Adding Notes/FX fields to a Notes form

You exchange data between Notes and 1-2-3 by adding a field to a Notes form that matches the name of a 1-2-3 Workbook Properties field or range name that is defined for Notes/FX.

1. In Notes, choose Design - Forms from the Folders navigator.
2. Select a form to edit, or choose Create - Design - Form to create a new form.
3. Choose Create - Field.
4. Enter the Notes field name of a 1-2-3 Workbook Properties field or range name that is defined for Notes/FX.

{button ,AL(`H_ADDING_NOTESFX_FIELDS_TO_A_NOTES_FORM_DETAILS',1)} See details

{button ,AL(`H_EMBEDDING_A_123_OBJECT_IN_AN_EXISTING_NOTES_FORM_STEPS;H_ENABLING_DOC_INFO_FIELDS_FOR_EXCHANGE_WITH_NOTES_STEPS;H_SETTING_UP_NOTES_FIELD_EXCHANGE_OVER;',0)} See related topics

Creating a new Notes document

If a Notes form contains an embedded 1-2-3 workbook object, Notes embeds a new copy of the object in each new document you compose.

1. In Notes, choose Create.
2. Choose the name of a form that contains an embedded 1-2-3 workbook object.
3. If the form does not automatically start 1-2-3, double-click the 1-2-3 workbook object.
4. In 1-2-3, enter new information in the workbook.

{button ,AL(`H_ADDING_NOTESFX_FIELDS_TO_A_NOTES_FORM_STEPS',0)} See related topics

Details: Adding Notes/FX fields to a Notes form

1-2-3 Workbook Properties fields

To create a field that exchanges Workbook Properties data, use a Notes field name and data type listed in the table below.

Workbook Properties field	Notes field name	Data type
Created by	From	Text
Title	Title	Text
Subject	Subject	Text
Keywords	Categories	Text
Description	DocumentComments	Text
Revision history	RevisionComments	Text
Created	Date	Date
Last edited	LastRevisionDate	Date
Last edited by	LastEditor	Text
Total revisions	NumberofEdits	Number
Total edited time	EditingTime	Number
Sheets	SizeInPages	Number
Size	SizeInK	Number
(not displayed)	DocumentClass	Text
(not displayed)	PageTitles	Text

{button ,AL(`H_ADDING_NOTESFX_FIELDS_TO_A_NOTES_FORM_STEPS',1)} Go to procedure

Details: Embedding a 1-2-3 workbook object in a Notes document
By embedding a 1-2-3 workbook object in an existing Notes document, you can:

- Use Notes to store different 1-2-3 sheets
- Collect data for a group of otherwise unrelated sheets
- Use Notes to distribute 1-2-3 sheets to members of your workgroup
- Use Notes dial-in features to allow remote users to work on 1-2-3 sheets
- Use Notes to view and sort the 1-2-3 sheets according to contents of Notes/FX fields

For more information, see your Notes documentation.

{button ,AL(`H_EMBEDDING_A_123_OBJECT_IN_AN_EXISTING_NOTES_FORM_STEPS',1)} Go to procedure

Details: Embedding a 1-2-3 workbook object in a Notes form

By embedding a 1-2-3 workbook object in a Notes form, you can:

- Use a common template for all 1-2-3 sheets.
- Include a consistent set of fields in all 1-2-3 sheets.
- Provide a consistent 1-2-3 sheet style for a group of users who share the same Notes database.
- Use Notes security features to protect 1-2-3 sheets from unauthorized reading or editing.
- Use Notes views to organize and categorize 1-2-3 sheets for tracking and reporting. For example, you can see which sheets were created in a particular month or on which projects each staff member worked.
- Use Notes formulas to track the tasks for a project. For example, you could track the number of days spent working on a group of 1-2-3 sheets on a project.

For more information, see your Notes documentation.

{button ,AL(`H_EMBEDDING_A_123_OBJECT_IN_A_NOTES_FORM_DESIGN_STEPS',1)} Go to procedure
{button ,AL(`H_SETTING_UP_NOTES_FIELD_EXCHANGE_OVER;',0)} See related topics

Details: Setting up named ranges to exchange data with Notes

Adding new Notes/FX fields from the Workbook Properties dialog box

When you set up a named range as a Notes/FX field, 1-2-3 adds the range to the list of field names on the Notes/FX fields tab in the Workbook Properties dialog box.

You can also add new Notes/FX fields by choosing New Field on the Notes/FX Fields tab in the Workbook Properties dialog box. Both the Workbook Properties dialog box and the InfoBox list the same ranges as Notes/FX fields.

Notes data types and exchange direction

The Notes data type and exchange direction of a 1-2-3 range depends on the type of range.

1-2-3 range type	Notes data type	Exchange direction
Single-cell range	Text, number, or date	Two-way
Single-cell range	Computed	One-way, from Notes to 1-2-3
Protected range	Text, number, or date	One-way, from 1-2-3 to Notes
Formula	Number	One-way, from 1-2-3 to Notes
Multiple-cell range	Text, number, or date with "Allow multiple values"	Two-way

NOTES FIELDS tables from previous releases of 1-2-3

Previous releases of 1-2-3 named tables (ranges) containing Notes/FX fields "NOTES FIELDS." This release of 1-2-3 still includes support for NOTES FIELDS tables. However, it's best to replace NOTES FIELDS tables with range name entries in the Workbook Properties dialog box.

If you are using a sheet that has a NOTES FIELDS table, do not create any Notes/FX ranges that overlap with the NOTES FIELDS table. A field name in the list of Notes/FX fields takes precedence over the same name in a NOTES FIELDS table. You can use other fields listed in the NOTES FIELDS table with Notes/FX.

{button ,AL(`H_SETTING_UP_FIELDS_FOR_TWOWAY_EXCHANGE_WITH_NOTES_STEPS',1)} Go to procedure

Embedding a 1-2-3 workbook object in a Notes document

You can embed a 1-2-3 workbook object in any rich text field in an existing Notes document that contains Notes/FX fields, and update the Notes/FX fields from the 1-2-3 workbook.

1. In Notes, open a document for editing.
2. Position the insertion point where you want to insert the 1-2-3 workbook object.
3. Choose Create - Object.
4. To embed a new 1-2-3 workbook object in the Notes document, select "Create a new object" and specify "1-2-3 Worksheet" as the object type.
5. To embed an existing 1-2-3 workbook as an object in the Notes document, select "Create an object from a file" and specify an existing 1-2-3 workbook.
6. Click OK.

{button ,AL(`H_EMBEDDING_A_123_OBJECT_IN_AN_EXISTING_NOTES_FORM_DETAILS',1)} See details
{button ,AL(`H_SETTING_UP_NOTES_FIELD_EXCHANGE_OVER;',0)} See related topics

Embedding a 1-2-3 workbook object in a Notes form

You can embed a 1-2-3 workbook object anywhere in a Notes form that contains Notes/FX fields. New documents composed using this form automatically include the embedded 1-2-3 workbook object.

1. In Notes, choose Create - Design.
2. Choose Form.
3. Position the insertion point where you want to insert the 1-2-3 workbook object.
4. Choose Create - Object.
5. To embed a new 1-2-3 workbook object in the Notes form, select "Create a new object" and specify "1-2-3 Worksheet" as the object type.
6. To embed an existing 1-2-3 workbook as an object in the Notes form, select "Create an object from a file" and specify an existing 1-2-3 workbook.
7. Click OK.
8. Close the Notes form.
9. Click Yes to save the form.

{button ,AL(`H_EMBEDDING_A_123_OBJECT_IN_A_NOTES_FORM_DESIGN_DETAILS',1)} See details
{button ,AL(`H_SETTING_UP_NOTES_FIELD_EXCHANGE_OVER;',0)} See related topics

Overview: Exchanging data between 1-2-3 and Notes

Notes/FX lets you exchange field data between 1-2-3 and Notes. With Notes/FX, you can:

- Display any 1-2-3 Workbook Properties field in a Notes form
- Pass text and values in a 1-2-3 named range back and forth between Notes and 1-2-3
- Use NotesFlow to publish Notes actions to 1-2-3

Using Notes/FX

To use Notes/FX with 1-2-3, complete the following tasks:

- Define fields and ranges to exchange
- Embed a 1-2-3 workbook object that contains those fields or ranges in a Notes document or form design
- Create new Notes documents that exchange data with embedded 1-2-3 workbook objects

For example, you can create a Notes form for a sales report and embed a 1-2-3 workbook object in the form. When you compose a new report, Notes passes data to 1-2-3, which uses this information to calculate the report.

When you complete the sales report and close 1-2-3, you can update the 1-2-3 workbook object embedded in the Notes form. Information from the sales report, such as the name and address of the company and the total sales for the period, now appears in the Notes document or in the Notes view. The sales report is centrally stored in a Notes database with other sales reports.

Using NotesFlow to publish Notes actions to 1-2-3

Notes/FX also lets you use NotesFlow technology to publish Notes actions to 1-2-3 and other Lotus desktop products. With NotesFlow, you can create a Notes action using formulas or scripts and publish the action in a Notes form. When you edit or view a 1-2-3 workbook object that is embedded in the form, the NotesFlow action appears in the 1-2-3 Actions menu.

NotesFlow publishing lets you define a sequence of tasks that gives you control over the flow of work. For example, you can integrate file creation and storage in other desktop products with the document sharing, storage, security, and management tools in Notes.

For more information about NotesFlow publishing, see the Notes application developer documentation.

{button ,AL(`H_SETTING_UP_NOTES_FIELD_EXCHANGE_OVER;H_ADDING_NOTESFX_FIELDS_TO_A_NOTES_FORM_STEPS;H_CREATING_A_NEW_NOTES_DOCUMENT_STEPS;H_EMBEDDING_A_123_OBJECT_IN_AN_EXISTING_NOTES_FORM_STEPS;H_EMBEDDING_A_123_OBJECT_IN_A_NOTES_FORM_DESIGN_STEPS;H_SETTING_UP_FIELDS_FOR_TWOWAY_EXCHANGE_WITH_NOTES_STEPS;H_UPDATING_FIELDS_IN_A_NOTES_DOCUMENT_FROM_123_STEPS;H_UPDATING_INFORMATION_IN_123_FROM_A_NOTES_DOCUMENT_STEPS',0)} See related topics

Overview: Setting up Notes/FX

To set up Notes/FX, you first embed a 1-2-3 workbook object in a Notes form or document. Then, you define fields or ranges in the embedded workbook object to exchange with corresponding fields in Notes. You can also run Notes formulas and scripts while working in an embedded 1-2-3 workbook object.

What can you exchange?

You can exchange the following types of data between 1-2-3 and Notes:

- 1-2-3 Workbook Properties fields
- Data in 1-2-3 cells and named ranges

1-2-3 Workbook Properties fields

1-2-3 supplies Workbook Properties fields with predefined names that contain information about a workbook file, such as its description and creation date. You can use any of these fields for exchange with Notes.

1-2-3 cells and named ranges

To use 1-2-3 cells and named ranges with Notes/FX, you specify a range name in 1-2-3 that matches a Notes field name as a Notes/FX field. You can exchange text and numbers in both directions. Data in protected cells and formula results can only move one way, from 1-2-3 to Notes.

{button ,AL(`H_USING_NOTES_FIELD_EXCHANGE_OVER;H_ADDING_NOTESFX_FIELDS_TO_A_NOTES_FORM_STEPS;H_CREATING_A_NEW_NOTES_DOCUMENT_STEPS;H_EMBEDDING_A_123_OBJECT_IN_AN_EXISTING_NOTES_FORM_STEPS;H_EMBEDDING_A_123_OBJECT_IN_A_NOTES_FORM_DESIGN_STEPS;H_SETTING_UP_FIELDS_FOR_TWOWAY_EXCHANGE_WITH_NOTES_STEPS;H_UPDATING_FIELDS_IN_A_NOTES_DOCUMENT_FROM_123_STEPS;H_UPDATING_INFORMATION_IN_123_FROM_A_NOTES_DOCUMENT_STEPS',0)} See related topics

Setting up named ranges to exchange data with Notes

1. Select the named range.
2. Choose Range - Range Properties.
3. Click the Basics tab.

4. Specify a range name that matches a Notes field name.
5. Select "Notes/FX field."

{button ,AL(`H_SETTING_UP_FIELDS_FOR_TWOWAY_EXCHANGE_WITH_NOTES_DETAILS',1)} See details
{button ,AL(`H_ADDING_NOTESFX_FIELDS_TO_A_NOTES_FORM_STEPS',0)} See related topics

Updating fields in a Notes document from 1-2-3

You can update Notes to reflect any changes made in 1-2-3 Notes/FX fields that support updates to Notes.

1. In Notes, display the document that contains the fields you want to update.
2. Double-click the embedded 1-2-3 workbook object.
3. In 1-2-3, enter any new information into Notes/FX fields.

   The Notes document is automatically updated.

{button ,AL(`H_UPDATING_INFORMATION_IN_123_FROM_A_NOTES_DOCUMENT_STEPS;H_USING_NOTES_FIELD_EXCHANGE_OVER;',0)} See related topics

Updating information in 1-2-3 from a Notes document

When the 1-2-3 sheet contains editable fields defined for use with Notes/FX, you can update these fields in the Notes form.

1. In Notes, select the document you want to edit.
2. Choose Actions - Edit Document.
3. Enter new information in the Notes/FX fields.

   The 1-2-3 workbook object is automatically updated.

{button ,AL(`H_UPDATING_FIELDS_IN_A_NOTES_DOCUMENT_FROM_123_STEPS;H_USING_NOTES_FIELD_EXCHANGE_OVER;',0)} See related topics

Creating an add-in

You can create an add-in file using the scripts in the current workbook. 1-2-3 leaves the source workbook in memory, and creates the executable add-in file.

1. Choose File - Add-Ins - Create Add-In.
2. Specify the file name and path in which to save the add-in file.
3. (Optional) Enter text in the "Description" box.
4. Click Save.

{button ,AL(`H_CREATING_ADDINS_DETAILS',1)} See details

{button ,AL(`;H_ADDINS_OVER;H_LOADING_AN_ADDIN_STEPS;H_REGISTERING_ADDINS_STEPS;H_REMOVING_AN_ADDIN_FROM_MEMORY_STEPS;H_REMOVING_ADDINS_FROM_THE_ADDIN_LIST_STEPS',0)} See related topics

Details: Creating an add-in

Compiling new add-ins
When you create an add-in, 1-2-3 compiles all the scripts in the source workbook. If there are any compile-time errors, they are shown in the Errors list in the Script Editor and the Create Add-In command is terminated. If there are no compile-time errors, the Create Add-In dialog box appears.

Saving add-ins
When you create a new add-in, a dialog box appears asking if you want to save it. Click Yes to name and save the add-in.

Naming new add-ins
When you save a new add-in, 1-2-3 automatically gives it the same name as the source file, but with the file extension .12A. All 1-2-3 97 add-ins should use this file extension.

{button ,AL(`H_CREATING_ADDINS_STEPS',1)} Go to procedure
{button ,AL(`H_SAVING_A_NEW_WORKBOOK_STEPS',0)} See related topics

Details: Loading add-ins

Specifying custom functions in add-ins
When you load an add-in that contains global functions, you can use those functions from any active file. You do not have to include the directory location when you specify the file name.

Reloading add-ins
If you select an add-in to be loaded, that add-in will remain checked and will be reloaded into memory in subsequent 1-2-3 sessions. If you do not want an add-in loaded into memory, you must select it again to remove the check mark.

{button ,AL(`H_LOADING_AN_ADDIN_STEPS',1)} Go to procedure

Details: Unloading add-ins

If you remove an add-in from memory, you do not delete the file from disk. However, you must register the add-in before you can load it again. Any formula that contains references to @functions from an add-in not in memory evaluates to ERR.

{button ,AL(`H_REMOVING_AN_ADDIN_FROM_MEMORY_STEPS',1)} Go to procedure

{button ,AL(`;H_ADDINS_OVER;H_CREATING_ADDINS_STEPS;H_LOADING_AN_ADDIN_STEPS;H_REGISTERING_ADDINS_STEPS',0)} See related topics

Loading add-ins

You can select which add-ins to load into memory each time you start 1-2-3. An add-in must be registered before you can load it.

1. Choose File - Add-Ins - Manage Add-Ins.

   The Manage Add-Ins dialog box appears, and lists all registered add-ins.

2. Click each add-in name to select the add-ins you want to load.

   A check mark appears to the left of each selected add-in.

3. Choose Done.

   The selected add-ins are loaded, and can now be used in 1-2-3.

{button ,AL(`H_LOADING_AN_ADDIN_DETAILS',1)} See details

{button ,AL(`;H_ADDINS_OVER;H_CREATING_ADDINS_STEPS;H_REGISTERING_ADDINS_STEPS;H_REMOVING_AN_ADDIN_FROM_MEMORY_STEPS;H_REMOVING_ADDINS_FROM_THE_ADDIN_LIST_STEPS',0)} See related topics

Manage Add-Ins dialog box

You can use this dialog box to load an add-in for this 1-2-3 session, register an add-in in the add-in list, or remove an add-in from either memory or the add-in list.

Choose a task

- Loading an add-in
- Registering an add-in
- Unloading an add-in
- Removing an add-in from the Manage Add-Ins list

{button ,AL(`H_ADDINS_OVER',0)} See related topics

Overview: Add-ins

An add-in is a special .123 file, created by Lotus or other software developers, that you can use with 1-2-3 to extend its capabilities. Add-ins let you package a workbook file so that the functionality the file contains appears to be built into 1-2-3. Users cannot change or read these files.

1-2-3 add-in files can contain add-in applications or @functions. You access an add-in file by calling the global subroutines and/or functions with preassigned custom menu commands or a published set of @functions, or when you press an assigned CTRL-key combination.

Add-in applications perform a specific task in 1-2-3. Add-in @functions are used in formulas just like 1-2-3 @functions.

You can create add-ins, register them, load them into memory, and remove them from memory.

You can't use add-ins designed for previous 1-2-3 releases that run in other environments, such as DOS or OS/2. If you want to use such an add-in, contact the developer or manufacturer of the add-in to see if a version is available for 1-2-3 97.

{button ,AL(`;H_CREATING_ADDINS_STEPS;H_LOADING_AN_ADDIN_STEPS;H_REGISTERING_ADDINS_STEPS;H_REMOVING_AN_ADDIN_FROM_MEMORY_STEPS;H_USING_ADDIN_ATFUNCTIONS_OVER;H_REMOVING_ADDINS_FROM_THE_ADDIN_LIST_STEPS',0)} See related topics

Registering add-ins

You can register add-ins that do not appear in the list of add-ins in the Manage Add-Ins dialog box.

1. Choose File - Add-Ins - Manage Add-Ins.
2. Click Register.
3. Specify the directory that contains the add-in you want to register.

   The add-ins included in the specified directory are listed.
4. Select the add-in you want to register.
5. Click Open.

{button ,AL(`;H_ADDINS_OVER;H_CREATING_ADDINS_STEPS;H_REGISTERING_ADDINS_STEPS;H_REMOVING_AN_ADDIN_FROM_MEMORY_STEPS;H_LOADING_AN_ADDIN_STEPS;H_REMOVING_ADDINS_FROM_THE_ADDIN_LIST_STEPS',0)} See related topics

Removing add-ins from the Manage Add-Ins list

You can remove add-ins from the list of registered add-ins in the Manage Add-Ins dialog box.

1. Choose File - Add-Ins - Manage Add-Ins.

   The Manage Add-Ins dialog box appears, and lists all registered add-ins.
2. Click the add-in(s) you want to remove from the list.
3. Click Remove.

{button ,AL(`;H_ADDINS_OVER;H_CREATING_ADDINS_STEPS;H_REGISTERING_ADDINS_STEPS;H_REMOVING_AN_ADDIN_FROM_MEMORY_STEPS;H_LOADING_AN_ADDIN_STEPS',0)} See related topics

Unloading add-ins

You can select which registered add-ins to remove from memory, or unload.

1. Choose File - Add-Ins - Manage Add-Ins.

   The Manage Add-Ins dialog box appears, and lists all registered add-ins. A check mark appears to the left of the add-ins selected to be loaded into memory.

2. Click the add-in(s) you want to unload.

   The check mark next to the add-in(s) disappears.

3. Click Done.

{button ,AL(`H_REMOVING_AN_ADDIN_FROM_MEMORY_DETAILS',1)} See details

{button ,AL(`;H_ADDINS_OVER;H_CREATING_ADDINS_STEPS;H_LOADING_AN_ADDIN_STEPS;H_REGISTERING_ADDINS_STEPS;H_REMOVING_ADDINS_FROM_THE_ADDIN_LIST_STEPS',0)} See related topics

Using add-in @functions

You use add-in @functions just as you use 1-2-3 @functions.

Add-in @function format

Add-in @functions have the same format as any 1-2-3 @function:

@FUNCTION

or

@FUNCTION*(arg1,arg2,...,argn)*

where:

@FUNCTION represents the name of the @function. It tells 1-2-3 which calculation to perform.

arg1,arg2,...,argn represent arguments. Arguments supply the information 1-2-3 needs to complete the @function calculation. For example, when 1-2-3 encounters the function @SUM(B4..B25), the argument B4..B25 tells 1-2-3 to add the values in the range B4..B25.

File references in add-in @functions

You cannot have more than one add-in @function with the same name in memory at the same time, even if the add-in @functions are located in different files. 1-2-3 always uses the @function from the first add-in file loaded into memory.

You can choose an @function from another .123 file in memory by specifying @<<FILENAME>>FUNC. You don't need to specify this string for add-ins, as 1-2-3 searches them automatically. While add-ins supported in earlier versions of 1-2-3 won't work in 1-2-3 97, you can rewrite an old @function in a new add-in.

A candidate @function is any global function that returns a string or number, and whose arguments are strings, numbers, or range objects. Range object arguments must be declared as Variant. If a number is returned, it must be of data type integer, double, or long.

{button ,AL(`H_ADDINS_OVER',0)} See related topics

Overview: @Functions

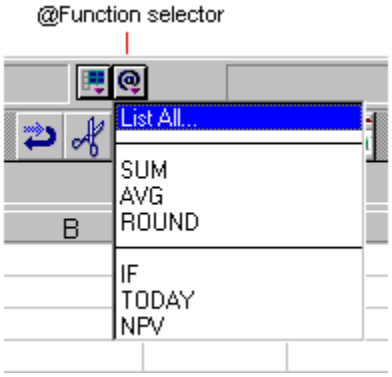
1-2-3 @functions are built-in formulas that perform specialized calculations automatically. You can use an @function by itself as a formula, combine it with other @functions and formulas, or use it in a script or a macro.

Some @functions perform simple calculations; for example, @SUM(D2..D7) adds the values in the range D2..D7 and is easier to enter than the formula +D2+D3+D4+D5+D6+D7.

Many @functions, however, simplify your work by performing complex calculations; for example, @NPV calculates the net present value of a series of future cash-flow values.

Entering @functions

The 1-2-3 @function menu lists a few of the most commonly used @functions. Click the @function selector to display the @function menu.



You can quickly use an @function by selecting it from the menu. In addition to the @functions on the menu, 1-2-3 provides nearly 300 other @functions. To choose from the complete list of @functions, choose List All from the @function menu.

To make entering @functions faster, you can change which @functions appear on the @function menu.

See related topics

Getting Help on individual @functions

In addition to Help that describes how to use @functions, 1-2-3 provides detailed information on individual @functions.

Note Help on individual @functions is installed by default. However, if you ran a customized installation (also called "manual install") and chose not to install @Function Help, you do not have Help on individual @functions. You can install @Function Help at any time.

See related topics

Parts of an @function

@Functions can contain these parts: an @ (at sign), the name of the @function, one or more arguments, and argument separators.

Arguments

An argument is the data you provide for 1-2-3 to use when it calculates the @function. Depending on the particular @function, an argument can be a single value, a range of cells, text, or another @function.

Arguments can be required or optional. You must enter required arguments, but you can omit the optional ones. The optional arguments are enclosed in [ ] (brackets) in the descriptions you see in the @Function List dialog box and in the Help on individual @functions.

If an @function contains more than one optional argument, you must use the arguments sequentially. You can't use an optional argument without using the optional arguments that precede it. You can, however, use an optional argument without using subsequent optional arguments.

Some @functions, such as @NOW, @RAND, and @TRUE, don't have arguments.

Argument separators

When you use more than one argument with an @function, you separate the arguments with an argument separator, typically a ; (semicolon). You can specify a different argument separator using regional (country) settings in your operating system.

Quotation marks

Quotation marks enclose the text for text arguments. For example, the following @function uses the text argument Sales Forecast:

```
@LOWER("Sales Forecast")
```

1-2-3 assumes that text not enclosed in quotation marks is a range name.

Parentheses

Parentheses enclose @function arguments. Nested parentheses enclose an @function that you use as an argument for another @function. For example, you use nested parentheses when you use @SUM and its argument as the argument for @INT as follows:

```
@INT(@SUM(D1..D7))
```

{button ,AL(`H_FUNC_BASICS;H_ARGUMENT_TYPES_OVER;H_CHANGING_THE_ARGUMENT_SEPARATOR_STEPS;H_INSTALLING_FUNCTION_HELP_STEPS;H_ENTERING_AN_ATFUNCTION_STEPS;',0)} See related topics

Entering an @function

When you enter an @function, the result of the calculation, not the @function, appears in the cell. The @function appears in the contents box.

1. Select the cell where you want to enter the @function.
2. Click the @function selector.

3. If the @function you want appears on the @function menu, choose it and continue to step 6.

   If the @function you want does not appear on the @function menu, choose List All.
4. Select the @function from the "@Functions" list.

   Tip To restrict the number of @functions in the list, select the category containing the @function.
5. Click OK.

   The @function, with argument placeholders, appears in the cell.
6. Replace any argument placeholders with the appropriate arguments.
7. Press ENTER.

If 1-2-3 displays *** (asterisks) in the cell, widen the column.

{button ,AL(`H_ENTERING_AN_ATFUNCTION_DETAILS',1)} See details

{button ,AL(`H_FUNC_BASICS;H_FUNCTION_FORMAT_OVER;H_COMMON_ERRORS_IN_FORMULAS_OVER;H_INSTALLING_FUNCTION_HELP_STEPS;H_FUNCTIONS_ALPHA_REF;h_sizing_columns_steps;H_ARGUMENT_TYPES_OVER;H_CHANGING_THE_ARGUMENT_SEPARATOR_STEPS;',0)} See related topics

Details: Entering an @function

Other ways to enter an @function
You can also enter an @function by typing it directly in the cell and enclosing the appropriate arguments in parentheses.

You can add the @functions you use frequently to the @function menu; then you can enter them without having to search the entire list of @functions.

Replacing range argument placeholders
When you enter an @function using the menu or the dialog box, 1-2-3 inserts the @function, along with placeholders for any arguments. To replace the placeholders for range arguments, type a range address or name, choose a name from the navigator, or select a range in the sheet.

Viewing @functions
You can always view the @function in the selected cell by looking in the contents box. To display the @function in the cell, instead of the result, change the number format of the cell to Formula format.

Printing @functions
You can print @functions along with cell contents. To print @functions, choose File - Preview & Page Setup, click the Include tab, and select "Formulas and cell contents" in the "Show" list.

Documenting an @function
You can annotate a cell's contents using a cell comment. To add a cell comment, use Range - Cell Comment.

Using formula markers
You can use formula markers to identify cells that contain @functions. Formula markers are turned off when you first start 1-2-3. To turn them on, use View - Set View Preferences.

{button ,AL(`H_ENTERING_AN_ATFUNCTION_STEPS',1)} Go to procedure

{button ,AL(`H_ADDING_AN_ATFUNCTION_STEPS;H_FORMATTING_NUMBERS_STEPS;H_CREATING_A_CELL_COMMENT_STEPS;H_PRINT_CHANGING_SELECTION_STEPS;',0)} See related topics

Argument types

Many @functions and macros require you to supply data to work on. This data is called an argument. For example, in the following @function, the argument is the range address D1..D7, enclosed in parentheses:

```
@SUM(D1..D7)
```

1-2-3 @functions and macros accept four types of arguments: condition, location, text, and value.

Condition

A condition is an expression that uses a logical operator (=, <, >, <>, >=, <=, #NOT#, #AND#, and #OR#), or the address or name of a cell containing a logical expression. You can also use a formula, @function, or a number (1 for true, 0 for false) as a condition. The @function or macro evaluates the condition argument and proceeds according to whether it is true or false.

Location

A location is the address or name of a range, or a formula or @function that produces the address or name of a range. A location argument can refer to a single cell or a multiple-cell range in one or more sheets in a single workbook.

Text

Text is any sequence of letters, numbers, and symbols enclosed in " " (quotation marks), the address or name of a cell that contains a label, or a formula or @function that produces a label. Text @functions and various macros use text arguments.

Value

A value is a number, the address or name of a cell that contains a number, or a formula or @function that produces a number.

{button ,AL(`H_FUNC_BASICS;H_FUNC_GUIDE_STAT;H_FUNC_GUIDE_DBASE;H_ENTERING_AN_ATFUNCTION_STEPS;H_123_MACROS_OVER;H_WRITING_A_MACRO_STEPS;H_CHANGING_THE_ARGUMENT_SEPARATOR_STEPS;',0)} See related topics

Statistical @function arguments

Many statistical @functions perform calculations on lists of values, which are represented by the argument named *list*.

list can contain any of the following, in any combination: numbers, numeric formulas, and addresses or names of ranges that contain numbers or numeric formulas. You separate elements of *list* with argument separators.

Labels in *list*

Labels within ranges in *list* do not cause statistical @functions to evaluate to ERR. With the exception of @COUNT and the statistical @functions that begin with @PURE, 1-2-3 assigns the value 0 to all labels in *list* (either in a range or listed individually) and includes them in calculations.

For example, if you use @AVG to calculate the average of the values in a range and the range contains a label, 1-2-3 considers the label to have the value 0 when it calculates the average.

If you do not use the @PURE statistical @functions, always check for labels in the ranges you use in statistical @functions to guard against unexpected results.

Blank cells in *list*

1-2-3 ignores blank cells in multiple-cell ranges in *list*, but does not ignore references to blank cells listed individually. For example, if you use @AVG to average the values in a range that spans four cells (A1..A4), and the range contains a blank cell, 1-2-3 divides the sum by three to find the correct average. If you list those four cells individually, however (A1;A2;A3;A4), 1-2-3 divides the sum by four.

{button ,AL(`H_ARGUMENT_TYPES_OVER;H_FUNC_BASICS;',0)} See related topics

Database @function arguments

Database @functions scan one or more input database tables, select the records that match the specified criteria, and then perform calculations on the selected records in the field you specify.

Note A database @function that refers to external database tables is recalculated each time any value in the sheet changes. A database @function that refers only to database tables in the workbook is recalculated only when a value the @function depends on changes.

The *input* argument

input is the name or address of a range that contains a database table or the name of an external table.

There is no limit to the number of tables you can use in *input*, provided that the total number of characters in the cell that contains the @function does not exceed 512.

To use more than one table as an *input* argument, separate them with valid argument separators. When 1-2-3 calculates a database @function, it reads the arguments from right to left. 1-2-3 uses the last argument in the @function as the *criteria*, the next to last argument as the *field*, and the remaining arguments as *input* tables.

For example, the following formula uses two input tables, SALES and INVENTORY:

```
@DAVG(SALES;INVENTORY;"PRICE";+Sales.ProductID=
    Inventory.ProductID#AND#PRODUCT="FILTERS")
```

In this formula, *criteria* is +Sales.ProductID=Inventory.ProductID#AND#PRODUCT="FILTERS", and *field* is "PRICE".

The *field* argument

field is the field name, enclosed in " " (quotation marks), the name or address of a cell containing the field name, or a field offset number.

If you use more than one table as an *input* argument (either in the sheet or from an external database table) and *field* is not a unique field name (it appears in more than one of the *input* tables), *field* must be the name of the table followed by a period and the field name, enclosed in quotation marks.

For example, if the field name Cost appears in two tables, GOTHAM and MAYFAIR, "GOTHAM.Cost" refers to the field name Cost in the table GOTHAM.

The *criteria* argument

criteria is a criteria formula or the name or address of a criteria range.

If you use only one table as an *input* argument, you can omit *criteria*. If you omit *criteria*, 1-2-3 includes all records from *input*.

If you use multiple tables for *input*, 1-2-3 performs a relational join on the tables. Therefore, make sure you specify a join criteria in the *criteria* argument. See Referring to multiple tables in criteria.

A criteria range is the name or address of a range that contains at least two rows. The first row lists some or all of the field names from a database table; the second and any subsequent rows contain the criteria. The criteria range cannot be a 3D range. Criteria are values, labels, formulas, @functions, or logical expressions.

Note @DPURECOUNT accepts only a criteria range; you cannot specify a criteria formula as the *criteria* argument.

Criteria range examples

A criteria range that specifies all employees who work in the Finance department might look like this:

```
DEPT
Finance
```

A criteria range that specifies all employees who work in the Finance department and earn more than $30,000 per year might look like this:

```
DEPT       SALARY
Finance    30000
```

{button ,AL(`H_ARGUMENT_TYPES_OVER;H_ENTERING_CRITERIA_IN_DATABASE_FUNCTIONS_OVER;H_ENTERING_MULTIPLE_CRITERIA_IN_DATABASE_FUNCTIONS_OVER;H_FUNC_BASICS;',0)} See related topics

Entering criteria in database @functions

Criteria tell 1-2-3 which records to select from a database table.

Matching an exact label or number

Enter a label or number exactly as it appears in the database table as the value portion of the criteria. For example, enter CITY="Boston" as the criteria. To match a number exactly, enter the number, as in SALARY=45000.

Note 1-2-3 does not distinguish between uppercase and lowercase letters. For example, the label SMITH matches the entries Smith and smith.

Matching similar labels

Use wildcard characters to match similar labels. For example:

```
PERIOD="Q?"
```

Matching a date value

When a field contains date entries, enter a date. You can enter numbers or date @functions.

For example, to select everyone born before January 8, 1967, enter:

```
BIRTHDAY<@DATE(67,1,8)
```

Matching values in a sheet

Use absolute references to match values in the sheet that are outside of the database table.

For example, to find all records in which sales is less than or equal to the number in cell D25, enter:

```
SALES<=$D$25
```

{button ,AL(`H_ENTERING_MULTIPLE_CRITERIA_IN_DATABASE_FUNCTIONS_OVER;H_REFERRING_TO_MULTIPLE_TABLES_IN_CRITERIA_OVER;H_FUNC_GUIDE_DBASE;',0)} See related topics

Entering multiple criteria in database @functions

You can select records that meet more than one condition. For example, you might want to see records for sales in May that were greater than $2,000, or you might want to see sales records for May and June.

Meeting all conditions (#AND#)

Use #AND# to select records in which all conditions are true. For example, to select only records in which the month is May and the sales value is greater than 2000, enter this criteria:

```
Month="May"#AND#Sales>2000
```

Meeting at least one condition (#OR#)

Use #OR# to select records in which at least one of two or more conditions is true. For example, to select records in which the month is May or the sales value is greater than 2000, enter this criteria:

```
Month="May"#OR#Sales>2000
```

Meeting one condition and excluding one condition (#NOT#)

Use #NOT# to select records in which one condition is true and another condition is false. For example, to select records in which the city is Paris and the department is not Sales, enter this criteria:

```
City="Paris"#AND##NOT#Department="Sales"
```

{button ,AL(`H_FUNC_GUIDE_DBASE;H_ENTERING_CRITERIA_IN_DATABASE_FUNCTIONS_OVER;H_REFERRING_TO_MULTIPLE_TABLES_IN_CRITERIA_OVER',0)} See related topics

Referring to multiple tables in criteria

When entering criteria in a database @function, you can compare fields from separate tables, as long as you create a join formula that follows these rules:

- Precede the field name by the table name and a . (period).
- Enter field names exactly as they appear in the database tables.
- The field names do not have to match, but the two fields must contain the same type of data.
- Entries in one field must match entries in the other field, and one field should not contain duplicate entries.

For example, here is a valid join formula:

```
+SALES.Item=PRICE.Item_Name
```

In this formula, there are two tables: one named SALES with a field called Item, and one named PRICE, with a field called Item_Name. Item and Item_Name are located in different tables but contain similar data. Each entry in PRICE.Item_Name is listed only once but may be listed many times in SALES.Item.

Note 1-2-3 cannot join two database tables that have no fields in common.

{button ,AL(`H_FUNC_GUIDE_DBASE;H_ENTERING_CRITERIA_IN_DATABASE_FUNCTIONS_OVER;H_ENTERING_MULTIPLE_CRITERIA_IN_DATABASE_FUNCTIONS_OVER;',0)} See related topics

Getting Help on an @function

If Help on individual @functions is installed, you can get detailed information on what each @function does and how to fill in the arguments.

1. Click the @function selector.

2. Choose List All.
3. Select the @function you want from the "@Functions" list.

   Tip To restrict the number of @functions in the list, select the category containing the @function.
4. Click Help.

{button ,AL(`H_GETTING_HELP_ON_AN_ATFUNCTION_DETAILS',1)} See details

{button ,AL(`H_FUNC_BASICS;H_INSTALLING_FUNCTION_HELP_STEPS;H_FUNCTIONS_ALPHA_REF',0)} See related topics

Details: Getting Help on an @function

Other ways to get Help

To get Help on an @function without using the dialog box, enter the @function name in a cell and then press F1 (HELP).

To get Help on an @function that is on the @function menu, highlight the @function in the menu and press F1 (HELP).

If you have already entered the @function in the sheet, double-click the cell that contains the @function. Then move the insertion point so it is in the name of the @function. Press F1 (HELP) to see the topic for that @function.

To find Help on the individual @functions from the Help Topics dialog box, click the Index tab and search for "@Functions, A-Z list." In the A-Z topic, click the button for the letter the @function begins with, and then click the name of the @function itself.

You can also use the Find tab in the Help Topics dialog box to perform a full-text search on 1-2-3 Help.

Determining whether the Help is installed

Help on individual @functions is installed by default. However, if you ran a customized installation (also called "manual install") and chose not to install @Function Help, you need to install it before you can get Help on individual @functions.

To determine whether @Function Help is installed, open the Help Topics dialog box, click the Index tab, and search for "@Functions, A-Z list." If that search term is in your Help index, then the Help on individual @functions is installed.

{button ,AL(`H_GETTING_HELP_ON_AN_ATFUNCTION_STEPS',1)} Go to procedure

Installing Help on individual @functions

Help on the individual @functions is automatically installed during a default installation. However, if you installed 1-2-3 using manual install, and chose not to install @Function Help, you can install it at any time after installing 1-2-3.

Tip Print this topic so you can refer to these instructions while running Install. (Install requires that you exit from all open applications.)

1. Insert the 1-2-3 or SmartSuite Install CD-ROM or the first Install disk in the disk drive.

   If you install 1-2-3 over a network, make sure the server where the 1-2-3 Install program is stored is connected to your computer. To connect to the server, choose Tools - Map Network Drive in the Windows Explorer.
2. Choose Start - Run from the Windows taskbar.
3. If you are installing from CD-ROM, type ***x*:\lotus\install.exe** (where ***x*** is the drive containing the CD-ROM), and click OK. For example, if your CD-ROM drive is the D drive, enter d:\lotus\install.exe.

   If you are installing from disks, type ***x*:\install.exe** (where ***x*** is the drive containing the Install disk), and click OK. For example, if your floppy drive is the A drive, enter a:\install.exe.

   If you are installing over a network, type ***x*:*path*\install.exe** (where ***x*** is the drive mapped to the server with the 1-2-3 Install directory, and ***path*** is the path to the directory where the 1-2-3 Install program is stored), and click OK. For example, if your server is mapped to the Q drive and the path is \lotus\123, enter q:\lotus\123\install.exe.
4. Follow the instructions on the screen until you reach the Install Options dialog box.
5. In the Install Options dialog box, select "Customize features - Manual install," and then click Next.
6. In the "Select 1-2-3 Features to Customize" dialog box, select 1-2-3, and click Customize.
7. Click the Help and Samples tab, and deselect Main 1-2-3 Help, 1-2-3 LotusScript Help, and Sample files (but leave @Function Help selected).
8. Deselect all other choices from all other tabs, and click OK.
9. In the "Select 1-2-3 Features to Customize" dialog box, select Approach, and click Customize.
10. Deselect all choices from the Approach and PowerKeys tabs, and click OK.
11. Finish answering all other installation questions, and then click Yes to copy your files.

If you need additional Help while installing the files, click the Help button in the Install dialog boxes.

{button ,AL(`H_FUNC_BASICS;H_GETTING_HELP_ON_AN_ATFUNCTION_STEPS',0)} See related topics

Help on individual @functions

Help on individual @functions is not currently installed. For information, see Installing Help on individual @functions.

Using the @Function List dialog box

You can use the @Function List dialog box to enter the name of an @function in a cell, along with argument placeholders. To display the dialog box if it is not currently displayed, enter @ (at sign) in a cell and press F3 (NAME), or click the @function selector and choose List All from the @function menu.

Choose a topic

- Entering an @function
- Adding an item to the @function menu
- Removing an item from the @function menu

{button ,AL(`H_FUNC_BASICS',0)} See related topics

When and how formulas recalculate

1-2-3 normally reevaluates formulas automatically each time you change data they refer to. Formulas recalculate in order of dependence: if a formula uses the results of other formulas, those formulas recalculate before the one that depends on them.

For example, if a formula in B7 depends on the result of a formula in C28, 1-2-3 recalculates the formula in C28 first, even though C28 is farther down the sheet. This is called recalculating in natural order.

Whenever 1-2-3 performs a recalculation pass, it recalculates only those formulas affected by changes in data. Because 1-2-3 skips over formulas not affected by data changes, it minimizes recalculation time, especially in large sheets that contain many unrelated formulas.

Order of calculation in a formula

Precedence numbers from 1 to 7 represent the order in which 1-2-3 performs operations in a formula. The lower the precedence number, the earlier 1-2-3 performs the operation. 1-2-3 performs operations with the same precedence number sequentially from left to right.

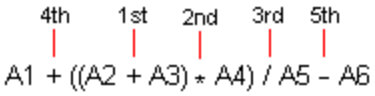
The order in which you perform arithmetic operations with the same precedence number may produce differences in rounding but otherwise does not matter. However, order is important when evaluating logical operations that contain #AND# and #OR#. A formula can produce different results depending on the order of these operators.

The table below shows the order of precedence for all operators you can use in formulas.

Number	Operation	Operator
1	Exponentiation	^
2	Identification of value as negative or positive	– +
3	Multiplication and division	* /
4	Addition and subtraction	+ –
5	Equal-to test	=
5	Not-equal-to test	<>
5	Less-than test	<
5	Greater-than test	>
5	Less-than-or-equal-to test	<=
5	Greater-than-or-equal-to test	>=
6	Logical-NOT test	#NOT#
7	Logical-AND test	#AND#
7	Logical-OR test	#OR#
7	Text string concatenation	&

Overriding order of precedence

You can override the order of precedence in a formula by enclosing operations in parentheses. 1-2-3 performs operations enclosed in parentheses first. Within each set of parentheses, the precedence numbers listed in the table above apply.



For example, to perform addition before multiplication, enclose the addition in parentheses. To see the difference, compare the results of two formulas:

- When calculating 3 + 4 * 5, 1-2-3 first multiplies 4 by 5 and then adds 3, resulting in 23.
- When calculating (3 + 4) * 5, 1-2-3 first adds 3 plus 4 and then multiplies the result by 5, resulting in 35.

Setting recalculation defaults

You can change how 1-2-3 recalculates in three ways:

- Choose whether to use automatic recalculation or manual recalculation.

- Recalculate formulas by column or by row instead of in natural order.
- Change the number of recalculation passes that 1-2-3 makes through each workbook.

{button ,AL(`H_SETTING_RECALCULATION_DEFAULTS_STEPS',0)} See related topics

Setting recalculation defaults

You can choose how often and in which order 1-2-3 recalculates formulas and how many recalculation passes it makes.

1. Choose File - User Setup - 1-2-3 Preferences.

2. Click the Recalculation tab in the dialog box.
3. Select a recalculation method.
4. Select an order of recalculation.
5. Specify a number from 1 to 50 in the "Number of iterations" box.
6. Click OK.

The settings remain in effect until you end the 1-2-3 session or open another workbook with different recalculation settings.

{button ,AL(`H_SETTING_RECALCULATION_DEFAULTS_DETAILS',1)} See details
{button ,AL(`H_WHEN_AND_HOW_FORMULAS_RECALCULATE_OVER',0)} See related topics

Details: Setting recalculation defaults

Options: 1-2-3 Preferences dialog box (Recalculation tab)

Recalculation

- Automatic -- Immediately recalculates formulas whenever you change the data they refer to. Automatic recalculation occurs in the background, so you can continue working during recalculation.
- Manual -- Recalculates formulas only when you want to. Manual recalculation occurs in the foreground, so you must wait for 1-2-3 to complete it before continuing your work.

Order of recalculation

- Natural -- Recalculates all formulas in order of dependence. If a formula uses the results of other formulas, 1-2-3 recalculates those formulas first.

  Recalculating in natural order is sufficient for most calculations. To control recalculation order more explicitly, select "By column" or "By row."
- By column -- Recalculates all formulas starting in A:A1 of the first active workbook and moves column by column through each sheet in each active workbook.
- By row -- Recalculates all formulas starting in A:A1 of the first active workbook and moves row by row through each sheet in each active workbook.

Number of iterations

Sets the number of recalculation passes 1-2-3 makes. This option takes effect only when the order of recalculation is "By column" or "By row," or when the order is "Natural" and a circular reference exists; otherwise, 1-2-3 makes one pass.

Recalculating formula links to other files

Recalculation settings apply only to formulas that refer to data in active workbooks. These settings do not affect formulas that link to data in workbooks on disk. For more information, see Updating file links.

Which settings should you use?

Most of the time, it's fine to use the initial recalculation settings (automatic, natural order). Change the order of recalculation only when necessary -- otherwise, you may get unexpected results.

When to use manual recalculation

Recalculation is set to "Automatic" by default. You may prefer to use manual recalculation if:

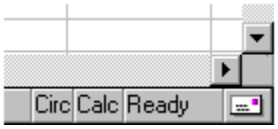
- Your sheet contains a large number of formulas and data that take a long time to recalculate.
- You're making a number of changes to a sheet and don't want the formulas to recalculate until after you've made the changes.
- You're perfecting a formula and don't want it to affect other formulas that depend on it yet.

Ways to recalculate formulas manually

When using manual recalculation, you must tell 1-2-3 when you want to recalculate formulas. You can:

- Press F9 (CALC) when you see the Ready indicator in the status bar.
- Click the icon shown below.

- Click the Calc button, which appears in the status bar when data changes.



{button ,AL(`H_SETTING_RECALCULATION_DEFAULTS_STEPS',1)} Go to procedure
{button ,AL(`H_USING_THE_STATUS_BAR_OVER',0)} See related topics

Overview: Creating a chart in 1-2-3

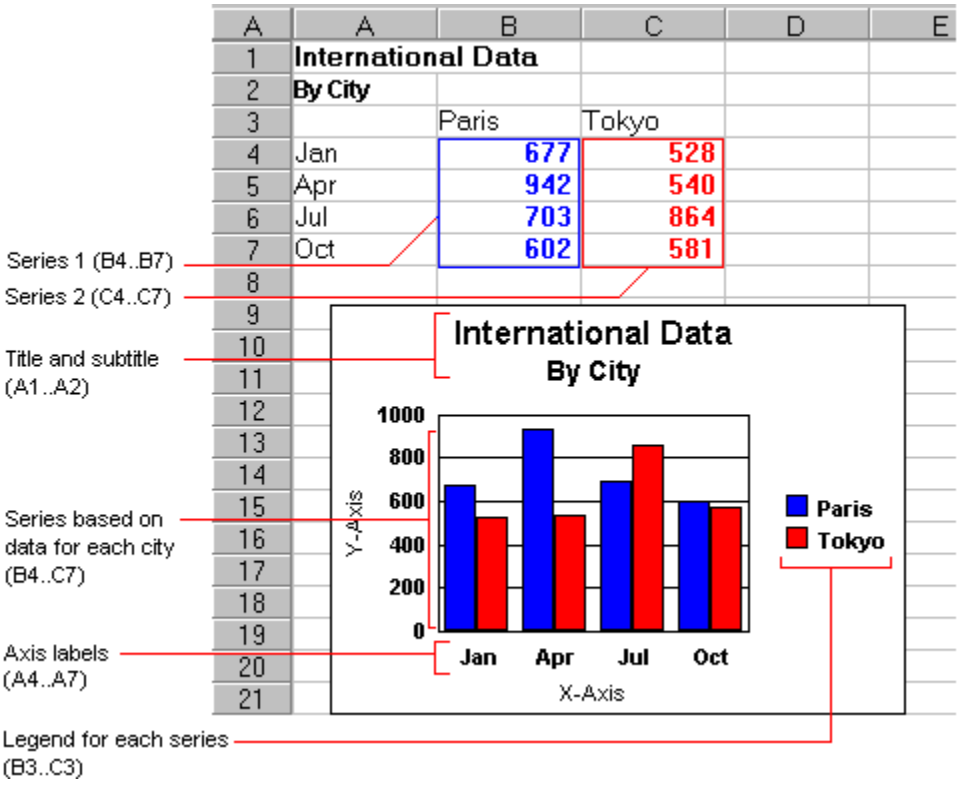
A chart is an effective way to illustrate the data in your spreadsheet. It can make relationships among numbers easy to see because it turns numbers into shapes (lines, bars, slices of a pie), and the shapes can then be compared to one another.

Setting up the range

You can set up a range so that it contains all the elements you need to create a basic chart.

If you select only numeric data and create a chart, 1-2-3 creates a chart with placeholders for the title, tick mark labels, and legend. If your selected range includes column and row headings, and text above or to the left of the numeric data, 1-2-3 uses the text to create the axis labels, title, subtitle, and legend.

Suppose the range you select has text and numbers arranged as in A1..C7 in the illustration below. 1-2-3 will plot the chart based on range A1..C7 by column. 1-2-3 automatically creates a bar chart as in the illustration.



How 1-2-3 plots the chart

When you create a chart, 1-2-3 plots each row or column of data in the selected range as a series -- a group of bars, lines, areas, or pie slices. A chart can contain up to 30 series. 1-2-3 follows rules to determine how to chart data.

First, 1-2-3 finds the first cell containing a value that isn't a date: B4 in this example. Then, starting from cell B4, 1-2-3 counts the number of columns that contain values (two) and the number of rows that contain values (four). Based on this count, 1-2-3 uses the following rules:

When there are	1-2-3 plots the chart
More columns than rows	By interpreting each row of values as a separate series. 1-2-3 uses the leftmost entry in each row as a legend label and the top entry in each column as an axis label.
More rows than columns	By interpreting each column of values as a separate series. 1-2-3 uses the top entry in each column as a legend label and the leftmost entry in each row as an axis label.
Equal rows and columns	Same as when there are more rows than columns

Styling and manipulating a chart

You can copy, move, style, and manipulate a chart the same as other graphic objects. You can switch to a different chart type, change the interior pattern and color, change the style of the chart border, add a designer frame, set how a chart is fastened to the cells behind it, and hide or lock the chart.

Select the chart, choose Chart - Chart Properties, and make the changes you want.

{button ,AL(`H_CREATING_A_CHART_IN_123_OVER;H_IBOX_CHART_BASICS_CS;H_IBOX_RECTANGLE_LINES_COLORS_CS',0)} See related topics

Creating a chart in 1-2-3

1-2-3 creates a chart based on the range you select.

1. Select the range or collection that contains the data to chart.

   You can include text for the chart title and legend entries in your selection.

2. Choose Create - Chart.

3. Click the sheet where you want the top left corner of the chart to appear.

Tip If the chart covers data in the sheet, you can move the chart and change its size; the data in the cells behind the chart will still be there.

{button ,AL(`H_CREATING_A_CHART_IN_123_DETAILS',1)} See details

{button ,AL(`;H_CREATING_A_CHART_IN_123_OVER;',0)} See related topics

Details: Creating a chart in 1-2-3

Placing a chart on a sheet
Instead of clicking the sheet to have 1-2-3 place and size the chart, you can determine the size and position of the chart by dragging a box in the sheet after you choose Create - Chart.

Changing the chart type
1-2-3 creates the chart using the default chart type. Initially, the default chart type is a bar chart.

To change the default chart type, use Chart - Chart Style - Set Default Chart. To change the chart type for a particular chart, use Chart - Chart Type.

How 1-2-3 names charts
1-2-3 automatically names the new chart Chart 1. Subsequent charts are named Chart 2, Chart 3, and so on. Use Chart - Chart Properties (Basics tab) to rename the chart.

Changing the orientation of rows and columns
1-2-3 assigns data to the series in a chart according to how many rows or columns the range contains. You might want to see the data the opposite way.

For example, suppose 1-2-3 plots a chart showing data for several cities by month. However, you might want to see the chart plotted by city instead. Use Chart - Ranges - Options to reassign the data, so axis labels and legends are reversed.

Related SmartIcons


Changes chart properties


Changes the chart type


Changes the chart style


Changes how chart data is assigned

{button ,AL(`H_CREATING_A_CHART_IN_123_STEPS',1)} Go to procedure

Chart Assistant dialog box

1-2-3 creates a chart based on the selected range.

Choose a task

Creating a chart in 1-2-3
Selecting a range from a dialog box

{button ,AL(`H_CREATING_A_CHART_IN_123_OVER;',0)} See related topics

Add-in commands

The table below lists Add-in commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Clear	File - Add-Ins - Manage Add-Ins
Invoke	No equivalent command
Load	File - Add-Ins - Manage Add-Ins
Quit	No equivalent command
Remove	File - Add-Ins - Manage Add-Ins
Settings	No equivalent command
Table	No equivalent command
Table Applications	No equivalent command
Table @Functions	No equivalent command
Table Macros	No equivalent command

Details: Using 1-2-3 Classic

1-2-3 Release 3.1 main menu commands
Some Release 3.1 main menu commands don't operate in 1-2-3 97. When you highlight a command that isn't operable, you see a message. To find out which 1-2-3 97 command to use instead, press F1 (HELP).

Wysiwyg menu commands
You can't use any : (colon) commands to perform tasks in 1-2-3 97, except in keystroke macros. If you press : (colon) when 1-2-3 is in Ready mode, 1-2-3 enters a colon in the current cell.

Choosing commands and ranges
You must use the keyboard to choose commands in 1-2-3 Classic. You can use the keyboard or the mouse to select ranges required to complete a / (slash) command.

Turning off 1-2-3 Classic
If you don't want to use 1-2-3 Classic, you can turn it off by choosing File - User Setup - 1-2-3 Preferences in 1-2-3 97, and then clicking the Classic Keys tab. When 1-2-3 Classic is turned off, pressing / (slash) or < (less-than symbol) enters the appropriate character in the current cell. However, you can continue to use your keystroke macros.

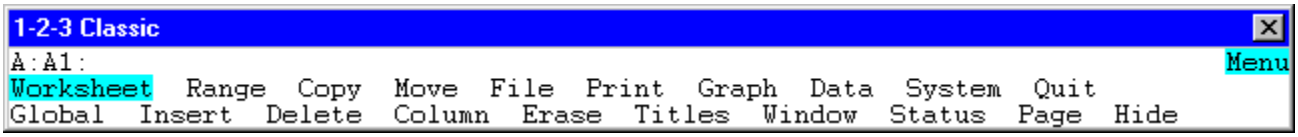
{button ,AL(`H_USING_123_CLASSIC_STEPS',1)} Go to procedure

Overview: 1-2-3 Classic

1-2-3 Classic is the / (slash) command menu of 1-2-3 for DOS Release 3.1, still available in 1-2-3 97. To work with new 1-2-3 97 features, you must use the pull-down menus.

When you press / (slash) or < (less-than symbol) in Ready mode, the 1-2-3 Classic window appears at the top of the 1-2-3 window, displaying the 1-2-3 Release 3.1 main menu, as shown below.

Note To see the menu in its entirety, use the scroll buttons or maximize the window.



1-2-3 Classic window

The 1-2-3 Classic window contains a title bar and the 1-2-3 for DOS Release 3.1 control panel. However, you enter and edit data in the edit line of 1-2-3 97. For information, see Overview: Entering data.

To move 1-2-3 Classic, you can drag the title bar with the mouse. To close 1-2-3 Classic, click the Close button.

Note The Wysiwyg menu is not available in 1-2-3 97. These commands perform tasks only in keystroke macros. However, 1-2-3 97 Help still provides command equivalents for the Wysiwyg (colon) commands

Running 1-2-3 for DOS 3.1 macros

1-2-3 97 can execute all Release 3.1 keystroke macros by using 1-2-3 Classic. 1-2-3 97 ignores inoperable commands in a macro, but continues execution of the macro.

Pressing F1 (HELP) in 1-2-3 Classic

To see a list of equivalent 1-2-3 97 commands for various / (slash) menu commands while you use 1-2-3 Classic, press F1 (HELP). For example, when you choose Range in 1-2-3 Classic and then press F1 (HELP), you see a list of equivalents for the /Range commands.

To see information on command equivalents without opening 1-2-3 Classic, select a command from the lists that follow.

Main menu commands

/Worksheet

/Range

/Copy

/Move

/File

/Print

/Graph

/Data

/System

/Quit

Wysiwyg menu commands

:Worksheet

:Format

:Graph

:Print

:Display

:Special

:Text

:Named-Style

:Quit

Add-in commands

Add-in commands

{button ,AL(`H_USING_123_CLASSIC_STEPS;',0)} See related topics

Using 1-2-3 Classic

In 1-2-3 97, you can work with the 1-2-3 Release 3.1 main menu in 1-2-3 Classic, just as you did in Release 3.1.

1. To display 1-2-3 Classic, press / (slash) or < (less-than symbol) in Ready mode.

   Note To change the key that displays the Classic menu, choose File - User Setup - 1-2-3 Preferences in 1-2-3 97, and click the Classic Keys tab.

   To use add-ins, press ALT+F10.

2. Choose the command that you want.

To close the 1-2-3 Classic window without completing a command, press CTRL+BREAK or press ESC until the Classic menu disappears.

{button ,AL(`H_USING_123_CLASSIC_DETAILS',1)} See details
{button ,AL(`H_123_CLASSIC_OVER;',0)} See related topics

/Copy

In 1-2-3 97, choose Edit - Copy, select a destination range, and choose Edit - Paste.

/Data

The table below lists /Data commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Distribution	Range - Analyze - Distribution
External	No equivalent command
Fill	Range - Fill
Matrix	Range - Analyze - Invert Matrix Range - Analyze - Multiply Matrix
Parse	Range - Parse
Query	Create - Database - Query Table
Regression	Range - Analyze - Regression
Sort	Range - Sort
Table	Range - Analyze - What-if Table

/Data External

The table below lists /Data External commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Create	No equivalent command
Delete	No equivalent command
List Fields	No equivalent command
List Tables	No equivalent command
Other Command	No equivalent command
Other Refresh	No equivalent command
Other Translation	No equivalent command
Quit	No equivalent command
Reset	No equivalent command
Use	No equivalent command

/Data Matrix

The table below lists /Data Matrix commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Invert	Range - Analyze - Invert Matrix
Multiply	Range - Analyze - Multiply Matrix

/Data Query

The table below lists /Data Query commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Criteria	Tools - Database - Query Table
Del	No equivalent command
Extract	Tools - Database - Query Table
Find	No equivalent command
Input	No equivalent command
Modify	See /Data Query Modify to see additional commands
Output	Tools - Database - Query Table
Quit	No equivalent command
Reset	Tools - Database - Query Table
Unique	No equivalent command

/Data Query Modify

The table below lists /Data Query Modify commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Cancel	No equivalent command
Extract	Tools - Database - Query Table
Insert	No equivalent command
Replace	No equivalent command

/Data Table

The table below lists /Data Table commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
1	Range - Analyze - What-if Table
2	Range - Analyze - What-if Table
3	Range - Analyze - What-if Table
Labeled	No equivalent command
Reset	Range - Analyze - What-if Table

/File

The table below lists /File commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Admin	See /File Admin for additional commands
Combine	File - Open
Dir	File - User Setup - 1-2-3 Preferences (File Locations tab)
Erase	No equivalent command
Import	See /File Import for additional commands
List	No equivalent command
New	File - New Workbook
Open	File - Open
Retrieve	File - Open
Save	File - Save/Update File - Save As/Save Copy As
Xtract	File - Save As/Save Copy As

/File Admin

The table below lists /File Admin commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Link-Refresh	Edit - Manage Links
Reservation	View - Set View Preferences (Security tab) File - Workbook Properties (Security tab)
Seal	View - Set View Preferences (Security tab) File - Workbook Properties (Security tab)
Table	No equivalent command

/File Import

The table below lists /File Import commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Numbers	File - Open
Text	File - Open

/Graph

The table below lists /Graph commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
A - F	Chart - Ranges
Group	Chart - Ranges
Name	See /Graph Name for additional commands
Options	See /Graph Options for additional commands
Quit	No equivalent command
Reset	Edit - Clear
Save	No equivalent command
Type	Chart - Chart Type Chart - Ranges
View	Edit - Go To
X	Chart - Ranges

/Graph Name

The table below lists /Graph Name commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Create	Chart - Chart Properties (Basics tab)
Delete	Edit - Clear
Reset	Edit - Clear
Table	No equivalent command
Use	Edit - Go To

/Graph Options

The table below lists /Graph Options commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Advanced	See /Graph Options Advanced for additional commands
B&W	No equivalent command
Color	No equivalent command
Data-Labels	See /Graph Options Data-Labels for additional commands
Format	Chart - Chart Type
Grid	Chart - Axes & Grids
Legend	Chart - Legend
Quit	No equivalent command
Scale	Chart - Axis Object - Object Properties (Number Format tab) Sheet - Sheet Properties (Number Format tab)
Titles	See /Graph Options Titles for additional commands

/Graph Options Advanced

The table below lists /Graph Options Advanced commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Colors	Chart - Chart Properties, select "Series" from the "Properties for" list, and then click (Lines & Colors tab)
Hatches	Chart - Chart Properties, select "Series" from the "Properties for" list, and then click (Lines & Colors tab)
Quit	No equivalent command
Text	Object - Object Properties (Text Format tab)

/Graph Options Data-Labels

The table below lists /Graph Options Data-Labels commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
A - F	Chart - Chart Properties (Ranges tab); select Data Labels from the list of parts
Group	Chart - Chart Properties (Ranges tab); select Data Labels from the list of parts
Quit	No equivalent command

/Graph Options Titles

The table below lists /Graph Options Titles commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Titles	
	Chart - Title
	Chart - Note

/Graph Type Features

The table below lists /Graph Type Features commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Drop-Shadow	Chart - Chart Type
Frame	Object - Object Properties (Lines & Colors tab) Sheet - Sheet Properties (Lines & Colors tab)
Horizontal	Chart - Chart Type
100%	Chart - Axes & Grids
Quit	No equivalent command
Stacked	Chart - Chart Type
2Y-Ranges	Chart - Ranges
3D	Chart - Chart Type
Table	Chart - Chart Type
Vertical	Chart - Chart Type
Y-Ranges	Chart - Ranges

/Move

In 1-2-3 97, choose Edit - Cut, select the destination range, and choose Edit - Paste.

/Print

The table below lists /Print commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Cancel	No equivalent command
Encoded	No equivalent command
File	File - Print
Printer	See /Print [Encoded, File, Printer] for additional commands
Quit	No equivalent command
Resume	No equivalent command
Suspend	No equivalent command

/Print [Encoded, File, Printer]

The table below lists /Print [Encoded, File, Printer] commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Align	No equivalent command
Clear	No equivalent command
Go	File - Print
Hold	No equivalent command
Image	No equivalent command
Line	No equivalent command
Options	See /Print [Encoded, File, Printer] Options for additional commands
Page	No equivalent command
Quit	No equivalent command
Range	File - Print
Sample	No equivalent command

/Print [Encoded, File, Printer] Options

The table below lists /Print [Encoded, File, Printer] Option commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Advanced	No equivalent command
Borders	No equivalent command
Header	File - Preview & Page Setup (Header & Footer tab)
Footer	File - Preview & Page Setup (Headers & Footers tab)
Margins	File - Preview & Page Setup (Layout tab)
Name	No equivalent command
Other	No equivalent command
Pg-Length	No equivalent command
Quit	No equivalent command
Setup	No equivalent command

/Quit

In 1-2-3 97, choose File - Exit, or File - Exit & Return to <application>.

/Range

The table below lists /Range commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Erase	Edit - Clear
Format	Range - Range Properties (Number Format tab)
Input	No equivalent command
Justify	No equivalent command
Label	Object - Object Properties (Alignment tab) Sheet - Sheet Properties (Alignment tab)
Name	Range - Name
Prot	Range - Range Properties (Security tab) Sheet - Sheet Properties (Basics tab)
Search	Edit - Find & Replace
Trans	Range - Transpose
Unprot	Range - Range Properties (Security tab) Sheet - Sheet Properties (Basics tab)
Value	Edit - Copy Edit - Paste Special

/Range Name

The table below lists /Range Name commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Create	Range - Name
Delete	Range - Name
Labels	Range - Name
Note	No equivalent command
Reset	Range - Name
Table	No equivalent command
Undefine	No equivalent command

/System

This 1-2-3 Classic command has no equivalent in 1-2-3 97.

/Worksheet

The table below lists /Worksheet commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Column	See /Worksheet Column for additional commands
Delete	See /Worksheet Delete for additional commands
Erase	File - Close
Global	See /Worksheet Global for additional commands
Hide	See /Worksheet Hide for additional commands
Insert	Range - Insert Create - Sheet
Page	Range - Range Properties (Basics tab)
Status	No equivalent command
Titles	View - Titles
Window	See /Worksheet Window for additional commands

/Worksheet Column

The table below lists /Worksheet Column commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Column-Range	Range - Properties (Basics tab)
Display	Range - Properties (Basics tab)
Hide	Range - Properties (Basics tab)
Reset-Width	Range - Properties (Basics tab)
Set-Width	Range - Properties (Basics tab)

/Worksheet Delete

The table below lists /Worksheet Delete commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Column	Range - Delete
File	File - Close
Row	Range - Delete
Sheet	Sheet - Delete Sheet

/Worksheet Global

The table below lists /Worksheet Global commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Col-Width	Sheet - Sheet Properties (Basics tab)
Default	See /Worksheet Global Default for additional commands
Format	Sheet - Sheet Properties (Number Format tab)
Group	Sheet - Group Sheets
Label	Sheet - Sheet Properties (Alignment tab)
Prot	Range - Range Properties (Security tab)
Recalc	File - User Setup - 1-2-3 Preferences (Recalculation tab)
Zero	Sheet - Sheet Properties (Number Format tab)

/Worksheet Global Default

The table below lists /Worksheet Global Default commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Autoexec	File - User Setup - 1-2-3 Preferences (File Locations tab)
Dir	File - User Setup - 1-2-3 Preferences (File Locations tab)
Ext	No equivalent command
Graph	No equivalent command
Other	See /Worksheet Global Default Other for additional commands
Printer	File - Print File - Preview & Page Setup
Quit	No equivalent command
Status	No equivalent command
Temp	No equivalent command
Update	File - User Setup - 1-2-3 Preferences (General tab)

/Worksheet Global Default Other

The table below lists /Worksheet Global Default Other commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Beep	File - User Setup - 1-2-3 Preferences
Clock	No equivalent command
Help	No equivalent command
International	File - User Setup - 1-2-3 Preferences
Undo	File - User Setup - 1-2-3 Preferences

/Worksheet Hide

The table below lists /Worksheet Hide commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Enable	Sheet - Sheet Properties (Basics tab)
Disable	Sheet - Sheet Properties (Basics tab)

/Worksheet Window

The table below lists /Worksheet Window commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Clear	View - Split View - Clear Split
Display	No equivalent command
Graph	No equivalent command
Horizontal	View - Split View - Clear Split
Map	No equivalent command
Perspective	View - Split View - Clear Split
Synch	View - Split View - Clear Split
Unsynch	View - Split View - Clear Split
Vertical	View - Split View - Clear Split

:Display

The table below lists :Display commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Colors	Sheet - Sheet Properties (Lines & Colors tab)
Default	No equivalent command
Font-Directory	No equivalent command
Mode	No equivalent command
Options	See :Display Options for additional commands
Quit	No equivalent command
Rows	No equivalent command
Zoom	View - Zoom to

:Display Options

The table below lists :Display Options commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Cell-Pointer	No equivalent command
Frame	View - Set View Preferences
Grid	View - Set View Preferences
Intensity	No equivalent command
Page-Breaks	View - Set View Preferences
Quit	No equivalent command

:Format

The table below lists :Format commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Bold	Object - Object Properties (Text Format tab)
Color	Object - Object Properties (Lines & Colors tab) Sheet - Sheet Properties (Lines & Colors tab)
Font	Object - Object Properties (Text Format tab)
Italics	Object - Object Properties (Text Format tab)
Lines	Object - Object Properties (Lines & Colors tab) Sheet - Sheet Properties (Lines & Colors tab)
Quit	No equivalent command
Reset	Edit - Clear
Shade	Object - Object Properties (Lines & Colors tab) Sheet - Sheet Properties (Lines & Colors tab)
Underline	Sheet - Sheet Properties (Text Format tab)

:Graph

The table below lists :Graph commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Add	See :Graph Add for additional commands
Compute	No equivalent command
Edit	See :Graph Edit for additional commands
Goto	Edit - Go To
Move	No equivalent command
Quit	No equivalent command
Remove	Edit - Clear
Settings	View - Set View Preferences Object - Object Properties (Lines & Colors tab) Sheet - Sheet Properties (Lines & Colors tab)
View	Edit - Go To
Zoom	No equivalent command

:Graph Add

The table below lists :Graph Add commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Blank	No equivalent command
Current	No equivalent command
Metafile	File - Open
Named	No equivalent command
PIC	File - Open

:Graph Edit

The table below lists :Graph Edit commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Add	See :Graph Edit Add for additional commands
Color	Object - Object Properties (Text Format tab) Object - Object Properties (Lines & Colors tab) Sheet - Sheet Properties (Lines & Colors tab)
Edit	See :Graph Edit Edit for additional commands
Options	See :Graph Edit Options for additional commands
View	See :Graph Edit View for additional commands
Rearrange	See :Graph Edit Rearrange for additional commands
Select	No equivalent command
Transform	See :Graph Edit Transform for additional commands
Quit	No equivalent command

:Graph Edit Add

The table below lists :Graph Edit Add commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Arrow	Create - Drawing - Arrow
Ellipse	Create - Drawing - Ellipse
Freehand	Create - Drawing - Freehand
Line	Create - Drawing - Line
Polygon	Create - Drawing - Polygon
Rectangle	Create - Drawing - Rectangle
Text	Create - Text

:Graph Edit Edit

The table below lists :Graph Edit Edit commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Arrowheads	Object - Object Properties (Lines & Colors tab) Sheet - Sheet Properties (Lines & Colors tab)
Centering	No equivalent command
Font	Object - Object Properties (Text Format tab)
Line-Style	Object - Object Properties (Lines & Colors tab) Sheet - Sheet Properties (Lines & Colors tab)
Smoothing	No equivalent command
Text	No equivalent command
Width	Object - Object Properties (Lines & Colors tab) Sheet - Sheet Properties (Lines & Colors tab)

:Graph Edit Options

The table below lists :Graph Edit Options commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Cursor	No equivalent command
Font-Magnification	Object - Object Properties (Text Format tab)
Grid	Chart - Axes & Grids

:Graph Edit Rearrange

The table below lists :Graph Edit Rearrange commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Back	Object - Send to Back
Copy	Edit - Copy
Delete	Edit - Clear
Front	Object **-** Bring to Front
Lock	Object - Object Properties (Basics tab)
Move	No equivalent command
Restore	Edit - Undo
Unlock	Object - Object Properties (Basics tab)

:Graph Edit Transform

The table below lists :Graph Edit Transform commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Clear	No equivalent command
Horizontal	No equivalent command
Quarter-Turn	Object - Object Properties (Basics tab)
Rotate	Object - Object Properties (Basics tab)
Size	No equivalent command
Vertical	No equivalent command
X-Flip	Drawing - Flip Top-Bottom
Y-Flip	Drawing - Flip Left-Right

:Graph Edit View

The table below lists :Graph Edit View commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Down	No equivalent command
Full	No equivalent command
In	No equivalent command
Left	No equivalent command
-	No equivalent command
Pan	No equivalent command
+	No equivalent command
Right	No equivalent command
Up	No equivalent command

:Named-Style

The table below lists :Named-Style commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Define	Range - Range Properties (Named Styles tab)
1 - 8	Range - Range Properties (Named Styles tab)

:Print

The table below lists :Print commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Configuration	See :Print Configuration for additional commands
File	No equivalent command
Go	File - Print
Info	No equivalent command
Layout	File - Preview & Page Setup
Preview	File - Preview & Page Setup
Quit	No equivalent command
Range	File - Preview & Page Setup
Settings	See :Print Settings for additional commands

:Print Configuration

The table below lists :Print Configuration commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Bin	File - Print, then Properties
1st-Cart	File - Print, then Properties
Interface	No equivalent command
Orientation	File - Preview & Page Setup (Layout tab) File - Print, then Properties
Printer	File - Preview & Page Setup (Printer tab), then Printer
Quit	No equivalent command
Resolution	File - Print, then Properties
2nd-Cart	File - Print, then Properties

:Print Settings

The table below lists :Print Settings commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Begin	File - Print File - Preview & Page Setup (Include tab)
End	File - Print File - Preview & Page Setup (Include tab)
Frame	File - Preview & Page Setup (Include tab)
Grid	File - Preview & Page Setup (Include tab)
Quit	No equivalent command
Reset	No equivalent command
Start-Number	File - Print File - Preview & Page Setup (Include tab)
Wait	No equivalent command

:Quit
This command has no equivalent in 1-2-3 97.

:Special

The table below lists :Special commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Copy	Edit - Copy, then Edit - Paste Special
Export	No equivalent command
Import	No equivalent command
Move	Edit - Cut, then Edit - Paste Special

:Text

The table below lists :Text commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Align	Object - Object Properties (Alignment tab) Sheet - Sheet Properties (Alignment tab)
Clear	No equivalent command
Edit	Create - Text
Reformat	No equivalent command
Set	No equivalent command

:Worksheet

The table below lists :Worksheet commands in 1-2-3 for DOS Release 3.1 and their closest equivalents in 1-2-3 97.

1-2-3 Release 3.1	1-2-3 97
Column	Range - Range Properties (Basics tab)
Page	Range - Range Properties (Basics tab)
Row	Range - Range Properties (Basics tab)

Overview: Distributing workbooks with TeamConsolidate

TeamConsolidate lets you distribute workbook sheets in a Lotus Notes database to request data or modifications from contributors. After they make changes, you can consolidate these sheets back into your original workbook.

For example, suppose you're using 1-2-3 to track expenses on a project involving several departments. You can create a workbook containing a sheet for each department. Using Lotus Notes, you distribute each sheet to people in each department. They make updates and additions and then you can consolidate the changes into the original workbook. Storing the workbook in a Notes database makes the information available to everyone--even people at different locations--and can help you track changes over time.

Note To use TeamConsolidate, you must have Lotus Notes 4.1 or higher, and should be familiar with the basics of working in Notes databases. If you don't have Notes 4.1, you can perform similar tasks with File - TeamReview. For more information, see Overview: TeamReview in 1-2-3.

How to distribute sheets and consolidate changes into your original document

The process for distributing the sheets of a workbook to contributors involves a single distributor and any number of contributors. The general procedure is outlined below.

- A person familiar with designing and administering Notes databases sets up a Notes database that will contain the master workbooks and distributed sheets. This database must use the TeamConsolidate template, named TEAMCONS.NTF, which comes with 1-2-3.
- In 1-2-3, the originator chooses File - Team Consolidate - Share Sheets Using Lotus Notes.
- The originator opens the database in which to store the workbook.
- In Notes, the originator chooses Create - 1-2-3 Workbook Document, and either creates a new workbook or opens an existing one.
- Next, the originator assigns individual sheets of the workbook to one or more contributors and notifies contributors in an e-mail message.
- Next, contributors open the Notes database, and edit the 1-2-3 workbook document in place. When contributors finish adding data, they mark the document as ready for consolidation and save it back to the Notes database.
- After all contributors mark their documents "Ready for consolidation," the originator clicks the Consolidate Workbook Data button to consolidate contributors' changes into the master workbook.
- After the changes are consolidated, the originator can save the master workbook as a separate 1-2-3 file or leave the workbook stored in the Notes database.

{button ,AL(`H_WORKING_IN_THE_TEAMCONSOLIDATE_VIEW_OVER;H_SETTING_UP_THE_MASTER_WORKBOOK_OVER;H_SHARE_SHEETS_USING_NOTES_STEPS;H_CREATING_THE_MASTER_WORKBOOK_AS_NEW_WORKBOOK_STEPS;H_DISTRIBUTING_SHEETS_STEPS;H_EDITING_A_DISTRIBUTED_SHEET_STEPS;H_CONSOLIDATING_DISTRIBUTED_SHEETS_STEPS;',0)} See related topics

Overview: Creating the TeamConsolidate Notes database

To use TeamConsolidate, you must have Lotus Notes 4.1 or higher.

To create a TeamConsolidate database, you need to be familiar with the process of setting up and administering Notes databases. You must create the TeamConsolidate database using the TeamConsolidate template, named TEAMCONS.NTF, which comes with 1-2-3 and is installed in your Notes data directory.

Setting up users

After creating the TeamConsolidate database, set up the list of users who will have access to the database and assign them the appropriate privileges. For example, every user must have a minimum of Author access to the database.

Customizing the database

You can use all of the TeamConsolidate features without altering the forms and views of a TeamConsolidate database.

However, you can customize the forms and views of the template to make it suit your needs. For example, you might want to change the user interface to make it easy to distribute workbook documents to the same set of users every month.

The forms of the TeamConsolidate database contain scripts created using the LotusScript language. To preserve the basic functionality of TeamConsolidate, you should exercise caution if you edit existing scripts. However, you can add new scripts to the forms to perform various tasks according to your needs.

Where to find more information

To find more detailed information about setting up, maintaining, and customizing a TeamConsolidate database, open the TeamConsolidate template database and choose Help - About This Database and Help - Using This Database. For general information about designing and maintaining Notes databases, consult your Lotus Notes documentation.

{button ,AL(`H_SHARE_SHEETS_USING_NOTES_OVER;H_SETTING_UP_THE_MASTER_WORKBOOK_OVER;
H_WORKING_IN_THE_TEAMCONSOLIDATE_VIEW_OVER',0)} See related topics

Overview: Setting up the master workbook

When you use TeamConsolidate, you work with 1-2-3 as you normally would. Because contributors will be working with only one sheet at a time, certain features of 1-2-3 are less important or useful, for example, features that work across sheets.

Below is information to keep in mind when creating the master workbook and working in distributed sheets.

Setting up each sheet

When you are distributing sheets from a workbook with multiple sheets, put all the data and graphic objects that you want to distribute to one person on a single sheet. If a workbook contains macros, it is best to put these on a separate sheet.

Charts, drawings, maps, and OLE embedded objects

During consolidation, if separate distributed sheets contain charts, drawings, maps, or embedded objects with the same names, the objects with the duplicate names are not renamed. No objects or data will be lost, but to avoid confusion, before you distribute a sheet, assign names to objects rather than accepting the default names suggested by 1-2-3.

Versions and version groups

It is a good idea to avoid 3D versions in a distributed sheet. Although contributors can use data in multiple sheets, for example with formula calculations, 1-2-3 only consolidates the changes made on the single sheet that was distributed.

If the originator adds versions in the master workbook while sheets are distributed, the data in these versions will be lost during consolidation.

Version groups are not included in a distributed sheet.

Scripts

You can add, edit, and consolidate scripts that are attached to graphic objects on the current sheet, but no other scripts.

Note If a script is attached to a range in a distributed sheet, the script will not be consolidated.

Locked workbooks

You can distribute, edit, and consolidate locked workbooks. The lock is ignored when the sheet is consolidated back into the master workbook.

Password-protected workbooks

Since you cannot password-protect an OLE object, you cannot password-protect a master document after it is in Notes.

{button ,AL(`H_WORKING_IN_THE_TEAMCONSOLIDATE_VIEW_OVER;H_SHARE_SHEETS_USING_NOTES_STEPS;H_CREATING_THE_MASTER_WORKBOOK_AS_NEW_WORKBOOK_STEPS;H_DISTRIBUTING_SHEETS_STEPS;H_EDITING_A_DISTRIBUTED_SHEET_STEPS;H_CONSOLIDATING_DISTRIBUTED_SHEETS_STEPS;H_NAMING_A_GRAPHIC_STEPS;H_SHARE_SHEETS_USING_NOTES_OVER;',0)} See related topics

Creating the master workbook from an existing workbook

Before you start, the Notes database for storing the workbook must be set up. If you are already in Notes, you can start with step 3.

1. Choose File - Team Consolidate - Share Sheets Using Lotus Notes.
2. Click Go To Lotus Notes.

   Note The Go To Lotus Notes button is dimmed if Notes 4.1 or higher is not installed.
3. In Notes, open the Notes database where you want to place the 1-2-3 workbook.
4. Click the Create 1-2-3 Workbook Document button.
5. Enter a title for the master workbook document.
6. Select "Use an existing 1-2-3 workbook" and specify the file name.
7. Click OK.
8. Select whether to request data for the workbook now or later.
   - If you choose to distribute the workbook now, follow the steps in Distributing sheets, starting with step 3.
   - If you choose to distribute the workbook later, when you are ready, click Request Workbook Data.

{button ,AL(`H_WORKING_IN_THE_TEAMCONSOLIDATE_VIEW_OVER;H_SETTING_UP_THE_MASTER_WORKBOOK_OVER;H_CREATING_THE_MASTER_WORKBOOK_AS_NEW_WORKBOOK_STEPS;H_DISTRIBUTING_SHEETS_STEPS;H_EDITING_A_DISTRIBUTED_SHEET_STEPS;H_CONSOLIDATING_DISTRIBUTED_SHEETS_STEPS;',0)} See related topics

Creating a new master workbook

Before you start, the Notes database for storing the workbook must be set up. If you are already in Notes, you can start with step 3.

1. Choose File - Team Consolidate - Share Sheets Using Lotus Notes.
2. Click Go To Lotus Notes.
3. Open the Notes database where you want to place the 1-2-3 workbook.
4. Click the Create 1-2-3 Workbook Document button.
5. Enter a title for the master workbook document.
6. Select "Create a new 1-2-3 workbook."
7. Click OK.
8. Set up and enter data in the 1-2-3 workbook object.
9. Click the Notes form outside the 1-2-3 workbook object when you finish creating the master workbook.
10. Close and save the Notes document.

You are now ready to distribute the sheets in the master workbook to contributors. See Distributing sheets for information.

{button ,AL(`H_SHARE_SHEETS_USING_NOTES_OVER;H_SHARE_SHEETS_USING_NOTES_STEPS;H_DISTRIBUTING_SHEETS_STEPS;H_EDITING_A_DISTRIBUTED_SHEET_STEPS;H_CONSOLIDATING_DISTRIBUTED_SHEETS_STEPS;',0)} See related topics

Distributing sheets

You distribute sheets to request data from contributors. Distributing sheets assigns them to contributors and makes each distributed sheet a response document under the master document.

1. Open the Notes document containing the workbook you want to distribute.
2. Click the Request Workbook Data button.
3. Select the sheets you want to distribute by dragging sheet names from the "Sheets in workbook" list to the "Sheets to distribute" list.
4. To choose contributors for each distributed sheet, click in the Contributors list and type a name or click the Addresses button to select names from an address book.

   You can specify more than one contributor for each sheet. Separate names with a , (comma). You can also use group names to specify multiple contributors.
5. (Optional) Select "Only contributor(s) may view distributed sheets," to prevent others from seeing and entering data in the distributed sheets.
6. (Optional) To send e-mail to all contributors, select "Send mail with doclink to contributors," then enter your message in the box.
7. (Optional) Select "Notify me when contributors have finished" if you want to receive a message when documents are marked "Ready to consolidate" or "Do not consolidate."
8. Click OK, and enter your e-mail password (if prompted).

After you close the document, response documents containing the distributed sheets appear beneath the master document with a status of "Data requested."

{button ,AL(`H_DISTRIBUTING_SHEETS_DETAILS',1)} See details

{button ,AL(`H_SHARE_SHEETS_USING_NOTES_OVER;H_WORKING_IN_THE_TEAMCONSOLIDATE_VIEW_OVER;H_SETTING_UP_THE_MASTER_WORKBOOK_OVER;H_EDITING_A_DISTRIBUTED_SHEET_STEPS;H_CONSOLIDATING_DISTRIBUTED_SHEETS_STEPS;',0)} See related topics

Details: Distributing sheets

When you can distribute sheets

You can distribute sheets from a master workbook document that has a status of "Data not yet requested" or "Consolidation completed." If a master workbook document has any other status, the Request Workbook Data button is not available.

After you distribute a sheet, you cannot distribute it again until the master workbook document has a status of "Consolidation completed." Consolidation is completed when all distributed sheets have a status of "Consolidated into Master" or "Do not consolidate."

{button ,AL(`H_DISTRIBUTING_SHEETS_STEPS',1)} Go to procedure

Overview: Working in the TeamConsolidate database

In the TeamConsolidate database, you can choose from several ways to view the master workbook documents and the distributed sheets, which appear as response documents to the master workbook document.

Displaying the TeamConsolidate Navigator

You can click the Navigator button to display a row of buttons on the left side of the workbook window that replace the standard Notes navigators. The TeamConsolidate navigator contains these buttons:

- All Documents -- Displays all documents in the view by originator name
- By Status -- Displays all documents by status of master workbooks
- By Date -- Displays all documents by modification date of master workbooks
- By Contributor -- Displays distributed sheets by contributor name, but does not display the master workbooks

Collapsing and expanding the Notes view

You can expand the Notes view to see the distributed sheets below the master workbook document. Click the triangle to expand or collapse the view.

{button ,AL(`H_SHARE_SHEETS_USING_NOTES_OVER;H_SETTING_UP_THE_MASTER_WORKBOOK_OVER;H_CREATING_THE_MASTER_WORKBOOK_AS_NEW_WORKBOOK_STEPS;H_SHARE_SHEETS_USING_NOTES_STEPS;H_DISTRIBUTING_SHEETS_STEPS;H_EDITING_A_DISTRIBUTED_SHEET_STEPS;H_CONSOLIDATING_DISTRIBUTED_SHEETS_STEPS;',0)} See related topics

Editing a distributed sheet

Contributors can edit distributed sheets in place or out of place. When you open a document containing a distributed sheet, the sheet is activated for in-place editing.

Editing the sheet in place

1. In the Notes database, open the document containing the distributed sheet.
2. Make your changes or additions to the sheet.
3. (Optional) Enter a comment in the Remarks field.
4. Close and save the Notes document.
5. In the Status of Contributor Document dialog box, make a choice reflecting the status of your work.

   Note If you plan to add more changes later, select "In progress."
6. Click Done.

Editing the sheet out of place

1. In the Notes database, open the document containing the distributed sheet.
2. Click outside the 1-2-3 workbook object to deactivate it.
3. Click the object to select it.
4. Choose Workbook - Open.

   The sheet appears in a full 1-2-3 window.
5. Make your changes or additions.
6. Choose File - Exit & Return to close 1-2-3 and go back to the Notes document.
7. (Optional) Enter a comment in the Remarks field.
8. Save and close the Notes document.
9. In the Status of Contributor Document dialog box, make a choice reflecting the status of your work.

   Note If you plan to add more changes later, select "In progress."
10. Click Done.

{button ,AL(`H_EDITING_A_DISTRIBUTED_SHEET_DETAILS',1)} See details

{button ,AL(`H_SHARE_SHEETS_USING_NOTES_OVER;H_SETTING_UP_THE_MASTER_WORKBOOK_OVER;H_DISTRIBUTING_SHEETS_STEPS;H_CONSOLIDATING_DISTRIBUTED_SHEETS_STEPS;',0)} See related topics

Details: Editing a distributed sheet

Adding comments
You can enter a comment in the response document to record any information you want about changes or additions you made to a distributed sheet. All comments from distributed sheets are listed in the Remarks field of the master workbook document after consolidation.

Limitations when editing a distributed sheet
When you are editing a distributed sheet, certain 1-2-3 commands and features are unavailable.

- You cannot use Edit - Go To to go to objects on other sheets.
- You cannot create or delete sheets.
- You cannot create version groups.
- You cannot insert or delete rows or columns in a versioned range (unless you created the version in the distributed sheet).
- You cannot add or change scripts attached to ranges.

Editing sheets in place
When you edit a sheet in place, the File and Window menus contain Lotus Notes commands. File - Save stores the entire Notes document containing the sheet, not just the sheet.

You can end in-place editing by clicking in the Notes document outside of the sheet. To return to editing the sheet, double-click it.

The 1-2-3 data is not saved until you save the Notes document.

Editing sheets out of place
When you edit the sheet out of place, the File menu contains 1-2-3 commands.

Setting the status of your work
When you save a distributed sheet, a dialog box requests you to confirm or change the status of the document. You can change the status to "In progress," "Ready to consolidate," or "Do not consolidate."

Duplicate range names
When you edit a distributed sheet, all range names proposed by Version Manager (for example, Range 1) will include the sheet name as a prefix (by default, a letter). If 1-2-3 detects a duplicate range name while consolidating distributed sheets back into the original workbook, 1-2-3 keeps the range name in the first sheet, but discards the names of any other ranges with the same name.

Embedding additional objects
You can embed objects in a distributed sheet and they will be merged back to the master workbook during consolidation.

{button ,AL(`H_EDITING_A_DISTRIBUTED_SHEET_STEPS',1)} Go to procedure

Consolidating distributed sheets

After contributors make changes, you can consolidate distributed sheets back into the master workbook.

1. In the Notes database, open the document containing the master workbook.
2. Click the Consolidate Workbook Data button.
3. Specify whether Notes will consolidate just those documents marked "Ready to consolidate" and whether contributors' documents will be deleted after consolidation.
4. Click OK.

   You see a message confirming that the distributed documents have been consolidated successfully.
5. (Optional) To save the 1-2-3 workbook document as a 1-2-3 workbook file, click the Detach 1-2-3 Workbook button.

{button ,AL(`H_CONSOLIDATING_DISTRIBUTED_SHEETS_DETAILS',1)} See details

{button ,AL(`H_SHARE_SHEETS_USING_NOTES_OVER;H_SETTING_UP_THE_MASTER_WORKBOOK_OVER;H_EDITING_A_DISTRIBUTED_SHEET_STEPS;H_DISTRIBUTING_SHEETS_STEPS;',0)} See related topics

Details: Consolidating distributed sheets

Replication conflicts in distributed sheets
You can consolidate original response documents only. If two people edit the same document at the same time, the second person to save it will create a replication conflict. You must resolve replication conflicts and delete the conflict document before you can consolidate distributed sheets.

Controlling which sheets are consolidated
If you don't select "Consolidate only documents marked Ready to consolidate," all documents with a status of anything except "Do not consolidate" will be consolidated. If you select this option, only those documents with a status of "Ready to consolidate" will be consolidated. If sheets are marked "Do not consolidate," "In progress", or "Data requested," you can consolidate them later, after the contributor changes their status.

If sheets are marked "In progress" and "Consolidate only documents marked Ready to consolidate" is selected, then the master workbook document will get the status of "Partially consolidated." Once the remaining sheets are marked "Ready to consolidate" or "Do not consolidate," you can consolidate again to incorporate the remaining data. Then the status of the master workbook document changes to "Consolidation completed."

Deleting contributors' documents
If you select "Delete contributors' documents after consolidating," Notes deletes the response documents after consolidation. This, however, does not remove replication conflicts for response documents.

If you choose not to delete contributors' documents, they become read-only documents to prevent changes to sheets that have already been consolidated.

{button ,AL(`H_CONSOLIDATING_DISTRIBUTED_SHEETS_STEPS',1)} Go to procedure

Merging versions and version groups

1-2-3 copies versions from named ranges in the source workbook to ranges of the same size and with the same names in the destination workbook.

1. Open the workbook containing the versions you want to merge (the source workbook) and the workbook into which you want to merge the versions (the destination workbook).
2. Make the destination the current workbook.
3. Choose File - Team Consolidate - Merge Versions.
4. In the "Merge versions and version groups from workbook" list, select the source workbook.
5. (Optional) To merge only versions and version groups created on or after a particular date, enter the date in the "On or after this date" box. Enter the date in DD-MMM-YY or DD-MMM format (for example, 15-Apr-96 or 15-Apr).
6. (Optional) To merge only versions or version groups created or last modified by a particular person, select the name in the "By the user" list.
7. Click OK.

   1-2-3 merges versions and version groups from the source workbook into the destination workbook. If 1-2-3 cannot merge any versions or version groups that meet the criteria you specified, the Merge Results dialog box appears.
8. (Optional) In the Merge Results dialog box, use the range selector to specify a range and click Copy Results to Selected Range to copy the merge results to the range. Then click Done.

{button ,AL(`H_MERGING_VERSIONS_AND_VERSION_GROUPS_DETAILS',1)} See details

{button ,AL(`H_WORKING_WITH_VERSIONS_OVER;H_SHARING_VERSIONS_WITH_A_TEAM_OVER;',0)} See related topics

Details: Merging versions and version groups

Options: Merge Versions Results dialog box

- Items not merged -- Lists named ranges or versions that were not merged. If a named range appears in the list, no versions of that range were merged. Version names are given in the form "RANGE.version," where "RANGE" is the range name and "version" is the version name. For example, SALES.BestCase indicates the BestCase version of the range named SALES.
- Reason -- Lists the reasons why ranges could not be merged. The following table explains the reasons.

Reason	Description
No matching range name	The named range in the source file does not exist in the destination file.
Different size	The named range in the source file and the corresponding named range in the destination file contain a different number of rows, columns, or sheets.
Protected	The named range in the destination file is protected.
Hidden	The version or version group in the source file is hidden and the source file is locked.
Contains versions not merged	The version group in the source file contains one or more versions that could not be merged.
Already exists	A version or version group exists in the destination file with the same name, creation date, last modified date, and last user as the version or version group in the source file.

{button ,AL(`H_MERGING_VERSIONS_AND_VERSION_GROUPS_STEPS',1)} Go to procedure

Share sheets using Lotus Notes dialog box

TeamConsolidate lets you distribute workbook sheets to team members, who can add their own data. Later, you can consolidate the updated sheets into your original workbook.

Overview: Distributing workbooks with Team Consolidate
Creating the master workbook from an existing workbook
Creating a new master workbook

{button ,AL(`H_SHARE_SHEETS_USING_NOTES_OVER;',0)} See related topics

Create Document with 1-2-3 Workbook dialog box
Use this dialog box to create a master workbook.

Choose a task
- Creating the master workbook from an existing workbook
- Creating a new master workbook

{button ,AL(`H_SHARE_SHEETS_USING_NOTES_OVER;',0)} See related topics

Overview: Copying and moving

After you enter data, you can copy or move it to other places in the sheet.

You can copy or move:

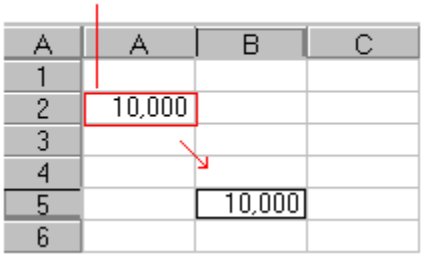
- Ranges (including cells, columns, and rows)
- Charts, maps, and drawings (such as lines, arrows, rectangles, and ellipses)
- Text blocks and buttons
- Embedded objects

You can't copy or move a collection.

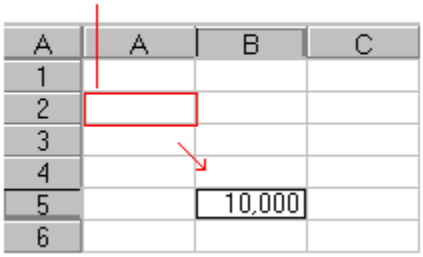
The difference between copying and moving data

Copying always leaves the original unchanged. Moving relocates your data to a destination you specify.

Contents of cell A2 remain after a copy



Nothing remains in cell A2 after a move



Why it's necessary to select the data first

Since 1-2-3 places the data you selected on the Clipboard when you choose Edit - Cut or Edit - Copy, you must select the data to copy first.

About the Clipboard

The Clipboard is a temporary storage area provided by the operating system. You can use it to copy data within 1-2-3 or to copy data to other applications. The Clipboard always contains the data you most recently cut or copied.

About pasting

The destination range can be in the same workbook, in another workbook, or in another active application. When you paste the data, 1-2-3 takes a copy of the data from the Clipboard and puts it where you specify. You can paste the data to as many locations as you want. If you use Edit - Paste Special, 1-2-3 displays a dialog box showing different options. Use the options in the Paste Special dialog box to choose which properties of the copied object you want to include (or exclude) when you paste.

About dragging

Dragging is a quick way to copy data to one location or to move data. When you drag data, 1-2-3 doesn't store the data on the Clipboard. If you want to copy or move data to multiple locations, you should not drag it. If you plan to drag data from one 1-2-3 workbook to another, tile the workbooks so they're both visible first.

What gets copied or moved

When you copy or move cells, 1-2-3 copies or moves styles as well as contents. You can choose Edit - Copy and Edit - Paste Special to paste cell comments to another cell. Scripts attached to ranges do not get copied, but can get moved.

When you copy or move graphic objects, 1-2-3 also copies or moves styles and scripts associated with the objects. You can copy or move a group of graphic objects, but not a collection of ranges.

Ways to copy and move data

You can copy data by dragging a copy to another location, by using the Edit - Copy and Edit - Paste, or by copying to fill adjacent cells. You can move data by dragging it to another location or by using Edit - Cut and Edit -Paste.

When you want to copy	Do this:

Data to one location	Drag the data
Data to more than one location	Copy and paste using the Clipboard
Formulas or data across a column or row	Copy to adjacent cells using Edit - Copy Right or Edit - Copy Down
Data to another application	Copy and paste using the Clipboard

Copying and moving ranges that contain formulas

When you copy or move a range that contains formulas, it can affect the results of the calculations in your data. When you copy a formula, the formula's relative references change, but when you move a formula, the references stay the same. For more information, see Overview: Copying and moving formulas.

{button ,AL(`H_COPYING_123_DATA_TO_OTHER_APPLICATIONS_OVER;H_COPYING_USING_THE_CLIPBOARD_STEPS;H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;H_COPYING_RIGHT_TO_FILL_A_RANGE_STEPS;H_COPYING_DOWN_TO_FILL_A_RANGE_STEPS;H_COPYING_FORMATS_STEPS;H_COPYING_CELL_COMMENTS_STEPS;H_MOVING_USING_THE_CLIPBOARD_STEPS;',0)} See related topics

Copying and moving using drag and drop

1. Select what you want to copy or move.
2. Move the mouse pointer to the edge of the selection so that the pointer changes to a hand.

3. To move the selection, press the mouse button, and drag the selection.

4. To copy the selection, hold down CTRL, press the mouse button, and drag a copy of the selection.

5. Release the mouse button when the outline of your selection is where you want it.

   If you're copying, release the mouse button first and then release CTRL.

Tip To get to a part of the sheet that isn't visible, drag the selection to the edge of the sheet to scroll the sheet.

{button ,AL(`H_COPYING_AND_MOVING_IN_A_SHEET_DETAILS',1)} See details

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_COPYING_CELL_COMMENTS_STEPS;H_COPYING_DOWN_TO_FILL_A_RANGE_STEPS;H_COPYING_FORMATS_STEPS;H_COPYING_AND_MOVING_OVER;H_COPYING_RIGHT_TO_FILL_A_RANGE_STEPS;H_COPYING_USING_THE_CLIPBOARD_STEPS;H_MOVING_USING_THE_CLIPBOARD_STEPS',0)} See related topics

Details: Copying and moving using drag and drop
While you drag, your selection is represented as an outline.

Copying or moving over existing data
If the destination already contains data, 1-2-3 asks if you want to replace the existing data with your selection or cancel the operation. If you accidentally delete data by dragging your selection on top of it, you can immediately choose Edit - Undo.

Copying or moving to another sheet
Drag the selection, without releasing the mouse button (and CTRL if copying), to the other sheet's tab, then to the location on the sheet.

Copying or moving to another active workbook
Tile the workbook windows so that both are visible, then drag the selection, without releasing the mouse button (and CTRL if copying), to the new workbook.

Dragging graphic objects
Drag a graphic object by any part except the handles; when copying or moving a shape with a transparent interior, drag it by the border, not the interior. If you select more than one graphic object, you can move them all by dragging one.

Canceling the copy or move
To cancel the drag operation, press ESC.

How moving ranges affects attached scripts
To move a script attached to a range, you must move the top left or bottom right corner of the scripted range. 1-2-3 only moves a script attached to a cell or range if you move it within a workbook using drag and drop or Edit - Cut and Edit - Paste.

To edit scripts and move them between workbooks, use the Integrated Development Environment (IDE). See Overview: Using LotusScript. for more information.

Turning off drag and drop
You can turn off drag and drop by choosing File - User Setup - 1-2-3 Preferences (General tab), and deselecting "Drag and drop cells." You can also turn off the message that 1-2-3 displays when you drag over existing data by choosing File - User Setup - 1-2-3 Preferences (General tab), and deselecting "Confirm overwrite for drag and drop."

Related SmartIcons

Lets you turn off drag and drop and set other 1-2-3 preferences

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{button ,AL(`H_COPYING_AND_MOVING_IN_A_SHEET_STEPS',1)} Go to procedure

Copying using the Clipboard

The Clipboard is useful when you want to copy data to more than one location.

1. Select what you want to copy.
2. Choose Edit - Copy.

1-2-3 places a copy of your selection on the Clipboard.

3. Select the destination for the copied data.

   Caution If you're copying a range, 1-2-3 writes over any existing data in the destination range, including data in hidden columns, rows, or sheets.

4. Choose Edit - Paste.

{button ,AL(`H_COPYING_USING_THE_CLIPBOARD_DETAILS',1)} See details

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;H_COPYING_CELL_COMMENTS_STEPS;H_COPYING_DOWN_TO_FILL_A_RANGE_STEPS;H_COPYING_FORMATS_STEPS;H_COPYING_AND_MOVING_OVER;H_COPYING_RIGHT_TO_FILL_A_RANGE_STEPS;H_MOVING_USING_THE_CLIPBOARD_STEPS;',0)} See related topics

Details: Copying using the Clipboard

Shortcut for pasting data
You can select the destination and press ENTER to paste the data. Pressing ENTER works only once after each copy or cut.

Selecting the destination
If you copy a range, the destination must be a range. If you copy a graphic object., the destination can be a range or graphic object.

About the destination range
You need to select only one cell of the destination range. 1-2-3 treats that cell as the top left cell of the destination and will paste all the data in its original size and layout. 1-2-3 pastes all the data, regardless of the size of the destination range. If you copy a single cell and the destination range is larger than one cell, 1-2-3 will repeat the data until the range is full.

Pasting text into a text block
To paste text into a text block, double-click the text block and use CTRL+V instead of Edit - Paste.

Copying named styles
When you copy a cell that uses a named style, 1-2-3 copies the named style so you can paste it into a different workbook. This is an easy way to share named styles between workbooks.

Related SmartIcons


Copies and fills a range to the right


Copies and fills a range down


Copies and fills a range down and right


Copies a range's styles to other ranges

{button ,AL(`H_COPYING_USING_THE_CLIPBOARD_STEPS',1)} Go to procedure

Copying right to fill a range

You can copy the contents of the leftmost column of a range to the remaining columns in the range. This is especially useful for copying formulas.

Show me a demo

1. Select the range.

   Include both the cells in the column you want to copy and the cells in the columns to the right that you want to fill with the copied data.

2. Choose Edit - Copy Right.

Caution 1-2-3 writes over any existing data in the range you're filling, including data in hidden columns and rows.

{button ,AL(`H_COPYING_RIGHT_TO_FILL_A_RANGE_DETAILS',1)} See details

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;H_COPYING_DOWN_TO_FILL_A_RANGE_STEPS;H_COPYING_AND_MOVING_OVER;H_COPYING_USING_THE_CLIPBOARD_STEPS;',0)} See related topics

Details: Copying right to fill a range
When you use Edit - Copy Right, 1-2-3 doesn't copy cell comments or scripts.

Related SmartIcons


Copies and fills a range down


Copies and fills a range down and right

{button ,AL(`H_COPYING_RIGHT_TO_FILL_A_RANGE_STEPS',1)} Go to procedure
{button ,AL(`H_COPYING_CELL_COMMENTS_STEPS',0)} See related topics

Copying down to fill a range

You can copy the contents of the top row of a range to the remaining rows in the range. This is especially useful for copying formulas.

Show me a demo

1. Select the range.

   Include both the cells in the row you want to copy and the cells in the rows below that you want to fill with the copied data.

2. Choose Edit - Copy Down.

Caution 1-2-3 writes over any existing data in the range you're filling, including data in hidden columns and rows.

{button ,AL(`H_COPYING_DOWN_TO_FILL_A_RANGE_DETAILS',1)} See details

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;H_COPYING_AND_MOVING_OVER;H_COPYING_USING_THE_CLIPBOARD_STEPS;H_COPYING_RIGHT_TO_FILL_A_RANGE_STEPS;',0)} See related topics

Details: Copying down to fill a range
When you use Edit - Copy Down, 1-2-3 doesn't copy cell comments or scripts.

Related SmartIcons


Copies and fills a range to the right


Copies and fills a range down and right

{button ,AL(`H_COPYING_DOWN_TO_FILL_A_RANGE_STEPS',1)} Go to procedure
{button ,AL(`H_COPYING_CELL_COMMENTS_STEPS',0)} See related topics

Copying styles

You can copy the styles of cells, including number formats, without copying the data in the cell(s).

1. Select the range.
2. Choose Edit - Copy.

3. Select the range to which you want to apply the styles.
4. Choose Edit - Paste Special.

5. Do one or more of the following:
   - To avoid pasting the cell data, deselect "Contents."
   - To paste all styles except range borders and designer frames, select "Styles and number formats."
   - To paste borders, select "Borders."
   - To paste designer frames, select "Charts, maps, drawings, and designer frames."
6. Click OK.

Note To copy a border or designer frame the range must include the entire border or frame.

{button ,AL(`H_COPYING_FORMATS_DETAILS',1)} See details

{button ,AL(`H_COPYING_CELL_COMMENTS_STEPS;H_COPYING_AND_MOVING_OVER;H_COPYING_USING_THE_CLIPBOARD_STEPS;H_USING_FAST_FORMAT_TO_STYLE_A_RANGE_STEPS;',0)} See related topics

Details: Copying styles

Copying styles from one sheet to another by grouping
You can group sheets together to apply the styles of one sheet to other sheets, and to style the group of sheets at the same time.

Related SmartIcons


Copies a range's styles to other ranges


Pastes a range's styles, except borders

{button ,AL(`H_COPYING_FORMATS_STEPS',1)} Go to procedure

{button ,AL(`H_COPYING_OVER;H_GROUPING_SHEETS_STEPS;H_USING_FAST_FORMAT_TO_STYLE_A_RANGE_STEPS',0)} See related topics

Copying cell comments

You can copy cell comments without copying the data in the cell(s).

1. Select the range.
2. Choose Edit - Copy.

3. Select the destination range.

   Caution 1-2-3 replaces any cell comments in the destination range with the cell comments you copied.

4. Choose Edit - Paste Special.

5. Select "Cell comments" and deselect the options you don't want to paste.
6. Click OK.

{button ,AL(`H_COPYING_CELL_COMMENTS_DETAILS',1)} See details

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;H_COPYING_CELL_COMMENTS_STEPS;H_COPYING_DOWN_TO_FILL_A_RANGE_STEPS;H_COPYING_FORMATS_STEPS;H_COPYING_AND_MOVING_OVER;H_COPYING_USING_THE_CLIPBOARD_STEPS;H_MOVING_USING_THE_CLIPBOARD_STEPS;H_CREATING_A_CELL_COMMENT_STEPS',0)} See related topics

Details: Copying cell comments

You cannot use the 1-2-3 Classic (/C) command to copy cell comments

You cannot use drag and fill or drag and clear to copy or delete cell comments.

{button ,AL(`H_COPYING_CELL_COMMENTS_STEPS',1)} Go to procedure

Paste Special dialog box

Use this dialog box to choose which properties of the range you want to include (or exclude) when you paste.

Choose a task

- Copying a formula's result
- Copying styles
- Copying cell comments

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_COPYING_AND_MOVING_OVER;',0)} See related topics

Overview: Copying and moving formulas

You can copy or move formulas to use them in different cells of the same sheet, in different sheets, or in different workbook files. You copy or move a formula the same way you copy other data. You can also copy just the result of a formula.

When you move a formula or the data it refers to, 1-2-3 makes any necessary changes so that the formula still refers to the same data. However, when you copy a formula, you can make the formula refer to the original or different data by using relative, absolute, or mixed references to cell addresses in the formula.

Using relative references to adjust cell addresses

When you copy a formula that contains cell addresses, 1-2-3 adjusts the addresses to their new location(s) in the sheet. Addresses that adjust when you copy them are called relative references. A relative reference can be an address, such as A:B25, or a range name.

For example, if the formula +A1+A2 is in cell A4 and you copy this formula to B4, the formula in B4 changes to +B1+B2. 1-2-3 adjusts the cell addresses in the formula relative to the formula's new location.

See example

Using absolute references to keep cell addresses unchanged

Sometimes you want a formula to refer to the same cells, no matter where and how many times you copy and paste it. To ensure that the formula always refers to the same cells, you change the references to those cells to absolute references. An absolute reference always refers to the same cell or range.

To make a relative reference absolute, you add a $ (dollar sign) before the sheet letter or name, column letter, and row number. For example: $A:$B$25. To make a range name absolute, enter a $ (dollar sign) before the range name. For example: $INTEREST.

See example

Using mixed references to keep part of a cell address unchanged

Sometimes when you copy or move a formula that refers to a cell or range, you want part of the address to stay the same and part of the address to adjust. For example, you may want the column letter to stay the same but the row number to change. To do this, you create a mixed reference by making part of the address absolute and leaving the other part relative.

For example, the formula $A:B$25 contains a mixed reference. The sheet letter (A) and row number (25) are absolute references and are preceded by a $. The column letter (B) is a relative reference. If you copy the formula, the sheet letter and row number stay the same while the column letter adjusts relative to its new location.

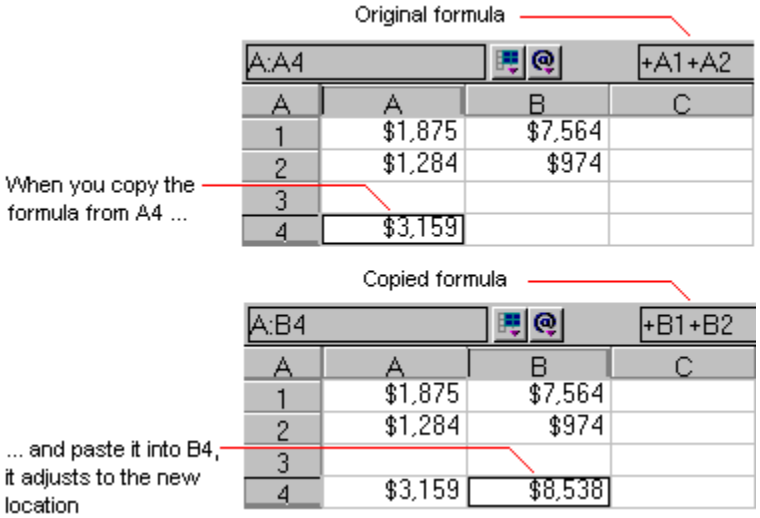
See example

{button ,AL(`H_COPYING_AND_MOVING_OVER;H_COPYING_A_FORMULA_STEPS;H_COPYING_A_FORMULAS_RESULT_STEPS;H_MOVING_A_FORMULA_STEPS;',0)} See related topics

Example: Using relative references

Suppose you create a formula that adds the values in column A, and you want to use the same formula to add the values in column B. To do this, copy the formula in column A and paste it into column B.

As shown below, 1-2-3 automatically adjusts the cell addresses in the formula to refer to cells in the formula's new location.



{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_EXAMPLE_USING_ABSOLUTE_REFERENCES_EX;H_EXAMPLE_USING_MIXED_REFERENCES_EX',0)} See related topics

Example: Using absolute references

Suppose you're calculating the interest on a series of principal values, and you want to use the same interest rate each time. You can make the formula that calculates interest use an absolute reference to the cell containing the interest rate.

When you copy the formula and paste it into other cells, the formula multiplies all of the principal amounts by the same interest rate in A2. The copied formulas will still refer to the single cell that contains the interest rate because of the absolute reference.

A2 contains the interest rate you always want to use

This range contains copies of a formula that makes an absolute reference to A2...

A:B4 +A4*$A$2

	A	B
1	Always use this rate:	
2	7.25%	
3	Principal	Interest
4	$1,000	+A4*$A$2
5	$2,000	+A5*$A$2
6	$3,000	+A6*$A$2
7	$4,000	+A7*$A$2
8	$5,000	+A8*$A$2

...so the formula multiplies all the principal amounts in column A by the same interest rate in A2

A:B4 +A4*$A$2

	A	B
1	Always use this rate:	
2	7.25%	
3	Principal	Interest
4	$1,000	$72.50
5	$2,000	$145.00
6	$3,000	$217.50
7	$4,000	$290.00
8	$5,000	$362.50

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_EXAMPLE_USING_MIXED_REFERENCES_EX;
H_EXAMPLE_USING_RELATIVE_REFERENCES_EX',0)} See related topics

Example: Using mixed references

Suppose you want to calculate interest on a series of principal values, using three different interest rates. You can use the same formula to do all the calculations, as long as it contains mixed references.

In the example below, the formula in B4, +$A4*B$1, uses an absolute reference to the column that contains the various principal values, but a relative reference to the row, so that 1-2-3 looks in the same column but moves down a row each time.

The formula refers to the interest rate by using an absolute reference to the row that contains the interest rates, but a relative column reference, so that 1-2-3 looks in the same row, but moves across a column each time.

The formula refers to the interest rates by relative column, absolute row

The formula refers to the principals by absolute column, relative row

A:B4 +$A4*B$1

	A	B	C	D
1	Try these interest rates:	7.50%	8.00%	8.50%
2				
3	Principal			
4	$1,000	$75	$80	$85
5	$2,000	$150	$160	$170
6	$3,000	$225	$240	$255
7	$4,000	$300	$320	$340
8	$5,000	$375	$400	$425

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_EXAMPLE_USING_ABSOLUTE_REFERENCES_EX;H_EXAMPLE_USING_RELATIVE_REFERENCES_EX',0)} See related topics

Copying a formula

You can copy a formula to use in one or more cells.

1. Select the cell or range that contains the formula(s) you want to copy.
2. (Optional) Edit the formula, if needed, to create relative, absolute, or mixed references to cell addresses.

   Tip When you're editing a formula, you can press F4 to cycle through relative, absolute, and mixed reference variations.
3. Choose Edit - Copy.

4. Select the cell or range where you want to paste the formula(s).
5. Choose Edit - Paste.

6. (Optional) Paste the formula(s) into additional cells.

Tip You can also copy a formula using drag and drop.

{button ,AL(`H_COPYING_A_FORMULA_DETAILS',1)} See details

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_COPYING_A_FORMULAS_RESULT_STEPS;H_EDITING_A_FORMULA_STEPS;H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;',0)} See related topics

Details: Copying a formula
When you copy formulas, 1-2-3 adjusts any relative and mixed references in the copied formulas. 1-2-3 does not adjust absolute references.

Copying a formula to adjacent cells
Sometimes, you want to copy a formula to adjacent cells.

Suppose that cell A5 contains the formula @SUM(A1..A3) and you want to copy the formula to the adjacent three cells. You can quickly copy the formula in cell A5 to B5..D5 using Edit - Copy Right.

You can also use Edit - Copy Down to copy the contents of the topmost cell in a selected range down to the remaining cells in the range.

Related SmartIcons


Pastes the cell contents


Copies the leftmost column to a range


Copies the topmost row to a range

{button ,AL(`H_COPYING_A_FORMULA_STEPS',1)} Go to procedure

{button ,AL(`H_COPYING_DOWN_TO_FILL_A_RANGE_STEPS;H_COPYING_RIGHT_TO_FILL_A_RANGE_STEPS;',0)} See related topics

Copying a formula's result

You can copy a formula's result, rather than the formula itself, when you need only the value for further calculations or when you don't want anyone to see the calculations that produced that value.

1. Select the cell or range that contains the formula(s) whose result(s) you want to copy.
2. Choose Edit - Copy.

3. Select the cell or range where you want to paste the result(s) of the formula(s).
4. Choose Edit - Paste Special.

5. Select "Formulas as values."
6. Click OK.

Tip To convert a formula to its value, double-click the cell containing the formula and press F9 (CALC). After you convert a formula to its value, you cannot retrieve the formula.

Related SmartIcons

Pastes formulas as values

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_COPYING_A_FORMULA_STEPS',0)} See related topics

Moving a formula

1. Select the cell or range that contains the formula(s) you want to move.
2. Choose Edit - Cut.

3. Select the cell or range where you want to paste the formula(s).
4. Choose Edit - Paste.

Tip You can also move a formula using drag and drop.

{button ,AL(`H_MOVING_A_FORMULA_DETAILS',1)} See details

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_MOVING_USING_THE_CLIPBOARD_STEPS;H_COPYING_A_FORMULAS_RESULT_STEPS;H_EDITING_A_FORMULA_STEPS;H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;',0)} See related topics

Details: Moving a formula

Keep in mind...

- If you move a formula, but not the data it refers to, the references in the formula don't change.

  For example, if you move the formula +A1+B3 from cell C10 to D10, the formula remains +A1+B3.

- If you move the data that a formula refers to, 1-2-3 adjusts the formula.

  For example, if cell C10 contains +A1+B3 and you move the contents of cell A1 to cell Q25, the formula in cell C10 changes to +Q25+B3.

  Note If you move the data to another workbook, 1-2-3 does not adjust the formula.

- If you move a formula and any of the data it refers to, 1-2-3 adjusts all references to that data, including absolute references.

  For example, if cell A3 contains the formula +$A$1+A2 and you move the range A1..A3 to B1..B3, the formula in cell B3 is +$B$1+B2.

- If you move a formula on top of data referred to by another formula, the other formula evaluates to ERR.

  For example, if cell A10 contains the formula +A1 and you move B1 (which contains a formula) to A1, the formula in A10 results in ERR.

{button ,AL(`H_MOVING_A_FORMULA_STEPS',1)} Go to procedure

Overview: Copying and moving 1-2-3 data to other applications

There are several ways to copy or move data from 1-2-3 to another application. You can:

- Use Edit - Copy or Edit - Cut to copy or move 1-2-3 data to the Clipboard so you can use this data in another application.
- Use drag and drop to copy data between applications. Both applications must be open and tiled.
- Save 1-2-3 files to other application file formats. File - Save As lets you export data by saving it in the file formats for other applications such as Excel, dBASE, and Paradox. You can save an entire file or just a selected range of data. 1-2-3 can save a file in these formats: .123, .12M, .WK4, .WT4, .WK3, .FM3, .WK1, .TXT, .XLS, .XLW, .DBF, .DB.

{button ,AL(`H_COPYING_123_DATA_TO_OTHER_APPLICATIONS_OVER;H_BRINGING_DATA_FROM_OTHER_APPLICATIONS_INTO_123_STEPS;H_COPYING_DATA_INTO_123_WITH_DRAG_AND_DROP_STEPS;H_OPENING_A_TEXT_FILE_STEPS;H_CLOSING_AND_SAVING_FILES_OVER;H_COPYING_AND_MOVING_OVER;H_COPYING_USING_THE_CLIPBOARD_STEPS;',0)} See related topics

Overview: Using data from other applications in 1-2-3

There are several ways to bring data from another Windows application into 1-2-3. You can:

- Cut or copy data to the Clipboard in another application and then use Edit - Paste to bring the data into 1-2-3.
- Use drag and drop to copy data between 1-2-3 and other applications. Both applications must be open and tiled.
- Use File - Open to bring data into 1-2-3. This single command brings in data from 1-2-3 workbook files as well as many other file types including Excel, dBASE, Paradox, and text files. In the File Open dialog box, choose Combine to insert data from another file into the current workbook.
- Use File - Open to import data from a text file. You enter the name of the text file, select "Text file" as the file type, and designate how to parse the data and what character set to use to interpret it.

{button ,AL(`H_COPYING_AND_MOVING_OVER;H_COPYING_123_DATA_TO_OTHER_APPLICATIONS_OVER;H_BRINGING_DATA_FROM_OTHER_APPLICATIONS_INTO_123_STEPS;H_COPYING_DATA_INTO_123_WITH_DRAG_AND_DROP_STEPS;H_COPYING_DATA_FROM_123_WITH_DRAG_AND_DROP_STEPS;H_PASTING_DATA_FROM_ANOTHER_APPLICATION_INTO_123_STEPS;H_OPENING_A_TEXT_FILE_STEPS;H_COPYING_USING_THE_CLIPBOARD_STEPS;H_COMBINING_DATA_STEPS;',0)} See related topics

Copying data from 1-2-3 with drag and drop

To copy data from 1-2-3 using drag and drop, the other application must also support drag and drop. Drag and drop does not use the Clipboard.

1. Tile the 1-2-3 window and the window of the destination application so that both are visible.
2. In 1-2-3, select the range or graphic object you want to copy.
3. Position the mouse pointer on the border of your selection so that the pointer changes to a hand.

4. While holding down the left mouse button, drag the selection to the destination application.
5. Release the mouse button.

{button ,AL(`H_USING_DATA_FROM_OTHER_APPLICATIONS_IN_123_OVER;H_COPYING_123_DATA_TO_OTHER_APPLICATIONS_OVER;H_COPYING_DATA_INTO_123_WITH_DRAG_AND_DROP_STEPS;',0)} See related topics

Copying and moving data from other applications into 1-2-3

1. In the source application, select what you want to copy or move.
2. Choose Edit - Copy or Edit - Cut to copy or move your selection to the Clipboard.

3. In 1-2-3, click the sheet where you want to place the top left corner of what you are copying or moving.
4. Choose Edit - Paste.

{button ,AL(`H_BRINGING_DATA_FROM_OTHER_APPLICATIONS_INTO_123_DETAILS',1)} See details

{button ,AL(`H_USING_DATA_FROM_OTHER_APPLICATIONS_IN_123_OVER;H_COPYING_123_DATA_TO_OTHER_APPLICATIONS_OVER;H_COPYING_AND_MOVING_OVER;',0)} See related topics

Details: Copying and moving data from other applications into 1-2-3

Copying pictures into 1-2-3
If you copy a picture into 1-2-3 from another application, you can manipulate it the same way you manipulate other graphic objects. For example, you can create or edit a picture with a graphics editor, copy it to the Clipboard, paste it into your sheet, and then select, move, copy, size, or delete it. You can paste a picture into a range or onto a graphic object. If you paste the picture on a graphic object, 1-2-3 places the top left corner of the picture over the top left corner of the graphic object.

Clipboard formats
1-2-3 uses a number of standard Clipboard formats to exchange data between applications via the Clipboard. These formats are:

- Lotus 1-2-3 97 Format
- Lotus 1-2-3 97 Workbook Object
- Rich Text
- Bitmap
- Picture
- Lotus Chart
- Text
- WK1
- WK3
- Device Independent Bitmap

Note If you choose Edit - Paste Special, you can select which Clipboard format you want to use.

{button ,AL(`H_BRINGING_DATA_FROM_OTHER_APPLICATIONS_INTO_123_STEPS',1)} Go to procedure

Copying data into 1-2-3 with drag and drop

To copy data into 1-2-3 using drag and drop, the source application must support drag and drop.

1. Tile the 1-2-3 window and the window of the other application so that both are visible.
2. In the source application, select the data you want to copy.
3. While holding down the left mouse button, drag the selection to its destination in 1-2-3.
4. Release the mouse button.

Note If the source application doesn't support drag and drop, use Edit - Copy and Edit - Paste.

{button ,AL(`H_COPYING_AND_MOVING_OVER;H_USING_DATA_FROM_OTHER_APPLICATIONS_IN_123_OVER;H_COPYING_123_DATA_TO_OTHER_APPLICATIONS_OVER;H_BRINGING_DATA_FROM_OTHER_APPLICATIONS_INTO_123_STEPS;',0)} See related topics

Creating custom @functions

You can use LotusScript to create your own @functions and use them just as you would use any of the built-in 1-2-3 @functions.

1. Choose Create - @Function.
2. Enter a name for the function in the "Name" box. Do not include the @ symbol in the name.
3. Click OK.

   1-2-3 displays an empty function in the Script Editor.
4. Enter the statements that you want to execute when 1-2-3 invokes the function.
5. Close the Script Editor when you finish writing the function statements.

{button ,AL(`H_CREATING_CUSTOM_FUNCTIONS_DETAILS',1)} See details

{button ,AL(`H_CREATING_CUSTOM_FUNCTIONS_EX',1)} See example

{button ,AL(`H_FUNC_BASICS;',0)} See related topics

Details: Creating custom @functions

Other ways to create custom @functions
Choose Edit - Scripts & Macros - Show Script Editor to open the Script Editor and then choose Create - Function from the main menu in the Script Editor.

Naming custom @functions
Follow the LotusScript function naming conventions when naming custom @functions. Do not use the name of an existing @function, macro keyword, or LotusScript keyword. For more information on naming functions, choose Help - LotusScript from the main menu in the Script Editor, then search on "Names, construction rules" in the LotusScript Help Index.

Specifying arguments for custom @functions
LotusScript lets you specify up to 31 arguments for functions you define. However, if you plan to use a function as a custom @function, you can specify only 30 arguments.

Saving custom @functions
To save custom @functions and any other scripts, save the workbook file that contains them.

Using custom @functions
Use a custom @function in the same way you use the @functions that are built into 1-2-3: Simply type the @function and its arguments into a cell.

Caution Do not write custom @functions that alter 1-2-3 objects. If the script for a custom @function contains statements that alter objects, unexpected results may occur.

{button ,AL(`H_CREATING_CUSTOM_FUNCTIONS_STEPS',1)} Go to procedure

Example: Creating custom @functions

This example creates an @function called @CELSIUS that converts a temperature measured in degrees Fahrenheit to its equivalent temperature measured in degrees Celsius.

Enter the following code to create the @CELSIUS function:

```
Function Celsius(temp As Integer) as Long
    Celsius = (temp-32) * 5/9
End Function
```

Now you can use the @function to convert temperatures. For example:

@CELSIUS(87) = 31

Sorting data

You can sort data in a range in the order you specify.

 **Show me a demo**

1. Select the range of data you want to sort.
2. Choose Range - Sort.
3. From the "Available columns" list, select a column to sort by.
4. Click >> or drag the selected column into the "Sort by" list.
5. (Optional) If two or more records have the same entry for the column you selected, add another column to the "Sort by" list.

   For example, if you are sorting by Last Name, you will probably also want to sort by ID Number.
6. Under Sort order, select an option.
7. (Optional) Select "Header at top" and enter a number or click the arrows to indicate how many rows make up the headers.

   1-2-3 does not include the header row(s) in the sort.
8. Click OK.

{button ,AL(`H_SORTING_DATA_DETAILS',1)} See details

{button ,AL(`H_SETTING_SORTING_OPTIONS_STEPS;H_CHANGING_INTERNATIONAL_SETTINGS_STEPS;',0)} See related topics

Details: Sorting data

Choosing a sort order
The Sort dialog box has sort order options.

- Ascending -- Sorts labels in A - Z order and values from smallest to largest.
- Descending -- Sorts labels in Z - A order and values from largest to smallest.

Easy ways to work in the Sort dialog box

- To remove a column from the "Sort by" list, drag it out of the box.
- To move a column from the "Sort by" list back to the "Available columns" list, select the column name and click <<.
- To change the position of a column in "Sort by" list, drag it up or down the list.
- To change the sort order for a column in the "Sort by" list, select the column name and click "Ascending" or "Descending" under "Sort order." [A] following a column name means ascending order; [D] means descending order.

When to select headers in the sort range
It is often convenient to include header rows when you select the sort range, especially when selecting a large data table by range name. Specifying how many rows deep the headers are in the table ensures that you do not sort the column titles along with the data.

Related SmartIcons

Sorts a selected range, labels in A - Z order and values from smallest to largest

Sorts a selected range, labels in Z - A order and values from largest to smallest

---

{button ,AL(`H_SORTING_DATA_STEPS',1)} Go to procedure

Parsing data

You can parse long labels from an imported text file into separate columns of values, dates, times, and labels.

1. Select the range containing the labels you want to parse.
2. Choose Range - Parse.
3. Click Guess Format.

   Based on the first label in the range, 1-2-3 guesses the correct format line and puts it in the "Format line" box.
4. (Optional) Edit the format line.
5. In the "Put results in" box, specify the range or the first cell of the range where you want the parsed data to appear.

   Caution 1-2-3 writes over any existing data, including hidden data, in the range you specify for the parsed data.
6. (Optional) To clear the format line and start again, click Clear Format.
7. Click OK.

{button ,AL(`H_OPENING_A_TEXT_FILE_STEPS;',0)} See related topics

Transposing data

You can copy data in a range, transposing rows and columns within the same sheet or across sheets and replacing formulas with their current values.

1. If the CALC button appears in the status bar, press F9 (CALC) to update formulas in the range you want to transpose.

   If this range contains formulas linked to data in other workbooks, use Edit - Manage Links to update these formulas.
2. Select the range you want to transpose.
3. Choose Range - Transpose.

4. In the "Put the results in" box, specify the range or the first cell of the range where you want to copy the transposed data.

   If you are transposing a 3D range, make sure you specify enough sheets in the range to accommodate the transposed data.

   Caution 1-2-3 writes over any existing data, including hidden data, in the results range.
5. Click OK.
6. (Optional) If you are transposing a 3D range, the 3D Transpose Options dialog box appears. Indicate how you want 1-2-3 to transpose the data, and click OK.

{button ,AL(`H_TRANSPOSING_DATA_DETAILS',1)} See details

{button ,AL(`H_COPYING_AND_MOVING_OVER;',0)} See related topics

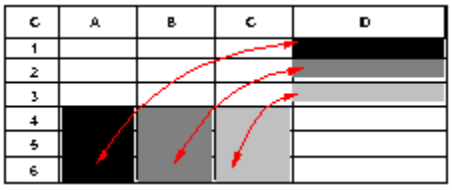
Details: Transposing data

The results of transposing data

You can transpose rows and columns, columns and sheets, and rows and sheets. When you transpose data, 1-2-3 copies the formats, styles, and protection setting of the selected range.

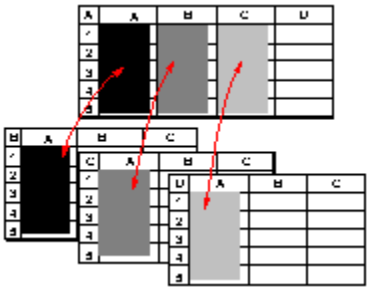
Transposing rows and columns

When you transpose rows and columns, 1-2-3 copies the selected range and converts rows into columns or columns into rows. You can transpose rows and columns within the same sheet or across sheets. The illustration below shows how 1-2-3 transposes rows and columns within the same sheet.



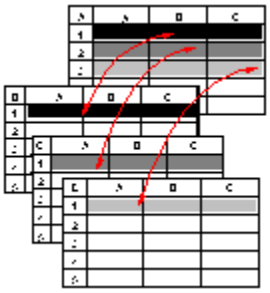
Transposing columns and sheets

When you transpose columns and sheets, 1-2-3 copies each column (or sheet) in the selected range to the corresponding sheet (or column) in the range where you put the results. Each transposed column remains a column in the range where you put the results. The illustration below shows how 1-2-3 transposes columns and sheets.



Transposing rows and sheets

When you transpose rows and sheets, 1-2-3 copies each row (or sheet) in the selected range to the corresponding sheet (or row) in the range where you put the results. Each transposed row remains a row in the range where you put the results. The illustration below shows how 1-2-3 transposes rows and sheets.

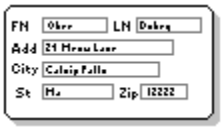


{button ,AL(`H_TRANSPOSING_DATA_STEPS',1)} Go to procedure

Create Form dialog box

Use the Create Form dialog box to connect with Lotus Approach and create a form for working with records from a 1-2-3 database table.

You can use the form to view records in a 1-2-3 database table one at a time, to edit records, and to create new records.



Choose a topic

Creating a form

{button ,AL(`H_DB_WORKING_WITH_DATABASE_TABLES_OVER',0)} See related topics

Creating a form

1-2-3 works with Lotus Approach to create a form for adding, editing, and viewing records in a 1-2-3 database table.

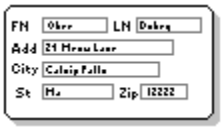
1. Move the cell pointer to a cell in the 1-2-3 database table you want to use.
2. Choose Create - Database - Form.

3. Check that the database table range is correct. If it is not, enter a different range in the box, or use the range selector to specify a range.
4. Click OK.
5. (Optional) Use the mouse with the scroll bars or sheet tabs to navigate to a location where you want to put the form. The form is an object on top of the sheet so it will not write over your data.

   Note If you use the keyboard to navigate, you will end the process without creating a form.
6. When the pointer changes to an icon, click in the sheet.
7. When 1-2-3 opens the Approach Form Assistant, use it to specify the the form layout and the fields you want in the form.

   Tip For more information, click Help in the Form Assistant.
8. Click Done.

   1-2-3 creates and activates the form in the sheet.



{button ,AL(`H_DB_CREATING_FORMS_DETAILS',1)} See details

{button ,AL(`H_DB_WORKING_WITH_A_FORM_STEPS;H_DB_WORKING_WITH_DATABASE_TABLES_OVER',0)} See related topics

Details: Creating a form

Tips

- If you create a form on a sheet other than the one that contains your database table, someone can enter data in the form without seeing the database table.
- You can even hide the sheet containing the database table to protect it from someone who only needs to use the form.

{button ,AL(`H_DB_CREATING_FORMS_STEPS',1)} Go to procedure

{button ,AL(`H_HIDING_SHEETS_STEPS;H_CREATING_A_SHEET_STEPS',0)} See related topics

Working with a form

To work with a form, you must select it or activate it.

Selecting a form

To select the form, click it. When the form is selected, you can:

- Use Form - Form Properties to change the properties of the form
- Move it by dragging it
- Size it by dragging any of the handles on the frame
- Delete it by pressing DELETE

Activating a form

To activate the form, choose Form - Edit or double-click it. When the form is active, you can:

- Enter and edit data in the form, which automatically updates data in the 1-2-3 database table

  Caution 1-2-3 allows up to 512 characters in a field. Approach allows up to 256 characters in a field. If you edit data longer than 256 characters using a form, that data will be truncated in your 1-2-3 database table when you refresh data in the form.
- Use the Browse commands to find, sort, add, duplicate, hide, and delete records or to navigate through records one at a time
- Size the form by dragging any of the handles on the frame
- Choose Help - Help Topics to get additional information on working with forms in Approach

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{button ,AL(`H_DB_WORKING_WITH_123_DATA_IN_AN_EMBEDDED_APPROACH_OBJECT_OVER;H_DB_CREATING_FORMS_STEPS',0)} See related topics

Dynamic Crosstab dialog box

Use the Dynamic Crosstab dialog box to connect with Lotus Approach and create a dynamic crosstab from data in a 1-2-3 database table.

In a a dynamic crosstab, you can group records by the fields you select. Use a crosstab to summarize and analyze data in a 1-2-3 database table.

Choose a topic

Creating a dynamic crosstab

{button ,AL(`H_DB_WORKING_WITH_DATABASE_TABLES_OVER;H_DB_CREATING_A_DYNAMIC_CROSSTAB_EX',0)} See related topics

Creating a dynamic crosstab

1-2-3 works with Lotus Approach to create a dynamic crosstab from data in a 1-2-3 database table.

1. Move the cell pointer to a cell in the 1-2-3 database table you want to use.
2. Choose Create - Database - Dynamic Crosstab.

3. Check that the database table range is correct. If it is not, enter a different range in the box, or use the range selector to specify a range.
4. Click OK.
5. (Optional) Use the mouse with the scroll bars or sheet tabs to navigate to a location where you want to put the dynamic crosstab. The crosstab is an object on top of the sheet, so it will not write over your data.

   Note If you use the keyboard to navigate, you will end the process without creating a crosstab.
6. When the pointer changes to an icon, click in the sheet.
7. When 1-2-3 opens the Crosstab Assistant, use it to set up a crosstab.

   Tip For more information, click Help in the Crosstab Assistant.
8. Click Done.

   1-2-3 creates and activates the crosstab in the sheet.

{button ,AL(`H_DB_CREATING_A_DYNAMIC_CROSSTAB_EX',1)} See example

{button ,AL(`H_DB_WORKING_WITH_A_DYNAMIC_CROSSTAB_STEPS;H_DB_WORKING_WITH_DATABASE_TABLES_OVER;',0)} See related topics

Working with a dynamic crosstab

To work with a crosstab, you must select it or activate it.

Selecting a crosstab

To select the crosstab, click it. When the crosstab is selected, you can:

- Use the Crosstab menu to change the properties of the crosstab or refresh the data
- Move the crosstab by dragging it
- Size it by dragging any of the handles on the frame
- Delete it by pressing DELETE
- Print it by choosing File - Print

Activating a crosstab

To activate the crosstab, choose Crosstab - Edit or double-click it. When you activate it, you can:

- Choose Edit or Browse commands to work with the crosstab
- Choose Help - Help Topics to get additional information on working with crosstabs in Approach

You can also use the mouse to:

- Size the crosstab by dragging any of the handles on the frame
- Rearrange the fields by dragging the column or row headers from one place to another
- Group data by dropping a field name in the column or row header area
- Summarize data in a field by dropping the field into the data area

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{button ,AL(`H_DB_CREATING_A_DYNAMIC_CROSSTAB_EX',1)} See example

{button ,AL(`H_DB_WORKING_WITH_123_DATA_IN_AN_EMBEDDED_APPROACH_OBJECT_OVER;H_DB_CREATING_A_DYNAMIC_CROSSTAB_STEPS',0)} See related topics

Example: Creating a dynamic crosstab

A crosstab is a good tool for categorizing and summarizing database records when the data includes at least three variables.

For example, the sheet below contains fields for the names of (1) each sales representative, (2) each product, and (3) the number of cases sold. The names and products are listed more than once so you can use a crosstab to total the data for either one.

A	A	B	C
1	**Sales Rep**	**Product**	**# Cases**
2	Lindsay	90 Cabernet	450
3	Lindsay	90 Pinot Noir	300
4	Lindsay	90 Merlot	380
5	Lindsay	90 Cabernet	240
6	Lindsay	90 Merlot	550
7	Lindsay	90 Merlot	700
8	Renault	90 Merlot	200
9	Renault	90 Cabernet	400
10	Renault	90 Cabernet	650
11	Renault	90 Pinot Noir	270
12	Renault	90 Merlot	150
13	Renault	90 Pinot Noir	290

The following crosstab shows the total cases sold by product for each sales representative.

	Lindsay	Renault	*Total*
	# Cases	# Cases	# Cases
90 Cabernet	690	1050	1740
90 Merlot	1630	350	1980
90 Pinot Noir	300	560	860
Total	2620	1960	4580

{button ,AL(`H_DB_CREATING_A_DYNAMIC_CROSSTAB_STEPS;H_DB_WORKING_WITH_A_DYNAMIC_CROSSTAB_STEPS',0)} See related topics

Create Report dialog box

Use the Create Report dialog box to connect with Lotus Approach and create a report using data from a 1-2-3 database table.

You can use a report to organize, analyze, and present data from many records in a 1-2-3 database table in different formats.

Choose a topic

Creating a report

{button ,AL(`H_DB_WORKING_WITH_DATABASE_TABLES_OVER;H_DB_CREATING_A_REPORT_EX',0)} See related topics

Creating a report

1-2-3 works with Lotus Approach to create a report about records in a 1-2-3 database table.

1. Move the cell pointer to a cell in the 1-2-3 database table you want to use.
2. Choose Create - Database - Report.

3. Check that the database table range is correct. If it is not, enter a different range in the box, or use the range selector to specify a range.
4. Click OK.
5. (Optional) Use the mouse with the scroll bars or sheet tabs to navigate to a location where you want to put the report. The report is an object on top of the sheet, so it will not write over your data.

   Note If you use the keyboard to navigate, you will end the process without creating a report.
6. When the pointer changes to an icon, click in the sheet.
7. When 1-2-3 opens the Approach Report Assistant, use it to set up the report.

   Tip For more information, click Help in the Report Assistant.
8. Click Done.

   1-2-3 creates and activates the report.

{button ,AL(`H_DB_CREATING_A_REPORT_EX',1)} See example

{button ,AL(`H_DB_WORKING_WITH_A_REPORT_STEPS;H_DB_WORKING_WITH_DATABASE_TABLES_OVER;',0)} See related topics

Working with a report

To work with a report, you must activate it.

1. Double-click the report icon in the sheet to activate the report and open Lotus Approach.
2. In the Design view in Approach, you can:
   - Customize the report
   - Use File - Print Preview to see the report
   - Use File - Print to print the report
   - Press F1 to get more information on working with reports
3. To exit Approach and return to 1-2-3, choose File Exit & Return to Lotus 1-2-3.

   When you close Approach, any changes you made to the report are automatically saved. 1-2-3 displays the report as an icon in the sheet.

{button ,AL(`H_DB_CREATING_A_REPORT_EX',1)} See example

{button ,AL(`H_DB_WORKING_WITH_123_DATA_IN_AN_EMBEDDED_APPROACH_OBJECT_OVER;H_DB_CREATING_A_REPORT_STEPS',0)} See related topics

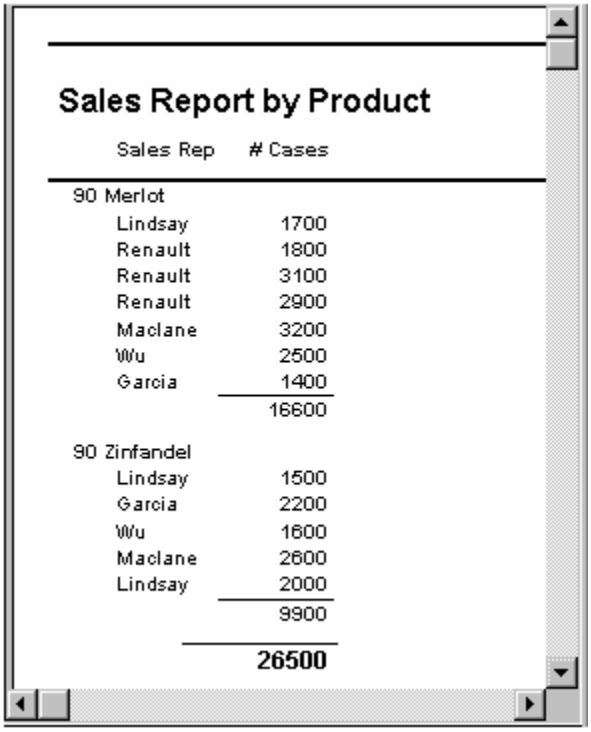
Example: Creating a report

You can create different kinds of reports to organize, analyze, and present data from many records in a 1-2-3 database table.

For example, the sheet below contains fields that include the names of sales representatives, products, and the number of cases sold.

B	A	B	C
1	**Sales Rep**	**Product**	**# Cases**
2	Lindsay	90 Zinfandel	2000
3	Lindsay	90 Zinfandel	1500
4	Garcia	90 Merlot	1400
5	Wu	90 Merlot	2500
6	Maclane	90 Merlot	3200
7	Lindsay	90 Merlot	1700
8	Renault	90 Merlot	1800
9	Garcia	90 Zinfandel	2200
10	Wu	90 Zinfandel	1600
11	Maclane	90 Zinfandel	2600
12	Renault	90 Merlot	3100
13	Renault	90 Merlot	2900

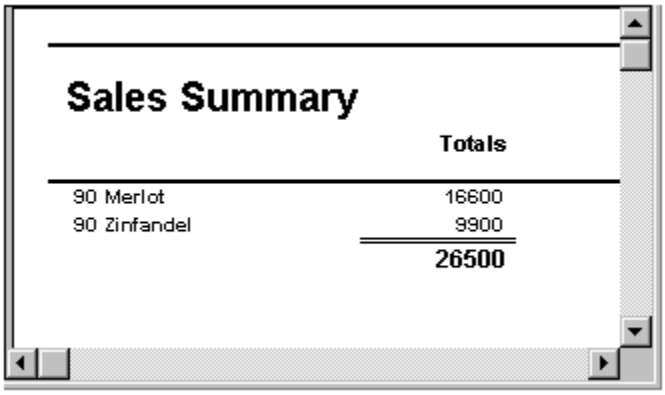
The following report shows individual sales by product.



Sales Report by Product

	Sales Rep	# Cases
90 Merlot		
	Lindsay	1700
	Renault	1800
	Renault	3100
	Renault	2900
	Maclane	3200
	Wu	2500
	Garcia	1400
		16600
90 Zinfandel		
	Lindsay	1500
	Garcia	2200
	Wu	1600
	Maclane	2600
	Lindsay	2000
		9900
		26500

The following summary report shows the total number of cases sold by product.



{button ,AL(`H_DB_CREATING_A_REPORT_STEPS;H_DB_WORKING_WITH_A_REPORT_STEPS;',0)} See related topics

Create Mailing Labels dialog box

Use the Create Mailing Labels dialog box to connect with Lotus Approach and create mailing labels from data in a 1-2-3 database table.

You can create mailing labels in several formats and print the mailing labels on standard or custom mailing label forms.

Choose a topic

Creating mailing labels

{button ,AL(`H_DB_WORKING_WITH_DATABASE_TABLES_OVER;',0)} See related topics

Creating mailing labels

1-2-3 works with Lotus Approach to create mailing labels using data in a 1-2-3 database table.

1. Move the cell pointer to a cell in the 1-2-3 database table you want to use.
2. Choose Create - Database - Mailing Labels.

3. Check that the database table range is correct. If it is not, enter a different range in the box, or use the range selector to specify a range.
4. Click OK.
5. (Optional) Use the mouse with the scroll bars or sheet tabs to navigate to a location where you want to put the mailing labels. The mailing labels are an object on top of the sheet so they will not write over your data.

   Note If you use the keyboard to navigate, you will end the process without creating mailing labels.
6. When the pointer changes to an icon, click in the sheet.
7. When 1-2-3 opens the Approach Mailing Label Assistant, use it to set up mailing labels.

   Tip For more information, click Help in the Mailing Label Assistant.
8. Click Done.

   1-2-3 creates and activates the mailing labels.

{button ,AL(`H_DB_WORKING_WITH_MAILING_LABELS_STEPS;H_DB_WORKING_WITH_DATABASE_TABLES_OVER;',0)} See related topics

Working with mailing labels

To work with mailing labels, you must activate them.

1. Double-click the mailing label icon to activate the mailing labels and open Approach.
2. In Approach, you can:
   - Use Browse view to enter, edit, review, and sort mailing labels
   - Use Design view to customize mailing labels
   - Use File - Print to print mailing labels
   - Press F1 to get more information on working with mailing labels
3. To exit Approach and return to 1-2-3, choose File Exit & Return to Lotus 1-2-3.

   When you close Approach, any changes you made to the mailing labels are automatically saved. 1-2-3 displays the mailing labels as an icon in the sheet.

{button ,AL(`H_DB_WORKING_WITH_123_DATA_IN_AN_EMBEDDED_APPROACH_OBJECT_OVER;H_DB_CREATING_MAILING_LABELS_STEPS',0)} See related topics

Create Form Letter dialog box

Use the Create Form Letter dialog box to connect with Lotus Approach and create a form letter using data in a 1-2-3 database table.

A form letter combines text you type with names and addresses from 1-2-3 database records. Use a form letter to send copies of the same letter to many different people.

Choose a topic

Creating a form letter

{button ,AL(`H_DB_WORKING_WITH_DATABASE_TABLES_OVER;',0)} See related topics

Creating a form letter

1-2-3 works with Lotus Approach to create a form letter that combines text in a letter with names and addresses from a 1-2-3 database table.

1. Move the cell pointer to a cell in the 1-2-3 database table you want to use.
2. Choose Create - Database - Form Letter.

3. Check that the database table range is correct. If it is not, enter a different range in the box, or use the range selector to specify a range.
4. Click OK.
5. (Optional) Use the mouse with the scroll bars or sheet tabs to navigate to a location where you want to put the form letter. The form letter is an object on top of the sheet so it will not write over your data.

   Note If you use the keyboard to navigate, you will end the process without creating a form letter.
6. When the pointer changes to an icon, click in the sheet.
7. When 1-2-3 opens the Approach Form Letter Assistant, use it to set up the form letter.

   Tip For more information, click Help in the Form Letter Assistant.
8. Click Done.

   1-2-3 creates and activates the form letter.

{button ,AL(`H_DB_WORKING_WITH_A_FORM_LETTER_STEPS;H_DB_WORKING_WITH_DATABASE_TABLES_OVER;',0)} See related topics

Working with a form letter

To work with a form letter, you must activate it.

1. Double-click the form letter icon to activate the form letter and open Approach.
2. In Approach you can:
   - Use Design view to enter and edit the text and to customize the form letter
   - Use Browse view to display the letters one at a time
   - Choose File - Print to print the letters
   - Press F1 to get more information on working with form letters
3. To exit Approach and return to 1-2-3, choose File Exit & Return to Lotus 1-2-3.

   When you close Approach, any changes you made to the form letter are automatically saved. 1-2-3 displays the form letter as an icon in the sheet.

{button ,AL(`H_DB_WORKING_WITH_123_DATA_IN_AN_EMBEDDED_APPROACH_OBJECT_OVER;H_DB_CREATING_A_FORM_LETTER_STEPS',0)} See related topics

Overview: Working with 1-2-3 data in an embedded Approach object

Query tables, forms, crosstabs, reports, form letters, and mailing labels are all Lotus Approach objects embedded in a 1-2-3 workbook. You can use these objects to work with copies of records from a 1-2-3 database table in different ways. These objects are linked to data in the database table so that edits to data in one are reflected in the other.

Editing data using an embedded Approach object

When you edit data in any embedded Approach object, you are also editing the data in your 1-2-3 database table. However, you cannot edit protected cells in 1-2-3, and you cannot change the data type in a field from within the embedded object.

Edits you make to data directly in a 1-2-3 database table are displayed in the embedded object when you activate it or refresh it.

Cautions

- Do not edit data in the embedded object that is the result of a formula in 1-2-3 because this will convert the formula to a value in the 1-2-3 database table. Edit formulas directly in the 1-2-3 database table.
- 1-2-3 allows up to 512 characters in a field. Approach allows up to 256 characters in a field. If you edit data longer than 256 characters using an embedded Approach object, that data will be truncated in your 1-2-3 database table when you refresh the object.

Adding data to a 1-2-3 database table linked to an embedded object

When you create an embedded Approach object, 1-2-3 assigns a range name to the 1-2-3 database table range you selected, if you did not already give the range a name.

Adding records (rows)

If you use an embedded Approach object, such as a query table or form, to add a record to a 1-2-3 database table, 1-2-3 automatically expands the named range to include the new record.

However, if you add records directly in the 1-2-3 database table, you must also expand the size of the named range in 1-2-3 to include the new records when the embedded object is not active. Otherwise, the new records may not appear in the embedded object.

Adding fields (columns)

You cannot add a field to a 1-2-3 database table or change the data type of a field using an embedded Approach object.

If you add a field to the 1-2-3 database table or if you change the data type in a field (for example, from values to text), you should recreate the embedded object. Otherwise, the new field may not appear in the embedded object.

{button ,AL(`H_NAMING_A_RANGE_STEPS;H_DB_ADDING_DATABASE_RECORDS_STEPS;H_DB_ADDING_A_FIELD_IN_A_QUERY_TABLE_STEPS;',0)} See related topics

Overview: Working with databases

A database is a collection of data organized into tables which consists of fields and records. Each record in a database contains the same kind of information.

For example,

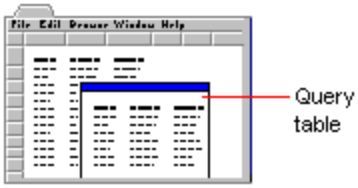
- A city telephone book is a database that contains a record for each person with their name, address, and phone number.
- Teachers keep a record for each student that includes the student's name, test scores, and final grades.
- A business database might include records of clients' names, addresses, phone numbers, and information about sales and purchases.
- A store inventory database might include the names for each product, stock numbers, prices, manufacturers, and so on.

What can you do with a database in 1-2-3?

1-2-3 works with Lotus Approach to help you manage and analyze data contained in a 1-2-3 or an external database. 1-2-3 and Approach are installed together when you install 1-2-3.

Using the Create - Database commands in 1-2-3, you can access Approach to create:

- Query tables -- To add, edit, sort, and find records in either a 1-2-3 database table or an external database table.



- Forms -- To view every record in a 1-2-3 database table, one record at a time. You can use a form to add and edit records.

- Reports -- To organize, analyze, and present data from many records in a 1-2-3 database table.

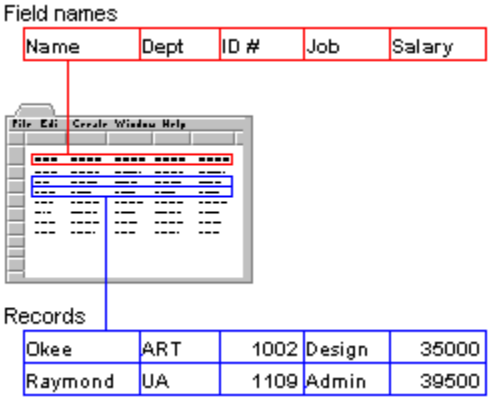
- Dynamic crosstabs -- To organize and summarize categories of data from many records in a 1-2-3 database table.

- Mailing labels -- To display information in a 1-2-3 database table in a mailing address format. You can then print the addresses on standard or custom mailing labels.

- Form letters -- To combine text in a letter with names and addresses from 1-2-3 database records, so you can send copies of the same letter to many different people.

About 1-2-3 database tables

A 1-2-3 database table is a range of data organized in columns and rows. Each column is one field and each row is one record. The top row must contain field names -- labels that identify the records entered in each column.



Once you set up a 1-2-3 database table with field names and records, you can quickly access and manipulate large amounts of data to get exactly the information you need by using a query table to find, sort, add, and delete records.

About external database tables

An external database table is a group of related records stored in a file other than a 1-2-3 workbook file. An external file can be on a personal computer, a network server, a mainframe, or a CD-ROM.

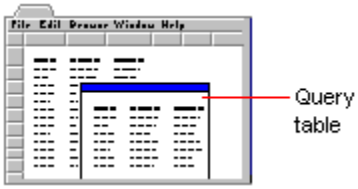
You can create a query table containing records from any external database table that is accessible using Lotus Approach. Using a query table, you can find, sort, add, and delete records from an external database table.

{button ,AL(`H_DB_CREATING_A_123_DATABASE_TABLE_STEPS;H_DB_QUERY_TABLES_OVER;H_DB_CREATING_QUERY_TABLE_STEPS;H_DB_JOINING_DATABASE_TABLES_STEPS',0)} See related topics

Overview: Query tables

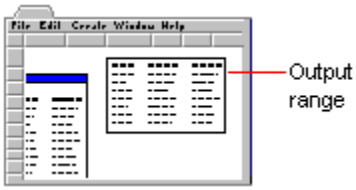
You must create a query table in 1-2-3 to sort or find specific records in a database table.

A query table is set up like a database table with fields, field names, and records. When you first create a query table, it contains a copy of all the database records you specified.



Once you create a query table, you can manipulate records from the source database table. Using the Browse commands, you can sort records or set criteria (conditions) to find specific records in the query table. The query table then displays only the results of the sort or find.

You can also copy the query results to an output range in 1-2-3, where you can format the data for printing, use the data in calculations, and use the data to create charts and maps.



A query table is linked to both the source database and the output range. If you edit data in the query table, these changes automatically appear in the source database table, and can be added to the output range when you refresh. If data in the source database table changes, you can refresh the data in the query table and the output range.

About embedded objects

A query table is an embedded Approach object that you can work with in the sheet. In some ways, a query table is like other objects in 1-2-3. When you select the query table, you can move and size it, change its properties, copy it, delete it, or save it with the workbook file.

However, you can also "activate" an embedded object by double-clicking it. When a query table is active, you can use 1-2-3 and Lotus Approach together to edit, sort, and query database records.

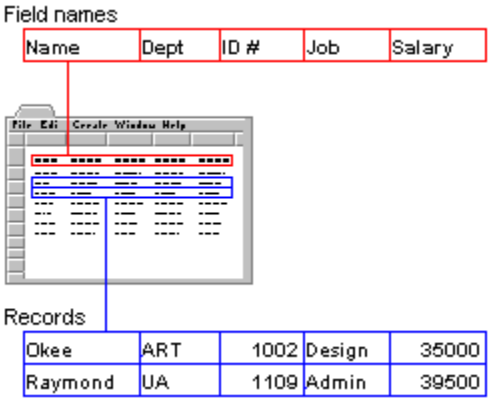
Setting criteria for a query

The process of setting query criteria, or conditions, to find specific database records has changed from previous releases of 1-2-3. First, you must create a query table, and then you can use the Browse commands to sort records or set conditions to find specific records.

{button ,AL(`H_DB_WORKING_WITH_DATABASE_TABLES_OVER;H_DB_CREATING_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_123_DATA_IN_AN_EMBEDDED_APPROACH_OBJECT_OVER;H_DB_QUERY_DATABASE_RECORDS_STEPS;H_DB_SORTING_DATABASE_RECORDS_STEPS;H_DB_ADDING_DATABASE_RECORDS_STEPS;H_DB_DELETING_DATABASE_RECORDS_STEPS;H_DB_EDITING_DATABASE_RECORDS_STEPS',0)} See related topics

Creating a 1-2-3 database table

A 1-2-3 database table is a range containing data organized by columns (fields) and rows (records). Each row contains one record and each column contains one kind of information.



1. Enter labels (field names) in adjacent cells across an empty row.
2. In the first row under each field name, enter information for the first record.
3. In the next row, enter another record.
4. Repeat step 3 for each record you want to enter in the database table.

   You do not need to enter records in any particular order because you can sort the records later.
5. (Optional) Name the range that contains the 1-2-3 database table. Make sure the range includes the first row of field names.
6. Save the file.

{button ,AL(`H_DB_CREATING_A_123_DATABASE_TABLE_DETAILS',1)} See details

{button ,AL(`H_DB_WORKING_WITH_DATABASE_TABLES_OVER;H_DB_JOINING_DATABASE_TABLES_STEPS',0)} See related topics

Details: Creating a 1-2-3 database table
A 1-2-3 database table must fit on a single sheet and can contain up to 256 fields and 8191 records.

Guidelines for entering field names

- Use a label for each field name, rather than a number or formula.
- To enter a field name that begins with a number or other non-alphabetic character, enter a label-prefix character first. For example, enter '1995 Salary as a field name.
- Don't use field names that look like cell addresses, such as P12, X24, or EX100.
- Don't use the same field name twice in the same table. Field names must be unique.
- Don't use any of the following characters in a field name:

  , (comma)

  . (period)

  : (colon)

  ; (semicolon)

  - (hyphen)

  # (number sign)

  ~ (tilde)

  ! (exclamation point)

  spaces

  arithmetic operators such as + (plus sign)

Guidelines for entering records

- Don't use a repeating character, such as a hyphen, to separate the row containing field names from the data.
- You can enter text, numbers, @functions, or formulas in each field.
- @Functions and formulas should contain absolute references or range names, rather than relative references.
- Use consistent formatting and capitalization in each field.
- Use a date @function to enter dates in a database table if you want to sort and query the table by dates.
- You get more reliable results when you query a database table if all entries in the same field (column) contain the same type of data -- for example, all labels rather than a mix of labels and values.

Adding records and fields
You can add records by entering data in rows in the database. You can add fields by entering data in additional columns.

Naming a database table
Assigning a range name to a database table makes it easier to specify the entire table when you want to query it or use it with database @functions.

Follow these rules when assigning a range name to a database table:

- The row containing the field names must be the first row of the named range.
- To avoid confusion, don't use a range name that matches any field names in the same table or any other table you want to query.
- If you add records or fields to a 1-2-3 database table, you must expand the named range to include the new data.

Formatting a database table
Once you enter information in a database table, you can use the InfoBox to change text attributes, number formats, and alignment of the data.

{button ,AL(`H_DB_CREATING_A_123_DATABASE_TABLE_STEPS',1)} Go to procedure

Query Table Assistant

Use the Query Table Assistant to create a query table. A query table contains a copy of the records from a source database table either in 1-2-3 or in an external file, and is linked to the source database.

After you create the query table, you can use the Browse commands to set the criteria (conditions) for a query or sort the records in the query table. When you add, edit, or delete records using the query table, you also make these changes in the source database table.

Choose a task

Creating a query table

{button ,AL(`H_DB_QUERY_TABLES_OVER',0)} See related topics

Creating a query table

1-2-3 works with Lotus Approach to create a query table in 1-2-3.

After you create a query table, you can use the Browse commands to set the criteria (conditions) for a query or to sort the records in the query table. You can also copy the results of a query to an output range in 1-2-3.

Tip If you want to put the query table and the output range on another sheet, create a new sheet before you begin.

1. (For a 1-2-3 database table, only) Open the workbook and move the cell pointer to any cell in the database table that you want to use as the data source.
2. Choose Create - Database - Query Table.

3. In the Query Table Assistant, select "A 1-2-3 range" or "An external table." For more help with specifying the input data, see Details.
4. Click OK.
5. (Optional) Use the mouse and the scroll bars or sheet tabs to navigate to where you would like to put the query table.

   Note If you use the keyboard to navigate, you will end the process without creating a query table.
6. Click in the sheet where you want to display the query table. (The query table is an object on top of the sheet so it will not write over your data.)
7. (For an external database table) In the Open dialog box, select the file containing the database table and click OK. Depending on the type of database you need to access, you may be prompted to enter a password to log in to a database server.
8. When the Worksheet Assistant appears, select the fields you want to work with in the query table.

   Tip For more information, click Help in the Worksheet Assistant.
9. Click Done to create the query table.

   1-2-3 displays and activates the query table in the sheet so you can use the Browse commands to sort or query the records in it.

{button ,AL(`H_DB_CREATING_QUERY_TABLE_DETAILS',1)} See details

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS',0)} See related topics

Details: Creating a query table

Specifying a 1-2-3 range for the input data
When you use a 1-2-3 database table for the input data, you can see your data in the sheet while you are creating a query table.

- If you selected "A 1-2-3 range" and the cell pointer was in a valid 1-2-3 database table, the range box automatically displays the database table range, or the range name if you assigned one to the database table.
- If the 1-2-3 range displayed in the range box is not correct, enter a different range or use the range selector to specify a range.

Specifying an external table for the input data
If you chose to use an external database table for the input data, you will be prompted to specify the file containing the database table. In the process of choosing an external database table, you may also need to log in to a database server.

See your database administrator for additional information about logging in to your database servers.

{button ,AL(`H_DB_CREATING_QUERY_TABLE_STEPS',1)} Go to procedure

Working with a query table

In some ways, a query table is like other objects in 1-2-3. When you select the query table, you can move, and size it, change its properties, delete it, and save it with the workbook file.

You can perform different tasks with a query table depending on whether it is selected or active.

Selecting a query table

To select the query table, click it once. When it is selected, you can:

- Use the Query Table commands to change the name and properties of the table, show or hide the name and border, specify an output range, edit (activate) the table, and refresh query table data from the source database table
- Move it by dragging the title bar
- Size the query table
- Delete it by pressing DELETE

 See related topics

Activating a query table

To activate the query table and display the Browse commands, select the query table and choose Query Table - Edit, or double-click in the query table.

When the query table is active, you can:

- Use the Browse commands to add, duplicate, delete, and edit records in the source database table, the query table, and the output range (if you created one)
- Use the Browse commands to find, sort, hide, and refresh records in the query table and the output range (if you created one)
- Use the Find Assistant to set up criteria (conditions) for a query
- Size the query table
- Rearrange the fields in the query table
- Choose Edit - Open to Full Window to access much more of Approach's database functionality (for example, you can change the data formats, change the query table layout, print the query table, join database tables, and access Help in Approach)

  Caution If you use Edit - Open to Full Window to work with a query table, do not use the Script Editor in Approach.

 See related topics

Using a query table linked to a shared external database table

If someone changes data in an external database table while the query table is inactive, 1-2-3 refreshes the data in the query table when you activate it.

However, if you are working in the query table, you should choose Browse - Refresh Data as often as you like to ensure that you are working with the most recent data.

Finding specific records in a query table

Use the Approach Find/Sort Assistant to set the criteria (conditions) for finding specific records. When you find specific records, the query table hides all the records except the ones that meet the conditions you specified.

1. Select the query table and choose Query Table - Edit to activate it.
2. Choose Browse - Find - Find Assistant.

   For information on setting conditions for finding records, click Help while you are in the Assistant dialog box.
3. Click Done to display the results in the query table.

   Note The first time you deactivate a query table by clicking in the sheet, 1-2-3 automatically displays the Query Table Assistant so that you can copy the records from the query table to an output range.
4. (Optional) Specify an output range. See Copying query results to an output range.

   Caution Specify a blank area of the sheet to avoid writing over existing data, or click Cancel.

Tip To redisplay all the records you started with in the query table, activate the query table and choose Browse - Find - Find All.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_DELETING_DATABASE_RECORDS_STEPS;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS',0)} See related topics

Sorting records in a query table

You can change the order of the records in a query table by sorting them. Sorting records in the query table does not change the order of records in the database table.

1. Select the query table and choose Query Table - Edit to activate it.
2. Click in the field you want to sort by.
3. Choose Browse - Sort.
4. Do one of the following:
   - Choose Ascending or Descending to sort the records by the field you selected.
   - Choose Define to do a more complex sort or add summary fields. If you choose Define, you can click Help to get additional information on defining a sort and summary fields.

   The results are displayed in the query table, and in the output range if you created one.

   Note The first time you deactivate a query table by clicking in the sheet, 1-2-3 automatically displays the Query Table Assistant so that you can copy the records from the query table to an output range.
5. (Optional) Specify an output range. See Copying query results to an output range.

   Caution Specify a blank area of the sheet to avoid writing over existing data, or click Cancel.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_REORDERING_FIELDS_IN_A_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS',0)} See related topics

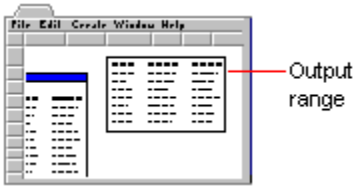
Copying query results to an output range

If you copy records from the query table to an output range in the sheet, you can format the data for printing or use the data in formulas, charts, and maps. Each query table can be linked to one output range in 1-2-3.

1. Select the query table.
2. Choose Query Table - Output Range.
3. Select the size of the output range first.
   - Variable -- Copies all of the records from the query table to the sheet, starting in the upper left cell of the range you selected. If you select only one cell in step 4, 1-2-3 copies all of the records starting in that cell.
   - Fixed -- Limits the size of the output range. 1-2-3 copies only the data that will fit in the selected range.
4. If the 1-2-3 range displayed in the range box is not correct, enter a different range or use the range selector to specify a range.

   Caution To avoid writing over existing data, place the output range in a blank area of the sheet.

   As soon as you select a range, 1-2-3 copies the records from the query table to the sheet. Any formulas from the source database table are converted to values in the output range.



{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_AN_OUTPUT_RANGE_STEPS;',0)} See related topics

Copying query results to an output range (optional)

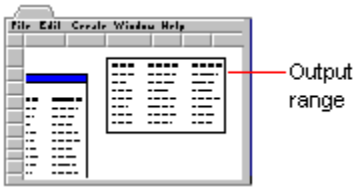
The first time you deactivate a query table by clicking in the sheet, 1-2-3 automatically displays the Query Table Assistant so that you can copy the records from the query table to an output range.

Each query table can be linked to one output range. Use the output range as a place to copy records from the query table to the sheet. Then you can format the data in the output range for printing, or use the data in formulas, charts, and maps.

1. Select the size of the output range first.
   - Variable -- Copies all of the records from the query table to the sheet, starting in the upper left cell of the range you selected. If you select only one cell in step 2, 1-2-3 copies all of the records starting in that cell.
   - Fixed -- Limits the size of the output range. 1-2-3 copies only the data that will fit in the selected range.
2. Select a range to which 1-2-3 can copy the records from the query table.

   Caution Specify a blank area of the sheet to avoid writing over existing data.
3. Click OK.

   1-2-3 copies the records from the query table to the sheet. Any formulas from the source database table are converted to values in the output range.



{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_AN_OUTPUT_RANGE_STEPS;',0)} See related topics

Working with an output range

Each query table can be linked to one output range. You can perform different sorts and queries in a query table, but only the most recent results are displayed in the output range.

How the output range works

Each time you complete a sort or a query, 1-2-3 copies the results to the output range as soon as you click in the sheet. When the source database table changes, refreshing records in the query table also refreshes the output range.

Editing and formatting data in the output range

Editing and formatting data in the output range does not change data in either the source database table or the query table. You can use the InfoBox to format the data in the output range.

Note Any changes you make to data in the output range will be lost the next time you refresh the query table and the output range unless you copy the data to another range.

Copying data from the output range

To save the results of each sort or find, you can copy the records from the output range to another range in 1-2-3. The copied records are no longer linked to the query table and will not change when you change data in the query table.

Moving the output range

If you move the output range, 1-2-3 maintains the link between the output range and the query table.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_DELETING_AN_OUTPUT_RANGE_STEPS;H_DB_REFRESHING_DATA_STEPS;',0)} See related topics

Deleting an output range

Deleting the output range does not affect data in the source database table or in the query table.

1. Select the entire output range.
2. Choose Edit - Clear.

3. Select "Contents" and "Borders and designer frames."
4. Click OK.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_WORKING_WITH_AN_OUTPUT_RANGE_STEPS;',0)} See related topics

Adding records using a query table

Adding a new record to a query table also adds the record to the source database table.

1. Select the query table and choose Query Table - Edit to activate it.
2. Choose Browse - New Record.

   A new blank record is added to the end of both the query table and the source database table.
3. In the query table, type data in each field of the new record.
4. Press ENTER after you type data in each field, or after you have entered data for the entire record, to append the record to the source database table.
5. If you created an output range, click anywhere in the sheet to refresh it.

Note You can also create and use a form to add records to a 1-2-3 database table.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_DELETING_DATABASE_RECORDS_STEPS;H_DB_CREATING_FORMS_STEPS;H_DB_WORKING_WITH_A_FORM_STEPS;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;H_DB_REFRESHING_DATA_STEPS',0)} See related topics

Editing records using a query table

Editing a record in a query table also edits that record in the source database table.

Caution Do not edit data in the query table that is the result of a formula in 1-2-3 because this will convert the formula to a value in your 1-2-3 database table. Edit formulas in the 1-2-3 database table.

1. Select the query table and choose Query Table - Edit to activate it.
2. Select the cell containing data you want to change.

   Caution 1-2-3 allows up to 512 characters in a field. Approach allows up to 256 characters in a field. If you edit data longer than 256 characters using a query table, that data will be truncated in your 1-2-3 database table.
3. Change the data and press ENTER.

   Data automatically changes in the source database table.
4. If you created an output range, click anywhere in the sheet to refresh it.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_CREATING_FORMS_STEPS;H_DB_WORKING_WITH_A_FORM_STEPS;H_DB_WORKING_WITH_DATABASE_TABLES_OVER;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;H_DB_REFRESHING_DATA_STEPS',0)} See related topics

Deleting records using a query table

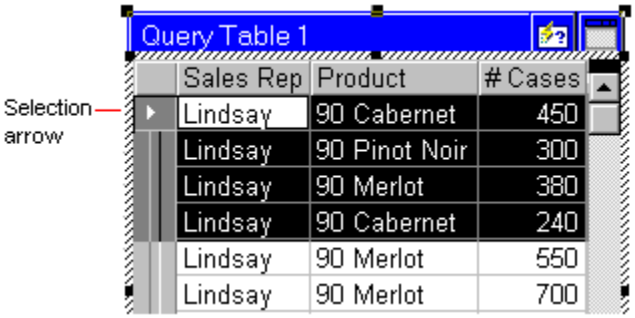
Deleting records from a query table also deletes the records from the source database table. For example, you might want to delete a record for one person, or you might want to delete all records entered before a specific date.

Caution You cannot undo deleting records.

Deleting selected records

You can select one or more records you want to delete.

1. Select the query table and choose Query Table - Edit to activate it.
2. Click in the first record you want to delete.
3. Click the selection arrow (in the left border) and drag down in the left border to select the records you want to delete.



4. Choose Browse - Delete Record.
5. Click Yes to permanently delete the selected records from both the query table and the source database table.

Deleting found records

You can delete all the records found as the result of a query.

1. Select the query table and choose Query Table - Edit to activate it.
2. Choose Browse - Find Assistant to set criteria (conditions) and find the records you want to delete.

   For more information, click Help while you are in the Assistant dialog box.
3. Check the query table to make sure it contains only the records you want to delete.
4. Choose Browse - Delete Found Set to delete all the records found.
5. Click Yes to permanently delete the found records from the source database table.

   After you delete the found records, 1-2-3 refreshes the query table to display all of the remaining records in the source database table.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_ADDING_DATABASE_RECORDS_STEPS;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;H_DB_QUERY_DATABASE_RECORDS_STEPS',0)} See related topics

Adding a field in a query table

Adding a field in the query table does not add a field to the source database table, but you may want to add a field in a query table if:

- You didn't include all of the fields when you first created the query table
- You created a calculated field in Lotus Approach and wish to add that field to the query table
- You joined two or more tables and wish to add fields from another table

To add a field in a query table:

1. Select the query table and choose Query Table - Edit to activate it.
2. Choose Edit - Add Field.
3. Drag the field name from the Add Field dialog box to the query table.

   For more information on working with fields, click Help while you are in the Add Field dialog box.
4. If you created an output range, click anywhere in the sheet to refresh it.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_DELETING_A_FIELD_IN_A_QUERY_TABLE_STEPS;H_DB_REORDERING_FIELDS_IN_A_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;',0) } See related topics

Reordering fields in a query table

Changing the order of the fields in the query table does not affect the source database table. However, these changes will appear in the output range when you refresh it.

1. Select the query table and choose Query Table - Edit to activate it.
2. Click a field name.
3. When the mouse pointer changes to a hand, drag the field to a different location.

   1-2-3 displays a highlighted line between the columns in the query table as you drag the field to a new location. This line indicates where the field will go when you release the mouse button.
4. If you created an output range, click anywhere in the sheet to refresh it.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_ADDING_A_FIELD_IN_A_QUERY_TABLE_STEPS;H_DB_DELETING_A_FIELD_IN_A_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;',0)} See related topics

Deleting a field in a query table

Deleting a field in the query table does not delete the field in the source database table, but it does delete the field in the output range when you refresh it.

1. Select the query table and choose Query Table - Edit to activate it.
2. Click the field name you want to delete.
3. Press DEL.
4. If you created an output range, click anywhere in the sheet to refresh it.

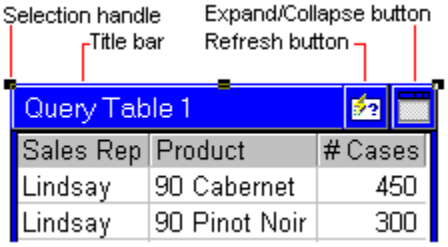
{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_REORDERING_FIELDS_IN_A_QUERY_TABLE_STEPS;H_DB_ADDING_A_FIELD_IN_A_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;',0)} See related topics

Moving and sizing a query table

A query table is an object on top of the sheet, so you can move and size it like any other object.

Moving a query table within the workbook

1. Select the query table.
2. Move the table by dragging the title bar.



Sizing a query table

1. Select the query table.
2. Do one of the following:
   - Drag any of the selection handles on the border to size the query table.
   - Click the Collapse button to display only the title bar. To expand the query table and redisplay the records, click the button again.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS',0)} See related topics

Copying a query table

You can create copies of a query table in the same 1-2-3 workbook to perform different queries using records from the same source database table. You cannot copy a query table to a different file.

1. Select the query table.
2. Choose Edit - Copy.

3. Click in the sheet where you want to copy the query table.
4. Choose Edit - Paste.

When you copy a query table, 1-2-3 assigns a new name to the table. The copy of the query table is still linked to the source database table, but it is not linked to an output range. You can use Query Table - Output Range to create an output range for the new query table.

Note If you copy a query table, be aware that changing records in either query table changes records in the same source database table.

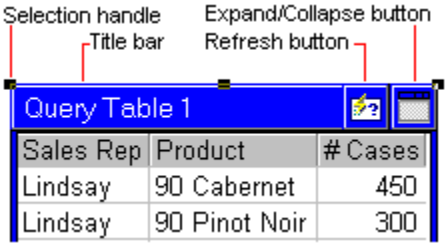
{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;H_DB_QUERY_OUTPUT_TO_RANGE_STEPS',0)} See related topics

Refreshing data

You can refresh the data in both the query table and the output range whenever data in the source database table changes.

To refresh data in the query table and the output range, do one of the following:

- When the query table is selected, choose Query Table - Refresh or click the refresh button in the title bar of the query table.



- When the query table is active, choose Browse - Refresh Data. When you click anywhere in the sheet, 1-2-3 also refreshes the output range.

Note Editing data in the output range does not change data in the query table or in the source database table. Any changes you make in the output range will be lost the next time you refresh the query table and the output range.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_AN_OUTPUT_RANGE_STEPS',0)} See related topics

Joining database tables

Use Lotus Approach to join databases that contain at least one common field.

For example, you might work with two databases that contain different kinds of information about the employees in your company. If each database contains a field with the employees' names, you can join the databases and share information between them.

1. Select the query table and choose Query Table - Edit to activate it.
2. Choose Edit - Open into Full Window to open the query table in Approach.
3. Choose Create - Join.

   For more information on joining database tables, click Help when you are in the Join dialog box.

{button ,AL(`H_DB_QUERY_TABLES_OVER;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_DATABASE_TABLES_OVER',0)} See related topics

Overview: 1-2-3 Preferences

1-2-3 preferences are settings that control the display and behavior of all new workbook files and of the current and future sessions of 1-2-3. These default settings take effect automatically whenever you start 1-2-3.

You can change the following settings in the 1-2-3 Preferences dialog box:

General
Lets you change defaults for startup, sorting, number of recent files displayed, Undo, drag and drop, autoexecute macros, and some other automatic functions such as date display and using "Total" to sum a range automatically.

New Workbook Defaults
Sets the font, point size, colors, and column and row sizes that 1-2-3 uses for new workbook files created without a SmartMaster.

File Locations
Lets you specify paths for workbook files, SmartMaster templates, automatically opened files, and add-in files.

Recalculation
Lets you change the recalculation setting from manual to automatic, the number of recalculation iterations, and the recalculation order 1-2-3 uses. These settings are stored in the current workbook.

Classic Keys
Sets which key brings up the 1-2-3 Classic menu and controls the behavior of the TAB and ENTER keys.

{button ,AL(`H_SETTING_123_OPTIONS_STEPS;H_SETTING_A_DEFAULT_FONT_FOR_ALL_WORKBOOKS_STEPS;H_SETTING_FILE_LOCATIONS_STEPS;H_SETTING_SORTING_OPTIONS_STEPS;H_SETTING_TAB_AND_ENTER_KEY_BEHAVIOR_STEPS;H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS;H_CHANGING_INTERNATIONAL_SETTINGS_STEPS;',0)} See related topics

Setting 1-2-3 options

1. Choose File - User Setup - 1-2-3 Preferences.

2. Click the General tab in the dialog box.
3. Under Options, select one or more options.
4. Click OK.

{button ,AL(`H_SETTING_123_OPTIONS_DETAILS',1)} See details

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SETTING_A_DEFAULT_FONT_FOR_ALL_WORKBOOKS_STEPS;H_SETTING_COLUMN_AND_ROW_DEFAULTS_FOR_ALL_WORKBOOKS_STEPS;H_SETTING_SORTING_OPTIONS_STEPS;H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS;',0)} See related topics

Details: Setting 1-2-3 options

Options: 1-2-3 Preferences dialog box (General tab)

- Number of recent files to show -- Specifies the number (0 to 10) of recently opened files to display at the bottom of the File menu.
- Show New Workbook dialog -- Displays the New Workbook dialog box when you choose File - New Workbook, so you can select a SmartMaster. Otherwise, 1-2-3 creates a plain workbook file when you choose File - New Workbook.
- Undo -- Enables Undo so you can cancel your last command or action.
- Beep on error -- Sounds your computer's bell when an error occurs.
- Use "Total" to sum automatically -- Sums adjacent rows or columns of data automatically when you type "Total" or "Totals" in a cell.
- Update links when opening workbooks -- Updates file links automatically when a workbook file is opened. When attempting to update an OLE link, if the application is not active, 1-2-3 starts the application.
- Drag and drop cells -- Lets you move, copy, clear, and fill cells using the mouse.
- Confirm overwrite for drag and drop -- Displays a message if dragging and dropping will write over existing data.
- Run file Opened scripts, autoexecute macros -- Runs scripts that contain an Opened event, or autoexecute macros when you open files that contain these scripts or macros.
- Show warning when saving as .WK* file -- Displays a message when you start to save a file to a .WK* format. The message warns that saving to an older file format can result in the loss of data associated with new 1-2-3 features. See Details: Saving a new workbook for more information about saving to file formats other than .123.
- Interpret entry of years 00-49 as 21st century -- For new dates you enter, makes 2-digit years from 00 to 49 start at the year 2000 instead of 1900. 2-digit years from 50 to 99 are always set to the years 1950 to 1999. This setting only applies to years you enter as dates.
- Set dates to always display 4-digit years -- Displays all dates with 4-digit years (whether you enter 2 or 4 digits for the year). When you deselect this option, 1-2-3 displays all dates with 2-digit years. Date formats in the InfoBox and status bar automatically change according to this setting. This setting only applies to years you enter as dates.

  Note Changing from 2-digit to 4-digit years will make the dates wider, so some dates may display as *** (asterisks) until you widen the column.

{button ,AL(`H_SETTING_123_OPTIONS_STEPS',1)} Go to procedure

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SETTING_A_DEFAULT_FONT_FOR_ALL_WORKBOOKS_STEPS;H_SETTING_COLUMN_AND_ROW_DEFAULTS_FOR_ALL_WORKBOOKS_STEPS;H_SETTING_SORTING_OPTIONS_STEPS;H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS;',0)} See related topics

Setting startup options

1. Choose File - User Setup - 1-2-3 Preferences.

2. Click the General tab in the dialog box.
3. To display the Welcome to 1-2-3 dialog box, under Startup, select "Show Welcome dialog."
4. To display 1-2-3 in a maximized window when starting, under Startup, select "Maximize 1-2-3 window."
5. Click OK.

{button ,AL(`H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_DETAILS',1)} See details

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SETTING_A_DEFAULT_FONT_FOR_ALL_WORKBOOKS_STEPS;H_SETTING_COLUMN_AND_ROW_DEFAULTS_FOR_ALL_WORKBOOKS_STEPS;H_SETTING_SORTING_OPTIONS_STEPS;H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS;',0)} See related topics

Details: Setting startup options

Starting 1-2-3
Workbook windows are always maximized within the 1-2-3 desktop window when the application starts.

User name settings
1-2-3 gets your user name from your e-mail system or the operating system.

{button ,AL(`H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS',1)} Go to procedure

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SORTING_OPTIONS_STEPS ;',0)} See related topics

Setting a default font and colors for new workbooks

Changes to these default settings will not take effect until you create a new workbook.

1. Choose File - User Setup - 1-2-3 Preferences.

2. Click the New Workbook Defaults tab in the dialog box.
3. Under Text format, select a font, point size, text color, and background color.
4. Click OK.

Note These defaults do not apply to workbooks created using a SmartMaster template.

{button ,AL(`H_SETTING_A_DEFAULT_FONT_FOR_ALL_WORKBOOKS_DETAILS',1)} See details

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SETTING_A_DEFAULT_FONT_FOR_ALL_WORKBOOKS_STEPS;H_SETTING_COLUMN_AND_ROW_DEFAULTS_FOR_ALL_WORKBOOKS_STEPS;H_SETTING_SORTING_OPTIONS_STEPS;H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS;',0)} See related topics

Details: Setting a default font and colors for new workbooks
You can't change the current workbook defaults, but you can change the current sheet defaults by choosing Sheet - Sheet Properties.

Using Windows defaults for text and background colors
When you select this option, 1-2-3 uses the text and background colors specified in the Windows Control Panel. For more information, see your Windows documentation.

{button ,AL(`H_SETTING_A_DEFAULT_FONT_FOR_ALL_WORKBOOKS_STEPS',1)} Go to procedure
{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;',0)} See related topics

Setting column and row defaults for new workbooks

Changes to these default settings will not take effect until you create a new workbook.

1. Choose File - User Setup - 1-2-3 Preferences.

2. Click the New Workbook Defaults tab in the dialog box.
3. To set column width in characters, under Column and row size, click the arrows or enter a number in the "Column width" box.
4. To set row height in points, under Column and row size, click the first button under "Row height," then enter a number or click the arrows to change the point size.
5. To set row height to the default font size, under Column and row size, select "Fit default font."
6. Click OK.

Note These defaults do not apply to workbooks created using a SmartMaster template.

{button ,AL(`H_SETTING_COLUMN_AND_ROW_DEFAULTS_FOR_ALL_WORKBOOKS_DETAILS',1)} See details

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SETTING_A_DEFAULT_FONT_FOR_ALL_WORKBOOKS_STEPS;H_SETTING_SORTING_OPTIONS_STEPS;H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS;',0)} See related topics

Details: Setting column and row defaults for new workbooks
You can't change the current workbook defaults, but you can change the current sheet defaults by choosing Sheet - Sheet Properties.

Setting the column width in characters
1-2-3 sizes columns in whole-character increments from 1 to 240 characters.

The effect of column width on values
When a column is too narrow to display an entire value as formatted, the value appears in Scientific format, or as a line of *** (asterisks). To display the value, you must widen the column to at least one character wider than the width of the formatted value.

The effect of column width on labels
If a label is longer than the cell it occupies and the cells to the right are blank, 1-2-3 displays the label across the blank cells. If the cells to the right contain data, 1-2-3 displays only the part of the label that fits in the cell where it is entered. To see the complete label, you must widen the column or wrap the text in the cell.

Setting the default row height in points
1-2-3 sizes rows in points from 1 to 255 points. When you set the row height to a specific point size, 1-2-3 will use that size unless you enter a taller font in the row. 1-2-3 always expands to the tallest font in the row regardless of the default row height setting.

{button ,AL(`H_SETTING_COLUMN_AND_ROW_DEFAULTS_FOR_ALL_WORKBOOKS_STEPS',1)} Go to procedure

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_WRAPPING_DATA_IN_A_CELL_STEPS;H_SIZING_COLUMNS_STEPS;',0)} See related topics

Setting file locations

You can set the default directories for workbooks, SmartMaster templates, automatically opened files, and add-in files.

1. Choose File - User Setup - 1-2-3 Preferences.

2. Click the File Locations tab in the dialog box.
3. Specify directories (folders) for any of the file types listed.
4. To view the directories to choose from, click Browse.
5. Click OK.

{button ,AL(`H_SETTING_FILE_LOCATIONS_DETAILS',1)} See details

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SETTING_SORTING_OPTIONS_STEPS;H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS;',0)} See related topics

Details: Setting file locations

1-2-3 Preferences dialog box (File Locations tab)

- Workbook files -- Specifies the default directory for opening and saving workbook files. You must specify a directory for workbook files.
- SmartMaster templates -- Specifies the directory where 1-2-3 looks for a list of SmartMaster templates.
- Automatically opened files -- Specifies the directory from which 1-2-3 automatically open workbook and add-in files. If you do not specify a directory, 1-2-3 does not automatically open any files.
- Add-ins -- Specifies the default directory for add-in files. When you choose File - Add-Ins, 1-2-3 lists the files that are in this directory.

{button ,AL(`H_SETTING_FILE_LOCATIONS_STEPS',1)} Go to procedure

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;',0)} See related topics

Setting sorting options

The sorting options determine the order in which 1-2-3 sorts numbers, words, and blank cells.

1. Choose File - User Setup - 1-2-3 Preferences.

2. Click the General tab in the dialog box.
3. Under Sorting, select one or both of the following options:
   - Sort numbers before words
   - Sort blank cells to the bottom
4. To change country sort order, select an option from the "Country sort order" list.
5. Click OK.

{button ,AL(`H_SETTING_SORTING_OPTIONS_DETAILS',1)} See details

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS;H_CHANGING_INTERNATIONAL_SETTINGS_STEPS;',0)} See related topics

Details: Setting sorting options

Sorting blank cells
If you select "Sort blank cells to the bottom," blank cells always sort to the bottom, regardless of the sort order (ascending or descending).

Country sort order
1-2-3 sorts words and numbers using the conventions of the country you select in the "Country sort order" list. The list of available country sort orders depends on what country driver(s) you have installed. If you select "Generic sorting" 1-2-3 sorts based on the operating system's regional (country) settings.

Related SmartIcons


Sorts a range in ascending order (A-Z, 1 to 10)


Sorts a range in descending order (Z -A, 10 to 1)

{button ,AL(`H_SETTING_SORTING_OPTIONS_STEPS',1)} Go to procedure

{button ,AL(`H_123_PREFERENCES_OVER;H_CHANGING_INTERNATIONAL_SETTINGS_STEPS;',0)} See related topics

Changing international settings

1-2-3 sorts and displays numbers, currencies, times, and dates based on defaults from regional settings (country settings) in the operating system. To change defaults for Windows 95, choose Start - Settings - Control Panel and open Regional Settings.

Setting country sort order

1-2-3 sorts using the operating system's settings if you specify "Generic Sorting" in the File - User Setup - 1-2-3 Preferences dialog box (General tab). You can override the operating system's sorting defaults by selecting a country instead of "Generic sorting."

Setting international date and time defaults

1-2-3 uses the operating system settings for certain date and time formats, called international date and time formats. These are marked with (System) in the table of available date formats in Details: Entering dates.

Setting number and currency defaults

For both Comma and Currency number formats, 1-2-3 uses either parentheses or minus sign, based on the negative number settings from the operating system's regional defaults. 1-2-3 also uses the operating system defaults for the decimal, thousands, and argument separator characters.

Macro compatibility and international defaults

Some macros written for previous versions of 1-2-3 may no longer return the proper international settings because of changes in the operating system.

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SETTING_SORTING_OPTIONS_STEPS;H_CHANGING_THE_CURRENCY_SYMBOL_DETAILS;H_SETTING_A_DEFAULT_NUMBER_FORMAT_STEPS;',0)} See related topics

Setting TAB and ENTER key behavior

1. Choose File - User Setup - 1-2-3 Preferences.

2. Click the Classic Keys tab in the dialog box.
3. Under TAB and ENTER keys, select an option.
4. Click OK.

{button ,AL(`H_SETTING_TAB_AND_ENTER_KEY_BEHAVIOR_DETAILS',1)} See details

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SETTING_SORTING_OPTIONS_STEPS;H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS;H_DISPLAYING_THE_123_CLASSIC_MENU_STEPS;',0)} See related topics

Details: Setting TAB and ENTER key behavior

Options: 1-2-3 Preferences dialog box (Classic Keys tab)

- TAB moves right one screen, ENTER confirms -- TAB confirms the cell entry and moves the cell pointer right the number of columns currently visible in the sheet. ENTER confirms the entry in the current cell without moving the cell pointer.
- TAB moves right one cell, ENTER confirms and moves down -- TAB confirms the cell entry and moves the cell pointer right to the next cell. ENTER confirms the cell entry and moves the cell pointer down to the next cell.

{button ,AL(`H_SETTING_TAB_AND_ENTER_KEY_BEHAVIOR_STEPS',1)} Go to procedure
{button ,AL(`H_123_PREFERENCES_OVER;',0)} See related topics

Changing the 1-2-3 Classic menu key

You can change the key you use to display the Classic menu. You can also turn off the display of the Classic menu.

1. Choose File - User Setup - 1-2-3 Preferences.

2. Click the Classic Keys tab in the dialog box.
3. Do one of the following:
   - To change the Classic menu key, select a symbol from the "Display 1-2-3 Classic by pressing" list.
   - To turn off display of the 1-2-3 Classic menu, deselect "Display 1-2-3 Classic by pressing."
4. Click OK.

{button ,AL(`H_DISPLAYING_THE_123_CLASSIC_MENU_DETAILS',1)} See details

{button ,AL(`H_123_PREFERENCES_OVER;H_SETTING_123_OPTIONS_STEPS;H_SETTING_SORTING_OPTIONS_STEPS;H_SETTING_TAB_AND_ENTER_KEY_BEHAVIOR_STEPS;H_SETTING_USER_NAME_AND_STARTUP_OPTIONS_STEPS;',0)} See related topics

Details: Changing the 1-2-3 Classic menu key
When 1-2-3 Classic is turned off, pressing / (slash) or < (less-than symbol) enters the appropriate character in the current cell. However, you can continue to use your keystroke macros.

Wysiwyg menu commands
You can't use any : (colon) commands to perform tasks in 1-2-3 97, except in keystroke macros. If you press : (colon) when 1-2-3 is in Ready mode, 1-2-3 enters a colon in the current cell.

{button ,AL(`H_DISPLAYING_THE_123_CLASSIC_MENU_STEPS',1)} Go to procedure
{button ,AL(`H_123_PREFERENCES_OVER;',0)} See related topics

1-2-3 Preferences dialog box (Classic Keys tab)

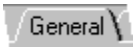
Use the Classic Keys tab to control how the TAB and ENTER keys work, and to control display of the 1-2-3 Classic menu.

Choose a task

- Setting TAB and ENTER key behavior
- Changing the 1-2-3 Classic menu key

{button ,AL(`H_123_PREFERENCES_OVER;',0)} See related topics

1-2-3 Preferences dialog box (General tab)



Use the General tab to set startup options, sorting options, and various 1-2-3 options.

Choose a task

- Setting startup options
- Setting sorting options
- Details: Setting 1-2-3 options

{button ,AL(`H_123_PREFERENCES_OVER;',0)} See related topics

1-2-3 Preferences dialog box (New Workbook Defaults tab)

Use the New Workbook Defaults tab to set default font, colors, column width, and row height. These defaults affect only subsequent new workbooks; to change current sheet defaults, select the sheet and choose Sheet - Sheet Properties.

Choose a task

Setting a default font and colors for new workbooks
Setting column and row defaults for new workbooks

{button ,AL(`H_123_PREFERENCES_OVER;',0)} See related topics

Setting view preferences for workbooks

You can set view preferences for the current workbook and for subsequent new workbooks.

1. Choose View - Set View Preferences.

2. Under Show in workbook, select the elements of the workbook you want to show; deselect the elements you want to hide.
3. To change the color of grid lines, select a color.
4. To change the default display size of the sheet, click the arrows or enter a number in the "Custom zoom %" box.
5. (Optional) To specify these settings as the default settings, click Make Default for New Workbooks.

   Note Clicking Make Default for New Workbooks does not affect the view settings in any existing workbooks.
6. Click OK.

Note These options do not apply to new workbooks you create using a SmartMaster template.

{button ,AL(`H_SETTING_VIEW_PREFERENCES_FOR_WORKBOOKS_DETAILS',1)} See details

{button ,AL(`H_CHANGING_THE_VIEW_SCALE_STEPS;H_SETTING_A_CUSTOM_VIEW_SCALE_STEPS;H_SETTING_VIEW_PREFERENCES_FOR_A_SHEET_STEPS;H_HIDING_OR_SHOWING_TABS_STEPS;',0)} See related topics

Details: Setting view preferences for workbooks

Options: Workbook Properties dialog box (View tab)

Show in workbook

- Sheet frame -- Turns the sheet frame on or off.
- Charts, maps, and drawings -- Determines whether graphic objects (charts, maps, drawings, text blocks, buttons, pictures, and embedded objects) are hidden. Hidden graphic objects do not print.

  Note To display but not print graphic objects, use File - Preview & Page Setup (Include tab).
- Formula markers -- Determines whether formula markers are shown in cells containing formulas.
- Cell comment markers -- Determines whether cell comment markers are displayed in cells containing comments.
- Version names and borders -- Determines whether version borders and names are displayed. Deselecting this option removes any names and borders currently displayed and sets the default option for new versions to not display names and borders. You can redisplay the names and borders of individual versioned ranges by using Range - Version - Version Properties.
- Grid lines -- Determines whether grid lines are displayed for all sheets in the current workbook, and sets the color of grid lines. The default color for grid lines is 25% gray.

  Note Workbook view preferences for the sheet frame, grid lines, and graphic objects can be changed for an individual sheet by using Sheet - Sheet Properties (View tab).
- Sheet tabs -- Determines whether sheet tabs and the New Sheet button are displayed in the current workbook.
- Scroll bars -- Determines whether scroll bars are displayed in the current workbook.
- Manual page breaks -- Determines whether page breaks you set are displayed in the current workbook.
- Automatic page breaks -- Determines whether print range borders and page breaks set by 1-2-3 are displayed in the current workbook.

  Note Even if page breaks are not displayed, 1-2-3 prints according to the page breaks.

Custom zoom %

Sets the custom view scale that appears on the Zoom to Custom Level command on the View menu. The default custom zoom scale is 87%.

Make Default for New Workbooks

Saves these settings as the default settings for all subsequent workbooks. 1-2-3 saves these settings to the current workbook when you click OK in the Workbook Properties dialog box.

Note These defaults do not apply to workbooks created using a SmartMaster template.

{button ,AL(`H_SETTING_VIEW_PREFERENCES_FOR_WORKBOOKS_STEPS',1)} Go to procedure

Setting view preferences for a sheet

View preferences for a sheet override the corresponding view preferences you set for the workbook using View - Set View Preferences.

1. Choose Sheet - Sheet Properties.

2. Click the View tab in the InfoBox.

3. Under Show in sheet, select one or more options.
4. To change the color of grid lines, select a color.
5. (Optional) To reset the view preferences in the selected sheet(s) to the workbook defaults, click Reset To Workbook Defaults.
6. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_SETTING_VIEW_PREFERENCES_FOR_A_SHEET_DETAILS',1)} See details

{button ,AL(`H_CHANGING_THE_VIEW_SCALE_STEPS;H_SETTING_A_CUSTOM_VIEW_SCALE_STEPS;H_HIDING_OR_SHOWING_TABS_STEPS;H_SETTING_VIEW_PREFERENCES_FOR_WORKBOOKS_STEPS;',0)} See related topics

Details: Setting view preferences for a sheet

Options: Sheet InfoBox (View tab)

- Sheet frame -- Turns the sheet frame on or off.
- Grid lines -- Determines whether grid lines are displayed in the current sheet, and sets the color of grid lines. The default color for grid lines is 25% gray.
- Charts, maps, and drawings -- Determines whether graphic objects (charts, maps, drawings, text blocks, buttons, pictures, and embedded objects) are displayed in the sheet. Hidden graphic objects do not print.

  Note To display but not print graphic objects, use File - Preview & Page Setup (Include tab).
- Reset To Workbook Default -- Returns view preferences for the sheet to the workbook defaults specified with View - Set View Preferences (View tab).

Related SmartIcons

Changes view preferences for the current workbook

{button ,AL(`H_SETTING_VIEW_PREFERENCES_FOR_A_SHEET_STEPS',1)} Go to procedure

Changing the view scale

When you change the view scale, the display size changes for all sheets in the current workbook.

1. To change the view to a preset scale, choose View - Zoom to and then select the percentage.
2. To change to the custom view scale, choose View - Zoom to Custom Level.

Note To set the custom view scale, use View - Set View Preferences.

{button ,AL(`H_CHANGING_THE_VIEW_SCALE_DETAILS',1)} See details

{button ,AL(`H_SETTING_A_CUSTOM_VIEW_SCALE_STEPS;H_SETTING_VIEW_PREFERENCES_FOR_A_SHEET_STEPS;',0)} See related topics

Details: Changing the view scale
The default custom view scale is 87%.

Related SmartIcons


Displays the sheet at the custom view size

Displays the sheet at 25% of full size

Displays the sheet at 50% of full size

Displays the sheet at 75% of full size

Displays the sheet at 100% of full size

Displays the sheet at 200% of full size

{button ,AL(`H_CHANGING_THE_VIEW_SCALE_STEPS',1)} Go to procedure

Setting the custom view scale

The custom view scale is the zoom percentage 1-2-3 uses when you choose View - Zoom to Custom Level.

1. Choose View - Set View Preferences.

2. Click the arrows or enter a number in the "Custom zoom %" box.

   The default custom view scale is 87%.

3. (Optional) Click Make Default for New Workbooks to make the zoom percentage the default for all workbooks created without using a SmartMaster.
4. Click OK.

{button ,AL(`H_CHANGING_THE_VIEW_SCALE_STEPS;H_SETTING_A_CUSTOM_VIEW_SCALE_STEPS;H_SETTING_VIEW_PREFERENCES_FOR_A_SHEET_STEPS;',0)} See related topics

Workbook Properties dialog box (View tab)

Use the View tab to set defaults for showing and hiding elements of the workbook, and to set the custom view scale. You can also choose to apply defaults to all new workbooks.

Choose a task

- Details: Setting view preferences for workbooks
- Setting a custom view scale
- Hiding or showing tabs

{button ,AL(`H_HIDING_SHEETS_STEPS;',0)} See related topics

Overview: Sheet defaults

You can change default settings for sheets using the InfoBox. To set defaults for more than one sheet at a time, you can select multiple sheets, or group sheets together.

Setting sheet defaults

You can control the default settings listed below for the selected sheet.

Text styles
Sets font name, size, attribute, and color for text and numbers in the selected sheet.

Alignment
Sets horizontal and vertical alignment for contents of all cells in the selected sheet. You can also set all text to wrap in cells.

Number format
Sets the display for numbers in the selected sheet. You can select from format categories, such as date, time, and currency. You can also promote frequently used formats to the status bar.

Cell colors
Add a pattern, pattern color, background color, and text color to the selected sheet. You can also set negative values to display in red.

Basic settings
Sets selected sheet name, tab color, default column width, and default row height; and lets you hide and lock the selected sheet.

View preferences
Sets the display of the sheet frame, grid lines, and graphic objects. Lets you reset all settings to the workbook defaults.

Outline settings
Sets the orientation for an outline and the outline frame display for the selected sheet.

Overriding sheet defaults

You can override sheet defaults with local settings by using the status bar or the InfoBox to change font name, size, color, alignment, or number format of individual ranges, and the size of individual columns and rows. These local settings are saved with the sheet. You can't override view preferences or outline settings.

Tip To switch between setting sheet defaults and styling ranges, use the "Properties for" box in the InfoBox.

{button ,AL(`H_SETTING_A_DEFAULT_ROW_HEIGHT_FOR_A_SHEET_STEPS;H_GROUPING_SHEETS_STEPS;H_SETTING_A_DEFAULT_COLUMN_WIDTH_FOR_A_SHEET_STEPS;H_SETTING_A_DEFAULT_FONT_FOR_A_SHEET_STEPS;H_SETTING_A_DEFAULT_NUMBER_FORMAT_STEPS;H_SETTING_A_DEFAULT_TEXT_ALIGNMENT_STEPS;H_SETTING_DEFAULT_CELL_COLORS_AND_PATTERNS_STEPS;H_SETTING_OUTLINE_PROPERTIES_STEPS;H_SETTING_VIEW_PREFERENCES_FOR_A_SHEET_STEPS;',0)} See related topics

Setting a default font for a sheet

1. Choose Sheet - Sheet Properties.

2. Click the Text Format tab in the InfoBox.

3. Select a font, point size, attribute, and color.
4. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_SETTING_A_DEFAULT_FONT_FOR_A_SHEET_DETAILS',1)} See details

{button ,AL(`H_OVERVIEW_SHEET_DEFAULTS_OVER;H_SETTING_A_DEFAULT_TEXT_ALIGNMENT_STEPS;H_SETTING_A_DEFAULT_NUMBER_FORMAT_STEPS;H_SETTING_A_DEFAULT_FONT_FOR_ALL_WORKBOOKS_STEPS;H_SELECTING_SHEETS_STEPS;H_SETTING_A_DEFAULT_ROW_HEIGHT_FOR_A_SHEET_STEPS;',0)} See related topics

Details: Setting a default font for a sheet

Troubleshooting
If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

{button ,AL(`H_SETTING_A_DEFAULT_FONT_FOR_A_SHEET_STEPS',1)} Go to procedure

Setting a default alignment for a sheet

1. Choose Sheet - Sheet Properties.

2. Click the Alignment tab in the InfoBox.

3. Select a horizontal alignment.
4. Select a vertical alignment.

   Note Data appears vertically aligned in a cell only when the row is taller than the cell contents.

5. To wrap text, select "Wrap text in cell."
6. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_SETTING_A_DEFAULT_TEXT_ALIGNMENT_DETAILS',1)} See details

{button ,AL(`H_SHEET_DEFAULTS_OVER;H_SETTING_A_DEFAULT_FONT_FOR_A_SHEET_STEPS;H_SELECTING_SHEETS_STEPS;H_SETTING_A_DEFAULT_NUMBER_FORMAT_STEPS;',0)} See related topics

Details: Setting a default alignment for a sheet

Troubleshooting
If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

{button ,AL(`H_SETTING_A_DEFAULT_TEXT_ALIGNMENT_STEPS',1)} Go to procedure

Setting a default number format for a sheet

Changing the number format affects only how 1-2-3 displays numbers, not how 1-2-3 stores or calculates with the numbers.

1. Choose Sheet - Sheet Properties.

2. Click the Number Format tab in the InfoBox.

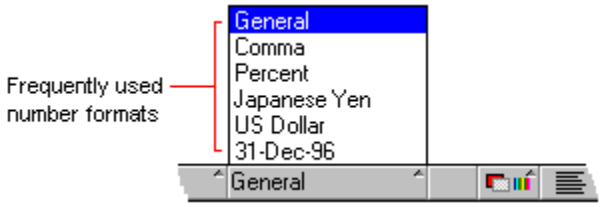
3. Select a format category.
4. Select a format from the "Current format" list.
5. (Optional) To promote a number format to the status bar, select "Show in Frequently Used list."
6. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_SETTING_A_DEFAULT_NUMBER_FORMAT_DETAILS',1)} See details

{button ,AL(`H_SHEET_DEFAULTS_OVER;H_SETTING_A_DEFAULT_FONT_FOR_A_SHEET_STEPS;H_SETTING_A_DEFAULT_ALIGNMENT_STEPS;H_SELECTING_SHEETS_STEPS;H_CHANGING_THE_CURRENCY_SYMBOL_STEPS;H_NUMBER_FORMATS_OVER;',0)} See related topics

Details: Setting a default number format for a sheet

Promoting a number format
Selecting "Show in Frequently Used list" promotes a format so that it appears when you click the Number format button in the status bar.



Displaying negative values in red
You can display negative values in red, for example, to show a debit. To display negative values in red for a selected range, use Range - Range Properties (Lines & Color tab).

Displaying zeros
If you deselect "Display zeros as," cells containing zeros appear blank. To change how zeros are displayed, enter a character in the "Display zeros as" box.

Displaying parentheses
Selecting "Parentheses" encloses all numbers in the sheet in parentheses, except numbers formatted as dates, times, or text.

Effect of column width on numbers
If you format a number and 1-2-3 fills the cell with *** (asterisks) or displays Scientific format, the column is not wide enough to display the number using the format you selected. To display the number, widen the column to one character wider than the length of the formatted number.

Troubleshooting
If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

{button ,AL(`H_SETTING_A_DEFAULT_NUMBER_FORMAT_STEPS',1)} Go to procedure

Setting default colors and pattern for a sheet

You can set a default pattern, pattern color, background color, and text color.

1. Choose Sheet - Sheet Properties.

2. Click the Lines & Colors tab in the InfoBox.

3. Select a pattern and a pattern color.
4. Select a text color and a background color.
5. (Optional) Select "Negative values in red."
6. (Optional) Select "Use Windows default colors for text and background."
7. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_SETTING_DEFAULT_CELL_COLORS_AND_PATTERNS_DETAILS',1)} See details

{button ,AL(`H_SHEET_DEFAULTS_OVER;H_SETTING_A_DEFAULT_TEXT_ALIGNMENT_STEPS;H_SETTING_A_DEFAULT_NUMBER_FORMAT_STEPS;H_SELECTING_SHEETS_STEPS;H_SETTING_A_DEFAULT_FONT_FOR_A_SHEET_STEPS;',0)} See related topics

Details: Setting default colors and patterns for a sheet

Selecting pattern and color options
See Details: Changing interior color and pattern for information.

Displaying negative values in red
You can display negative values in red, for example, to show a debit. To display negative values in red for a selected range, use Range - Range Properties (Lines & Color tab).

Using Windows defaults for text and background colors
When you select this option, 1-2-3 uses the text and background colors specified in the Windows Control Panel. For more information, see your Windows documentation.

Troubleshooting
If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

{button ,AL(`H_SETTING_DEFAULT_CELL_COLORS_AND_PATTERNS_STEPS',1)} Go to procedure

Setting a default column width for a sheet

1. Choose Sheet - Sheet Properties.

2. Click the Basics tab in the InfoBox.

3. Click the arrows or enter a number in the "Default column width" box.
4. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_SETTING_A_DEFAULT_COLUMN_WIDTH_FOR_A_SHEET_DETAILS',1)} See details

{button ,AL(`H_SHEET_DEFAULTS_OVER;H_SELECTING_SHEETS_STEPS;H_SETTING_VIEW_PREFERENCES_FOR_A_SHEET_STEPS;H_SETTING_COLUMN_AND_ROW_DEFAULTS_FOR_ALL_WORKBOOKS_STEPS;',0)} See related topics

Details: Setting a default column width for a sheet

Setting the column width in characters
1-2-3 sizes columns in whole-character increments from 1 to 240 characters.

Effect of column width on values
When a column is too narrow to display an entire value as it is formatted, 1-2-3 fills the cell with *** (asterisks) or displays Scientific format instead of the value. To display the value, widen the column to one character wider than the length of the value as formatted.

Effect of column width on labels
If a label is longer than the cell it occupies and the cells to the right are blank, 1-2-3 displays the label across the blank cells. If the cells to the right contain data, 1-2-3 displays only the part of the label that fits in the cell where it is entered. To see the complete label you must widen the column or wrap the text in the cell. The reverse is also true when labels are right-aligned.

For more information see Sizing columns and Wrapping data in a cell.

Troubleshooting
If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

{button ,AL(`H_SETTING_A_DEFAULT_COLUMN_WIDTH_FOR_A_SHEET_STEPS',1)} Go to procedure

Setting a default row height for a sheet

1. Choose Sheet - Sheet Properties.

2. Click the Basics tab in the InfoBox.

3. To set the default row height in points, click the arrows or enter a number in the "Default row height" box.
4. To make the default row height fit the default font size, select "Fit default font."
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_SETTING_A_DEFAULT_ROW_HEIGHT_FOR_A_SHEET_DETAILS',1)} See details

{button ,AL(`H_SHEET_DEFAULTS_OVER;H_SELECTING_SHEETS_STEPS;H_SETTING_VIEW_PREFERENCES_FOR_A_SHEET_STEPS;H_SETTING_COLUMN_AND_ROW_DEFAULTS_FOR_ALL_WORKBOOKS_STEPS;',0)} See related topics

Details: Setting a default row height for a sheet

1-2-3 accommodates the largest font entered in a row
As long as all text in a row is the same as, or smaller than, the default sheet row height, the row will remain at the default height. If you make any text in the row taller than the default, then the row height expands to accommodate it.

Default row height and "Fit default font"
When you select "Fit default font," the default row height is based on the size of the default font. If the default font size is larger than the default row height setting, then all rows will resize to fit the default font or the largest font currently entered in the row. You can override the default row height at any time by sizing the row.

Troubleshooting
If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

{button ,AL(`H_SETTING_A_DEFAULT_ROW_HEIGHT_FOR_A_SHEET_STEPS',1)} Go to procedure

Deleting graphic objects

You can delete drawings such as lines, arrows, rectangles, and ellipses. You can also delete charts, maps, text blocks, pictures, buttons, and embedded objects.

1. Select one or more object(s).
2. Choose Edit - Clear.

Tip You can also select the object(s) and press DEL.

{button ,AL(`H_DELETING_OBJECTS_DETAILS',1)} See details

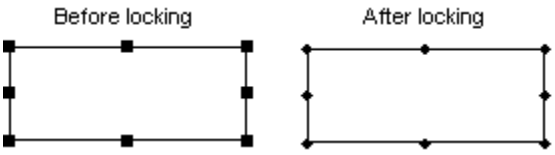
{button ,AL(`H_DELETING_DATA_IN_RANGES_STEPS;H_DELETING_OBJECTS_STEPS;H_USING_DRAGANDCLEAR_TO_DELETE_DATA_STEPS',0)} See related topics

Details: Deleting graphic objects

When you use Edit - Clear to delete data, 1-2-3 does not place the data on the Clipboard. As a result, you can't paste data that you have deleted using Edit - Clear. To restore the data to the same location, immediately use Edit - Undo. To clear data and paste it, use Edit - Cut and Edit - Paste.

Troubleshooting

You can't delete a locked graphic object. You can tell if an object is locked by its handles; the handles of a locked object are diamond-shaped rather than square. For more information, see Overview: Protecting data.



{button ,AL(`H_DELETING_OBJECTS_STEPS',1)} Go to procedure

Deleting data in ranges

You can delete the contents, styles, cell comments, borders, designer frames, and scripts associated with a range.

1. Select the range, collection, column or row.
2. Choose Edit - Clear.

3. Select the options you want to delete.
4. Click OK.

{button ,AL(`H_DELETING_DATA_IN_RANGES_DETAILS',1)} See details

{button ,AL(`H_DELETING_DATA_IN_RANGES_STEPS;H_DELETING_OBJECTS_STEPS;H_USING_DRAGANDCLEAR_TO_DELETE_DATA_STEPS',0)} See related topics

Details: Deleting data in ranges
When you use Edit - Clear to delete data, 1-2-3 does not place the data on the Clipboard. As a result, you can't paste data that you have deleted using Edit - Clear. To restore the data to the same location, immediately use Edit - Undo. To clear data and paste it, use Edit - Cut and Edit - Paste.

Other ways to delete data
Instead of choosing Edit - Clear to delete cell contents, you can select the data, then press DEL. Doing so removes only cell contents and leaves styles, scripts, and cell comments intact. To delete a designer frame or range border, the range you delete must include the entire frame or border.

Options for deleting
- Contents -- Deletes only the cell contents, leaving all styles intact.
- Styles and number format -- Leaves the cell contents intact and removes number formats, text attributes, alignment, background colors and patterns, and named styles. Also changes unprotected cells to protected.
- Borders and designer frames -- Removes borders, and designer frames if the range includes the whole frame.
- Cell comments -- Deletes cell comments.
- Script -- Deletes any scripts associated with the selected range.

Data you can't clear
You can't use Edit - Clear to delete protected data in a locked file, or a mixed range of protected and unprotected data. If you select a range or collection in which some of the data is protected, Edit - Clear will not clear any of the data.

How deleting affects formulas
If you delete a value that a formula refers to, some formulas will results in ERR. Any formulas that depend on this invalid formula also result in ERR.

Related SmartIcons


Deletes only the styles from a selected range


Deletes the contents in a selected range and copies them to the Clipboard


Pastes cell contents


Pastes cell styles


Cancels the last command or action

{button ,AL(`H_DELETING_DATA_IN_RANGES_STEPS',1)} Go to procedure

Using drag and clear to delete data

Drag and clear lets you use the mouse to delete data in a selected range, except for the top left cell. Drag and clear deletes the contents and styles, but not the cell comments, borders, designer frames, and scripts associated with any cell or range.

Show me a demo

1. Select the range you want to clear.
2. Position the mouse pointer at the bottom right corner of the range until the pointer displays four arrowheads.

3. Hold down the left mouse button and drag up and to the left to delete data in the range.

   The pointer changes to look like this:

4. Release the mouse button.
5. (Optional) To delete the top left cell of the range, press DEL.

{button ,AL(`H_USING_DRAGANDCLEAR_TO_DELETE_DATA_DETAILS',1)} See details

{button ,AL(`H_DELETING_DATA_IN_RANGES_STEPS;H_DELETING_OBJECTS_STEPS;H_USING_DRAGANDCLEAR_TO_DELETE_DATA_STEPS',0)} See related topics

Details: Using drag and clear to delete data

When you use drag and clear to delete data, you can't delete the contents of the top left cell of the range. You can only use drag and clear to clear ranges; you can't use it to clear a 3D range, a collection, or a graphic object.

To delete the contents in a selected range without clearing the styles, use Edit - Clear or press DEL.

Like Edit - Clear, drag and clear doesn't use the Clipboard or clear protected cells. As a result, you can't paste data that you have deleted using drag and clear. To restore the data to the same location, immediately use Edit - Undo. To clear data and paste it, use Edit - Cut and Edit - Paste.

Related SmartIcons

Lets you choose what to delete from a selected range

Deletes only the styles from a selected range

Deletes the contents in a selected range and copies them to the Clipboard

Pastes cell contents

Pastes cell styles

Cancels the last command or action

{button ,AL(`H_USING_DRAGANDCLEAR_TO_DELETE_DATA_STEPS',1)} Go to procedure

Deleting styles

You can remove the styles from a range without deleting the contents.

1. Select the range, collection, column, or row.
2. Choose Edit - Clear Styles.

1-2-3 removes all styles associated with the range you selected.

{button ,AL(`H_REMOVING_FORMATTING_FROM_TEXT_DETAILS',1)} See details

{button ,AL(`H_CHANGING_TEXT_FORMAT_STEPS;H_REMOVING_NAMED_STYLES_STEPS;',0)} See related topics

Details: Deleting styles

Other ways to delete styles

Select the range or collection, choose Edit - Clear, and select one or more of these options:

- Styles and number formats -- Leaves the cell contents intact and removes number formats, text attributes, alignment, background colors and patterns, and named styles. Also changes unprotected cells to protected.
- Borders and designer frames -- Removes borders, and designer frames if the range includes the whole frame.

Related SmartIcons

Removes bold, italics, and underlining from the selection

Changes the font, color, and attributes of data in ranges

{button ,AL(`H_REMOVING_FORMATTING_FROM_TEXT_STEPS',1)} Go to procedure

Overview: Creating and opening files

When you start 1-2-3, the Welcome to 1-2-3 dialog box lets you choose whether to create a new workbook file or open an existing file. Once you're working in 1-2-3, you use File - New Workbook to create a new workbook file and File - Open to open existing files.

Note If you don't want to see the Welcome to 1-2-3 dialog box each time you start 1-2-3, use File - User Setup - 1-2-3 Preferences (General tab) to turn it off.

Creating new files

1-2-3 files are called workbooks. Each workbook contains one or more sheets in which you can enter, calculate, and analyze data. When you create a new workbook, you can either start with a blank workbook to build a spreadsheet from scratch or select a SmartMaster template to streamline your work.

See related topics

Using SmartMaster templates

1-2-3 comes with a variety of SmartMaster templates for common business and financial tasks such as creating budgets, expense reports, sales plans, and so on. Each template has built-in formulas, scripts, formatting, and sample data to give you a quick start on creating effective spreadsheets.

You can also customize existing SmartMaster templates or create your own SmartMaster templates.

See related topics

Working with existing files

The 1-2-3 97 default file type is .123. You can open these file types:

- Lotus 1-2-3 Workbook (.123, .WK4, .WK3, .WK1, .WT4)
- Lotus 1-2-3 SmartMaster Template (.12M)
- Text (.TXT, .PRN, .CSV, .DAT, .OUT, .ASC)
- Excel (.XLS, .XLT, .XLW)
- Quattro Pro (.WQ1, .WB1, .WB2)
- dBASE (.DBF)
- Paradox (.DB)

In addition, you can combine data or graphics from these file types with the current workbook:

- Lotus 1-2-3 Workbook (.123, .WK4, .WK3, .WK1, .WT4)
- Lotus 1-2-3 SmartMaster Template (.12M)
- Text (.TXT, .PRN, .CSV, .DAT, .OUT, .ASC)
- dBASE (.DBF)
- Paradox (.DB)
- Windows Metafile (.WMF)
- Bitmap (.BMP)
- ANSI Metafile (.CGM)
- Lotus 1-2-3 PIC (.PIC)

You can open and view more than one file at the same time. However, you can work in only one file at a time.

Use the Window menu commands to arrange open files or to create extra windows to view different parts of the same

file.

 See related topics

Working with SmartMaster templates

SmartMaster templates give you a quick start for creating useful, attractive spreadsheets. Each template is designed to help you perform a different task.

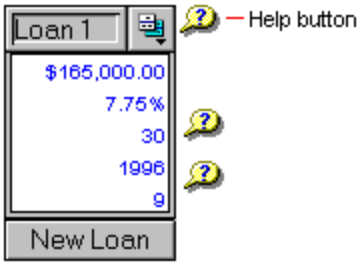
Exploring SmartMaster templates

Each SmartMaster contains sample data that shows how to use the SmartMaster. After looking over the sample data, you can replace it with your own data. Then use the built-in buttons to print or mail the data.

You can use 1-2-3 SmartMaster templates to:

- Amortize a loan
- Calculate loan payments
- Create a personal budget
- Create an expense report
- Fill out a time sheet
- Generate a purchase order
- Create an invoice
- Create a territory sales plan

To see Help about particular parts of a SmartMaster, click the Help button in the SmartMaster:



To clear the tip, click it or click the Help button again.

Customizing and creating SmartMaster templates

To customize an existing SmartMaster template, just make the changes you want and then save the file. If you want to keep the original SmartMaster unchanged, use File - Save As to save the customized template as a new .12M file with a different name.

You can also create your own templates, based on SHELL.12M, a starter template that comes with 1-2-3.

Before you save the SmartMaster, be sure to add a title and description to make it easy to identify in the future. Then you can share the template with your workgroup.

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_CREATING_A_SMARTMASTER_TEMPLATE_STEPS;H_CREATING_A_WORKBOOK_USING_A_SMARTMASTER_STEPS;H_EDITING_THE_FILE_DESCRIPTION_STEPS;H_WORKING_WITH_VERSIONS_OVER;H_OUTLINING_SHEET_DATA_OVER;H_TEAMMAIL_OVER', 0)} See related topics

Creating a SmartMaster template

In addition to using the SmartMaster templates that come with 1-2-3, you can create your own templates by basing them on a starter template (SHELL.12M).

1. Choose File - New Workbook.

2. Select "Create your own SmartMaster."
3. Click OK.
4. Add a title and description.

   Note Assigning a title to the template will let you identify your SmartMaster in the New Workbook dialog box during future 1-2-3 sessions. Otherwise, the dialog box lists the template as [No Title].
5. After you have modified the template file, choose File - Save As.

6. Specify the SmartMaster templates directory as the location where you want to save the template.
7. Enter a name in the "File name" box.
8. Select "Lotus 1-2-3 SmartMaster (12M)" from the "Save as type" list.
9. Click Save.

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_CREATING_A_WORKBOOK_USING_A_SMARTMASTER_STEPS;H_WORKING_WITH_SMARTMASTER_TEMPLATES_OVER',0)} See related topics

Creating a blank workbook

When you create a new workbook, 1-2-3 places it in a window and puts the cell pointer in cell A1.

1. Choose File - New Workbook.

2. Click Create a Blank Workbook.

Note To keep a copy of the new workbook on disk, you must save the workbook before you close it or end the 1-2-3 session.

{button ,AL(`H_CREATING_A_BLANK_WORKBOOK_DETAILS',1)} See details

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_CREATING_A_WORKBOOK_USING_A_SMARTMASTER_STEPS;H_SAVING_A_NEW_WORKBOOK_STEPS',0)} See related topics

Details: Creating a blank workbook

Naming new workbooks
1-2-3 supplies a temporary name. The first workbook name is Untitled. 1-2-3 refers to subsequent workbooks as Untitled1, Untitled2, and so on. When you save a new workbook, you must enter a file name in the Save As dialog box.

Creating blank workbooks quickly
To create workbooks quickly, turn off the New Workbook dialog box. Then, 1-2-3 simply creates a blank workbook whenever you choose File - New Workbook. To turn off the New Workbook dialog box, use File - User Setup - 1-2-3 Preferences (General tab).

Related SmartIcons

Creates a blank workbook without displaying the New Workbook dialog box

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{button ,AL(`H_CREATING_A_BLANK_WORKBOOK_STEPS',1)} Go to procedure

{button ,AL(`H_SETTING_123_OPTIONS_STEPS;H_SAVING_A_NEW_WORKBOOK_STEPS',0)} See related topics

Creating a workbook using a SmartMaster

Use SmartMaster templates to streamline tasks such as creating budgets and expense reports.

1. Choose File - New Workbook.

2. Double-click the SmartMaster you want to use.
3. (Optional) To browse through other directories to find a SmartMaster that is not on the list, click More SmartMaster Templates.

Note To keep a copy of the new workbook on disk, you must save the workbook before you close it or end the 1-2-3 session.

{button ,AL(`H_CREATING_A_WORKBOOK_USING_A_SMARTMASTER_DETAILS',1)} See details

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_CREATING_A_BLANK_WORKBOOK_STEPS;H_SAVING_A_NEW_WORKBOOK_STEPS;H_WORKING_WITH_SMARTMASTER_TEMPLATES_OVER',0)} See related topics

Details: Creating a workbook using a SmartMaster

SmartMaster templates

1-2-3 97 SmartMaster templates have a .12M file extension and contain scripts, while 1-2-3 Release 5 for Windows SmartMaster templates have a .WT4 extension and contain macros.

The New Workbook dialog box lists titles of .12M SmartMaster templates only. To list a .WT4 SmartMaster template here, first choose File - Open to open the .WT4 file and then use File - Save As to save it as a .12M SmartMaster template. Be sure to save the .12M file in the specified SmartMaster templates directory.

Note Before you create a workbook using a .WT4 template that you saved as a .12M template, make sure that "Run file Opened scripts, autoexecute macros" in File - User Setup - 1-2-3 Preferences (General tab) is selected.

You cannot create a workbook using a SmartMaster that's currently open.

Changing the default location for templates

When you install 1-2-3, 1-2-3 puts the SmartMaster templates in the \lotus\smasters\123 directory. If you create a workbook by selecting a SmartMaster from a different directory, 1-2-3 makes that directory the default SmartMaster directory for the current 1-2-3 session.

To change the default location for SmartMaster templates for subsequent 1-2-3 sessions, use File - User Setup - 1-2-3 Preferences (File Locations tab).

Naming workbooks

1-2-3 supplies a temporary name. The first workbook name is Untitled. 1-2-3 refers to subsequent workbooks as Untitled1, Untitled2, and so on. When you save a new workbook, you must enter a file name in the Save As dialog box.

{button ,AL(`H_CREATING_A_WORKBOOK_USING_A_SMARTMASTER_STEPS',1)} Go to procedure

{button ,AL(`H_SETTING_FILE_LOCATIONS_STEPS;H_SAVING_A_NEW_WORKBOOK_STEPS',0)} See related topics

Opening an existing file

1. Choose File - Open.

2. Select the type of file you want.
3. Select the computer, drive, and directory where the file resides.
4. Select the file name from the list.
5. Click Open.

   If you selected a password-protected file, enter the password in the Password dialog box.

   If someone else is using the workbook you selected and has the reservation, or if you selected a file that's set to read-only, 1-2-3 asks whether you want to open the file with read-only access.

For a description of the options in the Open dialog box, see Options.

Tip You can also open a file that you used recently by choosing it from the bottom of the File menu.

{button ,AL(`H_OPENING_AN_EXISTING_FILE_DETAILS',1)} See details

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_PREVENTING_OTHERS_FROM_OPENING_A_WORKBOOK_STEPS;H_SPECIFYING_A_FILE_OVER;H_USING_A_FILE_RESERVATION_OVER;H_123_OPENING_A_DOCUMENT_FROM_A_WEB_SERVER_ON_THE_INTERNET_STEPS;H_123_OPENING_A_DOCUMENT_FROM_AN_FTP_SERVER_ON_THE_INTERNET_STEPS',0)} See related topics

Details: Opening an existing file

Types of files you can open
You can open these file types in 1-2-3:

- Lotus 1-2-3 Workbook (.123, .WK4, .WK3, .WK1, .WT4)
- Lotus 1-2-3 SmartMaster Template (.12M)
- Text (.TXT, .PRN, .CSV, .DAT, .OUT, .ASC)
- Excel (.XLS, .XLT, .XLW)
- Quattro Pro (.WQ1, .WB1, .WB2)
- dBASE (.DBF)
- Paradox (.DB)

Depending on your computer's available memory, you can have up to 256 sheets open at once.

Opening multiple files
You can select up to 32 files at a time to open in the Open dialog box. The files must be located in the same directory.

Running Opened events and autoexecute macros
1-2-3 runs all Opened events and autoexecute macros when you simultaneously open multiple workbooks that contain them.

If a workbook contains both an Opened event and an autoexecute macro, it is recommended that you either convert the autoexecute macro to an Opened-event script, or embed the macro in the Opened-event script.

If you don't want 1-2-3 to automatically run Opened events and autoexecute macros when you open workbooks that contain them, use File - User Setup - 1-2-3 Preferences (General tab) to turn off "Run file Opened scripts, autoexecute macros."

Recalculation settings and formulas
When you open a workbook, 1-2-3 uses the recalculation settings stored in that workbook for all active workbooks. These settings remain in effect until you either open another workbook that has different recalculation settings or end the 1-2-3 session.

If you open a workbook in which recalculation is set to Automatic, 1-2-3 automatically updates formulas in that workbook whenever you change the data they refer to.

If recalculation is set to Manual in the workbook, 1-2-3 recalculates formulas only when you press F9 (CALC) or click the Calc button in the status bar.

The recalculation settings apply only to formulas that refer to data in active workbooks. To update formulas that link to files on disk, use Edit - Manage Links.

Updating links
When you open a workbook that contains links either to other workbooks or to other Windows applications, 1-2-3 automatically updates the links. If you don't want 1-2-3 to update the links, use File - 1-2-3 Preferences (General tab) to turn off "Update links when opening workbooks."

Opening Excel files
If you open an Excel file that contains untranslatable functions or links to other Excel files, 1-2-3 records the information in a log file.

Opening a read-only or reserved file
When you open either a read-only file or a file for which someone else has the reservation, 1-2-3 displays "(RO)" in front of the file name in the title bar.

If the file attribute is set to read-only by the operating system, you cannot save changes to the file under its current name. To save any changes to the file, you must save it under a different file name.

If you open a read-only copy of a file either by selecting "Open as read-only" in the Open dialog box or by opening a file without its reservation, you can subsequently get the reservation (if it is available) and then save changes to the file under its current name.

Opening a file automatically when you start 1-2-3
There are several ways you can make 1-2-3 always open a particular file each time you start 1-2-3:

- Use File - User Setup - 1-2-3 Preferences (File Locations tab) to specify a directory from which you want 1-2-3 to automatically open files.

If you created a file called AUTO123.WK4 for use in 1-2-3 Release 5 for Windows and want to continue opening the file automatically each time you start 1-2-3 97, put AUTO123.WK4 in the above specified directory.

- Include the path and file name in the command line used to run 1-2-3. For example:

  C:\LOTUS\123\PROGRAMS\123W.EXE C:\LOTUS\123\MYFILE.123

- Include the -w parameter and the path and file name in the command line used to run 1-2-3. For example:

  C:\LOTUS\123\PROGRAMS\123W.EXE -W C:\LOTUS\123\MYFILE.123

  If the file name contains either spaces or dashes, put single or double quotation marks around the path and file name. For example: C:\LOTUS\123\PROGRAMS\123W.EXE -W "C:\LOTUS\123\MY FILE.123"

Related SmartIcons

Opens a workbook file from the Internet

{button ,AL(`H_OPENING_AN_EXISTING_FILE_STEPS',1)} Go to procedure

{button ,AL(`H_SETTING_RECALCULATION_DEFAULTS_STEPS;H_OPTIONS_OPEN_FILE_REF;H_CREATING_AN_AUTOEXECUTE_MACRO_STEPS;H_WORKING_WITH_123_FILES_OVER;H_WORKING_WITH_DBASE_AND_PARADOX_FILES_OVER;H_WORKING_WITH_EXCEL_FILES_OVER;H_WORKING_WITH_QUATTRO_PRO_FILES_OVER;H_123_OPENED_EVENT_MEMDEF;H_USING_A_FILE_RESERVATION_OVER;H_GETTING_A_FILE_RESERVATION_STEPS',0)} See related topics

Opening a recently used file

1-2-3 gives you easy access to recently used files by listing them at the bottom of the File menu.

1. Choose File.
2. Choose a file from the list at the bottom of the menu.

   If you selected a password-protected file, enter the password in the Password dialog box.

   If someone else is using the workbook you selected and has the reservation, or if you selected a file that's set to read-only, 1-2-3 asks whether you want to open the file with read-only access.

{button ,AL(`H_OPENING_A_RECENTLY_USED_FILE_DETAILS',1)} See details

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_PREVENTING_OTHERS_FROM_OPENING_A_WORKBOOK_STEPS;H_USING_A_FILE_RESERVATION_OVER;',0)} See related topics

Details: Opening a recently used file

Listing recently used files
You can show 0-10 file names at the bottom of the File menu using File - User Setup - 1-2-3 Preferences (General tab).

Opening text files
When you choose a text file from the bottom of the File menu, 1-2-3 opens the file using the formatting options that you last specified in the Text File Options dialog box. To open the text file using different options, choose File - Open.

Opening a read-only file
When you open a read-only file, 1-2-3 displays "(RO)" in front of the file name in the title bar. To save any changes to the file, you must save the file under a different file name.

Related SmartIcons


Opens an existing file


Opens a file from the Internet

{button ,AL(`H_OPENING_A_RECENTLY_USED_FILE_STEPS',1)} Go to procedure
{button ,AL(`H_OPENING_A_TEXT_FILE_STEPS;H_SETTING_123_OPTIONS_STEPS',0)} See related topics

Opening a text file

When you open a text file, you can choose how to format the data that you bring into the sheet or let 1-2-3 automatically parse the data into columns for you.

1. Choose File - Open.

2. Select "Text" as the file type.
3. Select the computer, drive, and directory where the file resides.
4. Select the file name from the list.
5. Click Open.
6. Specify the text file format.

{button ,AL(`H_OPENING_A_TEXT_FILE_DETAILS',1)} See details

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_OPTIONS_OPEN_FILE_REF;H_SPECIFYING_A_FILE_OVER',0)} See related topics

Details: Opening a text file

Naming text files

When you open a text file, 1-2-3 treats the file as a new workbook and assigns a temporary name. The first workbook name is Untitled. 1-2-3 refers to subsequent workbooks as Untitled1, Untitled2, and so on. When you save the file, you must enter a file name in the Save As dialog box. If you want to retain the file as a text file, you must also select "Text" as the file type.

{button ,AL(`H_OPENING_A_TEXT_FILE_STEPS',1)} Go to procedure

{button ,AL(`H_OPTIONS_OPEN_FILE_REF',0)} See related topics

Specifying a text file format

Use the Text File Options dialog box to format text files that you bring into 1-2-3.

1. Specify a parsing option.
2. Select a character set.
3. Click OK.

{button ,AL(`H_SETTING_TEXT_FILE_OPTIONS_DETAILS',1)} See details

{button ,AL(`H_COMBINING_DATA_STEPS;H_OPENING_A_TEXT_FILE_STEPS',0)} See related topics

Details: Specifying a text file format

Options: Text File Options dialog box

Parsing options

- Start a new column at each [separator] -- Lets you specify the type of separator you want 1-2-3 to use for breaking the data from the text file into columns in the sheet. If you don't see the character you want in the list, or if you want to use a separator that consists of more than one character, select "Other character(s)" and then enter from 1 to 3 characters in the box that appears.
- Automatically parse based on file layout -- Breaks the data from a non-delimited text file into columns in the sheet based on the space between vertically aligned data in the text file.
- Put everything in one column -- Puts all the data from the text file into a single column in the sheet.

Character set

Specifies the character set you want 1-2-3 to use for interpreting data in the text file. Each character set represents a different national language. Unless you're either opening a text file that was created in a different country or using a different operating system, the default character set, Windows, should be appropriate.

{button ,AL(`H_SETTING_TEXT_FILE_OPTIONS_STEPS',1)} Go to procedure

Importing a picture

You can import a picture stored in a graphics file and add it to the current workbook.

1. Choose File - Open.

2. Select the type of graphics file you want.
3. Select the computer, drive, and directory where the file resides.
4. Select the file name from the list.
5. Click Combine.
6. Click the place in the sheet where you want to put the top left corner of the picture.

Tip You can also import a picture by copying it to the Clipboard and pasting it in the sheet.

{button ,AL(`H_IMPORTING_A_PICTURE_DETAILS',1)} See details

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_COMBINING_DATA_STEPS;H_OPTIONS_OPEN_FILE_REF;H_SPECIFYING_A_FILE_OVER',0)} See related topics

Details: Importing a picture

Types of graphic files you can import
You can import pictures stored in these file types into the current workbook:

- Windows Metafile (.WMF)
- Bitmap (.BMP)
- ANSI Metafile (.CGM)
- Lotus 1-2-3 PIC (.PIC)

Sizing pictures
An imported picture retains the dimensions stored in the original graphics file.

You can drag a handle to change the size of a picture. However, sizing may distort the proportions of the picture. The size information in the original graphic file does not change when you size the picture in the sheet.

Tip If you change a picture's size and then don't like the result, select the picture and then choose Drawing - Restore to original size.

{button ,AL(`H_IMPORTING_A_PICTURE_STEPS',1)} Go to procedure
{button ,AL(`H_OPTIONS_OPEN_FILE_REF',0)} See related topics

Combining data

When you combine data from a file on disk with data in the current workbook, 1-2-3 changes data in the current sheet beginning at the current cell.

1. (Optional) Save the workbook before you combine data with it in case you don't like the results.
2. Select the cell where you want to begin combining data.
3. Choose File - Open.

4. Select the file type of the file containing the data you want to combine.
5. Select the computer, drive, and directory where the file containing the data you want to combine resides.
6. Select the file name from the list.
7. Select "Combine with current workbook."
8. Click Combine.

   If you selected a workbook file, specify the options for combining data in the Combine 1-2-3 File dialog box.

   If you selected a text file, specify the text file format in the Text File Options dialog box.

{button ,AL(`H_COMBINING_DATA_DETAILS',1)} See details

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_IMPORTING_A_PICTURE_STEPS;H_OPTIONS_OPEN_FILE_REF;H_SPECIFYING_A_FILE_OVER',0)} See related topics

Details: Combining data

Types of files you can combine with a workbook

You can combine data, number formats, and style information from these file types with the current workbook:

- Lotus 1-2-3 Workbook (.123, .WK4, .WK3, .WK1, .WT4)
- Lotus 1-2-3 SmartMaster Template (.12M)
- Text (.TXT, .PRN, .CSV, .DAT, .OUT, .ASC)
- dBASE (.DBF)
- Paradox (.DB)

{button ,AL(`H_COMBINING_DATA_STEPS',1)} Go to procedure
{button ,AL(`H_OPTIONS_OPEN_FILE_REF',0)} See related topics

Specifying options for combining 1-2-3 data

Use the options in the Combine 1-2-3 File dialog box to control how you combine data from a workbook on disk with the current workbook.

1. Under Combine, select an option.
2. Under Values from the file, select an option.
3. Click OK.

   If you are adding data from a password-protected workbook, enter the password in the Password dialog box.

{button ,AL(`H_SETTING_OPTIONS_FOR_COMBINING_123_DATA_DETAILS',1)} See details

{button ,AL(`H_COMBINING_DATA_STEPS;H_PREVENTING_OTHERS_FROM_OPENING_A_WORKBOOK_STEPS;',0)} See related topics

Details: Specifying options for combining 1-2-3 data

Options: Combine 1-2-3 File dialog box

Combine

- Entire workbook -- Combines all of the data from the selected workbook on disk with the current workbook.
- Range -- Combines a specified range of data from the selected workbook on disk with the current workbook.

  Note Combining formulas that refer to a row, column, or sheet outside the boundary of the specified range may produce unexpected results.

Values from the file

- Replace current values -- Copies specified data from a workbook on disk into the current workbook, beginning at the current cell and writing over existing data. Blank cells from the workbook on disk will not replace data in corresponding cells in the current workbook.
- Add to current values -- Adds numeric data from a workbook on disk to values or blank cells in the current workbook, beginning at the current cell. This option adds numeric data to other numeric data only.
- Subtract from current values -- Subtracts numeric data in a workbook on disk from values or blank cells in the current workbook, beginning at the current cell. This option subtracts numeric data from other numeric data only.

Guidelines for adding and subtracting values

You can add numeric data to or subtract numeric data from other numeric data only. When the incoming value will overlay a label or formula in the current workbook, 1-2-3 discards the incoming value and retains the label or formula.

Do not add or subtract date or time numbers because the results will not be meaningful.

If you subtract a positive number from a blank cell, the result is a negative number because a blank cell evaluates to zero.

{button ,AL(`H_SETTING_OPTIONS_FOR_COMBINING_123_DATA_STEPS',1)} Go to procedure

Browsing through files

Use the Browse dialog box to find and select the file you want.

1. Select the computer, drive, and directory where the file resides.
2. Select the file name from the list.
3. Click Open.

{button ,AL(`H_BROWSING_FILES_DETAILS',1)} See details

Details: Browsing through files

Options: Browse dialog box

Look in

Displays the current directory and shows where it fits in the hierarchy on your computer. Below it is a list of the directories and files in the selected location. The files listed match the type selected from the "Files of type" list.

If the file you want resides on a network server or other remote computer, double-click Network Neighborhood, then double-click Entire Network to be sure you have access to the file location.

File name

Lets you select a file from the list or enter a path and file name containing a combined total of up to 259 characters.

Files of type

Lists the types of files you can open.

Title

Displays the title of the selected SmartMaster. The "Title" box appears in the Browse dialog box only after you click More SmartMaster Templates in either the New Workbook dialog box or the Welcome to 1-2-3 dialog box.

Open

Opens the specified file.

{button ,AL(`H_BROWSING_FILES_STEPS',1)} Go to procedure

Specifying a file

When you use a 1-2-3 command that requires you to specify a file, you must specify the file's path and name. You can do this several ways:

- Use "Look in" to list available directories and files in selected locations and then double-click the file you want from the list.
- Enter the path and file name in the "File name" box.
- Use the "File name" box in combination with the "Look in" box.

If you don't specify a path for a file, 1-2-3 looks for the file in the current directory.

The file path

The file path consists of the drive and directory where the file is located. The file name is the unique name and extension assigned to the file. For example, in the following file specification:

C:\REPORTS\JANUARY SUMMARY.123

C:\REPORTS is the path. It identifies C: as the drive and REPORTS as the directory where the file named JANUARY SUMMARY.123 is located. The .123 file extension identifies the file type.

If the file you're specifying is in a directory that's under another directory, the path includes both directory names. For example, in the following file specification:

C:\REPORTS\MONTHLY SALES\JANUARY SUMMARY.123

MONTHLY SALES is a directory under the REPORTS directory.

A backslash (\) must separate the drive, directory, and file name.

Using wildcard characters to list files

You can see a list of files with similar names or extensions by including the wildcard characters * (asterisk) and ? (question mark) in the file name that you enter in the "File name" box.

Asterisk (*)

The * wildcard character represents any number of consecutive characters in a file name or extension.

For example, to list all files with the characters MARCH9 (such as MARCH9.123, MARCH9.WK4, and MARCH96.WK3), you enter MARCH9*.* in the "File name" box and press ENTER.

To list all files that begin with B and have the extension .CGM, you enter B*.cgm and press ENTER.

To list all files in a folder, you enter *.* and press ENTER.

Question mark (?)

The ? wildcard character represents any single character in a file name or extension.

For example, to list all .123 files that begin with SALES followed by two characters, you enter SALES??.123 in the "File name" box and press ENTER.

{button ,AL(`H_OPTIONS_OPEN_FILE_REF;H_OPENING_AN_EXISTING_FILE_STEPS;H_COMBINING_DATA_STEPS;H_IMPORTING_A_PICTURE_STEPS;H_OPENING_A_TEXT_FILE_STEPS',0)} See related topics

New Workbook dialog box

Use this dialog box to create either a new workbook or a SmartMaster template.

Choose a task

- Creating a blank workbook
- Creating a workbook using a SmartMaster
- Creating a SmartMaster template

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_WORKING_WITH_SMARTMASTER_TEMPLATES_OVER',0)} See related topics

Open dialog box

Use this dialog box to open different types of files or to combine data from a file on disk with the current workbook.

Choose a task

- Opening an existing file
- Opening a text file
- Combining data
- Importing a picture
- Opening a workbook from a Web server on the Internet
- Opening a workbook from an FTP server on the Internet
- Opening a Notes file attachment from within 1-2-3

For a description of the options in this dialog box, see Options.

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_123_OPEN_FROM_NOTES_DB_OVER',0)} See related topics

Options: Open dialog box

Look in

Displays the current directory and shows where it fits in the hierarchy on your computer. Below it is a list of directories and files in the selected location. The files listed match the type selected in the "Files of type" list.

File name

Lets you select a file from the list or enter a path and file name containing a combined total of up to 259 characters.

Files of type

Lists the types of files you can open or combine with the current workbook.

Description

Displays a description of the file contents. Only 1-2-3 workbooks (.123, .WK4, .WT4) and SmartMaster templates (.12M) can display a description.

To add a file description, use File - Workbook Properties (General tab), or File - Save As.

Open as read-only

Opens a copy of the selected file that you can read but not modify.

When you open a read-only file, 1-2-3 displays "(RO)" in front of the file name in the title bar.

Combine with current workbook

Imports data from a file on disk into the current workbook.

Open

Opens the specified file. When you select "Combine with current workbook," the button name changes to Combine and lets you import data from the specified file into the current workbook.

Lotus Notes

Opens a file attachment stored in a document in a Lotus Notes database.

Internet

Opens a workbook from either an FTP server or a Web server on the Internet.

Overview: Protecting data

Sometimes your workbooks contain data you don't want other people to change or even see. For example, you may want to prevent others from changing a set of formulas, or limit who can open a workbook that contains confidential financial data. In 1-2-3, you can choose the level of security you want.

Preventing others from opening a workbook

You can limit access to a workbook or SmartMaster template completely by saving it with a password. Only those people who know the password can open, print, or view the file.

For example, you could create a SmartMaster template that calculates annual raises for the employees in your organization. To keep the financial data in the file confidential, you save the template with a password. Only managers who know the password would be able to see the file contents.

Note If you copy or rename a file that has a password, you must know the password to open the copy or renamed file.

 See related topics

Locking workbook contents to prevent changes

Locking a workbook prevents changes to protected ranges, versions, and version groups; charts, maps, and graphic objects; styles; and row, column, and sheet settings.

When you lock a workbook, other people can still open it. However, unless they know the password, they can't change any data in the workbook except in ranges that you specifically left unprotected before locking the workbook.

For example, you could create a workbook to calculate sales information. While you want other people to add their data, you don't want them to change your formulas or formatting. To prevent others from making unwanted changes, you can deselect protection for the ranges where you want them to enter their data, and then lock the workbook.

 See related topics

Locking individual sheets and objects

If you don't want to lock an entire workbook, you can lock individual sheets and objects such as charts and graphics.

Before locking a sheet, you can leave unprotected any ranges in which you want to allow changes. Locking the sheet protects the entire sheet from changes to range contents except in ranges for which you deselected protection.

Locking individual objects such as charts and graphics protects them (but not the underlying sheet) from change.

Because you don't use a password to lock individual sheets and objects, anyone can unlock them. Protecting data in this way is meant only to prevent accidental changes.

 See related topics

Using reservations to prevent conflicting changes

Each workbook has a reservation. If you share the workbook with other people on a network, 1-2-3 uses the reservation to control access to the workbook. By default, the reservation always goes to the first person who opens the workbook.

Before you can change a workbook over a network, you must get the reservation. Although the person who has the reservation is the only one who can make changes to the workbook, other people can view, copy, or print the workbook at the same time.

 See related topics

Leaving part of a workbook or sheet unprotected

Before you lock a workbook or sheet, you can leave specified ranges unprotected to allow changes to their data.

1. Select the ranges or collections where you want to allow changes to data.
2. Choose Range - Range Properties.

3. Click the Security tab in the InfoBox.

4. Deselect "Protect cell contents from changes."
5. (Optional) Move, collapse, or close the InfoBox.
6. Do one of the following:
   - Lock the workbook.
   - Lock the sheet.

{button ,AL(`H_MAKING_PART_OF_A_SHEET_OR_WORKBOOK_UNPROTECTED_DETAILS',1)} See details

{button ,AL(`H_LOCKING_SHEET_CONTENTS_STEPS;H_LOCKING_WORKBOOK_CONTENTS_STEPS;H_PROTECTING_DATA_OVER;',0)} See related topics

Details: Leaving part of a workbook or sheet unprotected

Which cells are protected and unprotected?
The status bar displays U when you select an unprotected cell. After you lock the workbook or sheet, the status bar displays PR when you select a protected cell and U when you select an unprotected cell.

{button ,AL(`H_MAKING_PART_OF_A_SHEET_OR_WORKBOOK_UNPROTECTED_STEPS',1)} Go to procedure

Protecting unprotected ranges in a locked workbook

1. Unlock the workbook.
2. Select the unprotected range or collection you want to protect.
3. Choose Range - Range Properties.

4. Click the Security tab in the InfoBox.

5. Select "Protect cell contents from changes."
6. (Optional) Move, collapse, or close the InfoBox.
7. Lock the workbook.

{button ,AL(`H_LOCKING_WORKBOOK_CONTENTS_STEPS;H_PROTECTING_DATA_OVER',0)} See related topics

Protecting unprotected ranges in a locked sheet

1. Unlock the sheet.

   Note Collapse or move the InfoBox, but do not close it.
2. Select the unprotected range or collection you want to protect.
3. Click the Security tab in the InfoBox.

4. Select "Protect cell contents from changes."
5. Lock the sheet.

{button ,AL(`H_LOCKING_SHEET_CONTENTS_STEPS;H_PROTECTING_DATA_OVER;H_UNLOCKING_A_SHEET_STEPS',0)} See related topics

Locking workbook contents

When you lock a workbook's contents with a password, other people can open the workbook. However, unless they know the password, they can't modify the workbook, except in ranges that you specifically left unprotected.

1. (Optional) Leave unprotected any ranges and versions in which you want to allow changes to cell contents.
2. Choose File - Workbook Properties.

3. Click the Security tab in the dialog box.
4. Select "Lock workbook."
5. Set the password in the Set Password dialog box.
6. After you return to the Workbook Properties dialog box, click OK.

{button ,AL(`H_LOCKING_WORKBOOK_CONTENTS_DETAILS',1)} See details

{button ,AL(`H_PROTECTING_DATA_OVER;H_MAKING_PART_OF_A_SHEET_OR_WORKBOOK_UNPROTECTED_STEPS;H_CHANGING_A_LOCKED_WORKBOOK_PASSWORD_STEPS;H_UNLOCKING_A_WORKBOOK_STEPS;H_PROTECTING_UNPROTECTED_CELLS_IN_A_LOCKED_WORKBOOK_STEPS;H_CHANGING_VERSION_PROPERTIES_STEPS',0)} See related topics

Details: Locking workbook contents
You can lock the contents of either a workbook (.123, .WK4, .WK3, .WT4) or a SmartMaster template (.12M) with a password.

Locking a workbook with a password is different from saving a workbook with a password:

- When you use File - Workbook Properties to lock a workbook with a password, other people can open the workbook. However, unless they know the password, they can't make changes to the contents of the workbook.
- When you use File - Save As to save a workbook with a password, only people who know the password can open, print, or view the workbook.

After you lock the workbook, the status bar displays PR when you select a protected cell and U when you select an unprotected cell.

Tasks you can't perform in a locked workbook
When a workbook is locked, you can't:

- Change cell contents or comments, except in unprotected cells
- Display hidden versions, change protected versions, or change unprotected versions, except those for which cells are left unprotected
- Display hidden version groups or change protected version groups
- Show hidden columns, rows, or sheets
- Insert or delete columns, rows, or sheets
- Change column width or row height
- Change page breaks
- Freeze or clear sheet titles
- Change number format, style, or alignment
- Name or rename sheets
- Name or rename ranges
- Group or ungroup sheets
- Change outline settings
- Add or change charts, maps, or graphic objects
- Change protection or workbook reservation settings

Working with versions
When you create a version, you select the protection setting that you want in either the New Version dialog box or the Range InfoBox (Version tab). The version protection setting takes effect after you lock the workbook.

For information about version protection settings, see Options: New Version dialog box and Range InfoBox.

{button ,AL(`H_LOCKING_WORKBOOK_CONTENTS_STEPS',1)} Go to procedure
{button ,AL(`H_PREVENTING_OTHERS_FROM_OPENING_A_WORKBOOK_STEPS;',0)} See related topics

Changing the password for a locked workbook

To change the password you use to prevent others from changing workbook contents, you first unlock the workbook and then relock it with a new password.

1. Make sure the cell pointer is in the workbook for which you want to change the password.
2. Choose File - Workbook Properties.

3. Click the Security tab in the dialog box.
4. Deselect "Lock workbook."
5. Enter the current password in the Password dialog box.
6. After you return to the Workbook Properties dialog box, reselect "Lock workbook."
7. Set a new password in the Set Password dialog box.
8. After you return to the Workbook Properties dialog box, click OK.

{button ,AL(`H_PROTECTING_DATA_OVER',0)} See related topics

Unlocking a workbook

If you decide that it's OK for others to make changes to workbook contents, you can unlock the workbook. You must know the password to unlock the workbook.

1. Make sure the cell pointer is in the workbook you want to unlock.
2. Choose File - Workbook Properties.

3. Click the Security tab in the dialog box.
4. Deselect "Lock workbook."
5. Enter the password in the Password dialog box.
6. After you return to the Workbook Properties dialog box, click OK.

Once you unlock a workbook, 1-2-3 deletes the password. If you decide to relock the workbook, you must reassign a password.

{button ,AL(`H_LOCKING_WORKBOOK_CONTENTS_STEPS;H_PROTECTING_DATA_OVER',0)} See related topics

Locking sheet contents

Locking a sheet prevents other people from entering or editing data in the sheet, except in cells that you specifically left unprotected.

1. (Optional) Leave unprotected any ranges and versions in which you want to allow changes to cell contents.
2. Make sure the cell pointer is in the sheet you want to lock.
3. Choose Sheet - Sheet Properties.

4. Click the Basics tab in the InfoBox.

5. Select "Lock contents of protected cells in this sheet."
6. (Optional) Move, collapse, or close the InfoBox.

Note If the current sheet belongs to a set of grouped sheets, locking that sheet locks the other sheets in the group.

{button ,AL(`H_LOCKING_SHEET_CONTENTS_DETAILS',1)} See details

{button ,AL(`H_MAKING_PART_OF_A_SHEET_OR_WORKBOOK_UNPROTECTED_STEPS;H_PROTECTING_DATA_OVER;H_UNLOCKING_A_SHEET_STEPS;H_PROTECTING_UNPROTECTED_CELLS_IN_A_LOCKED_SHEET_STEPS;H_GROUPING_SHEETS_STEPS;H_CHANGING_VERSION_PROPERTIES_STEPS',0)} See related topics

Details: Locking sheet contents
After you lock the sheet, the status bar displays PR when you select a protected cell and U when you select an unprotected cell.

How locking a sheet differs from locking a workbook
When you lock a sheet, 1-2-3 locks only the contents of the cells in the sheet that you have not previously left unprotected. Because you don't use a password to lock a sheet, anyone can unlock the sheet and change its cell contents.

Locking a workbook prevents changes to its contents, styles, and structure, while locking a sheet only prevents changes to its contents. Because you use a password to lock the workbook, only people who know the password can make changes to the workbook.

Tasks you can't perform in a locked sheet
When the current sheet is locked, you can't:

- Change cell contents or comments, except in unprotected cells
- Display unprotected, protected, or hidden versions, except those for which cells are left unprotected
- Insert or delete columns or rows

{button ,AL(`H_LOCKING_SHEET_CONTENTS_STEPS',1)} Go to procedure
{button ,AL(`H_LOCKING_WORKBOOK_CONTENTS_STEPS',0)} See related topics

Unlocking a sheet

You must unlock a sheet before you can make changes to protected ranges in the sheet.

1. Make sure the cell pointer is in the sheet you want to unlock.
2. Choose Sheet - Sheet Properties.

3. Click the Basics tab in the InfoBox.

4. Deselect "Lock contents of protected cells in this sheet."
5. (Optional) Move, collapse, or close the InfoBox.

Note If the current sheet belongs to a set of grouped sheets, unlocking that sheet unlocks the other sheets in the group.

{button ,AL(`H_PROTECTING_DATA_OVER;H_LOCKING_SHEET_CONTENTS_STEPS;H_GROUPING_SHEETS_STEPS',0)} See related topics

Preventing others from opening a workbook

When you assign a password to a workbook or SmartMaster template, only people who know the password can open, print, or view the file.

1. Make sure the cell pointer is in the file you want to prevent others from opening.
2. Choose File - Save As.

3. Enter a name in the "File name" box.
4. Click Password.
5. Set a password in the Set Password dialog box.
6. After you return to the Save As dialog box, click Save.

{button ,AL(`H_PREVENTING_OTHERS_FROM_OPENING_A_WORKBOOK_DETAILS',1)} See details

{button ,AL(`H_DELETING_A_PASSWORD_STEPS;H_PROTECTING_DATA_OVER;H_NAMING_A_FILE_OVER;H_OPTIONS_SAVE_AS_REF;H_CHANGING_THE_PASSWORD_FOR_A_PROTECTED_WORKBOOK_STEPS',0)} See related topics

Details: Preventing others from opening a workbook
You can save either a workbook (.123, .WK4, .WK3, .WK1, .WT4) or a SmartMaster template (.12M) with a password.

Saving a workbook or SmartMaster template with a password is different from locking a workbook with a password:

- When you use File - Save As to save a workbook or SmartMaster template with a password, only people who know the password can open, print, or view the file.
- When you use File - Workbook Properties to lock a workbook with a password, other people can open the workbook. However, unless they know the password, they can't make changes to the contents of the workbook.

When the password doesn't work
Anyone who knows the password that was assigned to a workbook or SmartMaster template can change or remove the password. If you're unable to open a password-protected workbook or SmartMaster template, check to see if someone else who knew the original password has changed it.

{button ,AL(`H_PREVENTING_OTHERS_FROM_OPENING_A_WORKBOOK_STEPS',1)} Go to procedure
{button ,AL(`H_OPTIONS_SAVE_AS_REF',0)} See related topics

Removing restrictions on opening a workbook

If you don't need to prevent others from opening a password-protected workbook or SmartMaster template, you can remove the password.

1. Make sure the cell pointer is in the file for which you want to remove the password.
2. Choose File - Save As.

3. Click Password.
4. After 1-2-3 displays the Set Password dialog box, check that the "Password" and "Verify password" boxes are blank and click OK.
5. After you return to the Save As dialog box, click Save.
6. When 1-2-3 says that the file already exists, click Replace to replace the existing file with the current file.

Note Only people who know the password can open the file and remove its password.

{button ,AL(`H_PREVENTING_OTHERS_FROM_OPENING_A_WORKBOOK_STEPS;H_OPTIONS_SAVE_AS_REF;H_PROTECTING_DATA_OVER;H_CHANGING_THE_PASSWORD_FOR_A_PROTECTED_WORKBOOK_STEPS',0)} See related topics

Changing the password for a protected workbook

To change the password you use to prevent others from opening a workbook or SmartMaster template, you open the file, assign a new password, and resave the file.

1. Make sure the cell pointer is in the file for which you want to change the password.
2. Choose File - Save As.

3. Click Password.
4. Set a new password in the Set Password dialog box.
5. After you return to the Save As dialog box, click Save.
6. When 1-2-3 says that the file already exists, click Replace to replace the existing file with the current file.

Note Only people who know the password can open the file and change its password.

{button ,AL(`H_PROTECTING_DATA_OVER;H_PREVENTING_OTHERS_FROM_OPENING_A_WORKBOOK_STEPS;H_DELETING_A_PASSWORD_STEPS;H_OPTIONS_SAVE_AS_REF',0)} See related topics

Overview: Using a workbook reservation

Workbook reservations let you control how you share workbooks on a network or in another multi-user environment, and help ensure that people don't inadvertently write over each other's work.

The workbook's reservation status changes depending on whether someone has the reservation. If no one has the reservation, it's available. It someone has the reservation, it's unavailable. Only one person at a time can have the reservation for a workbook.

Saving changes to a workbook

In a multi-user environment, you need the reservation to save changes to a workbook. When you have the reservation, you are the only person who can save changes to the workbook. Other people can open, print, view, or copy the workbook while you're using it, but they can't change the workbook as long as you have the reservation.

Opening a workbook without the reservation

When you try to open a workbook and someone else has the workbook's reservation, 1-2-3 asks whether you want to open a copy of the workbook with read-only access. When you open a read-only copy, you see "(RO)" before the workbook name in the title bar. You can use the workbook, but you can't save changes to the workbook under its current name.

After you open a workbook with read-only access, you can try to get its reservation using File - Get Reservation. If someone saved changes to the workbook since you opened the read-only copy, 1-2-3 displays a warning. You can do the following:

- To retain changes that you made to the data, use File - Save As to save the workbook under a different name.
- To see the most up-to-date version of the workbook, close the current workbook and then reopen it.

Getting the reservation

The reservation setting determines how you get the workbook reservation. By default, the reservation automatically goes to the first person who opens the workbook.

You can change the reservation setting so that no one automatically gets the reservation. Then, to get the reservation, you must use File - Get Reservation while the workbook is current.

Releasing the reservation

1-2-3 releases the workbook reservation when you do any of the following:

- Choose File - Release Reservation while the workbook is current.
- Close the workbook.
- End the 1-2-3 session.

Events that affect the reservation

If a power outage or server failure temporarily severs your connection to the file server, some network software may reconnect you to the workbook automatically. However, be aware that 1-2-3 might not display the read-only indicator (RO), even if you have lost the reservation. To see if you still have the reservation, try to save the workbook.

You can assign read-only status to a workbook by changing its properties in the operating system. Once you do so, you can't get the workbook's reservation in 1-2-3, even if no one else has the reservation.

{button ,AL(`H_GETTING_A_FILE_RESERVATION_STEPS;H_RELEASING_A_FILE_RESERVATION_STEPS;H_CHANGING_THE_FILE_RESERVATION_SETTING_STEPS;H_PROTECTING_DATA_OVER',0)} See related topics

Getting a workbook reservation

By default, the reservation goes to the first person who opens a workbook. If the default reservation setting has been changed, you need to get the reservation while the workbook is current.

To get the reservation for the current workbook, choose File - Get Reservation.

1-2-3 gives you the reservation if it's available.

{button ,AL(`H_GETTING_A_FILE_RESERVATION_DETAILS',1)} See details

{button ,AL(`H_RELEASING_A_FILE_RESERVATION_STEPS;H_USING_A_FILE_RESERVATION_OVER;H_PROTECTING_DATA_OVER;H_CHANGING_THE_FILE_RESERVATION_SETTING_STEPS',0)} See related topics

Details: Getting a workbook reservation

Opening a workbook with its reservation
By default, 1-2-3 gives the workbook reservation to the first person who opens the workbook. You need to use File - Get Reservation only if "Always get reservation when opening workbook" is turned off. To see the reservation setting for the current workbook, choose File - Workbook Properties (Security tab).

If you try to open a workbook and someone else already has the reservation, 1-2-3 asks whether you want to open a read-only copy of the workbook. The other person who has the reservation must release it before you can get it.

Opening a workbook without its reservation
If you just want to look at a workbook and don't need to make changes to it, you can open the workbook without its reservation. Choose File - Open and select "Open as read-only" in the Open dialog box. If you find that you need to make changes to the workbook, use File - Get Reservation to try to get the reservation.

{button ,AL(`H_GETTING_A_FILE_RESERVATION_STEPS',1)} Go to procedure
{button ,AL(`H_OPENING_AN_EXISTING_FILE_STEPS',0)} See related topics

Releasing a workbook reservation

Before you release the reservation, make sure you save any changes you made to the workbook.

To release the workbook reservation, choose File - Release Reservation.

Note 1-2-3 automatically releases the reservation when you either close the workbook or end the 1-2-3 session.

{button ,AL(`H_PROTECTING_DATA_OVER;H_GETTING_A_FILE_RESERVATION_STEPS;H_USING_A_FILE_RESERVATION_OVER;H_CHANGING_THE_FILE_RESERVATION_SETTING_STEPS',0)} See related topics

Changing the reservation setting

If you don't want the workbook reservation to go automatically to the first person who opens the workbook, you can change the reservation setting.

1. Choose File - Workbook Properties.

2. Click the Security tab in the dialog box.
3. Deselect "Always get reservation when opening workbook," and click OK.

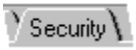
{button ,AL(`H_CHANGING_THE_FILE_RESERVATION_SETTING_DETAILS',1)} See details
{button ,AL(`H_USING_A_FILE_RESERVATION_OVER;H_PROTECTING_DATA_OVER',0)} See related topics

Details: Changing the reservation setting
When you open a workbook, 1-2-3 takes different actions depending on the reservation setting and whether the reservation is available:

- If "Always get reservation when opening workbook" is turned on and the reservation is available, 1-2-3 gives you the reservation when you open the workbook, allowing you to save changes to the workbook.
- If "Always get reservation when opening workbook" is turned on but the reservation is unavailable, 1-2-3 asks whether you want to open a read-only copy of the workbook without its reservation.
- If "Always get reservation when opening workbook" is turned off, 1-2-3 opens the workbook without its reservation, regardless of the workbook's reservation status. To make changes to the workbook, you must first use File - Get Reservation to try to get the reservation while the workbook is current. If someone else already has the reservation, that person must release it before you can get it.

{button ,AL(`H_CHANGING_THE_FILE_RESERVATION_SETTING_STEPS',1)} Go to procedure

Workbook Properties dialog box (Security tab)



Use the Security tab to protect workbook data from accidental change and to control how you share workbooks in a multi-user environment.

Choose a task

- Locking workbook contents
- Unlocking a workbook
- Changing the password for a locked workbook
- Changing the reservation setting

{button ,AL(`H_PROTECTING_DATA_OVER;H_USING_A_FILE_RESERVATION_OVER',0)} See related topics

Setting a password

1-2-3 is case-sensitive, so you must remember the exact combination of uppercase and lowercase characters.

1. Enter a password of up to 15 characters in the "Password" box.
2. Reenter the password in the "Verify password" box.
3. Click OK.

{button ,AL(`H_SET_PASSWORD_DETAILS',1)} See details

{button ,AL(`H_LOCKING_WORKBOOK_CONTENTS_STEPS;H_PREVENTING_OTHERS_FROM_OPENING_A_WORKBOOK_STEPS',0)} See related topics

Details: Setting a password

Using password protection

You can assign a password using File - Save As or File - Workbook Properties (Security tab).

- If you use File - Save As to save a workbook or SmartMaster template with a password, you must know the password to open, print, or view the file.
- If you use File - Workbook Properties (Security tab) to lock a workbook's contents with a password, you must know the password to make changes to the workbook or to unlock it.

If you don't use the password-protected file often, write down its password and keep it in a safe place.

{button ,AL(`H_SET_PASSWORD_STEPS',1)} Go to procedure

Entering a password

1. Enter the previously assigned password in the "Enter password" box.

   Note You must use the exact combination of uppercase and lowercase characters that were used to create the password.

2. Click OK.

{button ,AL(`H_UNLOCKING_A_WORKBOOK_STEPS;H_OPENING_AN_EXISTING_FILE_STEPS;H_OPENING_A_RECENTLY_USED_FILE_STEPS',0)} See related topics

Overview: Closing and saving files

The data that you enter in a file is temporary until you save the file on disk. As you update files during a 1-2-3 session, it's a good idea to save your work frequently to prevent accidental loss (for example, in case your computer loses power).

Saving files in different formats

You can save files in these formats:

- Lotus 1-2-3 Workbook (.123, .WK4, .WK3, .WK1, .WT4)
- Lotus 1-2-3 SmartMaster (.12M)
- Text (.TXT)
- Excel Worksheet (.XLS)
- Excel Workbook (.XLW)
- dBASE (.DBF)
- Paradox (.DB)

Extracting data

You can extract cell data from a 1-2-3 workbook file by saving a range to a new file. For example, if you have a large workbook and want to create a smaller workbook using part of the original data, you can select the range you want and then save it as a separate file.

You can save a range of cell data in these file formats:

- Lotus 1-2-3 Workbook (.123, .WK4, .WK3, .WK1, .WT4)
- Lotus 1-2-3 SmartMaster (.12M)
- Text (.TXT)
- dBASE (.DBF)
- Paradox (.DB)

Preventing others from opening a file

You can save a workbook or SmartMaster template with a password to prevent other people from opening, printing, or viewing it.

{button ,AL(`H_CLOSING_A_FILE_STEPS;H_SAVING_A_NEW_WORKBOOK_STEPS;H_SAVING_AN_EXISTING_FILE_STEPS;H_SAVING_A_RANGE_TO_A_FILE_STEPS;H_PREVENTING_OTHERS_FROM_OPENING_A_WORKBOOK_STEPS;H_SAVING_A_DOCUMENT_TO_AN_FTP_SERVER_ON_THE_INTERNET_STEPS;H_WORKING_WITH_EXCEL_FILES_OVER;H_WORKING_WITH_123_FILES_OVER;H_WORKING_WITH_DBASE_AND_PARADOX_FILES_OVER',0)} See related topics

Closing a file

To save memory and keep the workspace uncluttered, close files that you're not using.

1. Make sure the cell pointer is in the file you want to close.
2. Choose File - Close.

If the file has never been saved or has changed since the last time you saved it, 1-2-3 asks whether you want to save the changes. Click Yes, No, or Cancel.
If the file has never been saved and you click Yes, 1-2-3 displays the Save As dialog box so that you can name and save the file.

{button ,AL(`H_CLOSING_A_FILE_DETAILS',1)} See details

{button ,AL(`H_CLOSING_AND_SAVING_FILES_OVER;H_SAVING_A_NEW_WORKBOOK_STEPS;H_SAVING_AN_EXISTING_FILE_STEPS',0)} See related topics

Details: Closing a file

When you close a file, 1-2-3 removes the file from memory but doesn't delete the file from disk.

If the file you close is the last active file, 1-2-3 displays an empty workspace.

{button ,AL(`H_CLOSING_A_FILE_STEPS',1)} Go to procedure

Saving a new workbook

The data that you enter in a workbook is temporary until you save it.

1. Make sure the cell pointer is in the workbook you want to save.
2. Choose File - Save As.

3. Enter a name in the "File name" box.
4. (Optional) Select a different file format from the "Save as type" list.

   Note If you included an extension in the file name that doesn't match the selected file type, the extension overrides the file type.
5. Click Save.

   If you entered a file name that already exists in the specified location, 1-2-3 asks whether to replace the data in the existing file with the data in the current file, save the existing file as a backup file, or cancel saving the current file.

For a description of the options in the Save As dialog box, see Options.

{button ,AL(`H_SAVING_A_NEW_WORKBOOK_DETAILS',1)} See details

{button ,AL(`H_CLOSING_AND_SAVING_FILES_OVER;H_SAVING_AN_EXISTING_FILE_STEPS',0)} See related topics

Details: Saving a new workbook

Naming a file

1-2-3 assigns a temporary name to each workbook that you create. The first file name is Untitled, the next is Untitled1, the next is Untitled2, and so on. When you save a new workbook, you must enter a file name in the Save As dialog box.

The path and file name can contain a combined total of up to 259 characters. You can use any combination of letters, numbers, - (hyphens), spaces, _ (underscores), and . (periods) in a file name. You can also use both uppercase and lowercase letters; 1-2-3 retains whatever casing you use.

Specifying a file format

1-2-3 saves data and styles in a single file with a .123 extension unless you specify a different valid file extension or file type.

When you save data as a file type that 1-2-3 recognizes, 1-2-3 adds the file extension for you if you don't specify it as part of the file name. The extension begins with a period, contains up to three characters, and is based on the file type.

1-2-3 recognizes the file types and extensions listed below.

File type	Extension	Format
Lotus 1-2-3 Workbook (123)	.123	1-2-3 97 Edition for Windows 95
Lotus 1-2-3 (WK4)	.WK4	1-2-3 Releases 4 and 5 for Windows
Lotus 1-2-3 (WK3)	.WK3	1-2-3 for Windows Release 1
		1-2-3 for DOS Releases 3 and 4
Lotus 1-2-3 (WK1)	.WK1	1-2-3 for DOS Release 2
Lotus 1-2-3 SmartMaster (12M)	.12M	1-2-3 97 Edition for Windows 95
(not shown in the "Save as type" list)	.WT4	1-2-3 Release 5 for Windows
Text (TXT)	.TXT	Text file
Excel Worksheet (XLS)	.XLS	Excel Version 4.0
Excel Workbook (XLW)	.XLW	Excel Version 4.0
dBASE (DBF)	.DBF	dBASE
Paradox (DB)	.DB	Paradox

If you include an extension with the file name, 1-2-3 tries to identify the appropriate file type based on the specified extension. If 1-2-3 doesn't recognize the file extension, it adds an extension based on the selected file type.

For example, if you enter SALES.WK4 as the file name, 1-2-3 selects "Lotus 1-2-3 (WK4)" as the file type. However, if you enter SALES.ABC as the file name and select "Excel Worksheet (XLS)" as the file type, 1-2-3 saves the file in Excel format as SALES.ABC.XLS.

Saving data as different 1-2-3 file types

1-2-3 97 contains features that are not available in previous releases of 1-2-3. To preserve this information, you must save the workbook as a .123 file.

If you try to save a workbook as a .WK4, .WK3, .WK1, or .WT4 file, 1-2-3 warns you that information may be lost. Do one of the following:

- To save the workbook in the selected format, click OK.
- To save the workbook as a .123 file, click Cancel and then choose File - Save As.

If you don't want to see this warning each time you save a workbook in an earlier 1-2-3 file format, use File - 1-2-3 Preferences (General tab) to turn it off.

If you save a workbook as a 1-2-3 Release 5 for Windows SmartMaster template (.WT4) file, 1-2-3 appends a .WT4 extension to the file name but treats the template as a standard workbook. You cannot use File - New Workbook to create a new workbook based on a .WT4 file. The New Workbook dialog box lists titles of .12M SmartMaster templates only.

Saving data as an Excel file

When you save data as an .XLS or .XLW file, 1-2-3 preserves the cell data but does not retain other features such as outlines, charts, maps, and graphic objects. If the workbook contains any @functions that can't be translated or links to other files, 1-2-3 records the information in a log file.

Saving data as a text file

When you save data as a text file, 1-2-3 saves text and numbers in cells only. If a cell contains a formula, 1-2-3 saves the formula result in the text file.

You cannot save range names, styles, or versions (except for those currently displayed in the sheet). In addition, objects that appear on top of cells, such as charts, maps, or other graphic objects are not retained.

When you save data as a text file, numbers or text that don't fit in the specified column width may be lost. For best results, use a monospace font such as Courier and check that the columns are wide enough to display the data in the sheet. 1-2-3 adds spaces before or after the data in the resulting text file to align the columns of data.

{button ,AL(`H_SAVING_A_NEW_WORKBOOK_STEPS',1)} Go to procedure

{button ,AL(`H_OPTIONS_SAVE_AS_REF;H_WORKING_WITH_123_FILES_OVER;H_WORKING_WITH_EXCEL_FILES_OVER;H_WORKING_WITH_DBASE_AND_PARADOX_FILES_OVER',0)} See related topics

Saving an existing file

If you make changes to an existing file, you must save the file to make the changes permanent.

1. Make sure the cell pointer is in the file you want to save.
2. Choose File - Save.

Tip To save a copy of the file under a different name, choose File - Save As and then enter a new name in the "File name" box.

{button ,AL(`H_SAVING_AN_EXISTING_FILE_DETAILS',1)} See details

{button ,AL(`H_CLOSING_AND_SAVING_FILES_OVER;H_SAVING_A_NEW_WORKBOOK_STEPS',0)} See related topics

Details: Saving an existing file

Saving files from previous 1-2-3 releases

When you save a 1-2-3 Release 5 for Windows SmartMaster template (.WT4) file, 1-2-3 saves the template with its .WT4 file extension but treats the template as a standard workbook. You cannot use File - New Workbook to create a new workbook based on a .WT4 file. The New Workbook dialog box lists titles of .12M SmartMaster templates only.

When you save a .WK4, .WK3, .WK1, or .WT4 file, 1-2-3 warns you that information in the file may be lost if you save the file in its original format. To ensure that the information is not lost, you must save the file as a .123 file.

Do one of the following:

- To save the data in the selected format, click OK.
- To save the data as a .123 file, click Cancel and then choose File - Save As.

If you don't want to see this warning each time you save a workbook in an earlier 1-2-3 file format, use File - 1-2-3 Preferences (General tab) to turn it off.

Saving Excel files

When you save an .XLS or .XLW file, 1-2-3 preserves the cell data but does not retain other features you may have added in 1-2-3 such as outlines, charts, maps, and graphic objects. If the file contains any @functions that can't be translated or links to other files, 1-2-3 records the information in a log file.

When you reopen the file in the most recent version of Excel, Excel treats it as an earlier file format.

{button ,AL(`H_SAVING_AN_EXISTING_FILE_STEPS',1)} Go to procedure

{button ,AL(`H_WORKING_WITH_123_FILES_OVER;H_WORKING_WITH_EXCEL_FILES_OVER;H_WORKING_WITH_DBASE_AND_PARADOX_FILES_OVER',0)} See related topics

Saving a range as a new file

You can extract cell data from the current workbook by saving a range as a separate file.

1. Select the range that contains the data you want to extract.
2. Choose File - Save As.

3. Enter a name in the "File name" box.

   Note You must enter a different file name than that of the current workbook.
4. (Optional) Select a different file format from the "Save as type" list.
5. Select "Save selected range only."
6. Click Save.

   If you specified a 1-2-3 file type, the Save Selected Range dialog box appears. Select "Keep formulas" or "Convert formulas to values," and click OK.

For a description of the options in the Save As dialog box, see Options.

{button ,AL(`H_SAVING_A_RANGE_TO_A_FILE_DETAILS',1)} See details
{button ,AL(`H_CLOSING_AND_SAVING_FILES_OVER;',0)} See related topics

Details: Saving a range as a new file

Saving ranges in different formats
You can save a range of cell data in these file formats:

- Lotus 1-2-3 Workbook (.123, .WK4, .WK3, .WK1, .WT4)
- Lotus 1-2-3 SmartMaster (.12M)
- Text (.TXT)
- dBASE (.DBF)
- Paradox (.DB)

1-2-3 does not save any graphic objects, charts, maps, or embedded objects in the selected range.

When you save a range as a .WK3 or .WK1 workbook, 1-2-3 saves only the cell data, number format and alignment settings, and range names.

You cannot create a .WK1 workbook by saving a range from an active workbook that contains multiple sheets.

You cannot save a range in either a locked workbook or a locked sheet to a different file.

Preserving cell comments and scripts
If you save a range that contains cells with either attached cell comments or scripts, you must save the range as either a .123 workbook or a .12M SmartMaster template to retain the comments and scripts. If you save the range as a different file type, the data will be lost.

Preserving range names
When you save a range as a 1-2-3 workbook or SmartMaster template, 1-2-3 retains only those range names that refer to ranges completely within the selected range. If a range name refers to a range that either overlaps or is outside the selected range, 1-2-3 converts the range name to the appropriate range address, relative to the top left cell of the selected range.

Saving a range that contains formulas
If you save a range of data that contains formulas, be sure to include all the data referred to by the formulas. If the formulas refer to a range name, be sure to include the entire named range.

Saving a range of data that contains formulas that reference cells in rows, columns, or sheets outside the selected range may produce unexpected results. For the same reason, you should not save a range of data that contains formulas that reference 3D ranges to a workbook that contains fewer sheets than are in the 3D range.

If you want to save a range of data that contains formula values and the Calc button appears in the status bar, press F9 (CALC) to update the results of the formulas before you save the range.

Saving a range as a dBASE or Paradox file
When you save a range as a dBASE (.DBF) or Paradox (.DB) file, you must select the range containing the database table you want to save. 1-2-3 saves only the data in the selected range. No styles, formats, graphic objects, charts, maps, or embedded objects are saved.

{button ,AL(`H_SAVING_A_RANGE_TO_A_FILE_STEPS',1)} Go to procedure
{button ,AL(`H_OPTIONS_SAVE_AS_REF',0)} See related topics

Save As/Save Copy As dialog box

Use this dialog box to specify options for saving data.

If you're editing a 1-2-3 Workbook object that's embedded in another application, the Save As command changes to Save Copy As. You can use this command to save a copy of the workbook as any supported file type.

Choose a task

- Saving a new workbook
- Saving a range as a new file
- Preventing others from opening a workbook
- Removing restrictions on opening a workbook
- Saving a workbook to an FTP server on the Internet
- Saving a file to a Notes database

For a description of the options in this dialog box, see Options.

{button ,AL(`H_CLOSING_AND_SAVING_FILES_OVER;H_WORKING_WITH_123_FILES_OVER;H_WORKING_WITH_EXCEL_FILES_OVERH_WORKING_WITH_DBASE_AND_PARADOX_FILES_OVER;H_123_SAVE_TO_NOTES_DB_OVER',0)} See related topics

Options: Save As/Save Copy As dialog box

Save in

Displays the current directory and shows where it fits in the hierarchy on your computer. Below it is a list of directories and files in the selected location. The files listed match the type selected in the "Save as type" list.

File name

Lets you enter a path and file name containing a combined total of up to 259 characters. You can use any combination of letters, numbers, - (hyphens), spaces, _ (underscores), and . (periods) in a file name. 1-2-3 retains uppercase and lowercase characters.

If you include a file extension that 1-2-3 recognizes and the extension doesn't match the file type selected in the "Save as type" list, the file extension overrides the selected file type. If you include a file extension that 1-2-3 doesn't recognize, 1-2-3 adds an extension based on the selected file type.

Save as type

Lists the formats in which you can save the current file.

Description

Lets you enter text (up to 256 characters) to describe the file contents.

If the file is a workbook, the text that you enter in the "Description" box appears when you select the file in the Welcome to 1-2-3 dialog box or Open dialog box.

If the file is a SmartMaster template, the text that you enter in the "Description" box appears when you select the file in the Welcome to 1-2-3 dialog box or New Workbook dialog box.

You can also view the description on the General tab in the Workbook Properties dialog box.

Note You can only specify a description for 1-2-3 workbooks (.123, .WK4, .WT4) and SmartMaster templates (.12M). If you enter a description and save the file as any other file type, the description is not saved.

Save selected range only

Lets you extract data from the current file and save it as a separate file in these formats: 1-2-3 Workbook (.123, .WK4, .WK3, .WK1, .WT4), 1-2-3 SmartMaster (.12M), Text (.TXT), dBASE (.DBF), and Paradox (.DB). If you didn't select the range before choosing File - Save As, you can click the text box and then enter the range address. As an alternative, click the range selector to temporarily remove the dialog box and then select the range.

Password

Lets you assign a password to the current workbook or SmartMaster template. Only users who know the password can open, print, or view the protected file.

You can only assign a password to a 1-2-3 workbook file (.123, .WK4, .WK3, .WK1, .WT4) or SmartMaster template (.12M).

Lotus Notes

Saves the current file as an attachment to a document in a Lotus Notes database.

Internet

Saves the current file on the Internet.

Saving changes

Choose a task

- Closing a file
- Ending 1-2-3

Saving a dBASE or Paradox file

1. Make sure the cell pointer is in the file you want to save.
2. Choose File - Save As.

3. Enter a name in the "File name" box.
4. Select "dBASE (DBF)" or "Paradox (DB)" as the file type.

   Note If you included an extension in the file name that doesn't match the selected file type, the extension overrides the file type.
5. Click Save.

   If you entered a file name that already exists in the specified location, 1-2-3 prompts you for more information.
6. Choose one of the following options:

   Replace -- Replaces the data in the existing file on disk with the data in the current file.

   Cancel -- Returns you to 1-2-3 without saving the file.

For a description of the options in the Save As dialog box, see Options.

{button ,AL(`H_WORKING_WITH_DBASE_AND_PARADOX_FILES_OVER',0)} See related topics

Adding a title and description

You can add a title and descriptive text to workbook files (.123, .WK4, .WT4) and SmartMaster templates (.12M).

1. Make sure the file you want is the current workbook.
2. Choose File - Workbook Properties.

3. Click the General tab in the Workbook Properties dialog box.
4. Enter a title in the "Title" box.
5. Enter comments in the "Description" box.
   If needed, press ENTER to start a new line.
6. Click OK.

{button ,AL(`H_OPTIONS_WORK_PROP_TABGENERAL_REF',0)} See related topics

Viewing workbook file statistics

You can display information about a workbook such as size, number of sheets, when it was created and last modified, and recalculation settings.

1. Make sure the file you want is the current workbook.
2. Choose File - Workbook Properties.

3. Click the Statistics tab in the Workbook Properties dialog box.
4. After you finish viewing the information, click OK.

{button ,AL(`H_VIEWING_FILE_STATISTICS_DETAILS',1)} See details

{button ,AL(`H_SETTING_RECALCULATION_DEFAULTS_STEPS',0)} See related topics

Details: Viewing workbook statistics

You can't edit the information displayed on the Statistics tab in the Workbook Properties dialog box.

To add information such as a description of the file contents or notes about revisions, use File - Workbook Properties (General tab).

{button ,AL(`H_VIEWING_FILE_STATISTICS_STEPS',1)} Go to procedure

{button ,AL(`H_EDITING_THE_FILE_DESCRIPTION_STEPS;H_TRACKING_CHANGES_IN_A_FILE_STEPS',0)} See related topics

Tracking changes in a workbook

You can add notes about changes made to a workbook. 1-2-3 also records other information, including who last edited the workbook and when, and total number of revisions.

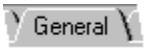
1. Make sure the file you want is the current workbook.
2. Choose File - Workbook Properties.

3. Click the General tab in the Workbook Properties dialog box.
4. Enter comments in the "Revision history" box.

   If needed, press ENTER to start a new line.
5. (Optional) To see information 1-2-3 records about the workbook, click the Statistics tab in the Workbook Properties dialog box.
6. Click OK.

{button ,AL(`H_OPTIONS_WORK_PROP_TABGENERAL_REF',0)} See related topics

Workbook Properties dialog box (General tab)



Use the General tab in the Workbook Properties dialog box to identify files, track changes, and transfer data between 1-2-3 and Lotus Notes using Notes/FX.

Choose a task

- Adding a title and description
- Tracking changes in a workbook
- Adding Notes/FX fields to a Notes form

For a description of the options in this dialog box, see Options.

{button ,AL(`H_EXCHANGING_DATA_BETWEEN_123_AND_NOTES_OVER',0)} See related topics

Options: Workbook Properties dialog box (General tab)

File name

Shows the name of the current workbook file or SmartMaster template.

Location

Shows where the current workbook file or SmartMaster template is stored.

Title

Lets you assign titles to workbook files (.123, .WK4, .WT4) and SmartMaster templates (.12M). The title is separate from the file name which appears in the title bar of the sheet window.

Workbook titles are visible only on the General tab in the Workbook Properties dialog box. You see SmartMaster template titles when you view the list of available templates in the Welcome to 1-2-3 dialog box or New Workbook dialog box.

Subject

Lets you exchange information between 1-2-3 and Lotus Notes. Notes then uses the information in the "Subject" field of a Notes document.

Keywords

Helps identify the workbook file and can supply categories to a Notes form. If you plan to use the keywords with Notes/FX, separate them with a , (comma).

Revision history

Lets you keep track of changes made to the file.

Description

Lets you enter text (up to 256 characters) to identify the file contents.

If the file is a workbook, the text that you enter in the "Description" box appears when you select the file in the Welcome to 1-2-3 dialog box or Open dialog box.

If the file is a SmartMaster template, you see the description when you select the template file in the Welcome to 1-2-3 dialog box or New Workbook dialog box.

You can also view and edit the description in the Save As dialog box.

Note You can only specify a description for 1-2-3 workbooks (.123, .WK4, .WT4) and SmartMaster templates (.12M). If you enter a description and save the file as any other file type, the description is not saved.

Overview: Ways to perform tasks

In 1-2-3 there are often several ways to perform a task. These include:

- Choosing a menu command
- Clicking one of the SmartIcons
- Using the InfoBox
- Using the status bar
- Using a keyboard shortcut

For example, there are several ways to make cell contents bold. You must select the cell first, and then you can use any one of these methods to perform the task:

- Click one of the SmartIcons

- In the Range InfoBox, use the Text Format tab

- In the status bar, click the Bold button

- On the keyboard, press CTRL+B

Using the menu or the SmartIcons

You can always choose a menu command, but if the equivalent icon is showing, clicking the icon is faster than choosing a menu command.

Using the InfoBox or the status bar

You can use the status bar to make single changes. However, if you want to make several changes at once or you want to format a workbook, using the InfoBox is easier. Changes you make using the InfoBox or the status bar happen instantly, so you can easily try out different options.

Using the mouse vs. using the keyboard

In most cases, 1-2-3 allows you to use either the mouse or the keyboard to complete a task. There are, however, some cases in which you must use the mouse, such as using drag and drop to move or copy data.

Using shortcut menus

Click the right mouse button on any object to display the shortcut menu.

{button ,AL(`H_USING_MENUS_OVER;H_USING_THE_INFOBOX_STEPS;H_USING_THE_STATUS_BAR_OVER;H_SHORTCUT_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_STYLE_KEYS_OVER;H_USING_SMARTICONS_OVER',0)} See related topics

Undoing a command

You can often undo a command or other action by performing Undo immediately after the command or action. For example, you can undo the effects of editing a cell or moving data.

To undo an action, choose Edit - Undo.

Note If Undo is turned off, you cannot undo a command or action. To turn Undo on or off, use File - User Setup - 1-2-3 Preferences (General tab).

You cannot undo some commands and actions. See details.

{button ,AL(`H_UNDOING_A_COMMAND_DETAILS',1)} See details

{button ,AL(`H_CANCELING_A_COMMAND_STEPS;',0)} See related topics

Details: Undoing a command

How Undo works in 1-2-3
If you changed several settings in a dialog box, choosing Edit - Undo will undo all of the changes.

If you changed several settings in the InfoBox, choosing Edit - Undo will undo the most recent change.

Some tasks cannot be undone
Commands and actions that cannot be undone include:

- Printing
- Saving a file
- Running a macro
- Running a script
- Copying data to the Clipboard
- Recalculating formulas by pressing F9 (CALC) or using Edit - Manage Links
- Moving the cell pointer
- Using Edit - Undo or CTRL-Z

Some tasks clear the Undo buffer
After you do any of the following tasks, you cannot undo any previous actions.

- Printing
- Saving a file
- Running a macro
- Running a script

{button ,AL(`H_UNDOING_A_COMMAND_STEPS',1)} Go to procedure

Canceling a command

At any point, while you are making a menu choice or using a dialog box, you can cancel the command. When you cancel a command, 1-2-3 closes the dialog box or menu without completing the command.

To cancel a command from a menu, move the mouse pointer off of the menu or press ESC.

To cancel a command from a dialog box, click Cancel, press ESC, or click the close icon

in the upper right corner of the title bar.

Note If a dialog box has a Done button instead of a Cancel button, you cannot cancel the command. However, you may be able to undo it.

{button ,AL(`H_UNDOING_A_COMMAND_STEPS;',0)} See related topics

Overview: Working with graphic objects

Graphic objects include charts, maps, buttons for running scripts and macros, query tables, lines, arrows, text blocks, and shapes, such as rectangles, ellipses, and polygons.

You can use lines, arrows, text blocks, and shapes to enhance your data and create great-looking presentations. You can also bring pictures into 1-2-3.

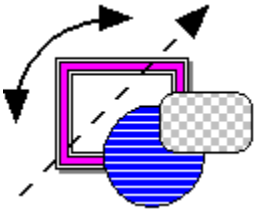
Manipulating graphic objects

After you select a graphic object, you can use many techniques to manipulate it. You can perform simple manipulations, such as moving and sizing graphic objects.

1-2-3 also provides commands for more advanced manipulations, such as rotating, shuffling, and flipping graphic objects. You can also group graphic objects to manipulate them as a single object.

Styling graphic objects

You can style graphic objects for a variety of visual effects, as shown in the illustration below.



For more information, see Styling graphic objects.

{button ,AL(`H_BRINGING_A_PICTURE_INTO_123_STEPS;H_CREATING_A_FREEHAND_DRAWING_STEPS;H_CREATING_A_LINE_ARC_OR_ARROW_STEPS;H_CREATING_A_POLYLINE_OR_POLYGON_STEPS;H_CREATING_A_RECTANGLE_OR_ELLIPSE_STEPS;H_CREATING_A_TEXT_BLOCK_STEPS;H_MOVING_GRAPHICS_STEPS;H_SIZING_GRAPHICS_STEPS;H_NAMING_A_GRAPHIC_STEPS;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_CREATING_A_BUTTON_STEPS;H_FASTENING_GRAPHICS_STEPS;H_FLIPPING_GRAPHICS_STEPS;H_GROUPING_GRAPHICS_STEPS;H_HIDING_OR_REDISPLAYING_GRAPHICS_STEPS;H_LOCKING_OR_UNLOCKING_GRAPHICS_STEPS;H_ROTATING_GRAPHICS_STEPS;H_RESHAPING_A_POLYLINE_POLYGON_OR_FREEHAND_DRAWING_STEPS;H_SHUFFLING_GRAPHICS_STEPS;H_UNGROUPING_GRAPHICS_STEPS;',0)} See related topics

Styling graphic objects

Using the InfoBox, you can style graphic objects in many different ways. To see the array of styling choices, right-click the object, choose the Properties command, and click the Lines & Color tab in the InfoBox.

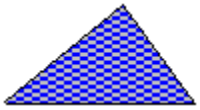
You can:

- Style a line or the border of a shape to make it dashed or dotted.

- Add an arrowhead to a line, polyline, or arc.

- Add designer frames around rectangular shapes, charts, maps, and parts of objects, such as chart titles.

- Change the interior pattern or color of graphic objects.



{button ,AL(`H_CHANGING_BORDERS_LINES_AND_COLORS_OVER;H_THE_INFOBOX_OVER;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_CHANGING_GRAPHICS_BORDERS_STEPS;H_CHANGING_LINE_STYLES_STEPS;H_CHANGING_INTERIOR_COLOR_AND_PATTERN_STEPS;H_USING_DESIGNER_FRAMES_STEPS;',0)} See related topics

Creating a line, arc, or arrow

Use lines, arrows, and arcs to point out and emphasize important data.

1. Choose Create - Drawing.
2. Choose Line, Arrow, or Arc.
3. Move the mouse pointer where you want to start drawing the line, arrow, or arc.
4. Drag across the sheet.
5. Release the mouse button.

Tip To draw horizontal, vertical, or 45-degree lines and arrows, or quarter-circle arcs, SHIFT+drag.

{button ,AL(`H_CREATING_A_LINE_ARC_OR_ARROW_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_FREEHAND_DRAWING_STEPS;H_CREATING_A_POLYLINE_OR_POLYGON_STEPS;H_CREATING_A_RECTANGLE_OR_ELLIPSE_STEPS;H_NAMING_A_GRAPHIC_STEPS;H_SIZING_GRAPHICS_STEPS;H_STYLING_GRAPHICS_OVER;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;',0)} See related topics

Details: Creating a line, arc, or arrow
You can drag a line, arc, or arrow to any size or angle. When you draw an arrow, the arrowhead appears at the end where you stop dragging.

Related SmartIcons


Draws a line


Draws an arc


Draws a forward-pointing arrow


Draws a double-headed arrow

{button ,AL(`H_CREATING_A_LINE_ARC_OR_ARROW_STEPS',1)} Go to procedure

Creating a rectangle or ellipse

Use rectangles, rounded rectangles, squares, ellipses, and circles to emphasize data or to create designs such as logos.

1. Choose Create - Drawing.
2. Choose Rectangle, Rounded Rectangle, or Ellipse.
3. Move the mouse pointer where you want to start drawing the shape.
4. Drag until the shape is the size you want.

   Tip To draw a square instead of a rectangle or to draw a circle instead of an ellipse, SHIFT+drag.
5. Release the mouse button.

{button ,AL(`H_CREATING_A_RECTANGLE_OR_ELLIPSE_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_FREEHAND_DRAWING_STEPS;H_CREATING_A_LINE_ARC_OR_ARROW_STEPS;H_CREATING_A_POLYLINE_OR_POLYGON_STEPS;H_NAMING_A_GRAPHIC_STEPS;H_STYLING_GRAPHICS_OVER;H_SIZING_GRAPHICS_STEPS;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;',0)} See related topics

Details: Creating a rectangle or ellipse

Changing rectangles and squares
You can select "Rounded corners" on the Lines & Colors tab in the InfoBox to change the corners of selected rectangles and squares.

Related SmartIcons


Draws a rectangle or square

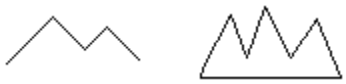

Draws a rounded rectangle


Draws an ellipse or circle

{button ,AL(`H_CREATING_A_RECTANGLE_OR_ELLIPSE_STEPS',1)} Go to procedure

Creating a polyline or polygon

Polylines and polygons are shapes consisting of any number of straight or freehand lines. As shown in the illustration below, a polyline is an open shape, and a polygon is closed.



1. Choose Create - Drawing.
2. Choose Polyline or Polygon.
3. Move the mouse pointer where you want to start drawing the first line.
4. Drag to draw a straight line, or CTRL+drag to draw a freehand line.

   Tip To draw a horizontal, vertical, or 45-degree line segment, SHIFT+drag.
5. Release the mouse button to end the line.
6. Drag or CTRL+drag to draw more lines.

   Tip If you start drawing a line and want to erase it and start again, press ESC.
7. To finish, double-click.

   Note For a polygon, 1-2-3 automatically connects the last line you drew to the first.

{button ,AL(`H_CREATING_A_POLYLINE_OR_POLYGON_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_FREEHAND_DRAWING_STEPS;H_CREATING_A_LINE_ARC_OR_ARROW_STEPS;H_CREATING_A_RECTANGLE_OR_ELLIPSE_STEPS;H_NAMING_A_GRAPHIC_STEPS;H_STYLING_GRAPHICS_OVER;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_RESHAPING_A_POLYLINE_POLYGON_OR_FREEHAND_DRAWING_STEPS;',0)} See related topics

Details: Creating a polyline or polygon
You can combine straight lines and freehand lines to create polyline or polygon drawings.

Related SmartIcons


Draws a polyline


Draws a polygon

{button ,AL(`H_CREATING_A_POLYLINE_OR_POLYGON_STEPS',1)} Go to procedure

Creating a freehand drawing

1. Choose Create - Drawing - Freehand.

2. Move the mouse pointer where you want to start the freehand drawing.
3. Drag to draw the shape you want.
4. Release the mouse button.

{button ,AL(`H_CREATING_A_FREEHAND_DRAWING_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_LINE_ARC_OR_ARROW_STEPS;H_CREATING_A_POLYLINE_OR_POLYGON_STEPS;H_NAMING_A_GRAPHIC_STEPS;H_STYLING_GRAPHICS_OVER;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_RESHAPING_A_POLYGON_POLYLINE_OR_FREEHAND_DRAWING_STEPS;',0)} See related topics

Details: Creating a freehand drawing
You can create many individual freehand lines or shapes and then group them to create a complex freehand drawing.

{button ,AL(`H_CREATING_A_FREEHAND_DRAWING_STEPS',1)} Go to procedure
{button ,AL(`H_GROUPING_GRAPHICS_STEPS;',0)} See related topics

Creating a text block

You can use text blocks to point out important data.

Show me a demo

1. Choose Create - Text.

2. Move the mouse pointer where you want the text block to appear.
3. Click to create a default-sized text block, or drag until the text block is the size you want.
4. Release the mouse button.
5. Enter text by typing or by pasting it from the Clipboard.

   Tip To paste text from the Clipboard into a text block, press CTRL+V rather than choosing Edit - Paste.
6. When you finish entering text, click a cell in the sheet.

{button ,AL(`H_CREATING_A_TEXT_BLOCK_DETAILS',1)} See details

{button ,AL(`H_EDITING_DATA_IN_TEXT_BLOCKS_STEPS;H_ALIGNING_DATA_IN_TEXT_BLOCKS_STEPS;H_CHANGING_TEXT_FORMAT_STEPS;H_SIZING_GRAPHICS_STEPS;H_STYLING_GRAPHICS_OVER;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;',0)} See related topics

Details: Creating a text block

If you cannot see all the text in a text block, change the size of the text block or the size of the text.

To start a new line in a text block, press ENTER.

{button ,AL(`H_CREATING_A_TEXT_BLOCK_STEPS',1)} Go to procedure

{button ,AL(`H_CHANGING_TEXT_FORMAT_STEPS;H_SIZING_GRAPHICS_STEPS;',0)} See related topics

Naming a graphic object

Naming graphic objects makes it easier to find them using Edit - Go To. 1-2-3 assigns a default name, such as "Line1," to every graphic object, but you can use the InfoBox to change the name.

1. Select the graphic object or group of graphic objects you want to name.
2. Right-click the selection and choose the Properties command.
3. Click the Basics tab in the InfoBox.

4. Enter a name in the "*Object* name box," according to the naming conventions.

   Object is the name of the selected graphic object; for example, "line."
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NAMING_A_GRAPHIC_DETAILS',1)} See details

{button ,AL(`H_NAMING_CONVENTIONS_OVER;H_STYLING_GRAPHICS_OVER;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS;H_THE_INFOBOX_OVER;H_GROUPING_GRAPHICS_STEPS;',0)} See related topics

Details: Naming a graphic object

Do not assign the same name to two graphic objects in the same workbook.

By default, 1-2-3 names the first line you create Line1, the next line Line2, and so on. As you create each type of graphic object, the number in the default name for the object increases in this same way.

The name of a graphic object is not a caption for the object and does not appear with the object in the sheet.

{button ,AL(`H_NAMING_A_GRAPHIC_STEPS',1)} Go to procedure

Bringing a picture into 1-2-3

You can bring a picture from another application into 1-2-3. For example, you can create or edit a picture in Microsoft Paint and bring it into a 1-2-3 sheet.

1. Choose Create - Drawing - Picture.

2. From "Look in" list, select the drive and folder containing the picture file.
3. (Optional) Select the file type of the picture in the "Files of type" list.
4. Select the picture file you want from the "File name" list.
5. Click Open.
6. Click the place in the sheet where you want to put the top left corner of the picture.

Tip You can also bring a picture into 1-2-3 by copying it to the Clipboard and pasting it in the sheet.

{button ,AL(`H_BRINGING_A_PICTURE_INTO_123_DETAILS',1)} See details

{button ,AL(`H_123_RESTORING_A_PICTURE_TO_ITS_ORIGINAL_SIZE_STEPS;H_STYLING_GRAPHICS_OVER;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER',0)} See related topics

Details: Bringing a picture into 1-2-3

Types of pictures you can bring into 1-2-3
The types of pictures you can bring into 1-2-3 are the following:

- Bitmap (.BMP),
- Windows metafiles (.WMF)
- 1-2-3 pictures (.PIC)
- ANSI metafiles (.CGM).

Sizing pictures
When you bring a picture into a sheet, 1-2-3 sizes the picture according to the dimensions specified in the original graphics file.The size information in the the original picture file does not change when you resize the picture in the sheet.

You can drag a handle to change the size of a picture, however, siizing the picture may distort its original proportions. To restore the picture to its original size, select it and choose Drawing - Restore to Original Size.

{button ,AL(`H_BRINGING_A_PICTURE_INTO_123_STEPS',1)} Go to procedure
{button ,AL(`H_SIZING_GRAPHICS_STEPS;',0)} See related topics

Restoring a picture to its original size

If you resized a picture after bringing it into 1-2-3, you can easily restore it to its original size.

1. Select the picture.
2. Choose Drawing - Restore to Original Size.

{button ,AL(`H_123_RESTORING_A_PICTURE_TO_ITS_ORIGINAL_SIZE_DETAILS',1)} See details

{button ,AL(`H_STYLING_GRAPHICS_OVER;H_WORKING_WITH_GRAPHICS_OVER;H_SIZING_GRAPICS_STEPS;H_BRINGING_A_PICTURE_INTO_123_STEPS;',0)} See related topics

Details: Restoring a picture to its original size

Sizing pictures
When you bring a picture into a sheet, 1-2-3 sizes the picture according to the dimensions specified in the original graphics file.The size information in the the original picture file does not change when you resize the picture in the sheet.

{button ,AL(`H_123_RESTORING_A_PICTURE_TO_ITS_ORIGINAL_SIZE_STEPS',1)} Go to procedure

Fastening graphic objects

You can change how a graphic object is fastened to the cells behind it.

1. Select one or more graphic objects.
2. Right-click the graphic object(s) and choose the Properties command.
3. Click the Basics tab in the InfoBox.

4. Under Fasten to cells, select an option.
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_FASTENING_GRAPHICS_DETAILS',1)} See details

{button ,AL(`H_STYLING_GRAPHICS_OVER;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_THE_INFOBOX_OVER;H_LOCKING_OR_UNLOCKING_GRAPHICS_STEPS;H_GROUPING_GRAPHICS_STEPS;',0)} See related topics

Details: Fastening graphic objects

Options for fastening graphic objects

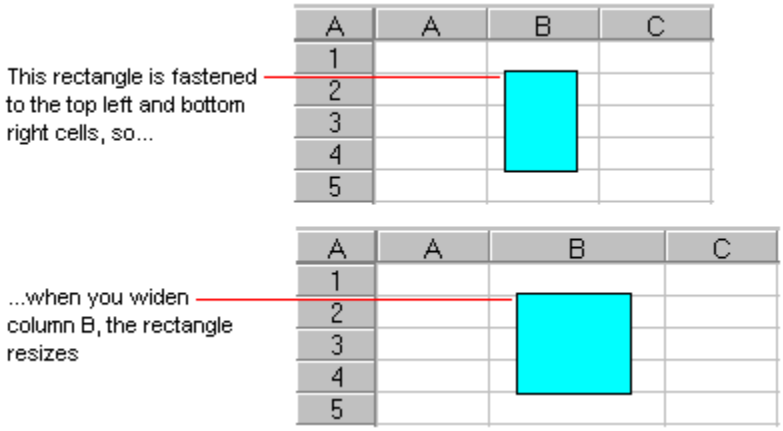
The "Fasten to cells" options determine how 1-2-3 fastens a graphic object to the cells behind the object.

- Top-left and bottom-right -- The graphic object changes size and position when you move, size, or hide the cells behind it.
- Top-left only -- The graphic object moves but stays the same size when you move, size, or hide the cells behind it.
- Not fastened -- The graphic object is detached from the underlying cells; it doesn't move or change size when you move, size, or hide the cells behind it.

How 1-2-3 fastens graphic objects

When you create a graphic object, it fastens by default to the cells behind its top left and bottom right corners. An object fastened in this way can move and change size with the cells behind it.

For example, when you create a rectangle, it fastes to the cells behind its top left and bottom right corners. It can move and change size when you insert or delete cells, columns, and rows; or when you change column widths and row heights.



Moving or sizing a graphic object does not change the way it was fastened.

{button ,AL(`H_FASTENING_GRAPHICS_STEPS',1)} Go to procedure

Flipping graphic objects

You can flip most graphic objects horizontally or vertically.

1. Select one or more graphic objects.
2. Right-click the selected object(s) and choose Flip Left-Right or Flip Top-Bottom.

Note You cannot flip charts, maps, embedded objects, query tables, buttons, pictures, or text blocks.

{button ,AL(`H_FLIPPING_GRAPHICS_DETAILS',1)} See details

{button ,AL(`H_SHUFFLING_GRAPHICS_STEPS;H_ROTATING_GRAPHICS_STEPS;H_RESHAPING_A_POLYLINE_POLYGON_OR_FREEHAND_DRAWING_STEPS;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;',0)} See related topics

Details: Flipping graphic objects

Flipping more than one graphic object
If you select more than one graphic object to flip, 1-2-3 flips the entire selection as a group. Any locked graphic objects in the group do not flip.

Related SmartIcons


Flips a graphic object horizontally left to right


Flips a graphic object vertically top to bottom

{button ,AL(`H_FLIPPING_GRAPHICS_STEPS',1)} Go to procedure

Grouping graphic objects

You can group graphic objects to manipulate and style them as a group rather than individually. Graphic objects stay grouped until you ungroup them.

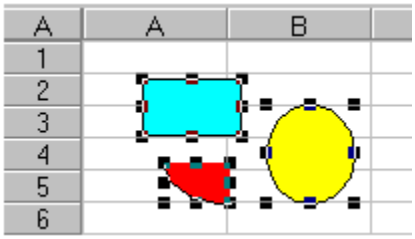
1. Select the graphic objects you want to group.
2. Right-click the objects and choose the Group command.

{button ,AL(`H_GROUPING_GRAPHICS_DETAILS',1)} See details

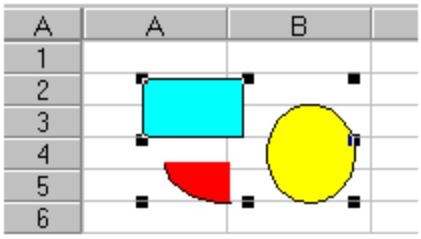
{button ,AL(`H_UNGROUPING_GRAPHICS_STEPS;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;',0)} See related topics

Details: Grouping graphic objects

Before you group graphic objects, each object has its own set of handles, as shown below.



After you group graphic objects, the group has one set of handles, as shown below.



Related SmartIcons

Groups the selected graphic objects

Ungroups the selected graphic objects

Selects several graphic objects

{button ,AL(`H_GROUPING_GRAPHICS_STEPS',1)} Go to procedure

Hiding or redisplaying graphic objects

You can use the InfoBox to hide or redisplay selected graphic objects in the current workbook.

1. Select one or more graphic objects.

   Note To select hidden graphic objects, use Edit - Go To.

2. Right-click the graphic object(s) and choose the Properties command.
3. Click the Basics tab in the InfoBox.

4. Under Misc, select or deselect "Hide."
5. (Optional) Move, collapse, or close the InfoBox.

Note To hide all graphic objects or redisplay all hidden graphic objects in the current workbook, use File - Workbook Properties (View tab).

{button ,AL(`H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_LOCKING_OR_UNLOCKING_GRAPHICS_STEPS;H_WORKING_WITH_GRAPHICS_OVER;H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS;H_THE_INFOBOX_OVER;',0)} See related topics

Locking or unlocking graphic objects

Locked graphic objects cannot be moved, sized, deleted, styled, or manipulated.

1. Select one or more graphic objects.
2. Right-click the graphic object(s) and choose the Properties command.
3. Click the Basics tab in the InfoBox.

4. Under Misc, select or deselect "Lock."
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_LOCKING_OR_UNLOCKING_GRAPHICS_DETAILS',1)} See details

{button ,AL(`H_HIDING_OR_REDISPLAYING_GRAPHICS_STEPS;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_THE_INFOBOX_OVER;',0)} See related topics

Details: Locking or unlocking graphic objects

When you select a locked graphic object, its handles are diamond-shaped rather than square.

Locked charts and maps change if the data they refer to changes.

Keeping a graphic object locked

Locking a graphic object prevents accidental changes, but it does not prevent you or others from unlocking the graphic object.

To prevent others from unlocking a graphic object, you can lock the workbook so that you or others must enter a password to make changes to the workbook. For more information, see Locking workbook contents.

{button ,AL(`H_LOCKING_OR_UNLOCKING_GRAPHICS_STEPS',1)} Go to procedure

Moving graphic objects

You can drag graphic objects to move them.

1. Select one or more graphic objects.
2. Drag the graphic object(s) by any part except the handles.

   Tip CTRL+drag to copy a graphic object and move the copy.
3. Release the mouse button.

Note You cannot move a locked graphic object.

{button ,AL(`H_MOVING_GRAPHICS_DETAILS',1)} See details

{button ,AL(`H_SIZING_GRAPHICS_STEPS;H_FLIPPING_GRAPHICS_STEPS;H_ROTATING_GRAPHICS_STEPS;H_SHUFFLING_GRAPHICS_STEPS;H_LOCKING_OR_UNLOCKING_GRAPHICS_STEPS;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_COPYING_AND_MOVING_OVER;',0)} See related topics

Details: Moving graphic objects

Moving several graphic objects at once
If you select more than one graphic object, you can move them all by dragging one.

Moving transparent shapes
When moving a transparent rectangle or other shape, drag it by the border, not by the interior.

{button ,AL(`H_MOVING_GRAPHICS_STEPS',1)} Go to procedure

{button ,AL(`H_COPYING_AND_MOVING_OVER;H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;H_COPYIN
G_AND_MOVING_TO_ANOTHER_SHEET_STEPS;H_COPYING_AND_MOVING_TO_A_NEW_SHEET_STEPS;
',0)} See related topics

Reshaping a polyline, polygon, or freehand drawing

You can reshape a polyline, polygon, or freehand drawing by displaying the points and moving them.

1. Select the polyline, polygon, or freehand drawing.
2. Right-click the object and choose the Properties command.
3. Click the Basics tab in the InfoBox.

4. Under Misc, select "Show points."
5. Drag the points to change the shape of the object.
6. (Optional) Move, collapse, or close the InfoBox.

Note You cannot reshape a locked polyline, polygon, or freehand drawing.

{button ,AL(`H_RESHAPING_A_POLYLINE_POLYGON_OR_FREEHAND_DRAWING_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_FREEHAND_DRAWING_STEPS;H_CREATING_A_POLYLINE_OR_POLYGON_STEPS;H_WORKING_WITH_GRAPHICS_OVER;H_THE_INFOBOX_OVER;H_LOCKING_OR_UNLOCKING_GRAPHICS_STEPS;',0)} See related topics

Details: Reshaping a polyline, polygon, or freehand drawing
You can move the points in a polyline, polygon, or freehand drawing, but you cannot add new points or delete existing ones.

{button ,AL(`H_RESHAPING_A_POLYLINE_POLYGON_OR_FREEHAND_DRAWING_STEPS',1)} Go to procedure

Rotating graphic objects

1. Select one or more graphic objects.
2. Right-click the graphic object(s) and choose the Properties command.
3. Click the Basics tab in the InfoBox.

4. Specify the degree of rotation in the "Rotation" box.
5. (Optional) Move, collapse, or close the InfoBox.

Note You cannot rotate embedded or locked graphic objects, charts, maps, buttons, pictures, query tables, or text blocks.

{button ,AL(`H_ROTATING_GRAPHICS_DETAILS',1)} See details

{button ,AL(`H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_THE_INFOBOX_OVER;H_FLIPPING_GRAPHICS_STEPS;H_MOVING_GRAPHICS_STEPS;H_SHUFFLING_GRAPHICS_STEPS;',0)} See related topics

Details: Rotating graphic objects

Rotating several graphic objects at once

If you select more than one graphic object and rotate them, the objects rotate as a group around the center of the group.

{button ,AL(`H_ROTATING_GRAPHICS_STEPS',1)} Go to procedure

Shuffling graphic objects

When graphic objects overlap, you can shuffle them to change which object is on top.

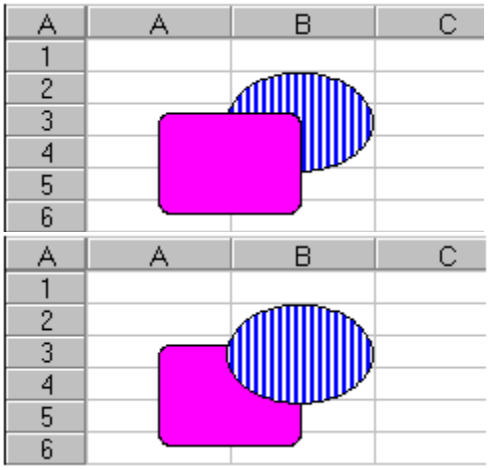
1. Select one or more graphic objects.
2. Right-click the object(s) and choose Bring to Front or Send to Back.

{button ,AL(`H_SHUFFLING_GRAPHICS_DETAILS',1)} See details

{button ,AL(`H_MOVING_GRAPHICS_STEPS;H_FLIPPING_GRAPHICS_STEPS;H_ROTATING_GRAPHICS_STEPS;H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;',0)} See related topics

Details: Shuffling graphic objects

The illustration below shows what happens when you shuffle graphic objects, bringing one graphic object to the front.



You cannot shuffle parts of maps or charts, such as titles, legends, notes, and axes.

Related SmartIcons

Brings graphic object to the front of the stack

Sends graphic object to the back of the stack

{button ,AL(`H_SHUFFLING_GRAPHICS_STEPS',1)} Go to procedure

Sizing graphic objects

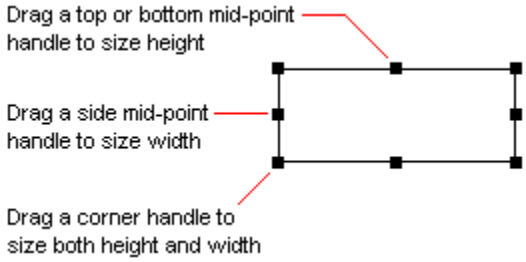
1. Select one or more graphic objects.
2. Drag a handle in the direction you want to size the object.

   Tip To maintain original proportions, SHIFT+drag a corner handle.
3. Release the mouse button when the object is the size you want.

{button ,AL(`H_SIZING_GRAPHICS_DETAILS',1)} See details

{button ,AL(`H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;',0)} See related topics

Details: Sizing graphic objects
You drag different handles to size a graphic object the way you want.



Restoring the size of a graphic object
While dragging to size a graphic object, you can restore it to its original size by pressing ESC.

After releasing the mouse button, you can restore a graphic object to its original size by immediately pressing CTRL+Z.

Sizing several graphic objects at once
If you select more than one graphic object to size, you can size them all by dragging a handle of one.

{button ,AL(`H_SIZING_GRAPHICS_STEPS',1)} Go to procedure

Ungrouping graphic objects

You can ungroup graphic objects to manipulate them individually.

1. Select one or more groups of graphic objects.
2. Right-click the selected group(s) and choose the Ungroup command.

{button ,AL(`H_UNGROUPING_GRAPHICS_DETAILS',1)} See details

{button ,AL(`H_WORKING_WITH_GRAPHICS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_GROUPING_GRAPHICS_STEPS;',0)} See related topics

Details: Ungrouping graphic objects

Related SmartIcons

Ungroups the selected group(s)

Groups the selected graphic objects

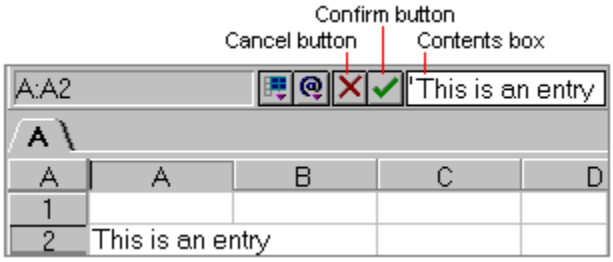
{button ,AL(`H_UNGROUPING_GRAPHICS_STEPS',1)} Go to procedure

Overview: Editing data

Edit an entry when you want to change data or replace it entirely.

Where you edit data

You can edit a cell entry either in the cell or in the contents box by double-clicking the cell or clicking the contents box when the cell is selected. When you edit in the contents box, (as shown below) the cancel and confirm buttons appear.



Data you can edit

You can edit:

- Cell contents
- Text in text blocks and cell comments
- Legends, labels, titles, and notes in charts
- Legends and titles in maps

Finding and replacing data

Choose Edit - Find and Replace to search through the workbook or sheet to find and replace characters. You can find and replace values as well as labels.

Checking spelling

Choose Edit - Check Spelling to correct misspelled words and check for duplicate words, such as "the the" in cells, charts, and text blocks.

{button ,AL(`H_EDITING_A_CELL_COMMENT_STEPS;H_EDITING_DATA_IN_A_CELL_STEPS;H_EDITING_DATA_IN_TEXT_BLOCKS_STEPS;H_ENTERING_DATA_OVER;H_MODIFYING_MAPS_OVER;H_CHECKING_SPELLING_STEPS;H_FINDING_DATA_OVER;H_CREATING_A_CHART_IN_123_OVER;',0)} See related topics

Editing data in a cell

1. Double-click the cell you want to edit.
2. Edit the entry.
3. Press ENTER.

Tip To replace an entry entirely, select the cell, type the new entry, and press ENTER.

{button ,AL(`H_EDITING_DATA_IN_A_CELL_DETAILS',1)} See details
{button ,AL(`H_EDITING_DATA_OVER;H_ENTERING_DATA_OVER;',0)} See related topics

Details: Editing data in a cell

To	Press
Delete characters to the left of the insertion point	BACKSPACE
Delete characters to the right of the insertion point	DEL
Scroll through the cell contents	HOME, END, →, or ←

Other ways to edit data in a cell

- Select the cell and press F2 (EDIT), edit the entry, then press ENTER.
- Select the cell to edit, click the contents box at the point where you want to begin editing, edit the entry, then click the Confirm button.

Canceling editing

To cancel the edits you're making, press ESC. Pressing ESC abandons the edit and restores the text that was in the cell before you started editing.

Note Once you begin an edit in a cell, you cannot switch to editing in the contents box. Once you begin an edit in the contents box, you cannot switch to editing in a cell.

{button ,AL(`H_EDITING_DATA_IN_A_CELL_STEPS',1)} Go to procedure

{button ,AL(`H_EDITING_KEYS_OVER;',0)} See related topics

Editing data in text blocks

1. Double-click the text block.
2. Edit the text.
3. When you finish editing, click outside the text block.

{button ,AL(`H_EDITING_DATA_IN_TEXT_BLOCKS_DETAILS',1)} See details
{button ,AL(`H_EDITING_DATA_OVER;H_CREATING_A_TEXT_BLOCK_STEPS;',0)} See related topics

Details: Editing data in text blocks

To	Press
Delete characters to the left of the insertion point	BACKSPACE
Delete characters to the right of the insertion point	DEL
Scroll through the text block contents	HOME, END, PG UP, PG DN, , ↓, →, or ←

Styling text blocks

You can apply only one font, color, and alignment to all the text in a text block. You can change the border, background color, and pattern of a text block. Use Drawing - Drawing Properties to style text blocks.

Locked text blocks

If the text block is locked, its handles are diamond-shaped. To unlock the text block so you can edit it, select it and use Drawing - Drawing Properties (Basics tab).

Locked

Unlocked

{button ,AL(`H_EDITING_DATA_IN_TEXT_BLOCKS_STEPS',1)} Go to procedure

Editing a cell comment

1. Click the cell containing the cell comment.
2. Choose Range - Cell Comment.

3. (Optional) Click Name and Date Stamp.
4. Edit the cell comment.
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_EDITING_A_CELL_COMMENT_DETAILS',1)} See details

{button ,AL(`H_EDITING_DATA_OVER;H_ENTERING_A_CELL_COMMENT_STEPS',0)} See related topics

Details: Editing a cell comment
You cannot style the text in a cell comment.

Using the Name and Date Stamp button
Clicking Name and Date Stamp on the Cell Comment tab in the InfoBox inserts your user name and the date and time at the top of the cell comment.

Related SmartIcons

Sets cell comment marker display as well as other view preferences for the current workbook

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{button ,AL(`H_EDITING_A_CELL_COMMENT_STEPS',1)} Go to procedure

Overview: Entering data

You build a spreadsheet by entering data, such as numbers, text, dates, times, and formulas.

Where you enter data

You can enter data in either the cell or the contents box. If you enter data in the contents box, the Cancel and Confirm buttons appear. You can enter up to 512 characters.

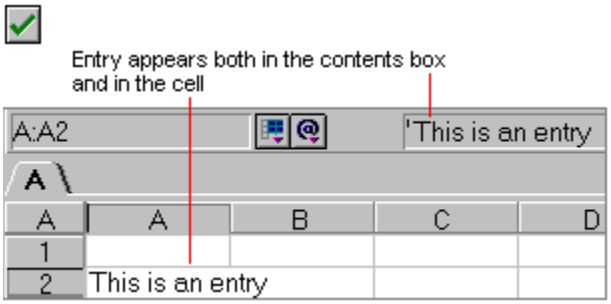
While you enter data

While you enter data in a cell, you can't perform other tasks until you cancel or confirm the entry. To continue, you must either cancel or confirm the entry.

Confirming an entry

When you confirm an entry, 1-2-3 stores the data in the cell. You confirm an entry by doing any of the following:

- Pressing ENTER
- Pressing , ↓, →, ←, or clicking outside the cell
- Clicking the Confirm button if you're entering in the contents box



Canceling an entry

When you cancel an entry, 1-2-3 abandons the entry, leaving the cell blank (or filled with the previous contents). While entering data, you can cancel an entry by doing one of the following:

- Pressing ESC
- Clicking the Cancel button if you're entering in the contents box

About text entries

Text entries are called labels. Labels can contain letters, numbers, or a combination of letters and numbers.

Entering numbers as labels

If the first character you enter is a number, 1-2-3 assumes that you are entering a value you want to use in calculations. 1-2-3 treats any entry that combines letters with numbers as a label.

If you want to enter numbers as a label, you must start your entry with a label-prefix character. Label-prefix characters indicate that you are entering a label; they also set alignment for the cell or repeat the label.

Label-prefix character	Effect
' (apostrophe)	Left alignment
" (quotation mark)	Right alignment
^ (caret)	Center alignment
\ (backslash)	Repeats label in the cell

Entering addresses

When you enter a street address, 1-2-3 automatically inserts a label-prefix character. For example, if you enter 10 Main Street, and then press ENTER, 1-2-3 treats the entry as a label.

About numeric entries

Numeric entries are called values. Values can be numbers, formulas, or @functions. Formulas calculate or combine numbers and text. @Functions are built-in formulas that calculate with numbers and text.

How 1-2-3 formats numbers

When you enter numbers, 1-2-3 formats them automatically as Comma, Percent, or Scientific depending on the symbols you use. For example, if you enter 37%, 1-2-3 formats the number in Percent format. If you enter 27,322, 1-2-3 formats the number in Comma format. If you enter a plain number, such as 3700 or 37.50, 1-2-3 enters the number using the default format (initially General format). In addition, 1-2-3 will automatically format numbers you enter using standard date and time formats, or one of the formats on the Frequently Used list in the status bar.

If you format a number and 1-2-3 fills the cell with *** (asterisks), the column is not wide enough to display the number using the format you selected.

Entering dates and times

You can enter a date or time, for example, 04/19/48 or 11:10 PM, as either a label or a value. When you enter dates or times as labels, remember to enter a label-prefix character first, if the date or time begins with a number.

You can use dates and times entered as values in calculations. For example, you can calculate the number of days in between two dates or quickly change the appearance of a date from 4/9/48 to 09-Apr-48. You can also use @functions such as @DATE and @TIME to enter dates and times and calculate with them.

1-2-3 stores date and time values as date and time numbers, but displays them in the format you specify. 1-2-3 automatically formats dates entered as Apr-48, 09-Apr, 09-Apr-48, or 04/09/48. 1-2-3 also automatically formats times entered in any of the standard time formats except hh.mm (hour.minutes).

Note 1-2-3 displays invalid dates as *** (asterisks) and invalid times as either 12:00 AM, or 00:00 in the current time format.

{button ,AL(`H_CREATING_A_CELL_COMMENT_STEPS;H_EDITING_DATA_OVER;H_ENTERING_DATES_STEPS;H_ENTERING_NUMBERS_STEPS;H_ENTERING_TEXT_STEPS;H_ENTERING_TIMES_STEPS',0)} See related topics

Entering numbers

1. Click the cell where you want to enter the number.
2. Type the number.
3. Press ENTER to confirm.

Tip To enter a number as currency or a percentage, include the currency symbol or the % sign (for example, type $200 or 95%).

{button ,AL(`H_ENTERING_NUMBERS_DETAILS',1)} See details

{button ,AL(`H_ENTERING_AN_ATFUNCTION_STEPS;H_ENTERING_A_FORMULA_STEPS;H_ENTERING_DATA_OVERH_FORMATTING_NUMBERS_STEPS;H_ENTERING_DATES_STEPS;H_ENTERING_TIMES_STEPS;H_EDITING_DATA_IN_A_CELL_STEPS;',0)} See related topics

Details: Entering numbers

If you make a mistake
If you make a typing mistake while entering, press BACKSPACE or press ESC to abandon the entry. Press F2 (EDIT) to edit the entry.

Range of numbers valid in 1-2-3
You can enter and calculate with any numbers from -1.79769313486231E308 to 1.79769313486231E308. 1-2-3 can display any number within this range, including zero.

Displaying large numbers in 1-2-3
If you enter a number with more than 15 decimals, 1-2-3 rounds it to 15 decimals. If a number appears in the form *n*E+*n*, or a number with decimal places appears rounded, or if 1-2-3 displays *** (asterisks) in the cell, it means the entry is too long to fit in the column.

1-2-3 stores the entire entry (up to 15 decimal places) but can't display it. You can see the number by widening the column. For information on changing column width, see Sizing columns.

Formatting numbers
You can enter a number one way (for example, as a percentage) and then change the format to display it a different way (for example, as currency). Changing the format changes how 1-2-3 displays the number, but does not change how 1-2-3 stores or calculates with the number. Use Range - Range Properties (Number Format tab) to change the number format.

Related SmartIcons


Cancels the last command or action

Formats values as a percent with two decimal places


Formats values with the default currency format

Formats values with the thousands separator and no decimal places

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{button ,AL(`H_ENTERING_NUMBERS_STEPS',1)} Go to procedure
{button ,AL(`H_NUMBER_FORMATS_OVER;H_FORMATTING_NUMBERS_STEPS;',0)} See related topics

Entering text

A text entry is called a label.

1. Click the cell where you want to enter the text.
2. Type the text.
3. Press ENTER to confirm.

{button ,AL(`H_ENTERING_TEXT_DETAILS',1)} See details

{button ,AL(`H_EDITING_DATA_IN_A_CELL_STEPS;H_ENTERING_DATA_OVER',0)} See related topics

Details: Entering text

If you make a mistake
If you make a typing mistake while entering, press BACKSPACE or press ESC to abandon the entry. Press F2 (EDIT) to edit the entry.

Displaying a label that is longer than the cell
If you enter a label that is longer than the cell, and the cells to the right of the label are blank, 1-2-3 displays the part of the label that overlaps those cells. If the cell to the right contains data, 1-2-3 displays as much of the label as possible. To see the entire label, widen the column. For information on changing column width, see Sizing columns.

Related SmartIcons

Cancels the last command or action

{button ,AL(`H_ENTERING_TEXT_STEPS',1)} Go to procedure

{button ,AL(`H_EDITING_KEYS_OVER;H_EDITING_DATA_IN_A_CELL_STEPS;',0)} See related topics

Entering dates

1. Click the cell where you want to enter the date.
2. Type the date in one of the following formats:
   - MM/DD/YY; for example, 4/10/56 or 04/10/56
   - DD-MMM-YY; for example, 10-Apr-56
3. Press ENTER to confirm.

Note If 1-2-3 displays *** (asterisks) in the cell, either the column is not wide enough to display the date, or the value is an invalid date, (for example, a date greater than 12/31/2099).

{button ,AL(`H_ENTERING_DATES_DETAILS',1)} See details

{button ,AL(`H_ENTERING_DATA_OVER;H_EDITING_DATA_IN_A_CELL_STEPS;H_ENTERING_TIMES_STEPS;H_ENTERING_NUMBERS_STEPS;',0)} See related topics

Details: Entering dates
If you enter a date without the year, for example in the format 4/10, 1-2-3 interprets your entry as a fraction, performs the calculation, and displays the result.

Valid dates in 1-2-3
1-2-3 can display dates between 01/01/1900 and 12/31/2099. Any dates outside this range display as (***) asterisks.

What date formats does 1-2-3 automatically recognize?
1-2-3 accepts any date formats you promote to the Frequently Used list on the status bar, plus the following formats:

- DD-MMM-YY; for example, 10-Apr-56
- DD-MMM; for example, 10-Apr
- MMM-YY; for example, Apr-56
- MM/DD/YY; for example, 04/10/56

To promote a date format to the status bar, use Range - Range Properties (Number Format tab).

If you use the format 10-Apr, 1-2-3 displays the date as entered and stores the date using the current year (10-Apr-96). If you use the format Apr-96, 1-2-3 displays the date as entered and stores the date using the first day of the month (1-Apr-96).

Note 1-2-3 uses the defaults set with File - User Setup - 1-2-3 Preferences (General tab) for displaying years with 2 or 4 digits, and for storing the years 00 to 49 as 20th or 21st century. For more information, see Details: Setting 1-2-3 options.

Date formats
1-2-3 uses the operating system settings for certain date formats, called international date formats. These are marked with (System) in the table of available date formats below. International date formats may differ depending on what is selected in the operating system's regional (country) settings.

Date format name	1234.56 appears as:
12/31/96 (System)	05/18/03
12/31 (System)	05/18
31-Dec-96	18-May-03
31-Dec	18-May
Dec-96	May-03
December-96	May-03
December 31, 1996	May 18, 1903
Tuesday	Monday
Tuesday, December 31, 1996	Monday, May 18, 1903
Tue, Dec 31, 1996	Mon, May 18, 1903
1996/12/31	1903/05/18
96/12/31	03/05/18
96/12	03/05
96.12.31	03.05.18
12.31	05.18
12/31/96 10:59:59 PM (System)	05/18/03 01:26:24
12/31 10:59 PM (System)	05/18 01:26
1996-12-31 (ISO)	1903-05-18
1996-12-31-23:59:59 (ISO)	1903-05-18-13:26:24

{button ,AL(`H_ENTERING_DATES_STEPS',1)} Go to procedure

{button ,AL(`H_PROMOTING_A_NUMBER_FORMAT_STEPS;H_FORMATTING_NUMBERS_STEPS;H_NUMBER_

FORMATS_OVER;',0)} See related topics

Entering times

1. Click the cell where you want to enter the time.
2. Type the time in one of the following formats:
   - HH:MM AM or PM; for example 05:57 PM
   - HH:MM:SS; for example 17:57:00
3. Press ENTER to confirm.

Note If a number in a cell remains displayed as 00:00 or 12:00 AM, it indicates an invalid value, for example, a time greater than 24:59:59.

{button ,AL(`H_ENTERING_TIMES_DETAILS',1)} See details

{button ,AL(`H_ENTERING_DATA_OVER;H_ENTERING_DATES_STEPS;H_EDITING_DATA_IN_A_CELL_STEPS; H_ENTERING_NUMBERS_STEPS;',0)} See related topics

Details: Entering times

Valid times in 1-2-3
1-2-3 displays times between 12 AM (midnight, 00:00:00) and one second before midnight (23:59:59.) Numbers you enter outside this range will display as either 12:00 AM or 00:00 in the current time format.

What time formats does 1-2-3 automatically recognize?
1-2-3 accepts any time formats you promote to the Frequently Used list on the status bar, plus the following formats:

- HH:MM:SS AM; for example, 11:04:22 PM
- HH:MM AM; for example, 11:04 PM
- HH:MM:SS; for example, 23:04:22
- HH:MM; for example, 23:04

To promote a time format to the status bar, use Range - Range Properties (Number Format tab).

Time formats
1-2-3 uses the operating system settings for certain time formats, called international time formats. These are marked with (System) in the table of available time formats below. International time formats may differ depending on what is selected in the operating system's regional (country) settings.

Time format name	1234.56 appears as:
10:59:59 PM (System)	01:26:24 PM
10:59 PM (System)	01:26 PM
11:59:59 PM	01:26:24 PM
1:59:59 PM	1:26:24 PM
11:59 PM	01:26 PM
1:59 PM	1:26 PM
23:59:59	13:26:24
3:59:59	13:26:24
23:59	13:26
3:59	13:26
23:59:59 (ISO)	13:26:24

{button ,AL(`H_ENTERING_TIMES_STEPS',1)} Go to procedure

{button ,AL(`H_PROMOTING_A_NUMBER_FORMAT_STEPS;H_FORMATTING_NUMBERS_STEPS;H_NUMBER_FORMATS_OVER;',0)} See related topics

Creating a cell comment

You can use a cell comment to annotate data, formulas, and @functions in cells.

Show me a demo

1. Click the cell.
2. Choose Range - Cell Comment.

3. (Optional) Click Name and Date Stamp.
4. Enter the comment text.
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CREATING_A_CELL_COMMENT_DETAILS',1)} See details

{button ,AL(`H_ENTERING_DATA_OVER',0)} See related topics

Details: Creating a cell comment
1-2-3 displays a small marker in the top left corner of a cell containing a comment.

You can enter up to 1024 characters in a cell comment.

Turning off cell comment markers
Use View - Set View Preferences to turn off the display of cell comment markers for the workbook.

Deleting a cell comment
Use Edit - Clear to delete a cell comment, or display the comment and delete the text.

Note If you leave blank characters in a cell comment, then the cell comment marker will still display.

Related SmartIcons

Sets cell comment marker display and other view preferences for the current workbook

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{button ,AL(`H_CREATING_A_CELL_COMMENT_STEPS',1)} Go to procedure
{button ,AL(`H_SETTING_VIEW_PREFERENCES_FOR_A_SHEET_STEPS',0)} See related topics

Overview: Filling ranges

1-2-3 automatically fills a range of cells with numbers, dates, times, or text.

Filling a range with values

You can automatically fill a range with a sequence of numbers, dates, or times by choosing Range - Fill and specifying the first value in the sequence, the last value, and the interval between each value. For example, you can fill a range with numbers between 0 and 100, counting by tens (0, 10, 20, 30,...90, 100).

Filling by example

Get a head start on filling a range by entering a value in the top left cell of the range. For example, if you're filling a range with dates, enter the first date in the top left cell of the range. 1-2-3 uses the date as a start value for the sequence, and fills the range with the date format you used. If you enter a sequence of values in the first two cells of a range, 1-2-3 can also determine the increment.

Filling a range with text

To fill a range with text, 1-2-3 must recognize the text sequence. 1-2-3 uses SmartFill lists to store lists of data. Some SmartFill lists, such as months of the year and days of the week, are included with 1-2-3.

You can create your own SmartFill lists so that 1-2-3 recognizes them as well. For example, you can create a SmartFill list that includes all the cities in which your organization has offices. You can then automatically fill a range with your custom SmartFill list.

{button ,AL(`H_CREATING_CUSTOM_FILL_LISTS_OVER;H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;H_FILLING_A_RANGE_WITH_DATES_STEPS;H_FILLING_A_RANGE_WITH_NUMBERS_STEPS;H_FILLING_A_RANGE_WITH_TEXT_STEPS;H_FILLING_A_RANGE_WITH_TIMES_STEPS',0)} See related topics

Filling a range with numbers

You can fill a range with a sequence of numbers.

1. Select the range to fill.

   Caution 1-2-3 writes over any existing data in the range, including data in hidden columns, rows, and sheets.

2. Choose Range - Fill.

3. In the "Fill using" list, select "Numbers."
4. Enter the start value, the increment, and the stop value.
5. Click OK.

{button ,AL(`H_FILLING_A_RANGE_WITH_NUMBERS_DETAILS',1)} See details

{button ,AL(`H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;H_FILLING_A_RANGE_WITH_DATES_STEPS;H_FILLING_A_RANGE_WITH_NUMBERS_STEPS;H_FILLING_A_RANGE_WITH_TEXT_STEPS;H_FILLING_A_RANGE_WITH_TIMES_STEPS;H_FILLING_RANGES_OVER;',0)} See related topics

Details: Filling a range with numbers

Entering the first number in the sequence
You can enter integers, for example 43, 67, 2, or numbers with decimal amounts, for example 2.5, 34.75, 33.2.

Entering an increment
The increment is the amount between the numbers in the sequence. The default is 1. You can enter integers or numbers with decimal amounts.

Entering the last number in the sequence
You can enter integers or numbers with decimal amounts. If you don't enter a stop value, 1-2-3 fills the entire range with the sequence of numbers. If you enter a negative increment value, you must specify a stop value that is less than the start value.

Filling a range by example
If the top left cell of the fill range contains a number, 1-2-3 enters the number as the start value if you select "Fill by example" in the "Fill using" list. If the first two cells of the range contain numbers in a sequence, 1-2-3 determines the increment value from the sequence. 1-2-3 also copies the number format and any other styles from the example cells into the fill range.

Entering a formula or cell reference
For the start, stop, and increment values, you can enter either a formula or the name or address of a cell containing the value you want to use.

How 1-2-3 fills the range
1-2-3 fills the cells in the range from top to bottom in a column and from left to right. If you specify a multiple-sheet fill range, 1-2-3 fills the range in the first sheet, continues the sequence on the second sheet, and so on until 1-2-3 reaches the stop value or the end of the range.

{button ,AL(`H_FILLING_A_RANGE_WITH_NUMBERS_STEPS',1)} Go to procedure

Filling a range with text

You can fill a range with a sequence of text, called a SmartFill list.

1. Enter the first item from the SmartFill list in the top left cell of the range.
2. Select the range to fill.

   Caution 1-2-3 writes over any existing data in the range, including data in hidden columns, rows, and sheets.
3. Choose Range - Fill.

4. In the "Fill using" list, select "Fill by example."
5. Click OK.

{button ,AL(`H_FILLING_A_RANGE_WITH_TEXT_DETAILS',1)} See details

{button ,AL(`H_CREATING_CUSTOM_FILL_LISTS_OVER;H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;H_FILLING_A_RANGE_WITH_DATES_STEPS;H_FILLING_A_RANGE_WITH_NUMBERS_STEPS;H_FILLING_A_RANGE_WITH_TEXT_STEPS;H_FILLING_A_RANGE_WITH_TIMES_STEPS;H_FILLING_RANGES_OVER;',0)} See related topics

Details: Filling a range with text
1-2-3 uses SmartFill lists to store lists of text you can use to fill ranges.

SmartFill lists that 1-2-3 recognizes
1-2-3 recognizes common sequences of data, including:

- days of the week
- directions (North, South, East, West)
- months of the year
- letters of the alphabet
- quarters of the year (Q1, Q2, Q3, Q4, Q, and so on)

In addition, 1-2-3 will recognize as a sequence any text you enter that begins or ends with a number. For example, if you enter Store 1 in a cell, 1-2-3 will fill the range with Store 2, Store 3, and so on.

1-2-3 also recognizes custom SmartFill lists you create using File - User Setup - SmartFill Setup.

{button ,AL(`H_FILLING_A_RANGE_WITH_TEXT_STEPS',1)} Go to procedure
{button ,AL(`H_CREATING_A_CUSTOM_FILL_LIST_STEPS',0)} See related topics

Filling a range with dates

You can fill a range with a sequence of dates.

Show me a demo

1. Select the range to fill.

   Caution 1-2-3 writes over any existing data in the range, including data in hidden columns, rows, and sheets.

2. Choose Range - Fill.

3. In the "Fill using" list, select "Dates."
4. Select an Interval.
5. Enter the start date and the increment.
6. (Optional) Enter the stop date.
7. Click OK.

{button ,AL(`H_FILLING_A_RANGE_WITH_DATES_DETAILS',1)} See details

{button ,AL(`H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;H_FILLING_A_RANGE_WITH_DATES_STEPS;H_FILLING_A_RANGE_WITH_NUMBERS_STEPS;H_FILLING_A_RANGE_WITH_TEXT_STEPS;H_FILLING_A_RANGE_WITH_TIMES_STEPS;H_FILLING_RANGES_OVER;',0)} See related topics

Details: Filling a range with dates

Entering the start date
If you are filling a blank range, you must enter the start date. You can enter the start date in the following formats:

- 17-Jul-96
- 17-Jul or 7/17

  If you enter the date in one these formats, 1-2-3 assumes the current year and stores the date as 17-Jul-96.
- Jul-96

  Use the format Jul-96 only for intervals of Quarter, Month, or Year. 1-2-3 stores the date using the first day of the month.
- 07/17/96

The start date can be any date from January 1, 1900 through December 31, 2099.

Note 1-2-3 uses the defaults set with File - User Setup - 1-2-3 Preferences (General tab) for displaying years with 2 or 4 digits, and for storing the years 00 to 49 as 20th or 21st century. For more information, see Details: Setting 1-2-3 options.

Filling by example
By default, 1-2-3 displays dates in the fill range in the format 31-Dec-96. If the top left cell in the range contains a date, 1-2-3 enters that date as the start date if you select "Fill by example" in the "Fill using" list. If the first two cells of the range contain dates in a sequence, 1-2-3 determines the increment value from the sequence. 1-2-3 also copies the date format and any other styles from the example cells into the fill range.

Entering the interval and increment
The interval specifies the type of date you want; the increment is the amount between the dates in the sequence. For example, to fill a range with dates two weeks apart, select week as the interval and enter 2 as the increment.

Entering a formula or cell reference
For the start, stop, and increment values, you can enter either a formula or the name or address of a cell containing the value you want to use.

How 1-2-3 fills the range
1-2-3 fills the cells in the range from top to bottom in a column and from left to right. If you specify a multiple-sheet fill range, 1-2-3 fills the range in the first sheet, continues the sequence on the second sheet, and so on until 1-2-3 reaches the stop value or the end of the range.

{button ,AL(`H_FILLING_A_RANGE_WITH_DATES_STEPS',1)} Go to procedure

Filling a range with times

You can fill a range with a sequence of times.

1. Select the range to fill.

   Caution 1-2-3 writes over any existing data in the range, including data in hidden columns, rows, and sheets.

2. Choose Range - Fill.

3. In the "Fill using" list, select "Times."
4. Select an interval.
5. Enter the start time and the increment.
6. (Optional) Enter the stop time.
7. Click OK.

{button ,AL(`H_FILLING_A_RANGE_WITH_TIMES_DETAILS',1)} See details

{button ,AL(`H_FILLING_RANGES_OVER;H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;H_FILLING_A_RANGE_WITH_DATES_STEPS;H_FILLING_A_RANGE_WITH_NUMBERS_STEPS;H_FILLING_A_RANGE_WITH_TEXT_STEPS;H_FILLING_A_RANGE_WITH_TIMES_STEPS',0)} See related topics

Details: Filling a range with times

Entering the start time
If you are filling a blank range, you must enter the first time in the sequence. You can enter the start time in the following formats:

- 10:45:34 PM
- 10:45 PM
- 22:45:34
- 22:45

The start time can be any time from 00:00:00 to 23:59:59. By default, 1-2-3 displays times in the fill range in the format 23.59.

Filling by example
If the top left cell in the range contains a time, 1-2-3 enters that time as the start time if you select "Fill by example" in the "Fill using" list. If the range contains times in a sequence, 1-2-3 determines the increment value from the sequence. 1-2-3 also copies the Time format and any other styles from the example cells into the fill range.

Including the last time in the sequence
To be sure the last time you want appears in the fill range, specify a stop value greater than the last time you want to include in the fill range, by an amount equal to the increment value.

Entering the interval and increment
The interval specifies the type of time unit you want; the increment is the amount between the times in the sequence. For example, to fill a range with times two minutes apart, select minute as the interval and enter 2 as the increment.

Entering a formula or cell reference
For the start, stop, and increment values, you can enter either a formula or the name or address of a cell containing the value you want to use.

How 1-2-3 fills the range
1-2-3 fills the cells in the range from top to bottom in a column and from left to right. If you specify a multiple-sheet fill range, 1-2-3 fills the range in the first sheet, continues the sequence on the second sheet, and so on until 1-2-3 reaches the stop value or the end of the range.

{button ,AL(`H_FILLING_A_RANGE_WITH_TIMES_STEPS',1)} Go to procedure

Overview: Creating custom fill lists

A custom SmartFill list can speed up data entry and make it easier to enter data that you use repeatedly. You can use your SmartFill lists in any workbook.

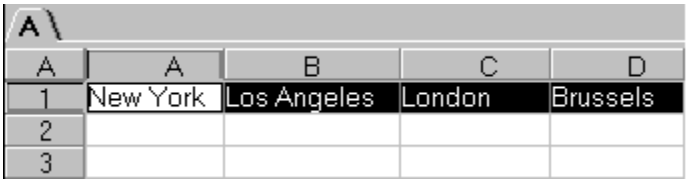
Creating your own SmartFill lists

You can use SmartFill lists to fill ranges and to name a series of sheets. SmartFill lists can now contain more than 100 items.

For example, suppose you frequently enter the following list of cities in your sheets:

```
New York
Los Angeles
London
Brussels
Tokyo
Seoul
Singapore
```

You can create a SmartFill list so that when any city in the list is in the first cell of the range to fill, 1-2-3 automatically enters the other cities, in the order they appear in the list. For example, if New York is in the first cell of the range, 1-2-3 enters Los Angeles, London, and so on.



	A	B	C	D
1	New York	Los Angeles	London	Brussels
2				
3				

If Seoul is in the first cell in the range, 1-2-3 enters Singapore, New York, Los Angeles, and so on. In the same way, you can use this SmartFill list to enter a series of sheet names.

{button ,AL(`H_CREATING_A_CUSTOM_FILL_LIST_STEPS;H_FILLING_RANGES_OVER;H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;H_FILLING_A_RANGE_WITH_TEXT_STEPS;H_MODIFYING_A_CUSTOM_FILL_LIST_STEPS',0)} See related topics

Creating a custom fill list

You can create a custom SmartFill list containing data you enter repeatedly.

1. Choose File - User Setup - SmartFill Setup.

2. Click New List.
3. Enter a name for the new list and click OK.
4. Click Add Item.
5. Enter the new item and click OK.
6. Repeat steps 4 and 5 for each item in the list.
7. Click Done.

{button ,AL(`H_CREATING_A_CUSTOM_FILL_LIST_DETAILS',1)} See details

{button ,AL(`H_CREATING_CUSTOM_FILL_LISTS_OVER;H_FILLING_RANGES_OVER;H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;H_FILLING_A_RANGE_WITH_TEXT_STEPS;H_MODIFYING_A_CUSTOM_FILL_LIST_STEPS',0)} See related topics

Details: Creating a custom fill list

Naming the SmartFill list
Each SmartFill list is identified by a unique name. If you have more than one SmartFill list with similar data, name each list with a unique name so that you can identify it. For example, if one list contains European cities, you might name it CITYEUR, while you name the list of cities in the United States CITYUS. SmartFill list names can contain up to 64 characters.

Entering items in a SmartFill list
Each item in a SmartFill list can contain up to 64 characters. Items can contain spaces, letters, and numbers. An item from a SmartFill list is always entered in your sheet as a label.

Capitalization in the SmartFill list
If you want 1-2-3 to use the exact combination of uppercase and lowercase letters you enter in the SmartFill list, select "Fill using same capitalization as list." Otherwise, 1-2-3 will use the capitalization from the data you enter in the range.

{button ,AL(`H_CREATING_A_CUSTOM_FILL_LIST_STEPS',1)} Go to procedure

Modifying a custom fill list

You can add, delete, or rearrange the items in a custom SmartFill list.

1. Choose File - User Setup - SmartFill Setup.

2. From the "List name" list, select the list you want to change.
3. To add an item to the list, click Add Item, enter the new item, then click OK.
4. To remove an item from the list, highlight the item and click Delete Item.
5. To change the order of the items, drag an item to a different part of the list.
6. To delete the list, click Delete List.
7. Click Done.

{button ,AL(`H_MODIFYING_A_CUSTOM_FILL_LIST_DETAILS',1)} See details

{button ,AL(`H_CREATING_CUSTOM_FILL_LISTS_OVER;H_CREATING_A_CUSTOM_FILL_LIST_STEPS;H_FILLING_RANGES_OVER;H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;H_FILLING_A_RANGE_WITH_TEXT_STEPS;H_MODIFYING_A_CUSTOM_FILL_LIST_STEPS',0)} See related topics

Details: Modifying a custom fill list

To edit an item in a SmartFill list, you must delete the original item and add a new item.

You can also rearrange items in the list by selecting an item and clicking the arrow buttons.

{button ,AL(`H_MODIFYING_A_CUSTOM_FILL_LIST_STEPS',1)} Go to procedure

Filling a range using drag and fill

You can use the mouse to fill a range with a sequence of data. 1-2-3 fills the range based on the data already entered in the range.

Show me a demo

1. Select the cell or range containing the data you want to base the sequence on.
2. Position the mouse pointer at the bottom right corner of the cell or range until the pointer displays four arrowheads.

3. Drag to select the range to fill.
4. Release the mouse button.

{button ,AL(`H_FILLING_A_RANGE_USING_DRAGANDFILL_DETAILS',1)} See details

{button ,AL(`H_FILLING_RANGES_OVER;H_CREATING_CUSTOM_FILL_LISTS_OVER;H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;H_FILLING_A_RANGE_WITH_DATES_STEPS;H_FILLING_A_RANGE_WITH_NUMBERS_STEPS;H_FILLING_A_RANGE_WITH_TEXT_STEPS;H_FILLING_A_RANGE_WITH_TIMES_STEPS',0)} See related topics

Details: Filling a range using drag and fill

How 1-2-3 determines how to fill the range
You must enter the data you want 1-2-3 to use as the basis for filling the range in the top left corner of the range. You can enter numbers, dates, and times, or text that is part of a SmartFill list.

When you select the cell or range, 1-2-3 examines the data in the range to determine how to fill the range. For example, you can select a cell that contains the word January, and then drag to fill a range with February, March, April, and so on.

If you want 1-2-3 to recognize a sequence, enter data in the first two cells of the range. For example, if you enter January and March, 1-2-3 will fill the range with every other month - January, March, May, July, and so on.

Dragging based on your selection
If you select one cell, then drag, you can drag both down and right. If you select a range of more than one cell, you can drag in only one direction.

Filling a 3D range
To fill a 3D range, use Range - Fill. You can't use drag and fill on a 3D range.

Troubleshooting
If the mouse pointer doesn't change, make sure that drag and drop is turned on in the File - User Setup - 1-2-3 Preferences dialog box (General tab).

If 1-2-3 doesn't recognize a relationship between the data in the first two cells of the range (for example, Monday, February) it fills a range by copying data from the first two cells.

{button ,AL(`H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS',1)} Go to procedure

Add Item dialog box

Use this dialog box to add items to a custom SmartFill list.

Choose a task

- Creating a custom fill list
- Modifying a custom fill list

{button ,AL(`H_CREATING_CUSTOM_FILL_LISTS_OVER;H_Filling_Ranges_OVER',0)} See related topics

Fill dialog box

Use this dialog box to choose fill options for the selected range.

Choose a task

- Filling a range with numbers
- Filling a range with text
- Filling a range with dates
- Filling a range with times

{button ,AL(`H_CREATING_CUSTOM_FILL_LISTS_OVER;H_Filling_Ranges_OVER;H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;',0)} See related topics

SmartFill Setup dialog box

Use this dialog box to name, add, modify, and view the entries in current SmartFill lists, and to control the capitalization and order of the entries.

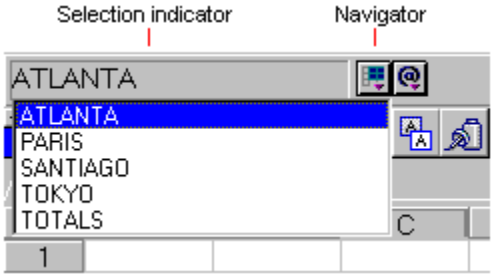
Choose a task

- Creating a custom fill list
- Modifying a custom fill list

{button ,AL(`H_CREATING_CUSTOM_FILL_LISTS_OVER;H_Filling_Ranges_OVER',0)} See related topics

Overview: Finding data

The selection indicator displays your current selection. It displays the address or name of a range and the name of other types of objects. For example, if you select an unnamed range, the range address appears in the selection indicator; if you select a chart, the chart name appears.



Click the navigator to see the list of range names in the current workbook. You can use the navigator to:

- Go to and select a named range (when 1-2-3 is in Ready mode)
- Insert a range name into a formula or @function

Going to and selecting ranges and graphic objects

Using Edit - Go To, you can go to and select ranges and other graphic objects in the current workbook or in other active workbooks. You can go to ranges, versioned ranges, sheets, charts, maps, embedded objects, query tables, Notes/FX fields, and drawings. For example, Edit - Go To is a quick way to select an object in another sheet or to navigate to a part of the sheet that's not visible.

Finding and replacing sheet entries

Use Edit - Find & Replace to find or replace labels or values in the sheet. 1-2-3 can search the selected range, current sheet, current workbook, or all active workbooks. Objects such as text blocks and maps are included in the search, but 1-2-3 will not search in hidden sheets, rows, or columns.

{button ,AL(`H_FINDING_AND_REPLACING_TEXT_OR_NUMBERS_STEPS;H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS;H_FINDING_TEXT_OR_NUMBERS_STEPS;H_USING_THE_NAVIGATOR_TO_FIND_NAMED_RANGES_STEPS',0)} See related topics

Finding text or numbers

1-2-3 can search the selected range, current sheet, current workbook, or all active workbooks to find labels and values. 1-2-3 looks in cells, ranges, maps, and text blocks.

1. Choose Edit - Find & Replace.

2. Enter the characters you want to find in the "Find" box.

   For numbers, don't include formatting. For example, enter 67, not 67%.

3. (Optional) In the "Look in," "Include," and "Match" boxes, specify where to look and what to include.
4. Click Find.

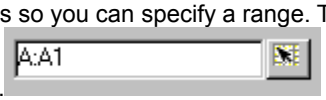
   1-2-3 highlights the first occurrence of the characters.

5. (Optional) To go to the next occurrence, click Find again.
6. Click Done.

{button ,AL(`H_FINDING_TEXT_OR_NUMBERS_DETAILS',1)} See details

{button ,AL(`H_FINDING_AND_REPLACING_TEXT_OR_NUMBERS_STEPS;H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS;H_USING_THE_NAVIGATOR_TO_FIND_NAMED_RANGES_STEPS;H_FINDING_DATA_OVER;',0)} See related topics

Details: Finding text or numbers
You can enter up to 512 characters to search for. 1-2-3 doesn't look in hidden rows, columns or sheets.

Looking in a selected range
If you choose "Selected range" from the "Look in" list, the "Range" box appears so you can specify a range. Type the name or address of the range, or click the range selector and select the range. 

You can also select the range before you choose Edit - Find & Replace.

Options for "Match"
- Case -- Looks for characters using the exact combination of uppercase and lowercase letters you enter in the "Find" box.
- Accent -- Looks for accented characters. Select this option if you don't want 1-2-3 to find é, è, and ë when you search for e. If you don't select this option, 1-2-3 ignores accents.

Options for "Include"
- Labels -- Searches for characters entered as text.
- Numbers -- Searches for numbers; does not include formula results.
- Formulas -- Searches the characters in formulas.

Redefining a search
At any time, you can click Redefine to change the search characters and start again.

Related SmartIcons

Goes to and selects a range or graphic object

{button ,AL(`H_FINDING_TEXT_OR_NUMBERS_STEPS',1)} Go to procedure

Finding ranges and graphic objects

You can go to a named range, sheet, query table, embedded object, chart, map, drawing, or Notes/FX field.

1. Choose Edit - Go To.

2. Select the type of object you want to go to.
3. (Optional) To look in another active workbook, select the workbook from the "In workbook" list.
4. Select the range, sheet, or graphic object you want from the "Names" list.
5. Click OK.

1-2-3 goes to and selects the range or object you chose.

{button ,AL(`H_FINDING_RANGES_AND_OTHER_OBJECTS_DETAILS',1)} See details

{button ,AL(`H_FINDING_AND_REPLACING_TEXT_OR_NUMBERS_STEPS;\
H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS;H_FINDING_TEXT_OR_NUMBERS_STEPS;H_USIN
G_THE_NAVIGATOR_TO_FIND_NAMED_RANGES_STEPS;H_FINDING_DATA_OVER;',0)} See related topics

Details: Finding ranges and graphic objects

Looking in a different workbook
By default, 1-2-3 looks in the current workbook for the range or object you select. If you select a different workbook, 1-2-3 lists all of the ranges and objects in that workbook.

Specifying a range address
If you select a range as the type of object you want to go to, you can enter a range address in the box above the list.

{button ,AL(`H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS',1)} Go to procedure

Finding and replacing text or numbers

1-2-3 can search the selected range, current sheet, current workbook, or all active workbooks to find and replace labels and values. 1-2-3 looks in cells, ranges, maps, and text blocks.

1. Choose Edit - Find & Replace.

2. Enter the characters you want to find in the "Find" box.
3. Enter the new characters in the "Replace with" box.
4. (Optional) In the "Look in," "Include," and "Match" boxes, specify where to look and what to include.
5. Click Find.

   1-2-3 highlights the first occurrence of the characters.
6. Click Replace.

   1-2-3 replaces the characters and moves to the next occurrence.
7. (Optional) To replace the next occurrence of the characters, click Replace again.
8. Click Done.

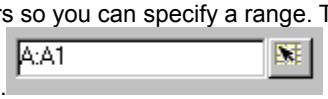
{button ,AL(`H_FINDING_AND_REPLACING_TEXT_OR_NUMBERS_DETAILS',1)} See details

{button ,AL(`H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS;H_USING_THE_NAVIGATOR_TO_FIND_NAMED_RANGES_STEPS;H_FINDING_DATA_OVER;H_FINDING_TEXT_OR_NUMBERS_STEPS;',0)} See related topics

Details: Finding and replacing text or numbers
You can enter up to 512 characters to search for. 1-2-3 doesn't look in hidden rows, columns, or sheets.

Replacing selected occurrences of the search characters
You can view each occurrence of the characters individually and determine whether to replace them.

- Replace -- Replaces the highlighted characters and finds the next occurrence.
- Find -- Skips to the next occurrence without replacing.
- Replace All -- Replaces all remaining occurrences of the characters in the range, sheet, workbook, or all workbooks (according to what is selected in the "Look in" list).

Looking in a selected range
If you choose "Selected range" from the "Look in" list, the "Range" box appears so you can specify a range. Type the name or address of the range, or click the range selector and select the range. 

You can also select the range before you choose Edit - Find & Replace.

Options for "Match"

- Case -- Looks for characters using the exact combination of uppercase and lowercase letters you enter in the "Find" box.
- Accent -- Looks for accented characters. Select this option if you don't want 1-2-3 to find é, è, and ë when you search for e. If you don't select this option, 1-2-3 ignores accents.

Options for "Include"

- Labels -- Searches for characters entered as text.
- Numbers -- Searches for numbers; does not include formula results.
- Formulas -- Searches the characters in formulas.

Redefining a search
At any time, you can click Redefine to change the search characters and start again.

Related SmartIcons

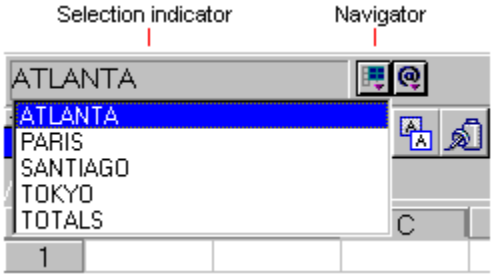
Goes to and selects a range or graphic object

{button ,AL(`H_FINDING_AND_REPLACING_TEXT_OR_NUMBERS_STEPS',1)} Go to procedure

Using the navigator to find named ranges

The navigator lists all named ranges in the current workbook.

1. Click the navigator.



2. Select the named range from the list.

1-2-3 goes to and selects the range, placing the cell pointer in the top left cell.

{button ,AL(`H_FINDING_AND_REPLACING_TEXT_OR_NUMBERS_STEPS;H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS;H_FINDING_TEXT_OR_NUMBERS_STEPS;H_FINDING_DATA_OVER;',0)} See related topics

Find and Replace dialog box

Use this dialog box to find or to find and replace text or numbers.

Choose a task

- Finding text or numbers
- Finding and replacing text or numbers

{button ,AL(`H_FINDING_DATA_OVER;',0)} See related topics

Adding an item to the @function menu

For easy access, you can add the @functions you use most often to the @function menu.

1. Click the @function selector.

2. Choose List All.
3. Click Menu >>.
4. (Optional) To narrow down the list of @functions, select a category from the "Category" list.
5. From the "@Functions" list, select the @function you want to add.
6. Click >>.

   Tip You can also drag the @function into the "Current menu" list.
7. (Optional) To add other @functions, repeat steps 5 and 6.
8. Click OK.

{button ,AL(`H_ADDING_AN_ATFUNCTION_DETAILS',1)} See details

{button ,AL(`H_REMOVING_AN_ATFUNCTION_STEPS;H_FUNC_BASICS;H_ENTERING_AN_ATFUNCTION_STEPS;H_REARRANGING_ATFUNCTION_MENU_STEPS',0)} See related topics

Details: Adding an item to the @function menu

Positioning @functions on the menu
When you click >> to add an @function, 1-2-3 adds the @function below the item selected in the "Current menu" list. If nothing is selected in the "Current menu" list, 1-2-3 adds the @function to the end of the list.

When you drag an @function to the "Current menu" list, the placement of the @function depends on the location of the mouse pointer when you release the mouse button:

- If the pointer is over the top half of an @function, 1-2-3 adds the new @function above that item.
- If the pointer is over the bottom half of an @function, 1-2-3 adds the new @function below that item.

Adding separators
You can add lines to the @function menu to separate and group @functions. To add a separator below an @function, select the @function in the "Current menu" list and then click Separator.

When the @function selector isn't available
If the edit line is hidden, you don't see the @function selector. To display the edit line and @function selector, choose View - Show Edit Line.

If no workbooks are open, the @function selector is grayed out.

{button ,AL(`H_ADDING_AN_ATFUNCTION_STEPS',1)} Go to procedure

Removing an item from the @function menu

If you remove an @function from the @function menu, you can still select the @function from the full list by clicking the @function selector.

1. Click the @function selector.

2. Choose List All.
3. Click Menu >>.
4. From the "Current menu" list, select the @function you want to remove.
5. Click <<.

   Tip You can also drag the @function out of the "Current menu" list.
6. (Optional) To remove other @functions, repeat steps 4 and 5.
7. Click OK.

{button ,AL(`H_REMOVING_AN_ATFUNCTION_DETAILS',1)} See details

{button ,AL(`H_ADDING_AN_ATFUNCTION_STEPS;H_FUNC_BASICS;H_REARRANGING_ATFUNCTION_MENU_STEPS',0)} See related topics

Details: Removing an item from the @function menu

Removing separators
To remove a separator, select the separator in the "Current menu" list and then click <<.

You can also remove a separator by dragging. Simply move the mouse pointer to the separator and then drag it out of the "Current menu" list.

When the @function selector isn't available
If the edit line is hidden, you don't see the @function selector. To display the edit line and @function selector, choose View - Show Edit Line.

If no workbooks are open, the @function selector is grayed out.

{button ,AL(`H_REMOVING_AN_ATFUNCTION_STEPS',1)} Go to procedure

Rearranging items on the @function menu

If you don't like the order of the items on the @function menu, you can rearrange them.

1. Click the @function selector.

2. Choose List All.
3. Click Menu >>.
4. Select the @function or separator you want to move in the "Current menu" list.
5. Drag the item to a new location in the "Current menu" list.
6. (Optional) To move other items, repeat steps 4 and 5.
7. Click OK.

{button ,AL(`H_REARRANGING_ATFUNCTION_MENU_DETAILS',1)} See details

{button ,AL(`H_ADDING_AN_ATFUNCTION_STEPS;H_REMOVING_AN_ATFUNCTION_STEPS;H_FUNC_BASICS',0)} See related topics

Details: Rearranging items on the @function menu

Positioning items on the menu

When you drag an @function or separator in the "Current menu" list, the placement of the item depends on the location of the mouse pointer when you release the mouse button:

- If the pointer is over the top half of an @function, 1-2-3 places the item above the @function.
- If the pointer is over the bottom half of an @function, 1-2-3 places the item below the @function.

{button ,AL(`H_REARRANGING_ATFUNCTION_MENU_STEPS',1)} Go to procedure

1-2-3 database table

A range containing data organized in rows and columns. Each row contains one record, and each column (field) contains one kind of information. For example, in an employee database table that contains the fields Last Name, First Name, and so on, each record contains information about one employee.

A 1-2-3 database table must fit on a single sheet, and can contain up to 256 fields and 8191 records.

absolute reference

In a formula, a reference to a cell that does not change when you copy the formula. An absolute reference always refers to the same cell or range.

To create an absolute cell reference, enter a $ (dollar sign) before the sheet letter, column letter, and row number ($A: $A$4) when you write the formula. To create an absolute range name, enter a $ (dollar sign) before the range name ($INTEREST).

For example, if you copy the formula +$A$1*B10 entered in cell C10 to C11 and C12, the formula changes to +$A$1*B11 and +$A$1*B12. The absolute reference ($A$1) does not change.

active area
The area bounded by cell A1 and the lowest and rightmost nonblank cell in the current sheet. Press END+HOME to find this cell. The size of the active area affects the amount of memory a sheet requires.

active window
The window in which you are working. Only one window can be active at a time.

You can identify the active window by the presence of color in its title bar. Click the title bar to make a window active.

active workbook
An open workbook.

add-in
A special program, created by Lotus and other software developers, that you can use with 1-2-3 to extend its capabilities.

alignment
The position of data in a cell, range, or text block; for example, centered, right-aligned, and so on.

To control alignment, use the Alignment tab in the InfoBox:

You can also use the Alignment button in the status bar.

ANSI (American National Standards Institute)
A set of character codes used by the operating system. The ANSI character set contains 256 character codes. The first 128 ANSI characters (0-127) are the same as the ASCII (American Standard Code for Information Interchange) character set. The first 32 ANSI characters (0-31) are non-printing control characters, and display as substitute characters.

argument separator
A single character, such as a , (comma), ; (semicolon), or . (period), that separates one argument from another in an @function or macro command, and one range from another in some commands.

You can specify any character as the argument separator using your operating system's regional (country) settings.

argument
Text, value, location, or condition that you provide for an @function or macro command. For example, in the formula @SUM(A1..A10), the argument is A1..A10. In the macro {BRANCH TOTALS}, the argument is the range name TOTALS.

ASCII (American Standard Code for Information Interchange)
A standard set of character codes many computers and devices use to create text. LMBCS (Lotus Multibyte Character Set) and ANSI (American National Standards Institute) include the ASCII character set.

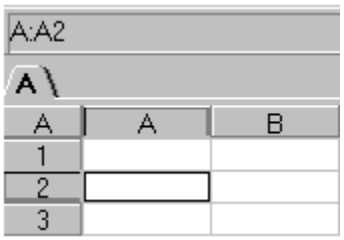
backslash macro
A macro name that consists of a \ (backslash) followed by a single letter; for example \d.

blank cell
A cell that contains no letters, numbers, spaces, or label-prefix character.

branch
A transfer of macro control to another macro routine. Unlike subroutine calls, branches do not return control to the original macro.

byte pointer
A place marker that moves by bytes in a text file and indicates the current position. 1-2-3 uses the byte pointer in some of the file-manipulation macro commands.

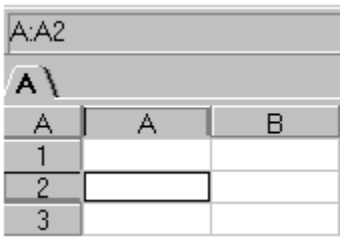
cell address
The location of a cell, identified by the sheet letter, column letter, and row number; for example, A:A2.



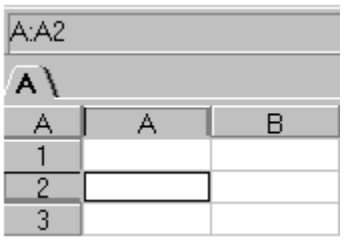
cell comment marker

Shows that a cell contains a cell comment by displaying a marker in the top left corner.

cell pointer
The rectangular outline in the sheet that marks the current cell. If a multi-cell range is selected, the current cell appears in reverse color.



cell
The basic unit of a 1-2-3 sheet. The intersection of a column and a row forms a cell. You enter and store data in a cell.



circular reference

A formula that refers to itself, either directly or indirectly. For example, a circular reference occurs if you enter the formula +B1+1 in cell B1.

When a formula contains a circular reference, 1-2-3 displays the Circ button in the status bar. To locate the circular reference, click the Circ button; 1-2-3 moves the cell pointer to the first cell containing a circular reference.

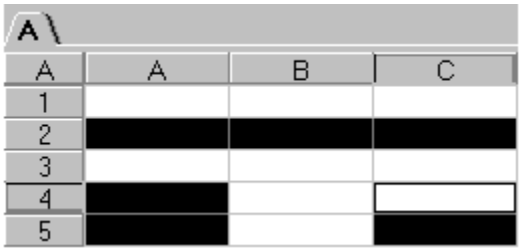
Clipboard format
One of a number of standard formats used for the exchange of data between applications via the Clipboard.

1-2-3 uses the following Clipboard formats:

- 1-2-3 97 Format
- 1-2-3 97 Workbook Object
- Rich Text
- Bitmap
- Picture
- Lotus Chart
- Text
- WK1
- WK3
- Device Independent Bitmap

Clipboard
A storage area the operating system uses to temporarily store data when you use Edit - Cut or Edit - Copy. Use Edit - Paste, Edit - Paste Special, and Edit - Paste Link to paste the Clipboard contents into 1-2-3 or another application.

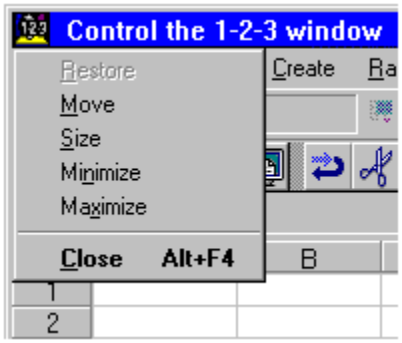
collection



Two or more ranges, selected at the same time, so that your next action affects all the ranges in the collection at once. A collection can include ranges in different sheets of the same file.
The address of a collection consists of the addresses of all of the ranges in the collection separated by semicolons. A collection cannot contain objects of different types. For example, a collection cannot contain both ranges and charts.

Comma format
Displays numbers with thousands separators and up to 15 decimal places. Comma format is the same as Currency format without the currency symbol.

Control menu



Displays commands for manipulating windows and the InfoBox.
To open the control menu, click the icon in the left corner of the title bar.

criteria

The conditions that you want records to meet when querying a database table. For example, to select all sales greater than $25,000, specify the criterion as SALES>25000.

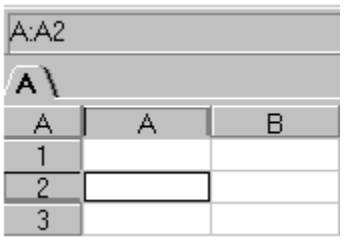
You set criteria to find records in a 1-2-3 database by using the Approach Find Assistant with 1-2-3. After you create a query table, you can select the type of find (query) you want to perform and specify the find conditions (criteria).

Currency format

Displays numbers with a currency symbol, thousands separators, and up to 15 decimal places; for example, $2,1330.40. You can format different cells in the same workbook as different types of currency. For example, you can format one cell as US dollar and another as French franc.

To format cells as currency, use the Number Format tab in the InfoBox:

current cell
The cell in the sheet that contains the cell pointer. The next selection, entry, or edit affects the current cell. The address of the current cell appears in the selection indicator in the edit line.

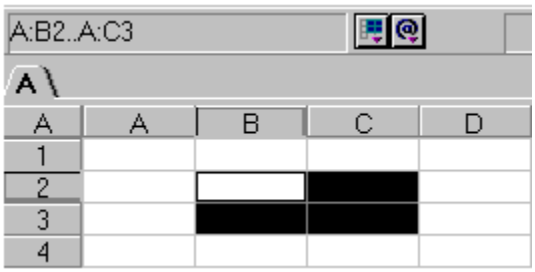


current directory

The directory that 1-2-3 automatically uses during a session to save, open, or list files.

The current directory is initially set to the default directory specified with File - User Setup - 1-2-3 Preferences (File Locations tab). If you specify a different directory during a 1-2-3 session with the File - Open or File - Save As commands, it takes precedence over the default directory during that session.

current selection
The highlighted cell, range, collection, or graphic object (drawing, chart, map,query table, or embedded object) that the next command will affect.



When you select a graphic object, handles -- the small boxes on the edges of the selection -- appear around it.

current workbook
The workbook that contains either the cell pointer or a selected graphic object.

database
A file containing one or more database tables. A 1-2-3 database table is a range containing data organized in rows and columns. A 1-2-3 database table consists of records (rows of data) whose parts are identified by labeled fields (columns).

Date format

The way 1-2-3 displays a date number. To apply a date format to a number in a range or a chart, use the Number Format tab in the InfoBox.

You can also use the status bar to apply a date format to a range.

1-2-3 automatically formats data as a date if you enter it using a format 1-2-3 recognizes. 1-2-3 automatically formats dates entered as Dec-63, 04-Dec, 04-Dec-63, or 12/04/63, plus dates entered in any format you promote to the Frequently Used list.

date number

A number from 1 through 73050 that 1-2-3 assigns in sequence to each date from January 1, 1900, through December 31, 2099. For example, the date number for July 21, 1991, is 33440.

If you enter a value that looks like a date, for example, 12/31/96 or 31-Dec, 1-2-3 enters the date as you typed it in the cell; the corresponding date number is stored in the cell.

You can use date numbers in calculations. Use date @functions to enter date numbers, and then format the number to look like a date.

default directory
The directory that 1-2-3 automatically uses for files when you start 1-2-3. Initially, 1-2-3 uses the directory specified in the Install program, but you can specify a different default directory with File - User Setup - 1-2-3 Preferences (File Locations tab).

default font

The font 1-2-3 uses for all data in a workbook, except for data in cells you explicitly style with another font. To change the default font, use File - User Setup - 1-2-3 Preferences (New Workbook Defaults tab).

Initially, the fonts listed in the 1-2-3 Preferences dialog box depend on the fonts available on the default printer you specified through the operating system. If you select a different printer in 1-2-3, the fonts listed reflect the fonts available on the selected printer.

default setting
The initial settings 1-2-3 uses for viewing, printing, and working in workbooks. You can change certain default settings for entire sheets or workbooks using View - Set View Preferences, File - User Setup - 1-2-3 Preferences, or Sheet - Sheet Properties.

delimited text file

A file in ASCII format that contains rows of data with delimiters. A delimiter is a , (comma), space, : (colon), or ; (semicolon) entered between numbers and labels in each row. Each row must end with a carriage return.

All labels must be enclosed in quotation marks. For example, the following line is from a delimited text file:

"Stolper","Boston",1400,1300,2800

Use File - Open to bring data in a delimited text file into a 1-2-3 sheet. 1-2-3 separates the data into columns in the sheet according to the delimiters.

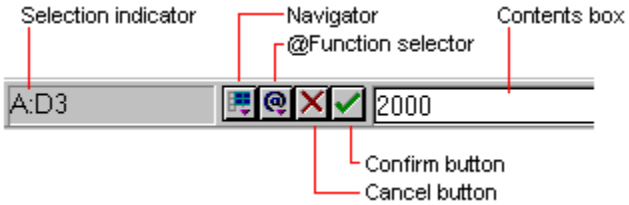
destination range
The range in a workbook that receives data from:

- Another range, when you use Edit - Paste or Edit - Paste Special.
- Another application, when you use Edit - Paste Link or Edit - Paste Special.

drag
To press the mouse button and hold it while moving the mouse.

edit line

The line below the menu in the 1-2-3 window.



Item	Function
Selection indicator	Shows the address or name of the current selection.
Navigator	Lets you go to and select a named range.
@Function selector	Lets you insert an @function in a cell.
Cancel and Confirm buttons	Cancel or confirm an entry. These buttons appear only when you enter or edit data in the contents box.
Contents box	Displays the entry you are typing or editing, or the contents of the current cell.

Choose View - Hide/Show Edit Line to hide or display the edit line.

empty string
A cell that contains a label-prefix character but no text. The cell looks blank, but 1-2-3 will not return the value ERR when you use it as an argument in a text @function, with the exception of the @CHAR and @CODE functions.

ERR

A special value that either 1-2-3 generates to indicate an error in a formula or you generate with @ERR.

ERR can ripple through formulas: any formula that refers to a cell that contains ERR results in ERR, and any other formula that depends on that formula also results in ERR. When you correct the formula that contains ERR, the results of dependent formulas also become correct.

The label ERR is not equivalent to the value ERR.

extension
At the end of a file name, a . (period) followed by up to three characters. An extension indicates the file type. For example, a file with the extension .TXT is a text file.

When you save a new 1-2-3 97 workbook file, 1-2-3 automatically adds the extension .123. You can override this extension by specifying a different extension when you save the workbook.

external database table
A table in an external database that contains a group of related information. External databases are stored in files that are not 1-2-3 files, such as Notes, Oracle, SQL Server, Paradox, dBASE IV, Informix, and text files.

field name
A label in the first row of a database or query table that identifies the contents of a field. For example, an employee database may contain the field names First Name, Last Name, and Employee Number.

In database @functions, the argument *field* can be one of the following:

- The field name enclosed in " " (quotation marks)
- An offset number that indicates the position of the field (column) in the database table
- The address of a cell that contains a field name in quotation marks, or an offset number

field
A labeled column in a database or query table that contains the same kind of information for each record. For example, an employee database table may contain fields labeled First Name, Last Name, and Employee Number.

file reference
A file name and extension, with or without a path, enclosed in << >> (double angle brackets); for example, <<SALES.123>>@SUM(A10..B22). Use a file reference in formulas and commands to refer to data in a workbook other than the current workbook.

Fixed format
A number format that displays numbers with up to 15 decimal places, a minus sign for negatives, and a leading zero for decimal values.

flow of control
The direction in which control passes from one set of macro instructions to another during macro execution. Some macro commands that govern the flow of control are {BRANCH}, {DEFINE}, {FOR}, and {RETURN}.

format file
A file in which some releases of 1-2-3 store style information associated with a workbook.

Format file type	Release
.FM3	1-2-3 for Windows Releases 1 and 1.1 Wysiwyg in 1-2-3 for DOS Release 3.1 or later
.FMT	Impress in 1-2-3 for DOS Releases 2.3 and 2.4

formula marker

Shows that a cell contains a formula by displaying a marker in the bottom left corner.

General format
Displays numbers up to 15 decimal places, with a minus sign for negatives, no thousands separators, and no trailing zeros to the right of the decimal point.

graphic object
An item, such as a chart, arrow, or shape that you can select, move, size, and style independently of the cells behind it. Graphic objects include drawings created with the Create - Drawing commands, text blocks, buttons, charts and chart parts, maps and map parts, embedded objects, query tables, and pictures brought from another application into 1-2-3.

handle
One of the small boxes that appears on the edge of a selected graphic object, such as a shape, text block, chart, or map. Use handles to size the object.

if-then-else
In a macro, conditional processing that directs the flow of control according to whether a specified condition is true or false.

input cell
A cell in which 1-2-3 temporarily stores values while it performs calculations for creating a what-if table.

input range

In database @functions, the argument *input* is the range that contains the database table(s); *input* can be the address or name of a range that contains the database table(s), or the name of the external database table(s), but it cannot be a 3D range.

label-prefix character

The first character in a label entry. It defines the entry as a label and sets the alignment for the cell. 1-2-3 does not display the label-prefix character in the cell but does display it in the contents box when you select a cell that contains a label.

Type a label-prefix character to enter a label that begins with a number or one of these characters:

+	=	-	\	#
<	$	(	/	@

Label-prefix character	Effect
' (apostrophe)	Left-aligns labels (default)
" (quotation mark)	Right-aligns labels
^ (caret)	Centers labels
\ (backslash)	Repeats one or more characters across a cell

Use the Alignment tab in the InfoBox to change alignment.

Label format
Displays new entries as labels by automatically adding a label-prefix character that corresponds to the default alignment set with Sheet - Sheet Properties. Displays existing numbers with no thousands separators and a minus sign for negatives.

label

Any cell entry you begin with a letter or label-prefix character.

When you complete a cell entry that starts with a letter, 1-2-3 automatically inserts the default label-prefix character (an apostrophe) at the beginning of the entry. 1-2-3 does not display the label-prefix character in the cell, but does display it in the contents box when you select a cell that contains a label.

LICS (Lotus International Character Set)
The 256 codes (0 through 255) that Symphony and 1-2-3 for DOS Release 2 use to display, store, and print characters. LICS codes 32 through 127 are equivalent to ASCII and LMBCS codes 32 through 127.

link

A connection between two applications or two 1-2-3 workbook files that lets the applications or workbooks share data.

You can link a 1-2-3 workbook to another application that supports OLE using Edit - Paste Link or Edit - Paste Special.

To create a link between 1-2-3 workbook files, use file references in formulas or Edit - Paste Link.

LMBCS (Lotus Multibyte Character Set)
The character set that 1-2-3 uses to store characters. It includes all the characters contained in LICS, ASCII, and most other international character sets. If the operating system cannot represent a LMBCS character, a substitute character appears.

locked sheet
A sheet that was locked using Sheet - Sheet Properties (Basics tab). Locking a sheet prevents changes to contents of protected cells.

locked workbook
A workbook file that was locked using File - Workbook Properties (Security tab). Locking a workbook prevents changes to protected cell contents, styles, sheet and range names, versions, charts, maps, and drawings. It also prevents changes to protection and workbook reservation settings.

logical formula

A formula that evaluates a condition as true or false by using a logical operator or a logical @function. The result of a logical formula is 1 for true or 0 for false.

For example, the formula +A2>8 returns 1 (true) when the value in A2 is greater than 8; it returns 0 (false) when the value in A2 is 8 or less.

long label

A label that exceeds the column width. If the cell to the right is blank, a long label extends into the next column. If the cell to the right is not blank, 1-2-3 displays as much of the label as possible.

1-2-3 stores the entire label in the cell. To see the entire label, widen the column, double-click the cell, or move the cell pointer to the cell and look at the label in the contents box.

loop
A set of macro instructions that executes repeatedly. You can use the macro commands {FOR} and {BRANCH} to create a loop in a macro.

1-2-3 workbook object

A 1-2-3 workbook that is embedded in another application file, such as a Word Pro document.

To edit a 1-2-3 workbook object embedded in another application file, double-click the object.

3D range
A range that spans two or more contiguous sheets and includes the same cells in those sheets. For example, the 3D range A:A1..B:B2 spans sheets A and B and contains the cells A1, A2, B1, and B2 in both sheets.

argument placeholder

Words that indicate the arguments needed to fill in an @function or macro command. To use the @function or macro command, you must replace the placeholder with the actual argument.

For example, in the @function @MIN(list), *list* is inserted in the @function by 1-2-3. You replace *list* with the name or address of the range for which you want to find the minimum value.

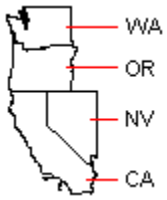
Formula format
Displays formulas written out, rather than as their computed values.

macro keyword
The first word in a macro command. The macro keyword tells 1-2-3 what action to perform. For example, in the macro {BRANCH TOTALS}, the keyword is BRANCH.

macro
A set of instructions, called macro commands, that automate a 1-2-3 task. You can use a macro to enter data or to perform a series of 1-2-3 commands to style sheets or workbooks, guide users through specific applications, calculate complex formulas with variable data, extract records from a database table, and so on.

map code
Text that identifies a row of data in a sheet with a map region. 1-2-3 recognizes predefined map codes, depending on the map type.

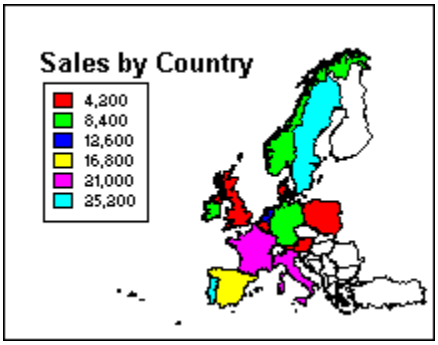
In the Region Check dialog box, you can link custom map codes to codes that 1-2-3 recognizes.



map data bin

A group of values or labels in a set of map data. 1-2-3 displays each bin as a color in the map. If you have two sets of map data, 1-2-3 creates pattern bins as well as color bins.

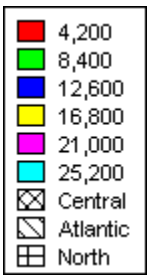
In this map, 1-2-3 groups the sales data for 15 countries into 6 bins.



The legend labels indicate the upper limit of data in that bin. For example, each country that falls into the red bin has sales less than or equal to 4,200.

map legend

Explains the meaning of the colors and patterns in a map. Values used as legend labels either exactly match values in the range of map data, or they represent the upper limit of the values contained in the bin. Use Map - Color Bins or Map - Pattern Bins to change the labels, the colors and patterns, and the values used to create bins.



map overlay

Another map added to your basic map. You cannot link sheet data to an overlay. The overlay can be a different map type; for example, you can add the world overlay to a map of the European Union.

The overlay can also be a map that is identical in outline to your basic map, but that displays different information. For example, you can add an overlay showing 5-digit ZIP code boundaries to a map of the United States by state.

mixed reference

In a formula, a reference to a cell in which parts of the referenced address are absolute and parts are relative. Absolute references in a formula refer to the same cells no matter where you copy or move the formula. To make a reference absolute, precede it with a $ (dollar sign). Relative references in a formula adjust relative to their new location when you copy or move the formula.

For example, the formula +A:$C4 contains a mixed reference. The column letter (C) is an absolute reference and is preceded by a $. The sheet letter (A) and the row number (4) are relative references. If you copy the formula, the column letter stays the same while the sheet letter and row number adjust relative to their new location.

mouse pointer
The symbol that indicates the location of the mouse on the screen. The pointer is usually shaped like an arrow, but can change depending on the task. For example, when you change the size of a window, the pointer becomes a white two-headed arrow. The following pointers may appear when you move around the sheet.

 Standard pointer

 Drag and drop

 Change the width of a column

 Change the height of a row

 Change the height and width of an object

 Select a range

 Edit text

 Drag and fill

named print styles
Print options, such as margins, headers, and footers, that you name and save with File - Preview & Page Setup (Named Style tab). When you save print styles, you can use them again.

Named print styles are stored in the workbook file. You can copy print styles among active workbooks.

named style
Styles, copied from a single cell, that you can apply to other ranges in a sheet. Styles stored in a named style can include number format, font, point size, underlining, bold, italics, borders, colors, pattern, and alignment.

Use Range - Range Properties (Named Styles tab) to create a named style.

NA

A special value that either 1-2-3 or you generate to indicate that a value needed to complete a formula is not available. @NA returns the value NA.

NA can ripple through formulas: any formula that refers to a cell that contains NA results in NA (no matter how the value NA is generated) unless the cell contains ERR. (ERR takes precedence over NA.) This ripple-through effect also means that when you provide the previously unavailable value to a formula that contains NA, the results of the dependent formulas also become correct.

The label NA is not equivalent to the value NA.

nested subroutine
In a macro, a subroutine that is called from within another subroutine. If 1-2-3 encounters a subroutine call while executing a subroutine, it transfers control to the subroutine specified in the subroutine call, performs the instructions there, returns to the first subroutine, finishes the instructions there, and finally returns to the main macro.

nonblank cell
A cell that contains a label-prefix character, letters, numbers, or spaces. A nonblank cell can appear to be blank if it has only a label-prefix character or spaces in it.

NotesFlow form
A form designed in Lotus Notes that can contain an embedded object such as a 1-2-3 workbook.

number format
The way 1-2-3 displays numbers on the screen. A number may look different from the actual value entered in the cell, depending on the number format. For example, the entry 25.451 may appear as $25.45, 2545%, or 25.5.

numeric formula
A formula that calculates numeric values using one or more of the arithmetic operators:

+ - * / ^

For example, the numeric formula +H16*2 multiplies the value in cell H16 by 2.

offset number

The number that corresponds to the position of a specified row, column, sheet, character, list item, or byte; used in some @functions and macros. The first offset number is 0, the second 1, the third 2, and so on.

In a database @function, the *field* argument can be the offset number for a field in the database table. For example, if the field SALES is in the fifth column of the database table, the offset number for that field is 4.

OLE (Object Linking and Embedding)
A method for linking data between applications or embedding objects created with one application into files created with another application.

Use Edit - Paste Link, Edit - Paste Special, or Create - Object to create a link or embed an object in a 1-2-3 workbook.

operator

A symbol in a formula that indicates the relationship between two values or the type of operation to be performed. 1-2-3 uses arithmetic, logical, and text operators.

Arithmetic operators

+	addition	-	subtraction
*	multiplication	/	division
^	exponentiation		

Logical operators

=	equal to	#AND#	AND
<	less than	#NOT#	NOT
>	greater than	#OR#	OR
<>	not equal to		
<=	less than or equal to		
>=	greater than or equal to		

Text operator

&	ampersand

panes
A display of two or four parts of a sheet in the same window. Use View - Split to divide a window into panes and to synchronize or unsynchronize scrolling in the panes. Use View - Clear Split to clear panes.

password
A password can contain up to 15 uppercase and lowercase characters. 1-2-3 passwords are case-sensitive, so you must remember the exact combination of uppercase and lowercase characters you use when you create the password.

path
The drive, directory, and subdirectories in which you save and open a file. In C:\1996\BUDGET.123, the path for the file BUDGET.123 is C:\1996. A backslash (\) must separate the path and the file name.

pattern
A style, such as cross-hatched lines, that you can use to distinguish a range, drawing, map region, or data series in a bar, area, mixed, doughnut, or pie chart. You can also apply a color to a pattern. After selecting a range, drawing, map, or chart, use the Lines & Colors tab in the InfoBox to apply a pattern and pattern color.

Percent format
Displays numbers as percentages (the number multiplied by 100) with a percent sign and up to 15 decimal places.

pin character

Symbols, such as  , or labels, such as "World Headquarters" that you can add to your map just as you might write annotations or stick pins on a paper map.

To create a pin character, enter the following in the range of map data:

- A symbol or label
- The latitude and longitude to locate the pin character in the map
- (Optional) the color of the pin character

point size
In reference to fonts, a point is a unit of measurement that determines the height of a character. A point is approximately 1/72 of an inch.

pointer-movement keys
Keys that control the movement of the cell pointer, menu pointer, and insertion point. These keys include , ↓, →, ←, PG UP, PG DN, and HOME, and can be combined with CTRL and END to move around sheets in the same workbook and in other active workbooks.

printer driver
A software program that controls how 1-2-3 communicates with your printer. 1-2-3 uses the printer drivers supplied by the operating system.

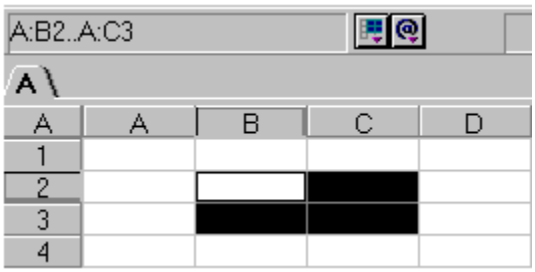
query table

A Lotus Approach object embedded in a 1-2-3 workbook. A query table contains a copy of the records from a source database table in either 1-2-3 or an external table, and is linked to the source database.

You create a query table in 1-2-3 to work with records from a database table. Once you create a query table in 1-2-3, you can manipulate records from the source database table. You can also send the results to an output range in 1-2-3 where you can format the data for printing, and use the data in calculations or to create charts and maps.

radian
The unit 1-2-3 uses to measure an angle, equal to approximately 57 degrees, 17 minutes. Used in mathematical @functions such as @TAN and @COS.

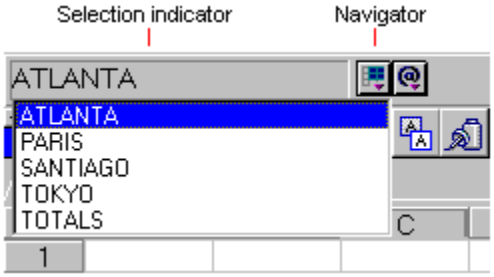
range address
The location of a range in a workbook. A range address consists of the addresses of the top left and bottom right cells, separated by two periods; for example, A:B2..A:C3.



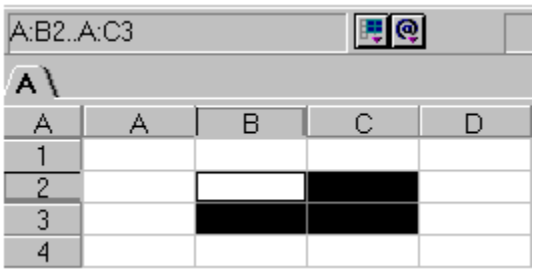
range name

A name that identifies a range and that can be used in commands and formulas instead of the range address. The formula @AVG(GRADES) is easier to understand than @AVG(C4..C29) because the range name GRADES tells you what kind of values the range contains.

You can name a range by selecting the range and choosing Range - Name. Click the navigator to see a list of range names in the current workbook.



range
A single cell, a rectangular block of adjoining cells, an entire sheet, or an entire workbook. A range is represented as the addresses of its top left and bottom right cells, separated by two periods, for example, A:B2..A:C3.



A 3D range spans two or more contiguous sheets; for example, A:B1..B:B5.

recalculation
Re-evaluation of formulas in active workbooks using the current cell values.

record
A one-row collection of information about one item in a database table. The first row of a database table contains field names, which identify the data in records; all other rows contain records.

relative reference

In a formula, a reference to a cell or a range that changes when you copy the formula. A relative reference refers to the location of the data in relation to the formula. A relative reference can be an address or range name.

For example, if the formula +A1+A2 is in cell A4 and you copy this formula to B4, the formula changes to +B1+B2. A1 and A2 are relative references, which means that they refer to the values entered in cells two and three rows above the formula. After you copy the formula, the relative references still refer to the cells two and three rows above the formula.

If you do not want a cell or range address to change when you copy a formula, use an absolute reference.

Scientific format
Displays numbers in scientific (exponential) notation, with up to 15 decimal places and an exponent of up to 3 digits. For example, the number 123 displays as 1.23E+002 in Scientific format.

scroll bar

The bar that appears at the right or bottom of a window or list box when the contents exceed the size of the window or list box. To scroll within a window or list box, click the scroll arrows or drag the scroll box. To turn the scroll bars in workbook windows on and off, use View - Set View Preferences.

scrolling
Moving horizontally or vertically through a sheet or a list box, or moving the cell pointer from one sheet to another. To scroll within a sheet or list box, click the scroll arrows, drag the scroll box, or use the pointer-movement keys. When you scroll within a sheet, the view of the current sheet moves, not the cell pointer.

server
During linking or embedding, the application that provides data to, or carries out instructions from, another application (the container).

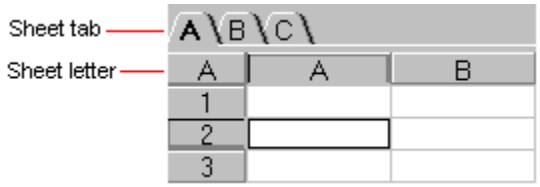
sheet frame

The border on the left and top of the sheet that contains the sheet letter, row numbers, and column letters.

Click the sheet letter, column letter, or row number to select the entire sheet, column, or row.

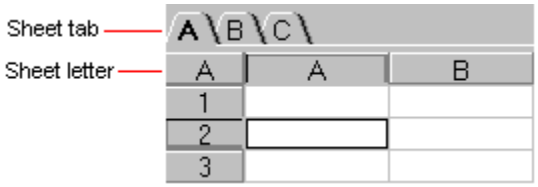
Use View - Set View Preferences (View tab) to hide or show the sheet frame.

sheet letter



The letter in the top left corner of the sheet that identifies each sheet in a workbook.
A 1-2-3 workbook can contain up to 256 sheets, with letters from A (for the first sheet) through IV (for the 256th sheet). In the cell address, the sheet letter is followed by a colon (A:) to distinguish it from the column letter (A).
To select all the cells in a sheet, click the sheet letter.

sheet tab



The tab appearing above the sheet that lets you name the sheet. Initially, workbooks have a single tab with the letter A for the first sheet. To insert additional sheets, use Create - Sheet or click the New Sheet button.
To enter a sheet name, double-click the tab, type the name, and press ENTER. Use View - Set View Preferences (View tab) to turn sheet tabs on and off.

SmartIcons

Buttons (icons) in the 1-2-3 window that you click to perform commands.
Choose File - User Setup - SmartIcons Setup to change a set of SmartIcons or to create custom SmartIcons that run your scripts or macros.
Choose View - Hide SmartIcons or View - Show SmartIcons to hide or show the SmartIcons.

SmartMaster

Templates for business and financial tasks. Each SmartMaster contains sample data and instructions that show you how the template works. Enter your own data and use the built-in SmartMaster charting and printing features for quick results.

You can create your own SmartMaster templates by saving a workbook as a .12M file.

sort

To arrange data in a range in a particular order, determined by the contents of one or more columns or fields. Use Range - Sort to sort data in ascending (A through Z, 0 through 9) or descending (Z through A, 9 through 0) order.

To change the sort order, use File - User Setup - 1-2-3 Preferences (General tab).

styles
Enhancements applied to the current selection. Styles include bold, italics, underlining, frames, border or line width and style, colors, patterns, alignment, font, point size, and number formats. You can use the InfoBox or the status bar to apply a wide range of styles.

subroutine
A discrete set of macro instructions that runs from within the macro. When the main macro calls the subroutine, control passes to the subroutine. After 1-2-3 completes the instructions in the subroutine, control returns to the main macro.

text argument
In a macro command or @function, text enclosed in " " (quotation marks), a text formula, or the address or name of a cell that contains a label or a formula that results in a label.

text block

A graphic object, shaped as a rectangle or square, that contains text. Text blocks, like other graphic objects, can be moved, copied, and sized. You can also edit, align, and change the font of the text in a text block.

Choose Create - Text to create a text block. Select the text block and use Drawing - Drawing Properties to change the appearance of a text block.

text file
A file on disk in ASCII format. Use File - Save As and specify the file type “Text (TXT)” to create a text file in 1-2-3. Use File - Open to read data from a text file into 1-2-3.

text formula
A formula that uses text in quotation marks and the text operator & (ampersand) in its calculations. For example, the formula +"Ms."&" Smith" combines the two words and a space between them to display the label Ms. Smith (be sure to include a space inside one of the pairs of quotation marks).

tilde (~)
The keyboard character that represents ENTER in macros.

Time format

The way 1-2-3 displays a time number. To apply a time format to a number in a range or chart, use the Number Format tab in the InfoBox.

You can also use the status bar to apply a time format to a range.

1-2-3 automatically formats data as a time if you enter it using a format 1-2-3 recognizes. 1-2-3 automatically recognizes data entered as 05:57:00 PM, 05:57 PM, 17:57:00, or 17:57, as well as data entered in any format you promote to the Frequently Used list.

time number

A decimal from 0.000000 through 0.999988 that 1-2-3 assigns in sequence to each moment in the 24 hours from midnight through 11:59:59 PM.

If you enter a value that looks like a time, for example 05:57 PM or 17:57:00, 1-2-3 enters the time as you typed it in the cell; the corresponding time number is stored in the cell.

Use a time @function to enter a time number in a sheet. You can display a time number in a variety of time formats.

undefined range name
A range name that is not assigned to a range. Formulas that contain undefined range names evaluate to ERR.

value
An entry that is a number, a formula, or an @function. 1-2-3 changes the mode to Value if you begin an entry with a number or one of the following symbols:

+ = - @ 0 (# $ (or current currency symbol)

version group
A named group of one or more versions. Each version in a version group must be associated with a different named range.

In previous releases of 1-2-3, version groups were called scenarios.

version
Versions are sets of different data for the same named range. Each version has a name. 1-2-3 keeps track of the date and time the version was created or modified, and the name of the person who created or modified it. You can also assign styles to a version and attach a descriptive comment.

wildcard character
The * (asterisk) or the ? (question mark) used in file names, criteria, and @functions.

*	Represents any number of sequential characters
?	Represents a single character

In file names, for example, *.123 lists all files with a .123 extension; *.wk? lists all files with extensions that begin with .wk, such as .WK4, .WK1, and .WK3. In criteria, B* matches all entries that begin with B. The criteria B??? matches all entries that begin with B and contain three other characters.

workflow application
An application that reflects and facilitates how people work together as a group. Workflow applications can automate and streamline the process of performing routine tasks.

yes/no argument

Text that specifies whether to turn a setting on or off. You can use on, true, or yes to turn a setting on; you can use off, false, or no to turn a setting off.

Enter the argument as text enclosed in " " (quotation marks), a text formula, or the address or name of a cell that contains a label or a formula that results in a label.

format line
Indicates how you want to parse the long labels in a selected range. The format line begins with a | (vertical bar) label-prefix character and can contain the following symbols:

Symbol	Description
L	Represents the beginning of a label block.
V	Represents the beginning of a value block.
D	Represents the beginning of a date block.
T	Represents the beginning of a time block.
S	1-2-3 does not parse the data block below the S; to enter this symbol edit the format line.
>	Represents any character in a data block after the first character.
*	Represents a blank space that can become part of a data block if the block requires extra characters.

summary row or summary column
Contains high-level entries that summarize lower level entries -- for example, the yearly total for a range of monthly figures, or a section title in a sheet with several sub-sections.

detail row or detail column
Contains entries subordinate to a higher level summary row or column -- for example, monthly figures subordinate to a yearly total.

backup file
A copy of a file on disk. When you create a backup file, 1-2-3 assigns the extension .BAK to the existing file on disk and saves the file in memory with the specified file extension (for example .123 or .WK4). If an associated format file (.FM3) exists, 1-2-3 assigns the extension .FMB to the existing file on disk.

Note You cannot create a backup file for a dBASE (.DBF) or Paradox (.DB) file.

day-count basis
A convention for counting the number of days in a month and a year. Some calendar and financial @functions offer a choice of the following bases in order to simplify calculations:

Day-count basis	1-2-3 counts
actual/actual	The actual number of days in a month and in the year
30/360	30 days in every month, and 360 days in the year, calculated according to the standards of the U.S. securities industry
European 30/360	30 days in every month, and 360 days in the year
actual/360	The actual number of days in every month, and 360 days in the year
actual/365	The actual number of days in every month, and 365 days in the year

flow control window

The window that appears when you open a routed workbook. The flow control window's title bar says TeamMail or TeamReview, depending on whether a workbook or a range was sent.

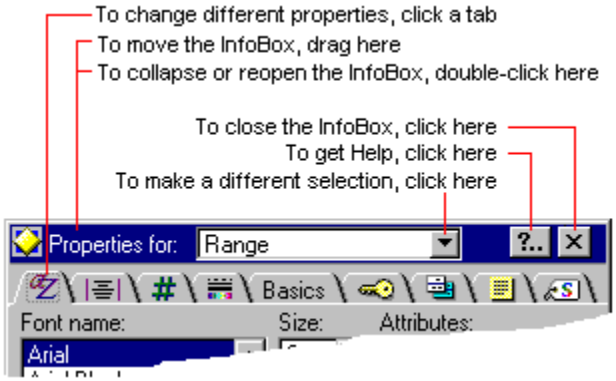
The flow control window stays open while you work in 1-2-3 and lets you control the flow of the routed workbook; for example, returning the workbook to the originator or sending to the next person on the route list.

in-place editing
Editing an embedded object without leaving the application in which it is embedded. Rather, the menu changes to show commands from the server application. You can edit embedded objects in place or out of place.

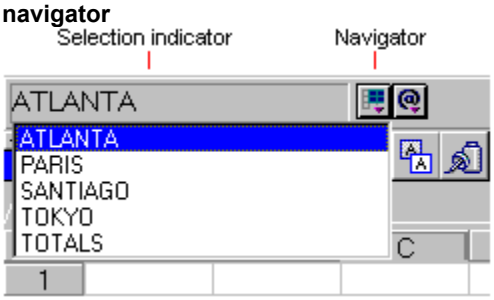
InfoBox

A window that shows properties for a selected object, such as colors, text attributes, alignment, and other settings. You use the InfoBox to change the properties of an object or any of its parts; for example, an entire sheet, a cell, a chart, the title of a chart, and so on. Changes appear immediately in your selection. You can make many changes to one object, or make changes to several objects without closing the InfoBox.

The following illustration shows how to work with the InfoBox:



navigator

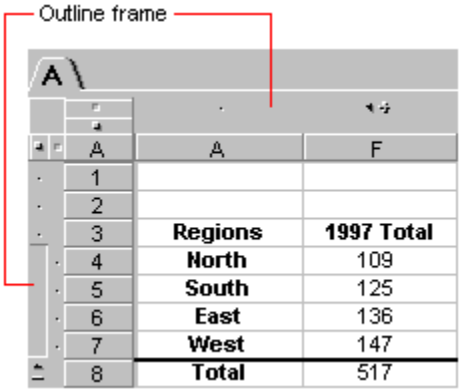


Click the navigator to see the list of named ranges in the current workbook. Use the navigator when you want to go to and select a named range, enter a range name in a formula, or specify a range name in a dialog box.

out-of-place editing
Editing an embedded object by opening the server application. You can edit embedded objects in place or out of place.

outline frame

Shows the structure of demoted rows and columns in a sheet, and contains buttons for collapsing and expanding the outline.



range selector

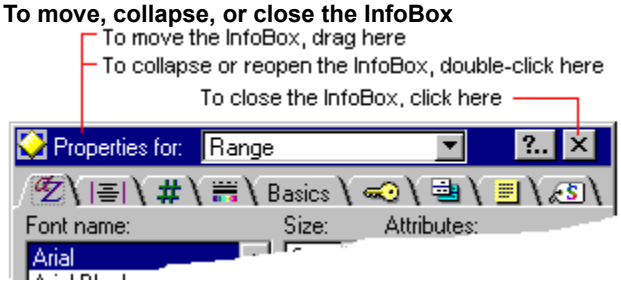
You can select a range from within a dialog box or the InfoBox by clicking the range selector button. When you click the button, 1-2-3 hides the dialog box or the InfoBox so that you can select the range. After you select the range, the dialog box or InfoBox reappears, with the range address entered.

Script Debugger
A window in which you can set, clear, disable, and enable breakpoints and step through scripts to locate the source of problems that may occur while a script is running.

Script Editor
A window in which you can write and edit scripts, check script syntax, and set breakpoints for debugging scripts. The Script Editor initially displays a script associated with the selected object.

Script
A sequence of one or more LotusScript statements. A script can be a complete application or part of an application.

To move, collapse, or close the InfoBox



To select a graphic object

To select a button, hold down SHIFT and click the button.

To select all other types of graphic objects, click the object.

To select multiple objects, hold down SHIFT and click each object.

To select a range
Click a cell in one corner of the range, and drag to highlight the rest of the range.

To select a range or collection

To select a range, click a cell in one corner of the range, and drag to highlight the rest of the range.

To select a collection, select the first range, then hold down CTRL and select the other ranges.

To select a range or graphic object

To select a range, click a cell in one corner of the range, and drag to highlight the rest of the range.

To select a button, hold down SHIFT and click the button. To select all other types of graphic objects, click the object.

To select more than one range or graphic object, hold down SHIFT while selecting the ranges or objects.

Note You can't select a mixture of ranges and objects.

To select a range, collection, column, or row

To select a range, click a cell in one corner of the range, and drag to highlight the rest of the range.

To select a collection, select the first range, then hold down CTRL and select the other ranges.

To select an entire column or row, click the column letter or row number.

To select a sheet tab

To select the tab of	Do this
The current sheet	Click the tab.
A range of contiguous sheets	Make the first sheet in the range the current sheet, click the tab, then press SHIFT and click the tab of the last sheet in the range.
A collection of sheets	Make the first sheet in the collection the current sheet, click the tab, then press CTRL and click the tab of each sheet in the collection.

To select an entire column or row

Click the column letter or row number.

To select more than one column or row, hold down SHIFT or CTRL and click the column letters or row numbers.

To select text

Select the cell or range that contains the text.

Click the text block, map title, map legend, chart title, legend label, or axis label. SHIFT+click a button.

workbook
A 1-2-3 file, with one of the following file extensions: .123, .WK1, .WK3, .WK4. SmartMaster templates (.12M and .WT4) are also workbooks.

A workbook can be embedded as a 1-2-3 workbook object in another application that uses OLE.

Changing group or collection properties

1. Select the group or collection you want to change.
2. Right-click the selection, and then choose the Properties command.

3. Click the tabs in the InfoBox to find the properties you want to change.
4. Change one or more properties.
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_GROUP_OR_COLLECTION_PROPERTIES_DETAILS',1)} See details

{button ,AL(`H_ALIGNING_DATA_IN_TEXT_BLOCKS_STEPS;H_CHANGING_GRAPHICS_BORDERS_STEPS;H_CHANGING_INTERIOR_COLOR_AND_PATTERN_STEPS;H_CHANGING_LINE_STYLES_STEPS;H_CHANGING_TEXT_FORMAT_STEPS;H_FASTENING_GRAPHICS_STEPS;H_HIDING_OR_REDISPLAYING_GRAPHICS_STEPS;H_LOCKING_OR_UNLOCKING_GRAPHICS_STEPS;H_ROTATING_GRAPHICS_STEPS;H_ROTATING_DATA_STEPS;H_THE_INFOBOX_OVER;H_USING_DESIGNER_FRAMES_STEPS;H_STYLING_GRAPHICS_OVER;H_USING_THE_INFOBOX_STEPS',0)} See related topics

Details: Changing group or collection properties

When the selected objects are the same type

If the objects in the group or collection are all the same object type -- for example, all rectangles -- the InfoBox displays options for changing the properties of the selected object type.

For example, if you select a collection that consists of two rectangles, the InfoBox displays the Lines & Colors tab and the Basics tab.

When the selected objects are different types

If the objects in the group or collection are different types, the InfoBox displays options for changing the properties of all the selected object types.

For example, if you select a set of grouped objects that consists of a rectangle and a text block, the InfoBox displays the Text Format, Alignment, Lines & Colors, and Basics tabs. When you change a property, 1-2-3 changes only those objects in the selection that have that property.

{button ,AL(`H_CHANGING_GROUP_OR_COLLECTION_PROPERTIES_STEPS',1)} Go to procedure

Alignment properties for ranges

Use the Alignment tab to change the alignment of cell contents in the selected range.

Choose a task

- Aligning data in cells
- Spanning text across columns
- Wrapping data in a cell
- Rotating data

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_ALIGNMENT_OVER',0)} See related topics

Alignment properties for sheets

Use the Alignment tab to change the default alignment of cell contents in the selected sheet(s).

Choose a task

Setting a default alignment for a sheet

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_ALIGNMENT_OVER;',0)} See related topics

Alignment properties for text blocks

Use the Alignment tab to change the alignment of text in the selected text block.

Choose a task

- Aligning data in text blocks
- Rotating data

{button ,AL(`H_ALIGNMENT_OVER;H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for arcs

Use the Basics tab to rename and set options for fastening, hiding, locking, and rotating the selected arc.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects
- Rotating graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for buttons

Use the Basics tab to rename the selected button and change its text. You can also set options for fastening, hiding, and locking the button.

Choose a task

- Naming a graphic object
- Details: Creating a script button
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for charts

Use the Basics tab to rename and set options for fastening, hiding, and locking the selected chart.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for ellipses

Use the Basics tab to rename and set options for fastening, hiding, locking, and rotating the selected ellipse.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects
- Rotating graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for freehand drawings

Use the Basics tab to rename and set options for fastening, hiding, locking, reshaping, and rotating the selected freehand drawing.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects
- Reshaping a polyline, polygon, or freehand drawing
- Rotating graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for lines and arrows

Use the Basics tab to rename and set options for fastening, hiding, locking, and rotating the selected object.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects
- Rotating graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for map legends

Use the Basics tab to show or hide some or all of the selected legend, and to change the position of the legend in relation to the plot area.

Choose a task

Changing legend labels

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_CHANGING_MAP_APPEARANCE_OVER',0)} See related topics

Basic properties for map plot areas

Use the Basics tab to change the placement and size of the selected plot area. You can also rotate the plot area, zoom in for a closer look or zoom out to see more of the map, and see latitude and longitude readings for the center of the plot area.

Choose a task

Changing the plot area

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_MODIFYING_MAPS_OVER',0)} See related topics

Basic properties for map titles

Use the Basics tab to show or hide the selected map title, change the placement of the title, and edit the text in the title.

Choose a task

Changing a map title

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for maps

Use the Basics tab to rename the selected map and tell 1-2-3 when to redraw the map. You can also set options for fastening, hiding, and locking the map.

Choose a task

- Naming a map
- Redrawing maps
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_MODIFYING_MAPS_OVER',0)} See related topics

Basic properties for OLE objects

Use the Basics tab to rename the selected OLE object and view information about it. You can also set options for fastening, hiding, and locking the object.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for pictures

Use the Basics tab to rename and set options for fastening, hiding, and locking the selected picture.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for polygons

Use the Basics tab to rename and set options for fastening, hiding, locking, reshaping, and rotating the selected polygon.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects
- Reshaping a polyline, polygon, or freehand drawing
- Rotating graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for polylines

Use the Basics tab to rename and set options for fastening, hiding, locking, reshaping, and rotating the selected polyline.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects
- Reshaping a polyline, polygon, or freehand drawing
- Rotating graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for query tables

Use the Basics tab to rename and set options for fastening, hiding, and locking the selected query table.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_DB_QUERY_TABLES_OVER',0)} See related topics

Basic properties for ranges

Use the Basics tab to create a range name, mark a range as a Notes/FX field, set column and row properties, and add or remove page breaks.

Choose a task

- Naming a range using the InfoBox
- Setting up named ranges to exchange data with Notes
- Sizing columns using the InfoBox
- Sizing rows using the InfoBox
- Hiding columns or rows using the InfoBox
- Displaying hidden columns or rows using the InfoBox
- Adding a page break
- Removing a page break

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for rectangles

Use the Basics tab to rename and set options for fastening, hiding, locking, and rotating the selected rectangle.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects
- Rotating graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for sheets

Use the Basics tab to change the sheet name and tab color, set the default column and row sizes, hide the selected sheet, and protect cell contents in the sheet.

Choose a task

- Naming a sheet using the InfoBox
- Changing sheet tab color
- Setting a default column width for a sheet
- Setting a default row height for a sheet
- Details: Hiding sheets
- Locking sheet contents
- Unlocking a sheet

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Basic properties for text blocks

Use the Basics tab to rename and set options for fastening, hiding, and locking the selected text block.

Choose a task

- Naming a graphic object
- Fastening graphic objects
- Hiding or redisplaying graphic objects
- Locking or unlocking graphic objects

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Cell comment properties for ranges

Use the Cell Comment tab to annotate cell contents.

Choose a task

- Creating a cell comment
- Editing a cell comment

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Color properties for maps

Use the Colors tab to select different colors used for mapped data, to change the legend labels, and to change the bin values associated with each color in the selected map.

Choose a task

- Changing bin colors or patterns
- Changing legend labels
- Changing color or pattern bin values

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Header and footer properties

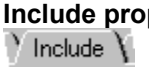
Use the Headers & Footers tab to add headers, footers, and repeating titles on each printed page.

Choose a task

Adding headers and footers
Printing titles on each page

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_PRINT_AND_PAGE_PROPERTIES_OVER',0)} See related topics

Include properties for printing



Use the Include tab to update the Preview window when the print selection changes, and to number printed pages.

Choose a task

- Changing the print selection
- Numbering printed pages

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Layout properties for printing

Use the Layout tab to specify margins, orientation, and centering, and to size data to the printed page.

Choose a task

- Changing print margins
- Changing page orientation
- Centering data on the printed page
- Fitting your work on the printed page

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_PRINT_AND_PAGE_PROPERTIES_OVER',0)} See related topics

Line and color properties for arcs, freehand drawings, and polylines

Use the Lines & Colors tab to change the color, pattern, and line style of the selected object.

Choose a task

Changing interior color and pattern
Changing line styles

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_CHANGING_BORDERS_LINES_AND_COLORS_OVER',0)} See related topics

Line and color properties for ellipses, polygons, map elements, and query tables

Use the Lines & Colors tab to change the color, pattern, and border of the selected object.

Choose a task

Changing interior color and pattern
Changing graphic object borders

{button ,AL(`H_CHANGING_BORDERS_LINES_AND_COLORS_OVER;H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Line and color properties for lines and arrows

Use the Lines & Colors tab to change the line style, color, and width of the selected object. You can also add or remove arrowheads.

Choose a task

Changing line styles

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_CHANGING_BORDERS_LINES_AND_COLORS_OVER;',0)} See related topics

Line and color properties for ranges

Use the Lines & Colors tab to add or change the color, pattern, border, and frame for the selected range.

Choose a task

- Changing interior color and pattern
- Changing range borders
- Adding designer frames

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_CHANGING_BORDERS_LINES_AND_COLORS_OVER',0)} See related topics

Line and color properties for rectangular objects

Use the Lines & Colors tab to add or change the color, pattern, border, and frame for the selected object.

Choose a task

- Changing interior color and pattern
- Changing graphic object borders
- Adding designer frames

{button ,AL(`H_CHANGING_BORDERS_LINES_AND_COLORS_OVER;H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Line and color properties for sheets

Use the Lines & Colors tab to change the color and pattern defaults for all cells in the selected sheet(s).

Choose a task

Setting default colors and pattern for a sheet

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Named style properties for printing

Use the Named Style tab to customize print and page settings that you can use when printing.

Choose a task

- Creating a named print style
- Applying a named print style
- Redefining a named print style
- Resetting a named print style
- Retrieving a print style from an earlier release of 1-2-3
- Renaming a print style
- Deleting a named print style
- Copying a named print style from another file

{button ,AL(`H_NS_PRINT_OVER;H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Named style properties for ranges

Use the Named Style tab to work with groups of settings which you can use to format cells.

Choose a task

- Creating a named style
- Applying a named style
- Removing a named style from cells
- Resetting a cell's styles to a named style
- Redefining a named style
- Renaming a named style
- Deleting a named style
- Using the style gallery

{button ,AL(`H_NAMED_STYLES_OVER;H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Number format properties for ranges

Use the Number Format tab to change how 1-2-3 displays values in cells. For easy access, you can also add the number formats you use most frequently to the status bar.

Choose a task

- Formatting numbers
- Formatting numbers as currency
- Changing the currency symbol
- Promoting a number format

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_NUMBER_FORMATS_OVER',0)} See related topics

Number format properties for sheets

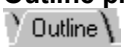
Use the Number Format tab to change the default display of values in the selected sheet.

Choose a task

- Setting a default number format for a sheet
- Changing the currency symbol

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_NUMBER_FORMATS_OVER',0)} See related topics

Outline properties for sheets



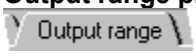
Use the Outline tab to change the settings when you outline sheet data.

Choose a task

Showing and hiding the outline frame
Specifying how summary data relates to detail data

{button ,AL(`H_OUTLINING_SHEET_DATA_OVER;H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',
0)} See related topics

Output range properties for query tables



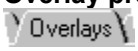
Use the Output range tab to specify the range where you want 1-2-3 to put the query results.

Choose a task

Copying query results to an output range

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_DB_QUERY_TABLES_OVER',0)} See related topics

Overlay properties for maps



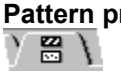
Use the Overlays tab to superimpose additional maps on top of the selected map.

Choose a task

Adding an overlay to a map
Removing an overlay from a map

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_MODIFYING_MAPS_OVER',0)} See related topics

Pattern properties for maps



Use the Patterns tab to select different patterns for mapped data, to modify the legend text, and to change the bin values specified for the patterns in the selected map.

Choose a task

Changing bin colors or patterns
Changing legend labels
Changing color or pattern bin values

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_MODIFYING_MAPS_OVER',0)} See related topics

Printer properties

Use the Printer tab to select a paper size and to view the name of the currently selected printer. You can also change the selected printer and its properties.

Choose a task

Changing the paper size

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Range properties for maps

Use the Ranges tab to use different data ranges in the selected map.

Choose a task

Changing range assignments

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_MAPS_OVER',0)} See related topics

Security properties for ranges

Use the Security tab to hide or protect cell contents in the selected range.

Choose a task

- Hiding cell contents
- Leaving part of a workbook or sheet unprotected
- Protecting unprotected ranges in a locked workbook
- Protecting unprotected ranges in a locked sheet

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_LOCKING_SHEET_CONTENTS_STEPS;H_LOCKING_WORKBOOK_CONTENTS_STEPS',0)} See related topics

Text format properties for graphic objects and ranges

Use the Text Format tab to set the font, point size, attribute(s), and color for text in the selected object or range.

Choose a task

Changing text styles

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Text format properties for printing

Use the Text Format tab to set the font, point size, attribute(s), and color for text in headers and footers, cell comments, formulas, and scripts.

Choose a task

Changing font properties for headers and footers

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_PRINT_AND_PAGE_PROPERTIES_OVER',0)} See related topics

Text format properties for sheets

Use the Text Format tab to change the default font, point size, attribute(s), and color of cell contents in the selected sheet.

Choose a task

Setting a default font for a sheet

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;',0)} See related topics

Version properties for ranges

Use the Version tab to rename a version, change its comment, and select display, style, and protection properties.

Choose a task

Changing version properties

For a description of the options on this tab, see Options.

{button ,AL(`H_THE_INFOBOX_OVER;H_USING_THE_INFOBOX_STEPS;H_WORKING_WITH_VERSIONS_OVER',0)} See related topics

Dialog box keys

These keys open, move, and close the dialog box; and move around and select options in the dialog box.

Press	To
, ↓, →, or ←	Move within a list, text box, or group of option buttons.
ALT+ a letter	Select the option or command with the underlined letter that you press.
ALT+F4	Close the dialog box without completing the command.
CTRL+BREAK	Cancel the current 1-2-3 command or operation and close the dialog box.
ENTER	Complete the command and close the dialog box.
ESC	Close the dialog box without completing the command.
SHIFT+TAB	Move backwards to the previous option, from bottom to top and right to left.
SPACEBAR	Select the option or operate the button that is current in a dialog box.
TAB	Move forward to the next option, from left to right and top to bottom.

Keys to select items in a drop-down box or list box

Press	To
a letter	Move to the first item that starts with that letter in a drop-down box or list box.
ALT+↓ ALT+	Open or close a drop-down box.
HOME END	Select the first or last item in a drop-down box or list box.
PG UP PG DN	Move to the top or bottom item in the list of items currently visible in a drop-down box or list box, and select the item.

{button ,AL(`H_EDITING_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_HELP_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_STYLE_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

Editing keys

You can use these keys to move around, select, and change the entry in a cell when 1-2-3 is in Edit mode, or when you are in the text box. If 1-2-3 is in another mode, press F2 (EDIT) to get into Edit mode.

Keys to change an entry

Press	To
BACKSPACE	Erase the highlighted selection or the character to the left of the insertion point.
DEL DELETE	Erase the highlighted selection or the character to the right of the insertion point.
INSERT INS	Switch between inserting characters and typing over existing characters at the insertion point.

Keys to move the insertion point

Press	To
CTRL+← CTRL+→	Move the insertion point left, to the beginning of, or right, to the end of, the entry.
	These keys are not available in a text box.
HOME END	Move the insertion point to the first or last character in the entry.
← →	Move the insertion point one character to the left or right.

Keys to select characters in an entry

Press	To
SHIFT+← SHIFT+→	Extend the highlight to the left or right of the insertion point.

{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_HELP_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_STYLE_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

Function keys

These keys perform special operations when used alone or in combination with ALT, CTRL, and SHIFT.

Note F2, F3, F4, F5, F8, and F9 perform different actions when the Script Editor or the Script Debugger is active. For more information about these keys, see Script editing and debugging keys.

Press	To
F1 (HELP)	Display a Help topic.
F2 (EDIT)	Switch into Edit mode. If the cell is blank, toggle between Edit and Ready modes. If the cell contains a label, toggle between Edit and Label modes.
F3 (NAME)	List range names or database table names in any active workbook, @functions, or macros, depending on the current task.
F4	Change the cell references in a formula from absolute to mixed to relative, when you enter or edit a formula.
	In Ready mode, anchor the cell pointer so you can select a range.
F5 (GOTO)	Move the cell pointer to a range, named range, sheet, chart, map, drawing, query table, version, OLE embedded object, or Notes/FX field.
	Equivalent to Edit - Go To and CTRL+G.
F6 (PANE)	Move the cell pointer clockwise to the next pane of the active window.
F7 (QUERY)	Perform a query on the selected query table.
F8	Repeat the last Range - Analyze - What-if Table command.
F9 (CALC)	In Ready mode, recalculate formulas.
	Replace the formula with its current value when entering or editing a formula.
F10 (MENU)	Activate the menu bar.
ALT+F1 (COMPOSE)	Enter characters in cells that you cannot enter directly from the keyboard. For example, to enter the character £ (British pound sterling symbol), press ALT+F1 (COMPOSE) and type L=. You can also use the Windows Character Map to enter these characters.
ALT+F3 (RUN)	Display the Run Scripts & Macros dialog box, showing a list of the macros in the active files.
	Equivalent to Edit - Scripts & Macros - Run.
ALT+F4	Close the 1-2-3 window and any active dialog boxes or InfoBox. 1-2-3 asks if you want to save any unsaved workbooks. Equivalent to File - Exit.
	Close the Help window or a dialog box.
CTRL+F2	Display the Check Spelling dialog box.
	Equivalent to Edit - Spell Check.

CTRL+F4	Close the active window if dialog boxes and the InfoBox are closed. 1-2-3 asks if you want to save any unsaved workbooks. Equivalent to File - Close.
CTRL+F6	Display the next workbook window, when more than one workbook is open.

{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_EDITING_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_HELP_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_STYLE_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

Help keys

You can use these keys in 1-2-3 Help.

Press	To
ALT+F4 ESC	Close the Help window.
ALT+SPACEBAR	Open the Control menu for the Help window.
CTRL+C	Copy text of a Help topic onto the Clipboard so you can paste it into a workbook or another Windows application.
CTRL+HOME CTRL+END HOME END	Scroll to the beginning or the end of the Help topic.
PG UP PG DN	Scroll up or down one screen in the Help topic.

{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_STYLE_KEYS_OVER;H_EDITING_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

InfoBox keys

These keys open and close the InfoBox, and move around and select options in the InfoBox.

Press	To
ALT+F4	Complete all commands and property changes and close the InfoBox.
ALT+SPACEBAR	Open the Control menu for the InfoBox. The Control menu contains commands to move, close, and get help on the InfoBox.
SHIFT+TAB	Move backwards to the previous option, bottom to top, right to left.
SPACEBAR	Erase the option in a text box when the option is highlighted.
	Add a space when typing in a text box.
TAB	Move forward to the next option, from left to right and top to bottom.

{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_STYLE_KEYS_OVER;H_EDITING_KEYS_OVER;H_HELP_KEYS_OVER;',0)} See related topics

Keyboard shortcuts

Use these keys to execute commands.

Press	To	Equivalent to
ALT+ENTER	Open the InfoBox for the selected object.	*<object>* - *<object>* Properties
ALT+SHIFT+ BACKSPACE	In Ready mode, delete a column to the left of the cell pointer without displaying the Delete dialog box.	Range - Delete
ALT+SHIFT+INS	In Ready mode, inserts a column to the left of the cell pointer without displaying the Insert dialog box.	Range - Insert
CTRL+ a letter	Runs a macro.	Edit - Script & Macros - Run
CTRL+C	Copy selected data and related styles to the Clipboard.	Edit - Copy
CTRL+F	Display the Find & Replace dialog box.	Edit - Find & Replace
CTRL+GRAY PLUS CTRL+SHIFT+ + (plus)	Display the Insert dialog box. Insert a row or column without displaying the dialog box when a row or column is selected.	Range - Insert
CTRL+GRAY MINUS CTRL+ - (hyphen)	Display the Delete dialog box. Delete a row or column without displaying the dialog box when a row or column is selected.	Range - Delete
CTRL+PG UP CTRL+PG DN	When you are using the Script Editor or Script Debugger, display the previous or next script.	View - Previous Script View - Next Script
CTRL+G	Display the Go To dialog box.	Edit - Go To
CTRL+H	When you are using the Script Editor or Script Debugger, find the next instance of the text specified in the Find & Replace dialog box.	Edit - Find Next
CTRL+O	Display the Open File dialog box.	File - Open
CTRL+P	Display the Print dialog box.	File - Print
CTRL+S	Save the current file.	File - Save
CTRL+V	Paste data and related styles from the Clipboard.	Edit - Paste

CTRL+X	Cut selected data and related styles to the Clipboard.	Edit - Cut
CTRL+Z	Reverse the effect of the most recently executed command or action that you can undo.	Edit - Undo
DELETE DEL CTRL+DELETE CTRL+DEL	Delete the contents of the selected cells, or delete the selected graphic objects, without using the Clipboard.	Edit - Clear
ENTER	Paste the data and related styles from the Clipboard when you select a location and press ENTER immediately after choosing Edit - Cut or Edit - Copy.	Edit - Paste
	Activate the selected OLE embedded object.	
ESC	End the function in progress, or cancel a drag operation.	Cancel Close
	Deactivate a selected OLE embedded object. (For some embedded objects, ESC might have a different function. In these cases, use SHIFT+ESC instead.)	

{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_EDITING_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_HELP_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_STYLE_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

Pointer-movement keys

Use these keys to move the cell pointer around the sheet.

Note Key names separated by a + (plus sign) indicate that you hold down the first key, press the second key, and then release both keys. Key names separated by a space indicate that you press the first key and release it, and then press the second key and release it.

Press	To
↓	Move the cell pointer up or down one row.
← →	Move the cell pointer left or right one column.
CTRL+← CTRL+→	Move the cell pointer left or right the number of columns currently visible in the window.
ENTER	Move the cell pointer down one row or leave it in the current cell, depending on the setting in File - User Setup - 1-2-3 Preferences (Classic Keys tab).
END HOME	Move the cell pointer to the lower right corner of the sheet's active area.
END ← END →	Move the cell pointer left or right in the current row to the next cell that contains data and is next to a blank cell.
END END ↓	Move the cell pointer up or down in the current column to the next cell that contains data and is next to a blank cell.
HOME	Move the cell pointer to cell A1 in the current sheet.
	Move the cell pointer to the top left cell in the sheet if you hide A1 or freeze it with View - Freeze Titles.
PG UP PG DN	Move the cell pointer up or down the number of rows currently visible in the window.
SHIFT+ENTER	Move the cell pointer up one row or leave it in the current cell, depending on the setting in File - User Setup - 1-2-3 Preferences (Classic Keys tab).
TAB SHIFT+TAB	Move the cell pointer right or left one column or one screen, depending on the setting in File - User Setup - 1-2-3 Preferences (Classic Keys tab).

Script editing and debugging keys

Use these keys when you are using the Script Editor or Script Debugger.

Note F2, F3, F4, F5, F6, F8, and F9 perform different actions when you are working with ranges and graphic objects. For more information about these keys, see Function keys.

Press	To	Equivalent to
F2	Compile the script module for the specified object.	Script - Check Scripts
F3	Create a subroutine in the Script Editor.	Create - Sub
F4	Activate the Script or Debugger Browser.	View - Browser
F5	Run the current subroutine.	Script - Run Current Sub
	Continue to debug a script.	Debug - Continue Execution
F6	Switch panes.	View - Switch Panes
F8	Execute the current line.	Debug - Step
F9	Set or clear a breakpoint in the selected line(s).	Script - Set/Clear Breakpoint Debug - Set/Clear Breakpoint
CTRL+F8	Exit the current procedure.	Debug - Step Exit
SHIFT+F2	Compile the script module for all scripted objects in the specified document.	Script - Check All Scripts
SHIFT+F3	Create a new function.	Script - New Function
SHIFT+F5	Stop executing the script.	Debug - Stop Execution
SHIFT+F8	Go to the line after the breakpoint line.	Debug - Step Over
SHIFT+F9	Enable or disable a breakpoint.	Script - Enable/Disable Breakpoint Debug - Enable/Disable Breakpoint
SPACEBAR CTRL+SPACEBAR	Execute the next procedure when debugging a macro.	Debug - Step

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{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_HELP_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_STYLE_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

Selection keys

You can use these keys to select or resize a range or collection, or to move the cell pointer within a selected range.

Keys to select cells

Press	To
CTRL+SHIFT+HOME	Select all cells in the current workbook.
CTRL+SHIFT+← CTRL+SHIFT+→	Select cells from the current cell left or right the number of columns currently visible.
SHIFT+HOME	Select all cells from the current cell to A1.

Keys to resize the current selection

Press	To
CTRL+SHIFT+PG UP CTRL+SHIFT+PG DN	Extend the selection to the next or previous sheet.
SHIFT+ SHIFT+↓	Resize the selection up or down one row.
SHIFT+← SHIFT+→	Resize the selection left or right one column.
SHIFT+PG UP SHIFT+PG DN	Resize the selection up or down the number of rows currently visible.

Keys to move within the current selection

Press	To
ENTER	Move the cell pointer through the range, top to bottom, left to right. When the cell pointer reaches the bottom right cell in the range, it returns to the top left cell in the range, or moves to the top left cell in the next range in the collection.
CTRL+ENTER CTRL+SHIFT+ENTER	Move the cell pointer to the first cell of the next or previous range of a collection, respectively.
SHIFT+ENTER	Move the cell pointer through the range, bottom to top, right to left. When the cell pointer reaches the top left cell in the range, it returns to the bottom right cell in the range, or moves to the bottom right cell in the next range in the collection.
SHIFT+TAB	Move the cell pointer through the range, right to left, bottom to top. When the cell pointer reaches the top left cell in the range, it returns to the bottom right cell in the range, or moves to the bottom right cell in the next range in the collection.
TAB	Move the cell pointer through the range, left to right, top to bottom. When the cell pointer reaches the bottom right cell in the

	range, it returns to the top left cell in the range, or moves to the top left cell in the next range in the collection.

{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_EDITING_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_HELP_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_STYLE_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

Sheet navigation keys

Use these keys to move the cell pointer between sheets in the current workbook.

Press	To
CTRL+HOME	Move the cell pointer to cell A:A1 in the current workbook.
	Move the cell pointer to the top left cell in the first sheet of the current workbook if you hide A:A1 or freeze it with View - Titles.
CTRL+PG UP CTRL+PG DN	Move the cell pointer to the last active cell in the previous or next sheet.
END CTRL+HOME	Move the cell pointer to the bottom right corner of the active area in the last nonblank sheet in the current workbook.
END CTRL+PG UP END CTRL+PG DN	Move backward or forward to the last or next sheet that contains data in the cell corresponding to the current cell and is next to a blank cell.
	Move to the corresponding cell in the first or last sheet, respectively, if all cells are blank.

{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_EDITING_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_HELP_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_STYLE_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

Special keys

These keys perform special functions, such as providing access to other open applications.

Press	To
ALT	Activate the menu bar. You can then choose a menu command by pressing the underlined letter of the command name.
	Perform special operations when used in combination with the function keys.
ALT+ESC	Make the next application window active.
ALT+ - (hyphen)	Open the Control menu for the active window.
ALT+ number keypad	Enter an extended character when you press ALT+ a 3-digit number on the keypad. For example, to enter the character Ñ, press ALT+165. You can also use the Windows Character Map to enter these characters.
ALT+SHIFT+ESC ALT+SHIFT+TAB	Make the previous open application window active.
ALT+ SPACEBAR	Open the Control menu for the 1-2-3 window, the Help window, dialog boxes, and InfoBox.
ESC	Cancel a dialog box without completing the command.
	Cancel the current entry in the current cell or the contents box.
	Return you to the previous menu.
	Close the Help window.

{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_HELP_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_STYLE_KEYS_OVER;H_SCRIPT_AND_MACRO_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

Style keys

These keys change the styles applied to data in a range.

Press	To
CTRL+B	Change the data in the current selection to bold.
	Remove the bold if data is already bold.
CTRL+E	Center data in cells.
CTRL+I	Italicize data in the current selection.
	Remove the italics if data is already italics.
CTRL+L	Align data with the left edge of the cells.
CTRL+N	Remove bold, italics, and underlines from data in the current selection.
CTRL+R	Align data with the right edge of the cells.
CTRL+U	Underline data in the current selection.
	Remove the underline if data is already underlined.

{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_WORKBOOK_NAVIGATION_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_HELP_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_EDITING_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

Workbook navigation keys

Use these keys to move between active workbooks.

The order in which the cell pointer moves between active workbooks, expressed in the terms first, last, next, and previous in the following definitions, depends on which workbook is active when you open a workbook, and the order in which you open the workbooks.

Note Key names separated by a + (plus sign) indicate that you hold down the first key, press the second key, and then release both keys. Key names separated by a space indicate that you press the first key and release it, and then press the second key and release it.

Press	To
CTRL+END HOME CTRL+END END	Switch to the first or last workbook window opened.
CTRL+F6 CTRL+TAB	Switch to the next workbook window.
CTRL+PG UP CTRL+PG DN	Move the cell pointer to the cell you last highlighted in the next or previous sheet of the workbook.
CTRL+SHIFT+F6 CTRL+SHIFT+TAB	Switch to the previous workbook window.

{button ,AL(`H_DIALOG_BOX_KEYS_OVER;H_EDITING_KEYS_OVER;H_FUNCTION_KEYS_OVER;H_HELP_KEYS_OVER;H_POINTERMOVEMENT_KEYS_OVER;H_SCRIPT_AND_MACROS_KEYS_OVER;H_SELECTION_KEYS_OVER;H_SHEET_NAVIGATION_KEYS_OVER;H_SHORTCUT_KEYS_OVER;H_SPECIAL_KEYS_OVER;H_STYLE_KEYS_OVER;H_INFOBOX_KEYS_OVER;',0)} See related topics

Overview: Learning 1-2-3

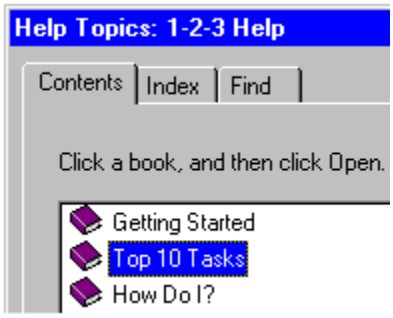
For many tasks in 1-2-3, you won't need any help. Simply reading the menus, clicking buttons, and responding to instructions in dialog boxes and the InfoBox will enable you to complete your work successfully.

When you do need help, 1-2-3 provides the following resources:

- The 1-2-3 Tour is an online introduction to 1-2-3.

  See Taking a tour.
- Help includes overviews, procedures, examples, and reference topics on 1-2-3 features.

  See Getting Help with 1-2-3.
- Help Contents contains information on the top 10 tasks in 1-2-3.



- Demos in Help show you how to perform some common 1-2-3 tasks.

  See Using demos.
- "Did you know...?" is a Help topic that lists useful features and tips.

  See Did you know...?.
- The printed documentation also contains introductions and tips on using many 1-2-3 features.

{button ,AL(`H_LEARN123_PRINTING_HELP_STEPS;H_LEARN123_LATE_BREAKING_NEWS_ABOUT_123_OVER;H_LEARN123_EXAMPLES_IN_HELP_OVER',0)} See related topics

Taking a tour

The 1-2-3 Tour is a brief, online introduction to the features of 1-2-3.

What's in the 1-2-3 Tour?

The first two parts of the tour give an overview of 1-2-3 features. The last three parts teach you more about using 1-2-3.

- Hot Features -- Highlights several new features of 1-2-3.
- Team Computing -- Shows you 1-2-3 features that help you and your team work together.
- Getting Started Quickly -- Shows you how to begin working in 1-2-3.
- Creating Charts, Drawings, and Maps -- Shows you how to present your data visually.
- Working with the Internet -- Shows you how to access Lotus Web sites, and save and open documents on the Internet.

How to run the tour

You can run the tour at any time by choosing Help - Tour.

{button ,AL(`H_LEARN123_HELP_OVER;H_LEARN123_CONVENTIONS_OVER;H_LEARN123_DID_YOU_KNOW_OVER;H_LEARN123_DEMOS_OVER;H_LEARN123_OVER;',0)} See related topics

Using demos

Each of the Help topics listed below contains a demo. When you run a demo, 1-2-3 opens a sample file and then performs the steps you see in the Help topic one at a time on the data in the sample file.

At the end of the demo, the sample file closes and you return to your workbook at the point you left off, with the Help window open, so you can perform the steps yourself.

To start a demo, just click the demo icon whenever you see one in a Help topic.

Demos in 1-2-3 Help

You can see demos of the tasks listed below.

Using the InfoBox

- Using the InfoBox

Entering, editing, and calculating data

- Filling a range using drag and fill
- Filling a range with dates
- Using drag and clear to delete data
- Creating a cell comment
- Summing a range automatically

Copying and moving data

- Copying down to fill a range
- Copying right to fill a range

Naming sheets and ranges

- Naming a sheet
- Naming a range
- Naming a range using adjacent labels

Changing columns and rows

- Sizing columns
- Fitting the widest column entry
- Hiding columns
- Sizing rows
- Freezing columns and rows as titles

Ordering and outlining data

- Sorting data
- Demoting rows and columns to create an outline
- Collapsing an outline to show less detail
- Expanding an outline to show more detail

Working with versions and version groups

- Creating a version
- Displaying a version
- Creating a version group

Working with graphic objects

- Creating a text block
- Creating a map

{button ,AL(`H_LEARN123_OVER;H_LEARN123_HELP_OVER;H_LEARN123_EXAMPLES_IN_HELP_OVER',0)}
See related topics

Getting Help with 1-2-3

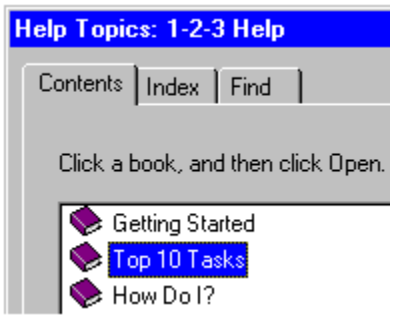
What's in Help?

Help contains overviews, procedures, technical details, examples, and demos that can teach you about using 1-2-3. Help also contains reference information on all @functions and LotusScript commands.

When you find the information you need in Help, you can print it or you can leave the Help window open when you work. The Help window stays on top of the 1-2-3 window so you can follow a procedure as you perform the task in 1-2-3.

If you don't know where to start

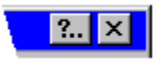
Choose Help - Help Topics to open Help from the 1-2-3 desktop. When you open Help, you see a dialog box with three tabs.



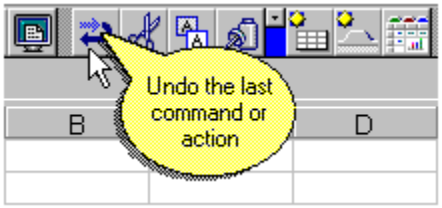
- Click Contents to see Help topics organized by books. Double-click a book to see the list of topics in each book. Double-click a topic to read it.
- Click Index to display a list of index entries. Each entry is associated with one or more Help topics. Type the first letters of the word you are looking for or scroll down the index to see all of the entries. Double-click an entry to display Help.
- Click Find to do a full-text search of Help topics. The first time you use Find, Windows creates a file that contains all of the words in Help. Using Find, you can locate any word or phrase contained in a Help topic.

Getting Help on your current task

- Using a dialog box -- Click Help or press F1 (HELP).
- Using the InfoBox -- Click the Help question mark button or press F1 (HELP).



- Highlighting a menu command -- Press F1 (HELP) to see a summary of commands on that menu.
- On SmartIcons or tabs in the InfoBox -- Hold the mouse pointer over an icon or tab to display a short description.



- Entering an @function -- In a blank cell, type @ and press F3 (NAME) to display a list of @functions. Highlight an @function and press F1 (HELP).
- Working in the Script Editor or Script Debugger -- Use the Help menu.

Navigating within Help

When the Help window is open, you can move from one Help topic to another to display additional information.

- Click green text with a dotted underline to view a definition in a pop-up window.

  Pop-up example
- Click green text with a solid underline to jump to another Help topic.

  Jump example

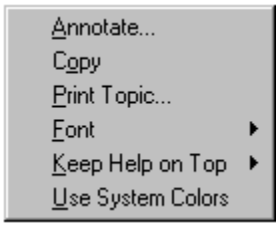
- Click the Go Back button to display previously read Help topics.

- The following buttons appear at the end of many Help topics. Click a button to see additional information.

See details
See example
See related topics

Windows Help commands

Windows includes some additional Help features. Click the right mouse button anywhere in a Help window to display the following Help commands.



Lotus Customer Support services

If you aren't able to find the answer to your question in Help, the printed documentation, or the README file, please contact the support service that is most appropriate to your needs.

For information on the services offered, see Support in the Help Index.

{button ,AL(`H_GETTING_HELP_ON_AN_ATFUNCTION_STEPS;H_LEARN123_CONVENTIONS_OVER;H_LEARN123_PRINTING_HELP_STEPS;H_GETTING_HELP_ON_A_MENU_COMMAND_STEPS;H_MACRO_KEYWORDS_DIALOG_BOX_CS;H_LEARN123_OVER;H_LEARN123_LATE_BREAKING_NEWS_ABOUT_123_OVER;H_LEARN123_EXAMPLES_IN_HELP_OVER;H_123_LSCOMMON_USING_LOTUSSCRIPT_HELP_OVER;',0)} See related topics

Printing Help information

You can print one topic or a book of Help topics.

- To print the topic you are reading, click Print.
- To print all the topics in a book from Help Contents, select the book and click Print.
- To print a pop-up in Help, right-click the pop-up window and choose Print Topic.

{button ,AL(`H_LEARN123_HELP_OVER;H_LEARN123_OVER',0)} See related topics

Conventions used in Help

- Commands appear in hyphenated form in Help procedures.

  For example, when you see File - User Setup - 1-2-3 Preferences in a procedure, you should choose File from the main menu, then choose User Setup and then 1-2-3 Preferences from the cascade menu.
- SmartIcons in a procedure indicate that you can either use the command or click the icon in 1-2-3.
- Click green text with a dotted underline to view a definition in a pop-up window.

  Pop-up example
- Click green text with a solid underline to jump to another Help topic.

  Jump example
- You see bold text in the following instances:

  Caution -- Introduces information essential to the safety of your data and software.

  Note -- Introduces additional technical information about a command or procedure.

  Tip -- Provides additional useful information.
- Function keys appear in all capitals and are followed by the 1-2-3 key name. For example, F1 (HELP).
- Key names separated by a + (plus sign) indicate that you hold down the first key, press the second key, and then release both keys. For example, CTRL+C.
- Key names separated by a space indicate that you press the first key and release it before pressing the second key. For example, END HOME.
- The following buttons appear at the end of many Help topics. Click a button to see additional information.


See details


See example


See related topics

- [ ] (brackets) enclose optional arguments in @functions and macro commands; for example, [*password*]. Arguments appear in italics.

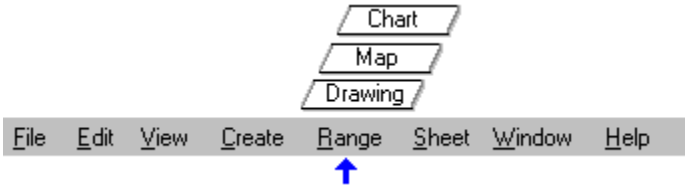
Did you know...?

This list of tips can help you work more efficiently in 1-2-3.

Working in 1-2-3

- Commands on the menu change, depending on what you have selected.

  For example, when you select a cell, 1-2-3 displays Range on the menu. If you select a rectangle or an arrow, Drawing replaces Range on the menu. When you select a Map or a Chart, you see menus for those objects.

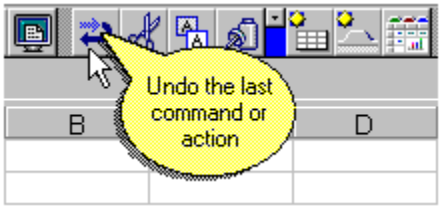


- You can undo many commands in 1-2-3 by using Edit - Undo.

- Press ESC to:
  - Cancel a dialog box without completing the command
  - Cancel the current entry in the current cell or the edit line
  - Return to a previous menu
  - Close the Help window
- Press F1 (HELP) to display the Help window at any time.
- You can leave the Help window open as you complete your work.

Using the mouse

- SmartIcons are buttons that represent mouse shortcuts for 1-2-3 actions and commands. If you see an icon in a Help topic that isn't displayed in your set of SmartIcons, you can add the icon using File - User Setup - SmartIcons Setup.
- To display a description of an icon or a tab in the InfoBox, hold the mouse pointer over the icon or tab.



- The mouse pointer changes shape, depending on the task.
- You can click the right mouse button over an object to display the shortcut menu for that object.

Working with windows and files

- When you create a new workbook, you can use a SmartMaster template to get a head start on your work.
- You can move a window by dragging the title bar.
- If you have more than one file open, you can use the Window command to navigate between the open files.

Using the InfoBox to change properties

- Remember that you must select any cell, range, or object before you can change the properties.
- To open the InfoBox for a cell or range, use Range - Range Properties. To open the InfoBox for most other objects, double-click the object.
- As you select options in the InfoBox, changes appear immediately in 1-2-3.
- You can leave the InfoBox open as you work. The InfoBox stays on top of your sheet as you select other objects.
- To collapse the InfoBox and display only its title bar, double-click the title bar. Double-click the title bar again to restore the InfoBox to its full size.

{button ,AL(`H_LEARN123_OVER;',0)} See related topics

Late breaking news about 1-2-3

The README.WRI file contains notes for upgraders and network administrators, and information received after the Help and the documentation were completed. The Install program copies the README.WRI file to your 1-2-3 directory.

To open the README.WRI file:

1. Click the Start button.
2. Click Programs.
3. Click Lotus SmartSuite (or the folder where you installed 1-2-3).
4. Click Lotus User Assistance.
5. Double-click 1-2-3 Product Updates to view README.WRI.

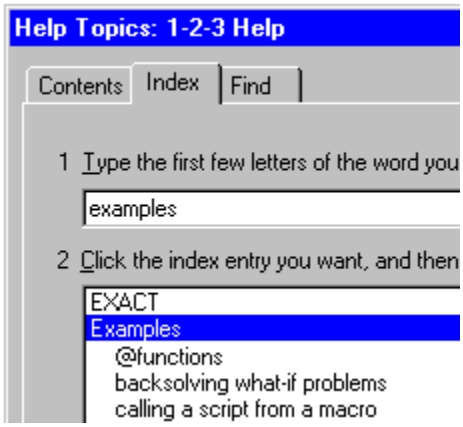
Finding examples in 1-2-3 Help

There are three types of examples in 1-2-3 Help.

- Examples that illustrate 1-2-3 features
- @Function examples
- LotusScript examples

To find examples in Help:

1. Click the Help Index tab.
2. Type example.



3. Under Examples in the list, double-click the example you want to see.

Pop-up example

This is a definition in a pop-up window.

To close this window, click anywhere.

Jump example

You just jumped to this Help topic.

To return to the topic you were reading, click the Go Back button.

Overview: Sharing data using OLE

Object Linking and Embedding (OLE) lets you share data (called objects) across applications. You can either link or embed the object.

When should you use links?

A link is a channel through which data stored in a source file is displayed in a destination file. When you update linked data in a destination file, the latest data from the source file is displayed.

Use links when all of the following are true:

- You need to share data between applications.
- You expect the shared data to change.
- You need to update the shared data when the original data changes.

Suppose you use data from an Approach file in a 1-2-3 workbook and the data changes weekly. You can create automatic links in the 1-2-3 workbook to the data in the Approach file. Now, whenever you open the 1-2-3 workbook, it automatically displays the latest Approach data.

You do not need to use links when any one of the following is true:

- You only use the data in one application.
- You do not expect the data to change.
- You do not need to update the shared data when the original data changes.

For example, if you created your company logo in Freelance Graphics and you wanted to use the logo in a 1-2-3 workbook, you would not use links since the logo is not likely to change. Instead, you could simply copy the logo in Freelance Graphics and paste it into 1-2-3.

When should you use embedded objects?

An embedded object is an object created in one application but stored in a file (called a compound document) in another application (the container application). The embedded object does not refer to or point to data outside of the compound document. It is not linked to another file.

Embed objects when both of the following are true:

- You only use the data in one application.
- You expect to edit or update the data.

For example, if you create a 1-2-3 workbook and want to include text from a Word Pro document, you can embed the Word Pro object in the 1-2-3 workbook. When you want to edit the Word Pro object, you can double-click it. Generally, the embedded object will display the text (unless you chose to display the object as an icon).

{button ,AL(`H_LINKS_OVER;H_EMBEDDED_OBJECTS_OVER;H_LINKING_FROM_123_TO_ANOTHER_APPLICATION_STEPS;H_CREATING_AN_EMBEDDED_OBJECT_STEPS;',0)} See related topics

Overview: OLE Links

An OLE link is a connection between a destination file and data in a source file. Links can automatically update the destination file so that it reflects changes made in the source file.

Suppose you use text from a Word Pro file in a 1-2-3 workbook and the text changes weekly. You can create automatic links to the text in the Word Pro file. Now, whenever you open the 1-2-3 file, it automatically displays the latest Word Pro text.

What you can link to

You can create links to a wide range of objects, including text, drawings, charts, and Notes documents, views, or databases.

Ways to create links

1-2-3 provides several ways to create links. You choose a method based on how much you want to control the link process. You can copy and paste the link from the server application, or you can create the link without leaving 1-2-3. When you paste a link, you can let 1-2-3 choose the link format, or you can choose a format yourself.

- Choose Edit - Copy in the other application to copy the data to the Clipboard, and then use Edit - Paste Link in 1-2-3 to create the link.
- Choose Edit - Paste Special to create a link using the contents of the Clipboard, and to give you more control over the format and appearance of the link.
- Choose Create - Object in 1-2-3, and select the "Create an object from a file" and the "Link to file" options to create a link to an entire file.

  Note 1-2-3 supports dragging to create a link. If the other application supports it, you may be able to drag the selection to or from the application to create a link.

What does a link look like?

Depending on the application that the link is connected to (the server), and depending on how you created the link, the link's appearance in the destination file varies. It can appear as a graphic object, text in a cell, or as the server application's icon. If you create a link using text or cell data, 1-2-3 creates a datalink. This type of link looks like plain text, but in the top left cell of the link, you will see @DATALINK in the contents box or when you edit the cell.

What can you do with a link?

You can move, copy, or delete a link just as you would a range or a graphic object. You can double-click most links to activate the server application so that you can change the original data. You can also view, edit, update, and delete links using Edit - Manage Links. For example, you can edit a link so that it refers to a different piece of data in the server application or change a link from automatic to manual.

{button ,AL(`H_EMBEDDED_OBJECTS_OVER;H_SHARING_DATA_USING_OLE2_OVER;H_LINKING_FROM_123_TO_ANOTHER_APPLICATION_STEPS;H_CREATING_A_LINK_USING_DRAG_AND_DROP_STEPS;H_EDITING_LINKS_STEPS;H_UPDATING_LINKS_STEPS;H_BREAKING_LINKS_STEPS;H_CHANGING_A_LINKS_UPDATE_MODE_STEPS;',0)} See related topics

Creating an OLE link in 1-2-3

You can create a link and let 1-2-3 choose the link format, or choose the format yourself.

Letting 1-2-3 choose the link format

1. Start the other application and open the file that has the data you want.
2. Copy the data to which you want to link.
3. Open the 1-2-3 workbook.
4. Select the location in the workbook.

   If the Clipboard contains text or cell data, select a range or the top left cell of the range.

   If the Clipboard contains a chart, drawing, bitmap, or picture, select a range or graphic object.
5. Choose Edit - Paste Link.

1-2-3 selects an appropriate format and creates the link.

Choosing the link format yourself

1. Start the other application and open the file that has the data you want.
2. Copy the data to which you want to link.
3. Open the 1-2-3 workbook.
4. Select the location in the workbook.
5. Choose Edit - Paste Special.
6. Select "Paste link to source."
7. Select a format from the "As" box.
8. (Optional) To display the pasted object as an icon representing the other application, select "Display as icon." To select a different icon, click Change Icon.
9. Click OK.

1-2-3 creates the link in 1-2-3 using the format you selected.

{button ,AL(`H_LINKING_FROM_123_TO_ANOTHER_APPLICATION_DETAILS',1)} See details

{button ,AL(`H_LINKS_OVER;H_CREATING_A_LINK_USING_DRAG_AND_DROP_STEPS;H_BREAKING_LINKS_STEPS;H_UPDATING_LINKS_STEPS;H_CREATING_A_LINKED_OBJECT_FROM_A_FILE_STEPS;',0)} See related topics

Details: Creating an OLE link in 1-2-3

Restrictions
To create a link in 1-2-3, the server application must support OLE linking. If Edit - Paste Link is not available, you may first have to save the file in the server application. Most server applications need to be open while creating links using the Clipboard. If you want, you can minimize the application's window to an icon.

You cannot paste a link when the Clipboard is empty, or when the upper left corner of the current selection is in a protected range.

1-2-3 cannot create OLE links to itself. That is, you cannot create links to 1-2-3 charts, maps, drawings, or embedded objects. If the Clipboard contains a 1-2-3 chart, map, drawing, or embedded object, the "Paste link to source" option is unavailable.

Creating a Notes link
You can create a link from 1-2-3 to a Notes 4.1 (or higher) document, view, or database. In Notes, use Edit - Copy As Link. Then, in 1-2-3 choose Edit - Paste Special, select "Paste link to source," and select "Notes Link" as the link type.

Creating a datalink
Datalinks are links to text or cell data. To create a datalink, choose Edit - Paste Special, select "Paste link to source," and select Text, .WK1, or .WK3 as the Clipboard format. In the top left cell of the link, you will see @DATALINK in the contents box or when you edit the cell. 1-2-3 automatically names datalinks "DataLink 1," "DataLink 2," and so on.

Pasting text or cell data
When pasting text or cell data, 1-2-3 writes over existing data in the range, including data in hidden columns, rows, and sheets.

Creating a linked object
You can also use Edit - Create Object, and select the "Create an object from a file" and the "Link to file" options to create a link.

{button ,AL(`H_LINKING_FROM_123_TO_ANOTHER_APPLICATION_STEPS',1)} Go to procedure

Using drag and drop to create an OLE link

You can create a link from 1-2-3 to another application (or vice versa) using drag and drop, provided the other application supports this feature.

1. Tile the 1-2-3 window and the window of the other application so that both are visible.
2. Make the 1-2-3 workbook that contains the original data the active window. Make sure you have named and saved the 1-2-3 file.
3. Select the range in 1-2-3 you want to link. You can include graphic objects in the range.
4. Position the mouse pointer on the border of your selection so that the mouse pointer changes to a hand.

5. Hold down both CTRL and SHIFT, and drag the object to the other application.
6. Release the mouse button when you reach the destination, then release CTRL and SHIFT.

Note To drag and drop from another application into 1-2-3, use this procedure, but select the data in the server application and drag it to 1-2-3. Check the other application's documentation to find out what keys to use while dragging.

{button ,AL(`H_CREATING_A_LINK_USING_DRAG_AND_DROP_DETAILS',1)} See details

{button ,AL(`H_LINKS_OVER;H_LINKING_FROM_123_TO_ANOTHER_APPLICATION_STEPS;H_USING_DRAG_AND_DROP_TO_EMBED_AN_OBJECT_STEPS;H_CREATING_A_LINKED_OBJECT_FROM_A_FILE_STEPS;H_UPDATING_LINKS_STEPS;H_BREAKING_LINKS_STEPS;',0)} See related topics

Details: Using drag and drop to create an OLE link

Troubleshooting
If you have trouble using drag and drop to create a link:

- Check that the source file is named and saved. In many cases, the server application's file must also be named and saved.
- Copy the data, choose Edit - Paste Special, and select "Paste link to source."

Controlling the link format
When you create a link using drag and drop, the container application chooses the link format. If you want more control over the type of link created, copy the data and use Edit - Paste Special.

{button ,AL(`H_CREATING_A_LINK_USING_DRAG_AND_DROP_STEPS',1)} Go to procedure

Creating a linked object from a file

You can create an OLE link to an entire file. The linked object updates when the source file changes.

1. In 1-2-3, choose Create - Object.

2. Select "Create an object from a file."
3. Enter the path and file name, or click Browse to select from the available directories.
4. (Optional) To display the object as an icon, select "Display as icon." To select a different icon, click Change Icon.
5. Click OK.
6. Click the sheet where you want the top left corner of the object to appear.

{button ,AL(`H_CREATING_A_LINKED_OBJECT_FROM_A_FILE_DETAILS',1)} See details

{button ,AL(`H_LINKS_OVER;H_LINKING_FROM_123_TO_ANOTHER_APPLICATION_STEPS;H_CREATING_A_LINK_USING_DRAG_AND_DROP_STEPS;H_UPDATING_LINKS_STEPS;H_BREAKING_LINKS_STEPS;',0)} See related topics

Details: Creating a linked object from a file
1-2-3 cannot create OLE links to itself. That is, you cannot create links to 1-2-3 charts, maps, drawings, or embedded objects.

Editing the source file
You can double-click a linked object to edit the source file. Linked objects are always edited out of place.

Placing the linked object on the sheet
Instead of clicking the sheet to have 1-2-3 place and size the linked object, you can determine the size and position of the object by dragging a box in the sheet.

{button ,AL(`H_CREATING_A_LINKED_OBJECT_FROM_A_FILE_STEPS',1)} Go to procedure

Breaking OLE links

You can break a link if you no longer want the linked data connected to its source. A broken link no longer updates the data.

1. Choose Edit - Manage Links.

2. Select "OLE links" in the "Link type" list.
3. Select the links to break.
4. Click Break Link.
5. Confirm your choice, and then click Done.

When you break a link to an object, in most cases the linked object becomes a picture. If a link uses @DATALINK, the formula is removed from the cell, leaving just the results.

{button ,AL(`H_LINKS_OVER;H_UPDATING_LINKS_STEPS;H_CHANGING_A_LINKS_UPDATE_MODE_STEPS;H_EDITING_LINKS_STEPS;',0)} See related topics

Changing an OLE link's update mode

When you create a link, 1-2-3 sets the update mode to automatic. Automatic update mode ensures that your data is always current.

1. Choose Edit - Manage Links.

2. Select "OLE links" in the "Link type" list.
3. Select the link.
4. Select Automatic or Manual.
5. Click Done.

{button ,AL(`H_CHANGING_A_LINKS_UPDATE_MODE_DETAILS',1)} See details

{button ,AL(`H_LINKS_OVER;H_BREAKING_LINKS_STEPS;H_EDITING_LINKS_STEPS;H_UPDATING_LINKS_STEPS;',0)} See related topics

Details: Changing an OLE link's update mode

Automatic updating
When the update mode for a link is set to automatic, 1-2-3 updates the links as follows:

- If the link is to an active file, links are updated whenever the data in the source file changes.
- If the link is to a file that is not active, when you open the workbook containing the link, 1-2-3 updates the linked data from the source file on disk, but only if the "Update links when opening workbooks" option in File - User Setup - 1-2-3 Preferences (General tab) is selected. If this option is not selected, you must choose Edit - Manage Links, and click Update Now to update the links to the source file.

Manual updating
When the update mode is manual, 1-2-3 updates the links only when you choose Edit - Manage Links - Update Now. If the file to which you are linking has changed, click Update Now to see the latest data.

Improving system performance
Use manual update mode to improve system performance when you have many links in a file or when the links contain a large amount of data. Manual update mode lets you update the links when you want rather than every time you make a change.

{button ,AL(`H_CHANGING_A_LINKS_UPDATE_MODE_STEPS',1)} Go to procedure
{button ,AL(`H_123_PREFERENCES_OVER;',0)} See related topics

Editing OLE links

You can modify the linked data and/or change the source of a linked object. Linked objects are always edited out of place.

Editing a linked object

1. Choose Edit - Manage Links.

2. Select "OLE links" in the "Type of link" list.
3. Select the link.
4. Click Open Source, and make changes in the source file.

Changing the link source

You can edit an object's links, for example, to link to a different file.

1. Choose Edit - Manage Links.

2. Select "OLE links" in the "Type of link" list.
3. Select the link.
4. Click Edit Link and specify a different path, file name, or item.
5. Click OK to return to the Manage Links dialog box.

{button ,AL(`H_EDITING_LINKS_DETAILS',1)} See details

{button ,AL(`H_LINKS_OVER;H_BREAKING_LINKS_STEPS;H_CHANGING_A_LINKS_UPDATE_MODE_STEPS;H_UPDATING_LINKS_STEPS;',0)} See related topics

Details: Editing OLE links

Editing datalinks
You can edit the arguments of a datalink directly in the cell. The syntax is as follows:

@DATALINK (app-name;topic-name;item-name;[format];[max-rows];[max-cols];[max-sheets])

Available commands when editing in the source file
When you are editing a linked object, you can update, close, or exit the source file. The commands listed may not all be available in certain applications, or may differ slightly.

- Choose File - Exit & Return to close the source file and return to 1-2-3.
- Choose File - Close to close the source file and leave the server application open to make it faster to edit another linked object.
- Choose File - Update to send the updated data back to 1-2-3 without leaving the server application.

{button ,AL(`H_EDITING_LINKS_STEPS',1)} Go to procedure
{button ,AL(`H_FUNC_DATALINK;',0)} See related topics

Updating OLE links

You can update a link when the update mode for the link is manual.

1. Choose Edit - Manage Links.
2. Select "OLE links" in the "Type of link" list.
3. Select the links to update.
4. Click Update Now.
5. Click Done.

{button ,AL(`H_UPDATING_LINKS_DETAILS',1)} See details

{button ,AL(`H_LINKS_OVER;H_BREAKING_LINKS_STEPS;H_CHANGING_A_LINKS_UPDATE_MODE_STEPS;H_EDITING_LINKS_STEPS;',0)} See related topics

Details: Updating OLE links

When the update mode is manual, 1-2-3 updates the links only when you click Update Now in the Manage Links dialog box.

If the original source file for the link has moved, before updating the link, you may first have to use Edit - Manage Links - Edit Link to modify the link so it matches the source's new location.

{button ,AL(`H_UPDATING_LINKS_STEPS',1)} Go to procedure

Manage Links dialog box

Use this dialog box to edit, update, and break existing links.

Choose a task

- Updating file links
- Updating OLE links
- Editing OLE links
- Changing an OLE link's update mode
- Breaking OLE links

{button ,AL(`H_LINKS_OVER;H_USING_FORMULAS_OVER;',0)} See related topics

Overview: Embedded objects

An embedded object is an object created in one application but stored in a file (called a compound document) in another application (the container application). The embedded object does not refer to or point to data outside of the compound document. It is not linked to another file.

For example, if you create a 1-2-3 workbook and want to include text from a Word Pro document, you can embed the document in the 1-2-3 workbook. When you need to change the text in the document, you can double-click the Word Pro object to edit the document.

How do you embed an object?

If both applications support OLE, you can embed objects. You embed objects using Edit - Paste Special or Create - Object. You use Edit - Paste Special to embed an object either copied or cut from another application. Use Create - Object to embed a new object from scratch or embed data from a file.

What does an embedded object look like?

When you embed an object from another application in a 1-2-3 workbook, the object appears as a graphic object or as the application's icon, depending on how you created it. When you select the object, it displays selection handles. You see the object's name on the 1-2-3 menu (for example, "Document" for a Word Pro object) so you can edit it or perform other actions on it.

What can you do with embedded objects?

You can copy, cut, move, or delete embedded objects like other objects. You can also edit embedded objects in place or out of place.

- If the server application supports in-place editing, you do not leave the container application when editing the object.
- If the server application does not support in-place editing, the server application is opened out of place and you edit the object in the server application.

{button ,AL(`H_LINKS_OVER;H_SHARING_DATA_USING_OLE2_OVER;H_CREATING_AN_EMBEDDED_OBJECT_STEPS;H_EMBEDDING_AN_EXISTING_OBJECT_STEPS;H_EDITING_AN_EMBEDDED_OBJECT_STEPS;H_USING_DRAG_AND_DROP_TO_EMBED_AN_OBJECT_STEPS;H_DRAGGING_A_RANGE_TO_THE_DESKTOP_STEPS;',0)} See related topics

Creating an embedded object

You can create an object using another application, but embed (store) the object in a 1-2-3 workbook. For example, you can embed a Word Pro document in a 1-2-3 workbook.

1. Choose Create - Object.

2. Select "Create a new object."
3. From the "Object type" list, select the type of object that you want to create.
4. (Optional) To display the object as an icon representing the other application, select "Display as icon." To select a different icon, click Change Icon.
5. Click OK.
6. Click the sheet where you want the top left corner of the object to appear.

   The object is created and activated, and the menus, icons, and toolbars of the server application appear in the 1-2-3 window.
7. Use the server application's menus, icons, and toolbars to edit the object.
8. When you finish, click anywhere in the sheet to deactivate the embedded object.

{button ,AL(`H_CREATING_AN_EMBEDDED_OBJECT_DETAILS',1)} See details

{button ,AL(`H_EMBEDDED_OBJECTS_OVER;H_EMBEDDING_AN_EXISTING_OBJECT_STEPS;H_EDITING_AN_EMBEDDED_OBJECT_STEPS;H_USING_DRAG_AND_DROP_TO_EMBED_AN_OBJECT_STEPS;H_DRAGGING_A_RANGE_TO_THE_DESKTOP_STEPS;',0)} See related topics

Details: Creating an embedded object

Editing an embedded object displayed as an icon
If you display the embedded object as an icon, you must edit it out of place. See Editing an embedded object for information.

Placing the embedded object on the sheet
Instead of clicking the sheet to have 1-2-3 place and size the embedded object, you can determine the size and position of the embedded object by dragging a box in the sheet.

{button ,AL(`H_CREATING_AN_EMBEDDED_OBJECT_STEPS',1)} Go to procedure

Using drag and drop to embed an object

You can embed an object from another application into 1-2-3 (and vice versa) provided the other application supports this feature.

1. Tile the 1-2-3 window and the window of the other application so that both are visible.
2. Make the server application the active window.
3. Select the data that you want to embed.
4. Position the mouse pointer on the border of your selection so that the pointer changes to a hand.

 .

5. Drag the selection to its destination in 1-2-3.
6. Release the mouse button when you reach the destination.

Note If the server application supports text as a drag-and-drop format, dragging and dropping to 1-2-3 will create text, not an object.

To drag and drop from 1-2-3 to another application, use this procedure, but select the data in 1-2-3 and drag it to the other application.

{button ,AL(`H_USING_DRAG_AND_DROP_TO_EMBED_AN_OBJECT_DETAILS',1)} See details

{button ,AL(`H_EMBEDDED_OBJECTS_OVER;H_COPYING_123_DATA_TO_OTHER_APPLICATIONS_OVER;H_CREATING_AN_EMBEDDED_OBJECT_STEPS;H_EMBEDDING_AN_EXISTING_OBJECT_STEPS;H_EDITING_AN_EMBEDDED_OBJECT_STEPS;H_DRAGGING_A_RANGE_TO_THE_DESKTOP_STEPS;',0)} See related topics

Details: Using drag and drop to embed an object

Troubleshooting

If you have trouble using drag and drop to embed an object, copy the data and use Edit - Paste Special.

{button ,AL(`H_USING_DRAG_AND_DROP_TO_EMBED_AN_OBJECT_STEPS',1)} Go to procedure

Creating an embedded object from existing data

There are two ways to embed existing data into a 1-2-3 workbook. Use the first procedure to embed an object that you copied or cut from another application. Use the second to embed an entire file.

Embedding an object using the Clipboard

1. In the server application, copy or cut the data you want to embed.
2. In 1-2-3, select a destination.
3. Choose Edit - Paste Special.

4. Select "Paste."
5. In the "As" list, select the type of object you want to embed.

   Generally, you should select the first object in the list, which is the server application's native format.
6. (Optional) To display the embedded object as an icon, select "Display as icon." To select a different icon, click Change Icon.
7. Click OK.

You see the embedded object in 1-2-3, which appears as an object or as an icon representing the server application.

Embedding an object from a file

1. In 1-2-3, choose Create - Object.

2. Select "Create an object from a file."
3. Enter the path and file name, or click Browse to select from the available directories.
4. (Optional) To display the embedded object as an icon, select "Display as icon." To select a different icon, click Change Icon.
5. Click OK.
6. Click the sheet where you want the top left corner of the object to appear.

You see the embedded object in 1-2-3, which appears as an object or as an icon representing the server application.

{button ,AL(`H_EMBEDDING_AN_EXISTING_OBJECT_DETAILS',1)} See details

{button ,AL(`H_EMBEDDED_OBJECTS_OVER;H_CREATING_AN_EMBEDDED_OBJECT_STEPS;H_USING_DRAG_AND_DROP_TO_EMBED_AN_OBJECT_STEPS;H_EDITING_AN_EMBEDDED_OBJECT_STEPS;H_CREATING_A_LINKED_OBJECT_FROM_A_FILE_STEPS;',0)} See related topics

Details: Creating an embedded object from existing data

Placing the embedded object on the sheet
Instead of clicking the sheet to have 1-2-3 place and size the embedded object, you can determine the size and position of the object by dragging a box in the sheet.

Linking to a file
You can create an object linked to an entire file by selecting "Link to file" in the Create Object dialog box. See Creating a linked object from a file for more information.

{button ,AL(`H_EMBEDDING_AN_EXISTING_OBJECT_STEPS',1)} Go to procedure

Editing an embedded object

You can edit an object in place if the object's application supports in-place editing, or out of place if it does not.

1. Double-click the object you want to edit.
   - If the server application supports in-place editing, you do not leave the container application when editing the object.
   - If the server application does not support in-place editing, the container application opens out of place when you double-click the object.
2. Edit the object using the menus, icons, and toolbars of the server application.
3. When you finish editing the object, do one of the following:
   - If you are editing in place, click outside the object.
   - If you are editing out of place, choose File - Exit & Return.

{button ,AL(`H_EDITING_AN_EMBEDDED_OBJECT_DETAILS',1)} See details

{button ,AL(`H_EMBEDDED_OBJECTS_OVER;H_CREATING_AN_EMBEDDED_OBJECT_STEPS;H_USING_DRAG_AND_DROP_TO_EMBED_AN_OBJECT_STEPS;H_EMBEDDING_AN_EXISTING_OBJECT_STEPS;H_DRAGGING_A_RANGE_TO_THE_DESKTOP_STEPS;',0)} See related topics

Details: Editing an embedded object

Other ways to begin editing an embedded object
There are several ways to begin editing an embedded object.

- To edit an object in place, you can select it and press ENTER. To edit an object out of place, you can select it and press CTRL+ENTER.
- Select the object, and choose the object's name from the 1-2-3 menu (for example, "Document" for a Word Pro embedded object), or right-click the object to open the same menu of options.

What happens during in-place editing
Even if an application supports most OLE features it may not support in-place editing. Consult the server application's documentation for more information.

Applications that support in-place editing allow you to edit embedded objects without leaving the container application. When you select an embedded object that can be edited in place, the following happens:

- The selected object looks as though it is still embedded in the container application.
- The commands (except for the File and Window commands), icons, toolbars, and so on, change to that of the server application.
- Icons and toolbars from the server application appear inside the container application's window.

What happens during out-of-place editing
Applications that do not support in-place editing of embedded objects allow you to edit them out of place, in the server application. When you edit an object out of place, the following happens:

- The selected object opens in a new window of the server application.
- In the container application, the object is shaded.
- The object changes in the container application as you edit it in the server application. In some applications, there is a short delay.

When you have finished editing the object, choose File - Exit & Return to exit the server application and update the object in the container application. If you want to update the object in the container application without leaving the server application, use File - Update, which is available in some applications.

{button ,AL(`H_EDITING_AN_EMBEDDED_OBJECT_STEPS',1)} Go to procedure

Dragging a range to the desktop

You can drag a 1-2-3 range to the desktop to create a scrap, which is a 1-2-3 OLE object with the desktop as its container. This can be useful, for example, for saving part of a file without using the File - Save command.

1. Size the 1-2-3 window so that the desktop is visible.
2. Select a range.
3. Position the mouse pointer on the border of the range so that the pointer changes to a hand.

4. Drag the range to the desktop.

The object appears as an icon with a name beginning with "Workbook Scrap" and followed by characters taken from the first row of the cells you selected in 1-2-3.

You can double-click the icon to open the range in 1-2-3.

{button ,AL(`H_EMBEDDED_OBJECTS_OVER;H_CREATING_AN_EMBEDDED_OBJECT_STEPS;H_USING_DRAG_AND_DROP_TO_EMBED_AN_OBJECT_STEPS;H_EMBEDDING_AN_EXISTING_OBJECT_STEPS;',0)} See related topics

Installing Help on LotusScript

Help on LotusScript is not automatically installed when you install 1-2-3. To install the LotusScript Help files, you must use a customized install.

Tip Print this topic so you can refer to these instructions while running Install. (Install requires that you exit from 1-2-3 if it is open.)

1. Insert the 1-2-3 or SmartSuite Install CD-ROM or first disk in the disk drive.

   If you install 1-2-3 over a network, open the directory containing the Install program.
2. Choose Start - Run, type *x*:\install.exe (where *x* is the drive containing the Install disk), and click OK.

   The installation program begins. Answer all initial questions asked.
3. In the Install Options dialog box, select "Customize features - Manual install," and then click Next.
4. In the "Select 1-2-3 Features to Customize" dialog box, select 1-2-3 and click Customize.
5. Click the Help and Samples tab, and select "1-2-3 LotusScript Help."
6. Deselect all other choices from all other tabs and then click OK.
7. In the "Select 1-2-3 Features to Customize" dialog box, select Approach and click Customize.
8. Deselect all choices from all tabs and then click OK.

   Note Deselecting Approach options prevents you from installing or reinstalling Approach program files.
9. Click Next to continue, finish answering all other installation questions, and then click Yes to copy your files.

If you need additional Help while installing the files, click Help in the Install dialog boxes.

Overview: Using LotusScript

LotusScript is a structured programming language that lets you automate tasks in 1-2-3, as well as customize Lotus products and work with them more effectively.

Because LotusScript uses the same development environment as other SmartSuite applications and Lotus Notes, you can create, debug, and run scripts in 1-2-3 and across other applications such as Freelance Graphics, Word Pro, and Lotus Notes. LotusScript is compatible with Visual Basic.

Accessing LotusScript Help

Help on LotusScript is not automatically installed by the Install program. To install the LotusScript Help files, you must use a customized install. For details, see Installing Help on LotusScript.

Once you install LotusScript Help, you can click the topics below for more information:

Details: Recording a script

Actions you cannot record
1-2-3 does not record any of the following:

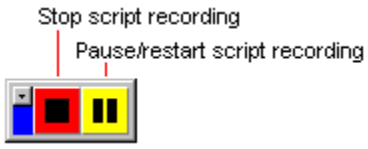
- Macro commands
- Keystrokes and mouse actions you perform in the Script Editor, Script Debugger, or Dialog Editor
- Keystrokes and mouse actions you perform while a script is running

Naming scripts
You must specify a name for the script in the "Script name" box. If you do not specify a name for the script, you cannot continue.

The name you give a script must be a valid LotusScript subroutine name.

Using the recording controls
When you click Record in the Record Script dialog box, 1-2-3 displays recording controls you can use to stop, pause, and restart recording.

Click the red Stop button to stop recording and display the Script Editor.



Click the yellow Pause button to temporarilty stop recording. To resume recording, click the Pause button again.

You can move the recording controls by dragging them.

Storing recorded scripts
You can store the recorded script in any active workbook. Select an active workbook from the list under "Record script into."

Related SmartIcons


Stops recording


Runs a script


Displays the Script Editor

{button ,AL(`H_123_RECORDING_A_SCRIPT_STEPS',1)} Go to procedure

Details: Running a script

Other ways to run a script

To attach a script to the Actions menu, or to assign a script to a keyboard shortcut, choose Edit - Scripts & Macros - Global Script Options.

To run a script that is attached to the Actions menu, choose Actions and then choose the name of the script you want to run.

To run a script from a keyboard shortcut, press the keyboard shortcut assigned to the script. For example, to run a script named Int_Rates that has been assigned to the keyboard shortcut CTRL+I, press CTRL+I.

Using 1-2-3 while a script is running

While a script is running, you can't do anything else in 1-2-3 unless the script contains a Yield statement.

Related SmartIcons

Records a script

Stops recording a script

Displays the Script Editor

{button ,AL(`H_123_RUNNING_A_SCRIPT_STEPS',1)} Go to procedure

{button ,AL(`H_123_CREATING_A_BUTTON_STEPS;LSAZ_YIELD_FUNCTION_AND_STATEMENT;H_123_SETTING_GLOBAL_SCRIPT_OPTIONS_STEPS',0)} See related topics

Details: Setting global script options

Assigning scripts to the Actions menu
Keep the following in mind when you attach scripts to the Actions menu:

- A script appears on the Actions menu only when the workbook it is stored in is in memory.
- When you highlight the command in the Actions menu, the corresponding Help text appears in the title bar.
- You can attach only Subs that have no parameters to the Actions menu.
- If you delete a script in the Script Editor, 1-2-3 automatically removes the entry from the Actions menu and deletes the keyboard shortcut assigned to it.
- If you make any changes to a script in the Script Editor, 1-2-3 checks to see if it is still valid for Actions menu assignment. If the script is invalid, 1-2-3 automatically removes the entry from the Actions menu.

  For example if you add parameters to a global sub that appears on the Actions menu, 1-2-3 automatically removes the sub from the Actions menu.

Assigning scripts to keyboard shortcuts
Keep the following in mind when you attach scripts to keyboard shortcuts::

- 1-2-3 stores keyboard shortcuts with the workbook their corresponding scripts are stored in. Keyboard shortcuts are enabled only when the workbook they are stored in is the current workbook.
- Keyboard shortcuts you assign to scripts take precedence over built-in 1-2-3 keyboard shortcuts. For example, in 1-2-3, Ctrl+X is the keyboard shortcut that cuts the current selection to the Clipboard. However, if you assign a script to Ctrl+X, pressing Ctrl+X runs the script instead of cutting the current selection.
- You can only specify letters as shortcut keys. Do not use numbers, spaces, or punctuation characters.
- If you try to assign a script to a keyboard shortcut that is already assigned to a macro or another script, 1-2-3 displays a message that lets you cancel or continue the assignment.
  - If you choose to continue, and the keyboard shortcut is already assigned to a macro, the keyboard shortcut takes precedence over the backslash macro name. When you press the keyboard shortcut, 1-2-3 runs the script, not the macro.
  - If the keyboard shortcut is already assigned to a script, do not assign it to another script. Unexpected results may occur when you press a keyboard shortcut that is assigned to more than one script.

Assigning scripts to both menus and keyboard shortcuts
You can assign a script to both the Actions menu and a keyboard shortcut.

{button ,AL(`H_123_SETTING_GLOBAL_SCRIPT_OPTIONS_STEPS',1)} Go to procedure

Details: Turning recording off

Other ways to turn recording off
If the Script Editor is open, you can turn recording off by choosing Script - Stop Recording from the Script Editor main menu.

Related SmartIcons

Records a script

{bmlsstartq.bmp} Turns recording off

{button ,AL(`H_123_TURNING_RECORDING_OFF_STEPS',1)} Go to procedure

Recording a script

You can record keystrokes and mouse actions into a script.

1. Choose Edit - Scripts & Macros - Record Script.

2. Type a name in the "Script name" box.
3. Select a workbook in which to store the recorded script.
4. Click Record.
5. Perform the task you want to record.
6. To stop recording and display the recorded script in the Script Editor, choose Edit - Scripts & Macros - Stop Recording.

{button ,AL(`H_123_RECORDING_A_SCRIPT_DETAILS',1)} See details

{button ,AL(`H_123_TURNING_RECORDING_OFF_STEPS;H_123_RUNNING_A_SCRIPT_STEPS;',0)} See related topics

Running a script

Follow these steps to run a script from the Run Scripts & Macros dialog box.

1. Choose Edit - Scripts & Macros - Run.

2. Select the "Script" option.
3. Select the name of a script to run from the "Script name" list.
4. If the script you want to run is not listed, select the name of another active file from the "From" box.
5. Click Run.

{button ,AL(`H_123_RUNNING_A_SCRIPT_DETAILS',1)} See details

{button ,AL(`H_RUNNING_A_MACRO_STEPS;H_123_RUNNING_A_SCRIPT_STEPS;H_123_SETTING_GLOBAL_OPTIONS_STEPS;H_123_RECORDING_A_SCRIPT_STEPS;',0)} See related topics

Setting global script options

You can make it easier for users to run a script by attaching it to the Actions menu or to a keyboard shortcut.

1. Choose Edit - Scripts & Macros - Global Script Options.
2. Select the name of a script to run from the "Scripts" list.
3. If the script you want to edit is not listed, select the name of another active file from the "Edit options for script from" list.
4. Click "Edit Options."
5. To attach the script to the Actions menu, enter the name of the command you want to run the script in the "Menu command on Actions menu" box.
6. (Optional) Enter a description of the script in the "Help text for menu command" box.
7. To assign the script to a keyboard shortcut, enter a letter in the "Ctrl+" box.
8. Click OK.

{button ,AL(`H_123_SETTING_GLOBAL_SCRIPT_OPTIONS_DETAILS',1)} See details
{button ,AL(`H_ACTIONS_MENU_REF;H_123_RUNNING_A_SCRIPT_STEPS',0)} See related topics

Turning recording off

To turn recording off when you finish performing the task you want to record choose Edit - Script & Macros - Stop Recording.

{button ,AL(`H_123_TURNING_RECORDING_OFF_DETAILS',1)} See details

{button ,AL(`H_123_RECORDING_A_SCRIPT_STEPS',0)} See related topics

Overview: Info components

Info components store information about the current 1-2-3 session.

For example, Worksheet-Background-Color info component stores the number that identifies the color of the current worksheet.

Types of info components

There are three types of info component values: Number, Text, and Range.

- For Number, use a numeric formula, or the range name or address of a cell that contains a number or numeric formula.
- For Text, use any text enclosed in " " (quotation marks), a text formula, or the range name or address of a cell that contains a label or text formula.

  For some Text info components, you can specify any text. In this case, you want 1-2-3 to use the text literally, that is, exactly as you specify it.

  For other Text info components, you must use specific text. For example, the Print-Grid-Lines Info component specifies whether to print grid lines. The value of Print-Grid-Lines can be yes or no.
- For Range, use a range name or address, or any formula that evaluates to a range name or address.

Using info components

- In some macro commands, when you omit an optional argument, 1-2-3 uses the current value of an info component in place of the omitted argument.

  For example, if you omit the *range* argument in {SORT}, 1-2-3 sorts the data in the range specified by the Data-Sort-Range info component.
- You can set an info component to a particular value by using the {SET} macro command.

  For example, {SET "worksheet-format";"currency"} sets the default number format to Currency.

  Note Changing an info Component value does not cause 1-2-3 to recalculate, even if you set recalculation to Automatic.
- You can find out the value of an info component by using @INFO.

  For example, @INFO("setup-undo") returns YES if Edit - Undo is on or NO if Edit - Undo is off.

{button ,AL(`H_M_INFO_FILE;H_M_INFO_MAPS;H_M_INFO_PRINT;H_M_INFO_PRINTER;H_M_INFO_SORT;H_M_INFO_US;H_M_INFO_WIN;H_M_INFO_SWD;H_M_INFO_OBSOLETE_OVER',0)} See related topics

File info components

Store information about a document.

Component name	Type	Definition
Document-Comments	Text	Comments about the file, up to 256 characters
Document-Keywords	Text	File keywords, up to 256 characters
Document-Revisions	Text	Notes about file revisions, up to 512 characters
Document-Subject	Text	Subject of the file, up to 256 characters
Document-Title	Text	Title of the file, up to 256 characters
File-Reserve-Automatically	manual, automatic	Whether to ask for the file reservation automatically when opening a file, or to ask for it manually

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{button ,AL(`H_M_INFO_OBSOLETE_OVER;H_M_INFO_C',0)} See related topics

Mapping info components

Store information about automatic or manual redrawing of maps.

Component name	Type	Definition
Map-Draw	automatic, manual	Whether to redraw maps automatically when data in the data range changes or to redraw them manually

---

{button ,AL(`H_M_INFO_OBSOLETE_OVER;H_M_INFO_C',0)} See related topics

Print info components

Store information about print settings. The info components for printing correspond to the arguments of the {PRINT} macro command.

Component name	Type	Definition
Print-Beginning-Page-Number	Number	Page number with which to start numbering in headers and footer
Print-Centered	horizontal, vertical, both, clear	Centers a print range on the page
Print-Drawn-Objects	no, yes	Whether to print charts and other graphic objects
Print-Fit-Page	no, yes	Whether to shrink what you print to fit a single page
Print-Footer-Center-Text	Text	Center text in footer
Print-Footer-Left-Text	Text	Left text in footer
Print-Footer-Right-Text	Text	Right text in footer
Print-Grid-Lines	no, yes	Whether to print grid lines
Print-Header-Center-Text	Text	Center text in header
Print-Header-Left-Text	Text	Left text in header
Print-Header-Right-Text	Text	Right text in header
Print-Margin-Bottom	Number	Bottom margin height, in inches
Print-Margin-Left	Number	Left margin width, in inches
Print-Margin-Right	Number	Right margin width, in inches
Print-Margin-Top	Number	Top margin height, in inches
Print-Orientation	landscape, portrait	Whether to print in portrait or landscape mode
Print-Range	Range or Collection	Range or collection to print
Print-Size	actual, fit-all, fit-columns, fit-rows, fill-page, fill-page-in-proportion	What type of print compression, if any, to use
Print-Size-Manual	Number	Manually specifies a print compression percentage
Print-Titles-Clear	columns, rows	Clears row or column titles
Print-Titles-Column-Range	Range	Range that contains column titles
Print-Titles-Row-Range	Range	Range that contains row titles
Print-Worksheet-Frame	no, yes	Whether to print the sheet frame

---

{button ,AL(`H_M_INFO_C;H_M_INFO_OBSOLETE_OVER',0)} See related topics

Printer Setup info components

Store information about a printer's properties.

Component name	Type	Definition
Printer-Setup-Bins	Text	Default paper bin from the Paper Source box in your printer's Properties dialog box
Printer-Setup-Copies	Number	Number of copies to print
Printer-Setup-Name	Text	Name of a printer
Printer-Setup-Paperlength	Number	The paper length, in either inches or millimeters; overrides Printer-Setup-Papersize
Printer-Setup-Paperwidth	Number	The paper width, in either inches or millimeters; overrides Printer-Setup-Papersize
Printer-Setup-Papersize	Text	Paper size from the Paper Size list in your printer's Properties dialog box
Printer-Setup-Quality	high, medium, low, draft	Print resolution

---

{button ,AL(`H_M_INFO_C;H_M_INFO_OBSOLETE_OVER',0)} See related topics

Sort info components

Store information about a database sort. The info components for sorting correspond to the arguments of the {SORT} and {SORT-KEY-DEFINE} macro commands.

Component name	Type	Definition
Data-Sort-Direction[*n*]	descend, ascend	Direction in which to sort the data according to Data-Sort-Key[*n*]
Data-Sort-Key[*n*]	Range	Contains *n*th sort key
Data-Sort-Range	Range	Contains data you want to sort

Note *n* is a value from 1 through 255 that specifies a sort key or sort direction.

{button ,AL(`H_M_INFO_C;H_M_INFO_OBSOLETE_OVER',0)} See related topics

User Setup info components

Store information about settings that affect the display and behavior of 1-2-3 in the current and future sessions.

Component name	Type	Definition
Setup-Autoexec	no, yes	Whether to run autoexecute macros (\0 macros)
Setup-Beep	no, yes	Whether to beep on error
Setup-Drag-And-Drop	no, yes	Whether to use drag and drop
Setup-File-Link-Update	manual, automatic	Whether to update file links manually or automatically
Setup-International-Currency-Default	Text	Default currency format
Setup-International-Currency-Position	prefix, suffix	Whether the currency symbol appears before or after the number
Setup-International-Currency-Symbol	Text	Text for the currency symbol
Setup-International-Negative-Values	parentheses, minus-sign	Whether negative numbers appear in parentheses or with a minus sign
Setup-International-Text	country, international	Sets the character translation table that 1-2-3 uses when combining and creating text files
Setup-Recalculate	manual, automatic	How 1-2-3 recalculates formulas
Setup-Recalculate-Iterations	Number	Number of recalculation iterations (from 1 through 50)
Setup-Recalculate-Order	natural, columns, rows	Formula recalculation order
Setup-Recent-Files-Number	Number	Number of recent files to show in the File menu (from 0 through 5)
Setup-Skip-Smartmasters	no, yes	Whether to display the New File dialog box when starting 1-2-3
Setup-Skip-Welcome	no, yes	Whether to display the Welcome dialog box when starting 1-2-3
Setup-Undo	no, yes	Whether to enable Undo
Setup-Worksheet-Directory	Text	Sets the default directory

{button ,AL(`H_M_INFO_C;H_M_INFO_OBSOLETE_OVER',0)} See related topics

Window info components

Store information about view preferences and various mouse actions.

Component name	Type	Definition
Window-Custom-Zoom	Number	Sets the percent for View Zoom to Custom Level for the current file
Window-Display-Drawn-Objects	no, yes	Whether to display charts and other graphic objects in the current file
Window-Display-Edit-Line	no, yes	Whether to display the edit line in 1-2-3
Window-Display-Frame	no, yes	Whether to display the sheet frame in the current file
Window-Display-Grid-Lines	no, yes	Whether to display grid lines in the current file
Window-Display-Page-Breaks	no, yes	Whether to display page breaks in the current file
Window-Display-Scroll-Bars	no, yes	Whether to display scroll bars in the current file
Window-Display-SmartIcons	no, yes	Whether to display SmartIcons in 1-2-3
Window-Display-Status-Bar	no, yes	Whether to display the status bar in 1-2-3
Window-Display-Tabs	no, yes	Whether to display sheet tabs in the current file
Window-Height	Number	Sets the height of the current window, in pixels
Window-Split	clear, horizontal, vertical	How to split the current window
Window-Split-Height	Number	Sets the height of the current pane, in pixels
Window-Split-Synchronize	no, yes	Whether to synchronize scrolling in panes
Window-Split-Width	Number	Sets the width of the current pane, in pixels
Window-Width	Number	Sets the width of the current window, in pixels
Window-X-Position	Number	Sets the horizontal position, in pixels, measured from the left side of the 1-2-3 window to the left side of the current window
Window-Y-Position	Number	Sets the vertical position, in pixels, measured from the top of the 1-2-3 window to the top of the current window

{button ,AL(`H_M_INFO_C;H_M_INFO_OBSOLETE_OVER',0)} See related topics

Worksheet Defaults info components

Store information about default settings.

Component name	Type	Definition
Worksheet-Align-Text	left, right, center	How to align data in a cell horizontally
Worksheet-Background-Color	Number	Default cell background color (0 through 255)
Worksheet-Column-Width	Number	Default column width
Worksheet-Display- Windows-Defaults	no, yes	Controls whether 1-2-3 uses Windows default colors for display; this setting has no effect on your print colors, which always come from the sheet's text and background colors
Worksheet-Font	Text	Default typeface
Worksheet-Font-Size	Number	Default point size
Worksheet-Format	comma, currency, fixed, general, label, percent, scientific, text, date-short-international, date-long-international, dd-mmm, dd-mmm-yy, mmm-yy, hh:mm am/pm, hh:mm:ss am/pm, time-long-international, time-short-international	Default number format
Worksheet-Format-Color-Negatives	no, yes	Whether to display negative numbers in red
Worksheet-Format-Decimals	Number	Default number of decimal places
Worksheet-Format-Display-Zeros	show, blank	Whether to display zeros in cells that contain the number 0 or formulas that evaluate to 0
Worksheet-Format-Parentheses	no, yes	Whether to enclose all new values in parentheses
Worksheet-Format-Zero-Text	Text	Label to display in place of zeros in cells that contain the number 0 or formulas that evaluate to 0
Worksheet-Grid-Color	Number	Default grid-line color (0 through 255)
Worksheet-Group-Sheets	no, yes	Whether to turn Group mode on or off for the current file
Worksheet-Row-Height	Number	Default row height
Worksheet-Tab-Color	Number	Color of the tab for the current sheet
Worksheet-Text-Color	Number	Default text color (0 through 255)

Note Setting the default text or background color for the current sheet also sets the Worksheet-Display-Windows-Defaults component to "no".

If you want to write a macro that displays the Windows default colors, but prints in another color, set the Worksheet-Format-Text and Worksheet-Format-Background components first, and then set the Worksheet-Display-Windows-Defaults component to "yes".

{button ,AL(`H_M_INFO_C;H_M_INFO_OBSOLETE_OVER',0)} See related topics

What's different in info components

Some info components work differently in 1-2-3 97 than in previous releases of 1-2-3, as described below.

Read-only info components

The following info components are read-only in 1-2-3 97. You can use them with @INFO to obtain information about a 1-2-3 session, but you cannot use them with the {SET} command to change settings. Using these info components with the {SET} command has no effect in 1-2-3 97.

Setup-International-Currency-Default
Setup-International-Currency-Position
Setup-International-Currency-Symbol
Setup-International-Negative-Values

Obsolete info components

The following info components are not supported in 1-2-3 97. Using these info components with @INFO causes the @INFO formula to evaluate to NA. Using these info components with the {SET} command has no effect in 1-2-3 97.

Setup-Autoformat
Setup-Autosave
Setup-Autosave-Interval
Setup-International-Currency-Display
Setup-International-Date
Setup-International-Separators
Setup-International-Time
Setup-International-WK1
Window-Display-Frame-Type

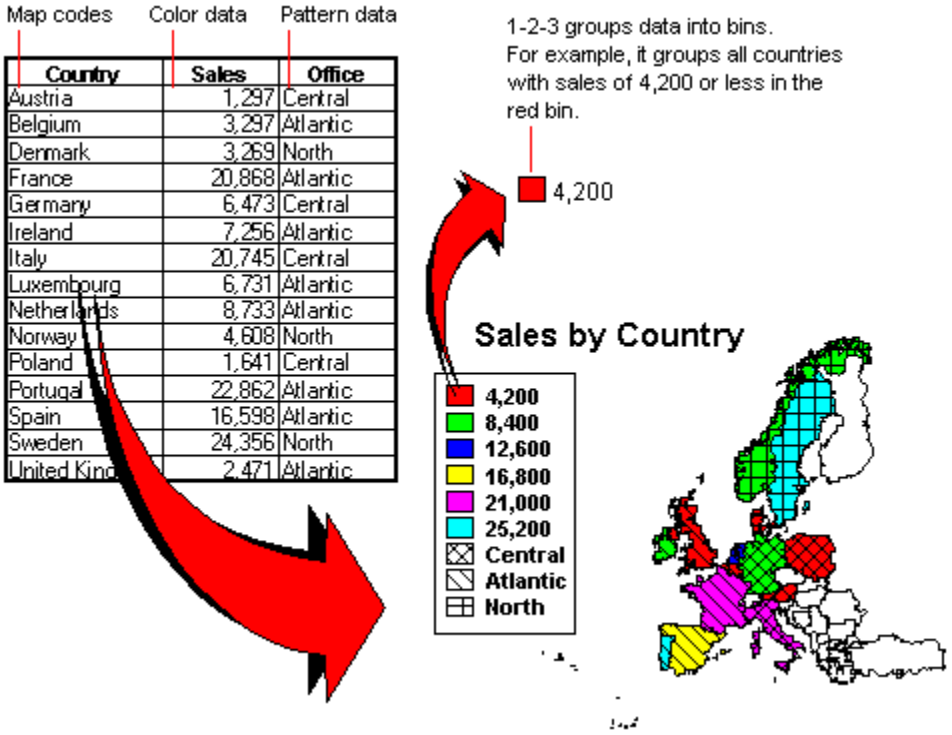
{button ,AL(`H_M_INFO_C',0)} See related topics

Overview: Maps

A map links sheet data to a geographic map. For example, you can use a map to display sales information for each country in the world by linking sales data in the sheet to a map of the world.

As when you create a chart, 1-2-3 links data in your sheet to a graphical representation of that data when you create a map. Just as you can create a bar chart to illustrate a range of sheet values, you can create a map that relates data in a range to recognizable geographic regions such as states or countries.

Maps display data according to a set of predefined geographic regions, which depend on the map you use. The map groups data into up to 12 categories, and shows each category with a separate color or pattern on the map.



Data is mapped as color or pattern

If you are mapping only one set, or range, of data, 1-2-3 converts each value to a color. If you are mapping more than one range of data, the first range of numerical data appears as colors applied to map regions. 1-2-3 can apply up to six colors to the regions of the map.

The second range of data appears as patterns applied to the same map regions. 1-2-3 can apply up to six patterns to the regions of the map.

You are not limited to six map regions in a range. When a range contains more than six regions, 1-2-3 groups the data into categories, called bins. Each bin appears as a color or pattern in the map.

Pin characters mark specific locations

You can include another set of data for a map region that lets you mark a location in the map region with a symbol, like P, or a label, like "World Headquarters." These symbols or labels are called pin characters.

You can define the color of a pin character in the range of data.

Additional information

For additional information about map data and mapping software, contact:

ESRI
380 New York Street
Redlands, CA 92373-8100
1-800-GIS-XPRT (1-800-447-9778)
1-909-793-2853 extension 1235
www.esri.com

{button ,AL(`H_RANGE_OF_MAP_DATA_EX',1)} See example

{button ,AL(`H_ADDING_PIN_CHARACTERS_TO_A_MAP_STEPS;H_CHANGING_MAP_APPEARANCE_OVER;H_CREATING_A_MAP_STEPS;H_MODIFYING_MAPS_OVER;H_SETTING_UP_MAP_DATA_STEPS;H_CHECKING_MAP_REGIONS_STEPS',0)} See related topics

Setting up map data

You specify the data you want to map in columns. Each column can contain only one kind of data: codes, labels, values, pin characters, pin coordinates, or color values for pin characters.

1. Enter the region names or map codes in the leftmost column.
2. Enter the data for each region name or code in the next column(s).
3. Enter the pin character, latitude, longitude, and (optionally) color in subsequent columns.

{button ,AL(`H_SETTING_UP_MAP_DATA_DETAILS',1)} See details

{button ,AL(`H_RANGE_OF_MAP_DATA_EX',1)} See example

{button ,AL(`;H_ADDING_PIN_CHARACTERS_TO_A_MAP_STEPS;H_CREATING_A_MAP_STEPS;H_MAPS_OVER;',0)} See related topics

Details: Setting up map data

Entering map codes
The left column of the selected range must contain the region name or map code for each location. For example, you can use either the region name "Massachusetts" or the map code "MA" to represent that U.S. state; similarly, you can use either the region name "Tokyo" or the map code "13" to represent that Japanese prefecture. 1-2-3 uses these region names and map codes to link regions in the map to rows of data in the range.

Entering data for each region
It's best to specify the data you want to map in the column(s) immediately to the right of the map codes. This data can be labels or values.

Entering pin characters
Pin characters can highlight particular areas of a map. You can specify pin characters before you first create the map, or you can add them later. You can specify either a label or a graphic symbol as a pin character. You must also specify the latitude and longitude at which you want the pin character to appear.

{button ,AL(`H_SETTING_UP_MAP_DATA_STEPS',1)} Go to procedure
{button ,AL(`H_RANGE_OF_MAP_DATA_EX',1)} See example

Creating a map

Before you can create a map, you should set up data in a range containing at least two columns.

Show me a demo

1. Set up the range of data you want to map.
2. Select the range containing the map data, or select a single cell within the range.

   Do not include column headings in the range you select.
3. Choose Create - Map.

4. Click the sheet where you want the top left corner of the map to appear.

   If 1-2-3 cannot determine what type of map to use, the Map Types dialog box appears. Select a map type and click OK.

   If 1-2-3 cannot identify a region you specified, the Region Check dialog box appears so you can reconcile the region name with the official 1-2-3 list of names and codes.

{button ,AL(`H_CREATING_A_MAP_DETAILS',1)} See details

{button ,AL(`H_RANGE_OF_MAP_DATA_EX',1)} See example

{button ,AL(`;H_ADDING_PIN_CHARACTERS_TO_A_MAP_STEPS;H_MAPS_OVER;',0)} See related topics

Details: Creating a map

Specifying the map location

You can click a single cell to position the map in the sheet, or click and drag a rectangle.

- If you click a single cell, 1-2-3 creates a default-sized map. The upper left corner of the map appears in the cell you clicked.
- If you click and drag, 1-2-3 displays a bounding box that lets you position and size the map. The map appears when you release the mouse button, and the bounding box becomes the map frame. The map plot area is sized within the frame as large as possible, while maintaining the proper aspect ratio for the map and allowing space for the title and legend.

Changing how 1-2-3 links data to the map

You can change the way that 1-2-3 links data to the map by using the Ranges, Colors, or Patterns tabs on the InfoBox for maps. For example, you can specify that 1-2-3 map labels, instead of values, as colors; and values, instead of labels, as patterns.

{button ,AL(`H_CREATING_A_MAP_STEPS',1)} Go to procedure

{button ,AL(`H_RANGE_OF_MAP_DATA_EX',1)} See example

Example: Setting up map data and creating a map

A map lets you represent data in your sheet geographically. You can create a map to relate data in a range to recognizable geographic regions such as states or countries.

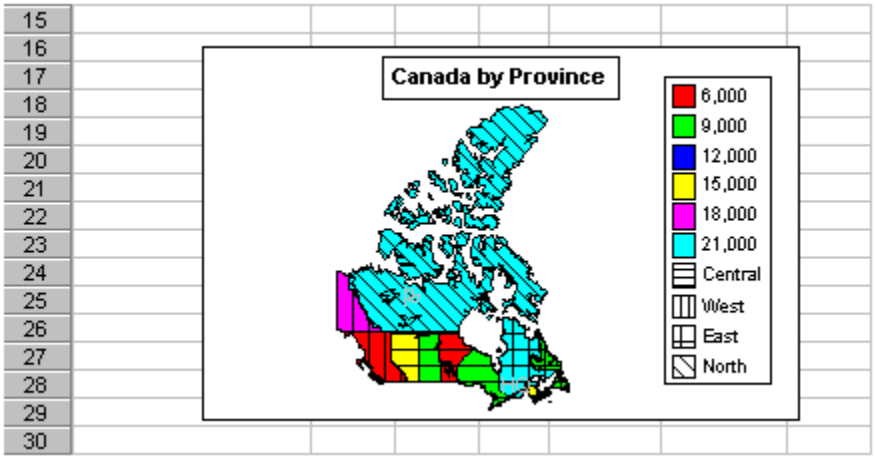
Specifying the map data

Suppose you are the sales manager for Caleb's Canoes, an outdoor adventure company. You want to show sales figures for canoes in Canada. First, list the Canadian provinces in which the canoes are sold in column A, and the amounts sold in column B. Then, list the region to which each office belongs in column C. Finally, specify pin character information in columns D, E, F, and G to locate the corporate headquarters office and the office that sold the most canoes.

	A	B	C	D	E	F	G
1	**Provinces**	**Sales**	**Area**	**Flag**	**Location**		
2					*Latitude*	*Longitude*	*Color*
3	Alberta	13,910	Central				
4	British Columbia	3,297	West				
5	Manitoba	3,269	Central				
6	New Brunswick	14,462	East				
7	Newfoundland	6,473	East				
8	Nova Scotia	7,256	East				
9	North West Territories	20,745	North				
10	Ontario	6,731	Central		65.46	-111.97	60
11	Prince Edward Island	5,672	East				
12	Quebec	19,123	East	HQ	47.66	-72.19	60
13	Saskatchewan	8,733	Central				
14	Yukon	16,598	West				

Creating the map

Once you have entered the data, you can create the map.



Interpreting the map

The map reflects the data you entered:

- Provinces (column A) -- Because you entered only Canadian provinces, 1-2-3 97 shows a map of Canada, and distinguishes its provinces.
- Sales (column B) -- This data is represented in the map by color. 1-2-3 grouped the data into six categories, bins, and then colored each country according to bin. For example, every province that sold 6,000 or fewer canoes is colored red.
- Area (column C) -- This data is represented in the map by pattern. For example, 1-2-3 shows all provinces belonging to the Western area with straight vertical lines.
- Flag and Location (columns D-G) -- The pin characters you specify in column D appear in the location you specify in columns E and F. You can determine the color of the pin character by entering a value in column G.

In addition to the data you enter, 1-2-3 provides some additional information to help you interpret the map:

- Title -- 1-2-3 assigns a default title to the map. You can easily change this title to be more meaningful to you.
- Legend -- The legend explains the colors and patterns that appear in the map. You can change the colors,

patterns, and legend labels.

{button ,AL(`H_SETTING_UP_MAP_DATA_STEPS;H_CREATING_A_MAP_STEPS;',0)} See related topics

Reconciling map region names

You can change the unrecognized region name or code to one that 1-2-3 recognizes, add the name or code as a custom name, or not include the unrecognized region in the map.

1. In the "Region list type" list, select the kind of list you want to work with.
2. In the "Known map region" list, select the recognized name or code that corresponds to the unrecognized label in the map data range.
3. Select either "Replace in cell with" or "Add as Custom Name for."
4. Click OK to implement your choice, or click Skip or Skip All if you don't want to include the unrecognized region in the map.

1-2-3 repeats this procedure until all unknown labels in the map data range have been replaced, skipped, or defined as custom names.

{button ,AL(`H_CHECKING_MAP_REGIONS_DETAILS',1)} See details

{button ,AL(`;H_MAPS_OVER;H_CREATING_A_MAP_STEPS;H_SETTING_UP_MAP_DATA_STEPS',0)} See related topics

Details: Reconciling map region names

Recognizing standard region names or codes

If you specify a map region name or code that 1-2-3 doesn't recognize, you must make some choices in the Region Check dialog box before 1-2-3 can create the map. If you decide not to create the map now, click Cancel.

When you choose Map - Create, 1-2-3 first reads each label in the leftmost column of the map data range and compares it to the list of region names, codes, and custom names for the map type. When it encounters a name or code it does not recognize, 1-2-3 displays the Region Check dialog box and lists the first unknown map region in "Unknown map region."

Options: Region Check dialog box

Using Map -- Specifies the type of map being created. Either 1-2-3 automatically determined the map type based on the region names or codes you entered, or you selected the map type on the Map Types dialog box.

Checking -- Specifies the cell address of the region name or code that 1-2-3 could not recognize.

Unknown map region -- Specifies the region name or code that 1-2-3 could not recognize.

Replace in cell with -- Removes the label in the map data range and replaces it with the item you selected from the "Known map region" list.

Add as Custom Name for -- Defines the label in the map data range as an acceptable substitute for the item you selected from the "Known map region" list.

Known map region -- Lists the region names, region codes, or custom names that 1-2-3 recognizes for the specified map type.

Region list type -- Lets you select the type of list you want to work with:

- "Names" lists conventional geopolitical names of map regions, like India and Finland.
- "Codes" lists map codes.
- "Custom Names" lists labels that you previously defined as acceptable substitutes for the recognized names or codes of regions in this map type. For example, you may prefer to use the name Nippon instead of Japan. When you link a custom name to a recognized name or code, 1-2-3 enters the substitute in the list of custom names for the map type and recognizes the substitute when you use it again.

{button ,AL(`H_CHECKING_MAP_REGIONS_STEPS',1)} Go to procedure

Adding pin characters to a map

You can include pin characters in maps to highlight locations or add more meaning to the map.

Adding pin characters before you create the map

1. Enter a symbol or label for the pin character in the column to the right of the map data.
2. Enter the latitude and longitude in the next two columns.
3. (Optional) Enter the value for the color in the next column.
4. Select this data when you create the map.

Adding pin characters after you create the map

1. Select the map for which you want to add the pin characters.
2. Choose Map - Ranges.

3. Enter the three-column range that includes the pin character information in the "Pin characters, latitude and longitude" box, or use the range selector to specify the range.

{button ,AL(`H_ADDING_PIN_CHARACTERS_TO_A_MAP_DETAILS',1)} See details

{button ,AL(`H_RANGE_OF_MAP_DATA_EX',1)} See example

{button ,AL(`;H_CREATING_A_MAP_STEPS;H_MAPS_OVER;H_MODIFYING_MAPS_OVER;H_SETTING_UP_MAP_DATA_STEPS',0)} See related topics

Details: Adding pin characters to a map

Specifying the pin character and color

Good sources of symbols to use for pin characters are the Wingdings or ZapfDingbats fonts. You can see the symbol in the available font in the Windows Character Map. To add a character to the 1-2-3 sheet, copy the character from the Character Map to the Clipboard, paste it into a cell, and apply the appropriate font.

Use numbers 0 through 240 to specify the pin character color. If you don't specify a color, the pin character will be black.

Determining latitude and longitude

To determine the latitude and longitude, right-click the mouse when the cursor is over the plot area. Hold the mouse button and move the pointer to the desired location. The region name, code, and coordinates appear in the sheet title bar. When you release the mouse button, you can copy the latitude and longitude coordinates from the pop-up menu.

What do negative coordinates mean?

The latitude coordinate is negative if the region you clicked is south of the equator. The longitude coordinate is negative if the region is west of the Greenwich meridian and east of the International Date Line.

For example, both coordinates are negative for locations in Chile. Both coordinates are positive for locations in Poland. For locations in Australia, however, the latitude is negative but the longitude is positive, since Australia is east of the Greenwich meridian and west of the International Date Line.

{button ,AL(`H_ADDING_PIN_CHARACTERS_TO_A_MAP_STEPS',1)} Go to procedure

{button ,AL(`H_RANGE_OF_MAP_DATA_EX',1)} See example

Overview: Changing map content

Once a map has been created, you can change its content.

For example, you can change the following aspects of a map's content:

- Map name
- Range assignments
- Legend labels
- Title
- Color or pattern bin values

You can also add overlays to a map, and redraw a map when data changes.

{button ,AL(`;H_ADDING_AN_OVERLAY_STEPS;H_CHANGING_COLOR_AND_PATTERN_BIN_VALUES_STEPS;H_CHANGING_MAP_APPEARANCE_OVER;H_CHANGING_RANGE_ASSIGNMENTS_STEPS;H_CHANGING_THE_LEGEND_LABELS_STEPS;H_CHANGING_THE_TITLE_STEPS;H_MAPS_OVER;H_NAMING_A_MAP_STEPS;H_REDRAWING_MAPS_STEPS;H_REMOVING_AN_OVERLAY_STEPS',0)} See related topics

Naming a map

The default name of the map appears when the map is first drawn. You can change the name to be more meaningful to you, and to help you find the map using Edit - Go To.

1. Select the map for which you want to change the name.
2. Choose Map - Map Properties.

3. Click the Basics tab in the InfoBox.

The default map name is shown.

4. Enter a new name.

   Note When you rename a map, you must use the same naming conventions as for naming a range. The only exception to this is that a map name can be up to 64 characters long.

5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_MODIFYING_MAPS_OVER;H_NAMING_CONVENTIONS_OVER',0)} See related topics

Changing range assignments

You can change the range specified for region names or codes, colors, patterns, or pin characters.

1. Select the map for which you want to change the range assignments.
2. Choose Map - Ranges.

3. Enter the range you want to assign in the appropriate option box, or use the range selector to specify the range.

   If 1-2-3 cannot identify a region you specified, the Region Check dialog box appears so you can reconcile the region name with the official 1-2-3 list of names and codes.
4. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_RANGE_ASSIGNMENTS_DETAILS',1)} See details

{button ,AL(`H_MAPS_OVER;H_SETTING_UP_MAP_DATA_STEPS',0)} See related topics

Details: Changing range assignments
Ranges that have already been specified are shown. If a range is blank, that type of data is not used in the map.

Options: InfoBox for maps (Ranges tab)
Map region names or codes -- Displays the data range currently specified for the region names or codes.

Data to map with colors -- Displays the data range currently specified to be mapped with colors.

Data to map with patterns -- Displays the data range currently specified to be mapped with patterns.

Pin characters, latitude and longitude -- Displays the data range currently specified for the pin characters. This range must be at least three columns wide.

{button ,AL(`H_CHANGING_RANGE_ASSIGNMENTS_STEPS',1)} Go to procedure

Changing the plot area

By default, 1-2-3 centers the plot area in the map frame. You can drag the plot area to any position or size, and you can rotate the plot area, within the map borders.

1. Select the map for which you want to change the plot area.
2. Choose Map - Plot.

3. Specify the options you want to change in the InfoBox.
4. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_THE_PLOT_AREA_DETAILS',1)} See details

{button ,AL(`;H_CHANGING_MAP_APPEARANCE_OVER',0)} See related topics

Details: Changing the plot area

Options: InfoBox for plots (Basics tab)
Maintain correct map dimensions -- Determines whether 1-2-3 automatically maintains the correct dimensions, or aspect ratio, of the map, even when you change the plot area. If this option is not selected, the dimensions may be distorted if you change the plot area. To redisplay a map with distorted dimensions correctly, select this option (default).

Plot position and size -- Respecifies the plot position and size. "Custom settings" is selected when the plot area has been moved or resized.

Misc -- Determines the rotation and zoom percentage of the plot area.

- Rotation -- Lets you specify the number of degrees by which to rotate the map For example, to rotate the map by 90°, enter 90.
- Zoom % -- Lets you specify the percentage to zoom in on the plot area.

Center -- Determines the latitude and longitude for the center of the plot area.

Related SmartIcons

 Decrease the display size of the map by 50% (zoom out)

 Increase the display size of the map by 100% (zoom in)

{button ,AL(`H_CHANGING_THE_PLOT_AREA_STEPS',1)} Go to procedure

Changing legend labels

You can change the text of each legend label, as well as where and how the legend displays. By default, the legend label is the number or string used to define the upper limit of a category, or bin.

1. Select the map for which you want to change the legend labels.
2. Choose Map - Color Bins, or Map - Pattern Bins.

   The legend labels currently specified for each bin are shown in the right-hand column of the InfoBox.
3. Change the specified legend label, or change the range that determines the legend label.
4. To change the position of the legend or to hide the color and/or the pattern legend, choose Map - Legend.

5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_THE_LEGEND_LABELS_DETAILS',1)} See details
{button ,AL(`H_MODIFYING_MAPS_OVER;H_MAPS_OVER',0)} See related topics

Details: Changing legend labels
You can change legend labels by changing the labels already specified, or by specifying a range that determines the labels.

Changing a specified legend label
To change a legend label that has already been specified, select "Manual" from the "Legend labels" list and enter the new label in the box that refers to the bin you want to change.

Specifying a range that determines the legend labels
To specify a range in the sheet that determines the legend labels, select "From Range" from the "Legend labels" list. Then, enter the range in the "Legends range" box at the bottom of the same column, or use the range selector to specify the range.

{button ,AL(`H_CHANGING_THE_LEGEND_LABELS_STEPS',1)} Go to procedure

Changing a map title

You can change the text and position of the map title, or hide the title.

1. Select the map for which you want to change the title.
2. Select Map - Title.

The specified title is shown in the InfoBox.

Tip You can also double-click the title and edit the text.

3. Change the specified title, or add another line to the title.
4. Change the position of the title, or hide it by deselecting "Show title."
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_THE_TITLE_DETAILS',1)} See details
{button ,AL(`;H_MODIFYING_MAPS_OVER',0)} See related topics

Details: Changing a map title

Specifying a new title in the sheet
You can also specify a new title for the map by selecting "Cell" on the Basics tab of the InfoBox for map titles. Then enter the cell coordinates, or use the range selector to specify the coordinates that contain the title.

Seeing the entire title
When you enter a new map title, you overwrite the old. Depending on the length of the new title, you may need to also change the point size of the title.

{button ,AL(`H_CHANGING_THE_TITLE_STEPS',1)} Go to procedure

Changing color or pattern bin values

You can change the values included in each category, or bin, that represents a map color or pattern. By default, the bin values used are computed from the data range you selected when you created the map.

1. Select the map for which you want to change the bin values.
2. Choose Map - Color Bins, or Map - Pattern Bins.

   The bin values for the currently specified colors or patterns are shown in the InfoBox.
3. Change the specified bin values, or change the range that determines the bin values.
4. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_COLOR_AND_PATTERN_BIN_VALUES_DETAILS',1)} See details
{button ,AL(`;H_MODIFYING_MAPS_OVER;H_MAPS_OVER;',0)} See related topics

Details: Changing color or pattern bin values
You can change the bin values for the map's colors and patterns by changing the values already specified, or by specifying a different range to determine the bin values.

How 1-2-3 assigns bin values
1-2-3 assigns bin values based on the number and types of data items that need to be mapped. 1-2-3 can create up to six color bins and six pattern bins. You can map either values or labels to either colors or patterns.

Number of items	Type	Bins
6 or less	Values	1 bin for each exact value
More than 6	Values	Groups into bins by upper limit
6 or less	Labels	1 bin for each label
More than 6	Labels	Bins created only for first 6 unique labels

Changing the specified bin values
To change a bin value that has already been specified, select "Manual" from the "Values" list, and enter the new bin value in the box next to the bin you want to change.

Changing the range that determines the bin values
To change a range in the sheet that determines the bin values, select "From Range" from the "Values" list. Then, enter the range in the "Values range" box at the bottom of the same column, or use the range selector to specify the range.

How 1-2-3 formats numbers
1-2-3 applies the number format of the first cell in the color range to the color bin values, and the format of the first cell in the pattern range to the pattern bin values.

{button ,AL(`H_CHANGING_COLOR_AND_PATTERN_BIN_VALUES_STEPS',1)} Go to procedure

Adding an overlay to a map

You can add an overlay to a map to provide a broader context or more detail to the presentation of the sheet data you're mapping.

1. Select the map to which you want to add an overlay.
2. Choose Map - Overlays.

3. Click Add in the InfoBox.

   The Add Overlay dialog box appears, showing all installed map files.
4. Click the name of the overlay you want to add.
5. Click Open.

   The selected overlay is added to the map, and the name of the overlay is listed in the InfoBox.
6. (Optional) Move, collapse, or close the InfoBox when you have added all the appropriate overlays.

{button ,AL(`H_ADDING_AN_OVERLAY_DETAILS',1)} See details

{button ,AL(`H_MODIFYING_MAPS_OVER;H_REMOVING_AN_OVERLAY_STEPS',0)} See related topics

Details: Adding an overlay to a map

Seeing the overlays

You can add several overlays to a map. Depending on the geographic position of the countries in the overlay in relation to the countries in the original map, the overlay countries may not appear in the plot area. To see the entire map and overlay, you might have to choose Map - Zoom Out.

Related SmartIcons

 Decrease the display size of the map by 50% (zoom out)

 Increase the display size of the map by 100% (zoom in)

{button ,AL(`H_ADDING_AN_OVERLAY_STEPS',1)} Go to procedure

{button ,AL(`H_CHANGING_THE_VIEW_SCALE_OF_MAPS_STEPS',0)} See related topics

Redrawing maps

You can specify whether to redraw each map automatically or manually.

Redrawing maps automatically

1. Select the map that you want automatically redrawn.
2. Choose Map - Map Properties.

3. Make sure "Redraw map automatically when data changes" is selected (the default setting).

Each time you change the data for this map, it will be automatically redrawn.

Redrawing maps manually

1. Select the map and choose Map - Map Properties.
2. Make sure "Redraw map automatically when data changes" is not selected.
3. (Optional) Move, collapse, or close the InfoBox.
4. Change the appropriate data in the map range.
5. Select the map.
6. Choose Map - Redraw.

{button ,AL(`H_REDRAWING_MAPS_DETAILS',1)} See details
{button ,AL(`;H_MODIFYING_MAPS_OVER',0)} See related topics

Details: Redrawing maps

Lessening the time needed to redraw maps
Maps are complex images that require the detailed drawing of many visual elements and sensitivity to changes in sheet data. Rendering a map that looks good and represents your data accurately can take time.

When you make changes to the data linked to maps, keep the following points in mind:

- Turning off "Redraw map automatically when the data changes" lets you decide when 1-2-3 can redraw a map.
- When you turn on "Redraw map automatically when the data changes," 1-2-3 redraws a map after each change you make to the map data. If you need to make several changes to the data, first turn off the automatic redraw option. After you make all the changes, choose Map - Redraw, and 1-2-3 redraws the map once to reflect all the changes.
- If you have more than one map linked to the same set of data, and "Redraw map automatically when the data changes" is on, 1-2-3 must redraw each map whenever you change the data. Once again, by turning off this option, you can reduce the interruption caused by the redrawing of maps.

Redrawing maps in 1-2-3 Release 5 files
When you open a 1-2-3 Release 5 workbook that contains maps set to manual redraw, each map is marked for manual redraw.

{button ,AL(`H_REDRAWING_MAPS_STEPS',1)} Go to procedure

Overview: Changing map appearance

Once a map has been created, you can change its appearance, including the location of some of its components. For example, you can change the colors and patterns displayed in the map, and move the legend to a different position.

You can zoom in on a portion of the map, or zoom out to see more of the entire map.

You can also group a map with another map or a different drawn object. Similarly, you can move a map to the front or back of a group of maps or other drawn objects.

Like other types of graphic objects, you can also change the text, borders, and fill characteristics of the map components.

{button ,AL(`H_CHANGING_THE_DATA_COLORS_STEPS;H_CHANGING_THE_VIEW_SCALE_OF_MAPS_STEPS;H_GROUPING_GRAPHICS_STEPS;H_FASTENING_GRAPHICS_STEPS;H_HIDING_OR_REDISPLAYING_GRAPHICS_STEPS;H_LOCKING_OR_UNLOCKING_GRAPHICS_STEPS;H_CHANGING_INTERIOR_COLOR_AND_PATTERN_STEPS;H_CHANGING_GRAPHICS_BORDERS_STEPS;H_CHANGING_THE_PLOT_AREA_STEPS;H_USING_DESIGNER_FRAMES_STEPS;H_CHANGING_TEXT_FORMAT_STEPS;H_CHANGING_THE_TITLE_STEPS;H_CHANGING_THE_LEGEND_LABELS_STEPS',0)} See related topics

Changing bin colors or patterns

You can change the colors or patterns used to map different data by selecting new colors or patterns, or by specifying a range in the sheet.

1. Select the map for which you want to change the colors or patterns.
2. Choose Map - Color Bins, or Map - Pattern Bins.

   The colors or patterns currently specified for each bin are shown in the left-hand column of the InfoBox.
3. Change the specified colors or patterns, or change the range that determines the colors or patterns.
4. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_THE_DATA_COLORS_DETAILS',1)} See details
{button ,AL(`H_CHANGING_MAP_APPEARANCE_OVER',0)} See related topics

Details: Changing bin colors or patterns
By default, the number specified in a bin is the highest number included in that bin.

Changing a specified color or pattern
To change a color that has already been specified, select "Manual" from the "Colors" list, click the bin color you want to change, and select a new color from the pop-up palette.

To change a pattern that has already been specified, select "Manual" from the "Patterns" list, click the bin pattern you want to change, and select a new pattern.

Specifying the range that determines a color or pattern
To specify a range in the sheet that determines the colors, select "From Range" from the "Colors" list. Then, enter the range in the "Colors range" box at the bottom of the same column, or use the range selector to specify the range. This range must contain values that correspond to the color palette.

To specify a range in the sheet that determines the patterns, select "From Range" from the "Patterns" list. Then, enter the range in the "Patterns range" box at the bottom of the same column, or use the range selector to specify the range. Valid values for this range are 0 through 6.

{button ,AL(`H_CHANGING_THE_DATA_COLORS_STEPS',1)} Go to procedure

Changing the zoom factor of maps

You can enlarge the map to view a portion of it in more detail, or shrink the map to see more of it or an overlay.

To take a closer look at a portion of the map, choose Map - Zoom In.

You can also hold CTRL while you drag a rectangle around an area, so as to exclude extraneous parts of the map and focus on a certain area of the map.

To see more of the map, choose Map - Zoom Out.

To display the map as it was when it was created, choose Map - Restore to original size.

Note When you use Map - Zoom In or Map - Zoom Out, the plot area changes by 50% of the current size. To specify how much you want to change the plot area, use the Zoom % option on the InfoBox for plots (Basics tab).

{button ,AL(`H_CHANGING_MAP_APPEARANCE_OVER',0)} See related topics

Removing an overlay from a map

You can remove an overlay that has been added to a map.

1. Select the map from which you want to remove an overlay.
2. Choose Map - Overlays.

A list of overlays that have been added to the current map is displayed in the InfoBox.

3. Click the name of the overlay you want to remove.
4. Click Remove.

{button ,AL(`H_ADDING_AN_OVERLAY_STEPS;H_MODIFYING_MAPS_OVER',0)} See related topics

1-2-3 menus and their functions

For information on the commands under each menu, highlight the menu name in 1-2-3 and press F1 (HELP).

File

Open, save, print, and close files; use Team tools to share information.

Edit

Rearrange data and objects, manage links, and create and edit scripts.

View

Control the display settings for the sheet and 1-2-3.

Create

Create sheets, objects, and @functions; embed data from other Windows applications.

Window

Control how 1-2-3 displays windows.

Help

Open 1-2-3 Help; press F1 (HELP) at any time for context-sensitive Help.

Range

Work with and analyze ranges of data.

Sheet

Work with sheets and outlines.

Drawing

Work with, arrange, and script drawn objects.

Chart

Set data ranges, change chart types, and enhance charts.

Map

Work with maps.

Query Table

Work with query tables.

OLE object

Work with and arrange embedded objects.

Preview

Zoom in or out, or manipulate the preview window.

Actions

List NotesFlow and Script commands that relate to an object embedded in 1-2-3 when you publish a Notes action to that object.

{button ,AL(`H_USING_MENUS_OVER',0)} See related topics

Actions menu

NotesFlow command 0-n
List of NotesFlow commands that relate to a 1-2-3 embedded object. These commands are run from Notes.

Promoted Script commands...
List of LotusScript subroutines promoted to the menu in the Global Script Options dialog box.

Chart menu

Chart Type
Choose a chart type.

Chart Style >
- Apply

  Apply a chart style.
- Create

  Create a chart style.
- Set Default Chart

  Set a default chart type and style.
- Change Path

  Specify a Chart Style directory.

<Chart object> Properties
View and modifyproperties of the selected chart or portion of a chart.

Title
View and modify title properties.

Legend
View and modify legend properties.

Axes & Grids >
- X-Axis & Grids

  View and modify x-axis and grid properties.
- Y-Axis & Grids

  View and modify y-axis and grid properties.
- 2nd Y-Axis & Grids

  View and modify second y-axis and grid properties. This command appears only when the selected chart includes a second y-axis.
- Z-Axis & Grids

  View and modify z-axis and grid properties. This command appears only when the selected chart includes a z-axis.

Series
View and modify series properties.

Series Labels
View and modify series labels properties.

Plot
View and modify plot properties.

Note
View and modify note properties.

Table
View and modify table properties.

Ranges
View and modify the ranges on which the chart is based.

Bring to Front
Put the selected chart(s) in front of all other objects.

Send to Back
Put the selected chart(s) behind all other objects.

Group
Group the selected charts.

Ungroup
Ungroup the selected group.

Create menu

Sheet
Add one or more sheets to the current workbook.

Chart
Create a chart using the selected range.

Map
Create a map using the selected range.

Database >
- Query Table
  Create a Lotus Approach query table by extracting records from a database table.
- Form
  Create a Lotus Approach form.
- Report
  Create a Lotus Approach report.
- Dynamic Crosstab
  Create a Lotus Approach dynamic crosstab.
- Mailing Labels
  Create Lotus Approach mailing labels.
- Form Letter
  Create a Lotus Approach form letter.

Text
Create a text block.

Button
Create a button to run a script or macro.

Drawing >
- Line
  Draw a line.
- Polyline
  Draw a segmented line.
- Arrow
  Draw an arrow.
- Rectangle
  Draw a rectangle or square.
- Rounded Rectangle
  Draw a rounded rectangle or square.
- Arc
  Draw an arc.
- Ellipse
  Draw an ellipse or circle.
- Polygon
  Draw a polygon.
- Freehand
  Draw freehand.

- Picture
  Add a picture.

@Function
Create a custom @function.

Object
Embed data from another application in 1-2-3.

Drawing menu

Drawing Properties
View and modify drawn object properties.

Bring to Front
Put the selected object(s) in front of all others.

Send to Back
Put the selected object(s) behind all others.

Group
Group the selected objects.

Ungroup
Ungroup the selected group.

Flip Left-Right
Flip the selected object(s) horizontally.

Flip Top-Bottom
Flip the selected object(s) vertically.

Reset to Original Size
Show the selected picture in its original size. This menu choice appears only when a picture is selected.

Edit menu

Undo
Reverse the effect of the most recently executed command or action.

Cut
Delete data and related styles from the sheet and place them on the Clipboard.

Copy
Copy data and related styles from the sheet to the Clipboard.

Paste
Paste the contents of the Clipboard to the sheet.

Clear
Delete the contents, formatting, borders, cell comments, or scripts from the selected range or object without using the Clipboard.

Clear Styles
Delete formatting from a cell or range.

Paste Special
Controls how 1-2-3 pastes and formats data from the Clipboard into the sheet.

Paste Link
Paste data on the Clipboard into the sheet as a formula, file link, or OLE link.

Copy Down
Copy the contents of the top row in the selection to fill the entire selection.

Copy Right
Cop the contents of the leftmost column in the selection to fill the entire selection.

Go To
Go to and select an item.

Find & Replace
Find or replace specified characters in labels and formulas.

Check Spelling
Find and correct misspelled or duplicate words.

Manage Links
Update 1-2-3 file links, or create and maintain OLE links.

Scripts & Macros >
- Run

  Run or debug a script or macro.
- Record Script/Stop Recording

  Create a script by recording keystrokes and mouse actions; if you are recording a script, stop recording and show the Script Editor.
- Show Script Editor

  Edit a script.
- Show Dialog Editor

  Show the dialog editor.

- Global Script Options
  Add a script to the Actions menu, or assign it to a quick key.

File menu

New Workbook
Create a new workbook.

Open
Open an existing workbook.

Close/Close & Return to <application>
Close the current file or active window, or close a 1-2-3 worksheet object embedded in another application file and return to that other application.

Save/Update <file name>
Save the current workbook. Update appears only when the current document is embedded in another application; it updates the current document in the file in which it is embedded.

Save As/Save Copy As
Save a workbook with a name you specify or save part of this workbook; assign a password to files.

Add-Ins >
- Manage Add-Ins

  Load, unload, or register an add-in.
- Create Add-In

  Create an add-in.

TeamMail
Create a mail message or route this workbook using your mail system.

TeamReview
Distribute workbook for review; read and write comments; end the review session.

TeamConsolidate >
- Merge Versions

  Combine versions and version groups from team members.
- Share Sheets using Notes

  Distribute workbook sheets to team members and consolidate their updates using Lotus Notes.

Internet >
- Publish a Range to the Internet

  Copy a range to the Internet.
- Open from Internet

  Open a file from the Internet.
- Save to Internet

  Save a file to the Internet.
- FTP Connection Setup

  Configure the Internet options.

Get/Release Reservation
Get or release the reservation for the current workbook.

Print
Print a range or ranges of data, or change the page layout.

Preview & Page Setup

Preview the print selection, and set headers, footers, and page orientation.

Workbook Properties
View and modify properties for the current workbook.

User Setup >
- 1-2-3 Preferences
  Customize the behavior of 1-2-3.
- SmartIcons Setup
  Move and modify sets of SmartIcons, and create SmartIcons.
- SmartFill Setup
  Create and maintain custom lists.

Exit 1-2-3/Exit 1-2-3 & Return to <file name>
End the 1-2-3 session.

<List of most recently used files>
Open an existing file.

Help menu

Help Topics
Display the online Help window's Contents, Index, and Find tabs.

Lotus Internet Support
- Lotus Home Page

  Go to the Lotus home page on the Internet.
- Lotus Customer Support

  Go to the Lotus customer support page on the Internet.
- Lotus FTP Site

  Go to the Lotus FTP site on the Internet.

Tour
Start the 1-2-3 Tour.

About 1-2-3
Display release and copyright information.

Map menu

<Map object> Properties
View and modify properties of the selected map or portion of a map.

Ranges
Set or change the properties of the range assignments.

Color Bins
Set or change the properties of the color bins.

Patterns Bins
Set or change the properties of the pattern bins.

Title
Set or change the properties of the title.

Legend
Set or change the properties of the legend.

Overlays
Add or remove overlays.

Plot
Set or change the properties of the plot area.

Zoom In
Increase the display size of the map by 100%.

Zoom Out
Decrease the display size of the map by 50%.

Reset to Original View
Display the map in its original size.

Redraw
Redraw selected maps.

Bring to Front
Put the selected map(s) in front of all other objects.

Send to Back
Put the selected map(s) behind all other objects.

Group
Group the selected maps.

Ungroup
Ungroup the selected group.

OLE Object menu

<OLE object> Properties
View and modify object properties.

<Verb 0 - n>
Display the registered verbs for the embedded object.

Edit
Edit the embedded object.

Open
Open the embedded object.

Bring to Front
Put the selected object(s) in front of all other objects.

Send to Back
Put the selected object(s) behind all other objects.

Group
Group the selected objects.

Ungroup
Ungroup the selected group.

Preview menu

Preview & Page Setup Properties
View and modify preview and page setup properties.

Previous Page
Show the previous page of the print selection in the Preview window.

Next Page
Show the next page of the print selection in the Preview window.

One Page View
Show one page of the print selection in the Preview window.

Two Page View
Show two facing pages of the print selection in the Preview window.

Four Page View
Show four pages of the print selection in the Preview window.

Nine Page View
Show nine pages of the print selection in the Preview window.

Query Table menu

Query Table Properties
View and modify query table properties.

Refresh
Update records in a query table.

Output Range
Specify or change the output range.

Bring to Front
Put the selected query table(s) in front of all other objects.

Send to Back
Put the selected query table(s) behind all other objects.

Group
Group the selected query tables.

Ungroup
Ungroup the selected group.

Range menu

Range Properties
View and modify range properties.

Insert/Insert Columns/Insert Rows
Insert blank cells, columns, or rows.

Delete/Delete Columns/Delete Rows
Delete cells, columns, or rows.

Name
Create and delete range names.

Version >
- Version Properties
  View and modify version properties.
- New Version
  Create a new version of the selected range.
- Display Version
  List versions in the current workbook, and select a version to display.
- Delete Version
  Delete a version from the workbook.
- Version Groups
  Create, edit, show, and delete groups of versions.
- Report
  Report on selected versions and their effects on formula results.

Fill
Enter values, dates, times, or a custom sequence in a range.

Sort
Sort data in a range in ascending or descending order.

Analyze >
- What-if Table
  Create a table showing the results of changing variables in formulas.
- Backsolver
  Work backwards from a formula result to find values for variables.
- Distribution
  Create a frequency distribution of the values in a range.
- Regression
  Perform multiple linear regression analysis.
- Invert Matrix
  Invert a square matrix.
- Multiply Matrix
  Multiply two ranges as matrixes.

Cell Comment
Add or modify a cell comment.

Transpose
Copy a range, transposing the layout of the data.

Parse
Convert a column of long labels into one or more columns of data.

Fast Format
Apply the current range's formatting to other ranges.

Sheet menu

Sheet Properties
View and modify sheet properties.

Delete Sheet
Delete the selected sheets.

Outline >
- Demote/Demote Columns/Demote Rows
  Demote selected columns or rows down one outline level.
- Promote/Promote Columns/Promote Rows
  Promote selected columns or rows up one outline level.
- Expand/Expand Columns/Expand Rows
  Expand columns or rows in the selected range.
- Collapse/Collapse Columns/Collapse Rows
  Collapse columns or rows in the selected range.
- Clear Outline
  Clear outlines for the entire sheet.

Hide
Hide the selected sheet(s).

Unhide
Show hidden sheet(s).

Group Sheets/Clear Sheet Group
Group sheets, or ungroup all grouped sheets.

View menu

Zoom to Custom Level (xx%)
Reset the display of cells to the default (not shown in Preview mode).

Zoom to >
(These commands do not appear in Preview mode.)

- 25%
  Display the sheet at 25% of full size.
- 50%
  Display the sheet at 50% of full size.
- 75%
  Display the sheet at 75% of full size.
- 100%
  Display the sheet at 100% of full size.
- 200%
  Display the sheet at 200% of full size.

Hide/Show SmartIcons
Hide or show SmartIcons.

Hide/Show Internet Tools
Hide or show the Internet SmartIcons.

Hide/Show Status Bar
Hide or show the status bar.

Hide/Show Edit Line
Hide or show the edit line.

Titles
Freeze columns and rows as sheet titles, or unfreeze the sheet titles.

Split/Clear Split
Split the window into two or four panes, or restore a split window to one pane.

Synchronize Split/Unsynchronize Split
Scroll the panes of a split window together or independently (appear only when the window is split).

Set View Preferences
View or modify the properties of the current workbook.

Window menu

New Window
Create a new window for the current workbook.

Tile Left-Right
Size and arrange open windows side by side.

Tile Top-Bottom
Size and arrange open windows top to bottom.

Cascade
Size and stack open windows diagonally.

<List of open windows>
See a list of windows open in 1-2-3.

More Windows...
See a complete list of windows open in 1-2-3, if you have more than nine windows open.

Moving a sheet

To move a sheet, you move the data in the sheet to a new location, then delete the original sheet.

1. Click the sheet letter to select the sheet.
2. Choose Edit - Copy or Edit - Cut.

   1-2-3 places a copy of the sheet on the Clipboard.
3. Click cell A1 in the destination sheet.

   Caution 1-2-3 writes over any existing data in the destination sheet, including data in hidden columns or rows.
4. Choose Edit - Paste.

5. Delete the original sheet.

{button ,AL(`H_MOVING_A_SHEET_DETAILS',1)} See details

{button ,AL(`H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;H_COPYING_AND_MOVING_OVER;H_MOVING_USING_THE_CLIPBOARD_STEPS;H_COPYING_USING_THE_CLIPBOARD_STEPS;',0)} See related topics

Details: Moving a sheet

About the destination range
You need to select only one cell of the destination range. 1-2-3 treats that cell as the top left cell of the destination and will paste all the data in its original size and layout. 1-2-3 pastes all the data, regardless of the size of the destination range.

{button ,AL(`H_MOVING_A_SHEET_STEPS',1)} Go to procedure

Moving using the Clipboard

The Clipboard is useful when you want to move data to more than one location.

1. Select what you want to move.
2. Choose Edit - Cut.

1-2-3 places a copy of your selection on the Clipboard and deletes your original selection.

3. Select the destination for the data.

   Caution If you're moving a range, 1-2-3 writes over any existing data in the destination range, including data in hidden columns, rows, or sheets.

4. Choose Edit - Paste.

   Note If you're moving a formula, 1-2-3 keeps relative references the same only the first time you paste. In subsequent pastes, 1-2-3 adjusts the relative references to the new location.

{button ,AL(`H_MOVING_USING_THE_CLIPBOARD_DETAILS',1)} See details

{button ,AL(`H_COPYING_AND_MOVING_FORMULAS_OVER;H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;H_COPYING_AND_MOVING_OVER;H_COPYING_USING_THE_CLIPBOARD_STEPS;',0)} See related topics

Details: Moving using the Clipboard

Shortcut for pasting data
You can select the destination and press ENTER to paste the data. Pressing ENTER works only once after each cut or copy. If you choose a command or run a macro or script before pressing ENTER, the ENTER key will not paste the data.

Selecting the destination
If you cut a range, the destination must be a range. If you cut a graphic object, the destination can be a range or graphic object.

How moving ranges affects attached scripts
To move a script attached to a range, you must move the top left or bottom right corner of the scripted range. 1-2-3 only moves a script attached to a cell or range if you move it within a workbook using drag and drop or Edit - Cut and Edit - Paste.

To edit scripts and move them between workbooks, use the Integrated Development Environment (IDE). See Overview: Using LotusScript. for more information.

About the destination range
You need to select only one cell of the destination range. 1-2-3 treats that cell as the top left cell of the destination and will paste all the data in its original size and layout. 1-2-3 pastes all the data, regardless of the size of the destination range.

If you copy a single cell into a destination range that is larger than one cell, 1-2-3 repeats the data until the destination range is full. However, If you cut a single cell and the destination range is larger than one cell, 1-2-3 does not repeat the data to fill the rest of the destination range.

Pasting text into a text block
To paste text into a text block, double-click the text block and use CTRL+V instead of Edit - Paste.

Related SmartIcons

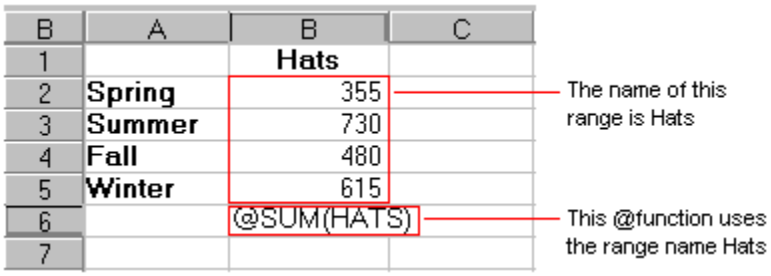
Pastes the properties you specify


Pastes a 1-2-3 file link or an OLE link

{button ,AL(`H_MOVING_USING_THE_CLIPBOARD_STEPS',1)} Go to procedure

Overview: Range names

You can name a range and use the range name in place of the range address. Range names are easy to remember and convenient to use in dialog boxes, the InfoBox, scripts, macros, formulas, and @functions.



Ways to use range names

Using the navigator is an easy way to find and select a named range. Click the navigator to display a list of all named ranges in the current workbook. Then, just click a range name in the list to find and select the range.

When you are editing a formula, you can add a range name to the formula by clicking the navigator and selecting the name.

Using F3 (NAME) is an easy way to insert a range name in a dialog box or the InfoBox. When the insertion point is in a field that requires a range address or name, press F3 (NAME) to display a list of named ranges in all active workbooks. To insert the range name, just select it from the list, and click OK.

Range names and versions

You also use range names when creating versions. Only a named range can have versions.

{button ,AL(`H_DELETING_RANGE_NAMES_STEPS;H_USING_THE_NAVIGATOR_TO_FIND_NAMED_RANGES_STEPS;H_NAMING_A_RANGE_STEPS;H_NAMING_A_RANGE_USING_ADJACENT_LABELS_STEPS;H_NAMING_A_RANGE_USING_THE_INFOBOX_STEPS;H_NAMING_CONVENTIONS_OVER;H_WORKING_WITH_VERSIONS_OVER;',0)} See related topics

Naming a range

 **Show me a demo**

1. Select the range you want to name.
2. Choose Range - Name.
3. Enter a range name in the "Name" box according to the naming conventions.
4. (Optional) To name another range, click Add and repeat steps 1 and 3.
5. Click OK.

{button ,AL(`H_NAMING_A_RANGE_DETAILS',1)} See details

{button ,AL(`H_NAMING_A_RANGE_USING_THE_INFOBOX_STEPS;H_DELETING_RANGE_NAMES_STEPS;H_NAMING_CONVENTIONS_OVER;H_RANGE_NAMES_OVER;H_SELECTING_A_RANGE_FROM_A_DIALOG_BOX_STEPS;H_NAMING_A_RANGE_USING_ADJACENT_LABELS_STEPS;',0)} See related topics

Details: Naming a range

Multiple names for the same range
You can create more than one name for a range, but you cannot use the same name for more than one range in the same workbook. If you give a range an additional name, this name does not replace the first one in formulas.

If the range you selected has more than one name, the name that is first alphabetically appears in the InfoBox.

The number of range names that you create in a workbook is limited only by the amount of available memory.

Tips for using range names
You can use the navigator to display a list of all named ranges in the current workbook. To find and select a named range in the current workbook, just click the navigator and select the name from the list.

When you are editing a formula, you can add a range name to the formula by clicking the navigator and selecting the name you want from the list of range names in the current workbook.
Using F3 (NAME) is an easy way to insert a range name in a dialog box or the InfoBox. When your insertion point is in a field that requires a range address or name, press F3 (NAME) to display a list of named ranges in all active workbooks. To insert the range name, just select it from the list, and click OK.

Range names in formulas
After you name a range, 1-2-3 substitutes the range name for the address in any existing formulas that reference the range.

Saving range names with a workbook
When you save a workbook, 1-2-3 saves the range names with the workbook.

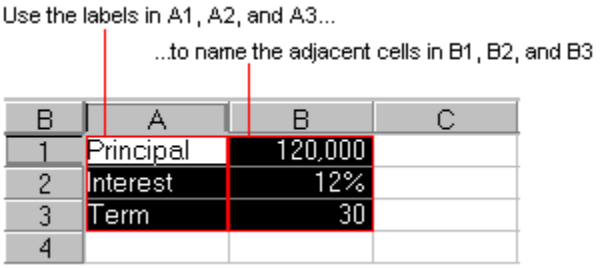
{button ,AL(`H_NAMING_A_RANGE_STEPS',1)} Go to procedure
{button ,AL(`H_USING_RANGE_NAMES_IN_A_FORMULA_STEPS;H_USING_THE_NAVAGATOR_TO_FIND_NAMED_RANGES_STEPS;H_USING_FORMULAS_OVER;',0)} See related topics

Naming a range using adjacent labels

A convenient method for naming several single-cell ranges at the same time is to use labels in adjacent cells.

Show me a demo

1. Select the range containing the labels and the adjacent cells you want to name.



2. Choose Range - Name.
3. Select an option from the "For cells" list.
4. Click Use Labels.
5. Click Done.

{button ,AL(`H_NAMING_A_RANGE_USING_ADJACENT_LABELS_DETAILS',1)} See details

{button ,AL(`H_NAMING_A_RANGE_USING_THE_INFOBOX_STEPS;H_DELETING_RANGE_NAMES_STEPS;H_NAMING_A_RANGE_STEPS;H_RANGE_NAMES_OVER;',0)} See related topics

Details: Naming a range using adjacent labels

Options for adjacent labels
The options in the "For cells" list indicate which single-cell ranges you want to name using adjacent labels.

- To the left -- Names single-cell ranges to the left of the labels. For example, labels in column B name adjacent cells in column A.
- To the right -- Names single-cell ranges to the right of the labels. For example, labels in column A name adjacent cells in column B.
- Above -- Names single-cell ranges above the labels. For example, labels in row 2 name adjacent cells in row 1.
- Below -- Names single-cell ranges below the labels. For example, labels in row 1 name adjacent cells in row 2.

Naming conventions for labels
The labels that you enter to use as range names must follow the range naming conventions.

Tips for using range names
You can use the navigator to display a list of all named ranges in the current workbook. To find and select a named range in the current workbook, just click the navigator and select the name from the list.

When you are editing a formula, you can add a range name to the formula by clicking the navigator and selecting the name.
Using F3 (NAME) is an easy way to insert a range name in a dialog box or the InfoBox. When your insertion point is in a field that requires a range address or name, press F3 (NAME) to display a list of named ranges in all active workbooks. To insert the range name, just select it from the list, and click OK.

Range names in formulas
After you name a range, 1-2-3 substitutes the range name for the address in any existing formulas that reference the range.

Saving range names with a workbook
When you save a workbook, 1-2-3 saves the range names with the workbook.

{button ,AL(`H_NAMING_A_RANGE_USING_ADJACENT_LABELS_STEPS',1)} Go to procedure

{button ,AL(`H_NAMING_CONVENTIONS_OVER;H_USING_FORMULAS_OVER;H_USING_RANGE_NAMES_IN_A_FORMULA_STEPS;',0)} See related topics

Naming a range using the InfoBox

1. Select the range you want to name.
2. Choose Range Properties.
3. Click the Basics tab in the InfoBox.

4. Enter a range name in the "Range name" box according to the naming conventions.
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NAMING_A_RANGE_USING_THE_INFOBOX_DETAILS',1)} See details

{button ,AL(`H_NAMING_A_RANGE_STEPS;DELETING_RANGE_NAMES_STEPS;H_NAMING_CONVENTIONS_OVER;H_RANGE_NAMES_OVER;H_USING_THE_INFOBOX_OVER;H_NAMING_A_RANGE_USING_ADJACENT_LABELS_STEPS;',0)} See related topics

Details: Naming a range using the InfoBox

Multiple names for the same range
You can create more than one name for a range, but you cannot use the same name for more than one range in the same workbook. If you give a range an additional name, this name does not replace the first one in formulas.

If the range you selected has more than one name, the name that is first alphabetically appears in the InfoBox.

The number of range names that you create in a workbook is limited only by the amount of available memory.

Tips for using range names
You can use the navigator to display a list of all named ranges in the current workbook. To find and select a named range in the current workbook, just click the navigator and select the name from the list.

When you are editing a formula, you can add a range name to the formula by clicking the navigator and selecting the name.
Using F3 (NAME) is an easy way to insert a range name in a dialog box or the InfoBox. When your insertion point is in a field that requires a range address or name, press F3 (NAME) to display a list of named ranges in all active workbooks. To insert the range name, just select it from the list, and click OK.

Range names in formulas
After you name a range, 1-2-3 substitutes the range name for the address in any existing formulas that reference the range.

Saving range names with a workbook
When you save a workbook, 1-2-3 saves the range names with the workbook.

{button ,AL(`H_NAMING_A_RANGE_USING_THE_INFOBOX_STEPS',1)} Go to procedure
{button ,AL(`H_USING_THE_NAVIGATOR_TO_FIND_NAMED_RANGES_STEPS;H_USING_FORMULAS_OVER;H_USING_RANGE_NAMES_IN_A_FORMULA_STEPS;',0)} See related topics

Deleting range names

You can delete any range name in the current workbook, leaving the data in the range unchanged.

1. Choose Range - Name.
2. To delete individual range names, select a name in the "Existing named ranges" box and click Delete.
3. To delete all range names in the current workbook, click Delete All.
   Note If you click Cancel after clicking Delete or Delete All, 1-2-3 does not restore the deleted range names.
4. Click OK.

{button ,AL(`H_DELETING_RANGE_NAMES_DETAILS',1)} See details
{button ,AL(`H_NAMING_A_RANGE_STEPS;H_RANGE_NAMES_OVER;',0)} See related topics

Details: Deleting range names

Other ways to delete range names
You can also use the InfoBox to delete a range name. Select the range whose name you want to delete and choose Range Properties; then click the Basics tab and delete the name in the "Range name" box.

How deleting range names affects formulas
If you delete a range name used in a formula, 1-2-3 replaces the range name with the associated range address.

For example, if SALES is the name of B14..H14, and you delete the name SALES, 1-2-3 changes @SUM(SALES) to @SUM(B14..H14).

How deleting range names affects versions
A named range can have one or more versions, and only named ranges can have versions. You cannot delete the range name of a range that has versions. You must delete all the versions before deleting the range name.

{button ,AL(`H_DELETING_RANGE_NAMES_STEPS',1)} Go to procedure

{button ,AL(`H_USING_RANGE_NAMES_IN_A_FORMULA_STEPS;H_USING_FORMULAS_OVER;H_WORKING_WITH_VERSIONS_OVER;',0)} See related topics

Naming conventions

Use the following conventions when naming ranges, sheets, query tables, and graphic objects, such as drawings, charts, and maps.

Name length

Names for ranges and sheets can be up to 15 characters long. Names for graphic objects can be up to 64 characters long.

Case-sensitivity in names

1-2-3 is not case-sensitive for names. For example, if you enter "myrange" as a range name, 1-2-3 displays the name as MYRANGE and considers myrange and MYRANGE as the same name.

Character restrictions

Names for all objects, including sheets and ranges, can contain spaces. However, do not start a name with a space or an ! (an exclamation point). Also, do not include any of the following:

, (comma)	+ (plus sign)	< (less than)
; (semicolon)	- (minus sign)	> (greater than)
. (period)	* (asterisk)	@ (at sign)
? (question mark)	/ (slash)	# (pound sign)
& (ampersand)	{ (left curly brace)	

Naming restrictions

Do not:

- Create names that look like cell addresses, such as Q2 or FY96; or names that begin with numbers, such as 20DEC.
- Use any of the following as range names: @function names; keyboard key names, such as HOME; macro command keywords, such as BEEP; LotusScript commands or keywords.
- Create a sheet name that is the same as sheet letters; for example, do not name a sheet A or BB.

{button ,AL(`H_NAMING_A_RANGE_STEPS;H_NAMING_A_SHEET_STEPS;H_NAMING_A_RANGE_USING_ADJACENT_LABELS_STEPS;H_NAMING_A_RANGE_USING_THE_INFOBOX_STEPS;',0)} See related topics

Name dialog box

Use this dialog box to create and delete range names.

Choose a task

- Naming a range
- Naming a range using adjacent labels
- Deleting range names

Compatibility

Upgraders from previous releases of 1-2-3 can use familiar menu commands and macros to perform tasks while learning to use new features in 1-2-3 97 Edition. 1-2-3 also lets you work with new file types.

1-2-3 Classic

1-2-3 Classic lets you use the 1-2-3 for DOS Release 3.1 menu to perform tasks so you can remain productive while you learn to use 1-2-3 in the Windows 95 environment. To use 1-2-3 Classic, just press / (slash) or < (less than) from the current sheet. If you don't want to use 1-2-3 for DOS menu commands, you can hide 1-2-3 Classic.

1-2-3 macros

Although LotusScript offers a new way to automate tasks and develop custom applications, you can continue to use existing 1-2-3 macros and macro applications from previous releases of 1-2-3 for DOS and 1-2-3 for Windows.

File formats

1-2-3 saves new files as .123 files, a new file type that contains both data and formatting. The new file format for SmartMaster files is .12M.

You can now open these files types in 1-2-3:

- Lotus 1-2-3 (.123, .WK4, .WK3, .WK1)
- Lotus 1-2-3 SmartMaster Template (.12M, .WT4)
- Text (.TXT, .PRN, .CSV, .DAT, .OUT, .ASC)
- Excel, up to version 7.0 (.XLS, .XLW, .XLT)
- Quattro Pro (.WQ1, .WB1, .WB2)
- dBASE (.DBF)
- Paradox (.DB)
- Bitmap (.BMP)
- ANSI Metafile (.CGM)
- Windows Metafile (.WMF)
- Lotus 1-2-3 PIC (.PIC)

You can save 1-2-3 files in these file formats:

- Lotus 1-2-3 (.123, .WK4, .WK3, .WK1)
- Lotus 1-2-3 SmartMaster Template (.12M)
- Text (.TXT)
- Excel 4.0 (.XLS, .XLW)
- dBASE (.DBF)
- Paradox (.DB)

Solver

Solver is available as a 1-2-3 97 add-in. This new add-in, which replaces previous versions of Lotus Solver, is a "what if" analysis tool that finds the best possible allocation of resources to minimize costs or maximize profits. Solver finds answers to problems you define, using either constraint formulas or a formula cell to be minimized or maximized. You can still use the following 1-2-3 Solver macro commands on new or existing scripts:

- {SOLVER-ANSWER}
- {SOLVER-ANSWER-SAVE}
- {SOLVER-DEFINE}
- {SOLVER-REPORT}

Solver handles problems with up to 200 decision variables. You can use Solver to:

- Schedule employees to better meet customer demands
- Manage cash flow to earn more interest
- Make capital budgeting decisions for different projects within your organization
- Develop an inventory ordering policy

You can install a trial version of Solver from the \EXTRA\123\SOLVER directory on the 1-2-3 or SmartSuite CD. For more information about Solver, contact:

Frontline Systems, Inc.
PO Box 4288
Incline Village, NV 89450

Tel: (702) 831-0300
Fax: (702) 831-0314
Web: http://www.frontsys.com
E-mail: info@frontsys.com

{button ,AL(`H_123_CLASSIC_OVER;H_MOVING_DATA_IN_AND_OUT_OF_123_OVER;H_MACRO_COMPATIBILITY_OVER;H_WORKING_WITH_123_FILES_OVER;H_WORKING_WITH_DBASE_AND_PARADOX_FILES_OVER;H_WORKING_WITH_EXCEL_FILES_OVER;H_WORKING_WITH_QUATTRO_PRO_FILES_OVER',0)} See related topics

Internet access

When you use the 1-2-3 97 palette of Internet SmartIcons, you can access the Lotus home page, Lotus customer support page, Lotus FTP (File Transfer Protocol) server, and the Yahoo search engine with one click. You can then open files from the World Wide Web and FTP servers, and save workbook files to FTP servers. A list of frequently used addresses to FTP servers is maintained for easy access.

1-2-3 97 supports popular Web browsers, including Netscape, Microsoft Internet Explorer, GNNworks, and the Lotus Notes Internet Browser.

You can share 1-2-3 data by publishing it to a Web page as an HTML table. 1-2-3 97 also lets you import HTML tables into 1-2-3.

{button ,AL(`H_123_WORKING_WITH_INTERNET_CONNECTIONS_OVER',0)} See related topics

Object Linking and Embedding

Object Linking and Embedding (OLE) lets you share data between 1-2-3 and other applications that support OLE.

Full OLE2 support

Full OLE 2 support makes it easier to edit embedded objects from other applications because the 1-2-3 main menu switches to reflect the commands you need. For example, when you edit an embedded Freelance Graphics object in 1-2-3, the 1-2-3 main menu integrates the Freelance menus so you can continue to work in 1-2-3. In addition, embedded objects reflect your changes immediately, so you don't need to explicitly update them.

Similarly, when you edit an embedded 1-2-3 object in another application that supports OLE2, that application's menu changes to display 1-2-3 commands. For example, if you edit an embedded 1-2-3 object in Word Pro, you can choose 1-2-3 commands directly in Word Pro.

OLE2 automation

New OLE2 automation capabilities let you develop cross-product scripts that can interact with and control products and their objects from outside. In other words, you can program other products to automate repetitive tasks.

You can use other products that support OLE automation to externally access and manipulate 1-2-3 and objects in it. For example, you can create a script in a Notes document that uses OLE automation to perform calculations in 1-2-3 and then bring the data back into Notes.

It's just as easy to use 1-2-3 to control other products using OLE automation. For example, you can use 1-2-3 to access Word Pro and Freelance Graphics, and then bring the text and graphics back into 1-2-3 where you can consolidate them with your data for a monthly report.

{button ,AL(`H_SHARING_DATA_USING_OLE2_OVER',0)} See related topics

Overview: Installing additional language versions of 1-2-3

You can access 1-2-3 in multiple languages.

The first language you install becomes your default language. To add a second or third language version of 1-2-3, you must run the Install program again. Install informs you that you already have an existing copy of the product in a different language and preserves the directory structure of the default language.

Install adds icons for the additional languages to the Start menu. These icons are identified by the two-character ISO language tag. For example, the icon for the French version of 1-2-3 is labeled Lotus 1-2-3 97 - FR.

Productivity and ease of use

New or improved features make 1-2-3 more intuitive and easy to use and let you focus on working more effectively.

Shared Lotus user interface

1-2-3 has the same menu structure as other Lotus applications such as Word Pro, Approach, and Freelance Graphics. Other shared features include SmartIcons, the status bar, and the InfoBox. The consistent user interface lets you transfer your knowledge from one Lotus product to another and reduce the time needed to get up and running.

Context-sensitive menus

The 1-2-3 main menu changes depending on the type of object you're working with, so the commands you need are always at hand.

New context commands are available when you're working with a map, graphic, query tables, OLE object, the Script Editor or Debugger, or when you're previewing data.

InfoBox

Use the InfoBox to view and change properties for any object in 1-2-3 without interrupting your work to open or close a dialog box. You see all changes that you make in the InfoBox as you make them. You can leave the InfoBox open while you work, or collapse it to view more of your workspace.

Outlining

1-2-3 outlining lets you control how you view summary and detail data in the sheet. You can collapse or expand groups of rows and columns to view or print just the data you want.

Lotus Assistants

Lotus Assistants give you step-by-step instructions for performing complex tasks such as creating charts, maps, and query tables, for working with 1-2-3 data in Lotus Approach, and for managing multiple versions of data.

Help

New Help features include a book-like table of contents and index, full-text search, and animated demos that show you how to perform various tasks in 1-2-3.

Try using bubble help as a handy way to explore the 1-2-3 workspace. Just rest the pointer over different SmartIcons to see a pop-up description. Or rest the pointer over the various tabs in the InfoBox to find out what types of tasks you can perform.

Print preview

A dynamic print preview function lets you check your work before you print it, make whatever adjustments are necessary, and see the effects of those changes immediately. This way, you won't waste paper or tie up the printer needlessly.

AutoTotal

You can now sum a range of values simply by typing TOTAL or TOTALS -- you don't have to enter an @function or formula in the sheet.

Using Approach with 1-2-3

1-2-3 97 uses Approach to optimize traditional database functionality, including forms, mailing labels, dynamic crosstabs, and reports for 1-2-3 ranges. You can use query tables to find or sort records extracted from a larger database, and dynamically rearrange data in a 1-2-3 range by dragging and dropping field names from one location to another.

Cell comments

When you add cell comments to your sheet, 1-2-3 97 automatically adds a date/time stamp so you can track the comments of multiple contributors.

{button ,AL(`H_OUTLINING_SHEET_DATA_OVER;H_THE_INFOBOX_OVER;H_PREVIEWING_AND_PRINTING_DATA_OVER;H_SUMMING_A_RANGE_AUTOMATICALLY_STEPS;H_LEARN123_OVER;H_EASY_DATABASE_ACCESS_OVER',0)} See related topics

Programmability

1-2-3 has a new programming language, LotusScript, to help you create custom applications and integrate data from other Windows applications. New @functions let you perform standard and custom calculations quickly. You can also continue to use familiar 1-2-3 macro commands to perform tasks and automate procedures.

LotusScript

LotusScript is an object-oriented programming language that lets you automate your work in 1-2-3 and other Lotus products. You can use LotusScript for a wide variety of tasks, from performing simple commands to developing complex cross-product applications. The file format for LotusScript files is .LSO.

Because 1-2-3 provides the same development environment as other Lotus applications, it's easier to create, debug, and run programming applications. LotusScript is compatible with Visual Basic.

@Functions

1-2-3 includes these new @functions:

@DECILE	@PUREMEDIAN
@FORECAST	@PVAMOUNT
@FVAMOUNT	@QUARTILE
@ISBETWEEN	@XIRR
@NSUM	@XNPV

You can also create your own @functions using LotusScript.

Click the @Function selector to see a list of all 1-2-3 and custom @functions available.

Macros

You can also use macro commands to automate tasks and create custom applications in 1-2-3.

Actions menu

The 1-2-3 Actions menu lets you quickly add custom menu commands to the 1-2-3 menu. This menu appears in a 1-2-3 embedded object, when you publish a Notes action. Commands in this menu can include NotesFlow commands and prompted Script commands.

{button ,AL(`H_MACRO_COMPATIBILITY_OVER;H_MACRO_SCRIPT_EQUIVALENTS_OVER',0)} See related topics

Team computing

Team computing features help you communicate, collaborate, and coordinate with others in your organization to work together more effectively.

TeamMail

TeamMail provides enhanced electronic mail support that lets you distribute data to co-workers -- from a message to an entire 1-2-3 workbook. You can send data to a group of people simultaneously, or route the data sequentially from one individual to the next in a mailing list. After reviewing the data, individuals can incorporate their updates and comments before routing the date to the next recipient. You can also save and reuse mailing lists for subsequent routing.

TeamReview

TeamReview, like TeamMail, lets you distribute a range of data to your co-workers simultaneously or individually. When you have received changes and comments from the recipients, you can replace the original data with the new, or merge the changes into the source as range versions.

TeamConsolidate

TeamConsolidate facilitates group collaboration by tapping into the power of Lotus Notes. You can split a 1-2-3 workbook into individual sheets, and then save the sheets as separate documents in a Notes database. After team members view and update the information, you can consolidate their changes by recombining the separate documents into a single workbook.

TeamConsolidate also lets you merge separate versions of data when you share 1-2-3 workbooks. You can create a master copy of the workbook, and then distribute copies to your co-workers. After they enter versions in their copies of the original workbook, you can use TeamConsolidate to merge their updates back into the original file.

NotesFlow

NotesFlow lets you develop custom workflow applications using Notes Release 4.0 and Object Linking and Embedding (OLE).

You create a NotesFlow form in Notes and associate menu commands with the form. Each command runs a particular script that you specify. When you use the form to work with an embedded 1-2-3 object, the NotesFlow commands appear on the Actions menu in both Notes and 1-2-3. When you choose a NotesFlow command in 1-2-3, the command runs the appropriate script.

Version Manager

1-2-3 comes with enhancements that simplify creating, updating, and viewing multiple sets of data in the same range. It's also easier to work with groups of selected versions to analyze the effects of various scenarios.

{button ,AL(`H_WORKING_WITH_VERSIONS_OVER;H_TEAMMAIL_OVER;H_TEAMREVIEW_OVER;H_SHARE_SHEETS_USING_NOTES_OVER;H_SHARING_VERSIONS_WITH_A_TEAM_OVER',0)} See related topics

1-2-3 @Function Help is not available

Help on @functions is not currently installed. For information, see Installing Help on individual @functions.

1-2-3 Macro Help is not available

Help on macros is not currently installed. For information, see Installing Help on macro commands.

1-2-3 LotusScript Help is not available

Help on LotusScript is not currently installed. For information, see Installing Help on LotusScript.

Help is not available

The Help topic you selected is not available. Click Go Back to see the previously displayed Help topic, or click Help Topics and then select a different Help topic.

Help is not available

The topic you selected is in a Help file that is not available.

To install additional Help files, run the Install program, select the Customize features - Manual install option, and specify the Help file(s) you want to install.

Macro Help is not available

The topic you selected is in a Help file that is not installed by the Install program.

If you have the 1-2-3 97 or SmartSuite 97 CD-ROM, you can install macro Help from there. If not, you can download macro Help from the World Wide Web or order a copy from Lotus Customer Support. For more information, see "Installing Help on macro commands."

Overview: Selecting graphic objects

To work with a graphic object, you must first select it. After you select the object, you can move it, copy it, delete it, or change its properties.

When you select an object, its menu appears in the main menu. For example, if you select a chart, the Chart menu appears.

Graphic objects you can select

You can select any of the following objects:

- Buttons (attached to macros or scripts)
- Charts and chart parts
- Embedded objects
- Lines, arrows, and shapes (such as rectangles, ellipses, and polygons)
- Maps and map parts
- Query tables
- Text blocks

The appearance of a selected object

When you select an object, handles appear around it. The name of the object appears in the selection indicator.

Selecting more than one object

You can select more than one object to move or style them together. Hold down SHIFT as you select each object.

Selecting an object by its name

You can use F5 (GOTO) to find and select a graphic object in any active file.

{button ,AL(`H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_SELECTING_WORKSHEET_AREAS_OVER;',0)} See related topics

Selecting graphic objects

To work with a graphic object, you must first select it. The table below describes how to select various objects.

To select	Do this
Button	SHIFT+click the button.
Chart	Click the border of the chart.
Chart part	Click the part of the chart you want.
Embedded object	Click the embedded object.
Collection of objects	Click the first object, then SHIFT+click the others.
Line or arrow	Click the line or arrow.
Map	Click the border of the map.
Map part	Click the part of the map you want.
Query table	Click the query table.
Shape	Click the border of the shape.
Text block	Click the text block.

To remove an object from a selection, SHIFT+click or CTRL+click the object.

Selecting objects that are not visible at the same time

Objects do not all have to be visible simultaneously to select them. You can select objects in different parts of the same sheet by selecting the first object, then navigating to and selecting the next one(s).

Related SmartIcons


Selects several objects


Groups selected objects


Ungroups selected objects


Brings selected objects to the front


Sends selected objects to the back

{button ,AL(`H_SELECTING_OBJECTS_OVER;',0)} See related topics

Overview: Creating an outline

Outlining lets you expand and collapse areas of a sheet to see and print different levels of detail. You can create an outline with up to eight levels of rows and columns.

Benefits of outlining

Outlining is useful for viewing and printing summary reports. Often, spreadsheet summary data -- such as a total for the 12 months of a year -- is hard to find, and requires a lot of scrolling. Outlining makes it easy to hide rows and columns of details so that you can see summary data. When you need to see the details, you can expand the outline.

Creating an outline

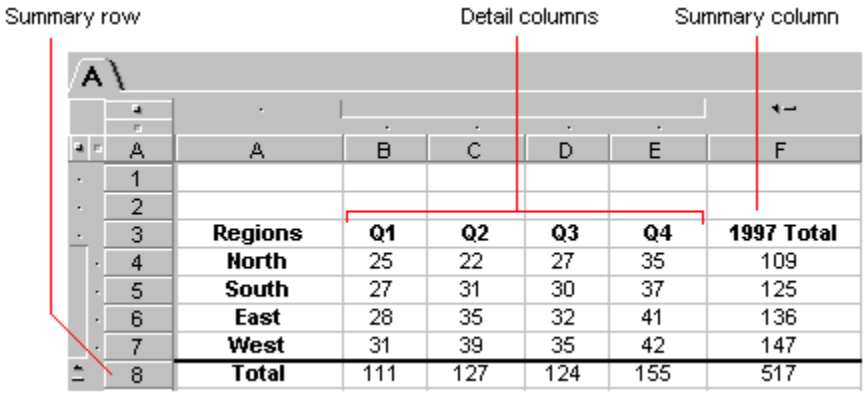
Creating an outline requires three general steps.

1. Before outlining a range of data, plan the outline by analyzing the levels and layout of the data in the range. Identify the hierarchy of summary and detail data. Determine which rows and columns contain the highest level of summary data, which contain the next highest level of summary data, and so on, down to the detail data.

   The example below shows an outline of a range containing sales data by quarter. The highest level columns are A (Regions) and F (1997 Totals). In the outline, 1997 Total is the summary column. Columns B through E, showing quarterly data, are detail columns. Row 8 is the summary row, and rows 4 through 7, containing data by quarter, are detail rows.

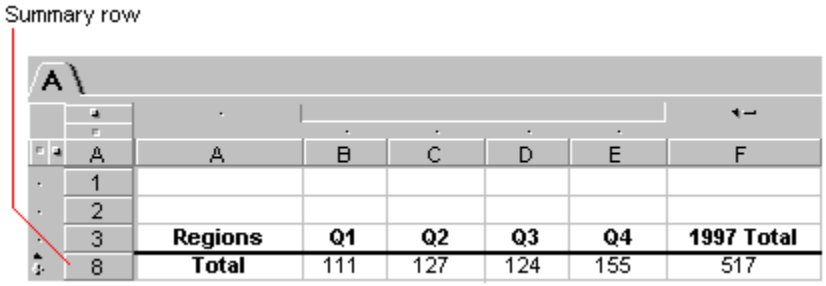
2. Next, determine where summary data is in relation to its detail data. Are summary rows above or below related detail rows? Are summary columns to the right or left of detail columns? The answer to these questions will determine how you set properties to expand and collapse your outline.

   In the example, the summary column (F), is to the right of the detail columns, and the detail rows are above the summary row (8). Use Sheet - Sheet Properties (Outline tab) to reflect this orientation. See Specifying how summary data relates to detail data.

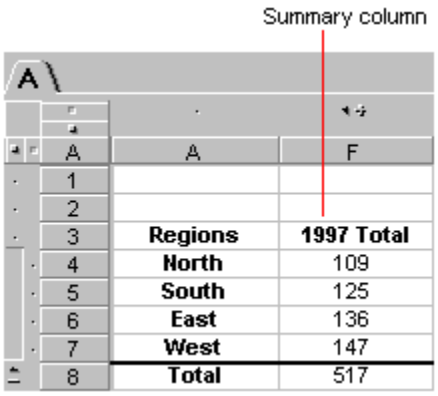


	A	B	C	D	E	F
1						
2						
3	**Regions**	**Q1**	**Q2**	**Q3**	**Q4**	**1997 Total**
4	**North**	25	22	27	35	109
5	**South**	27	31	30	37	125
6	**East**	28	35	32	41	136
7	**West**	31	39	35	42	147
8	**Total**	111	127	124	155	517

3. Finally, you are ready to demote the lower level rows or columns to create the levels of your outline. See Demoting rows and columns to create an outline.



	A	B	C	D	E	F
1						
2						
3	**Regions**	**Q1**	**Q2**	**Q3**	**Q4**	**1997 Total**
8	**Total**	111	127	124	155	517



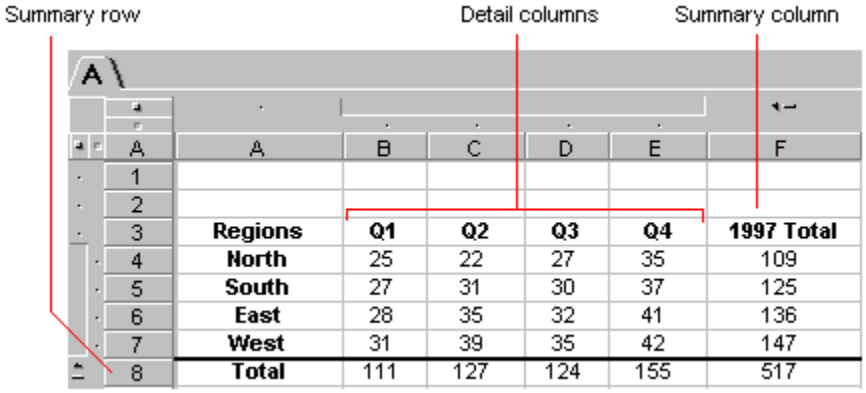
{button ,AL(`H_CREATING_AN_OUTLINE_EX',1)} See example

{button ,AL(`H_WORKING_WITH_OUTLINES_OVER;H_DEMOTING_ROWS_AND_COLUMNS_STEPS;H_PROMOTING_ROWS_AND_COLUMNS_STEPS;H_SETTING_OUTLINE_PROPERTIES_STEPS;H_HIDING_AND_SHOWING_THE_OUTLINE_FRAME_STEPS;H_COLLAPSING_OUTLINES_STEPS;H_EXPANDING_OUTLINES_STEPS;H_CLEARING_OUTLINES_STEPS;',0)} See related topics

Example: Creating an outline

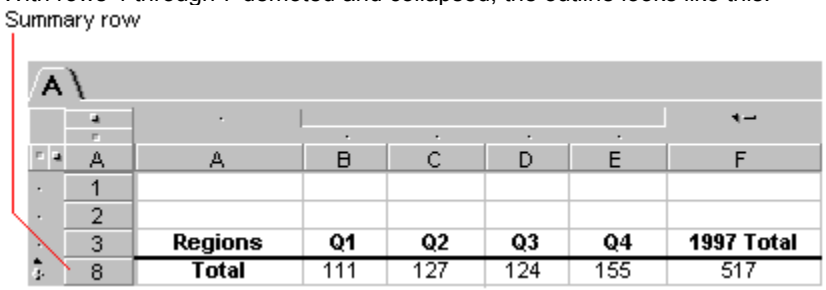
This example shows an outline of a range containing sales data by quarter. The highest level columns are A (Regions) and F (1997 Totals). In the outline, 1997 Totals is the summary column. Columns B through E, showing quarterly data, are detail columns. Row 8 is the summary row, and rows 4 through 7, containing data by quarter, are detail rows.

The summary column (F) is to the right of the detail columns, and the detail rows are above the summary row (8).



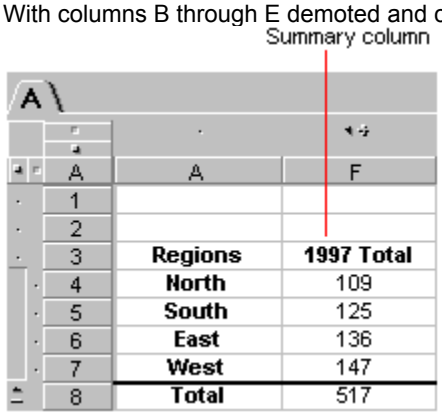
	A	B	C	D	E	F
1						
2						
3	**Regions**	**Q1**	**Q2**	**Q3**	**Q4**	**1997 Total**
4	**North**	25	22	27	35	109
5	**South**	27	31	30	37	125
6	**East**	28	35	32	41	136
7	**West**	31	39	35	42	147
8	**Total**	111	127	124	155	517

With rows 4 through 7 demoted and collapsed, the outline looks like this:



	A	B	C	D	E	F
1						
2						
3	**Regions**	**Q1**	**Q2**	**Q3**	**Q4**	**1997 Total**
8	**Total**	111	127	124	155	517

With columns B through E demoted and collapsed, the outline looks like this:



	A	F
1		
2		
3	**Regions**	**1997 Total**
4	**North**	109
5	**South**	125
6	**East**	136
7	**West**	147
8	**Total**	517

Overview: Working with rows and columns in outlines

In general, you can size, insert, delete, move, and copy rows and columns when the outline frame is displayed as you would any rows and columns in a sheet.

Inserting rows and columns

You can insert rows or columns from within an outline by choosing Range - Insert.

- When you insert rows from within an outline, the inserted rows are placed at the same level as the row above the insertion point.
- When you insert columns from within an outline, the inserted columns are placed at the same level as the column to the left of the insertion point.

Deleting rows and columns

When you delete a summary row or column, the associated detail rows or columns are promoted to the same outline level as the summary row or column you deleted.

Moving rows or columns

When you move a summary row or column from within an outline, 1-2-3 moves the data and styles, but not the outline structure.

Copying rows or columns

When you copy and paste a row or column of data from within an outline, 1-2-3 copies the data and styles, but not the outline structure.

{button ,AL(`H_OUTLINING_SHEET_DATA_OVER;H_INSERTING_COLUMNS_OR_ROWS_STEPS;H_DELETING_COLUMNS_OR_ROWS_STEPS;H_COPYING_AND_MOVING_IN_A_SHEET_STEPS;',0)} See related topics

Demoting rows and columns to create an outline

Demote groups of rows, and then columns, to create an outline or change the structure of an existing outline.

Show me a demo

1. Make sure you have specified how summary data relates to detail data.
2. Select the row numbers or column letters for the rows or columns you want to demote.
   Don't include summary rows or summary columns in your selection.
3. Choose Sheet - Outline - Demote Rows, or Sheet - Outline - Demote Columns.

1-2-3 inserts an outline frame along the left (for demoted rows) or top (for demoted columns) of your sheet.

{button ,AL(`H_DEMOTING_ROWS_AND_COLUMNS_DETAILS',1)} See details

{button ,AL(`H_PROMOTING_ROWS_AND_COLUMNS_STEPS;H_OUTLINING_SHEET_DATA_OVER;H_EXPANDING_OUTLINES_STEPS;H_COLLAPSING_OUTLINES_STEPS;',0)} See related topics

Details: Demoting rows and columns to create an outline

Selecting rows and columns to demote
You can select the entire row or column, or just a cell in the row or column. To select more than one row or column, you can select cells to indicate the range of columns or rows you want to demote. If you select a range of cells or a collection of ranges, and then choose Sheet - Outline - Demote, 1-2-3 displays a dialog to allow you to specify whether you want to demote rows or columns.

Number of outline levels
You can create up to eight outline levels.

Related SmartIcons

Demotes the selected rows down one outline level

Promotes the selected rows up one outline level

{button ,AL(`H_DEMOTING_ROWS_AND_COLUMNS_STEPS',1)} Go to procedure

Promoting rows and columns

Promote groups of rows and columns to move them up one level in an outline.

1. Select the demoted row(s) or columns(s) you want to promote.

   Don't include summary rows or columns in your selection.

2. Choose Sheet - Outline - Promote Rows, or Sheet - Outline - Promote Columns.

{button ,AL(`H_PROMOTING_ROWS_AND_COLUMNS_DETAILS',1)} See details

{button ,AL(`H_OUTLINING_SHEET_DATA_OVER;H_DEMOTING_ROWS_AND_COLUMNS_STEPS;H_EXPANDING_OUTLINES_STEPS;H_COLLAPSING_OUTLINES_STEPS;',0)} See related topics

Details: Promoting rows and columns

Selecting rows and columns to promote
You can select the entire row or column, or just a cell in the row or column. To select more than one row or column, you can select cells to indicate the range of columns or rows you want to promote. If you select a range of cells or a collection of ranges, and then choose Sheet - Outline - Promote, 1-2-3 displays a dialog to allow you to specify whether you want to promote rows or columns.

Related SmartIcons


Demotes the selected rows down one outline level


Promotes the selected rows up one outline level

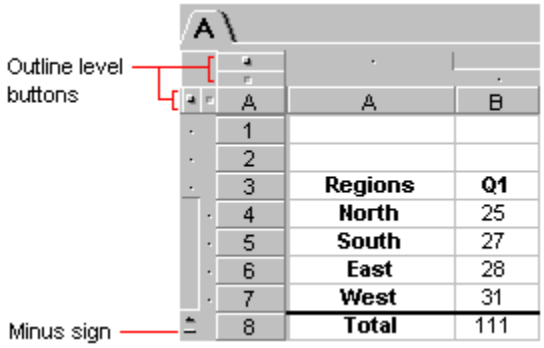
{button ,AL(`H_PROMOTING_ROWS_AND_COLUMNS_STEPS',1)} Go to procedure

Collapsing an outline to show less detail

You can collapse rows or columns to show less detail and to emphasize summary data.

Show me a demo

1. To collapse a single outlined section of the sheet to a particular level, click the minus sign for the level you want to collapse.
2. To collapse all outlined sections of the sheet to a particular level, click the outline-level button corresponding to that level.



{button ,AL(`H_COLLAPSING_OUTLINES_DETAILS',1)} See details

{button ,AL(`H_EXPANDING_OUTLINES_STEPS;H_OUTLINING_SHEET_DATA_OVER;H_DEMOTING_ROWS_AND_COLUMNS_STEPS;H_PROMOTING_ROWS_AND_COLUMNS_STEPS;',0)} See related topics

Details: Collapsing an outline to show less detail

Using menu commands to collapse an outline
You must use menu commands to collapse an outline if the outline frame is hidden.

Select a range of entire rows or columns to collapse, and then choose Sheet - Outline - Collapse. Or, select a range including at least one cell in each row or column you want to collapse, and then choose Sheet - Outline - Collapse, select Rows or Columns, and click OK.

Effects of collapsing rows and columns
The following conditions are in effect when rows or columns are collapsed.

- You cannot use Edit - Go To to jump to a collapsed range.
- Collapsed rows and columns do not print.
- You can still perform 1-2-3 operations--such as summing a range of cells--on ranges in collapsed rows or columns. To perform a command on a range in a collapsed row or column, enter the address or range name in a dialog box or select the surrounding rows or columns.
- Formulas containing references to ranges in collapsed rows or columns still work correctly. When creating a formula that refers to data in a collapsed row or column, enter the range name or address in the formula instead of selecting it.
- You can prevent changes to data in collapsed rows or columns only by protecting the data and locking the sheet or workbook.

Related SmartIcons


Expand columns or rows in the selected range


Collapse columns or rows in the selected range

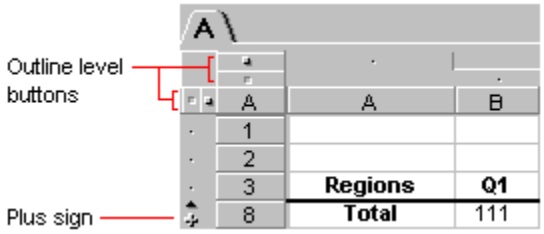
{button ,AL(`H_COLLAPSING_OUTLINES_STEPS',1)} Go to procedure

Expanding an outline to show more detail

You can expand rows or columns to show more detail.

Show me a demo

1. To expand a single outlined section of the sheet to a particular level, click the plus sign for the level you want to expand.
2. To expand all outlined sections of the sheet to a particular level, click the outline-level button corresponding to that level.



{button ,AL(`H_EXPANDING_OUTLINES_DETAILS',1)} See details

{button ,AL(`H_OUTLINING_SHEET_DATA_OVER;H_COLLAPSING_OUTLINES_STEPS;H_PROMOTING_ROWS_AND_COLUMNS_STEPS;H_DEMOTING_ROWS_AND_COLUMNS_STEPS;',0)} See related topics

Details: Expanding an outline to show more detail

Using menu commands to expand an outline

You must use menu commands to expand an outline if the outline frame is hidden.

Select the rows or columns on either side of the rows or columns you want to expand, and then choose Sheet - Outline - Expand. For example, to expand rows 4 and 5, select rows 3 and 6.

Related SmartIcons

Expand columns or rows in the selected range

Collapse columns or rows in the selected range

{button ,AL(`H_EXPANDING_OUTLINES_STEPS',1)} Go to procedure

Specifying how summary data relates to detail data

Before you create an outline, you must specify the position of summary rows and columns with respect to detail rows and columns. These settings are for the entire sheet.

1. Choose Sheet - Sheet Properties.

2. Click the Outline tab.

3. Under Row outline, select "Show outline frame" and then select:
   - "Above detail" if summary data is in a row above detail data
   - "Below detail" if summary data is in a row below detail data
4. Under Column outline, select "Show outline frame" and then select:
   - "To the left of detail" if summary data is in a column to the left of detail data
   - "To the right of detail" if summary data is in a column to the right of detail data
5. (Optional) Move, collapse, or close the InfoBox.

Note If you change the orientation for rows in an existing outline, the outline for rows is cleared. If you change the orientation for columns, the outline for columns is cleared.

{button ,AL(`H_SETTING_OUTLINE_PROPERTIES_DETAILS',1)} See details

{button ,AL(`H_OUTLINING_SHEET_DATA_OVER;H_HIDING_AND_SHOWING_THE_OUTLINE_FRAME_STEPS;', 0)} See related topics

Details: Specifying how summary data relates to detail data

Showing the outline frame
Selecting "Show outline frame" under either Row outline or Column outline displays the outline frame.

Note If display of an outline frame is turned off, promoting or demoting rows or columns also turns on the display of the outline frame.

{button ,AL(`H_SETTING_OUTLINE_PROPERTIES_STEPS',1)} Go to procedure

Showing and hiding the outline frame

1-2-3 remembers how you set your outline levels, whether the outline frame is visible or not.

1. Choose Sheet - Sheet Properties.

2. Click the Outline tab.

3. Under Row outline or Column outline, select or deselect "Show outline frame."

Note If you promote or demote rows or columns when the outline frame is hidden, 1-2-3 shows the frame.

{button ,AL(`H_OUTLINING_SHEET_DATA_OVER;',0)} See related topics

Removing an outline

You can remove an outline in the current sheet. This does not delete any sheet data.

1. Select any cell in the sheet with the outline you want to clear.
2. Choose Sheet - Outline - Clear Outline.

The column and row outline frames are no longer displayed and all collapsed rows and columns are expanded.

{button ,AL(`H_CLEARING_OUTLINES_DETAILS',1)} See details
{button ,AL(`H_OUTLINING_SHEET_DATA_OVER;',0)} See related topics

Details: Removing an outline

Hiding the outline frame
If you don't want to remove the outline, you can hide it using Sheet - Sheet Properties (Outline tab).

Removing a single outline level
To remove a single outline level, select the columns or rows in the range and choose Sheet - Outline - Promote Rows or Sheet - Outline - Promote Columns.

{button ,AL(`H_CLEARING_OUTLINES_STEPS',1)} Go to procedure

Overview: Print and page properties

When you choose File - Preview & Page Setup, 1-2-3 displays the current workbook in a window on the left and the Preview window on the right. 1-2-3 also opens the InfoBox so you can easily customize print and page settings as you preview your work.

When you change a setting in the InfoBox, 1-2-3 automatically updates the Preview window. 1-2-3 also saves print and page settings with the workbook file.

While previewing your work, you can change the following print and page settings:

- Choose what to print, including charts, maps, drawings, the sheet row and column frame, grid lines, formulas, and cell comments
- Set page numbers
- Change print margins
- Change the page orientation
- Center a selection on the page for printing
- Choose how to fit your work on the page
- Add headers and footers
- Include print titles on each page
- Create and use named print settings
- Change paper size

{button ,AL(`H_NS_PRINT_OVER;H_PRINT_ADDING_HEADERS_AND_FOOTERS_STEPS;H_PRINT_ADDING_TITLES_ON_EACH_PAGE_STEPS;H_PRINT_CENTERING_DATA_STEPS;H_PRINT_CHANGE_MARGINS_STEPS;H_PRINT_CHANGING_PAGE_ORIENTATION_STEPS;H_PRINT_CHANGING_SELECTION_STEPS;H_PRINT_CHOOSING_THE_PAPER_SIZE_STEPS;H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS;H_PRINT_NUMBERING_PAGES_STEPS;H_PRINT_CHANGING_FONTS_HEADERS_FOOTERS_STEPS',0)} See related topics

Changing font properties for headers and footers

1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Click the Text Format tab in the InfoBox.

3. Select the header or footer you want to change from the "Font properties for" list.
4. Select a different font, size, color, and any other attributes you want to change.
5. Repeat steps 3 and 4 to change additional header or footer settings.
6. (Optional) Move, collapse, or close the InfoBox.
7. (Optional) Close the Preview window.

{button ,AL(`H_PRINT_ADDING_HEADERS_AND_FOOTERS_STEPS;',0)} See related topics

Changing the print selection

If you change the selection in the sheet while the Preview window is open, you must update the Preview window to display the new selection before you can print it.

1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Click the Include tab in the InfoBox.

3. If the information under "Current selection" is different from the information under "What to print," click Update Preview so you can print the current selection.
4. Under Show, select the items you want to print.
5. (Optional) Under Pages, specify how many pages to print and how to number them.
6. (Optional) Move, collapse, or close the InfoBox.
7. (Optional) Close the Preview window.

Note If you selected "Current sheet" or "Entire workbook," 1-2-3 also prints everything selected in the Show list such as cell comments, formulas, sheet grid lines, and frames.

{button ,AL(`H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS;H_PRINT_NUMBERING_PAGES_STEPS;H_PRINT_AND_PAGE_PROPERTIES_OVER',0)} See related topics

Numbering printed pages

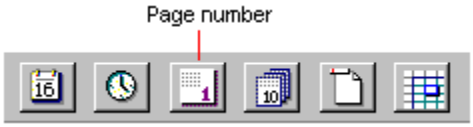
You can print all pages or you can specify which pages to print and how to number them.

1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Click the Headers & Footers tab in the InfoBox.

3. Under Headers and footers, click in one of the header or footer boxes.
4. Click the page number icon.



1-2-3 enters a # (pound sign) in the box.

Tip To identify each icon, hold the mouse pointer over an icon until you see a short description.

5. Click the Include tab in the InfoBox.
6. Under Pages, select one of the following:
   - All -- Prints all pages
   - Pages from and to -- Prints from the first to the last page you specify
   - Start page numbering with -- Specifies a number for the first page you print
7. (Optional) Move, collapse, or close the InfoBox.
8. (Optional) Close the Preview window.

{button ,AL(`H_PRINT_NUMBERING_PAGES_DETAILS',1)} See details

{button ,AL(`H_PRINT_ADDING_HEADERS_AND_FOOTERS_STEPS;H_PRINT_AND_PAGE_PROPERTIES_OVER',0)} See related topics

Details: Numbering printed pages
If you select All pages, 1-2-3 begins numbering pages with 1 unless you specify a different starting number. However, you can also customize how 1-2-3 numbers the pages.

Example
Suppose you are previewing a document of 10 pages, made some changes to data on pages 4, 5, and 6, and need to reprint just those three pages. To print pages 4, 5, and 6 with the correct page numbers, you can specify the following print settings:

- Pages from 4
- Pages to 6
- Start page numbering with 4

Related SmartIcons


Displays the Print dialog box


Prints the current selection


Closes the active window

{button ,AL(`H_PRINT_NUMBERING_PAGES_STEPS',1)} Go to procedure

Changing print margins

You can change the top, bottom, left, and right print margins.

1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Click the Layout tab in the InfoBox.

3. Under Margins, enter a measurement for the left, right, top, or bottom print margins.
4. (Optional) Move, collapse, or close the InfoBox.
5. (Optional) Close the Preview window.

{button ,AL(`H_PRINT_CHANGE_MARGINS_DETAILS',1)} See details

{button ,AL(`H_PRINT_AND_PAGE_PROPERTIES_OVER',0)} See related topics

Details: Changing print margins

Tips

- If the minimum margins for your printer are larger than what you entered, 1-2-3 automatically adjusts the margins.
- You can set the unit of measurement for margins in the Windows control panel. To display these settings, click the Start button, choose Settings - Control Panel, and then open Regional Settings.

{button ,AL(`H_PRINT_CHANGE_MARGINS_STEPS',1)} Go to procedure

Changing page orientation

You can print your work in portrait or landscape mode.

1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Click the Layout tab in the InfoBox.

3. Under Orientation, click an icon to select one of the following:
   - Landscape -- Prints sideways
   - Portrait -- Prints upright

   Tip Use landscape mode when your sheet is wider than a standard page. If you are printing many columns of data, landscape printing may help you fit all the columns on a single page.
4. (Optional) Move, collapse, or close the InfoBox.
5. (Optional) Close the Preview window.

Related SmartIcons

Prints sideways in landscape mode

Prints upright in portrait mode

Closes the active window

{button ,AL(`H_PRINT_AND_PAGE_PROPERTIES_OVER;H_PRINT_CENTERING_DATA_STEPS;H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS;',0)} See related topics

Centering data on the printed page

Use the InfoBox to center your data on a printed page.

1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Click the Layout tab in the InfoBox.

3. Under Center, select one or both options. Selecting both options centers the data in both directions.
4. (Optional) Move, collapse, or close the InfoBox.
5. (Optional) Close the Preview window.

Related SmartIcons

Centers left to right

Centers top to bottom

Centers in both directions

Closes the active window

{button ,AL(`H_PRINT_AND_PAGE_PROPERTIES_OVER;H_PRINT_CHANGING_PAGE_ORIENTATION_STEPS;H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS;',0)} See related topics

Fitting your work on the printed page

You can reduce or enlarge the size of printed work to fit on a single page.

1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Click the Layout tab in the InfoBox.

3. Under Page fit, select an option.
4. If you selected "Custom," enter a percentage (from 15 to 1000) in the "Percent" box.
5. (Optional) Move, collapse, or close the InfoBox.
6. (Optional) Close the Preview window.

{button ,AL(`H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_DETAILS',1)} See details

{button ,AL(`H_PRINT_CENTERING_DATA_STEPS;H_PRINT_CHANGING_PAGE_ORIENTATION_STEPS',0)} See related topics

Details: Fitting your work on the printed page

Options: Preview & Page Setup InfoBox (Layout tab)
These options let you choose how to scale your work for the printed page.

Note If you print an entire workbook that contains more than one sheet, 1-2-3 automatically prints each sheet on a new page.

Specifying how to scale selected data for printing

- Actual -- Prints the selection in the size it appears on the screen
- Fit all to page -- Fits all the data on a single printed page
- Fit rows to page -- Shrinks all the rows of data to fit on a single printed page
- Fit columns to page -- Shrinks all the columns of data to fit on a single printed page
- Custom -- Shrinks or enlarges the printed data by a percentage you enter. You can enter a percentage from 15 to 1000. For example, enter 75 to shrink the selection to 75% of its original size.

Specifying how to scale an object for printing such as a chart or map without sheet data

- Actual -- Same as above
- Fill page -- Enlarges the object to fill the page
- Fill page, but keep proportions -- Enlarges the object with the same proportions
- Custom -- Same as above

Related SmartIcons


Sizes data by columns to fit the printed page


Sizes data by rows to fit the printed page


Sizes data to fit the printed page

{button ,AL(`H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS',1)} Go to procedure

Adding headers and footers

A header is text printed below the top margin on each page. A footer is text printed above the bottom margin.

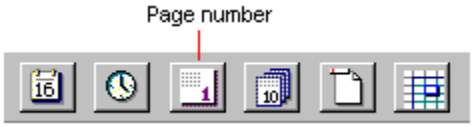
1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Click the Headers & Footers tab in the InfoBox.

3. Under Headers and footers, click in a text box to enter a header or footer.

   You can type any text in the box, and use the icons to automatically enter the information represented by each icon.



If you click an icon, 1-2-3 enters a symbol in the InfoBox, but displays the actual information in the Preview window. The date and time are taken from the computer's internal clock.

   Tip To identify each icon, hold the mouse pointer over an icon until you see a short description.

4. (Optional) Move, collapse, or close the InfoBox.
5. (Optional) Close the Preview window.

{button ,AL(`H_PRINT_ADDING_HEADERS_AND_FOOTERS_DETAILS',1)} See details

{button ,AL(`H_PRINT_AND_PAGE_PROPERTIES_OVER;H_PRINT_CHANGING_FONTS_HEADERS_FOOTERS_STEPS',0)} See related topics

Details: Adding headers and footers

Header and footer symbols

To enter the following information for a header or footer, you can click the icons in the InfoBox or type the following symbols in the text boxes under Headers and footers.

To enter	Type
The date of printing	@ (at sign)
The time of printing	+ (plus sign)
Consecutive page numbers	# (pound sign)
The total number of pages	% (percent sign)
The file name	^ (caret)
The contents of a cell	\ (backslash) followed by a cell address or range name

You can combine the date, time, page number, and file name with other header and footer text that you type. For example, you can type Page and then enter # (pound sign), or click the page number icon, to print Page 1, Page 2, Page 3, and so on.

Header/footer entry	Printed header/footer
Page #	Page 1, Page 2, and so on
Page # of %	Page 1 of 10, page 2 of 10, and so on
\A:A1	The text entered in cell A:A1
@ - page #	The date followed by the page number
^ - @	The file name followed by the date

Tips

- You can enter up to 240 characters for each part of a header or footer.
- If you use @ (at sign) or + (plus sign) to enter the date or time, 1-2-3 updates the date and time each time you print. If you do not want the date and time to change each time you print, you can just type them in.
- To print @ (at sign), + (plus sign), # (pound sign), % (percent sign), ^ (caret), or \ (backslash) in a header or footer, enter an ' (apostrophe) immediately before the character. For example, enter '# to print #.
- If you see overlapping text in a header or footer, this means you have typed too much text in one of the header or footer boxes. To fix this, delete some of the text or enter the text in a different location.
- You cannot use a | (vertical bar) character in a header or footer.
- You cannot combine the contents of a cell with other text you type.

{button ,AL(`H_PRINT_ADDING_HEADERS_AND_FOOTERS_STEPS',1)} Go to procedure

Printing titles on each page

Printing titles is like freezing column and row titles in the sheet. Titles can clarify data in your printed sheet by providing the same headings in the first row and left column of each printed page.

1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Click the Headers & Footers tab in the InfoBox.

3. Under Print as titles on each page, enter a a range for "Rows," "Columns," or both, or use the range selector to specify the range(s).

   Data in the columns will print along the left edge of each page, and data in the rows will print along the top edge of each page.

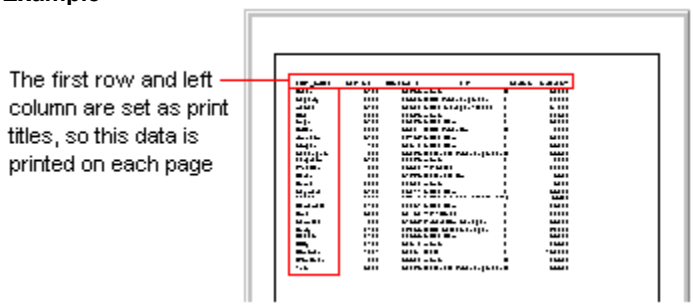
4. (Optional) Move, collapse, or close the InfoBox.
5. (Optional) Close the Preview window.

{button ,AL(`H_PRINT_ADDING_TITLES_ON_EACH_PAGE_DETAILS',1)} See details

{button ,AL(`H_PRINT_AND_PAGE_PROPERTIES_OVER;',0)} See related topics

Details: Printing titles on each page

Example



Size of the titles

You only need to specify one cell from each column or row for the titles. Although you can select as many contiguous columns and rows as you like for titles, it is practical to set only a few columns and rows so your data will fit on the page.

1-2-3 uses only the number of rows and columns for your titles that correspond to the size of your print range. For example, if you select B1..M15 as a print range and column A for column print titles, 1-2-3 prints the contents of A1..A15 down the left edge of each page.

Related SmartIcons

Sets columns as print titles

Sets rows as print titles

{button ,AL(`H_PRINT_ADDING_TITLES_ON_EACH_PAGE_STEPS',1)} Go to procedure

Changing the paper size

You can choose from the paper sizes supported by the current printer or you can set a custom paper size.

1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Click the Printer tab in the InfoBox.

3. Select a size from the list or select "Custom" if the printer driver supports a custom setting.
   If you selected "Custom," specify the height and width of the paper.
4. (Optional) Move, collapse, or close the InfoBox.
5. (Optional) Close the Preview window.

{button ,AL(`H_PRINT_AND_PAGE_PROPERTIES_OVER;',0)} See related topics

Overview: Named print styles

After you have used the InfoBox to customize print and page settings, you can name and save these settings as print styles to use any time you print.

Use named print styles to:

- Print different kinds of data using the same print and page settings
- Print the same data in different ways; for example, with and without grid lines
- Create variations of the same settings for different files and kinds of data

1-2-3 saves named print styles with the current workbook, and includes all the print and page settings you chose except the printer.

Notes

In earlier releases of 1-2-3, this feature was called "named page settings."

You can retrieve settings from .AL3 files, but you can no longer save settings to these files.

Creating a named print style

After you have used the InfoBox to customize print and page settings, you can name and save these settings with the current workbook to use any time you print.

1. Choose File - Preview & Page Setup.

2. Review your work in the Preview window and use the InfoBox to change the print and page settings.
3. Click the Named Style tab in the InfoBox.

4. Click Create Style.
5. Enter a name (up to 64 characters long) for the print style.
6. (Optional) Enter a description for the style.
7. (Optional) Select "Save print selection as part of the style."

   If you select this option, 1-2-3 saves the selected range as part of the style. This lets you print the same range with the same settings each time.
8. Click OK to save the named print style with the current workbook.
9. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NS_PRINT_OVER',0)} See related topics

Applying a named print style

You can apply an existing named print style to the current workbook.

1. Choose File - Preview & Page Setup.

2. Click the Named Style tab in the InfoBox.

3. From the "Print style name" list, select the print style you want to apply to the current workbook.

   1-2-3 immediately applies the settings for the style you selected to the current workbook, and 1-2-3 will use these settings to print until you change them.

4. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NS_PRINT_OVER',0)} See related topics

Redefining a named print style

1. Choose File - Preview & Page Setup.

2. Change some of the print and page settings.
3. Click the Named Style tab in the InfoBox.

4. Click Redefine Style.
5. Select the name of the print style you want to redefine.

   Note If you select Default, the most recent print settings you specified will become the default print settings.
6. (Optional) Enter a new description of the style, or edit the current one.
7. (Optional) Select "Save print selection as part of the style."

   If you select this option, 1-2-3 saves the selected range as part of the style. This lets you print the same range with the same settings each time.
8. Click OK to save the print style with the current settings.
9. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NS_PRINT_OVER;H_NS_RESET_PRINT_STYLES_STEPS;',0)} See related topics

Resetting a named print style

If you applied a named print style and then modified print settings in the InfoBox, you can undo the changes by resetting the style.

1. Choose File - Preview & Page Setup.

2. Click the Named Style tab in the InfoBox.

3. Click Reset to Style.
4. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NS_PRINT_OVER;H_NS_REDEFINE_STYLES_STEPS',0)} See related topics

Retrieving a print style from an earlier release of 1-2-3

You can retrieve named page settings saved in an .AL3 file from an earlier release of 1-2-3.

1. Choose File - Preview & Page Setup.

2. Click the Named Style tab in the InfoBox.

3. Click Retrieve.
4. In the Retrieve Named Settings dialog box, specify the name of the .AL3 file you want to use.
5. Click Open.
6. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NS_PRINT_OVER',0)} See related topics

Manage Styles dialog box for print styles

Use this dialog box to manage named print styles.

Choose a task

- Renaming a print style
- Deleting a named print style
- Copying a named print style from another file

{button ,AL(`H_NS_PRINT_OVER',0)} See related topics

Renaming a print style

You can change the name of a print style.

1. Choose File - Preview & Page Setup.

2. Click the Named Style tab in the InfoBox.

3. Click Manage Styles.
4. Select the style you want to rename from the list.
5. Click Rename.
6. In the "To" box, edit the current name or enter a new name (up to 64 characters long).
7. (Optional) Edit the current description of the style, or enter a new one.
8. Click OK to rename the style.
9. When you return to the Manage Styles dialog box, click Done.
10. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NS_PRINT_OVER',0)} See related topics

Deleting a named print style

1. Choose File - Preview & Page Setup.

2. Click the Named Style tab in the InfoBox.

3. Click Manage Styles.
4. Select the style you want to delete from the list.
5. Click Delete.
6. Click Done.
7. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NS_PRINT_OVER',0)} See related topics

Copying a named print style from another file

To copy named print styles between files, both workbook files must be open.

1. Open both workbook files.
2. Beginning in the file to which you want to copy the named style, choose File - Preview & Page Setup.

3. Click the Named Style tab in the InfoBox.

4. Click Manage Styles.
5. Click Copy From.
6. Under Workbook, select the workbook that has the named style you want to copy.
7. Under Styles, select the style you want to copy.
8. Click Copy to copy the selected named print style into the current workbook.
9. When you return to the Manage Styles dialog box, click Done.
10. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NS_PRINT_OVER',0)} See related topics

Print dialog box

Use the Print dialog box to print your work.

Choose a task

- Previewing your work before printing
- Quick printing
- Printing a workbook
- Printing the current sheet
- Printing a range
- Printing graphic objects, charts, and maps
- Printing to a file
- Printing text in the Script Editor
- Selecting a printer
- Changing printer properties

{button ,AL(`H_PRINT_OVER;H_PRINT_PREVIEW_WINDOW_OVER;',0)} See related topics

Overview: Printing

In 1-2-3 you can print the current sheet, the entire workbook, or any selected range or collection. You can print your work quickly by using the default settings, or you can enhance your printed work by using the InfoBox to customize the print and page settings.

For example, you can:

- Include charts, maps, and graphics when you print
- Print cell comments and formulas
- Print with or without grid lines, row and column frames, and the outline frame
- Add headers, footers, and titles
- Shrink or enlarge data to fill the page
- Center your data horizontally or vertically
- Change the page orientation
- Save and reuse customized print and page settings as named print styles
- Change print and page settings as you preview your work

{button ,AL(`H_PRINT_PREVIEW_WINDOW_OVER;H_PRINT_QUICK_STEPS;H_PRINT_A_WORKBOOK_STEPS;H_PRINT_A_SHEET_STEPS;H_PRINT_A_RANGE_STEPS;H_PRINT_OBJECTS_CHARTS_MAPS_STEPS;H_PRINT_TO_FILE_STEPS;H_PRINT_ADDING_A_PAGE_BREAK_STEPS;H_PRINT_REMOVING_A_PAGE_BREAK_STEPS;H_PRINT_AND_PAGE_PROPERTIES_OVER',0)} See related topics

Quick printing

The quickest way to print is to use the default print and page settings.

1. Choose File - Print.

2. Under Printer, select the printer you want to use.
3. Under Print, select what you want to print.

   If you want to print a "Selected Range," enter a range in the box, or use the range selector to specify the range.
4. (Optional) Under Copies, select the number of copies to print and whether to collate them.
5. Click Print.

Tip To bypass the Print dialog box, use the Quick Print icon to print your selection. Use File - User Setup - SmartIcons Setup to add this icon to the icon bar.

{button ,AL(`H_PRINT_QUICK_DETAILS',1)} See details

{button ,AL(`H_PRINT_OVER;H_PRINT_CHANGING_SELECTION_STEPS;H_PRINT_A_WORKBOOK_STEPS;H_PRINT_A_SHEET_STEPS;H_PRINT_A_RANGE_STEPS;H_PRINT_OBJECTS_CHARTS_MAPS_STEPS;H_PRINT_TO_FILE_STEPS;',0)} See related topics

Details: Quick printing

Installing a printer
If you need to install a printer, see the documentation for your operating system.

Printing defaults
If you selected only a single cell and you have not saved a print range, 1-2-3 prints the current worksheet. By default, 1-2-3 prints charts, maps, graphic objects, and database query tables within your selected print range.

{button ,AL(`H_PRINT_QUICK_STEPS',1)} Go to procedure

Printing a workbook

If you print a workbook that contains more than one sheet, 1-2-3 automatically prints each sheet on a new page.

1. Choose File - Print.

2. Under Printer, select the printer you want to use.
3. Under Print, select "Entire workbook."
4. (Optional) Under Pages, select the pages to print and how to number them.
5. (Optional) Under Copies, select the number of copies to print and whether to collate them.

   Note If you click Preview & Page Setup, you can preview your work and customize print and page settings before you print.
6. Click Print.

{button ,AL(`H_PRINT_A_WORKBOOK_DETAILS',1)} See details

{button ,AL(`H_PRINT_OVER;H_PRINT_CHANGING_SELECTION_STEPS;H_PRINT_SELECTING_A_PRINTER_STEPS;H_PRINT_CHANGING_PRINTER_PROPERTIES_STEPS;H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS;H_PRINT_NUMBERING_PAGES_STEPS;H_PRINT_PREVIEW_WINDOW_OVER',0)} See related topics

Details: Printing a workbook

When you preview or print a workbook, the automatic page breaks appear as gray lines in the sheet. 1-2-3 automatically paginates what you are printing based on how many complete columns and rows will fit on the current page. Page breaks never occur part way through a column or row.

If the pages do not automatically break where you want, you can add page breaks to keep related data together or to print certain data on a separate page.

{button ,AL(`H_PRINT_A_WORKBOOK_STEPS',1)} Go to procedure

{button ,AL(`H_PRINT_ADDING_A_PAGE_BREAK_STEPS',0)} See related topics

Printing the current sheet

1. Move the cell pointer to the sheet you want to print.
2. Choose File - Print.

3. Under Printer, select the printer you want to use.
4. Under Print, select "Current sheet."
5. (Optional) Under Pages, select the pages to print and how to number them.
6. (Optional) Under Copies, select the number of copies to print and whether to collate them.

   Note If you click Preview & Page Setup, you can preview your work and customize print and page settings before you print.
7. Click Print.

{button ,AL(`H_PRINT_OVER;H_PRINT_CHANGING_SELECTION_STEPS;H_PRINT_SELECTING_A_PRINTER_STEPS;H_PRINT_CHANGING_PRINTER_PROPERTIES_STEPS;H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS;H_PRINT_ADDING_A_PAGE_BREAK_STEPS;H_PRINT_NUMBERING_PAGES_STEPS;H_PRINT_PREVIEW_WINDOW_OVER',0)} See related topics

Printing a range

1. Choose File - Print.

2. Under Printer, select the printer you want to use.
3. Under Print, select "Selected range." Enter the range you want to print or use the range selector to specify the range.
4. (Optional) Under Pages, select the pages to print and how to number them.
5. (Optional) Under Copies, select the number of copies to print and whether to collate them.

   Note If you click Preview & Page Setup, you can preview your work and customize print and page settings before you print.
6. Click Print.

{button ,AL(`H_PRINT_A_RANGE_DETAILS',1)} See details

{button ,AL(`H_PRINT_OVER;H_PRINT_CHANGING_SELECTION_STEPS;H_PRINT_SELECTING_A_PRINTER_STEPS;H_PRINT_CHANGING_PRINTER_PROPERTIES_STEPS;H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS;H_PRINT_ADDING_A_PAGE_BREAK_STEPS;H_PRINT_NUMBERING_PAGES_STEPS;H_PRINT_PREVIEW_WINDOW_OVER',0)} See related topics

Details: Printing a range

Selecting a range

- To select a range before you open the Print dialog box, highlight the range before you choose File - Print. When you open the dialog box, the address for the range you highlighted will appear in the "Selected range" box .
- To print using a named range, click in the "Selected range" box. Then type the range name or press F3 to select a range name from the list.

Printing a collection

A collection is a group of noncontiguous cells.

- To select a collection before you open the Print dialog box, select the first cell or range, hold down CTRL, and select additional ranges.
- To specify a collection from the Print dialog box, you can enter each range address separated by a semicolon.

If you print a range collection, each range in the collection is printed on a separate page.

Printing a 3D range

A 3D range is a range that spans more than one sheet. When you print a 3D range, each sheet of the range is printed on a separate page.

{button ,AL(`H_PRINT_A_RANGE_STEPS',1)} Go to procedure

Printing graphic objects, charts, and maps

1. Select the graphic object, chart, or map you want to print.
2. Choose File - Print.

3. Under Printer, select the printer you want to use.

   Note If you click Preview & Page Setup, you can preview your work and customize print and page settings before you print.
4. Click Print.

{button ,AL(`H_PRINT_OVER;H_PRINT_CHANGING_SELECTION_STEPS;H_PRINT_SELECTING_A_PRINTER_STEPS;H_PRINT_CHANGING_PRINTER_PROPERTIES_STEPS;H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS;H_PRINT_NUMBERING_PAGES_STEPS;H_PRINT_PREVIEW_WINDOW_OVER',0)} See related topics

Printing to a file

You can save data from a 1-2-3 workbook to a .PRN file so you can print it at another time.

Note This .PRN file contains information specific to the printer driver that you are using with 1-2-3. When you print the file, use the same type of printer you were using with 1-2-3 when you created the file.

1. (Optional) Select the data you want to print to a file.
2. Choose File - Print.

3. Under Printer, select "Print to file."
4. Under Print, select what you want to print.
5. Click Print.
6. In the Print to File dialog box, specify the following:
   - The directory in which to save the file
   - A name for the file
7. Click OK (or Save for NT users) to save the data in a file.

1-2-3 saves the data in a file with a .PRN extension.

Tip To save your data to a file in a text format, use File - Save As and save the file as a Text (.TXT) file.

{button ,AL(`H_PRINT_OVER;H_PRINT_CHANGING_SELECTION_STEPS;',0)} See related topics

Printing text in the Script Editor

You can print the current script, all scripts for a selected object, or all scripts for the current workbook.

1. From the Script Editor menu, choose File - Print Script.

2. Under Printer, select the printer you want to use.
3. Under Pages, specify the pages to print and how you want to number them.
4. Under Print, select what you want to print.
5. (Optional) Under Copies, specify the number of copies you want to print and whether you want to collate them.
6. Click Print.

{button ,AL(`H_LOTUSSCRIPT_INDEX_TOPIC_OVER;H_INSTALLING_123_SCRIPT_HELP_STEPS;H_PRINT_OVER;H_PRINT_SELECTING_A_PRINTER_STEPS;H_PRINT_CHANGING_PRINTER_PROPERTIES_STEPS;H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS;H_PRINT_ADDING_A_PAGE_BREAK_STEPS;H_PRINT_NUMBERING_PAGES_STEPS;H_PRINT_PREVIEW_WINDOW_OVER;H_PRINT_TO_FILE_STEPS',0)} See related topics

Overview: The Preview window

With Dynamic Preview, you can preview your work while you make formatting changes.

The Preview window

When you open the Preview window, 1-2-3 displays the current workbook in a window on the left, and displays the Preview window on the right. 1-2-3 also opens the InfoBox so you can change print and page settings.

With the tiled preview and worksheet windows, you can change print settings and immediately preview those changes before you print your work.

Use the Preview window to add headers, footers, and other printing details before you print your work. If you make changes to print and page settings or to the selected data while you are previewing your work, you see the results immediately in the Preview window.

The Preview window is like any other window--you can move it, size it, minimize it, maximize it, and close it. When you close it, 1-2-3 restores the current workbook to its original size and placement.

Navigating in the Preview window

In the Preview window, you can view part of a page or object in great detail or view up to nine smaller pages at once.

Click anywhere in the Preview window to zoom in or out, depending on what you are viewing. If you cannot see all of your work, use the horizontal and vertical scroll bars in the Preview window.

You can also use the Preview menu commands or the preview SmartIcons to display one or more pages in the Preview window.

Tip Right-click in the Preview window to display the shortcut menu for previewing and printing your work.

{button ,AL(`H_PRINT_PREVIEW_KEY_MOUSE_SHORTCUTS_OVER;H_PRINT_PREVIEW_WINDOW_OVER;H_PRINT_PREVIEW_ZOOMING_IN_AND_OUT_STEPS;H_PRINT_PREVIEW_YOUR_WORK_STEPS',0)} See related topics

Overview: Keyboard and mouse shortcuts in the Preview window

You can use the keyboard or the mouse in the Preview window to zoom in and out of pages and to navigate between pages.

Tip Right-click in the Preview window to display the shortcut menu for previewing and printing your work.

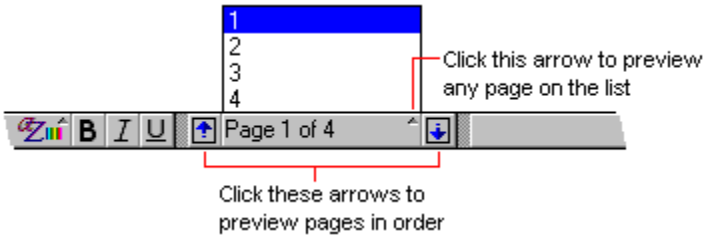
Keyboard shortcuts

You can view up to nine pages in the Preview window. When you use keyboard shortcuts, 1-2-3 displays different amounts of information in the Preview window depending on how many pages you are viewing at the time. Here is a quick summary of how you can work with keyboard shortcuts in the Preview window.

Press...	While previewing...	To do this...
↓	1 page	Scroll down within a page or show the next page
	2 - 9 pages	Scroll down to show the next row of pages
	1 page	Scroll up within a page or show the previous page
	2 - 9 pages	Scroll up to show the previous row of pages
PGDN	1 page	Scroll down to show the next page
	2 - 9 pages	Scroll down to show the next screen of pages
PGUP	1 page	Scroll up to show the previous page
	2 - 9 pages	Scroll up to show the previous screen of pages
+ (Plus)	1 page	Zoom in one level
	2 pages	Zoom in to display one page
	4 pages	Zoom in to display two pages
	9 pages	Zoom in to display four pages
- (Minus)	1 page	Zoom out one level
	2 pages	Zoom out to display four pages
	4 pages	Zoom out to display nine pages
ENTER	1 - 9 pages	Show the next page
SHIFT + ENTER	1 - 9 pages	Show the previous page

Mouse shortcuts

When you are previewing your print job, you can use the status bar to preview different pages.



Related SmartIcons


Previews your print selection


Displays the Preview & Page Setup InfoBox


Previews the next page


Previews the previous page


Previews one page


Previews two pages


Previews four pages


Previews nine pages


Displays the Print dialog box


Prints now, without displaying the Print dialog box


Closes the active window

{button ,AL(`;H_PRINT_PREVIEW_WINDOW_OVER;H_PRINT_PREVIEW_ZOOMING_IN_AND_OUT_STEPS;',0)}
See related topics

Previewing your work before printing

With Dynamic Preview, you can preview your work while you make formatting changes. Previewing lets you see how pages will look with the current print and page settings before you print them.

1. Choose File - Print.

2. Under Print, select what you want to print.
3. Click Preview & Page Setup.

   1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

   Tip Right-click in the Preview window to display the shortcut menu for previewing and printing your work.
4. (Optional) Use the InfoBox to change print and page settings for the current print selection.

   1-2-3 instantly updates the Preview window as you change these settings. You can move, collapse, or close the InfoBox.
5. When you are ready to print, click the Quick Print icon.

6. Close the Preview window.

{button ,AL(`H_PRINT_PREVIEW_YOUR_WORK_DETAILS',1)} See details

{button ,AL(`H_PRINT_PREVIEW_WINDOW_OVER;H_PRINT_CHANGING_SELECTION_STEPS;H_PRINT_OVER;H_PRINT_PREVIEW_KEY_MOUSE_SHORTCUTS_OVER;H_PRINT_PREVIEW_ZOOMING_IN_AND_OUT_STEPS;H_USING_THE_INFOBOX_STEPS',0)} See related topics

Details: Previewing your work before printing

You can use the Preview commands or the related SmartIcons to display your work in the Preview window and to print your work.

Task	Command	Icon
Change print and page settings	Preview - Preview & Page Setup Properties	
Display the previous page	Preview - Previous Page	
Display the next page	Preview - Next Page	
View one page	Preview - One Page View	
View two pages	Preview - Two Page View	
View four pages	Preview - Four Page View	
View nine pages	Preview - Nine Page View	
Open the Print dialog box	File - Print	
Open the Preview window	File - Preview & Page Setup	

{button ,AL(`H_PRINT_PREVIEW_YOUR_WORK_STEPS',1)} Go to procedure

Zooming in and out of the Preview window

You can click on data in the Preview window to zoom in or out.

1. Choose File - Preview & Page Setup.

1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox. In the Preview window, the mouse pointer changes to a zoom in or zoom out icon, depending on the current state of the Preview display.

2. Click on data in the Preview window to zoom in or out.

   If you zoom in, 1-2-3 may not display all of your work in the Preview window. Click the horizontal and vertical scroll bars to see more of your work.

3. (Optional) Close the Preview window.

Note Zooming in or out in the Preview window does not affect the size of the printed text.

{button ,AL(`H_PRINT_PREVIEW_ZOOMING_IN_AND_OUT_DETAILS',1)} See details

{button ,AL(`;H_PRINT_PREVIEW_KEY_MOUSE_SHORTCUTS_OVER;H_PRINT_PREVIEW_WINDOW_OVER',0)} See related topics

Details: Zooming in and out of the Preview window

If you are previewing a single page or multiple pages, clicking in the Preview window zooms in and out.

- First click -- Zooms into the page
- Second click -- Zooms further into the page
- Third click -- Returns to either a one page preview or multiple page preview, depending on where you started

---

{button ,AL(`H_PRINT_PREVIEW_ZOOMING_IN_AND_OUT_STEPS',1)} Go to procedure

Selecting a printer

If you have installed more than one printer, you can select the printer you want to use.

Note If you need to install a printer, see the documentation for your operating system.

1. Choose File - Print.

2. Under Printer, select a printer from the "Print to" list.
3. Do one of the following:
   - Click Print to print your work to the printer you selected.
   - Click Cancel to keep the printer you specified as the default printer and to close the Print dialog box without printing.

{button ,AL(`H_PRINT_CHANGING_PRINTER_PROPERTIES_STEPS;H_PRINT_OVER',0)} See related topics

Changing printer properties

The properties you can change depend on the type of printer you have installed.

1. Choose File - Print.

2. Under Printer, click Properties.

   Note The Properties dialog box is for the current printer only and is controlled by the operating system.

3. Select the properties you want to use for the current printer.
4. Click OK to close the Properties dialog box.
5. Do one of the following:
   - Click Print to print your work.
   - Click Cancel to close the Print dialog box without printing.

{button ,AL(`H_PRINT_SELECTING_A_PRINTER_STEPS;H_PRINT_OVER',0)} See related topics

Adding a page break

When you preview your work before printing, 1-2-3 displays page breaks as bold grey lines in the sheet.

If the automatic page breaks aren't where you want them, you can add page breaks to keep related data together or to print certain data on a separate page.

1. Use File - Preview & Page Setup to see where 1-2-3 displays page breaks.

   1-2-3 displays the current workbook on the left and the Preview window on the right. 1-2-3 also opens the InfoBox.

2. Use the Preview window to see each page.

   Tip You can use the status bar to display one page at a time.

3. In the sheet, select a cell below the row or to the right of the column where you want to add a page break.
4. Click the Basics tab in the InfoBox.

5. Select one or both options:
   - Break page at column -- Inserts a vertical page break in the column to the left of the selected cell.
   - Break page at row -- Inserts a horizontal page break in the row above the selected cell.
6. (Optional) Move, collapse, or close the InfoBox.
7. (Optional) Close the Preview window.

{button ,AL(`H_PRINT_ADDING_A_PAGE_BREAK_DETAILS',1)} See details

{button ,AL(`;H_PRINT_CHANGE_MARGINS_STEPS;H_PRINT_CHANGING_PAGE_ORIENTATION_STEPS;H_PRINT_FITTING_YOUR_WORK_ON_THE_PAGE_STEPS;H_PRINT_REMOVING_A_PAGE_BREAK_STEPS;H_PRINT_CHANGING_SELECTION_STEPS',0)} See related topics

Details: Adding a page break

1-2-3 automatically paginates what you are printing based on how many complete columns and rows will fit on the current page. Page breaks never occur part way through columns or rows.

If you print a workbook that contains more than one sheet, 1-2-3 automatically prints each sheet on a new page.

Related SmartIcons

Inserts a horizontal page break

Inserts a vertical page break

{button ,AL(`H_PRINT_ADDING_A_PAGE_BREAK_STEPS',1)} Go to procedure

Removing a page break

1-2-3 displays page breaks as bold grey lines in the sheet. You can remove page breaks that you added to the sheet for printing your work.

1. Select a cell directly below or to the right of the grey line.
2. Choose Range - Range Properties.

3. Click the Basics tab in the InfoBox.
4. Deselect one or both options:
   - Break page at column -- Removes the vertical page break in the column to the left of the selected cell.
   - Break page at row -- Removes the horizontal page break in the row above the selected cell.
5. (Optional) Move, collapse, or close the InfoBox.

Note You cannot remove the automatic page breaks 1-2-3 displays when you preview your work before printing, but you can add page breaks to control how 1-2-3 prints your work.

{button ,AL(`H_PRINT_ADDING_A_PAGE_BREAK_STEPS;',0)} See related topics

Chart commands

The table below lists Chart commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97.

1-2-3 Release 5	1-2-3 97
Chart - Axis - X-Axis	Chart - Axes & Grids - X-Axis & Grids
Chart - Axis - Y-Axis	Chart - Axes & Grids - Y-Axis & Grids
Chart - Axis - 2nd Y-Axis	Chart - Axes & Grids - 2nd Y-Axis & Grids
Chart - Data Labels	Chart - Ranges; select Data labels in the "Parts" list
Chart - Grids	Chart - Axes & Grids - X-Axis & Grids Chart - Axes & Grids - Y-Axis & Grids Chart - Axes & Grids - 2nd Y-Axis & Grids Chart - Axes & Grids - Z-Axis & Grids
Chart - Headings	Chart - Title Chart - Note
Chart - Legend	Chart - Legend
Chart - Name	Chart - Chart Properties (Basics tab)
Chart - Numeric Color	Chart - Series (Lines & Colors tab)
Chart - Ranges	Chart - Ranges
Chart - Set Preferred	Chart - Chart Style - Set Default Chart
Chart - Type	Chart - Chart Type
Chart - Use Preferred	Chart - Chart Style - Apply

Edit commands

The table below lists Edit commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97.

Note In the table, *Object* refers to the current selected object, such as a chart, a graphic object, or an embedded document.

1-2-3 Release 5	1-2-3 97
Edit - Arrange - Bring to Front	*Object* - Bring to Front
Edit - Arrange - Fasten to Cells	*Object* - *Object* Properties (Basics tab)
Edit - Arrange - Flip Left-Right	Drawing - Flip Left-Right
Edit - Arrange - Flip Top-Bottom	Drawing - Flip Top-Bottom
Edit - Arrange - Group	*Object* - Group
Edit - Arrange - Lock	*Object* - *Object* Properties (Basics tab)
Edit - Arrange - Rotate	*Object* - *Object* Properties (Basics tab)
Edit - Arrange - Send to Back	*Object* - Send to Back
Edit - Arrange - Ungroup	*Object* - Ungroup
Edit - Arrange - Unlock	*Object* - *Object* Properties (Basics tab)
Edit - Clear	Edit - Clear
Edit - Copy	Edit - Copy
Edit - Copy Back	{EDIT-COPYFILL} macro
Edit - Copy Down	Edit - Copy Down
Edit - Copy Forward	{EDIT-COPYFILL} macro
Edit - Copy Left	{EDIT-COPYFILL} macro
Edit - Copy Right	Edit - Copy Right
Edit - Copy Up	{EDIT-COPYFILL} macro
Edit - Cut	Edit - Cut
Edit - Delete	Range - Delete Sheet - Delete Sheet
Edit - Find & Replace	Edit - Find & Replace
Edit - Go To	Edit - Go To
Edit - Insert	 Create - Sheet Range - Insert
Edit - Insert Object	Create - Object
Edit - Links	Edit - Manage Links
Edit - Paste	Edit - Paste
Edit - Paste Link	Edit - Paste Link
Edit - Paste Special	Edit - Paste Special
Edit - Undo	Edit - Undo

File commands

The table below lists File commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97:

1-2-3 Release 5	1-2-3 97
File - Close	File - Close
File - Close & Return	File - Close & Return to <application>
File - Doc Info	File - Workbook Properties (General tab)
File - Exit	File - Exit 1-2-3
File - Exit & Return	File - Exit & Return to <application>
File - New	File - New Workbook
File - Open	File - Open
File - Page Setup	File - Preview & Page Setup
File - Print	File - Print
File - Print Preview	File - Preview & Page Setup
File - Printer Setup	File - Print
File - Protect	File - Workbook Properties (Security tab)
File - Save	File - Save
File - Save As	File - Save As
File - Save Copy As	File - Save Copy As
File - Send Mail	File - TeamMail
File - Update	File - Update

Help commands

The table below lists Help commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97.

1-2-3 Release 5	1-2-3 97
Help - About 1-2-3	Help - About 1-2-3
Help - Contents	Help - Help Topics
Help - For Upgraders	Help - Help Topics: What's New for Upgraders book
Help - Keyboard	Help - Help Topics: Tools for Getting Your Work Done book
Help - How Do I	Help - Help Topics: How Do I? book
Help - Search	Help - Help Topics (Index tab)
Help - Tutorial	Help - Tour
Help - Using Help	Help - Help Topics: Getting Started book

Overview: Release 5 command equivalents

The following topics list commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97 Edition:

File commands
Edit commands
View commands
Style commands
Tools commands
Range commands
Window commands
Help commands
Chart commands
Query commands
Transcript commands

Note Some Release 5 commands are obsolete and have no equivalent in 1-2-3 97. For example, query tables are now supported through embedded Lotus Approach databases, so many commands that are specific to query tables are actually Approach commands.

{button ,AL(`H_123_CLASSIC_OVER;H_GETTING_HELP_ON_A_MENU_COMMAND_STEPS',0)} See related topics

Query commands

The table below lists Query commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97.

In 1-2-3 97, query tables have been replaced by embedded Approach queries. In many cases, an equivalent command is not available in 1-2-3 97. However, you can use 1-2-3 97 with Approach to perform the action equivalent to the 1-2-3 Release 5 command.

1-2-3 Release 5	1-2-3 97
Aggregate	See Creating a query table and Creating a report.
Choose Fields	Click the field name in a query table. Also see Adding a field in a query table and Deleting a field in a query table.
Join	See Joining database tables.
Name	Query Table - Query Table Properties (Basics tab)
Refresh Now	Query Table - Refresh
Set Criteria	See Finding specific records in a query table.
Set Options	See Creating a query table.
Set Database Table	Double-click the query table to activate it. If the original table is missing or has been renamed, Approach prompts for a replacement table name.
Show Field As	Double-click the query table to activate it, double-click the field header, and enter the new name.
Show SQL	No longer supported
Sort	See Sorting records in a query table.
Update Database Table	Query Table - Refresh

Range commands

The table below lists Range commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97.

1-2-3 Release 5	1-2-3 97
Range - Analyze - Backsolver	Range - Analyze - Backsolver
Range - Analyze - Distribution	Range - Analyze - Distribution
Range - Analyze - Invert Matrix	Range - Analyze - Invert Matrix
Range - Analyze - Multiply Matrix	Range - Analyze - Multiply Matrix
Range - Analyze - Regression	Range - Analyze - Regression
Range - Analyze - Solver	Solver
Range - Analyze - What-if Table	Range - Analyze - What-if Table
Range - Fill	Range - Fill
Range - Fill by Example	Range - Fill
Range - Name	Range - Name
Range - Parse	Range - Parse
Range - Sort	Range - Sort
Range - Transpose	Range - Transpose
Range - Version	Range - Version - New Version Range - Version - Display Version Range - Version - Delete Version Range - Version - Version Groups Range - Version - Report

Style commands

The table below lists Style commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97. In 1-2-3 97, most Style commands are now performed in the InfoBox. For example, to align a range of text in Release 5, you used Style - Alignment. In 1-2-3 97, you choose Range - Range Properties to open the Range InfoBox, click the Alignment tab, and then select the alignment option.

Note In the table, *Object* refers to the current selection, such as a range, chart, map, or other graphic object.

1-2-3 Release 5	1-2-3 97
Style - Alignment	
	Object - *Object* Properties (Alignment tab) Sheet - Sheet Properties (Alignment tab)
Style - Column Width	Range - Range Properties (Basics tab)
Style - Fast Format	Range - Fast Format
Style - Font & Attributes	
	Object - *Object* Properties (Text Format tab)
Style - Gallery	Range - Range Properties (Named Styles tab)
Style - Hide	*Object* - *Object* Properties (Basics tab)
Style - Lines & Color	*Object* - *Objec*t Properties (Lines & Colors tab) Sheet - Sheet Properties (Lines & Colors tab)
Style - Named Style	Range - Range Properties (Named Styles tab)
Style - Number Format	
	Range - Range Properties (Number Format tab) Sheet - Sheet Properties (Number Format tab)
Style - Page Break	Range - Range Properties (Basics tab)
Style - Protection	Range - Range Properties (Security tab) Sheet - Sheet Properties (Basics tab)
Style - Row Height	Range - Range Properties (Basics tab)
Style - Worksheet Defaults	Sheet - Sheet Properties

Tools commands

The table below lists Tools commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97. In 1-2-3 97, query tables have been replaced by embedded Approach queries. In some cases, an equivalent command is not available in 1-2-3 97. However, you can use 1-2-3 97 with Approach to perform the action equivalent to the 1-2-3 Release 5 command.

1-2-3 Release 5	1-2-3 97
Tools - Add-in	File - Add-Ins
Tools - Audit	No longer supported
Tools - Chart	Create - Chart
Tools - Database - Append Records	See Adding records using a query table.
Tools - Database - Connect to External	See Creating a query table.
Tools - Database - Create Table	See Creating a 1-2-3 database table.
Tools - Database - Crosstab	Create - Database - Dynamic CrossTab
Tools - Database - Delete Records	See Deleting database records.
Tools - Database - Disconnect	When the query table is active, choose Open to Full Window, choose Open, select the desired connection and click Disconnect. Refer to Approach Help for more information.
Tools - Database - Dynamic Crosstab	Create - Database - Dynamic Crosstab
Tools - Database - Find Records	See Finding specific records in a query table.
Tools - Database - Form	Create - Database - Form
Tools - Database - Mailing Labels	Create - Database - Mailing Labels
Tools - Database - New Query	Create - Database - Query Table
Tools - Database - Report	Create - Database - Report
Tools - Database - Send Command	No longer supported
Tools - Draw - Arc	Create - Drawing - Arc
Tools - Draw - Arrow	Create - Drawing - Arrow
Tools - Draw - Button	Create - Button
Tools - Draw - Ellipse	Create - Drawing - Ellipse
Tools - Draw - Freehand	Create - Drawing - Freehand
Tools - Draw - Line	Create - Drawing - Line
Tools - Draw - Polygon	Create - Drawing - Polygon

Tools - Draw - Polyline	Create - Drawing - Polyline
Tools - Draw - Rectangle	Create - Drawing - Rectangle
Tools - Draw - Rounded Rectangle	Create - Drawing - Rounded Rectangle
Tools - Draw - Text	Create - Text
Tools - Macro - Assign to Button	Edit - Scripts & Macros - Show Script Editor
Tools - Macro - Record	Edit - Scripts & Macros - Record Script
Tools - Macro - Run	Edit - Scripts & Macros - Run
Tools - Macro - Show Transcript	No longer supported
Tools - Macro - Single Step	Edit - Scripts & Macros - Run
Tools - Macro - Trace	Edit - Scripts & Macros - Run
Tools - Map - Colors & Legend	Map - Color Bins
Tools - Map - New Map	Create - Map
Tools - Map - Patterns & Legend	Map - Pattern Bins
Tools - Map - Ranges & Title	Map - Map Ranges Map - Map Title
Tools - Map - Redraw	Map - Redraw
Tools - Map - Set Redraw Preference	Map - Map Properties (Basics tab)
Tools - SmartIcons	File - User Setup - SmartIcons Setup
Tools - Spell Check	Edit - Check Spelling
Tools - User Setup	File - User Setup - 1-2-3 Preferences

Transcript commands

1-2-3 97 does not contain a Transcript window for recording commands and actions. Instead, commands and actions are recorded as scripts in the Integrated Development Environment (IDE).

1-2-3 Release 5	1-2-3 97
Make Button	Create - Button
Minimize on Run	No longer supported
Playback	No longer supported
Record Absolute	No longer supported
Record Relative	No longer supported

View commands

The table below lists View commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97.

1-2-3 Release 5	1-2-3 97
View - Clear Split	View - Clear Split
View - Clear Titles	View - Titles
View - Custom - nn%	View - Zoom to Custom Level (xx%)
View - Freeze Titles	View - Titles
View - Set View Preferences	View - Set View Preferences
View - Split	View - Split
View - Zoom In	View - Zoom to
View - Zoom Out	View - Zoom to

Window commands

The table below lists Window commands in 1-2-3 Release 5 for Windows and their closest equivalents in 1-2-3 97.

1-2-3 Release 5	1-2-3 97
Window - Cascade	Window - Cascade
Window - More Windows	Window - More Windows
Window - Tile	Window - Tile Left-Right Window - Tile Top-Bottom
Window - <List of open windows>	Window - <List of open windows>

Chart macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in LotusChart. For more information on individual LotusChart properties and methods, search on the property or method name in the LotusScript Index.

1-2-3 Release 5	LotusChart
{CHART-ASSIGN-RANGE}	DataLink property
{CHART-AXIS-INTERVALS}	MajorInterval property
	MajorIntervalIsManual property
	MinorInterval property
	MinorIntervalIsManual property
	SecondYAxis property
	XAxis property
	YAxis property
{CHART-AXIS-LIMITS}	Maximum property
	MaximumIsManual property
	Minimum property
	MinimumIsManual property
	SecondYAxis property
	XAxis property
	YAxis property
{CHART-AXIS-SCALE-TYPE}	Scale property
	ScaleType property
	SecondYAxis property
	XAxis property
	YAxis property
{CHART-AXIS-TICKS}	MajorTickmarks property
	MajorTickmarkPlacement property
	MinorTickmarks property
	MinorTickmarkPlacement property
	SecondYAxis property
	TickLabelSkip property
	Visible property
	XAxis property
	YAxis property
{CHART-AXIS-TITLE}	SecondYAxis property
	Text property
	Title property
	XAxis property
	YAxis property
{CHART-AXIS-UNITS}	Exponent property
	SecondYAxis property
	Scale property
	Subtitle property

	SubtitleIsManual property
	SubtitlePlacement property
	Text property
	XAxis property
	YAxis property
{CHART-COLOR-RANGE}	No longer supported
{CHART-DATA-LABELS}	Series property
	SeriesData property
	TextLabels property
{CHART-FOOTNOTE}	DataLink property
	Lines property
	Note property
	Placement property
	Source property
	Text property
	Visible property
{CHART-GRID}	MajorGridlines property
	MinorGridlines property
	SecondYAxis property
	Visible property
	XAxis property
	YAxis property
{CHART-LEGEND}	DataLink property
	Entries property
	Legend property
	Placement property
	Source property
	Text property
	Visible property
{CHART-NEW}	NewChart method
{CHART-PATTERN-RANGE}	No longer supported
{CHART-PIE-LABELS}	PercentLabels property
	PercentLabelPlacement property
	Placement property
	SeriesData property
	TextLabels property
	TextLabelsPlacement property
	ValueLabels property
	ValueLabelPlacement property
{CHART-PIE-SLICE-EXPLOSION}	ExplodePercent property
	Pies property
	PieSlices property
	SliceExplosion property
	SliceDirection property
{CHART-RANGE}	DataLink property

	Series property
	Source property
	Type property
	Use2YAxis property
	XAxis property
{CHART-RANGE-DELETE}	Series property
	Visible property
	XAxis property
{CHART-RENAME}	Name property
{CHART-SET-PREFERRED}	No longer supported
{CHART-TITLE}	DataLink property
	Lines property
	Placement property
	Source property
	Text property
	Title property
	Visible property
{CHART-TYPE}	Type property
{CHART-USE-PREFERRED}	No longer supported

Database macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{COMMIT}	Commit method
{CROSSTAB}	No longer supported
{DATABASE-APPEND}	AppendRecords method
{DATABASE-CONNECT}	Connect method
{DATABASE-CREATE-TABLE}	CreateTable method
{DATABASE-DELETE}	DeleteRecords method
{DATABASE-DISCONNECT}	Disconnect method
{DATABASE-FIND}	FindRecords method
{DATABASE-SEND-COMMAND}	SendCommand method
{QUERY-ADD-FIELD}	AddSelectField method
	CreateComputedField method
{QUERY-AGGREGATE}	FieldAggregateType method
	ResetFieldAggregates method
{QUERY-CHOOSE-FIELDS}	AllFields property
	SelectFields property
{QUERY-COPY-SQL}	CopySQLToClipboard method
	Paste method
	SQL property
{QUERY-CRITERIA}	Criteria property
{QUERY-DATABASE-TABLE}	BaseSourceTable property
{QUERY-JOIN}	Join method
{QUERY-NAME}	Name property
{QUERY-NEW}	NewQuery method
	OutputLocation property
	Refresh method
{QUERY-OPTIONS}	AllowsUpdates property
	AutoRefresh property
	ExtractingUniqueRecords property
	RecordsLimited property
	RecordsLimitMax property
{QUERY-REFRESH}	Refresh method
{QUERY-REMOVE-FIELD}	DeleteComputedField method
	RemoveSelectField method
{QUERY-SHOW FIELD}	FieldAlias method
{QUERY-SORT}	SortData method
{QUERY-SORT-KEY-DEFINE}	QuerySortDefineKey method
{QUERY-SORT-RESET}	SortReset method
{QUERY-UPGRADE}	No longer supported
{QUERY-UPDATE}	Update method

{ROLLBACK}	Rollback method
{SEND-SQL}	SendSQL method

Data manipulation macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{APPENDBELOW}	No LotusScript equivalent
{APPENDRIGHT}	No LotusScript equivalent
{BLANK}	Clear method
{CONTENTS}	CellDisplay property
{LET}	Contents property
{PUT}	Contents property
{RECALC}	RecalcRange method
{RECALCCOL}	RecalcRange method

DDE and OLE macro commands

The 1-2-3 Release 5 for Windows DDE macro commands are no longer supported:

{DDE-ADVISE}

{DDE-CLOSE}

{DDE-EXECUTE}

{DDE-OPEN}

{DDE-POKE}

{DDE-REQUEST}

{DDE-TABLE}

{DDE-UNADVISE}

{DDE-USE}

The tables below list Link and OLE macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

Link macro commands

1-2-3 Release 5	1-2-3 97
{LINK-ASSIGN}	Target property
{LINK-CREATE}	NewDataLink method
{LINK-DEACTIVATE}	AutoUpdate property
{LINK-DELETE}	BreakLink method
{LINK-REMOVE}	Target property
{LINK-TABLE}	No longer supported
{LINK-UPDATE}	Update method

OLE macro commands

1-2-3 Release 5	1-2-3 97
{EDIT-OBJECT}	Verb method
{INSERT-OBJECT}	NewObject method
{UPDATE-OBJECT}	Save method

Edit macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{DELETE-COLUMNS}	DeleteColumns method
{DELETE-ROWS}	DeleteRows method
{DELETE-SHEETS}	DeleteSheet method
{EDIT-CLEAR}	Clear method
{EDIT-COPY}	CopyToClipboard method
{EDIT-COPY-FILL}	CopyFill method
{EDIT-CUT}	Cut method
{EDIT-FIND}	Find method
	SearchString property
{EDIT-FIND?}	No LotusScript equivalent
{EDIT-PASTE}	Paste method
{EDIT-PASTE-LINK}	NewDataLink method
	Paste method
{EDIT-PASTE-SPECIAL}	NewDataLink method
	Paste method
{EDIT-QUICK-COPY}	QuickCopy method
{EDIT-QUICK-MOVE}	QuickMove method
{EDIT-REPLACE}	Replace method
	SearchString property
	ReplaceString property
{EDIT-REPLACE-ALL}	ReplaceAll method
	SearchString property
	ReplaceString property
{FILE-UPDATE-LINKS}	FileAdminLinksRefresh method
{INSERT-COLUMNS}	InsertColumns method
{INSERT-ROWS}	InsertRows method
{INSERT-SHEETS}	NewSheet method

File info component equivalents

The table below lists info components in 1-2-3 Release 5 for 'Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
DOCUMENT-COMMENTS	Description property
DOCUMENT-KEYWORDS	Keywords property
DOCUMENT-REVISIONS	Revisions property
DOCUMENT-SUBJECT	Subject property
DOCUMENT-TITLE	Title property
FILE-RESERVE-AUTOMATICALLY	AlwaysReserve property

File macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{FILE-CLOSE}	Close method
{FILE-COMBINE}	RangeCombine method
{FILE-EXIT}	Quit method
{FILE-EXTRACT}	RangeExtract method
{FILE-GET-RESERVATION}	ReservationGet method
{FILE-IMPORT}	RangeCombineText method
{FILE-NEW}	NewDocument method
{FILE-OPEN}	OpenDocument method
{FILE-OPEN?}	No LotusScript equivalent
{FILE-RELEASE-RESERVATION}	ReservationReleased method
{FILE-RETRIEVE}	No LotusScript equivalent
{FILE-SAVE}	Save method
	SaveAs method
{FILE-SAVE-ALL}	No LotusScript equivalent
{FILE-SAVE-AS?}	No LotusScript equivalent
{FILE-SEAL}	Lock method
{FILE-SEAL-NETWORK-RESERVATION}	No LotusScript equivalent
{FILE-UNSEAL}	Lock method
{PRINT}	Copies property
	Print method
	PrintPagesFrom property
	PrintPagesStart property
	PrintPagesTo property
	PrintWhat property
{PRINT?}	No LotusScript equivalent
{PRINT-NAME-ADD}	NewNamedPrintSettings method
{PRINT-NAME-USE}	CurrentPrintSettings property
	RetrievePrintSettings method
{PRINT-RESET}	CurrentPrintSettings property
{SEND-MAIL}	SendMail method
{SEND-RANGE}	Send method
{SEND-RANGE-LOGIN}	UserLogin method

Flow-of-control macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents. For more information on individual LotusScript statements and functions, search on the function or statement name in the LotusScript Index.

LotusScript offers the standard capabilities of a structured programming language and the 1-2-3 classes are an extension of that language that enables object-oriented application development within 1-2-3 and across other Lotus products as well.

1-2-3 Release 5	LotusScript
{-- comment}	' (single quote) comment
{BRANCH}	GoSub statement
{DEFINE}	Sub statement parameter list
{DISPATCH}	GoTo statement
{FOR}	For statement
{FORBREAK}	Exit statement
{IF}	If statement
{LAUNCH}	Shell statement
{LOTUS-LAUNCH}	No longer supported
{ONERROR}	On Error statement
{QUIT}	End statement
{RESTART}	No LotusScript equivalent
{RETURN}	Exit Function statement
	Exit Sub statement
{SET}	See 1-2-3 Release 5 info component equivalents
{subroutine}	Call statement
{SYSTEM}	Shell statement

Keystroke equivalents

The table below lists keys and corresponding macros in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

Release 5 key	Release 5 macro	1-2-3 97
~ (tilde)	{~}	No LotusScript equivalent
{ (open brace)	{{}	No LotusScript equivalent
} (close brace)	{}}	No LotusScript equivalent
/ (slash) or < (less than)	/, <, or {MENU}	No LotusScript equivalent
ALT+F6 (ZOOM)	{ZOOM}	ZoomIn method
		ZoomOut method
BACKSPACE	{BACKSPACE} or {BS}	No LotusScript equivalent
CTRL+END	{FILE}	No LotusScript equivalent
CTRL+END CTRL+PG DN	{PREVFILE}, {PF}, or {FILE}{PS}	Goto method
CTRL+END CTRL+PG UP	{NEXTFILE}, {NF}, or {FILE}{NS}	Goto method
CTRL+END END	{LASTFILE}, {LF}, or {FILE}{END}	Goto method
CTRL+END HOME	{FIRSTFILE},{FF}, or {FILE}{HOME}	Gotomethod
CTRL+HOME	{FIRSTCELL} or {FC}	MoveCellPointer method
CTRL+LEFT	{BACKTAB} or {BIGLEFT}	MoveCellPointer method
CTRL+PG UP	{NEXTSHEET} or {NS}	PageForward method
CTRL+PG DN	{PREVSHEET} or {PS}	PageBack method
CTRL+RIGHT	{BIGRIGHT}	MoveCellPointer method
DEL	{DELETE} or {DEL}	Clear method
DOWN	{DOWN} or {D}	MoveCellPointer method
END	{END}	No LotusScript equivalent
END CTRL+HOME	{LASTCELL} or {LC}	MoveCellPointer method
ESC	{ESCAPE} or {ESC}	No LotusScript equivalent
ESC in 1-2-3 Classic edit line	{CLEARENTRY} or {CE}	No LotusScript equivalent
F1 (HELP)	{HELP}	HelpContents method
F2 (EDIT)	{EDIT}	No LotusScript equivalent

F3 (NAME)	{NAME}	No LotusScript equivalent
F4 in Ready mode	{ANCHOR}	No LotusScript equivalent
F4 (ABS)	{ABS}	No LotusScript equivalent
F5 (GOTO)	{GOTO}	GoTo method
F6 (PANE)	{WINDOW}	NextSplit method
F7 (QUERY)	{QUERY}	No LotusScript equivalent
F8 (TABLE)	{TABLE}	No LotusScript equivalent
F9 (CALC)	{CALC}	Calc method
HOME	{HOME}	MoveCellPointer method
INS	{INSERT} or {INS}	No LotusScript equivalent
LEFT	{LEFT} or {L}	MoveCellPointer method
PG DN	{PGDN}	MoveCellPointer method
PG UP	{PGUP}	MoveCellPointer method
RIGHT	{RIGHT} or {R}	MoveCellPointer method
SHIFT+CTRL+LEFT	{SELECT-BIGLEFT}	No LotusScript equivalent
SHIFT+CTRL+RIGHT	{SELECT-BIGRIGHT}	No LotusScript equivalent
SHIFT+DOWN	{SELECT-DOWN}	No LotusScript equivalent
SHIFT+CTRL+HOME	{SELECT-FIRSTCELL}	No LotusScript equivalent
SHIFT+HOME	{SELECT-HOME}	No LotusScript equivalent
END SHIFT+CTRL+HOME	{SELECT-LASTCELL}	No LotusScript equivalent
SHIFT+LEFT	{SELECT-LEFT}	No LotusScript equivalent
SHIFT+CTRL+PG UP	{SELECT-NEXTSHEET}	No LotusScript equivalent
SHIFT+PG DN	{SELECT-PGDN}	No LotusScript equivalent
SHIFT+PG UP	{SELECT-PGUP}	No LotusScript equivalent
SHIFT+CTRL+PG DN	{SELECT-PREVSHEET}	No LotusScript equivalent
SHIFT+RIGHT	{SELECT-RIGHT}	No LotusScript equivalent
SHIFT+UP	{SELECT-UP}	No LotusScript equivalent

TAB	{TAB}	MoveCellPointer method
UP	{UP} or {U}	MoveCellPointer method

Macro debug info component equivalents

The table below lists info components in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
MACRO-STEP	MacroStep property
MACRO-TRACE	MacroTrace property

Mapping info component equivalents

The table below lists info components in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
MAP-DRAW	AutoRedaw property
MAP-REDRAW	RedrawMap method

Navigation macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{CELL-ENTER}	Contents property
{EDIT-GOTO}	GoTo method
{SCROLL-COLUMNS}	MoveOrigin method
{SCROLL-ROWS}	MoveOrigin method
{SCROLL-TO-CELL}	SetOrigin method
{SCROLL-TO-COLUMN}	MoveOrigin method
{SCROLL-TO-OBJECT}	GoTo method
{SCROLL-TO-ROW}	MoveOrigin method
{SELECT}	Select method
{SELECT-ALL}	AddToSelection method
	Select method
	SelectAll method
	SelectAllSheets method
{SELECT-APPEND}	AddToSelection method
{SELECT-RANGE-RELATIVE}	Select method
{SELECT-REMOVE}	RemoveFromSelection method
{SELECT-REPLACE}	AddToSelection method
	RemoveFromSelection method

Printer Setup info component equivalents

The table below lists info components in Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
PRINTER-SETUP-BINS	PaperBinName property
PRINTER-SETUP-COPIES	Copies property
PRINTER-SETUP-NAME	PrinterName property
PRINTER-SETUP-PAPERLENGTH	PaperHeight property
PRINTER-SETUP-PAPERWIDTH	PaperWidth property
PRINTER-SETUP-PAPERSIZE	PaperSizeName property
PRINTER-SETUP-QUALITY	PrinterQuality property

Print info component equivalents

The table below lists info components in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
PRINT-BEGINNING-PAGE-NUMBER	PrintPagesStart property
PRINT-CENTERED	CenterLeftToRight property
	CenterTopToBottom property
PRINT-DRAWN-OBJECTS	ChartsPicturesAndDrawPrint property
PRINT-FIT-PAGE	FitToPage property
PRINT-FOOTER-CENTER-TEXT	FooterCenter property
PRINT-FOOTER-LEFT-TEXT	FooterLeft property
PRINT-FOOTER-RIGHT-TEXT	FooterRight property
PRINT-GRID-LINES	GridLinesPrint property
PRINT-HEADER-CENTER-TEXT	HeaderCenter property
PRINT-HEADER-LEFT-TEXT	HeaderLeft property
PRINT-HEADER-RIGHT-TEXT	HeaderRight property
PRINT-MARGIN-BOTTOM	BottomMargin property
PRINT-MARGIN-LEFT	LeftMargin property
PRINT-MARGIN-RIGHT	RightMargin property
PRINT-MARGIN-TOP	TopMargin property
PRINT-ORIENTATION	Orientation property
PRINT-RANGE	PrintRange property
PRINT-SIZE	FitDrawnObjectToPage property
	FitToPage property
PRINT-SIZE-MANUAL	FitToPage property
	ScalePercent property
PRINT-TITLES-CLEAR	No LotusScript equivalent
PRINT-TITLES-COLUMN-RANGE	ColumnTitleRange property
PRINT-TITLES-ROW-RANGE	RowTitleRange property
PRINT-WORKSHEET-FRAME	SheetFramePrint property

Range macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{DATA-TABLE-1}	WhatIfTable1 method
{DATA-TABLE-2}	WhatIfTable2 method
{DATA-TABLE-3}	WhatIfTable3 method
{DATA-TABLE-RESET}	WhatIfTableReset method
{DISTRIBUTION}	Distribution method
{FILL}	RangeFill method
{FILL-BY-EXAMPLE}	RangeFill method
{MATRIX-INVERT}	MatrixInvert method
{MATRIX-MULTIPLY}	MatrixMultiply method
{PARSE}	DataParse method
{RANGE-NAME-CREATE}	CreateRangeName method
{RANGE-NAME-DELETE}	DeleteRangeName method
{RANGE-NAME-DELETE-ALL}	ClearRangeNames method
{RANGE-NAME-LABEL-CREATE}	CreateRangeNameFromLabel method
{RANGE-NAME-TABLE}	CreateRangeNameTable method
{RANGE-TRANSPOSE}	Transpose method
{RANGE-VALUE}	RangeValue method
{REGRESSION}	Regression method
{SHEET-NAME}	SheetName property
{SHEET-NAME-DELETE}	SheetName property
{SORT}	Sort method
{SORT-KEY-DEFINE}	RangeSortDefineKey method
{SORT-RESET}	SortResetKeys method

Overview: Release 5 info component equivalents

The following topics list info components in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

File info component equivalents

Macro debug info component equivalents

Mapping info component equivalents

Print info component equivalents

Printer Setup info component equivalents

Sort info component equivalents

User Setup info component equivalents

Window info component equivalents

Worksheet Defaults info component equivalents

Overview: Release 5 macro command equivalents

The following topics list macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

SmartIcons macro commands

The table below lists commonly-used SmartIcon macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{SMARTSUM}	SmartSum method
{SORT-ASCENDING}	SmartSort method
{SORT-DESCENDING}	SmartSort method
{TOGGLE-OUTLINE}	No LotusScript equivalent
{TOGGLE-SHADOW}	No LotusScript equivalent

Solver macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{BACKSOLVE}	Backsolve method
{SOLVER-ANSWER}	No LotusScript equivalent
{SOLVER-ANSWER-SAVE}	No LotusScript equivalent
{SOLVER-DEFINE}	No LotusScript equivalent
{SOLVER-DEFINE?}	No LotusScript equivalent
{SOLVER-REPORT}	No LotusScript equivalent

Note Macros can be used if the Solver add-in is loaded.

Sort info component equivalents

The table below lists info components in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
DATA-SORT-DIRECTION[n]	RangeSortDefineKey method
DATA-SORT-KEY[n]	RangeSortDefineKey method
DATA-SORT-RANGE	SortRange property

Style macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{COLUMN-WIDTH}	ColumnWidth property
{COLUMN-WIDTH-FIT-WIDEST}	FitWidest method
{COLUMN-WIDTH-RESET}	ResetColumnWidth method
{HIDE-COLUMNS}	HideColumns method
{HIDE-SHEETS}	HideSheets method
{NAMED-STYLE-USE}	StyleName property
{PAGE-BREAK-COLUMN}	VerticalPageBreak property
{PAGE-BREAK-ROW}	HorizontalPageBreak property
{PROTECT}	IsProtected property
{UNPROTECT}	IsProtected property
{ROW-HEIGHT}	RowHeight property
{ROW-HEIGHT-FIT-LARGEST}	FitTallest method
{SHOW-COLUMNS}	UnhideColumns method
{SHOW-SHEETS}	ShowSheet method
{STYLE-ALIGN-HORIZONTAL}	TextHorizontalAlign property
{STYLE-ALIGN-ORIENTATION}	TextOrientation property
{STYLE-ALIGN-VERTICAL}	TextVerticalAlign property
{STYLE-BORDER}	BottomBorder property
	GridBorder property
	HorizontalBorder property
	LeftBorder property
	OutlineBorder property
	RightBorder property
	TopBorder property
	VerticalBorder property
{STYLE-EDGE}	Arrow property
	EdgeColor property
	EdgeDashStyle property
	EdgeLineWidth property
{STYLE-FONT}	FontColor property
	FontName property
{STYLE-FONT-ALL}	Bold property
	Italic property
	Underline property
	DoubleUnderline property
	WideUnderline property
{STYLE-FONT-ATTRIBUTES}	Bold property
	Italic property
	Underline property

	DoubleUnderline property
	WideUnderline property
{STYLE-FONT-RESET}	StyleFontReset method
{STYLE-FONT-SIZE}	Size property
{STYLE-FRAME}	DesignerFrameColor property
	DesignerFrameStyle property
{STYLE-GALLERY}	SetGalleryStyle method
{STYLE-INTERIOR}	BackColor property
	Background property
	Color property
	ColorName property
	Font property
	FontColor property
	NegativesInColor property
{STYLE-LINE}	Arrow property
	EdgeColor property
	EdgeDashStyle property
	EdgeLineWidth property
{STYLE-NUMBER-FORMAT}	Format method
{STYLE-NUMBER-FORMAT-RESET}	FormatReset method

Text file macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents. For more information on individual LotusScript statements and functions, search on the function or statement name in the LotusScript Index.

LotusScript offers the standard capabilities of a structured programming language and the 1-2-3 classes are an extension of that language that enables object-oriented application development within 1-2-3 and across other Lotus products as well.

1-2-3 Release 5	LotusScript
{CLOSE}	Close statement
{FILESIZE}	FileLen function
{GETPOS}	Seek function
{OPEN}	Open statement
{READ}	Line Input # statement
{READLN}	Line Input # statement
{SETPOS}	Seek statement
{WRITE}	Print # statement
	Write # statement
{WRITELN}	Print # statement
	Write # statement

Tools macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{ADDIN-INVOKE}	No longer supported
{ADDIN-LOAD}	LoadAddin method
{ADDIN-REMOVE}	UnloadAddin method
{ADDIN-REMOVE-ALL}	No longer supported
{AUDIT}	No LotusScript equivalent
{MAP-NEW}	NewMap method
{MAP-REDRAW}	RedrawMap method
{REGISTER}	Declare statement
{SMARTICONS-USE}	ShowIconBar method
{SPELLCHECK?}	No LotusScript equivalent
{UNREGISTER}	No longer supported

User environment macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97.

- For more nformation on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.
- For more information on individual LotusScript statements and functions, search on the function or statement name in the LotusScript Index.
- For more information about using the LotusScript Dialog Editor, search on "Dialog Editor" in the LotusScript Index.

1-2-3 Release 5	1-2-3 97
{?}	Yield statement
{ALERT}	MessageBox function
{BEEP}	Beep statement
{BREAKOFF}	No LotusScript equivalent
{BREAKON}	No LotusScript equivalent
{CHOOSE-FILE}	Custom dialog boxes created with the LotusScript Dialog Editor
{CHOOSE-ITEM}	Custom dialog boxes created with the LotusScript Dialog Editor
{CHOOSE-MANY}	Custom dialog boxes created with the LotusScript Dialog Editor
{CHOOSE-ONE}	Custom dialog boxes created with the LotusScript Dialog Editor
{DIALOG}	Show method
{DIALOG?}	No LotusScript equivalent
{FORM}	No longer supported
{FORMBREAK}	No longer supported
{GET}	GetKey method
{GET-FORMULA}	InputBox function
{GET-LABEL}	InputBox function
{GET-NUMBER}	InputBox function
{GET-RANGE}	RangeSelector property
{LOOK}	No LotusScript equivalent
{MENUBRANCH}	No LotusScript equivalent
{MENUCALL}	No LotusScript equivalent
{MENU-COMMAND-ADD}	AddItem method
{MENU-COMMAND-DISABLE}	DisableItem method
{MENU-COMMAND-ENABLE}	EnableItem method
{MENU-COMMAND-REMOVE}	RemoveItem method
{MENU-CREATE}	AddMenu method
	NewMenuBar method
{MENU-INSERT}	AddMenu method
	NewMenu method
{MENU-RESET}	ResetMenuBar method
{MODELESS-DISMISS}	Custom dialog boxes created

	with the LotusScript Dialog Editor. Search on "Modeless dialog boxes" in the LotusScript Index.
{MODELESS-DISPLAY}	Custom dialog boxes created with the LotusScript Dialog Editor. Search on "Modeless dialog boxes" in the LotusScript Index.
{PLAY}	No LotusScript equivalent
{WAIT}	No LotusScript equivalent

User Setup info component equivalents

The table below lists info components in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
SETUP-AUTOEXEC	AutoExecMacrosEnabled property
SETUP-AUTOFORMAT	No longer supported
SETUP-AUTOSAVE	No longer supported
SETUP-AUTOSAVE-INTERVAL	No longer supported
SETUP-BEEP	BeepsOnError property
SETUP-DRAG-AND-DROP	DragAndDropEnabled property
SETUP-DRAG-AND-DROP-PROMPT	ConfirmDragAndDrop property
SETUP-FILE-LINK-UPDATE	UpdateLinksOnOpenDoc property
SETUP-INTERNATIONAL-CURRENCY-DEFAULT	No LotusScript equivalent
SETUP-INTERNATIONAL-CURRENCY-DISPLAY	No longer supported
SETUP-INTERNATIONAL-CURRENCY-POSITION	No LotusScript equivalent
SETUP-INTERNATIONAL-CURRENCY-SYMBOL	No LotusScript equivalent
SETUP-INTERNATIONAL-DATE	DateOrder property
SETUP-INTERNATIONAL-NEGATIVE-VALUES	DefaultNegCurrencyFormat property
SETUP-INTERNATIONAL-SEPARATORS	DecimalSeparator property
	ThousandsSeparator property
SETUP-INTERNATIONAL-TEXT	TextCodePage property
SETUP-INTERNATIONAL-TIME	TimeCycle property
SETUP-INTERNATIONAL-WK1	No LotusScript equivalent
SETUP-RECALCULATE	CalcMode property
SETUP-RECALCULATE-ITERATIONS	CalcIterations property
SETUP-RECALCULATE-ORDER	CalcOrder property
SETUP-RECENT-FILES-NUMBER	NumberOfMostRecentFiles property
SETUP-SKIP-SMARTMASTERS	SmartMasterOn property
SETUP-SKIP-WELCOME	WelcomeOn property
SETUP-UNDO	UndoEnabled property
SETUP-WORKSHEET-DIRECTORY	DefaultPath property
DIRECTORY	DefaultPath property

Version Manager macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{RANGE-VERSION?}	No longer supported
{SCENARIO-ADD-VERSION}	AddVersion method
{SCENARIO-CREATE}	NewVersionGroup method
{SCENARIO-DELETE}	DeleteVersionGroup method
{SCENARIO-INFO}	Description property
	Share property
{SCENARIO-REMOVE-VERSION}	RemoveVersion method
{SCENARIO-SHOW}	MakeCurrent method
{VERSION-CREATE}	NewVersion method
{VERSION-DELETE}	DeleteVersion method
{VERSION-INDEX-COPY}	No longer supported
{VERSION-INDEX-MERGE}	MergeVersions method
{VERSION-INFO}	Description property
	Share property
	StylesRetained property
{VERSION-REPORT}	ReportVersion method
{VERSION-SHOW}	MakeCurrent method
{VERSION-UPDATE}	No longer supported

Window and screen display macro commands

The table below lists macro commands in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
{APP-ADJUST}	Move method (windows)
	Resize method
	Restore method
{APP-STATE}	Maximize method
	Minimize method
	Restore method
{BREAK}	No LotusScript equivalent
{FRAMEOFF}	ShowSheetFrame property
{FRAMEON}	ShowSheetFrame property
{INDICATE}	LongPrompt property
{PANELOFF}	No LotusScript equivalent
{PANELON}	No LotusScript equivalent
{VIEW-ZOOM}	ZoomTo method
{WINDOW-ACTIVATE}	Activate method
{WINDOW-ADJUST}	Move method (windows)
	Resize method
	Restore method
{WINDOW-ARRANGE}	Cascade method
	Tile method
	TileHorizontal method
	TileVertical method
{WINDOW-STATE}	Maximize method
	Minimize method
	Restore method
{WINDOWSOFF}	UpdateSheetDisplay property
{WINDOWSON}	UpdateSheetDisplay property
{WORKSHEET-TITLES}	HorizontalTitle property
	VerticalTitle property

Window info component equivalents

The table below lists info components in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
WINDOW-CUSTOM-ZOOM	ZoomScale property
WINDOW-DISPLAY-DRAWN-OBJECTS	ShowDrawLayer property
WINDOW-DISPLAY-EDIT-LINE	EditLineVisible property
WINDOW-DISPLAY-FRAME	ShowSheetFrame property
WINDOW-DISPLAY-FRAME-TYPE	No longer supported
WINDOW-DISPLAY-GRID-LINES	ShowGridLines property
WINDOW-DISPLAY-PAGE-BREAKS	ShowAutomaticPageBreaks property
	ShowManualPageBreaks property
WINDOW-DISPLAY-SCROLL-BARS	ShowScrollBars property
WINDOW-DISPLAY-SMARTICONS	IconBarsVisible property
WINDOW-DISPLAY-STATUS-BAR	StatusBarVisible property
WINDOW-DISPLAY-TABS	ShowSheetTabs property
WINDOW-HEIGHT	Height property
"WINDOW-SPLIT	ViewSplitStyle property
WINDOW-SPLIT-HEIGHT	No longer supported
WINDOW-SPLIT-SYNCHRONIZE	SynchScrolling property
WINDOW-SPLIT-WIDTH	No longer supported
WINDOW-WIDTH	Width property
WINDOW-X-POSITION	Left property
WINDOW-Y-POSITION	Top property

Worksheet Defaults info component equivalents

The table below lists info components in 1-2-3 Release 5 for Windows and their LotusScript equivalents in 1-2-3 97. For more information on individual 1-2-3 97 properties and methods, see 1-2-3 LotusScript A-Z.

1-2-3 Release 5	1-2-3 97
WORKSHEET-ALIGN-TEXT	TextHorizontalAlign property
WORKSHEET-BACKGROUND-COLOR	Color property
WORKSHEET-COLUMN-WIDTH	DefaultColumnWidth property
	InitialColWidth property
WORKSHEET-DISPLAY-WINDOWS-DEFAULTS	WindowsDefaultsDisplayed property
WORKSHEET-FONT	DefaultFontName property
	FontName property
WORKSHEET-FONT-SIZE	DefaultFontSize property
WORKSHEET-FORMAT	FormatName property
WORKSHEET-FORMAT-COLOR-NEGATIVES	NegativesInColor property
WORKSHEET-FORMAT-DECIMALS	FormatDecimals property
WORKSHEET-FORMAT-DISPLAY-ZEROS	IsZeroDisplayed property
WORKSHEET-FORMAT-PARENTHESES	IsParenthesized property
WORKSHEET-FORMAT-ZERO-TEXT	ZeroDisplayAs property
WORKSHEET-GRID-COLOR	GridLineColor property
WORKSHEET-GROUP-SHEETS	GroupSheets method
WORKSHEET-ROW-HEIGHT	DefaultRowHeight property
	InitialRowHeight property
WORKSHEET-TAB-COLOR	TabColor property
WORKSHEET-TEXT-COLOR	ColorName property
	DefaultTextColor property
	FontColor property

The Excel log file

When you open an Excel file in 1-2-3 or save a 1-2-3 file in. XLS or .XLW format, 1-2-3 preserves as much of the original data as possible. If the file that you're opening or saving contains any untranslatable information or links to other files, 1-2-3 records the information in a log file. You can view the log file at any time using a word processing program such as Lotus Word Pro.

For example, if you open DATA.XLS in 1-2-3 and the file contains a function that has no equivalent in 1-2-3, 1-2-3 creates a log file called DATA.LOG that contains information about the untranslated function. 1-2-3 saves the log file in the same folder as DATA.XLS.

If you open a file that resides in a write-protected directory and has an untranslatable formula, 1-2-3 tries to save the log file in either the 1-2-3 default directory or the system TEMP directory. If either folder is full or write-protected, 1-2-3 stops the translation.

If the folder where 1-2-3 puts the log file already contains a log file with the same name, the new log file replaces the previous one.

Similarly, if you save a 1-2-3 file as an .XLS or .XLW file, and the file contains @functions that have no equivalents in Excel, or links to other 1-2-3 files, 1-2-3 creates a log file and saves it in the default workbook files location. The log file has the same name as the 1-2-3 file, with a .LOG extension.

You must edit untranslated Excel functions and formulas to use them in 1-2-3. Likewise, you must edit untranslated 1-2-3 @functions to use them in Excel.

{button ,AL(`H_TRANSLATING_EXCEL_FILES_OVER;H_VIEWING_THE_EXCEL_LOG_FILE_OVER;H_WORKING_WITH_EXCEL_FILES_OVER;H_VIEWING_THE_EXCEL_LOG_FILE_STEPS;',0)} See related topics

Translating Excel files

When you open an Excel Version 2.1 or 3.0 file in 1-2-3, 1-2-3 retains only values and text. Formula and function results are converted to the last value saved in Excel before translation. No formatting or styling is retained.

When you open an Excel file in 1-2-3, the following information is not translated:

- Solutions created with Solver and Goal Seek, unless the Goal or Solution is kept
- Custom functions, formats, menus, dialog boxes, buttons, and icons
- Macro functions
- Custom functions created with Excel add-ins, macros, or VBA
- Worksheet views
- Outlines

When you open an Excel Version 4.0+ file in 1-2-3, 1-2-3 preserves as much of the original data as possible but does not translate the following information:

- Custom functions and formats
- OLE links
- Outlining
- Embedded charts and other graphics
- Add-in macro (.XLA) files
- Chart (.XLC) files
- Macro (.XLM) files
- Special DLL (.XLL) files

Similarly, when you save a 1-2-3 file as an .XLS or .XLW file, not all data is translated. Information about untranslated data appears in the Excel log file.

Cell notes

1-2-3 converts Excel cell notes to cell comments. To make cell comment markers visible, choose View - Set View Preferences.

Characters

When you open an Excel file in 1-2-3, 1-2-3 converts ANSI characters to their LMBCS equivalent. 1-2-3 retains only ANSI characters created with the CHAR function and a value argument. If the CHAR function uses a formula result or cell reference as its argument, the log file lists the ANSI character in a message. You should determine the LMBCS equivalent and then modify the formula to produce the correct code. The 1-2-3 @CODE function returns the LMBCS code.

When you save a 1-2-3 file as an Excel file, 1-2-3 converts LMBCS characters to their ANSI equivalent.

Data tables

If you open an Excel file containing data tables, 1-2-3 puts @<<XL>>TABLE(ARGUMENTS); VALUE in each cell of each table. VALUE is the last calculated value saved in Excel before translation. To recreate the data tables in 1-2-3, use Range - Analyze - What-if Table.

Date calculation

Excel lets you set the starting date from which all dates are calculated to either January 1, 1900 or January 1, 1904, while 1-2-3 uses only January 1, 1900. If you open an Excel file that uses 1904, 1-2-3 records it in the log file and assumes the dates start from January 1, 1900.

DDE and file links

If an Excel file contains DDE links, 1-2-3 converts the array formula that created the link to @DATALINK("Application," "Filename," "Range"). 1-2-3 puts the @function in the top left corner of each range that contains a DDE link. If the links provide data to the file from another Windows application, the translated file won't reflect changes to the original data unless the other application is installed on the same computer where you're running 1-2-3.

If an Excel file that you open in 1-2-3 contains links to other Excel files, the log file lists the linked files with drive, path, file name, and .XLS extension. You must open each of the linked files in 1-2-3 and save them in their original locations as .123, .WK4, or .WK3 files. Then you can edit the links to reference these files and use Edit - Manage

Links in 1-2-3 to update all the file links.

If a 1-2-3 file that you save in Excel format contains links to other 1-2-3 files, the log file informs you that file links exist, and the extension on the link is converted to WK4. You must open all of the linked files in 1-2-3 and save them in their original locations as .WK4 files. Both Excel and 1-2-3 can evaluate WK4 file links.

If a .123 file that you're saving as an Excel file contains links to .WK3 or .WK4 files, use the Edit - Links command in Excel to refresh the links to the correct drive and path.

Formulas

1-2-3 and Excel use almost identical arithmetic and logical operators, except for the intersection operator in Excel, which 1-2-3 translates as @<<XL>>ISECT(RANGE1,RANGE2).

1-2-3 and Excel calculate using a slightly different order of precedence. Results are identical except when you use exponentiation and negation in the same formula. Excel carries out exponentiation after negation, while 1-2-3 carries it out before negation. The difference is noticeable in an equation such as -2^2, which evaluates to 4 in Excel ((-2)^2) and to -4 in 1-2-3 (-(2^2)). If an .XLS file contains such formulas, 1-2-3 puts parentheses around the values to produce the same result as Excel.

Formulas that concatenate text may produce different results in the two programs because Excel concatenates text before comparisons, while 1-2-3 concatenates it after comparisons.

1-2-3 translates the error value #N/A to NA. 1-2-3 translates #VALUE!, #REF!, #NAME?, #NUM!, #DIV/O!, and #NULL! to ERR.

Numbers

Numbers from Excel that are larger than 1.79769313486231 E308 and smaller than 2.22507385850721 E-308 appear as *** (asterisks) when they are translated.

Print settings

1-2-3 translates Excel print areas that are defined as single, contiguous ranges, and retains header and footer settings that it supports, such as date and file name.

The Excel page numbering feature "Page n of n" (for example, Page 2 of 5) is translated when you open an Excel file in 1-2-3. 1-2-3 converts Excel header and footer formatting codes to 1-2-3 codes as listed below:

Excel code	1-2-3 code
&&	&
&B	b and end-of-format sequence
&C	|Text|
&D	@
&F	^
&I	i and end-of-format sequence
&L	Text|
&N	no equivalent available
&P	#
&R	|Text
&T	+

3D ranges

Microsoft Excel Versions 5.0 and 7.0 support 3D ranges, but Versions 2.1, 3.0, and 4.0 do not. When you save a .123 file in .XLS or .XLW format, any named 3D range from the 1-2-3 file appears in Excel as a named 2D range on each sheet matching the sheets in the original 3D range.

For example, suppose you have a 1-2-3 file containing a 3D range, A:A1..C:B5, named Hats. If you save this file as an Excel file, sheet A in the Excel file will have a range A:A1..A:B5, named Hats; sheet B will have a range, B:A1..B:B5, named Hats; and sheet C will have a range, C:A1..C:B5, named Hats.

Formulas that reference the named 3D range in 1-2-3 refer in Excel to each of the named 2D ranges.

Formula references to 3D ranges evaluate to #ERR! in Excel. To avoid problems, edit the file in 1-2-3 before you open it in Excel. Move any ranges referenced by formulas so that the data is either completely in one sheet or the other.

Rows

A 1-2-3 sheet contains 8,192 rows, while an Excel worksheet has 16,384 rows. When you open an Excel worksheet with more than 8,192 rows in 1-2-3 97, data below row 8192 will appear in a separate sheet.

If an Excel range begins before row 8192 and extends after it, you must recreate that range in 1-2-3 97. You must also edit any formula(s) containing that range to include the new range name.

Sheet and range names

Sheet names in Excel bound workbook files can contain hyphens. 1-2-3 sheet names cannot contain hyphens. When you open an Excel bound workbook file in 1-2-3, sheet names containing hyphens are translated to the appropriate sheet letter according to the position of the sheet in the file.

Range names in 1-2-3 can contain spaces; range names in Excel cannot. When you open a 1-2-3 file that was saved as an Excel file, Excel prompts you to replace spaces in range names with another accepted character, such as an _ (underscore).

{button ,AL(`H_THE_EXCEL_LOG_FILE_OVER;H_WORKING_WITH_EXCEL_FILES_OVER;H_TRANSLATING_EXCEL_FILES_FORMATTING_OVER;H_TRANSLATING_EXCEL_FILES_FUNCTIONS_OVER;',0)} See related topics

Translating formatting information in Excel files

1-2-3 translates Excel formatting information as described below.

Color settings

When you open an Excel file in 1-2-3, the colors are translated as closely as possible to the 256 colors available in 1-2-3.

When you save a 1-2-3 file in Excel format, the colors are translated as closely as possible to the 16 standard default colors in Excel 4.0.

Column and row sizes

1-2-3 supports column widths of 0 to 240 characters and converts column widths of 241 through 255 to 240 characters.

1-2-3 supports row heights of 0 to 255 points and converts row heights of 256 through 409 to 255 points.

Fonts

If the fonts used in the Excel file aren't available, 1-2-3 substitutes the closest available equivalents. The status bar displays the name of the original font used in the selected cell.

Number formats

1-2-3 translates standard number formats to the closest available equivalent. If a file contains custom number formats, 1-2-3 converts them to the closest equivalent number format but doesn't preserve other custom formatting, such as individual characters or text.

If you assigned a custom color to negative values, 1-2-3 displays them in red. Other colors assigned with custom number formats are not translated. 1-2-3 converts cell borders, patterns, and colors to the closest available equivalent.

{button ,AL(`H_TRANSLATING_EXCEL_FILES_OVER;',0)} See related topics

Translating functions in Excel files

When you open an Excel file in 1-2-3, built-in Excel functions that have no equivalent in 1-2-3 display in the 1-2-3 sheet like this:

@<<XL>>FUNCTION NAME(ARGUMENTS); CURRENT VALUE

User-defined or third-party functions that have no equivalent in 1-2-3 display in the 1-2-3 sheet like this:

@<<XLUSERFN>>FUNCTION NAME(ARGUMENTS); CURRENT VALUE

In both cases, these functions evaluate to ERR. If you move to the cell that contains this function, double-click or press F2 to edit the file, and then press RETURN, the cell contents converts to a text string until you replace it with a valid 1-2-3 formula.

When you save a 1-2-3 file as an Excel file, 1-2-3 functions that have no equivalent in Excel display in the Excel worksheet as a label:

@FUNCTION NAME(ARGUMENTS); CURRENT VALUE

The translation log file also lists untranslated Excel and 1-2-3 functions with the cell address, function name, and current value.

If you open an Excel file in 1-2-3 and then save that file again as an Excel file, the functions that did not translate in 1-2-3 must be translated again in Excel.

For example, suppose an Excel file contains the function CONFIDENCE(1-K29,K28,K27). When you open the Excel file in 1-2-3, this function is not translated. It appears in the sheet as @<<XL>>CONFIDENCE(1-K29,K28,K27);0.692950886085332 and evaluates to ERR.

If you save the 1-2-3 file containing this untranslated function as an Excel file, the function is not translated back to its original form in Excel. The log file lists the location of the function, along with the message "Cannot translate @Function," and the current value of the @function.

To use untranslated Excel and 1-2-3 functions, you can:

- Write an add-in @function in LotusScript or with an add-in development application, such as the Lotus 1-2-3 97 Add-In Development Kit
- Build a formula that recreates the untranslated function
- Use the current value

Sometimes when you open an Excel file, 1-2-3 translates different Excel functions to the same 1-2-3 @function but changes the arguments. When you save a 1-2-3 file as an Excel file, 1-2-3 can save the same @function as different Excel functions depending on the arguments specified in the @function.

If you use the equivalent 1-2-3 @functions in new calculations, you must adjust any dependent formulas to reflect the way these @functions work in 1-2-3. Cells containing untranslatable functions evaluate to ERR in 1-2-3. If the untranslated Excel function is supported by an add-in that you can use with 1-2-3, it evaluates correctly when you load the add-in.

If a user-defined function was an Excel 4.0 style macro or a VBA macro, you can save the function to text and then use it in LotusScript. After you save both the LotusScript file and the translated Excel file are in memory, the function evaluates.

Array functions

1-2-3 translates Excel array functions that take range arguments, such as HLOOKUP, VLOOKUP, and SUMPRODUCT.

1-2-3 handles other Excel array functions by writing the array values in empty cells. It then calculates the function by using these written values.

Functions that return an ANSI character

For Excel functions that return an ANSI character, 1-2-3 annotates the cell containing a translated function. 1-2-3 adds a semicolon after the function, followed by the value of the function as it appears in Excel. For example, if A1 contains =CHAR(A2) and A2 contains the value 181, A1 displays µ in Excel. When you open the file containing this function in 1-2-3, 1-2-3 translates the function to @CHAR(A2);µ. The cell containing the translated function displays Á, the LMBCS equivalent of 181.

1-2-3 translates CHAR to @CHAR and returns the same ANSI character as Excel when you use a value argument. If CHAR takes a cell reference or formula argument, the translated function returns the LMBCS character equivalent to the value in the referenced cell or the formula result.

DB

If you open an Excel file that contains the Excel function =DB(cost,salvage,life,period,month), 1-2-3 puts @<<XL>>DB(cost,salvage,life,period,month);VALUE in each cell that holds this function, since the 1-2-3 function @DB takes only four arguments. If any of the cells contain the Excel function =DB(cost,salvage,life,period), 1-2-3 translates this function, but, since 1-2-3 uses a slightly different algorithm, the value is more accurate than that of Excel.

FIND, MATCH, FASTMATCH, and WEEKDAY

1-2-3 translates the Excel functions FIND, MATCH, FASTMATCH, and WEEKDAY to equivalent 1-2-3 @functions but alters the results to return the same values as Excel. For example, 1-2-3 translates WEEKDAY to @WEEKDAY but increases the result by a factor of 2 because Excel uses 1 to 7 for Sunday through Saturday, while 1-2-3 uses 0 to 6 for Monday through Sunday.

Some Excel functions use different value arguments than the equivalent 1-2-3 @functions. For example, in Excel, MATCH can take 0, 1, or -1 as an optional argument, while in 1-2-3 @MATCH can take 0, 1, or 2. In such cases, 1-2-3 translates the Excel function and converts its arguments to produce the same result as Excel.

In cases where the value argument in Excel is the result of a formula or cell reference, 1-2-3 converts the argument to the 1-2-3 equivalent and does not retain the formula or cell reference. To translate such functions correctly, make sure you recalculate the Excel file before saving it in Excel, and then open it in 1-2-3.

FIXED

When you open an Excel file in 1-2-3, FIXED translates to @STRING; when you save a 1-2-3 file as an Excel file, @STRING translates to FIXED. Some unexpected results, not reported in the log file, can occur during translation of these functions.

1-2-3 lets you specify up to 116 decimal places for n in @STRING; Excel allows up to 127 decimal places. If the number of decimal places specified in FIXED is greater than 116, this function appears as ERR when you open the Excel file in 1-2-3.

If *n* in the @STRING function is negative, the number returned by @STRING is formatted as scientific notation in 1-2-3. When you save the 1-2-3 file as an Excel file, this number appears rounded to the left of the decimal point. In Excel, if the decimals argument for FIXED is negative, the number returned appears rounded to the left of the decimal point. When you open an Excel file in 1-2-3, this number appears formatted as scientific notation.

To format the number returned by FIXED with commas, you set the no_commas argument to FALSE. When you open the Excel file in 1-2-3, the number appears without commas, even though no_commas was set to FALSE. The argument n+1000 in @STRING indicates Comma format. This argument causes the FIXED function to appear as #VALUE! when you open the file in Excel. The argument n+10000 in @STRING indicates General format. This argument also causes the FIXED function to appear as #VALUE! when you open the file in Excel.

INTERCEPT, RSQ, and STEYX

1-2-3 translates INTERCEPT, RSQ, and STEYX to @REGRESSION. 1-2-3 assumes the x- and y-range values are in columns and that the y-range contains the same number of rows as the x-range. If the x- or y-range data is in rows, @REGRESSION evaluates to ERR. To display the correct result, transpose the x- and y-range data to appear in columns instead of rows.

MINVERSE and MMULT

1-2-3 doesn't have equivalent @functions for MINVERSE or MMULT. Instead, use the Range - Analyze - Invert Matrix, or Range - Analyze - Multiply Matrix, command.

{button ,AL(`H_TRANSLATING_EXCEL_FILES_OVER;',0)} See related topics

Viewing log files

1-2-3 97 could not translate some information from the Excel or Quattro Pro file you tried to open.

Choose a task

Viewing the Excel log file
Viewing the Quattro Pro log file

{button ,AL(`H_WORKING_WITH_EXCEL_FILES_OVER;H_WORKING_WITH_QUATTRO_PRO_FILES_OVER',0)}
See related topics

Viewing the Excel log file

When you open an Excel file with untranslatable information or links to other .XLS files, 1-2-3 records the information in a log file. 1-2-3 displays a dialog box that lets you choose whether to view the log file or the translated file, or to get help.

To view the log file, click Explain.

To view the translated Excel file, click OK.

{button ,AL(`H_THE_EXCEL_LOG_FILE_OVER;H_TRANSLATING_EXCEL_FILES_OVER;H_WORKING_WITH_EXCEL_FILES_OVER;',0)} See related topics

Viewing the Quattro Pro log file

When you open a Quattro Pro file in 1-2-3, not all information is translated or retained. 1-2-3 lists the data that could not be translated and saves it in a separate log file.

For example, if you open DATA.WB2 in 1-2-3 and the file contains an @function that has no equivalent in 1-2-3, 1-2-3 creates a log file called DATA.LOG that contains information about the untranslated @function. 1-2-3 saves the log file in the same folder that contains DATA.WB2.

If the folder where 1-2-3 puts the log file already contains a log file with the same name, the new log file replaces the previous one.

To view the log file, use a word processing program such as Word Pro, or the Windows 95 WordPad or Notepad accessories.

{button ,AL(`H_WORKING_WITH_QUATTRO_PRO_FILES_OVER',0)} See related topics

Working with 1-2-3 files

You can open and save these file types in 1-2-3 97:

- 1-2-3 97 (.123)
- 1-2-3 for Windows Release 4 and 5 (.WK4)
- 1-2-3 for Windows Release 1 (.WK3)
- 1-2-3 for DOS Releases 3 and 4 (.WK3)
- 1-2-3 for DOS Release 2 (.WK1)

The following information is not saved when you save a 1-2-3 97 file to an earlier version of 1-2-3 (a .WK1, .WK3, or .WK4 file):

- LotusScript information
- Outlining features
- New windows
- Grid charts are converted to line charts
- Doughnut charts are converted to pie charts

Sharing files with previous releases of 1-2-3 for Windows

Duplicate style names

If you open a .WK3 or .WK4 file that contains named styles that have the same name, 1-2-3 appends a number to the end of the second style name to distinguish between the two.

For example, if the workbook contains a named style called "BoldTotal" and a second named style called "Boldtotal," 1-2-3 converts both named style names to uppercase and renames the second named style "BOLDTOTAL1."

@Functions

@Functions that are not available and @functions that have unavailable arguments in 1-2-3 for Windows are treated as add-in @functions when you save them in a .WK3 or .WK4 file. Cells that contain these @functions evaluate to ERR in 1-2-3 for Windows. If you don't edit the cells containing these @functions and then reopen the file in 1-2-3 97, the original @functions are restored.

Macro buttons

If you open a .WK4 file that contains a macro button that was created in 1-2-3 Release 5 for Windows, 1-2-3 updates the button by embedding its macro commands in a LotusScript Click event. When you click the button, 1-2-3 executes the Click event. You can add more LotusScript or macro commands to the Click event. However, if you resave the .WK4 file, new LotusScript or macro commands are not saved. To save these new LotusScript or macro commands, save the file as a .123 file.

Note Once you have saved a file containing buttons as a .123 workbook, the original macro text is available only in the Click event. Therefore, buttons in .123 files will not work if you later save the file in the .WK4 format. To retain the orginial macro text, save files containing buttons as .WK4 files.

Maps

When you open a .WK4 file that contains a map that was created in 1-2-3 Release 5 for Windows, 1-2-3 converts the map to a 1-2-3 97 map.

Caution If you resave the .WK4 file, the map object will be lost. To retain the maps, save the file as a .123 file.

Number formats

When you save a 1-2-3 97 file that contains multiple currency formats as a .WK3 file, and then open the file in 1-2-3 for Windows Release 1, 1-2-3 displays the multiple currency formats using the default currency setting specified in 1-2-3 for Windows Release 1. If you reopen the file in 1-2-3 97, 1-2-3 doesn't restore the multiple currency formats.

You'll see the same result if you open a 1-2-3 97 file that contains multiple currency formats in 1-2-3 for Windows Release 4.0. However, if you don't modify the number formats, 1-2-3 displays the multiple currency formats when you reopen the file in 1-2-3 97.

Print settings

When you open .WK4, .WK3, or .WK1 files, you can use the print settings information saved with that file by choosing File - Preview & Page Setup and selecting the appropriate .AL3 file. 1-2-3 97 does not save print settings information in an .AL3 file when you save the workbook as a .WK4, .WK3, or .WK1 file.

Significant digits

Because 1-2-3 97 calculates values of up to 15 significant digits while 1-2-3 Release 5 for Windows calculates to 18 digits, a logical formula comparing two values may produce different results. If needed, use @ROUND to round the result to 15 significant digits.

Sharing files with 1-2-3 for DOS

You can open .WK1 and .WK3 files in 1-2-3 97 and save them in their original format or as .123 files.

1-2-3 97 has many features that aren't available in 1-2-3 for DOS. When you save a .123 file in .WK1 or .WK3 format, these features are either lost or converted to default settings. If you don't want to lose the information permanently, save the file as a .123 file before you save it as a .WK1 or .WK3 file.

Note To save a locked .123 file in .WK1 format, you must first unlock the file using File - Workbook Properties (Security tab). To convert a multiple-sheet file to a .WK1 file, use Edit - Copy and Edit - Paste to copy data from the multi-sheet file in memory to a single-sheet file in memory, and then save the single-sheet file as a .WK1 file.

When you save a 1-2-3 97 file as a .WK1 or .WK3 file, the following information is lost:

- Query tables. 1-2-3 saves query tables as sheet data.
- Graphics and maps, except for charts.
- Approach forms, reports, crosstabs, and mailing labels, and other embedded data from other Windows applications.
- Settings that control the display of the sheet frame, grid lines, page breaks, and charts, and the displayed size of cells.
- Sheet settings including names, and default text and cell background colors. If you don't delete or reorder the sheets in a .WK3 file in 1-2-3 for DOS Release 3 or 4, you see the previous sheet names when you reopen the file in 1-2-3 97.
- File information such as title, subject, and description entered in the Workbook Properties dialog box or the Save As dialog box.
- Information necessary to use File - TeamMail to send ranges of data.
- Formula markers.
- Cell comments.

This additional information is lost when you save a 1-2-3 97 file as a .WK1 file:

- ANSI characters that have no LICS equivalent
- Formula annotations
- Named print settings
- Grouped sheet settings
- The third variable in three-variable what-if tables

Character sets

When you open a .WK1 file, 1-2-3 97 uses LICS to read characters in the file.

Charts

When you save a .123 file containing charts as a .WK1 or .WK3 file, and then open the file in 1-2-3 for DOS Release 2 or 3, you'll notice these differences:

- Charts display only the first six data series.
- Radar, mixed, and HLCO charts appear as line charts.
- 3D charts appear as the corresponding 2D chart type in versions of 1-2-3 for DOS that don't support 3D charts.
- The legend appears below the plot area.
- 1-2-3 converts data series colors and patterns to the closest 1-2-3 for DOS equivalent.
- Fonts may not map to a close equivalent.

If you don't edit the charts in a .WK3 file in 1-2-3 for DOS Release 3 or 4, you see the previous chart settings when you reopen the file in 1-2-3 97.

When you create a pie chart in 1-2-3 97, 1-2-3 assumes that you don't want to plot negative values and omits the associated slices. Release 2 plots the absolute value of negative numbers. To make 1-2-3 97 pie charts consistent with Release 2, use @ABS to make the negative numbers positive, or create formulas to copy the positive value of the numbers to another range.

To work with named charts created in 1-2-3 for DOS, open the file in 1-2-3 97. Choose Edit - Go To, select "Charts"

as the object type, and then select the named chart. 1-2-3 adds the chart to the center of the sheet area displayed on the screen. You can drag the chart to where you want it.

Data queries
To use input, output, and criteria ranges saved in a .WK1 or .WK3 file, use the /Data Query commands in 1-2-3 Classic.

If you plan to share files containing queries with other versions of 1-2-3, you must use input, output, and criteria ranges and the /Data commands in 1-2-3 Classic.

Displaying long values
For display only, 1-2-3 97 rounds the number of digits in a value to fit in a cell. Release 2 cuts off the digits that don't fit.

File links
In 1-2-3 97, when you open a .WK1 file that contains a reference to another file, the file link looks like this: @@("<<FILE NAME>>RANGE").

If you open a .WK1 file containing a file link in Release 2.01, the formula results in ERR because Release 2.01 doesn't support file links.

Formulas
1-2-3 97 lets you use a range name in a formula even if you haven't assigned the name to a range. Formulas that contain undefined range names evaluate to ERR until you assign the range name to a range address.

Formulas that contain more than 240 characters are saved as is. However, if you try to edit such a formula in Release 2, 1-2-3 truncates the formula after the 240th character.

@Functions
@Functions that are not available and @functions that have unavailable arguments in 1-2-3 for DOS are treated as add-in @functions when you save them in a .WK1 or .WK3 file. Cells that contain these @functions evaluate to NA in Release 2, and to ERR in Releases 3 and 4. If you don't edit the cells containing these @functions, 1-2-3 97 restores the original @functions when you reopen the file.

In 1-2-3 97, database @functions can take a formula as their last argument, while 1-2-3 for DOS supports only a criteria range. If you save database @functions that contain a formula argument in a .WK1 or .WK3 file, they won't work in 1-2-3 for DOS.

When you open a .WK1 or .WK3 file containing @functions that were created by a 1-2-3 for DOS add-in program, the @functions evaluate to ERR in 1-2-3 97.

Hidden cell contents
When you lock a file in 1-2-3 97, hidden cell contents don't appear in the contents box. In Release 2.01, hidden cell contents appear in the control panel, even if global protection is turned on.

Number formats
When you save a 1-2-3 97 file that contains multiple currency formats as a .WK1 file, and then open the file in 1-2-3 for DOS, 1-2-3 displays the multiple currency formats using the default currency setting specified in the version of 1-2-3 for DOS in which you opened the file. If you reopen the file in 1-2-3 97, 1-2-3 doesn't restore the multiple currency formats.

OLE/DDE links
If you save a file containing OLE/DDE links as a .WK1 or .WK3 file, 1-2-3 saves the links as add-in @functions that evaluate to NA or ERR. If you don't edit the cells containing the @functions, 1-2-3 97 retains the OLE/DDE links when you reopen the file.

Perspective view
If you try to open a file saved in perspective view, 1-2-3 97 will open the file with the default workbook view.

Print settings
When you open .WK3 or .WK1 files created in 1-2-3 for DOS, the print settings information saved in the associated .ALS or .AL3 file cannot be accessed by 1-2-3 97. To use print settings that you saved in a .WK1 or .WK3 file created in 1-2-3 for DOS, use the /Print commands in 1-2-3 Classic.

1-2-3 97 does not save print settings information in an .ALS or .AL3 file when you save the worksheet as a .WK3 or .WK1 file.

Significant digits

Because 1-2-3 97 calculates values of up to 15 significant digits while 1-2-3 for DOS Releases 3 and 4 calculate to 18 digits, a logical formula comparing two values may produce different results. If needed, use @ROUND to round the result to 15 significant digits.

Sort keys
1-2-3 97 lets you create up to 255 sort keys while Release 2 supports only two sort keys. If you save a 1-2-3 97 file containing extra sort keys as a .WK1 file, the extra sort keys are lost.

Styling
When you save a .123 file as a .WK3 file, 1-2-3 saves styles in a format file. 1-2-3 97 does not create a format file when you use File - Save As to save a .WK1 file. All styling information will be converted to the closest default style, or lost.

When you open the file in 1-2-3 for DOS, the data in the file looks different depending on whether WYSIWYG is loaded. 1-2-3 97:

- Changes styles not recognized in .WK1 and .WK3 files to 1-2-3 for DOS default styles.
- Uses the first eight fonts on the sheet and converts the rest to their closest equivalents in 1-2-3 for DOS.
- Converts colors, line styles, and line widths to their closest 1-2-3 for DOS equivalent.
- Converts patterns to the closest type of shading.
- Places left-aligned or centered values to the right; aligns data that was evenly spaced in cells or aligned across columns to the left.
- Converts number formats that do not exist in Release 2 to default Release 2 formats.
- Converts frames with a drop shadow to drop shadows, and maps other frames to various border styles.
- Retains the first eight named styles and the first six characters of each named style. New settings, such as number format and alignment, are lost. Ranges formatted with other named styles retain their settings, but the named styles can't be applied to other ranges.
- Converts settings created with the Style Gallery to their closest equivalent.

Transposing ranges
When you transpose a range containing formulas in 1-2-3 97, 1-2-3 copies the formula results rather than the formulas. Release 2.01 copies the formulas rather than their results.

Versions and version groups
If you save a 1-2-3 97 file containing versions and version groups as a .WK1 or .WK3 file, 1-2-3 keeps only the version or version group data currently displayed and treats it as sheet data.

If you create versions and version groups in 1-2-3 97 and then save them for use in 1-2-3 Release 4 for DOS, first save the file as a .WK4 file and then convert it to a .WK3 file by saving it in 1-2-3 Release 5 for Windows or by using the Translator utility in 1-2-3 Release 4 for DOS. 1-2-3 retains the data but not the tracking information that tells you who created or modified the data, when, and why. Styles applied to the version are also lost.

In addition, all lowercase characters in version and version group names are converted to uppercase. As a result, any @functions or macro commands that refer to such names will no longer work correctly.

If the file contains any versions or version groups with the same name, 1-2-3 renames them with a unique name. For example, if the file contains two versions called "Best Case" in the same range, 1-2-3 renames one "BEST CASE1." If you reopen the .WK4 file in 1-2-3 97, 1-2-3 doesn't restore the lost information or change the characters that were previously converted to uppercase back to lowercase.

Caution Although you can save version and version group data in a .WK4 file, only 1-2-3 97 and 1-2-3 Release 5 for Windows can interpret such data. If you plan to share files between 1-2-3 97 and 1-2-3 Release 4 for DOS, be sure to save the file as a .123 file before you save it as a .WK4 file. Then, resave the .WK4 file as a .WK3 file using 1-2-3 Release 5 for Windows, or convert it to a .WK3 file using the Translator utility in 1-2-3 Release 4 for DOS. The file should use unique names that contain only uppercase characters. This ensures you will retain all of the information associated with the versions and version groups, as well as the @functions and macros that refer to them.

If you want to use 1-2-3 97 to work with versions and version groups created in 1-2-3 Release 4 for DOS, you can open the file in 1-2-3 Release 5 for Windows and resave it as a .WK4 file, or use the Translator utility in 1-2-3 Release 4 for DOS. However, if the ranges that contain the versions exceed 2000 cells, 1-2-3 97 can't interpret any version and treats the versions or version group data currently displayed as sheet data.

Scenario information in .WK3 and .WK4 files is handled correctly when you open or save a .123 file.

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_CLOSING_AND_SAVING_FILES_OVER',0)} See related topics

Working with dBASE and Paradox files

In 1-2-3 97, you can use File - Open to open and combine dBASE IV (.DBF) and Paradox (.DB) files, and you can use File - Save and File - Save As to save dBASE IV and Paradox files.

To open and save dBASE IV and Paradox files, you must install ODBC drivers for dBASE IV and Paradox.The 1-2-3 default is to install the drivers for dBASE IV only.

Opening dBASE IV and Paradox files

When opening a dBASE IV or Paradox file, you can either specify the file type and select the file you want, or type the file name with a .DBF or .DB extension. dBASE IV and Paradox files that you have open in 1-2-3 are not locked and can still be accessed or changed by others on your network.

You can insert rows for new records, and columns for new fields, within the range of the original dBASE IV or Paradox table. When you save the file, 1-2-3 inserts these new records into the table and creates a new table with a new table definition. However, 1-2-3 does not save new records appended at the end of the table, or new fields added outside the range of the original table, in the dBASE IV or Paradox file.

Saving dBASE IV and Paradox files

You can save changes to a dBASE IV or Paradox file using File - Save. 1-2-3 saves only the data in the database table range, including data in rows or columns that you added within this range. Nothing outside this range is saved. Styles, number formats, charts, and drawn objects are not saved to the dBASE or Paradox file.

When you save a .123 file in .DBF or .DB format, you can save only a selected range containing a valid database table. You save the file using File - Save As, and you must select "Selected range only." 1-2-3 saves only the data in the selected range. Styles, number formats, charts, and drawn objects are not saved.

You cannot save a .123 file in .DBF or .DB format with a password or comments. The dBASE IV or Paradox file does not maintain any password protection for the .123 file you saved. If you save a .123 file to a dBASE IV or Paradox file that has a password, 1-2-3 writes over the password and you have to create a new password for the dBASE IV or Paradox file.

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_CLOSING_AND_SAVING_FILES_OVER',0)} See related topics

Working with Excel files

You can open .XLS and .XLT files from Microsoft Excel Versions 2.1, 3.0, 4.0, 5.0, and 7.0, and .XLW files from Excel Version 4.0 in 1-2-3 for Windows 95. 1-2-3 lets you open .XLT files only if they are worksheets or workbooks, and .XLW files only if they are bound notebook files.

You can save 1-2-3 files in Excel Version 4.0 .XLS and .XLW format for use in Excel Versions 4.0, 5.0, and 7.0. When you save a file in .XLW format, 1-2-3 creates a bound notebook. You cannot save files in .XLT format.

If an Excel file is protected with a password, you must remove the password in Excel before you can open the file in 1-2-3. When you save a password-protected 1-2-3 file as an .XLS or .XLW file, the Excel file is not password-protected. If you use macros to open Excel files in 1-2-3, you should use the {FILE-OPEN} macro command instead of a /File Retrieve keystroke macro.

Translation restrictions

When you open an Excel file in 1-2-3, or save a 1-2-3 file in .XLS or .XLW format, not all information is translated or retained. 1-2-3 creates a translation log file that lists all data that could not be translated. The log file also lists links in the Excel file to other .XLS files that are no longer linked when you open the file in 1-2-3, and other data that requires editing in either 1-2-3 or Excel.

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_THE_EXCEL_LOG_FILE_OVER;H_TRANSLATING_EXCEL_FILES_OVER;',0)} See related topics

Working with Quattro Pro files

You can open these Quattro Pro file types in 1-2-3 97:

- .WQ1 files created in Quattro Pro for DOS Versions 1.0 through 4.0
- .WB1 files created in Quattro Pro Versions 1.0 and 5.0 for Windows
- .WB2 files created in Quattro Pro Version 6.0 for Windows

Note You cannot open .WB3 files created in Quattro Pro Version 7.0 for Windows 95.

1-2-3 treats Quattro Pro template files and macro library files as standard files.

1-2-3 records information about untranslated data in the Quattro Pro log file.

Quattro Pro log file

When you open a Quattro Pro file in 1-2-3, not all information is translated or retained. 1-2-3 lists the data that could not be translated and saves it in a separate log file.

For example, if you open DATA.WB2 in 1-2-3 and the file contains an @function that has no equivalent in 1-2-3, 1-2-3 creates a log file called DATA.LOG that contains information about the untranslated @function. 1-2-3 saves the log file in the same folder that contains DATA.WB2.

If the folder where 1-2-3 puts the log file already contains a log file with the same name, the new log file replaces the previous one.

To view the log file, use a word processing program such as Word Pro, or the Windows 95 WordPad or Notepad accessories.

Translation restrictions

When you open a Quattro Pro file in 1-2-3, 1-2-3 translates text, formulas, and values in the file. It also translates column widths, tab names, and many @functions. 1-2-3 does not translate:

- Graphic objects, including drawn objects and charts
- Object pages
- Notebook zoom and display settings
- Split views
- File links
- @Functions with no direct equivalent

Password-protected files

To open a Quattro Pro file that has password protection, you must remove the password in Quattro Pro before opening the file in 1-2-3.

Formatting

1-2-3 retains number and date formats. 1-2-3 converts other formatting such as alignment, colors, and fonts to the current default settings in 1-2-3.

Range names

1-2-3 translates range names and range name references in .WB1 and .WB2 files. If a Quattro Pro file contains range names that refer to a single cell, 1-2-3 replaces those range name references with cell addresses.

@Functions

1-2-3 translates many Quattro Pro @functions to the equivalent 1-2-3 @function. If a Quattro Pro @function has no equivalent in 1-2-3, 1-2-3 displays the Quattro Pro @function like this:

@<<QP>>FUNCTION NAME(ARGUMENTS); CURRENT VALUE

The current value is the last calculated value saved in Quattro Pro before translation. You must edit untranslated Quattro Pro @functions and formulas before you can use them in 1-2-3.

The log file lists untranslated Quattro Pro @functions and includes the cell location, @function name, and current value.

To use an untranslated Quattro Pro @function, you can:

- Write an add-in @function using an add-in development application
- Build a formula that recreates the untranslated @function
- Use the current value

Macros

1-2-3 does not translate Quattro Pro macros. You can run some Quattro Pro macro commands that are equivalent to 1-2-3 macro commands. However, customized macro applications will require rewriting before you can run them in 1-2-3.

{button ,AL(`H_CREATING_AND_OPENING_FILES_OVER;H_123_VIEWING_THE_QUATTRO_PRO_LOG_FILE_STEPS',0)} See related topics

Checking spelling

1-2-3 checks for unknown and duplicate words.

1. Choose Edit - Check Spelling.

2. In the "Look in" list, specify where you want 1-2-3 to check for spelling errors.
3. Click Start.
4. To correct a word, select a word from the "Alternatives" list, or edit the word in the "Replace with" box, then click Replace.
5. To keep the original spelling, click Skip.
6. Repeat steps 4 and 5 for each unrecognized word.
7. Click Done.

{button ,AL(`H_CHECKING_SPELLING_DETAILS',1)} See details

{button ,AL(`;H_CHANGING_SPELL_CHECKING_OPTIONS_STEPS;H_EDITING_THE_SPELLING_DICTIONARY_STEPS;H_CHANGING_LANGUAGE_OPTIONS_STEPS;H_CREATING_A_USER_DICTIONARY_STEPS;',0)} See related topics

Details: Checking spelling

Specifying where 1-2-3 checks for spelling errors
1-2-3 checks spelling in cells, text blocks, and maps.

- Current workbook -- Checks the spelling in all sheets of the current workbook.
- All workbooks -- Checks all active workbooks.
- Current sheet -- Checks the current sheet.
- Selected range -- Checks the range you specify. You can select the range before you choose Edit - Check Spelling, or you can click the range selector in the dialog box and select the range.

Note 1-2-3 does not check spelling in cell comments, non-displayed versions, embedded objects, query tables, or hidden sheets, colums, or rows. If you select a range to check, 1-2-3 doesn't check text blocks and maps in the range.

Replacing, skipping, and adding words
If 1-2-3 doesn't find a word in the main dictionary or the user dictionary, you can:

Click	To
Replace	Correct the spelling of the word
Replace All	Correct the spelling of all occurrences of the word
Skip	Ignore the word, but stop on the next occurrence
Skip All	Ignore all occurrences of the word
Add to Dictionary	Add the word as spelled to the user dictionary

Canceling the spell check
You can click Done at any time to stop checking spelling. 1-2-3 saves all corrections made up to that point.

{button ,AL(`H_CHECKING_SPELLING_STEPS',1)} Go to procedure

Changing spell checking options

You can specify what kind of words 1-2-3 looks for, and set dictionary options.

1. Choose Edit - Check Spelling.

2. Click Options.
3. Under Check for, select an option:
   - Repeated words -- Finds words that occur twice in a row, such as "the the".
   - Words with numbers -- For example, Quarter1 or 1st.
   - Words with initial caps -- For example, Sandra or Madrid.
4. Under Include, select an option:
   - User dictionary alternatives -- Displays words from the user dictionary as alternative spellings.
   - Macro/@function keywords, punctuation -- Recognizes macro keywords and @function names as correctly spelled, and argument separators as acceptable punctuation.
5. Click OK to return to the Check Spelling dialog box.

{button ,AL(`H_CHANGING_SPELL_CHECKING_OPTIONS_DETAILS',1)} See details

{button ,AL(`H_CHANGING_SPELL_CHECKING_OPTIONS_STEPS;H_EDITING_THE_SPELLING_DICTIONARY_STEPS;H_CHANGING_LANGUAGE_OPTIONS_STEPS;H_CREATING_A_USER_DICTIONARY_STEPS;',0)} See related topics

Details: Changing spell checking options

When you choose not to check for repeated words, 1-2-3 checks the spelling of the words, but doesn't report repeated words as an error.

When you choose not to check for words with numbers or words with initial capitals, 1-2-3 does not check the spelling of these words.

{button ,AL(`H_CHANGING_SPELL_CHECKING_OPTIONS_STEPS',1)} Go to procedure

Changing to another dictionary

You can select the language and user dictionaries 1-2-3 uses to check spelling.

1. Choose Edit - Check Spelling.

2. Click Options.
3. To use a different language dictionary, select a language from the "Language" list.
4. To use a different user dictionary, click Choose User Dictionary, select a file with the extension .UDC, and click Open.

   Note The default directory for dictionaries is \LOTUS\COMPNENT\SPELL.
5. Click OK to return to the Check Spelling dialog box.

{button ,AL(`H_CHANGING_SPELL_CHECKING_OPTIONS_STEPS;H_EDITING_THE_SPELLING_DICTIONARY_STEPS;H_CHANGING_LANGUAGE_OPTIONS_STEPS;H_CREATING_A_USER_DICTIONARY_STEPS;',0)}
See related topics

Editing the user dictionary

The user dictionary contains words that are not in the language dictionary, but that you want 1-2-3 to recognize as correctly spelled.

1. Choose Edit - Check Spelling.

2. Click Edit Dictionary.
3. To add a word, enter it in the "New word" box and click Add.
4. To delete a word, select it in the "Current words" list and click Delete.
5. Click Done to return to the Check Spelling dialog box.

{button ,AL(`H_EDITING_THE_SPELLING_DICTIONARY_DETAILS',1)} See details

{button ,AL(`;H_CHECKING_SPELLING_STEPS;H_CHANGING_SPELL_CHECKING_OPTIONS_STEPS;H_CHANGING_LANGUAGE_OPTIONS_STEPS;',0)} See related topics

Details: Editing the user dictionary
Words appear in the following order in the "Current words" list: symbols and numbers in ASCII order, words in alphabetical order.

{button ,AL(`H_EDITING_THE_SPELLING_DICTIONARY_STEPS',1)} Go to procedure

Creating a user dictionary

You can create a new user dictionary if you have a set of words that you want 1-2-3 to treat as spelled correctly, such as the names of team members or product names.

1. Choose Edit - Check Spelling.

2. Click Options.
3. Enter a path and file name in the "User dictionary" box.

   Note The default directory for dictionaries is \LOTUS\COMPNENT\SPELL. The default user dictionary is LTSUSER1.UDC.
4. Click OK.

   1-2-3 creates an empty dictionary.
5. (Optional) To add words to the dictionary, click Edit Dictionary.

{button ,AL(`H_EDITING_THE_SPELLING_DICTIONARY_STEPS;H_CHANGING_LANGUAGE_OPTIONS_STEPS;',0)} See related topics

Options dialog box

Use this dialog box to change spell checking options, change to another language dictionary, or create a new user dictionary.

Choose a task

- Changing spell checking options
- Changing to another dictionary
- Creating a user dictionary

Overview: Welcome to 1-2-3

The 1-2-3 Welcome dialog box appears when you start 1-2-3. To begin working in 1-2-3, you can do any of the following:

- Open an existing workbook.
- Create a new workbook using a SmartMaster. SmartMaster templates contain calculations, formatting, and instructions to generate common business and financial forms.
- Create a blank workbook.
- Take a tour to learn about using 1-2-3.

{button ,AL(`H_CREATING_A_BLANK_SPREADSHEET_STEPS;H_LEARN123_TOUR_OVER;H_OPENING_AN_EXISTING_SPREADSHEET_STEPS;H_USING_SMARTMASTERS_STEPS;H_ENDING_123_STEPS',0)} See related topics

Creating a blank workbook

Creating a blank workbook is like starting with a clean piece of paper. You enter the data and formulas and format the information yourself.

1. Start 1-2-3.
2. In the Welcome to 1-2-3 dialog box, click Create a Blank Workbook.

{button ,AL(`H_OPENING_AN_EXISTING_SPREADSHEET_STEPS;H_USING_SMARTMASTERS_STEPS;',0)} See related topics

Creating a new workbook using a SmartMaster

A 1-2-3 SmartMaster is a template for business and financial tasks. Each SmartMaster gives you a head start for creating attractive, useful workbooks. Sample data and instructions in the SmartMaster show you how the template works.

For quick results, you can enter your own data and use the built-in SmartMaster charting and printing features. You can also create your own SmartMaster.

1. Start 1-2-3.
2. In the Welcome to 1-2-3 dialog box, click the Create a New Workbook Using a SmartMaster tab.

   1-2-3 lists SmartMaster files in the current SmartMaster directory. When you highlight a file, 1-2-3 displays a description.
3. Select the SmartMaster you want to use, and click OK.

   Note If the SmartMaster you want to use does not appear in the list, click More SmartMaster Templates.

{button ,AL(`H_CREATING_A_BLANK_SPREADSHEET_STEPS;H_OPENING_AN_EXISTING_SPREADSHEET_STEPS;H_WORKING_WITH_SMARTMASTER_TEMPLATES_OVER;H_CREATING_AND_OPENING_FILES_OVER;H_CREATING_A_SMARTMASTER_TEMPLATE_STEPS',0)} See related topics

Opening an existing workbook

1. Start 1-2-3.
2. In the Welcome to 1-2-3 dialog box, select the workbook file you want to open.

   Note The box displays the 10 most recently used workbooks. If the file you want to open does not appear in the list, click Browse for More Workbooks.
3. Click OK.

{button ,AL(`H_CREATING_A_BLANK_SPREADSHEET_STEPS;H_USING_SMARTMASTERS_STEPS;',0)} See related topics

Ending 1-2-3

When you end a session, 1-2-3 removes all active files from memory, but does not delete the files from disk.

1. Choose File Exit.

   If you have modified one or more active files, 1-2-3 prompts you to save changes to each file before closing the file and ending the 1-2-3 session.

2. Choose one of the following options:

   - Yes -- Saves changes to the file before ending the session.

     If you created a new file, 1-2-3 displays the File Save As dialog box so you can enter a name for the new file before ending the 1-2-3 session.

   - No -- Closes the file without saving changes.
   - Cancel -- Returns you to 1-2-3 without saving any active files, but you can save changes later.
   - Save All -- Saves all active files that have changed, or updates all embedded 1-2-3 workbooks, and ends the 1-2-3 session.

Note If you are exiting a 1-2-3 workbook that is embedded in another application file, you return to the other application when the 1-2-3 session ends.

Overview: Using 1-2-3 to analyze data

You can use 1-2-3 to analyze statistics over a period of time. Statistical analysis involves collecting, organizing, and interpreting numeric data. With 1-2-3, you can:

- Calculate a frequency distribution to find out how many values in a range fall within certain numeric intervals.
- Perform a regression analysis to determine whether one set of data has any correlation to another set of data.
- Invert and multiply matrixes to solve problems involving probabilities or multiple variables.
- Solve what-if problems that answer questions like "What would happen to my profits if my sales went up 30%?".

{button ,AL(`;H_COMPUTING_A_FREQUENCY_DISTRIBUTION_STEPS;H_USING_DATA_MATRIXES_OVER;H_USING_REGRESSION_ANALYSIS_OVER;H_WHATIF_TABLES_AND_BACKSOLVING_OVER',0)} See related topics

Calculating a frequency distribution

You use a frequency distribution to find out how many values in a range fall within certain numeric intervals, called bins.

1. Enter the values for the values range.
2. Enter the values for the bin range in ascending order in one column. In each cell of the bin range, enter the upper limit for the bin.

   Note Leave the column to the right of the bin range blank. 1-2-3 puts the results of the frequency distribution in this column and writes over any existing data.
3. Select the values range.
4. Choose Range - Analyze - Distribution.
5. Enter the bin range in the "Bin range" box, or use the range selector to specify the range.
6. Click OK.

{button ,AL(`H_COMPUTING_A_FREQUENCY_DISTRIBUTION_DETAILS',1)} See details
{button ,AL(`H_COMPUTING_A_FREQUENCY_DISTRIBUTION_EX',1)} See example
{button ,AL(`;H_ANALYZE_DATA_OVER;',0)} See related topics

Details: Calculating a frequency distribution

Setting up the bin range

The bin range contains the numeric intervals within which you want to distribute the values. The value in each cell in the bin range is the upper limit for that bin.

Follow these guidelines when you set up this range:

- Put the bin range in a single sheet.
- The intervals don't have to be equal.

  Tip If you want to fill a range quickly with even intervals, you can use Range - Fill.
- The intervals must be in ascending order.
- Don't include text or blank cells in the bin range.

Setting up the values range

The values range contains the values you want to count. The values range can be in one or more sheets in a workbook file that's either active or on disk. 1-2-3 analyzes only the numeric data in the values range and ignores text and blank cells. The order of the data doesn't matter.

{button ,AL(`H_COMPUTING_A_FREQUENCY_DISTRIBUTION_STEPS',1)} Go to procedure

{button ,AL(`H_COMPUTING_A_FREQUENCY_DISTRIBUTION_EX',1)} See example

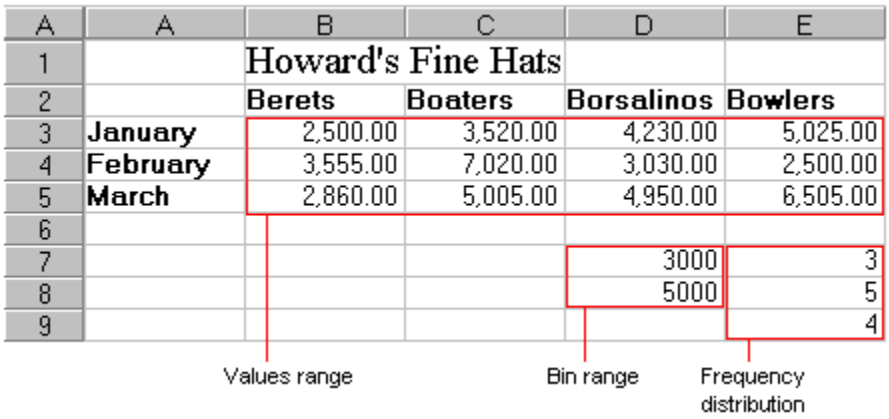
Example: Calculating a frequency distribution

A frequency distribution counts how many values in a range fall within certain numeric intervals. For example, you can use a frequency distribution to count how many of your monthly sales orders are less than or equal to $3000, how many are greater than $3000 and less than or equal to $5000, and how many are greater than $5000.

1-2-3 calculates the frequency distribution using the values range and the bin range.

- The values range contains the values you want to count.
- The bin range contains the numeric intervals within which you want to distribute the values.

1-2-3 puts the results of the frequency distribution in the column to the right of the bin range.



Interpreting the results

When you calculate a frequency distribution, the results show how many values are equal to or less than the bin value to the left. If no values fall within a bin, 1-2-3 enters 0 next to the bin.

A frequency distribution always produces one more value than the number of bins. 1-2-3 counts any values that are greater than the largest bin value and displays that number in the cell just below and to the right of the largest bin value.

In this example, there are:

- Three sales orders equal to or less than $3000 (shown in cell E8).
- Five sales orders between $3000 and $5000 (shown in cell E9).
- Four sales orders greater than $5000 (shown in cell E10).

{button ,AL(`H_COMPUTING_A_FREQUENCY_DISTRIBUTION_STEPS',0)} See related topics

Overview: Using regression analysis

Regression analysis determines whether one set of data (one or more independent variables) has any relationship, or correlation, to another set of data (dependent variable). You can make predictions once you calculate these relationships. 1-2-3 performs multiple linear regression analysis, which predicts a value for a single dependent variable based on the values of one or more independent variables.

You collect data for a period of time or from multiple sites, so you can perform a regression analysis. You can predict future sales (dependent variable) based on the values specified for the key factors (independent variables) if the correlation between the key factors and sales is strong enough.

{button ,AL(`H_SETTING_UP_A_REGRESSION_ANALYSIS_EX',1)} See example

{button ,AL(`H_ANALYZE_DATA_OVER;H_PREDICTING_VALUES_STEPS;H_PERFORMING_A_REGRESSION_ANALYSIS_STEPS',0)} See related topics

Example: Setting up a regression analysis

Regression analysis determines whether one set of data (one or more independent variables) has any relationship to another set of data (dependent variable).

For example, suppose you run an ice cream stand at a tourist location, and you want to predict approximately how many quarts of ice cream you'll sell the next day. You think that your sales depend on three key factors (the independent variables): the number of hours of sunshine, the midday temperature, and the number of buses in a nearby parking lot. Since you're assuming that your sales depend on these values, sales is the dependent variable.

You collect data for a six-day period so you can perform a regression analysis. If the correlation between the three factors and sales is strong enough, you can predict future sales based on the values for the independent variables.

Setting up the ranges

To set up the data in the sheet correctly, you must:

- Enter the values for the independent variables (the x-range). The x-range can include from 1 to 75 independent variables. Put the values for each variable in a separate column. Each column must have the same number of rows as the dependent variable, and the columns for the independent variables must all be adjacent.
- Enter the values for the dependent variable (the y-range) in a single column. The y-range containing the values for the dependent variable must be in a single column and must contain the same number of rows as the x-range.
- Decide where you want 1-2-3 to put the results (the output range).

In this example, column B contains the y-range (ice cream sales). Columns C, D, and E contain the x-range (hours of sunshine, temperature, and number of buses).

A	A	B	C	D	E
1	Day	Ice Cream Sales	Sunshine	Temperature	Busses in Lot
2	1	250	3	84	10
3	2	545	5	91	7
4	3	550	5	89	8
5	4	450	6	85	10
6	5	605	6	90	11
7	6	615	7	88	9

Y-range contains dependent variable

X-range contains independent variables

{button ,AL(`H_USING_REGRESSION_ANALYSIS_OVER;H_PERFORMING_A_REGRESSION_ANALYSIS_EX;H_PREDICTING_VALUES_EX;',0)} See related topics

Performing a regression analysis

1. Set up the data in the sheet.
2. Choose Range - Analyze - Regression.
3. In the "X-range" box, enter the range containing the values for the independent variables, or use the range selector to specify the range.
4. In the "Y-range" box, specify the range containing the values for the dependent variable.
5. In the "Output range" box, specify the range where you want 1-2-3 to display the results of the regression analysis.

   You can specify either the entire range or the first cell in the range.

   Caution 1-2-3 writes over existing data in the output range, including hidden columns and rows.
6. (Optional) Under Y-intercept, select an option.
7. (Optional) To clear the settings so you can enter different ranges, click Reset.
8. Click OK.
9. (Optional) Use the results to predict values.

{button ,AL(`H_PERFORMING_A_REGRESSION_ANALYSIS_DETAILS',1)} See details
{button ,AL(`H_PERFORMING_A_REGRESSION_ANALYSIS_EX',1)} See example
{button ,AL(`H_USING_REGRESSION_ANALYSIS_OVER;',0)} See related topics

Details: Performing a regression analysis

Options: Regression dialog box

- X-range of values for the independent variables -- Enter the range that contains the independent variable(s). Each column in this range must contain the values of one independent variable. This box initially displays the currently selected range.
- Y-range of values for the dependent variable -- Enter the range that contains the dependent variable. This range must be a single column and must have the same number of rows as the x-range.
- Output range starting at cell -- Enter the range in which you want 1-2-3 to place the results of the regression analysis. You can enter the entire range or just the first cell in the range. If you select the entire range, it must be at least 9 rows wide and 4 columns deep; you may need to specify more columns, depending on the number of independent variables.
- Y-intercept -- Tell 1-2-3 what value to use for the y-intercept. Select "Compute" (the default) if you want 1-2-3 to calculate the y-axis intercept when performing the regression. Select "Set to zero" if you want 1-2-3 to use zero as the intercept.

Resetting the options to perform a new regression

Click Reset to clear the X-range, Y-range, and Output range settings, and reset the Y-intercept setting to "Compute" when performing the regression.

{button ,AL(`H_PERFORMING_A_REGRESSION_ANALYSIS_STEPS',1)} Go to procedure

{button ,AL(`H_PERFORMING_A_REGRESSION_ANALYSIS_EX',1)} See example

Example: Performing a regression analysis

When you perform a regression analysis, 1-2-3 analyzes the relationship between the dependent variable and the independent variables and enters the results in the output range.

	A	B	C	D	E
1	Day	Ice Cream Sales	Sunshine	Temperature	Busses in Lot
2	1	250	3	84	10
3	2	545	5	91	7
4	3	550	5	89	8
5	4	450	6	85	10
6	5	605	6	90	11
7	6	615	7	88	9

Y-range contains dependent variable

X-range contains independent variables

1-2-3 enters statistics in the output range, which tell you about the relationships between the data.

Point where regression line intercepts the y-axis

Number of rows of data

Number of observations minus number of independent variables minus 1

Standard error of estimated y-value

R^2 value

11		Regression Output:			
12	Constant			-2327.9095	
13	Std Err of Y Est			32.6714791	
14	R Squared			0.97722522	
15	No. of Observations			6	
16	Degrees of Freedom			2	
17					
18	X Coefficient(s)		61.177	28.4478809	0.595647194
19	Std Err of Coef.		12.1885	6.79391567	11.89658121

Standard error of each x coefficient

Slope for each independent variable

Note If 1-2-3 displays an R Squared value less than zero, you specified a zero intercept when it was not appropriate. Repeat the regression analysis, but select "Compute" under Y-intercept to recalculate the regression and adjust R Squared accordingly.

R Squared tells you how closely the independent and dependent variables are correlated, or how much variation in the dependent variable can be explained by the combination of the independent variables. The value of R Squared is between 0 and 1. The closer the R Squared value is to 1, the more closely the independent variables are related to the dependent variable. Since R Squared is close to 1 in this example, a strong correlation exists between ice cream sales, the weather, and the number of buses.

{button ,AL(`H_PERFORMING_A_REGRESSION_ANALYSIS_STEPS;',0)} See related topics

Predicting values

Once you've proven through regression analysis that a relationship exists between dependent and independent variables, you can use the values for the independent variables to predict the values for the dependent variables.

1. Perform a regression analysis.
2. Enter the predicted value for each independent variable in the cell below the column of existing variables.
3. Enter text to identify the forecast.
4. Enter the appropriate formula in a blank cell in the dependent variable column.

   Note When you use values from the regression output in formulas, select them when building the formula or copy them from the output range. Don't type them over or you may get undesired rounding errors.

The formula result is the predicted value for the dependent variable.

{button ,AL(`H_PREDICTING_VALUES_EX',1)} See example

{button ,AL(`H_PERFORMING_A_REGRESSION_ANALYSIS_STEPS;H_USING_REGRESSION_ANALYSIS_OVER;',0)} See related topics

Example: Predicting values

Because you've performed a regression analysis, you know there is a relationship between the dependent value (the ice cream sales) and the independent variables (the hours of sunshine, the temperature, and the number of buses). Now, you can use these independent variables to predict tomorrow's sales.

Suppose the weather forecast says that tomorrow will be cloudy, with only two hours of sunshine and a midday temperature of 84 degrees Fahrenheit. You guess that no more than five buses will visit.

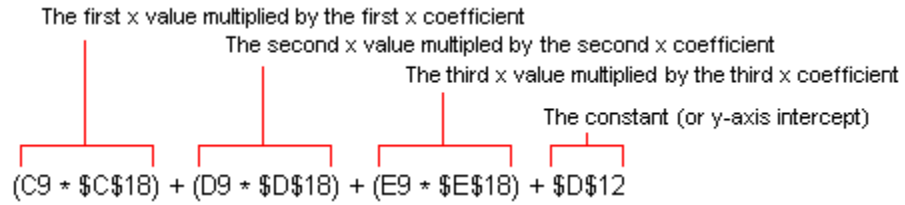
	A	B	C	D	E
1	Day	Ice Cream Sales	Sunshine	Temperature	Busses in Lot
2	1	250	3	84	10
3	2	545	5	91	7
4	3	550	5	89	8
5	4	450	6	85	10
6	5	605	6	90	11
7	6	615	7	88	9
8	Forecast				
9		187.04467354	2	84	5
10					
11		Regression Output:			
12	Constant			-2327.9095	
13	Std Err of Y Est			32.6714791	
14	R Squared			0.97722522	
15	No. of Observations			6	
16	Degrees of Freedom			2	
17					
18	X Coefficient(s)		61.17698	28.4478809	0.595647194
19	Std Err of Coef.		12.18849	6.79391567	11.89658121

Predicted value for dependent variable

Predicted values for independent variables

Constructing the formula

The formula you use for the dependent variable refers to the predicted values and the x coefficients in the output range of the example. The formula may look complicated, but it's really only the sum of the following items:



Note When you use values from the regression output in formulas, select them when building the formula or copy them from the output range. Don't type them over or you may get undesired rounding errors.

Interpreting the results

The results of the regression predict that you'll sell approximately 187 quarts of ice cream tomorrow (cell B9), if the weather and the number of buses are as forecasted.

{button ,AL(`H_COMPUTING_A_FREQUENCY_DISTRIBUTION_EX;H_PERFORMING_A_REGRESSION_ANALYSIS_EX;H_SETTING_UP_A_REGRESSION_ANALYSIS_EX;H_PREDICTING_VALUES_STEPS',0)} See related topics

Overview: Using data matrixes

You can use matrix calculations to solve problems that involve several variables. A 1-2-3 matrix is a multiple-cell range that contains a value in each cell. The range can be in one sheet or across sheets (a 3D matrix). Each value represents the coefficient for a variable in a formula or a constant in a formula.

Matrix analysis finds the relationship between two or more sets of variables in one or more formulas. You use the relationships to determine which combination of values will produce the result you want for the formulas.

You can invert a matrix, multiply matrixes, or do both to analyze simultaneous equations. The matrixes can be in active files or on disk.

Inverting a matrix

You can invert a matrix only if it has the same number of rows as columns. When you invert a matrix, the new matrix will be the same size as the original.

Inverting a matrix is more involved than just inverting the numbers in the range. The new matrix is the approximate inverse of the original matrix; when you multiply a matrix by its inverse matrix, the result is the identity matrix of the same size. The identity matrix must be square, and includes 1 in the top left and bottom right cells; all other cells are zero (0).

Note Because the values may be rounded off, zero (0) may not appear in the appropriate cells. Round off these values to 15 decimal places to make the zero (0) appear.

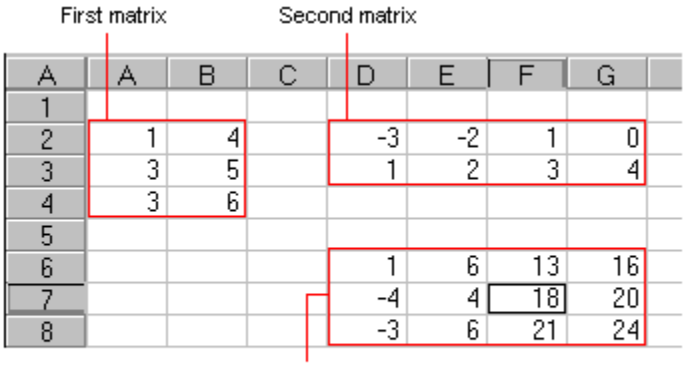
A	A	B
1	**Matrix**	
2	1.00	2.00
3	1.50	1.75
4		
5	**Inverse matrix**	
6	-1.40	1.60
7	1.20	-0.80
8		
9	**Identity matrix**	
10	1.00	0.00
11	0.00	1.00

Note Some matrixes are mathematically impossible to invert. For some matrixes, especially large matrixes with many rows and columns, the matrix inversion algorithms would produce less accurate results. 1-2-3 will display a message if it cannot invert a matrix.

Multiplying matrixes

To multiply matrixes, the number of columns in the first matrix must equal the number of rows in the second matrix. The order in which you multiply the matrixes makes a difference to the results.

The resulting matrix will have the same number of rows as the first matrix and the same number of columns as the second matrix. The entry in the nth row and the xth column of the resulting matrix will be calculated from the entries in the nth row of the first matrix paired with the entries in the xth column of the second matrix.



Results of multiplying data in the two matrices. For example, the value in cell F7 (18) is the result of (A3 * F2) + (B3 * F3).

Note Matrix multiplication algorithms by their nature propagate small errors. Multiplying an ill-converted matrix (a matrix that contains numbers differing greatly in magnitude) or a very large matrix may result in less accurate results.

{button ,AL(`H_USING_DATA_MATRIXES_OVER_EX',1)} See example

{button ,AL(`H_INVERTING_A_MATRIX_STEPS;H_MULTIPLYING_MATRIXES_STEPS;H_ANALYZE_DATA_OVER;',0)} See related topics

Example: Using data matrixes

Suppose a bank has three main sources of income: business accounts, house loans, and car loans. The bank also has a venture capital branch that takes money from the bank's total income to provide loans for start-up businesses.

By setting up this problem as a series of simultaneous equations, you can use matrix analysis to determine what percentage each income source contributes to the total venture funds. The following equation represents this relationship:

x% * (Business) + y% * (House) + z% * (Car) = Total venture funds

x%, y%, and z% are the percentage contributions that each of the income sources makes to the total venture funds. These values are what you want to find.

Since you will need to invert the matrix of income sources, the matrix must have the same number of rows as columns. Therefore, you will need to use data from three years to solve this problem.

From the equation, you know that the matrix of income sources multiplied by the matrix of percentages equals the matrix of venture funds.

[Income sources] * [Percentages] = [Venture funds]

If you multiply the inverse of the income sources matrix by each side of the equation, the result is the matrix of percentages that you wanted to find.

$$[M]^{-1} * [M] * [P] = [M]^{-1} * [V]$$
$$[I] * [P] = [M]^{-1} * [V]$$
$$[P] = [M]^{-1} * [V]$$

where:

M = The income source matrix

P = The percentage matrix

I = The identity matrix

V = The venture funds matrix

Therefore, to solve this problem you need to set up the matrixes of income sources and venture funds, invert the matrix of income sources, and multiply the inverted matrix by the matrix of venture funds.

Set up the matrix of income values

First, set up a matrix of values for total income received from each of the three sources, and a corresponding column for the total venture funds received.

	A	B	C	D	E	F	G
1	Total Income from Loans (thousands)						
2							
3		**Business**	**House**	**Car**		**Total Venture Funds**	
4	**1995**	$10,994	$48,760	$22,451		$24,300	
5	**1996**	$12,321	$46,650	$26,434		$24,800	
6	**1997**	$11,546	$45,732	$21,540		$23,600	

Matrix of income values

Invert the matrix

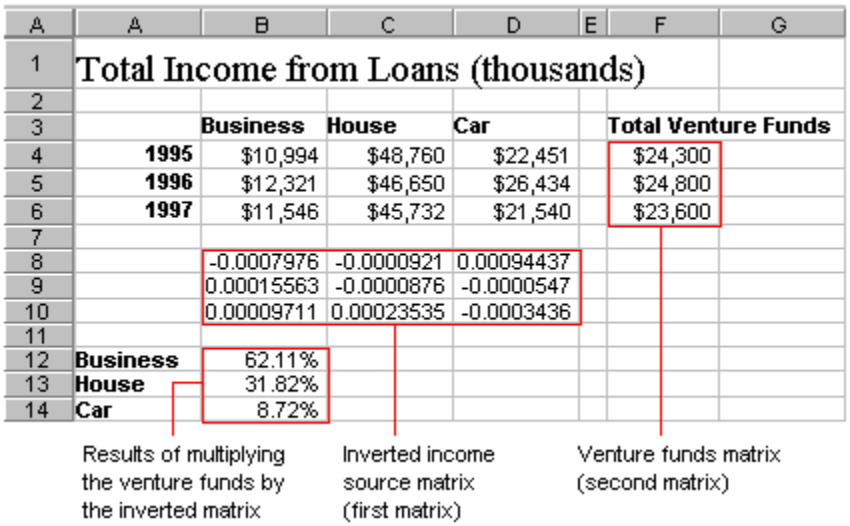
Next, invert the matrix of income sources in range B4..D6.

	A	B	C	D	E	F	G
1	Total Income from Loans (thousands)						
2							
3		**Business**	**House**	**Car**		**Total Venture Funds**	
4	**1995**	$10,994	$48,760	$22,451		$24,300	
5	**1996**	$12,321	$46,650	$26,434		$24,800	
6	**1997**	$11,546	$45,732	$21,540		$23,600	
7							
8		-0.0007976	-0.0000921	0.00094437			
9		0.00015563	-0.0000876	-0.0000547			
10		0.00009711	0.00023535	-0.0003436			

Results of inverting the matrix

Multiply the matrixes

After inverting the matrix, you can find out what percentage each income source contributes to the total venture funds by multiplying the inverted matrix by the total venture funds received in each of those years. The resulting matrix contains the percentage contributions of each income source.



	A	B	C	D	E	F	G
1	Total Income from Loans (thousands)						
2							
3		**Business**	**House**	**Car**		**Total Venture Funds**	
4	**1995**	$10,994	$48,760	$22,451		$24,300	
5	**1996**	$12,321	$46,650	$26,434		$24,800	
6	**1997**	$11,546	$45,732	$21,540		$23,600	
7							
8		-0.0007976	-0.0000921	0.00094437			
9		0.00015563	-0.0000876	-0.0000547			
10		0.00009711	0.00023535	-0.0003436			
11							
12	**Business**	62.11%					
13	**House**	31.82%					
14	**Car**	8.72%					

Verifying the results

To verify these results, multiply the percentage matrix by the original income matrix. The venture funds matrix is the result. To predict future venture amounts, enter three new values for the income, and then multiply them by the percentage matrix.

{button ,AL(`H_INVERTING_A_MATRIX_STEPS;H_MULTIPLYING_MATRIXES_STEPS;H_USING_DATA_MATRIXES_OVER;',0)} See related topics

Multiplying matrixes

You can multiply the columns of one matrix by the rows of a second matrix.

1. Select the range containing the first matrix you want to multiply.
2. Choose Range - Analyze - Multiply Matrix.
3. Enter the range containing the second matrix you want to multiply in the "Second matrix" box, or use the range selector to specify the range.

   The number of columns in the first matrix must equal the number of rows in the second matrix. Each matrix can contain up to 80 columns and 80 rows.
4. Specify the range for the results in the "Resulting matrix" box.

   Caution 1-2-3 writes over existing data in the range including data in hidden columns, rows, or sheets.
5. Click OK.

1-2-3 creates a matrix that contains the same number of rows as the first matrix and the same number of columns as the second matrix.

{button ,AL(`H_MULTIPLYING_MATRIXES_DETAILS',1)} See details

{button ,AL(`H_USING_DATA_MATRIXES_OVER_EX',1)} See example

{button ,AL(`H_INVERTING_A_MATRIX_STEPS;H_USING_DATA_MATRIXES_OVER;',0)} See related topics

Details: Multiplying matrixes

You can multiply matrixes in any workbook file, whether it is active or on disk. When you specify the range where you want to put the results matrix, you can specify either the entire range or the first cell in the range.

Note Matrix multiplication algorithms by their nature propagate small errors. Multiplying an ill-converted matrix (a matrix that contains numbers differing greatly in magnitude) or a very large matrix may result in less accurate results.

Multiplying 3D matrixes

A 3D matrix includes the same cells in two or more contiguous sheets. When you multiply 3D matrixes, both matrixes must be 3D, and both must contain the same number of sheets. The matrixes can be in different sheets, or in different workbooks. The 3D results matrix can also be in different sheets or workbooks from the the matrixes you're multiplying.

1-2-3 multiplies the first and second matrixes in each sheet and enters the results in the resulting matrix range in that sheet. For example, 1-2-3 multiplies the range in the first sheet of the first matrix by the range in the first sheet of the second matrix and enters the results in the first sheet, multiplies the range in the second sheet of the first matrix by the range in the second sheet of the second matrix and enters the results in the second sheet, and so on.

{button ,AL(`H_MULTIPLYING_MATRIXES_STEPS',1)} Go to procedure

{button ,AL(`H_USING_DATA_MATRIXES_OVER_EX',1)} See example

Inverting a matrix

You can use matrix inversion to solve problems involving probabilities or multiple variables.

1. Select the range containing the matrix you want to invert.
   The range must have the same number of columns as rows, up to 80 columns and 80 rows.
2. Choose Range - Analyze - Invert Matrix.
3. Enter the range for the inverted matrix in the "To" box, or use the range selector to specify the range.
   Caution 1-2-3 writes over existing data in the range including data in hidden columns, rows, or sheets.
4. Click OK.

{button ,AL(`H_INVERTING_A_MATRIX_DETAILS',1)} See details

{button ,AL(`H_USING_DATA_MATRIXES_OVER_EX',1)} See example

{button ,AL(`H_MULTIPLYING_MATRIXES_STEPS;H_USING_DATA_MATRIXES_OVER;',0)} See related topics

Details: Inverting a matrix

You can invert matrixes in any workbook file, whether it is active or on disk. When you specify the range where you want to put the inverted matrix, you can specify either the entire range or just the first cell in the range.

Note Matrix inversion algorithms by their nature propagate small errors. Inverting an ill-converted matrix (a matrix that contains numbers differing greatly in magnitude) may result in large errors.

Inverting 3D matrixes

A 3D matrix includes the same cells in two or more contiguous sheets. When you invert a 3D matrix, the matrix you want to invert and the results range must be square on each sheet, and contain the same number of sheets.

1-2-3 inverts the matrix in each sheet of the 3D range and enters the results in each sheet. The matrixes must be in the same workbook but can be in different sheets. Also, the 3D results matrix must be in the same workbook as the matrixes you're inverting, but can be in different sheets.

For example, 1-2-3 inverts the matrix in the first sheet of the range and enters the results in the first sheet, inverts the matrix in the second sheet and enters the results in the second sheet, and so on.

{button ,AL(`H_INVERTING_A_MATRIX_STEPS',1)} Go to procedure

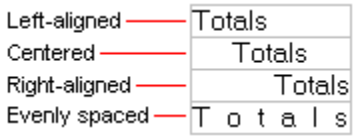
{button ,AL(`H_USING_DATA_MATRIXES_OVER_EX',1)} See example

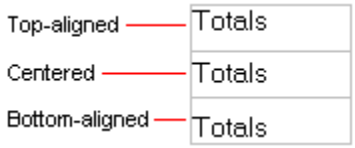
Overview: Alignment

The InfoBox makes it easy to change the alignment for both values and labels in cells or text blocks.

Horizontal and vertical alignment

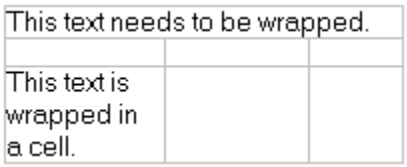
By default, 1-2-3 aligns values in cells horizontally to the right and labels in cells horizontally to the left, and aligns both values and labels in cells vertically to the bottom. The illustrations below show examples of horizontal and vertical alignment.





Wrapping text in a cell

Wrapping text in cells is useful when text is too long to fit in one cell.



Aligning text across columns

You can center, right align, or evenly space text (or numbers entered as labels) across several columns. If column widths change, 1-2-3 automatically adjusts the alignment.

For example, you can center Yearly Totals (cell A1)...

A	A	B	C	D
1	Yearly Totals			
2		1996	1997	1998
3	Dublin	392	573	655
4	London	458	619	834

...across columns A through D.

A	A	B	C	D
1		Yearly Totals		
2		1996	1997	1998
3	Dublin	392	573	655
4	London	458	619	834

Rotating data

You can rotate data in a cell or text block. For example, the numbers below are rotated at 45 degrees.

A	A	B	C	D
1		Yearly Totals		
2	1996	1997	1998	
3	Dublin	392	573	655
4	London	458	619	834

{button ,AL(`H_ALIGNING_DATA_IN_CELLS_STEPS;H_ALIGNING_DATA_IN_TEXT_BLOCKS_STEPS;H_ALIGNMENT_OVER;H_CHANGING_ALIGNMENT_STEPS;H_ROTATING_DATA_STEPS;H_SPANNING_TEXT_ACROSS_COLUMNS_STEPS;H_WRAPPING_DATA_IN_A_CELL_STEPS;',0)} See related topics

Aligning data in cells

You can align labels and values in cells.

1. Select the range or collection.
2. Choose Range - Range Properties.

3. Click the Alignment tab in the InfoBox.

4. Select a horizontal alignment.
5. Select a vertical alignment.
6. (Optional) Move, collapse, or close the InfoBox.

Note Data appears vertically aligned in a cell only when the row is taller than the cell contents.

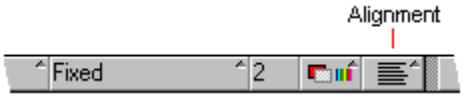
{button ,AL(`H_ALIGNING_DATA_IN_CELLS_DETAILS',1)} See details

{button ,AL(`H_ALIGNING_DATA_IN_CELLS_STEPS;H_ALIGNING_DATA_IN_TEXT_BLOCKS_STEPS;H_ALIGNMENT_OVER;H_CHANGING_ALIGNMENT_STEPS;H_ROTATING_DATA_STEPS;H_SPANNING_TEXT_ACROSS_COLUMNS_STEPS;H_WRAPPING_DATA_IN_A_CELL_STEPS;',0)} See related topics

Details: Aligning data in cells

Other ways to align data in cells

You can click the Alignment button in the status bar and select an alignment from a list of options.



You can also align data in cells using a label-prefix character. For more information see Overview: Entering data.

Troubleshooting

If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Left-aligns labels; right-aligns values


Left-aligns data


Right-aligns data


Centers data


Evenly spaces text in a cell or text block


Centers text across columns

{button ,AL(`H_ALIGNING_DATA_IN_CELLS_STEPS',1)} Go to procedure

Aligning data in text blocks

1. Click the text block.
2. Choose Drawing - Drawing Properties.

3. Click the Alignment tab in the InfoBox.

4. Select a horizontal alignment.
5. Select a vertical alignment.
6. (Optional) Move, collapse, or close the InfoBox.

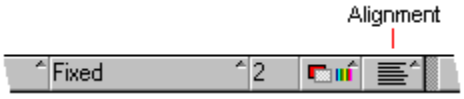
{button ,AL(`H_ALIGNING_DATA_IN_TEXT_BLOCKS_DETAILS',1)} See details

{button ,AL(`H_ALIGNING_DATA_IN_CELLS_STEPS;H_ALIGNING_DATA_IN_TEXT_BLOCKS_STEPS;H_ALIGNMENT_OVER;H_EDITING_DATA_IN_TEXT_BLOCKS_STEPS;',0)} See related topics

Details: Aligning data in text blocks

Other ways to align data in text blocks

You can click the Alignment button in the status bar and select an alignment from the list of options.



Troubleshooting

If the object or the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes to a locked object or workbook. To unlock the object, use Drawing - Drawing Properties (Basics tab). To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Note Evenly spaced alignment has no effect on data that ends with a . (period), ! (exclamation point), ? (question mark), or : (colon).

Related SmartIcons

Left-aligns labels; right-aligns values

Left-aligns data

Right-aligns data

Centers data

Evenly spaces text in a cell or text block

{button ,AL(`H_ALIGNING_DATA_IN_TEXT_BLOCKS_STEPS',1)} Go to procedure

Spanning text across columns

You can align text across columns in a range.

1. Select the range that you want to align the text across.

   The text you want to align must be in the leftmost cell of the range. For example, to align the text in cell A1 across A1..D1, select A1..D1.

2. Choose Range - Range Properties.

3. Click the Alignment tab in the InfoBox.

4. Select a horizontal alignment.
5. Select "Align across columns."
6. (Optional) Move, collapse, or close the InfoBox.

When you align text across columns, make sure the cells to the right of the label you want to align are blank.

{button ,AL(`H_SPANNING_TEXT_ACROSS_COLUMNS_DETAILS',1)} See details

{button ,AL(`H_ALIGNING_DATA_IN_CELLS_STEPS;H_ALIGNMENT_OVER;H_ROTATING_DATA_STEPS;H_WRAPPING_DATA_IN_A_CELL_STEPS;',0)} See related topics

Details: Spanning text across columns
You can't align numbers across columns unless you enter the number as a label using a label-prefix character.

Troubleshooting
If nothing happens when you select "Align across columns," check that all cells in the range in which you're aligning are blank. Also check the horizontal alignment you selected. Aligning across columns has no effect on general alignment or left alignment since text by default is left-aligned.

If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Left-aligns labels; right-aligns values


Left-aligns data


Right-aligns data


Centers data


Evenly spaces text in a cell or text block


Centers text across columns

{button ,AL(`H_SPANNING_TEXT_ACROSS_COLUMNS_STEPS',1)} Go to procedure

Rotating data

When you rotate data in a cell, the row expands to fit the rotated data if the row height is set to "Fit largest font" on the Basics tab in the InfoBox.

1. Select the range or text block containing the data you want to rotate.
2. Right-click the selection and choose the Properties command.
3. Click the Alignment tab in the InfoBox.

4. Select an orientation.

   To rotate text to a specified angle, select the last orientation choice and then click the arrows or enter a number in the "Angle" box.

5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_ROTATING_DATA_DETAILS',1)} See details

{button ,AL(`H_ALIGNING_DATA_IN_CELLS_STEPS;H_ALIGNING_DATA_IN_TEXT_BLOCKS_STEPS;H_ALIGNMENT_OVER;H_SPANNING_TEXT_ACROSS_COLUMNS_STEPS;H_WRAPPING_DATA_IN_A_CELL_STEPS;',0)} See related topics

Details: Rotating data

Printing rotated data
To print rotated data, both the printer and the printer driver must support rotation of installed fonts.

Troubleshooting
If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons

Rotates data in a cell 45 degrees

{button ,AL(`H_ROTATING_DATA_STEPS',1)} Go to procedure

Wrapping data in a cell

1-2-3 adjusts row height to fit the wrapped text if the row height is set to "Fit largest font" on the Basics tab in the InfoBox.

1. Select the range or collection.
2. Choose Range - Range Properties.

3. Click the Alignment tab in the InfoBox.

4. Select "Wrap text in cell."
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_WRAPPING_DATA_IN_A_CELL_DETAILS',1)} See details

{button ,AL(`H_ALIGNING_DATA_IN_CELLS_STEPS;H_ALIGNING_DATA_IN_TEXT_BLOCKS_STEPS;H_ALIGNMENT_OVER;H_CHANGING_ALIGNMENT_STEPS;H_ROTATING_DATA_STEPS;H_SPANNING_TEXT_ACROSS_COLUMNS_STEPS;H_WRAPPING_DATA_IN_A_CELL_STEPS;',0)} See related topics

Details: Wrapping data in a cell
You can't wrap numbers in a cell.

Troubleshooting
If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Left-aligns labels; right-aligns values


Left-aligns data


Right-aligns data


Centers data


Evenly spaces text in a cell or text block


Centers text across columns

{button ,AL(`H_WRAPPING_DATA_IN_A_CELL_STEPS',1)} Go to procedure

Horizontal alignment
Changes the horizontal position of text and values. Click one of these buttons in the InfoBox:


Left-aligns text; right-aligns values


Left-aligns text and values


Centers text and values


Right-aligns text and values


Evenly spaces text in a cell or text block

Note These buttons also appear in the status bar.

Vertical alignment
Changes the vertical position of text and values. Click one of these buttons in the InfoBox:


Aligns text and values to the top


Aligns text and values to the center


Aligns text and values to the bottom

Overview: Changing borders, lines, and colors

Simple enhancements to sheet data can improve its effectiveness. You can add borders, lines, color, and designer frames to your sheet to emphasize important data.

Use the InfoBox or the status bar to style ranges and graphic objects.

Borders around ranges and graphic objects

You can add borders around cells and ranges. Borders are different than the grid lines that separate cells in the sheet. Graphic objects such as closed shapes, pictures, charts, maps, and text blocks also have borders. You can change the style and color of borders.

Designer frames

A designer frame is a special kind of border that you can add to cells, ranges, and any rectangular object except a button. The designer frame palette includes frames with drop shadows and beveled edges, which you can enhance with color.

Enhancing lines

Change the style, width, and color of lines, arcs, arrows, and freehand drawings to make them stand out. You can add arrowheads to the beginning, end, or both ends of a line.

Colors and patterns

You can change the color of lines and borders, and change the background color of ranges, charts, maps, text blocks, and closed shapes (such as circles and rectangles). Then you can add a pattern and a pattern color to the background. You can also fill the interior of an arc, polyline, or freehand drawing with a color and a pattern.

{button ,AL(`H_CHANGING_INTERIOR_COLOR_AND_PATTERN_STEPS;H_CHANGING_LINE_STYLES_STEPS;
H_CHANGING_GRAPHICS_BORDERS_STEPS;H_CHANGING_RANGE_BORDERS_STEPS;H_USING_DESIG
NER_FRAMES_STEPS;',0)} See related topics

Changing interior color and pattern

You can add or change interior colors and patterns in cells, ranges, sheets, and many graphic objects. You can't change the interior color or pattern of a bitmap picture or an embedded object.

1. Select what you want to change.
2. Right-click the selection and choose the Properties command.
3. Click the Lines & Colors tab in the InfoBox.

4. Under Interior, select a background color, a pattern, and a pattern color.
5. (Optional) Move, collapse, or close the InfoBox.

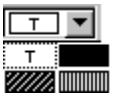
{button ,AL(`H_CHANGING_INTERIOR_COLOR_AND_PATTERN_DETAILS',1)} See details

{button ,AL(`H_REMOVING_FORMATTING_FROM_TEXT_STEPS;H_CHANGING_BORDERS_LINES_AND_COLORS_OVER;H_CHANGING_LINE_STYLES_STEPS;H_CHANGING_GRAPHICS_BORDERS_STEPS;H_CHANGING_RANGE_BORDERS_STEPS;H_USING_DESIGNER_FRAMES_STEPS;',0)} See related topics

Details: Changing interior color and pattern

Selecting pattern and color options

- Background color -- The color inside the range or graphic object behind any pattern.
- Pattern -- The fill pattern inside the range or graphic object. Choose from 64 fill patterns, including transparent.

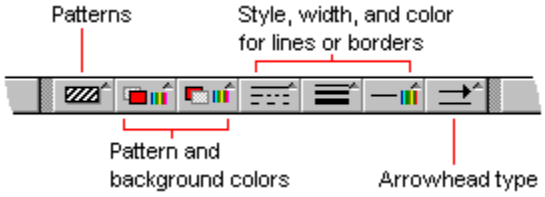


Note In chart parts, the background color has no effect until you select a pattern other than transparent or solid.

- Pattern color -- The color of the pattern in the range or graphic object. If the pattern is set to transparent or to the solid background color, you see no change if you select pattern colors.
- Text color -- When a range is selected, the color of the text in the range. You can also change text color using the Text Format tab in the InfoBox.

Other ways to change interior colors

You can use the status bar to change background color, pattern, or pattern color. The options available in the status bar change depending on what's selected. For example, you can use the status bar to change the background color, pattern, and pattern color of a rectangle, but you can change only the background color of a range.



Displaying negative values in red

When a range is selected, select "Negative values in red" to display negative numbers in red, for example, to show a debit. You can set this option for the entire sheet by using Sheet - Sheet Properties (Lines & Colors tab).

Troubleshooting

If the object or the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes to a locked object or workbook. To unlock the object, use the Basics tab in the InfoBox for the object. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons

Opens the InfoBox and displays the Lines & Colors tab for ranges

Opens the InfoBox for drawings

Opens the InfoBox for charts

Opens the InfoBox for maps

{button ,AL(`H_CHANGING_INTERIOR_COLOR_AND_PATTERN_STEPS',1)} Go to procedure

Changing graphic object borders

You can change the border for a chart, map, picture, text block, or any closed shape.

1. Select the graphic object with the border you want to change.
2. Right-click the selection and choose the Properties command.
3. Click the Lines & Colors tab in the InfoBox.

4. Under Border, select a line color, line style, and line width.
5. (Optional) Move, collapse, or close the InfoBox.

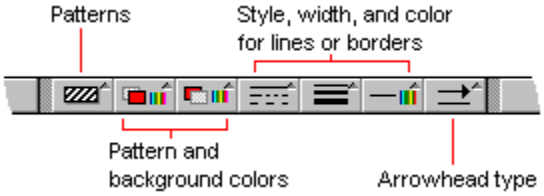
{button ,AL(`H_CHANGING_GRAPHICS_BORDERS_DETAILS',1)} See details

{button ,AL(`H_REMOVING_FORMATTING_FROM_TEXT_STEPS;H_CHANGING_BORDERS_LINES_AND_COLORS_OVER;H_CHANGING_LINE_STYLES_STEPS;H_CHANGING_RANGE_BORDERS_STEPS;H_USING_DESIGNER_FRAMES_STEPS;',0)} See related topics

Details: Changing graphic object borders

Other ways to change graphic object borders

You can also use the status bar to change the color, style, and width of graphic object borders.



Troubleshooting

If the object or the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes to a locked object or workbook. To unlock the object, use the Basics tab in the InfoBox for the object. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons

Opens the InfoBox and displays the Lines & Colors tab for ranges

Opens the InfoBox for drawings

Opens the InfoBox for charts

Opens the InfoBox for maps

{button ,AL(`H_CHANGING_GRAPHICS_BORDERS_STEPS',1)} Go to procedure

Changing range borders

Change the border of a range to emphasize important data.

1. Select the range or collection.
2. Choose Range - Range Properties.

3. Click the Lines & Colors tab in the InfoBox.

4. Under Border, click the button that shows the border style you want.
5. Select a line style and color for the border.
6. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_RANGE_BORDERS_DETAILS',1)} See details

{button ,AL(`H_REMOVING_FORMATTING_FROM_TEXT_STEPS;H_CHANGING_BORDERS_LINES_AND_COLORS_OVER;H_CHANGING_LINE_STYLES_STEPS;H_CHANGING_GRAPHICS_BORDERS_STEPS;H_CHANGING_RANGE_BORDERS_STEPS;H_USING_DESIGNER_FRAMES_STEPS;',0)} See related topics

Details: Changing range borders

Troubleshooting

- If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.
- If no border appears, make sure the line style is not set to "none."

Related SmartIcons

Opens the InfoBox and displays the Lines & Colors tab for ranges

Adds a border around the selected cell or range

Adds a border and drop shadow to the selected cell or range

{button ,AL(`H_CHANGING_RANGE_BORDERS_STEPS',1)} Go to procedure

Changing line styles

You can change line styles for any graphic object made from lines, such as an arrow, arc, or polyline.

1. Select the object.
2. Choose Drawing - Drawing Properties.

3. Click the Lines & Colors tab in the InfoBox.

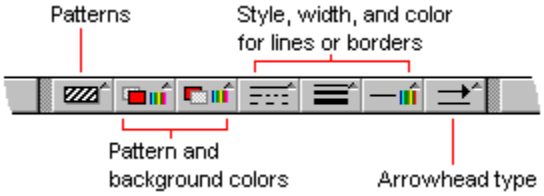
4. Select a line color, style, and width.
5. (Optional) Select an arrowhead.
6. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_LINE_STYLES_DETAILS',1)} See details

{button ,AL(`H_REMOVING_FORMATTING_FROM_TEXT_STEPS;H_CHANGING_BORDERS_LINES_AND_COLORS_OVER;H_CHANGING_GRAPHICS_BORDERS_STEPS;H_CHANGING_RANGE_BORDERS_STEPS;H_USING_DESIGNER_FRAMES_STEPS;',0)} See related topics

Details: Changing line styles

Other ways to change line styles
You can also use the status bar to change line style, width, color, and arrowheads.



Lines and arrowheads
You can add an arrowhead at the beginning of a line, the end of a line, or at both ends.

Troubleshooting
If the object or the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes to a locked object or workbook. To unlock the object, use Drawing - Drawing Properties (Basics tab). To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

{button ,AL(`H_CHANGING_LINE_STYLES_STEPS',1)} Go to procedure

Adding designer frames

You can add a designer frame to a cell, a range, and any rectangular object except a button.

1. Select what you want to frame.
2. Right-click the selection and choose the Properties command.
3. Click the Lines & Colors tab in the InfoBox.

4. Select "Designer frame," then select a frame style and a frame color.
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_USING_DESIGNER_FRAMES_DETAILS',1)} See details

{button ,AL(`H_CHANGING_BORDERS_LINES_AND_COLORS_OVER;H_CHANGING_LINE_STYLES_STEPS;H_CHANGING_GRAPHICS_BORDERS_STEPS;H_CHANGING_RANGE_BORDERS_STEPS;',0)} See related topics

Details: Adding designer frames

Troubleshooting

If the object or the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes to a locked object or workbook. To unlock the object, use the Basics tab in the InfoBox for the object. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons

Adds a border around the selected cell or range

Adds a border and drop shadow to the selected cell or range

Opens the InfoBox and displays the Lines & Colors tab for ranges

Opens the InfoBox for drawings

Opens the InfoBox for charts

Opens the InfoBox for maps

{button ,AL(`H_USING_DESIGNER_FRAMES_STEPS',1)} Go to procedure

Using fast format to style a range

Fast format automatically copies the styles of the current range into other ranges you select.

1. Select the range containing the styles you want to copy.
2. Choose Range - Fast Format.

The mouse pointer changes to a paintbrush.

3. Select the ranges you want to format.
4. To turn off fast formatting, choose Range - Fast Format again, click the fast format icon, or press ESC.

{button ,AL(`H_USING_FAST_FORMAT_TO_STYLE_A_RANGE_DETAILS',1)} See details

{button ,AL(`H_USING_THE_STYLE_GALLERY_STEPS;H_NAMED_STYLES_OVER;',0)} See related topics

Details: Using fast format to style a range

Other ways to turn off fast formatting
Fast formatting turns off when you press a key, click a status bar button or an InfoBox option, or click one of the SmartIcons.

Selecting the range to format
You need to select only the top left cell of the range to which you're applying styles.

Other ways to style a range
You can use the buttons in the status bar to change the styles of text or numbers.

Using named styles
Click the Named Style button in the status bar and choose from a list of your personal styles to quickly format a range of data.

Troubleshooting
If the worksheet is locked, fast format is not available. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Applies a named style


Opens the gallery of style templates


Clears styles from the current selection

{button ,AL(`H_USING_FAST_FORMAT_TO_STYLE_A_RANGE_STEPS',1)} Go to procedure
{button ,AL(`H_NAMED_STYLES_OVER;',0)} See related topics

Overview: Named styles

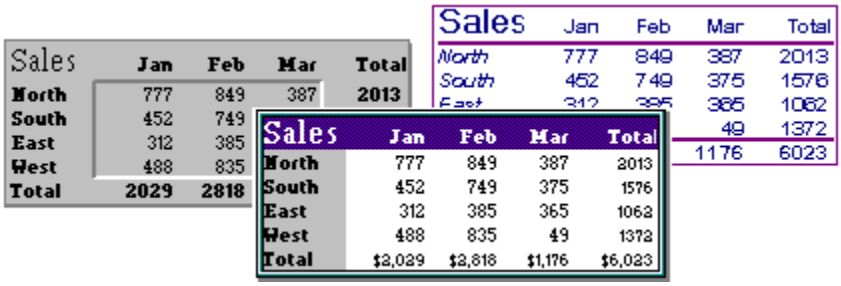
A named style is a collection of styles that you can copy from a single cell and apply to other ranges. A named style can include number format, font, point size, bold, italics, underlining, borders, colors, pattern, and alignment.

Create named styles when you want to reuse styles that you frequently apply to data. The named styles that you create appear on the status bar.

Using named styles, you can quickly apply the same styles to all the cells in a range or collection. You can redefine the named style to apply changes to all the cells using that named style.

Style gallery

You can also choose from a selection of style templates available in the style gallery. For more information, see Using the style gallery.



{button ,AL(`H_APPLYING_A_NAMED_STYLE_STEPS;H_CREATING_A_NAMED_STYLE_STEPS;H_DELETING_A_NAMED_STYLE_STEPS;H_REDEFINING_A_NAMED_STYLE_STEPS;H_REMOVING_A_NAMED_STYLE_STEPS;H_RENAMING_A_NAMED_STYLE_STEPS;H_RESETTING_A_NAMED_STYLE_STEPS;',0)} See related topics

Applying a named style

1. Select the range or collection you want to style.
2. Choose Range - Range Properties.

3. Click the Named Style tab in the InfoBox.

4. Select a named style from the "Style name" list.
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_APPLYING_A_NAMED_STYLE_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_NAMED_STYLE_STEPS;H_NAMED_STYLES_OVER;H_REDEFINING_A_NAMED_STYLE_STEPS;H_REMOVING_A_NAMED_STYLE_STEPS;H_RESETTING_A_NAMED_STYLE_STEPS;H_USING_FAST_FORMAT_TO_STYLE_A_RANGE_STEPS;',0)} See related topics

Details: Applying a named style

Other ways to apply a named style
Click the Named Style button on the status bar to see a list of current named styles in the sheet. Click the named style to apply it to the current selection. If no named styles have been defined, "No style" appears by itself in the list.

The Named Style button displays the name of the style applied to the current selection. "No style" means the current selection isn't formatted with a named style.

Copying named styles
You can copy a named style from one workbook to another by selecting an example cell and choosing Edit - Copy and Edit - Paste.

Overriding a named style
Once a named style has been applied to a cell, you can still change the individual properties of the cell without breaking the link to that named style. If you redefine the named style, 1-2-3 changes only the properties you didn't override. You can click Reset to Style to change the cell's styles back to the original named style.

Troubleshooting
The named style is not automatically applied to the example cell that defines it, so remember to include the example cell in the range you want to style.

If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Applies a named style


Resets the selection to the current named style


Redefines a named style based on the selected cell


Creates a named style based on the selected cell


Copies a range's styles to another range


Opens the gallery of style templates

{button ,AL(`H_APPLYING_A_NAMED_STYLE_STEPS',1)} Go to procedure
{button ,AL(`H_REDEFINING_A_NAMED_STYLE_STEPS',0)} See related topics

Creating a named style

You create a named style based on an example cell.

1. Click the cell that has the styles you want to define as a named style.
2. Choose Range - Range Properties.

3. Select the Named Style tab in the InfoBox.

4. Click Create Style.
5. Enter a name for the new named style in the "Style name" box.
6. Click OK.
7. (Optional) Move, collapse, or close the InfoBox.

Note The named style is not automatically applied to the example cell that defines it. Remember to apply the style to the example cell.

{button ,AL(`H_CREATING_A_NAMED_STYLE_DETAILS',1)} See details

{button ,AL(`H_APPLYING_A_NAMED_STYLE_STEPS;H_DELETING_A_NAMED_STYLE_STEPS;H_NAMED_STYLES_OVER;H_REDEFINING_A_NAMED_STYLE_STEPS;H_RENAMING_A_NAMED_STYLE_STEPS;',0)} See related topics

Details: Creating a named style
1-2-3 saves named styles with the workbook. Named style names can be up to 64 characters long and must be unique in the workbook.

Creating a named style with a range selected
A named style is based on a single cell. If you select a range, then 1-2-3 uses the styles of the top left cell of the range to create the named style.

To copy the styles of a range, use Range - Fast Format. To see a gallery of style templates for ranges, choose Range - Range Properties and click Style Gallery on the Named Style tab in the InfoBox.

Named styles and sheet defaults
A named style can contain a sheet default. If you change the sheet default, the named style changes to use the new sheet default. For example, you create a named style based on a cell using the sheet default background color. If you later change the sheet default background color to yellow, the named style changes to use the default background color (yellow). All cells using that named style then change to a yellow background color.

If you don't want your named style to use the sheet defaults, use Range - Range Properties to style the cell with a local setting before you create the named style. For information on sheet defaults, see Overview: Sheet defaults.

Troubleshooting
If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Creates a named style based on the selected cell


Applies a named style


Redefines a named style based on the selected cell


Resets the selection to the current named style


Copies a range's styles to another range


Opens the gallery of style templates

{button ,AL(`H_CREATING_A_NAMED_STYLE_STEPS',1)} Go to procedure
{button ,AL(`H_USING_FAST_FORMAT_TO_STYLE_A_RANGE_STEPS;',0)} See related topics

Renaming a named style

1. Choose Range - Range Properties.

2. Click the Named Style tab in the InfoBox.

3. Click Manage Styles.
4. Select the named style you want to rename from the "Style name" list.
5. Click Rename.
6. Enter the new name in the "To" box and click OK.
7. Click Done.
8. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_RENAMING_A_NAMED_STYLE_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_NAMED_STYLE_STEPS;H_DELETING_A_NAMED_STYLE_STEPS;H_NAMED_STYLES_OVER;H_REDEFINING_A_NAMED_STYLE_STEPS;H_RESETTING_A_NAMED_STYLE_STEPS;H_APPLYING_A_NAMED_STYLE_STEPS;',0)} See related topics

Details: Renaming a named style
You can change style names at any time to more accurately describe what the named style is being used for. All the cells using the old style name become associated with the new name when you rename a named style, but any overrides to that style remain. Names for named styles must be unique in the workbook.

Troubleshooting
If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Displays the Manage Styles dialog box


Resets the selection to the current named style


Redefines a named style based on the selected cell


Creates a named style based on the selected cell

{button ,AL(`H_RENAMING_A_NAMED_STYLE_STEPS',1)} Go to procedure

Redefining a named style

You redefine a named style using an example cell. When you redefine a named style, all the cells using the named style change to the new styles.

1. Click the cell that has the styles you want to use to redefine the named style.
2. Choose Range - Range Properties.

3. Click the Named Style tab in the InfoBox.

4. Click Redefine Style.
5. Select the named style you want to redefine.
6. Click OK.
7. (Optional) Move, collapse, or close the InfoBox.

Note The named style is not automatically applied to the example cell that defines it. Remember to apply the style to the example cell.

{button ,AL(`H_REDEFINING_A_NAMED_STYLE_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_NAMED_STYLE_STEPS;H_NAMED_STYLES_OVER;H_REMOVING_A_NAMED_STYLE_STEPS;H_RENAMING_A_NAMED_STYLE_STEPS;H_RESETTING_A_NAMED_STYLE_STEPS;H_APPLYING_A_NAMED_STYLE_STEPS;',0)} See related topics

Details: Redefining a named style

Overriding a named style
Once a named style has been applied to a cell, you can still change the individual properties of the cell without breaking the link to that named style. If you redefine the named style, 1-2-3 changes only the properties you didn't override. You can click Reset to Style to change the cell's styles back to the original named style.

Troubleshooting
If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Redefines a named style based on the selected cell


Resets the selection to the current named style


Creates a named style based on the selected cell


Applies a named style

{button ,AL(`H_REDEFINING_A_NAMED_STYLE_STEPS',1)} Go to procedure

Resetting a cell's styles to a named style

If you applied a named style to a cell and then changed the cell's styles, you can reset the cell back to the named style.

1. Select the range or collection that has the styles you want to reset.
2. Choose Range - Range Properties.

3. Click the Named Style tab in the InfoBox.

4. Click Reset to Style.
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_RESETTING_A_NAMED_STYLE_DETAILS',1)} See details

{button ,AL(`H_APPLYING_A_NAMED_STYLE_STEPS;H_CREATING_A_NAMED_STYLE_STEPS;H_NAMED_STYLES_OVER;H_REDEFINING_A_NAMED_STYLE_STEPS;H_REMOVING_A_NAMED_STYLE_STEPS;',0)} See related topics

Details: Resetting a cell's styles to a named style
When you reset to the named style, 1-2-3 removes style changes made after the named style was applied, and assigns only the attributes of the named style to the selection.

Troubleshooting
If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Resets the selection to the current named style


Clears all styles, including number formats, from the current selection


Creates a named style based on the selected cell


Applies a named style


Redefines a named style based on the selected cell

{button ,AL(`H_RESETTING_A_NAMED_STYLE_STEPS',1)} Go to procedure

Removing a named style from cells

Removing a named style from a cell removes the styles associated with the named style, but leaves any changes you made after applying the named style.

1. Select the range or collection from which you want to remove the named style.
2. Choose Range - Range Properties.

3. Click the Named Style tab in the InfoBox.

4. Select "No style" from the "Style name" list.
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_REMOVING_A_NAMED_STYLE_DETAILS',1)} See details

{button ,AL(`H_APPLYING_A_NAMED_STYLE_STEPS;H_DELETING_A_NAMED_STYLE_STEPS;H_NAMED_STYLES_OVER;H_REDEFINING_A_NAMED_STYLE_STEPS;H_RESETTING_A_NAMED_STYLE_STEPS;',0)} See related topics

Details: Removing a named style from cells

Other ways to remove named styles

- Click the Named Style button in the status bar and select "No style."
- Choose Edit - Clear Styles, which will remove all styles, not just the styles associated with the named style.

Troubleshooting

If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons

Clears all styles, including number formats, from the current selection

Redefines a named style based on the selected cell

Resets the selection to the current named style

{button ,AL(`H_REMOVING_A_NAMED_STYLE_STEPS',1)} Go to procedure

Deleting a named style

When you delete a named style, the cells formatted with that named style retain the styles, but are no longer linked to the named style.

1. Choose Range - Range Properties.

2. Click the Named Style tab in the InfoBox.

3. Click Manage Styles.
4. From the "Style name" list, select the style you want to delete.
5. Click Delete.
6. Click Done.
7. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_DELETING_A_NAMED_STYLE_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_NAMED_STYLE_STEPS;H_NAMED_STYLES_OVER;H_REDEFINING_A_NAMED_STYLE_STEPS;H_RENAMING_A_NAMED_STYLE_STEPS;',0)} See related topics

Details: Deleting a named style

Troubleshooting

If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons

Displays the Manage Styles dialog box

Clears all styles, including number formats, from the current selection

Redefines a named style based on the selected cell

{button ,AL(`H_DELETING_A_NAMED_STYLE_STEPS',1)} Go to procedure

Using the style gallery

You can quickly format ranges or collections with the style templates available in 1-2-3.

1. Select the range you want to format.
2. Choose Range - Range Properties.

3. Click the Named Style tab in the InfoBox.

4. Click Style Gallery.
5. Select the template you want to use from the "Style templates" list.
6. Click OK.
7. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_USING_THE_STYLE_GALLERY_DETAILS',1)} See details

{button ,AL(`H_APPLYING_A_NAMED_STYLE_STEPS;H_CREATING_A_NAMED_STYLE_STEPS;H_NAMED_STYLES_OVER;H_USING_FAST_FORMAT_TO_STYLE_A_RANGE_STEPS;',0)} See related topics

Details: Using the style gallery

Troubleshooting

If the workbook is locked, the style options in the InfoBox are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Opens the gallery of style templates


Copies a range's styles to another range


Pastes a cell's styles


Creates a named style based on the selected cell


Applies a named style

{button ,AL(`H_USING_THE_STYLE_GALLERY_STEPS',1)} Go to procedure

Manage Styles dialog box for named styles

Use this dialog box to rename or delete named styles.

Choose a task

- Renaming a named style
- Deleting a named style

{button ,AL(`H_NAMED_STYLES_OVER;',0)} See related topics

Overview: Number formats

You can change the appearance of numbers by changing number formats. Number formats differentiate one kind of data from another; for example, currency from percentages. Number formats affect only how 1-2-3 displays numbers, not how 1-2-3 stores or calculates with numbers.

You can change the number format for an entire sheet (the sheet default) or for a selected range or collection. The initial default number format for sheets is General. Use Sheet - Sheet Properties (Number Format tab) to change the default number format. Use Range - Range Properties (Number Format tab) to format numbers in a range or collection.

Categories of number formats

Number formats are grouped into the categories described below.

Frequently Used

Initially, the Frequently Used category contains several common formats. You can add or delete formats from the list.

Number formats in this category appear on the Frequently Used list in the status bar, and are automatically recognized by 1-2-3 when you enter them. For example, if you promote the date format December-96 to the Frequently Used list, 1-2-3 formats the cell with that format when you type January-97 (or any other date in that format).

Number

The Number category contains these formats:

- General format -- Displays up to 15 decimal places, a minus sign for negatives, no thousands separators, and no trailing zeros to the right of the decimal point. General format is the initial default number format.

  Note If you enter a large decimal number in General format, 1-2-3 either rounds the number to fit the column width, displays scientific notation, or displays *** (asterisks) until you widen the column.
- Fixed format -- Displays up to 15 decimal places, a minus sign for negatives, and a leading zero for decimal values.
- Comma format -- Displays thousands separators and up to 15 decimal places, and parentheses for negative numbers. Comma format is the same as currency format without the currency symbol. You can change the negative number indicator from minus sign to parentheses using the regional or country settings for negative numbers in the operating system's control panel.
- Scientific format -- Displays scientific (exponential) notation, with up to 15 decimal places and an exponent of up to 3 digits.
- Percent format -- Displays numbers as percentages (the number multiplied by 100) with a percent sign and up to 15 decimal places.

The table below shows the same number formatted in different ways.

Format name	1234.567 appears as
General	1234.567
Fixed	1234.57
Comma	1,234.57
Scientific	1.23E+003
Percent	123456.70%

Currency

Displays numbers with a currency symbol, thousands separators, and up to 15 decimal places. You can format different cells in the same workbook as different types of currency. For example, you can format one cell as US dollar and another cell as French franc. See Details: Formatting numbers as currency for the list of currency formats. You can change the negative number indicator from minus sign to parentheses using the regional or country settings for negative numbers in the operating system's control panel.

ISO Currency

Displays numbers with the International Standards Organization (ISO) code, thousands separators, and up to 15 decimal places. For example, the ISO code for $ (US dollar sign) is USD. See Details: Changing the currency symbol for the table of ISO currency formats.

Date

Displays a date number as a date. If a number falls outside the range of date numbers, 1-2-3 displays *** (asterisks) in the cell. See Details: Entering dates for the table of date formats.

Time
Displays a time number as a time. If a number falls outside the range of time numbers, 1-2-3 displays 12:00 AM or 00:00 in the cell. See Details: Entering times for the table of time formats.

Note 1-2-3 will display any whole integer as 12:00 AM in Time format since Time format is derived from a fraction or decimal.

Text

- Label format -- Displays existing numbers with no thousands separators, and a minus sign for negative numbers. New entries in Label format display as text, compute to the value 0 (zero), and automatically use a label-prefix character that corresponds to the alignment set with Sheet - Sheet Properties.

  Note 1-2-3 lets you compute with numbers that you have changed to label format before you edit them. After you edit a number in Label format, 1-2-3 enters a label-prefix character in the cell and the cell computes to the value 0 (zero).
- Formula format -- Displays formulas written out, rather than as their computed values. This is useful for debugging or printing formulas.

{button ,AL(`H_FORMATTING_NUMBERS_AS_CURRENCY_STEPS;H_SETTING_123_PREFERENCES_STEPS;H_SETTING_A_DEFAULT_NUMBER_FORMAT_STEPS;H_FORMATTING_NUMBERS_STEPS;H_CHANGING_THE_CURRENCY_SYMBOL_STEPS;',0)} See related topics

Formatting numbers

Changing the number format affects only how 1-2-3 displays numbers, not how 1-2-3 stores or calculates with numbers.

1. Select the numbers you want to format.
2. Choose Range - Range Properties.

3. Click the Number Format tab in the InfoBox.

4. Select a format category.
5. Select a format from the "Current format" list.

   Tip To promote the number format to the status bar, select "Show in Frequently Used list."
6. (Optional) To reset the current selection to the sheet default, click Reset to Sheet Format.
7. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_FORMATTING_NUMBERS_DETAILS',1)} See details

{button ,AL(`H_NUMBER_FORMATS_OVER;H_FORMATTING_NUMBERS_AS_CURRENCY_STEPS;H_SETTING_123_PREFERENCES_STEPS;H_SETTING_A_DEFAULT_NUMBER_FORMAT_STEPS;H_LC_CHANGING_NUMERIC_FORMATS_STEPS;',0)} See related topics

Details: Formatting numbers

Other ways to format numbers
You can use the status bar to format numbers in cells. Click the Number format button to display the Frequently Used list of number formats. Only the formats included in the Frequently Used category on the Number format tab in the InfoBox are available from the status bar.

Automatic formatting
1-2-3 automatically formats a number if you enter it using a time format, a percent sign, or one of the formats in the Frequently Used category. For example, if you enter 12:31:57, 1-2-3 automatically assigns a time format (23:59:59) to that cell, but if you enter 12/31/57, 1-2-3 automatically assigns a date format (12/31/96) to that cell. If you enter a plain number that is not a recognized date, time, or other format, 1-2-3 enters the number using the default format (initially, General format).

Displaying parentheses
Selecting "Parentheses" on the Number Format tab encloses both positive and negative numbers in parentheses, except numbers formatted as dates, times, or text. You can also set this option for the entire sheet by using Sheet - Sheet Properties.

Negative number defaults for Comma and Currency formats
For both Comma and Currency number formats, 1-2-3 displays negative numbers using either parentheses or a minus sign based on operating system default settings.

Displaying negative values in red
You can display negative values in red, for example, to show a debit. To display negative values in red for a selected range, use Range - Range Properties (Lines & Color tab). You can also set this option for the entire sheet by using Sheet - Sheet Properties.

The effect of column width on numbers
If you format a number and 1-2-3 fills the cell with *** (asterisks), the column is not wide enough to display the number using the format you selected.

If you enter a number in General format, but 1-2-3 displays the number in Scientific format, the number is too large to display in the column. To display the number, widen the column to at least one character wider than the width of the formatted number.

If 1-2-3 still displays *** (asterisks) after you widen the column, the value is invalid, for example, a date greater than 12-31-2099.

Troubleshooting
If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Formats values as a percent with two decimal places


Formats values with the thousands separator and no decimal places


Formats values with the default currency format

{button ,AL(`H_FORMATTING_NUMBERS_STEPS',1)} Go to procedure

{button ,AL(`H_PROMOTING_A_NUMBER_FORMAT_STEPS;H_CHANGING_INTERNATIONAL_SETTINGS_STEPS;H_SIZING_COLUMNS_STEPS;',0)} See related topics

Formatting numbers as currency

Changing the number format affects only how 1-2-3 displays numbers, not how 1-2-3 stores or calculates with numbers.

1. Select the numbers you want to format.
2. Choose Range - Range Properties.

3. Click the Number Format tab in the InfoBox.

4. Select "Currency" or "ISO Currency" from the "Category" list.
5. Select a currency format from the "Current format" list.

   Tip To promote the number format to the status bar, click "Show in Frequently Used list."
6. (Optional) To reset the current selection to the sheet default, click "Reset to Sheet Format."
7. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_FORMATTING_NUMBERS_AS_CURRENCY_DETAILS',1)} See details

{button ,AL(`H_NUMBER_FORMATS_OVER;H_CHANGING_THE_CURRENCY_SYMBOL_STEPS;H_FORMATTING_NUMBERS_STEPS;',0)} See related topics

Details: Formatting numbers as currency

Other ways to format numbers as currency
You can also use the status bar to change currency formats quickly. Click the Number format button to display the Frequently Used list of number formats. Only the formats included in the Frequently Used category on the Number Format tab in the InfoBox are available from the status bar.

Automatic formatting of currencies
1-2-3 automatically formats data as currency when you enter it if you use one of the currency formats in the Frequently Used category. For example, if French franc is on the Frequently Used list, and you enter 254.70 F, 1-2-3 automatically assigns the French franc currency format (with two decimal places) to that cell.

Displaying negative values in red
You can display negative values in red, for example, to show a debit. To display negative values in red for a selected range, use Range - Range Properties (Lines & Color tab). You can also set this option for the entire sheet by using Sheet - Sheet Properties.

Negative number defaults for Comma and Currency formats
For both Comma and Currency number formats, 1-2-3 uses either parentheses or minus sign defaults based on default negative number settings from the Windows control panel.

The effect of column width on numbers
If you format a number and 1-2-3 fills the cell with *** (asterisks), the column is not wide enough to display the number using the format you selected. To display the number, widen the column to at least one character wider than the width of the formatted number. If 1-2-3 still displays *** (asterisks) after you widen the column, the value is invalid.

Troubleshooting
If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Related SmartIcons


Formats values with the default currency format


Formats values with the US dollar currency symbol, the default thousands separator, and two decimal places


Formats values with the British pound currency symbol, the default thousands separator, and two decimal places


Formats values with the Japanese yen currency symbol, the default thousands separator, and zero decimal places

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{button ,AL(`H_FORMATTING_NUMBERS_AS_CURRENCY_STEPS',1)} Go to procedure

{button ,AL(`H_FORMATTING_NUMBERS_DETAILS;H_SIZING_COLUMNS_STEPS;H_Promoting_a_number_format_steps;H_CHANGING_INTERNATIONAL_SETTINGS_STEPS;',0)} See related topics

Promoting a number format

You can promote any number format you use frequently to the status bar.

1. Select an example cell that has the format you want to promote.
2. Choose Range - Range Properties.

3. Click the Number Format tab in the InfoBox.

4. Select "Show in Frequently Used list."

   The format you selected now appears when you click the Number format button in the status bar.

5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_PROMOTING_A_NUMBER_FORMAT_DETAILS',1)} See details

{button ,AL(`H_NUMBER_FORMATS_OVER;H_FORMATTING_NUMBERS_AS_CURRENCY_STEPS;H_FORMATTING_NUMBERS_STEPS;',0)} See related topics

Details: Promoting a number format

Removing formats from the Frequently Used list
If you want to remove a format from the Frequently Used list, deselect "Show in Frequently Used list" on the Number Format tab in the InfoBox. The format of the current selection does not change, but the InfoBox changes to show that number format in its original category, and removes the format from the status bar.

Troubleshooting
If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

{button ,AL(`H_PROMOTING_A_NUMBER_FORMAT_STEPS',1)} Go to procedure
{button ,AL(`H_USING_THE_STATUS_BAR_OVER',0)} See related topics

Changing the currency symbol

You can change the symbol or International Standards Organization (ISO) code for a selected currency, and the position of the symbol or code.

1. Choose Range - Range Properties or Sheet - Sheet Properties.
2. Select "Currency" or "ISO Currency" from the "Category" list.
3. In the "Current format" list, select the currency whose symbol or ISO code you want to change.
4. Click Currency Options.
5. Enter the symbol or code in the "Symbol" box.
6. (Optional) Select a position for the currency symbol or code.
7. Click OK.

{button ,AL(`H_CHANGING_THE_CURRENCY_SYMBOL_DETAILS',1)} See details

{button ,AL(`H_NUMBER_FORMATS_OVER;H_FORMATTING_NUMBERS_AS_CURRENCY_STEPS;H_FORMATTING_NUMBERS_STEPS;',0)} See related topics

Details: Changing the currency symbol

Entering the currency symbol

To enter a symbol character that you cannot type directly from your keyboard, you can use a compose sequence starting with ALT+F1 (COMPOSE). For example, to enter the character £ (British pound sterling symbol), press ALT+F1 (COMPOSE) and type L=. You can also copy the currency symbol from the Windows Character Map.

Changes to the currency symbol

These changes affect current and future sessions of 1-2-3 and are stored as default settings. They are specific to your copy of 1-2-3 and are not transferred when you give a workbook to someone else.

Note You cannot enter a symbol or code that is already being used for another currency. Also, if you leave the "Symbol" box blank, the symbol for the selected currency reverts to the system default.

Table of currency symbols

The table below shows the number 1234.56 displayed as regular and ISO currencies:

Currency name	Regular currency	ISO currency
Argentinean Peso	A1,234.56	ARS 1,234.56
Australian Dollar	A$1,234.56	AUD 1,234.56
Austrian Schilling	1,234.56 ÖS	ATS 1,234.56
Belgian Franc	1,234.56 BF	BEF 1,234.56
Brazilian Real	R$ 1,234.56	BRL 1,234.56
British Pound	£1,234.56	GBP 1,234.56
Canadian Dollar	C$1,234.56	CAD 1,234.56
Chinese Yuan	PRC¥1,234.56	CNY 1,234.56
Czech Koruna	1,234.56 Kc	CZK 1,234.56
Danish Krone	Dkr 1,234.56	DKK 1,234.56
ECU	1,234.56 ECU	XEU 1,234.56
Finnish Markka	1,234.56 mk	FIM 1,234.56
French Franc	1,234.56 F	FRF 1,234.56
German Mark	1,234.56 DM	DEM 1,234.56
Greek Drachma	1,234.56 Dr	GRD 1,234.56
Hong Kong Dollar	HK$1,234.56	HKD 1,234.56
Hungarian Forint	1,234.56 Ft	HUF 1,234.56
Indian Rupee	Rs 1,234.56	INR 1,234.56
Indonesian Rupiah	Rp 1,234.56	IDR 1,234.56
Irish Punt	IR£1,234.56	IEP 1,234.56
Italian Lira	L. 1,234.56	ITL 1,234.56
Japanese Yen	¥1,234.56	JPY 1,234.56
Luxembourg Franc	1,234.56 LF	LUF 1,234.56
Malaysian Ringgit	Rm 1,234.56	MYR 1,234.56
Mexican Peso	N$1,234.56	MXN 1,234.56
Netherlands Guilder	F 1,234.56	NLG 1,234.56
New Zealand Dollar	NZ$1,234.56	NZD 1,234.56
Norwegian Krone	Nkr 1,234.56	NOK 1,234.56
Polish Zloty	1,234.56 Zl	PLN 1,234.56
Portuguese Escudo	1,234.56 Esc.	PTE 1,234.56
Romanian Leu	1,234.56 Lei	ROL 1,234.56
Russian Ruble	1,234.56 R	SUR 1,234.56
Singapore Dollar	S$1,234.56	SGD 1,234.56

Slovakian Koruna	1,234.56 Sk	SKK 1,234.56
Slovenian Tolar	SIT 1,234.56	SIT 1,234.56
South African Rand	R1,234.56	ZAR 1,234.56
South Korean Won	W1,234.56	KRW 1,234.56
Spanish Peseta	1,234.56 Pts	ESP 1,234.56
Swedish Krona	1,234.56 Skr	SEK 1,234.56
Swiss Franc	SFr 1,234.56	CHF 1,234.56
Taiwan Dollar	NT$1,234.56	TWD 1,234.56
Thai Baht	1,234.56 Bt	THB 1,234.56
US Dollar	$1,234.56	USD 1,234.56
Other Country	OTH 1,234.56	OTH 1,234.56

{button ,AL(`H_CHANGING_THE_CURRENCY_SYMBOL_STEPS',1)} Go to procedure

{button ,AL(`H_FORMATTING_NUMBERS_AS_CURRENCY_STEPS;H_FORMATTING_NUMBERS_STEPS;H_NUMBER_FORMATS_OVER;H_ENTERING_NUMBERS_STEPS;',0)} See related topics

Changing text styles

Use the InfoBox to style labels and values in ranges, and text in graphic objects.

1. Select the range or graphic object containing the text.
2. Right-click the selection, and choose the Properties command.
3. Click the Text Format tab in the InfoBox.

4. Select a font, point size, color, and attribute(s).
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_TEXT_FORMAT_DETAILS',1)} See details

{button ,AL(`H_REMOVING_FORMATTING_FROM_TEXT_STEPS;H_NAMED_STYLES_OVER;',0)} See related topics

Details: Changing text styles

Other ways to style text

You can also style text by using the buttons in the status bar. Click the button and select from a list of options.

Troubleshooting

- If the font name in the status bar is red, it means the font is not installed on your computer. 1-2-3 substitutes a similar font in its place.
- If the workbook is locked, the style options in the InfoBox and status bar are dimmed. You can't make style changes in a locked workbook. To unlock the workbook, use File - Workbook Properties (Security tab). For more information, see Overview: Protecting data.

Styling text blocks

Changes you make to text blocks affect all the text in the text block. You can't style individual characters.

Removing attributes from text

To remove bold, italic, strikethrough, and all underlining from the selection, click the Text Format tab in the InfoBox and select "Normal" from the "Attributes" list; or click the icon shown below.

Related SmartIcons

Adds bold to data in a selection

Adds italics to data in a selection

Adds underlining to data in a selection

Adds double underlining to data in a selection

Changes the font, color, and attributes of data in ranges

Changes the font, color, and attributes of text in text blocks

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{button ,AL(`H_CHANGING_TEXT_FORMAT_STEPS',1)} Go to procedure
{button ,AL(`H_USING_THE_STATUS_BAR_OVER;',0)} See related topics

Overview: Differences between TeamMail and TeamReview

TeamMail and TeamReview share the same distribution and routing feature, which uses your e-mail system.

With either TeamMail or TeamReview, you can send workbook data and a message to other 1-2-3 users in your workgroup, collect their input, and have their changes and additions returned to you automatically. However, TeamMail and TeamReview have different uses.

When to use TeamMail

Use TeamMail when you want to:

- Send a workbook and a message, or just a message, to a group.
- Send all objects in a workbook (including drawings, charts, and maps), and maintain versions, styles, settings, and other workbook properties.
- Let recipients add data to the workbook. To merge the changes into your original workbook, you can use Edit - Cut and Edit - Paste or File - TeamConsolidate - Merge Versions.

When to use TeamReview

Use TeamReview when you want to:

- Send a message with a range of data that others can edit. 1-2-3 stores the range of data in a new workbook called the routed workbook.

  Before you send the routed workbook to recipients, you can copy graphic objects such as charts and maps to the routed workbook. You can also add versions in the routed workbook before sending, and recipients can create versions along the route.
- Gather data from individuals and then automatically merge the returned data, including versions, into the original range.

  When you receive the routed range back from recipients, click the Merge button. You can specify whether 1-2-3 writes over the original data or creates versions automatically based on the data you receive.

{button ,AL(`H_TEAMMAIL123_OVER;H_TEAMREVIEW_OVER;H_MERGING_VERSIONS_AND_VERSION_GROUPS_STEPS;',0)} See related topics

Overview: TeamMail in 1-2-3

TeamMail lets you send an entire workbook, or just a message, using your e-mail system.

What you can do as the originator of a workbook

If you distribute a workbook, you can distribute it to one or more people at once or route it sequentially to one person at a time, tracking its progress along the way. If you distribute a workbook and other team members change the data, you can later merge these changes into your original workbook by pasting in the returned data or by using File - TeamConsolidate - Merge Versions.

If you want to distribute a range of data that others can edit (rather than an entire workbook), use File - TeamReview.

What you can do as the recipient of a workbook

If you are the recipient of a workbook, you can make changes, add comments, and send it to the next person in the route list or back to the originator. If the originator granted permission, you can edit the route list.

TeamMail compatibility

TeamMail works with Lotus Notes, Lotus cc:Mail, and other e-mail applications that support Vendor Independent Messaging (VIM), Messaging Application Programming Interface (MAPI), or Common Messaging Call (CMC).

To use TeamMail with Lotus Notes on Windows NT, you must have version 4.0 or higher.

If someone sends you a 1-2-3 Release 5 file with TeamMail, you can open it in 1-2-3 97, but you cannot continue the routing process.

You cannot route a 1-2-3 97 workbook to a Release 5 user.

{button ,AL(`H_SENDING_A_MESSAGE_ONLY_WITH_TEAMMAIL_STEPS;H_SENDING_A_WORKBOOK_WITH_TEAMMAIL_STEPS;H_DIFFERENCES_BETWEEN_TEAMMAIL_AND_TEAMREVIEW_OVER;H_MERGING_VERSIONS_AND_VERSION_GROUPS_STEPS;H_TEAMREVIEW_OVER;',0)} See related topics

Sending a workbook with TeamMail

You can attach the current workbook to a message, and then send it to a group of recipients all at once or route it sequentially to one person at a time.

1. Choose File - TeamMail.

2. Under Send, select "Workbook with message."
3. Click OK.
4. If prompted, type your e-mail password and any other required information in the Mail Login dialog box, and click OK.
5. Enter the names of the recipients and set tracking and delivery options on the Basics and Options tabs in the TeamMail dialog box.
6. Click Send.

{button ,AL(`H_DIFFERENCES_BETWEEN_TEAMMAIL_AND_TEAMREVIEW_OVER;H_RECEIVING_A_ROUTED_RANGE_STEPS;H_TEAMMAIL_OVER;H_SENDING_A_MESSAGE_ONLY_WITH_TEAMMAIL_STEPS;H_DBOX_BASICS_REF;H_DBOX_OPTIONS_REF;',0)} See related topics

Sending a message with TeamMail

You can send a message and, optionally, include a picture of the current selection in the message. Messages are sent to all recipients simultaneously rather than routed sequentially.

1. (Optional) To include a picture of a range or graphic object with your message, select the range or graphic object.
2. Choose File - TeamMail.

3. Under Send, select "Message only."
4. (Optional) Select "Paste in a picture of the selection" to include a picture of the selected range or object.
5. Click OK.
6. If prompted, enter your e-mail password and any other required information in the Mail Login dialog box, and click OK.
7. Enter the names of the recipients and set tracking and delivery options on the Basics and Options tabs in the TeamMail dialog box.
8. Click Send.

{button ,AL(`H_SENDING_A_MESSAGE_ONLY_WITH_TEAMMAIL_DETAILS',1)} See details

{button ,AL(`H_DIFFERENCES_BETWEEN_TEAMMAIL_AND_TEAMREVIEW_OVER;H_TEAMMAIL_OVER;H_SENDING_A_WORKBOOK_WITH_TEAMMAIL_STEPS;H_DBOX_BASICS_REF;H_DBOX_OPTIONS_REF;',0)} See related topics

Details: Sending a message with TeamMail

Sending pictures of ranges and graphic objects

If you selected a range, it appears in a Notes e-mail as a table. If you selected a map, chart, or other graphic object, 1-2-3 pastes it as a bitmap in your e-mail message. You can't send a collection or an entire sheet as a picture.

Note You can send pictures with a message only if you are using Lotus Notes or another e-mail system that supports DDE paste commands.

{button ,AL(`H_SENDING_A_MESSAGE_ONLY_WITH_TEAMMAIL_STEPS',1)} Go to procedure

TeamMail dialog box
Use this dialog box to send a message, include pictures of 1-2-3 data, or attach a workbook to a mail message.

Choose a task
- Sending a workbook with TeamMail
- Sending a message with TeamMail

{button ,AL(`H_TEAMMAIL123_OVER;',0)} See related topics

Overview: TeamReview in 1-2-3

Using your e-mail system, TeamReview lets you send a range of workbook data to other 1-2-3 users. You can send a range to members of a team, collect their input, and have it returned to you automatically.

What you can do as the originator of a routed range

When you want to send a range out for review, you select the range and create a list of recipients.

You can send the range to all recipients at once, or route it from one person to the next, tracking its progress along the way.

Recipients make their changes, add comments, and return the range to you. You can open it in 1-2-3 and merge the changes into your original workbook.

For example, suppose you need figures from several different people to complete your department's budget. You tell 1-2-3 who to send the budget to, and in what order, and specify that you want the range returned to you. Your co-workers add their figures to the range and 1-2-3 automatically routes it to the next person on your list. When the range returns to you, 1-2-3 remembers where the range came from and can merge the updated range into your original workbook.

You can choose to incorporate just the changes you want, to replace your original data with reviewers' changes, or to merge each reviewer's changes as a version of your original range.

What you can do as the recipient of a routed range

When you receive an e-mail containing a routed range, you get an attached workbook containing the range. You can detach or launch the attached workbook. In the workbook, you can add or change data, make comments, and add drawings or charts.

You can then send the workbook along to the next recipient on the list. If the originator granted permission, you can edit the route list. If you are the last recipient, you can return the routed workbook to the originator.

TeamReview compatibility

TeamReview works with Lotus Notes, Lotus cc:Mail, and other e-mail applications that support Vendor Independent Messaging (VIM), Messaging Application Programming Interface (MAPI), or Common Messaging Call (CMC).

To use TeamReview with Lotus Notes on Windows NT, you must have Notes version 4.0 or higher.

{button ,AL(`H_TEAMMAIL123_OVER;H_RECEIVING_A_ROUTED_RANGE_STEPS;H_SENDING_A_RANGE_FOR_REVIEW_STEPS;H_DIFFERENCES_BETWEEN_TEAMMAIL_AND_TEAMREVIEW_OVER;H_MERGING_DATA_INTO_A_WORKBOOK_STEPS;',0)} See related topics

Sending a range for review

You can send a range of data and a message to a list of recipients, either all at once, or one at a time in the order you specify.

1. Select the range you want to send.

   Note If you want to merge data when the routed range is returned to you, make sure you save the workbook before you send the range for review.

2. Choose File - TeamReview.

3. Select an option for sending formulas and click OK.

   1-2-3 creates a new workbook containing the range, and the flow control window opens.

4. (Optional) Make changes to the routed workbook.

   Note 1-2-3 does not copy graphic objects or versions into the routed workbook. However, you can add them now before sending the workbook. You can merge the original data, including versions (but not graphic objects), back into the original workbook.

5. Click Send.
6. If prompted, enter your e-mail password and any other required information in the Mail Login dialog box and click OK.
7. In the TeamMail dialog box, enter the names of recipients, select whether to distribute the workbook simultaneously or route it sequentially, and set other tracking and delivery options.
8. Click Send.

{button ,AL(`H_SENDING_A_RANGE_FOR_REVIEW_DETAILS',1)} See details

{button ,AL(`H_TEAMREVIEW_OVER;H_RECEIVING_A_ROUTED_RANGE_STEPS;H_MERGING_DATA_INTO_A_WORKBOOK_STEPS;H_DBOX_BASICS_REF;H_DBOX_OPTIONS_REF;',0)} See related topics

Details: Sending a range for review

What you can send in the selected range
The range you copy to the routed workbook can include cell data, cell comments, and scripts. Styles applied to the selected range are copied to the routed workbook.

When the selection is a 3D range, 1-2-3 displays the range in the routed workbook starting on sheet A.

You cannot send graphic objects, outline settings, collections, or versions. If the range you send contains a version, 1-2-3 sends data from the current version only. You can add versions and graphic objects, or adjust settings in the routed workbook, before you send it to the first recipient.

Note When you send a range for review, you can later merge any changes that fall within the range you sent originally.

Formulas in the routed range
Selecting "Formulas and values" leaves formulas intact. Formulas that refer to data outside of the range you are sending will not evaluate correctly until the range is merged back into the original workbook.

Selecting "Values only" converts formulas in the range to their values.

Making changes in the routed workbook
The routed workbook contains a copy of the range you selected; it is not linked to the original workbook.Before sending, you can change data in the range, or add new data. For example, you might want only part of the data to be reviewed by the list of recipients. Or, you might want to delete certain data. Changes you make in the routed workbook are not reflected in the original workbook (unless you later merge the changes).

You can use the gray area surrounding the selected range to add data, make notes, and create charts or drawings. The additions you make here will be sent or routed to the next person, but only the range you originally selected can be merged back into your workbook.

{button ,AL(`H_SENDING_A_RANGE_FOR_REVIEW_STEPS',1)} Go to procedure
{button ,AL(`;H_PROTECTING_DATA_OVER;',0)} See related topics

Receiving a range or workbook

When you receive a range or workbook in an e-mail, you can open it, make changes to the data, and send it to the next person in the route list or back to the originator.

1. In your e-mail application, either launch the attachment to start 1-2-3 and open the workbook, or detach the workbook and then open it in 1-2-3 with File - Open.
2. Make changes to the workbook.
3. (Optional) Add comments in the flow control window (titled TeamMail or TeamReview).
4. Click the appropriate button in the flow control window. You will see one or more of these buttons, depending on what was sent and how:
   - Send to Next -- Sends the workbook or range to the next person on the recipient list.
   - Edit Route -- Edits the list of recipients.
   - Return to Originator -- Returns a workbook or range with your changes back to the originator.
   - Merge -- Combines changes to a routed range into your original workbook.
   - Done -- Closes the flow control window.

{button ,AL(`H_RECEIVING_A_ROUTED_RANGE_DETAILS',1)} See details

{button ,AL(`H_TEAMREVIEW_OVER;H_SENDING_A_RANGE_FOR_REVIEW_STEPS;H_MERGING_DATA_INTO_A_WORKBOOK_STEPS;',0)} See related topics

Details: Receiving a range or workbook
The flow control window, titled TeamReview or TeamMail depending on what was sent, stays open in 1-2-3 while you work with a routed range or workbook.

Options for handling routed ranges and workbooks
The buttons available in the flow control window vary depending on whether you are a recipient or the orginator of the routed range or workbook, and whether it was mailed to all recipients at once or routed from one to the next.

- Send to Next -- Displays the name of the next person on the list. Click OK to send the workbook.
- Return to Originator -- You see this button if you are the last person on the route list and the originator selected the Return to Originator option, or if the range or workbook was sent to several recipients at once and the originator selected the Return to Originator option.
- Edit Route -- If the originator chose to let recipients change the route list, you see the Edit Route button. Clicking Edit Route opens the TeamMail dialog box so you can edit the list of recipients.
- Merge -- You see this button if you are the originator of a TeamReview range that completed the route and was returned to you. Clicking Merge lets you merge the range into your original workbook.
- Done -- You see this button if you are the last person to receive a routed workbook, or the last person to receive a routed range if the Return to Originator option was not selected. When you close the flow control window, 1-2-3 creates a text block in the current sheet to contain the routing information. To keep this information, you must save the workbook.

Note To consolidate changes if you are the originator of a workbook sent with File - TeamMail, copy the data back to the original workbook with Edit - Copy or use File - TeamConsolidate - Merge Versions.

Adding a comment
As the recipient of a range or workbook, you can enter or edit a comment in the "Comment" box in the flow control window. The comment appears next to your name in the "Contributor/Action" list.

{button ,AL(`H_RECEIVING_A_ROUTED_RANGE_STEPS',1)} Go to procedure

Merging ranges into a workbook

When a range of data returns to you, you can merge it into your original workbook. When you merge the range, 1-2-3 opens the original workbook and replaces the original range with the routed range, or creates versions for the range if you request. You can only merge cells that are within the original range.

1. In your e-mail application, open the attached routed workbook.
2. (Optional) If you do not want to merge the whole range, select the portion of the range that you want to merge.
3. Click Merge.
4. Select "Entire routed range" or, if you're merging part of the range, select "Range."
5. Click OK.
6. If the destination range already contains data, select whether to keep both new and existing data as versions of the original range or to replace (overwrite) the original data with the new data.
7. To merge additional ranges, repeat steps 2 through 6.
8. (Optional) Save the routed workbook to keep a record of the merge.

{button ,AL(`H_MERGING_DATA_INTO_A_WORKBOOK_DETAILS',1)} See details

{button ,AL(`H_WORKING_WITH_VERSIONS_OVER;H_TEAMREVIEW_OVER;H_SENDING_A_RANGE_FOR_REVIEW_STEPS;H_RECEIVING_A_ROUTED_RANGE_STEPS;',0)} See related topics

Details: Merging ranges into a workbook

If 1-2-3 can't find the original workbook
If 1-2-3 can't find the original workbook in its original location, the Select Workbook dialog box appears so you can specify the correct file and location.

Merging cells outside the original range
If the range that you are merging contains cells outside the original range, or if the range is completely outside the original range, 1-2-3 displays a message saying that only data within the routed range can be merged back into the original range. To merge data outside the routed range, use Edit - Copy and Edit - Paste or Team Consolidate - Merge Versions.

Multiple merges
When you are the originator and a routed workbook is returned to you, you can merge as many times as necessary. For example, if a recipient adds data to different parts of the range, you can merge each part of the range separately.

Saving merge records
1-2-3 creates a merge record each time you merge data into the original workbook. The merge information appears in the "Comment" box in the flow control window. The merge record provides detailed information about what was merged.

By saving the routed workbook, you can save merge records to keep an audit trail of the routed workbook's progress.

Merging and versions
If you choose to keep the original data as well as the new data from the routed range, 1-2-3 creates two versions for the range: Original Data, which contains the original data, and Merged 1, which contains the new data. If the original range is a named range, 1-2-3 creates the new versions using the original range name. If the original range is not named, but the routed range is named, 1-2-3 uses the name of the routed range. If neither range is named, 1-2-3 names the range MERGED 1. For example, if neither range is named, 1-2-3 names the range MERGED 1, and then creates two versions for it: Original Data and Merged 1.

If the routed range and the original range have matching named ranges of the same size, versions in the routed range are merged into the corresponding ranges in the original file.

If a routed range contains versioned ranges that do not exist in the original workbook, 1-2-3 creates those versions in the original workbook. If 1-2-3 merges all the versions within a version group, the version group is merged as well.

If a partial selection of the routed range is a versioned range, 1-2-3 merges all versions in that range only. If the selected range already has a range name, 1-2-3 uses that name instead of MERGED 1.

If any data is not merged, 1-2-3 records omissions in the merge record.

{button ,AL(`H_MERGING_DATA_INTO_A_WORKBOOK_STEPS',1)} Go to procedure
{button ,AL(`H_MERGING_VERSIONS_AND_VERSION_GROUPS_STEPS;',0)} See related topics

TeamReview Assistant dialog box

Use this dialog box to select a range to send instead of a single cell.

Choose a task

Sending a range for review
Selecting a range from a dialog box

{button ,AL(`H_TEAMREVIEW_OVER;',0)} See related topics

Overview: 1-2-3 Top 10 tasks

The Help topics in this book describe features you can use to perform the top ten most common spreadsheet tasks. Each Help topic gives you the basics and directs you to more detailed Help.

Click an item in the list below and have fun exploring.

Previewing and printing data

Moving data in and out of 1-2-3

More power with @functions and formulas

Styling a sheet

Copying, moving, and filling

Charting and mapping your data

Easy database access

Automating 1-2-3

Row and column operations

Starting smart with SmartMaster templates

Automating 1-2-3

This release of 1-2-3 introduces the power of LotusScript. Using LotusScript, you can automate simple 1-2-3 tasks and create complex custom applications.

Also, you can still run macros from previous releases of 1-2-3 and, using script equivalents to macro commands, you can convert your macros to LotusScript.

What is LotusScript?

LotusScript is an object-oriented, BASIC-compatible programming language used by all the SmartSuite products and Notes. You can create scripts to run within 1-2-3 and across products.

For reference Help about all the 1-2-3 LotusScript commands, see 1-2-3 LotusScript A-Z.

The LotusScript IDE

1-2-3 provides an Integrated Development Environment (IDE) to facilitate writing, editing, recording, and debugging scripts. In the IDE, you can access all the objects you need to create all kinds of scripts.

The LotusScript Dialog Editor

Using the LotusScript Dialog Editor, you can create custom dialog boxes and attach scripts to them.

Let 1-2-3 create scripts for you

You can write scripts from scratch, and you can use 1-2-3 to record many useful scripts. The commands for running and recording scripts are on the Edit - Scripts & Macros menu.

Moving from macros to LotusScript

You still can run your existing macros, and you can create new ones. For information about writing, recording, running, and debugging macros, see Overview: 1-2-3 macros.

For information about macro compatibility between this release of 1-2-3 and previous releases, see Macro compatibility. For information about LotusScript equivalents to 1-2-3 Release 5 macro commands, see Overview: 1-2-3 Release 5 macro command equivalents.

To review the current 1-2-3 macro commands, just type { (open brace) in a cell and press F3 (NAME). The Macro Keywords dialog box appears, and you can do the following:

- Browse through the list of commands and the brief descriptions of each command.
- Select a command from the list and click OK to insert the command and argument placeholders in the current cell.

If you have the CD edition of SmartSuite or 1-2-3, you can find the 1-2-3 macros Help file in the EXTRA directory, ready for you to install. Otherwise, if you have access to the World Wide Web, you can download a copy of 1-2-3 macro reference Help and install it with your copy of 1-2-3. For more information, see Installing Help on macro commands.

{button ,AL(`H_123_TOP_TEN_TASKS_OVER;H_LOTUSSCRIPT_INDEX_TOPIC_OVER;H_123_CONVERTING_MACRO_BUTTONS_OVER;H_123_CREATING_A_BUTTON_STEPS;H_123_RUNNING_A_SCRIPT_STEPS;H_123_RECORDING_A_SCRIPT_STEPS;H_123_VIEWING_A_SCRIPT_STEPS;H_123_TURNING_RECORDING_OFF_STEPS;H_CALLING_A_SCRIPT_FROM_A_MACRO_STEPS;H_ATTACHING_A_SCRIPT_TO_AN_ICON_STEPS;',0)} See related topics

Charting and mapping your data

The most powerful way to convey the significance of your numbers is displaying them as a chart or map.

Creating a chart

In one step, you can create a chart, complete with titles, labels, and a legend. After you've selected the range of data you want to chart, click this icon:

Then click the sheet where you want your chart to appear, and 1-2-3 draws your chart. For more information, see Overview: Creating a chart in 1-2-3.

Changing chart type

By default, 1-2-3 creates a bar chart. If you want to display a different type of chart, you can:

- Change the default by using Chart - Chart Styles - Set Default Chart.
- Use the Type tab in the Chart Properties InfoBox or any of the chart type SmartIcons to change the type of a selected chart.

Mapping your data

Lotus Mapping lets you draw maps that represent your data geographically. For example, with just a click, you can create maps of population density by state or average rainfall by province.

As with charting, you select a range of data to map. Then click this icon:

Click the sheet where you want your map to appear, and 1-2-3 draws your map. You can then enhance the map with colors, patterns, overlays, and pin characters. For more information, see Overview: Maps.

Manipulating parts of charts and maps

Manipulating and changing parts of charts and maps is simple. Just point to the part -- for example, the chart title or map legend -- and right-click to display a menu of commands you can use on that part. To display the InfoBox for working with part of a chart or map, just double-click the part.

{button ,AL(`H_123_TOP_TEN_TASKS_OVER;H_CREATING_A_CHART_IN_123_OVER;H_CREATING_A_CHART_IN_123_STEPS;H_CHANGING_MAP_APPEARANCE_OVER;H_CREATING_A_MAP_STEPS;H_MODIFYING_MAPS_OVER;H_PURCHASING_MORE_MAPS_OVER;H_SETTING_UP_MAP_DATA_STEPS;',0)} See related topics

Copying, moving, and filling

1-2-3 features a variety of ways to copy and move data. You can also quickly fill ranges with data.

Drag and Drop

You can drag and drop data:

- In the same sheet, between sheets, and between open workbooks.
- Between 1-2-3 and other programs that support OLE2.

For more information, see:

Copying and moving using drag and drop,

Copying data from 1-2-3 with drag and drop

Copying data into 1-2-3 with drag and drop.

Copy, move, and fill commands

The commands to copy and move and fill are Edit - Copy, Edit - Cut, Edit - Paste, Range - Fill. You can also just click these SmartIcons:


Copy to the Clipboard


Cut to the Clipboard


Paste the Clipboard contents


Fill a range with data

Quick ways to copy formulas

You often want to copy formulas into cells below or to the right. Use Edit - Copy Right and Edit - Copy Down, or just click these SmartIcons:


Copy right


Copy down

For more information, see Copying right to fill a range and Copying down to fill a range.

SmartFill

Do you enter the same sequences of items over and over again -- for example, the days of the week, the months of the year, the names of your regional field offices? SmartFill can save you time and effort by automatically filling a range with this data.

If it's a common sequence like the days of the week, just enter the first item of the sequence and position the mouse pointer at the bottom right corner of the cell so it looks like this:

Then just drag to select the range you want to fill.

You can also create your own custom SmartFill lists, and you can fill ranges according to data already in the range. For more information about creating custom fill lists, see Overview: Creating custom fill lists. For information about filling a range by example, see Overview: Filling ranges.

{button ,AL(`H_123_TOP_TEN_TASKS_OVER;H_FILLING_A_RANGE_USING_DRAGANDFILL_STEPS;H_COPYING_AND_MOVING_FORMULAS_OVER;H_COPYING_AND_MOVING_OVER;',0)} See related topics

Easy database access

1-2-3 uses the power of Approach to manage and analyze data stored in a workbook or in an external database. 1-2-3 and Approach are installed together so you can work seamlessly with both.

1-2-3 and Approach integration

Using the Create - Database commands in 1-2-3, you can create:

- Query tables to analyze data with the power and flexibility of Approach editing and querying tools.
- Forms to view every record in a database, one record at a time, and to add and edit records.
- Reports to organize, analyze, and present data from many records.
- Dynamic crosstabs to organize and summarize categories of data from many records.
- Mailing labels created from database records.
- Form letters that combine text you type with names and addresses from database records.

For more information, see Overview: Working with databases.

Working with query tables

A query table is an Approach object embedded in a 1-2-3 workbook. It is linked to a 1-2-3 range containing your data table or to an external database table and, and it contains a copy of records from the source database table.

Using a query table, you can sort records or set criteria to find specific records. The query table displays the results of the criteria, sort, or find.

You can also display these results in an output range in 1-2-3. In the output range, you can analyze data using 1-2-3 analysis tools, including charting and mapping.

Also, if data in the source database table changes, you can refresh the data in the query table and in the output range. If you edit data in the query table, these changes also appear in the source database table.

For more information, see Overview: Query tables.

{button ,AL(`H_123_TOP_TEN_TASKS_OVER;H_DB_WORKING_WITH_DATABASE_TABLES_OVER;H_DB_CREATING_A_DYNAMIC_CROSSTAB_STEPS;H_DB_CREATING_FORMS_STEPS;H_DB_CREATING_A_DATABASE_REPORT_STEPS;H_DB_CREATING_MAILING_LABELS_STEPS;H_DB_CREATING_QUERY_TABLE_STEPS;H_DB_WORKING_WITH_A_QUERY_TABLE_STEPS;H_DB_SORTING_DATABASE_RECORDS_STEPS;H_DB_QUERY_OUTPUT_TO_RANGE_STEPS;',0)} See related topics

More power with @functions and formulas

To perform calculations in 1-2-3, you can use built-in formulas, called @functions, or you can create your own formulas.

Working with @functions

To use @functions, just click the @function selector.

Choose List All to see a list of the more than 200 @functions.

You can:

- Browse through the list and read a brief description of each @function, or click Help for more detailed information on a selected @function.
- Select an @function and click OK to insert the @function and argument placeholders into the current cell.

For more information, see Overview: @Functions.

Popular @functions

The @Functions book in Help Contents contains an alphabetical list of @functions and a list of @functions organized by category. Here's Help for some of the most popular @functions:

@AVG

@IF

@NPV

@ROUND

@SUM

@TODAY

Using AutoTotal

Using the AutoTotal feature, you just type the word "Total" or "Totals" to sum columns or rows of values. To sum columns, enter Total to the left of the range you want to sum.

6		Paris	Atlanta
7	June	5500	3300
8	July	4500	5600
9	August	3200	2100
10	Totals	13200	11000

Enter "Totals" here to sum columns

To sum rows, enter Total above the range you want to sum.

Enter "Totals" here to sum rows

15		Paris	Atlanta	Totals
16	June	5500	3300	8800
17	July	4500	5600	10100
18	August	3200	2100	5300

For more information, see Summing a range automatically.

You can also click this icon to sum values above and to the left:

Working with formulas

When you enter formulas, 1-2-3 displays the formula results in the sheet and the formula in the edit line. When you change data a formula refers to, the formula results automatically change.

For more information about formulas, see Overview: Using formulas.

Auditing a workbook

Have you ever opened a workbook and wondered where all the formulas are and how they work? To help yourself and others audit workbooks, you can use formula markers to identify cells containing formulas. You can also annotate cells with comments about the cell contents.

{button ,AL(`H_123_TOP_TEN_TASKS_OVER;H_GUIDELINES_FOR_ENTERING_FORMULAS_OVER;H_USING_FORMULAS_OVER;H_CREATING_A_CELL_COMMENT_STEPS;H_ENTERING_A_FORMULA_STEPS;H_ENTERING_AN_ATFUNCTION_STEPS;H_FUNCTION_FORMAT_OVER;',0)} See related topics

Moving data in and out of 1-2-3

1-2-3 provides many ways to move data in and out of your spreadsheets. You can:

- Open and save many different types of files.
- Cut and paste and drag and drop data from one 1-2-3 workbook to another and between 1-2-3 and other programs.
- Use the Internet to move data in and out of 1-2-3.
- Move data between 1-2-3 and Notes.
- Use 1-2-3 team features to share data in and out of 1-2-3.

Using File - Open and File - Save As

You can use File - Open to bring in data from 1-2-3 workbooks and many other types of files, including Excel, dBASE, Paradox, and text files. You can also combine files and parse data from the Open dialog box. For more information about opening files in 1-2-3, see Overview: Creating and opening files.

You can use File - Save As to save files in many different file formats, including Excel, dBASE, Paradox, and text. You can save an entire file in these various file formats, or you can save just a selected range. For more information, see Overview: Closing and saving files.

Moving data between 1-2-3 and other programs

To move data between 1-2-3 and other programs, you can:

- Use Edit - Copy and Edit - Cut to move 1-2-3 data onto the Clipboard and then use Edit - Paste to bring the data into 1-2-3. For more information, see Copying and moving data from other applications into 1-2-3.
- Use Edit - Paste Special or Edit - Paste Link to create links between 1-2-3 and other programs. The link ensures that the data you bring into 1-2-3 is updated whenever the data in the other program changes. For more information, see Overview: Links.
- Drag and drop data between 1-2-3 and other programs that support OLE 2. For more information, see Copying data from 1-2-3 with drag and drop and Copying data into 1-2-3 with drag and drop.

Using the Internet

1-2-3 provides fast and easy ways to move data between your workbooks and the World Wide Web. You can use File - Open to open World Wide Web and FTP files stored on the Internet. You can import HTML tables into 1-2-3 and much more.

You can:

- Use File - Save As to save your workbooks directly to the Internet. Just click the Internet button in the File - Save As dialog box and select the Internet site where you want to save your file.
- Publish a 1-2-3 range to a Web site. The published range appears as an HTML table on the Web site you chose. Just select the range you want to publish to the Internet and click this icon:

- Perform a Web search on the content of a 1-2-3 cell. Just select the cell and click this icon:

For more information, see Overview: Working with Internet connections and Internet access.

Using Notes

There are several convenient features for moving data between 1-2-3 and Notes. You can use:

- The Lotus Notes button in the Open dialog box to open files embedded in documents in a Notes database. For more information, see Opening a Notes file attachment from within 1-2-3.
- TeamConsolidate to distribute sheets to a Notes database for input from your colleagues. For more information, see Overview: Distributing workbooks with TeamConsolidate.
- Notes/FX to exchange data in a 1-2-3 range with a document in a Notes database. When you change a value in a range, the corresponding Notes field updates automatically, and vice versa. For more information, see Overview: Setting up Notes/FX.

Using 1-2-3 team features

1-2-3 has other team features for sharing data inside and outside 1-2-3. You can use:

- TeamReview to send ranges or entire workbooks to lists of colleagues using Lotus Notes, cc:Mail, or most any e-mail system. For more information, see Overview: TeamReview in 1-2-3.
- TeamMail to send a message or a workbook. You can broadcast data or route it sequentially to one person at a time, tracking its progress along the way. For more information, see Overview: TeamMail in 1-2-3.
- Versions and version groups to move data in and out of 1-2-3. For example, use TeamConsolidate to distribute data and, after your colleagues enter their versions, merge the versions into a single workbook. You can also use TeamMail and TeamReview to distribute and collect versions. For information about working with versions, see Overview: Versions.

{button ,AL(`H_123_TOP_TEN_TASKS_OVER;H_COMBINING_DATA_STEPS;H_COPYING_USING_THE_CLIPBOARD_STEPS;H_MOVING_USING_THE_CLIPBOARD_STEPS;H_OPENING_A_TEXT_FILE_STEPS;H_SAVING_A_NEW_WORKBOOK_STEPS;H_SAVING_A_RANGE_TO_A_FILE_STEPS;H_CREATING_A_123_FILE_LINK_STEPS;H_USING_DATA_FROM_OTHER_APPLICATIONS_IN_123_OVER;H_COPYING_123_DATA_TO_OTHER_APPLICATIONS_OVER;H_WORKING_WITH_VERSION_GROUPS_OVER;H_CREATING_A_VERSION_STEPS;H_CREATING_A_VERSION_GROUP_STEPS;',0)} See related topics

Previewing and printing data

Previewing

It's easy to preview your spreadsheets and make layout and data changes before printing. When you preview data, 1-2-3 displays the Workbook window and the Preview window side by side, along with the Preview & Page Setup InfoBox, and the Previewing set of SmartIcons.

Previewing is live and dynamic. When you change data in the Workbook window or use the InfoBox to modify page layout, you immediately see the results in the Preview window. When your data and layout are all set, you can print directly from the Preview window without displaying the Print dialog box.

- To preview your presentation, click this icon:

- To zoom in and out, click anywhere in the Preview window.
- To view pages in a variety of ways, click these icons:

Preview one page

Preview two pages

Preview four pages

Preview nine pages

- To display the next or previous page, click these icons:

Preview the next page

Preview the previous page

- To go to the page you want to display, click the arrows in the status bar:

- To close the Preview window, click the close box or this icon:

For more information on previewing, see Overview: The Preview window.

Printing

Printing is also flexible and direct.

- 1-2-3 prints everything -- data, charts, graphics -- exactly as you formatted it. To display the Print dialog box, click this icon:

- To by-pass the Print dialog box and quick-print a selected range, chart, or graphic, click this icon:

For more information on printing, see Overview: Printing.

{button ,AL(`H_123_TOP_TEN_TASKS_OVER;H_PRINT_QUICK_STEPS;H_PRINT_PREVIEW_KEY_MOUSE_SHORTCUTS_OVER;H_PRINT_SELECTING_A_PRINTER_STEPS;H_PRINT_OBJECTS_CHARTS_MAPS_STEPS;H_PRINT_A_WORKBOOK_STEPS;H_PRINT_A_SHEET_STEPS;H_PRINT_A_RANGE_STEPS;',0)} See related topics

Row and column operations

You often need to shift data around, add new data and blank areas, and change row heights and column widths. 1-2-3 makes all these row and column operations easy. Once your sheet is all set, you can use outlining to expand and collapse rows and columns so you can view details or summary data.

Adding and deleting columns and rows

- To insert columns or rows, use Range - Insert, or click these SmartIcons:

Insert one or more columns to the left of the selected columns

Insert one or more rows above the selected rows

- To insert columns or rows immediately without displaying a dialog box, select as many entire columns or rows as you want to insert, and choose Range - Insert Column or Range - Insert Row.
- To delete columns or rows, use Range - Delete, or click these SmartIcons:

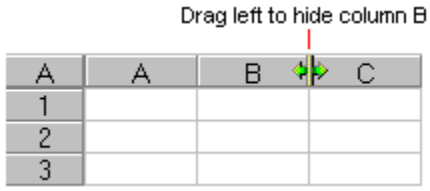
Delete all columns in the selected range

Delete all rows in the selected range

- To delete columns or rows immediately without displaying a dialog box, select as many entire columns or rows as you want to delete, and choose Range - Delete Column or Range - Delete Row.
- To delete columns or rows in a range without upsetting the layout of data around that range, select "Insert in selected range only" or "Delete in selected range only" in the Range - Insert or Range - Delete dialog box.

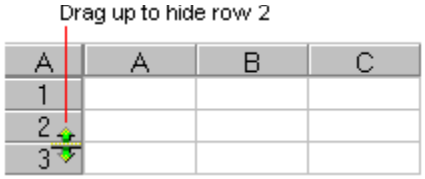
Changing row height and column width

- The quickest way to change column width is to position the mouse pointer on the column border right of the column letter, and drag the border right or left until the column is the width you want.



You can also double-click the column border to adjust the column to fit its widest entry.

- The quickest way to change row height is to position the mouse pointer on the bottom border of the row and drag the border up or down until the row is the height you want.



You can also double-click the row border to adjust the row to fit its tallest entry.

For more information, see Overview: Sizing columns and rows.

Hiding columns or rows

Hiding columns or rows is a good way to keep other users of your workbooks focused on what you want them to see rather than on confidential or distracting information.

- To hide columns, position the mouse pointer in the sheet frame on the right border of the column you want to hide

and drag left until the indicator shows 0 (zero).

- To hide rows, position the mouse pointer in the sheet frame on the bottom border of the row you want to hide and drag up until the indicator shows 0 (zero).

For more information, see Overview: Hiding data.

Outlining rows and columns of data

Outlining lets you expand and collapse rows and columns to see and print different levels of detail. You can create an outline with up to eight levels of rows and columns. You can collapse rows and columns of details to see just your summary data. When you need to see the details, it's easy to expand the rows and columns again.

For more information, see Overview: Outlining sheet data.

{button ,AL(`H_123_TOP_TEN_TASKS_OVER;H_DELETING_A_RANGE_STEPS;H_DELETING_COLUMNS_AND_ROWS_STEPS;H_INSERTING_A_RANGE_STEPS;H_INSERTING_COLUMNS_AND_ROWS_STEPS;H_SIZING_COLUMNS_STEPS;H_SIZING_ROWS_STEPS;H_HIDING_ROWS_STEPS;H_HIDING_COLUMNS_STEPS;H_WORKING_WITH_OUTLINES_OVER;',0)} See related topics

Starting smart with SmartMaster templates

SmartMaster templates give you a quick start for creating many useful spreadsheets. Each SmartMaster provides a template for a common business or financial task, such as amortizing a loan; filling out a time sheet; creating budgets, invoices, sales plans, purchase orders, and expense reports.

Starting smart

You can access SmartMaster templates from the Welcome dialog box, or choose File - New Workbook and select the SmartMaster you want.

Each SmartMaster template contains sample data to help you understand how the SmartMaster works. After looking over the sample data, you can replace it with your own data.

Formulas, print ranges, formatting, and charting are built into the templates for fast, great-looking results, and SmartMaster templates also include built-in buttons for printing or mailing data.

For more information, see Working with SmartMaster templates.

Custom SmartMaster templates

To create your own SmartMaster templates for sharing with your team, you can:

- Modify an existing SmartMaster and save it as a new template.
- Save a workbook in SmartMaster format.
- Create your own template, based on SHELL.12M, a starter template that comes with 1-2-3, and add a title and description for easy identification.

{button ,AL(`H_123_TOP_TEN_TASKS_OVER;H_CREATING_A_WORKBOOK_USING_A_SMARTMASTER_STEPS;H_USING_SMARTMASTERS_STEPS;H_CREATING_A_SMARTMASTER_TEMPLATE_STEPS;',0)} See related topics

Styling a sheet

Use the 1-2-3 styling features to transform a simple sheet into a great-looking presentation.

The InfoBox and status bar give you one-stop shopping for all kinds of fonts, formats, colors, borders, designer frames, alignments, user-defined styles, and the Style Gallery of ready-made style templates.

The InfoBox

Use the InfoBox to style ranges, graphics, charts, and more. Just select what you want to style, right-click the selection, and choose the Properties command. Click the InfoBox tabs to see the styling options available to you. You can leave the InfoBox open as you work, and you can move, collapse, or close the InfoBox if it covers data you want to see.

For more information on the InfoBox and how to use it, see Overview: The InfoBox and Using the InfoBox.

The status bar

The status bar at the bottom of the 1-2-3 window gives you quick access to fonts, font sizes, named styles, and number formats, including more than 40 international currency formats.

For more information about using the status bar, see Overview: Using the status bar.

Fast formatting

You can quickly paint a range with styles from another range. Select the range whose styles you want to copy and choose Range - Fast Format or click this icon:

Then just select the ranges you want to fast format.
For more information, see Using fast format to style a range.

The Style Gallery and designer frames

You can transform a simple spreadsheet into a beautiful presentation by choosing a template from the Style Gallery. You can also put designer frames around important data to emphasize it.

For more information, see Using the style gallery and Overview: Changing borders, lines, and colors.

{button ,AL(`H_123_TOP_TEN_TASKS_OVER;H_ALIGNMENT_OVER;H_NAMED_STYLES_OVER;H_STYLE_KEYS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_SHEET_AREAS_OVER;',0)} See related topics

Overview: Using the status bar

The status bar, located at the bottom of the 1-2-3 window, gives you information about the current selection and tells you what 1-2-3 is doing. You can use the status bar to perform many functions with the mouse.

The contents of the status bar change when you select a:

- Range
- Query table
- Text block, chart, map, or button
- Line, shape, or other draw object

For example, when you open a workbook, you see the following status bar.

Note To see these status bars in their entirety, use the scroll buttons or maximize the window.

However, when you select a rectangle, several buttons change:

Some status bar buttons also change when you preview a file before you print it.

Selecting status bar options

The status bar contains many buttons that let you perform such operations as changing the typeface of a range of text, assigning a different color to a drawn object, or applying a named style to a range.

When you click certain status bar buttons, a pop-up list appears and you can pick another option. For example, if you click the typeface button, a list of other available typefaces appears. You can change the font of the selected cells by selecting a different font on the list. In other cases, a color library appears, allowing you to select a different color.

To change an option using the mouse, point to the new selection and click.

The status bar includes a status indicator, a mode indicator, and some buttons that perform a function. These are included on the far right of the status bar.

Status and mode indicators

A status indicator shows the current state of 1-2-3, such as when 1-2-3 is running a script or the current cell is protected. For example, Cmd appears on the status bar when 1-2-3 is running a script or macro.

A mode indicator shows the current operating mode of 1-2-3, such as Ready or Edit. The mode indicator changes when you press certain keys or 1-2-3 performs certain actions. For example, when you select a menu command, the mode indicator changes to Menu, and you can select a command.

You cannot change status or mode indicators by clicking them.

Buttons that perform a function

The status bar may also include some buttons that perform a specific function. For example, you can click the Circ button to move to the first circular reference in the sheet. Similarly, you can click the Calc button to manually recalculate formulas. And if you have an e-mail program running on your system that includes unread messages, you can access it by clicking the Mail button.

Using the keyboard to select status bar options

You can also use the keyboard to pick another option from a status bar button. After you click a button, use , ↓, →, or ← to move through the list of options. In lists of words, type the first letter of a word to move to the first word that begins with that letter. For example, type C to move to the first font that begins with the letter "C" in the font list. Press ENTER to make the selection.

The progress indicator

When you save a file or open an existing file, the status bar indicates the percentage of the file saved or opened. The progress indicator includes:

- Descriptive text (opening, combining, or saving the file)
- The percentage complete
- A gauge, showing the percentage complete

Hiding the status bar

To hide the status bar, choose View - Hide Status Bar. To redisplay it, choose View - Show Status Bar.

{button ,AL(`H_EDIT_MODE_OVER;H_LABEL_MODE_OVER;H_PROGRESS_INDICATOR_OVER;H_VALUE_MODE_OVER;H_MODE_INDICATOR_OVER;H_STATUS_INDICATOR_OVER;H_SETTING_RECALCULATION_DEFAULTS_DETAILS;H_COMMON_ERRORS_IN_FORMULAS_OVER',0)} See related topics

Status indicator

Indicates the current state 1-2-3 is in. The following indicators are available:

Indicator	What it means
Cmd	1-2-3 is running a script or macro.
End	You pressed END to use with a pointer-movement key.
Grp	The sheets in the current workbook are grouped.
PR	The current cell is protected. This flag is displayed only if the workbook is locked.
Rec	You are recording a script.
U	The current cell is unprotected.
Zoom	After choosing View - Split to create panes, you pressed ALT+F6 (ZOOM PANE) for a full-window view of the current pane or sheet.

{button ,AL(`H_USING_THE_STATUS_BAR_OVER;H_POINTERMOVEMENT_KEYS_OVER',0)} See related topics

Mode indicator

Indicates the current mode 1-2-3 is in. The following indicators are available:

Indicator	What it means
Edit	You pressed F2 (EDIT) to edit a cell, or you made an incorrect entry.
Error	1-2-3 is displaying an error message.
Files	You are in 1-2-3 Classic and 1-2-3 is displaying a list of file names.
Find	You are in 1-2-3 Classic and 1-2-3 is displaying the results of the /Data Query Find command.
Label	You are entering a label.
Menu	You are choosing a menu command or selecting options in a dialog box.
Names	You are in 1-2-3 Classic and 1-2-3 is displaying a list of range names.
Point	You are selecting a range before choosing a command, while working in a dialog box or the InfoBox, or while entering a formula.
Ready	1-2-3 is ready for you to enter data or choose a command.
Value	You are entering a value.
Wait	1-2-3 is completing a command or process, such as saving a file.

{button ,AL(`;H_USING_THE_STATUS_BAR_OVER;H_123_CLASSIC_OVER',0)} See related topics

Edit mode

In Edit mode, you can change data in the current cell or in the contents box. 1-2-3 changes to Edit mode when you:

- Double-click a cell.
- Press F2 (EDIT) when you are typing an entry.
- Press F2 (EDIT) when 1-2-3 is in Ready mode.
- Click anywhere in the contents box.
- Type an entry that 1-2-3 cannot accept. 1-2-3 places the insertion point at the point where it detects an error.

Use the editing keys to change data when 1-2-3 is in Edit mode.

{button ,AL(`H_USING_THE_STATUS_BAR_OVER;H_EDITING_KEYS_OVER',0)} See related topics

Label mode

Indicates that the data you are entering is a label. 1-2-3 classifies an entry as a label if the first character you type is a letter or a label-prefix character. A label can be up to 512 characters long.

{button ,AL(`H_USING_THE_STATUS_BAR_OVER;H_ENTERING_DATA_OVER',0)} See related topics

Value mode

Indicates you are entering a value. 1-2-3 classifies an entry as a value if the first character you type is a number (0 through 9) or any one of these characters:

+ - @ . (# $ (or the current currency symbol)

A value can also be a formula or an @function.

Editing values

Use the following keys when 1-2-3 is in Value mode:

Key	Definition
F2 (EDIT)	Switches between Value and Edit mode. When 1-2-3 is in Edit mode, you can use all the editing keys.
F4	Switches a cell or range reference among relative, mixed, and absolute types.
F9 (CALC)	Converts a formula to its current value.

{button ,AL(`H_USING_THE_STATUS_BAR_OVER;',0)} See related topics

Overview: The InfoBox

What is the InfoBox?

The InfoBox is a fast and direct way to change the properties of an object. Properties are the characteristics of an object, such as color, name, size, and protection setting.

You use the InfoBox to change the properties of an object or any of its parts. For example, you can change the properties for an entire sheet, a cell, a chart, the title of a chart, and so on.

The following illustration shows how to work with the InfoBox.

How the InfoBox works

When you open the InfoBox, it displays the current properties for the selected object. When you select a different object, the InfoBox changes to display the properties for that object, so you can leave the InfoBox open as you work. You can move, collapse, or close the InfoBox if it covers data you want to see. The "Properties for" box in the title bar of the InfoBox displays the type of object selected.

Opening the InfoBox

You can open the InfoBox by:

- Selecting an object and choosing Properties from the menu for that object.

  For example, select a range and then choose Range - Range Properties.
- Selecting an object and clicking the InfoBox icon. Look for the following symbol to identify icons that open the InfoBox for the selected object:

- Double-clicking the object (except for objects that contain text, such as ranges, text blocks, and chart or map titles).
- Right-clicking the object and choosing the Properties command.

Changing properties

Changes appear immediately in your selection as you select options in the InfoBox. You can make many changes to one object or make changes to several objects without closing the InfoBox.

For example, you can select a range and change the background color, change the column width, and name the range. Then, without closing the InfoBox, you can select a chart, change the color of its border, and change it from a plain bar chart to a 3D bar chart. The changes appear as you make them, so you don't need to click OK or close the InfoBox before doing something else.

InfoBox tabs

The InfoBox consists of a series of tabs. Each tab contains a category of properties you can change for the current selection.

{button ,AL(`H_USING_THE_INFOBOX_STEPS;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_SHEET_AREAS_OVER;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_OBJECTS_OVER;H_USING_THE_STATUS_BAR_OVER;',0)} See related topics

Using the InfoBox

You can make changes to one object or several objects without closing the InfoBox.

Show me a demo

1. Select what you want to modify.
2. Right-click the selection and choose the Properties command.
3. Click the tab for the properties you want to change.
4. Select one or more options.
5. (Optional) Move, collapse, or close the InfoBox.

Tip To open the InfoBox, click the InfoBox icon for the selected object. Look for this symbol on the icon:

{button ,AL(`H_USING_THE_INFOBOX_DETAILS',1)} See details
{button ,AL(`H_THE_INFOBOX_OVER;',0)} See related topics

Details: Using the InfoBox

When do InfoBox changes take effect?
In the InfoBox, when you select an option or pick from a list, your selection takes effect immediately. When you type something (such as a name or range address) in the InfoBox, 1-2-3 waits for you to confirm what you typed. Confirm the entry by pressing ENTER or clicking another InfoBox tab.

InfoBox tabs
Each tab in the InfoBox contains a category of properties you can change for the current selection.


Change font, size, color, and attributes for selected text


Change alignment for sheets, ranges, and text blocks


Change the number format for sheets, ranges, charts, and maps


Change color, pattern, and line style for sheets, ranges, and graphic objects


Change basic properties


Change protection settings for the selected range


Create a version for the selected range


Create or change a cell comment for the current cell


Create or change named styles for ranges, charts, and printed pages


Change headers, footers, and print titles


Change layout, margins, orientation, and placement for the printed page


Change printer settings and paper size


Change map colors


Change map patterns

Bubble help for InfoBox tabs
To turn off bubble help for InfoBox tabs and SmartIcons, choose File - User Setup - SmartIcons Setup and deselect "Show icon descriptions (bubble help)."

The InfoBox and the Help window
If the Help window is open when you open the InfoBox, the Help window may cover the InfoBox. To see the InfoBox, move, minimize, or close the Help window.

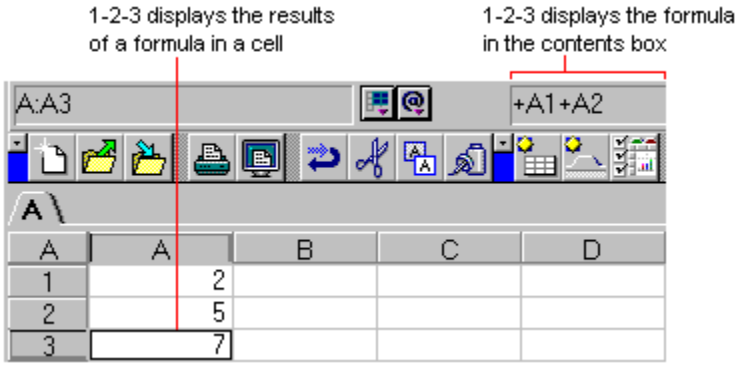
{button ,AL(`H_USING_THE_INFOBOX_STEPS',1)} Go to procedure

Overview: Using formulas

A formula is an entry in a sheet that performs a calculation on numbers, text, or other formulas. When you use formulas in a sheet, your data becomes dynamic. When Recalculation is set to automatic, 1-2-3 recalculates the formula for you if you change data to which the formula refers.

Writing formulas

You enter a formula in a cell much as you enter any data into a sheet. Once you enter the formula, 1-2-3 displays the formula's result in the cell. To see the formula, look in the contents box.



You can always type the numbers or text you want to calculate directly into the formula. You can also enter the data in other cells, then use cell addresses or named ranges in the formula.

Calculating without entering formulas

You can sum a range of data without entering a formula, using the 1-2-3 automatic summing feature.

Seeing which cells contain formulas

Formula markers let you quickly see which cells contain formulas. You can choose whether to display formula markers in the sheet.

Use View - Set View Preferences to turn on formula markers.

Linking workbook files

A formula that refers to a range in another workbook is called a file reference or file link. A formula in one workbook that refers to a range in another workbook links the two workbooks. Formulas can refer to an active workbook or to a workbook file on disk.

You can create links to .123, .WK4, .WK3, and .WK1 files.

Using @functions

An @function is a built-in formula that performs a specialized calculation, such as finding the average of a column of numbers. See Overview: @Functions for more information.

{button ,AL(`H_SUMMING_A_RANGE_AUTOMATICALLY_STEPS;H_COMMON_ERRORS_IN_FORMULAS_OVER;H_EDITING_A_FORMULA_STEPS;H_ENTERING_A_FORMULA_STEPS;H_GUIDELINES_FOR_ENTERING_FORMULAS_OVER;H_PARTS_OF_A_FORMULA_OVER;H_REFERRING_TO_OTHER_FILES_IN_FORMULAS_STEPS;H_TYPES_OF_FORMULAS_OVER;H_USING_RANGE_NAMES_IN_A_FORMULA_STEPS;H_REFERRING_TO_OTHER_FILES_IN_FORMULAS_DETAILS;H_USING_RANGE_ADDRESSES_IN_A_FORMULA_STEPS',0)} See related topics

Types of formulas

1-2-3 has three types of formulas: numeric, text, and logical.

Numeric formulas

Numeric formulas perform simple arithmetic or complex calculations involving many variables and use one or more of the arithmetic operators: + (addition), - (subtraction), * (multiplication), / (division), and ^ (exponentiation).

The following table shows some examples of simple numeric formulas:

Formula	Result
25+5	30
15+A:A1	20, if A:A1 contains 5
22*A:A1/A:A2	11, if A:A1 contains 5 and A:A2 contains 10

Text formulas

Text formulas automatically change or combine text entered in cells. In a text formula, you must enclose text in " " (quotation marks). Text formulas use & (ampersand) to combine strings of text.

The following table shows two examples of text formulas:

Formula	Result
+"New"&D6	New Totals, if D6 contains the text " Totals"
+"New"+" Totals"	New Totals

Logical formulas

Logical formulas use a logical operator or a logical @function to evaluate whether a condition is true or false. The formula result is 1 if the condition is true, and 0 if the condition is false. Logical formulas use the operators listed below to evaluate various conditions.

Operator	Result is true when
=	Values are equal
<	First value is less than second value
>	First value is greater than second value
<=	First value is less than or equal to second value
>=	First value is greater than or equal to second value
<>	Values are not equal
#AND#	Both conditions are true
#OR#	At least one condition is true
#NOT#	Condition is false (If the condition is true, the result is false)

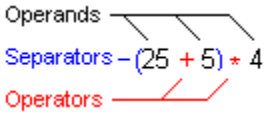
The following table shows some examples of logical formulas:

Formula	Result
5>4	1 (True).
5>A:A1	1, if A:A1 is less than 5.
+A:A1=1#AND#A:A2=2	1, if A:A1 contains 1 and A:A2 contains 2. 0, if either A:A1 or A:A2 contains another value.
+A:A1=1#OR#A:A2=2	1, if A:A1 contains 1 or A:A2 contains 2.
#NOT#A:A1=0	1, if A:A1 contains any value other than 0 (zero).

{button ,AL(`H_USING_FORMULAS_OVER;H_PARTS_OF_A_FORMULA_OVER;H_GUIDELINES_FOR_ENTERING_FORMULAS_OVER;H_ENTERING_A_FORMULA_STEPS',0)} See related topics

Parts of a formula

All formulas contain three basic elements: operands, operators, and separators.



Operands

Operands are the values or text that the formula operates on.

Operand	Description	Examples
Value	Number	450, -92, 7.1E+12
Text	Sequence of characters enclosed in double quotation marks	"Budget", "TOTAL", "1955 Hill Valley Road"

Although you can enter values or text for operands directly into a formula, you can often make a formula more useful by entering the addresses or names of cells that contain the values or text instead. Every time you change the data in a cell referred to by a formula, the result of the formula changes.

You can enter a cell or range address in a formula by typing it, or you can select the range with the mouse or keyboard so that 1-2-3 enters the address for you. Selecting a range helps you avoid typing errors.

Operators

Operators are mathematical symbols, text characters, or logical statements that tell 1-2-3 what to do with the operands in a formula.

Type	Operators	Description
Arithmetic operators	+, -, *, /, ^	Symbols for addition, subtraction, and so on
Text operator	&	Symbol for combining strings
Logical operators	=, <, >, <=, >=, <>	Symbols for equal to, less than, and so on
	#AND#, #OR#, #NOT#	Words set off with # that evaluate conditions

Parentheses

Parentheses let you combine various operations and multiple formulas in one formula. You can use parentheses in complex formulas to tell 1-2-3 the order in which you want the formulas calculated.

In the following example, the inside formula is set off from the outside formula with parentheses.

(A1+A2*(A3-A4))/A5

{button ,AL(`H_WHEN_AND_HOW_FORMULAS_RECALCULATE_OVER;H_USING_FORMULAS_OVER;H_ENTERING_A_FORMULA_STEPS;H_TYPES_OF_FORMULAS_OVER;H_GUIDELINES_FOR_ENTERING_FORMULAS_OVER',0)} See related topics

Guidelines for entering formulas

Use these guidelines when entering a formula:

- Formulas can be up to 512 bytes in length.
- A formula can begin with a number or one of these characters: +, -, =, (, @, ., $, or #.
- When the first element of a formula is a cell address or range name, begin the formula with +, -, =, (, or $.
- When the first character in a text formula is a " (quotation mark), begin the formula with (or +.
- When a formula looks like a date (for example, 9/25/90), begin the formula with +.
- To enter an @function in a formula, you can select it with the @function selector. You can also type @, press F3 (NAME), and then select the @function.

Blank cells

1-2-3 assigns the value 0 to blank cells whose addresses are used in formulas and in most @functions except statistical and text @functions. Most statistical @functions ignore blank cells, and text @functions using blank cells evaluate to ERR.

{button ,AL(`H_COMMON_ERRORS_IN_FORMULAS_OVER;H_ENTERING_A_FORMULA_STEPS;H_ENTERING_AN_ATFUNCTION_STEPS;H_USING_FORMULAS_OVER;H_TYPES_OF_FORMULAS_OVER;H_PARTS_OF_A_FORMULA_OVER',0)} See related topics

Entering a formula

You enter a formula in a cell much as you enter any data into a sheet. After you enter a formula in a cell, 1-2-3 displays the formula in the contents box and the formula's result in the cell.

1. Select the cell where you want to enter the formula.
2. Type + to start the formula.
3. Type operands, operators, and parentheses as needed.
4. To complete the formula, press ENTER.
5. (Optional) To display the result if 1-2-3 displays *** (asterisks), widen the column.

If the formula results in ERR, or 1-2-3 does not accept the formula, check for common errors.

{button ,AL(`H_ENTERING_A_FORMULA_DETAILS',1)} See details

{button ,AL(`H_COMMON_ERRORS_IN_FORMULAS_OVER;H_EDITING_A_FORMULA_STEPS;H_GUIDELINES_FOR_ENTERING_FORMULAS_OVER;H_PARTS_OF_A_FORMULA_OVER;H_REFERRING_TO_OTHER_FILES_IN_FORMULAS_STEPS;H_SIZING_COLUMNS_STEPS;H_USING_RANGE_NAMES_IN_A_FORMULA_STEPS;H_USING_FORMULAS_OVER;H_USING_RANGE_ADDRESSES_IN_A_FORMULA_STEPS',0)} See related topics

Details: Entering a formula

Calculating numeric formulas
The number of decimal places 1-2-3 displays for a calculated value depends on the number format of the cell. 1-2-3 calculates the value to a precision of 15 digits regardless of how many it displays. Use an @function, such as @ROUND, to specify a precision of less than 15 digits.

Documenting a formula
You can annotate a formula by typing ; (semicolon) immediately after the formula and then typing the note. The note appears in the contents box only, unless you format the cell as text.

To add a comment to a cell containing a formula, use Range - Cell Comment.

Using formula markers
You can use formula markers to identify cells that contain formulas. Formula markers are turned off when you first start 1-2-3. To turn them on, use View - Set View Preferences.

Printing formulas
When you print a workbook, you can choose to print the formulas along with the cell contents. To print formulas, choose File - Preview & Page Setup, click the Include tab, and select "Formulas and cell contents" in the "Show" list.

{button ,AL(`H_ENTERING_A_FORMULA_STEPS',1)} Go to procedure

{button ,AL(`;H_CREATING_A_CELL_COMMENT_STEPS;H_PRINT_CHANGING_SELECTION_STEPS;H_SETTING_VIEW_PREFERENCES_FOR_WORKBOOKS_STEPS',0)} See related topics

Using range names in a formula

You can use a range name in place of an address in a formula.

1. Enter the formula up to the operator or ((open parenthesis) that precedes the range name you want to enter.
2. Type the range name, or click the navigator and select the name from the list.
3. Complete the formula.

Tip When you are writing a formula, you can also press F3 (NAME) to see a list of range names for any active workbook.

{button ,AL(`H_USING_RANGE_NAMES_IN_A_FORMULA_DETAILS',1)} See details

{button ,AL(`H_ENTERING_A_FORMULA_STEPS;H_USING_RANGE_ADDRESSES_IN_A_FORMULA_STEPS',0)} See related topics

Details: Using range names in a formula

If you plan to use a range name in a formula, you can enter it as a placeholder in the formula before you define the range name. The formula results in ERR until you define the range name.

To locate and change a range name that appears in formulas, use Edit - Find & Replace.

If you delete a range name that a formula uses, 1-2-3 replaces the range name with its associated address. For example, suppose that SALES is the name of B14..H14, and that your sheet contains the formula @SUM(SALES). If you delete the name SALES, 1-2-3 changes @SUM(SALES) to @SUM(B14..H14).

{button ,AL(`H_USING_RANGE_NAMES_IN_A_FORMULA_STEPS',1)} Go to procedure

Referring to other workbook files in formulas

Formulas can refer to ranges in other workbook files as well as ranges in the current workbook.

1. Enter the formula up to the operator or ((open parenthesis) that precedes the workbook reference.
2. If the other workbook is visible, use the mouse to select the range.

   Otherwise, type the workbook reference using this format:

   +<<workbook.ext>>range

   Substitute the name of the workbook, extension, and range that you want. For example, +<<MYWORKBOOK.123>>@SUM(C10..P24)
3. Press ENTER.

{button ,AL(`H_REFERRING_TO_OTHER_FILES_IN_FORMULAS_DETAILS',1)} See details
{button ,AL(`H_ENTERING_A_FORMULA_STEPS;H_USING_FORMULAS_OVER',0)} See related topics

Details: Referring to other workbook files in formulas

Other ways to specify a range in another workbook file

Press CTRL+PG UP or CTRL+PG DN to go to the other workbook and then use the keyboard to select the range.

If the other workbook is active, and the range you want to select has an assigned name, you can press F3 (NAME), choose the workbook from the "In workbook" list, and then select the named range.

When you refer to data in another workbook file using the format <<workbook.ext>>range, you don't need to include the path if the file is in the directory for workbook files specified using File - User Setup - 1-2-3 Preferences (File Locations tab). Keep in mind that if you move the workbook, you need to update the reference to reflect the workbook's new location.

Updating file links

1-2-3 automatically updates all file links when you open a workbook that refers to other active workbooks if Recalculation is set to automatic in the workbook that you open. For more information, see Setting recalculation defaults.

If you open a workbook that has links to a workbook on disk, and "Update links when opening workbooks" is not turned on with File - User Setup - 1-2-3 Preferences (General tab), you need to update the links manually so the workbook uses current data from the linked workbook. To update the links, use Edit - Manage Links. For more information, see Updating file links.

{button ,AL(`H_REFERRING_TO_OTHER_FILES_IN_FORMULAS_STEPS',1)} Go to procedure

Editing a formula

1. Double-click the cell containing the formula, or select the cell and press F2 (EDIT).
2. Edit the formula.
3. Press ENTER.

{button ,AL(`H_COMMON_ERRORS_IN_FORMULAS_OVER;H_USING_FORMULAS_OVER',0)} See related topics

Common errors in formulas

If a formula results in ERR, or if 1-2-3 beeps instead of accepting the formula, don't panic. Examine the formula for obvious errors such as extra spaces, missing operators, or missing parentheses.

When a formula results in ERR

What happened	Try this
You used zero as a denominator.	Don't divide by zero.
You used an undefined range name or text that you haven't yet defined as a range name.	Link the name with an address. For more information, see Naming a range.
In a text formula, you referred to a cell that contains a value.	Correct the formula to refer to a cell that contains text.
You referred to a workbook file that either doesn't exist or isn't in the default directory.	Re-create the workbook file or refer to an existing workbook file; or include the path to a workbook outside the default directory.
You moved data into the first or last cell of a range that is referred to in a formula.	Re-create the overwritten data in a new location and then edit the formula to refer to the new location.
You moved data into the first or last cell of a named range referred to in the formula.	Re-create the range name, and then edit the formula to refer to the range name.
There's not enough available memory to calculate the formula.	Try closing extra windows or other applications, or quitting and re-opening 1-2-3.

Other problems

What happened	Try this
Your numeric formula looks like a date to 1-2-3, for example 11/30, or 30-Aug (if Aug is a range name).	Enclose the formula in parentheses or start it with + or =. For example (11/30) or +30-Aug.
You entered a formula that begins with a range name, and it didn't evaluate.	Enclose the formula in parentheses or start it with +, -, or =.
You entered an address one way, for example with a sheet address, but 1-2-3 changed the way the address looks, or changed the address to a range name.	Don't worry. 1-2-3 sometimes adjusts references you enter to show what's relevant. For example, if you have only one sheet, 1-2-3 doesn't show sheet letters in the formula. This will not hurt your formulas.

Finding circular references

A circular reference is a formula that refers directly or indirectly to itself. For example, if you enter the formula +A1+1 in cell A1, you've created a direct circular reference.

When a formula contains a circular reference, the Circ button appears in the status bar. To locate a circular reference, click the Circ button. 1-2-3 moves the cell pointer to the first circular reference.

{button ,AL(`H_GUIDELINES_FOR_ENTERING_FORMULAS_OVER',0)} See related topics

Summing a range automatically

 **Show me a demo**

You can sum a range of data without entering a formula.

1. Enter the data in the sheet.
2. To sum columns, select the cell to the left of where you want to display the sum.
   To sum rows, select the cell above where you want to display the sums.
3. Type Total or Totals.
4. Press ENTER.

{button ,AL(`H_SUMMING_A_RANGE_AUTOMATICALLY_DETAILS',1)} See details

Details: Summing a range automatically

How does 1-2-3 know what data to sum?

When you enter Total or Totals in a cell, 1-2-3 checks to see if there are numbers in columns above and to the right, or in rows below and to the left.

To sum columns, you must enter Total (or Totals) to the left of the range where you want to create the sums.

To sum rows, enter Total (or Totals) above the range where you want to create the sums.

When you sum columns, you can have up to 10 blank rows between the row where you want the totals to appear and the numbers in the columns above.

When you sum rows, you can have up to 10 blank columns between the column where you want the totals to appear and the numbers in the rows to the left.

To turn off automatic summing, use File - User Setup - 1-2-3 Preferences (General tab).

Automatic summing won't work if...

- You enter any word other than Total or Totals.
- The cells below (for rows) or to the right of (for columns) where you want to put the sum are not blank.
- You try to sum a 3D range. You must use a formula or @function instead.
- Automatic summing is turned off.

Related SmartIcons

Sums values above or to the left

{button ,AL(`H_SUMMING_A_RANGE_AUTOMATICALLY_STEPS',1)} Go to procedure

Details: Updating file links

Automatically updating file links
1-2-3 automatically updates all file links when you open a workbook that refers to other active workbooks if Recalculation is set to automatic in the workbook that you open. For more information, see Setting recalculation defaults.

{button ,AL(`H_UPDATING_FILE_LINKS_STEPS',1)} Go to procedure

Details: Using range addresses in a formula

Other ways to enter a cell or range address in a formula

You can enter a cell or range address in a formula by selecting the range with the mouse or keyboard. When you select the range, 1-2-3 enters the address for you.

- To use the mouse, click the cell or drag to select a range.
- To use the keyboard, press , ↓, ←, →, or another pointer-movement key to move the cell pointer to the cell. For a range, move to a cell at the corner of the range, press . (period), and then use a pointer-movement key to highlight the other cells.

{button ,AL(`H_USING_RANGE_ADDRESSES_IN_A_FORMULA_STEPS',1)} Go to procedure

Updating file links

You can update links to all workbook files not in memory.

1. Choose Edit - Manage Links.

2. In the "Link type" list, select "1-2-3 file links."
3. Select the link you want to update.
4. Click Update All Now.
5. Click Done.

{button ,AL(`H_UPDATING_FILE_LINKS_DETAILS',1)} See details

{button ,AL(`;H_REFERRING_TO_OTHER_FILES_IN_FORMULAS_STEPS;H_UPDATING_LINKS_STEPS;H_USING_FORMULAS_OVER',0)} See related topics

Using range addresses in a formula

You can use a cell or range address in a formula.

1. Enter the formula up to the operator or ((open parenthesis) that precedes the cell or range address you want to enter.
2. Type the cell or range address.
3. Complete the formula.

{button ,AL(`H_USING_RANGE_ADDRESSES_IN_A_FORMULA_DETAILS',1)} See details

{button ,AL(`H_ENTERING_A_FORMULA_STEPS;H_USING_RANGE_NAMES_IN_A_FORMULA_STEPS;H_USING_FORMULAS_OVER',0)} See related topics

Overview: Using SmartIcons

SmartIcons are buttons that represent mouse shortcuts for 1-2-3 actions and commands. When you first load 1-2-3, a set of SmartIcons appears in a bar at the top of the workspace.

To use an icon, simply click it.

To tell you what an icon does, bubble help appears by default when you position the mouse pointer over an icon. You can hide or show SmartIcons bubble help, or the set of SmartIcons.

Sets of SmartIcons

You can display several sets of icons at a time.

The set of icons that appears in the workspace changes depending on what is currently selected. For example, the set of icons that appears when a range is selected is different from the set that appears when a chart is selected. You can change which set of SmartIcons is displayed at any given time.

You can also change the position of each set of SmartIcons in the workspace.

{button ,AL(`H_HIDING_AND_SHOWING_SMARTICONS_STEPS;H_PLACING_SMARTICONS_IN_THE_WORKSPACE_STEPS;H_SELECTING_AND_DISPLAYING_A_SET_OF_SMARTICONS_STEPS;H_HIDING_AND_SHOWING_BUBBLE_HELP_STEPS;H_SIZING_SMARTICONS_STEPS;H_CUSTOMIZING_SMARTICONS_OVER;',0)} See related topics

Hiding and showing a set of SmartIcons

You can hide or show SmartIcons by doing one of the following:

- Choose View - Hide/Show SmartIcons.
- Click the Control menu for the set of SmartIcons, located at the far left of the set, or click the right mouse button when the pointer is on the set. Then choose to hide the particular set of SmartIcons, or all SmartIcons.

{button ,AL(`H_CUSTOMIZING_SMARTICONS_OVER;H_USING_SMARTICONS_OVER;H_PLACING_SMARTICONS_IN_THE_WORKSPACE_STEPS;H_SELECTING_AND_DISPLAYING_A_SET_OF_SMARTICONS_STEPS;',0)} See related topics

Selecting and displaying a set of SmartIcons

You can choose which set of SmartIcons to display, and when each set is displayed.

1. Choose File - User Setup - SmartIcons Setup.

2. Under Bar to setup, choose the set of SmartIcons to display from the "Bar name" list.
3. Select an option from the "Bar can be displayed when context is" list.
4. Make sure "Bar is enabled to display during its context" is selected.
5. Click OK.

{button ,AL(`H_SELECTING_AND_DISPLAYING_A_SET_OF_SMARTICONS_DETAILS',1)} See details

{button ,AL(`H_HIDING_AND_SHOWING_SMARTICONS_STEPS;H_PLACING_SMARTICONS_IN_THE_WORKSPACE_STEPS;H_USING_SMARTICONS_OVER',0)} See related topics

Details: Selecting and displaying a set of SmartIcons

Options for setting up SmartIcons bars

- Bar name -- When you select a set of SmartIcons from this list, the set appears across the top of the dialog box.
- Bar can be displayed when context is -- You can decide when to display a set of SmartIcons: always; when you're working in a range, a sheet, a chart, a map, a drawing, a query table, an OLE server, or an OLE object; or when you're using print preview.

  For example, you are working with a map and want a custom set of map SmartIcons to display. First, select the custom set of SmartIcons in the "Bar name" list. Then select "A Map" from the "Bar can be displayed when context is" list. Now you can display the custom set when you're working on a map.
- Bar is enabled to display during its context -- This option acts as an on/off display switch. If selected, it displays a specific set of SmartIcons whenever you're working with a specific type of data. Deselect this option to turn off the display of a specific set of SmartIcons.

{button ,AL(`H_SELECTING_AND_DISPLAYING_A_SET_OF_SMARTICONS_STEPS',1)} Go to procedure

Moving a set of SmartIcons

You can move a set of SmartIcons wherever you want on the desktop.

1. Position the mouse pointer under the Control menu at the far left of the displayed set of SmartIcons.

   The mouse pointer changes to the shape of a hand.
2. Drag the set of SmartIcons to the new location.
3. Release the mouse button.

{button ,AL(`H_PLACING_SMARTICONS_IN_THE_WORKSPACE_DETAILS',1)} See details

{button ,AL(`H_CUSTOMIZING_SMARTICONS_OVER;H_USING_SMARTICONS_OVER;H_HIDING_AND_SHOWING_SMARTICONS_STEPS;H_SELECTING_AND_DISPLAYING_A_SET_OF_SMARTICONS_STEPS',0)} See related topics

Details: Moving a set of SmartIcons

Moving the set of SmartIcons to a fixed position
You can position SmartIcons at the edges of the 1-2-3 window in a fixed position (left, right, top, or bottom). If you drag the SmartIcons bar to an edge, it will snap to and stay with that edge, even when the 1-2-3 window is moved.

Moving the set of SmartIcons to a floating position
You can display SmartIcons in a floating position anywhere inside or outside the 1-2-3 window. Dragging SmartIcons to a place other than an edge creates a floating palette. You can also drag one set of SmartIcons over another.

{button ,AL(`H_PLACING_SMARTICONS_IN_THE_WORKSPACE_STEPS',1)} Go to procedure

Overview: Customizing SmartIcons

1-2-3 includes many standard SmartIcons and sets of SmartIcons. You can use the icons and sets of icons as they are, or you can change them to suit your needs. You can create and edit custom icons to be part of a standard 1-2-3 set, or you can create custom sets of SmartIcons. You can also:

- Add SmartIcons to a set
- Move SmartIcons within a set
- Remove SmartIcons from a set
- Delete individual SmartIcons or entire sets of SmartIcons
- Save new or changed SmartIcons and sets of SmartIcons
- Attach scripts or macros to SmartIcons

{button ,AL(`H_ADDING_AN_ICON_TO_A_SET_OF_SMARTICONS_STEPS;H_CREATING_AN_ICON_STEPS;H_EDITING_AN_ICON_STEPS;H_MOVING_AN_ICON_WITHIN_A_SET_OF_SMARTICONS_STEPS;H_REMOVING_AN_ICON_FROM_A_SET_OF_SMARTICONS_STEPS;H_SAVING_A_SET_OF_SMARTICONS_STEPS;H_ATTACHING_A_SCRIPT_TO_AN_ICON_STEPS;H_DELETING_A_SET_OF_SMARTICONS_STEPS;',0)} See related topics

Adding an icon to a set of SmartIcons

You can add an icon to a set of SmartIcons.

1. Choose File - User Setup - SmartIcons Setup.

2. From the "Bar name" list, select the set of SmartIcons to which you want to add the icon.
3. Click an icon in the "Available icons" list.
4. Drag the selected icon to the position you want in the displayed set.
5. Do one of the following:
   - Click Save Set if you want to save the modified set of SmartIcons with a new name.
   - Click OK to save the modified set with the current name, and display the modified set.

   Note When you click OK, 1-2-3 replaces the old set of SmartIcons with the modified set. If you think you will want to use the old set again, click Save Set and give the modified set a different name.

{button ,AL(`H_ADDING_AN_ICON_TO_A_SET_OF_SMARTICONS_DETAILS',1)} See details

{button ,AL(`H_CUSTOMIZING_SMARTICONS_OVER;H_MOVING_AN_ICON_WITHIN_A_SET_OF_SMARTICONS_STEPS;H_REMOVING_AN_ICON_FROM_A_SET_OF_SMARTICONS_STEPS;H_SAVING_A_SET_OF_SMARTICONS_STEPS;',0)} See related topics

Details: Adding an icon to a set of SmartIcons

Positioning an icon in the set

To position the new icon before an icon that already appears in the set, drag the new icon to the left of that icon.

To position the new icon after an icon that already appears in the set, drag the new icon to the right of that icon.

Adding a spacer icon

You can also add a spacer icon, which helps you to visually group the icons in the set.

{button ,AL(`H_ADDING_AN_ICON_TO_A_SET_OF_SMARTICONS_STEPS',1)} Go to procedure

Creating an icon

You create a new icon by editing and renaming a standard 1-2-3 icon, or by creating a new icon from scratch. When you save an icon, you give it a file name with the .BMP file extension.

1. Choose File - User Setup - SmartIcons Setup.

2. Click Edit Icon.
3. Click Create a New Blank Icon to create a new icon, or select an icon to modify from the "Available icons you can edit or copy" list.
4. Use the mouse buttons to apply or change colors.
5. Enter the icon's bubble help in the "Description" box.
6. Click Save As to name and save the new icon.
7. Attach a macro or script to the icon that will run when the icon is clicked.
8. If you make further changes to the icon, click Save to preserve the changes.
9. Click Done to return to the SmartIcons Setup dialog box.

   The new icon appears in the list of available icons.
10. Click OK.

{button ,AL(`H_CREATING_AN_ICON_DETAILS',1)} See details

{button ,AL(`H_CUSTOMIZING_SMARTICONS_OVER;H_USING_SMARTICONS_OVER;H_EDITING_AN_ICON_STEPS;',0)} See related topics

Details: Creating an icon

Applying colors
You create or edit an icon by applying or changing color. To select a color, click the "Left" or "Right" box under Mouse button colors and click a color from the palette that appears.

To apply the color, use the left or right mouse button and click where you want to apply color on the icon under "Picture editor." 1-2-3 applies the color and updates the Preview icon as you go along.

Starting from scratch
To create a new custom icon, click Create a New Blank Icon. 1-2-3 displays a blank icon under "Picture editor."

Creating a new icon from an existing one
To create a new icon based on an existing one, select an icon from the "Available icons you can edit or copy" list. If you select a standard 1-2-3 icon, 1-2-3 copies the icon, but not the file name, and displays it under "Picture editor." You must give this icon a new file name when you save it.

{button ,AL(`H_CREATING_AN_ICON_STEPS',1)} Go to procedure

Editing an icon

You can modify an existing custom icon by changing the icon's picture, colors, bubble help, or the attached script or macro. While you cannot modify the standard 1-2-3 SmartIcons, you can create a custom icon by copying a standard icon and modifying the copy.

1. Choose File - User Setup - SmartIcons Setup.

2. Click Edit Icon.
3. Select the icon in the "Available icons you can edit or copy" list.
   The icon appears under "Picture editor."
4. Edit the icon by using the mouse buttons to apply or change colors.
5. (Optional) Change the icon's bubble help in the "Description" box.
6. Click Save As to name and save the new icon.
7. Attach a macro or script to the icon that will run when the icon is clicked.
8. If you make any further changes to the icon, click Save to preserve the changes.
9. Click Done to return to the SmartIcons Setup dialog box.
   The new icon appears in the list of available icons.
10. Click OK.

{button ,AL(`H_EDITING_AN_ICON_DETAILS',1)} See details
{button ,AL(`H_CUSTOMIZING_SMARTICONS_OVER;H_CREATING_AN_ICON_STEPS;',0)} See related topics

Details: Editing an icon

Applying colors

You edit an icon by applying or changing color. To select a color, click the "Left" or "Right" box under Mouse button colors and click a color from the palette that appears.

To apply the color, use the left or right mouse button and click where you want to apply color on the icon under "Picture editor." 1-2-3 applies the color and updates the the Preview icon as you go along.

{button ,AL(`H_EDITING_AN_ICON_STEPS',1)} Go to procedure

Moving an icon within a set of SmartIcons

You can move an icon to a new position within a set of SmartIcons.

Tip If the set of SmartIcons containing the icon you want to move is displayed in the 1-2-3 window, hold down CTRL and drag the icon to its new position in the displayed set.

1. Choose File - User Setup - SmartIcons Setup.

2. From the "Bar name" list, select the set of SmartIcons that contains the icon you want to move.
3. Click the icon you want to move, and drag it to its new location in the set of SmartIcons.
4. Do one of the following:
   - Click Save Set if you want to save the modified set of SmartIcons with a new name.
   - Click OK to save the modified set with the current name, and display the modified set.

   Note When you click OK, 1-2-3 replaces the old set of SmartIcons with the modified set. If you think you will want to use the old set again, click Save Set and give the modified set a different name.

{button ,AL(`H_MOVING_AN_ICON_WITHIN_A_SET_OF_SMARTICONS_DETAILS',1)} See details

{button ,AL(`H_CUSTOMIZING_SMARTICONS_OVER;H_REMOVING_AN_ICON_FROM_A_SET_OF_SMARTICONS_STEPS;H_SAVING_A_SET_OF_SMARTICONS_STEPS;H_ADDING_AN_ICON_TO_A_SET_OF_SMARTICONS_STEPS',0)} See related topics

Details: Moving an icon within a set of SmartIcons
You don't need to be in the SmartIcons Setup dialog box to move an icon within a set of SmartIcons. Just hold CTRL as you drag the icon to its new position within a set of SmartIcons in your workspace.

{button ,AL(`H_MOVING_AN_ICON_WITHIN_A_SET_OF_SMARTICONS_STEPS',1)} Go to procedure

Removing an icon from a set of SmartIcons

You can remove an icon from a set of SmartIcons.

1. Choose File - User Setup - SmartIcons Setup.

2. From the "Bar name" list, select the set of SmartIcons that contains the icon you want to remove.
3. Click the icon you want to remove, and drag it off the set.
4. Do one of the following:
   - Click Save Set if you want to save the modified set of SmartIcons with a new name.
   - Click OK to save the modified set with the current name, and display the modified set.

   Note When you click OK, 1-2-3 replaces the old set of SmartIcons with the modified set. If you think you will want to use the old set again, click Save Set and give the modified set a different name.

{button ,AL(`H_CUSTOMIZING_SMARTICONS_OVER;H_ADDING_AN_ICON_TO_A_SET_OF_SMARTICONS_STEPS;H_SAVING_A_SET_OF_SMARTICONS_STEPS;',0)} See related topics

Deleting a set of SmartIcons

If you delete a set of SmartIcons, 1-2-3 deletes the set but not the individual icons.

1. Choose File - User Setup - SmartIcons Setup.

2. Click Delete Set.
3. Select the set(s) of SmartIcons you want to delete.
4. Click OK.

   1-2-3 deletes the selected sets of SmartIcons and returns you to the SmartIcons Setup dialog box.
5. Click OK.

{button ,AL(`H_CUSTOMIZING_SMARTICONS_OVER;H_USING_SMARTICONS_OVER;H_SAVING_A_SET_OF_SMARTICONS_STEPS;',0)} See related topics

Saving a set of SmartIcons

You can save a modified set of SmartIcons with the current name or a new name. You can also save a custom set of SmartIcons.

1. Choose File - User Setup - SmartIcons Setup.

2. Select a set of SmartIcons from the "Bar name" list.
3. Add, move, or remove icons to create the set you want.
4. Click Save Set.

   1-2-3 asks if you want to overwrite the current set, or create a new one.
5. Do one of the following:
   - Click Overwrite to save the changed set of SmartIcons under the current name. Go to step 9.
   - Click Save As New to save the set of SmartIcons under a new name. Go to step 6.
6. Enter a name for the set of SmartIcons in the "SmartIcons bar name" box.
7. Enter a new file name in the "SmartIcons file name" box.
8. (Optional) Click Browse to change the directory in which 1-2-3 saves the new set of SmartIcons.
9. Click OK.

   1-2-3 saves the set of SmartIcons and returns you to the SmartIcons Setup dialog box.
10. Click OK.

{button ,AL(`H_SAVING_A_SET_OF_SMARTICONS_DETAILS',1)} See details

{button ,AL(`H_USING_SMARTICONS_OVER;H_CUSTOMIZING_SMARTICONS_OVER;H_ADDING_AN_ICON_TO_A_SET_OF_SMARTICONS_STEPS;H_DELETING_A_SET_OF_SMARTICONS_STEPS;H_MOVING_AN_ICON_WITHIN_A_SET_OF_SMARTICONS_STEPS;H_REMOVING_AN_ICON_FROM_A_SET_OF_SMARTICONS_STEPS;',0)} See related topics

Details: Saving a set of SmartIcons

Naming a set of SmartIcons

When you save a set of SmartIcons, the name appears in the "Bar name" list in the SmartIcons Setup dialog box.

You save a set of SmartIcons as an .SMI file. You save a custom icon as a .BMP file.

{button ,AL(`H_SAVING_A_SET_OF_SMARTICONS_STEPS',1)} Go to procedure

Changing the display size of SmartIcons

You can change the default display size for SmartIcons.

1. Choose File - User Setup - SmartIcons Setup.

2. Under SmartIcons preferences, select a size in the "Icon size" list.
3. Click OK.

{button ,AL(`H_SIZING_SMARTICONS_DETAILS',1)} See details

{button ,AL(`H_CUSTOMIZING_SMARTICONS_OVER;H_USING_SMARTICONS_OVER;',0)} See related topics

Details: Changing the display size of SmartIcons

Selecting the size

You may want to change the displayed size of SmartIcons based on the type of display adaptor and monitor you use, or just to make it easier to see them clearly. By default, SmartIcons are displayed as Regular. You can change the display size to Large.

{button ,AL(`H_SIZING_SMARTICONS_STEPS',1)} Go to procedure

SmartIcons Setup dialog box

You can review all sets of SmartIcons from this dialog box by selecting the icon sets from the "Bar name" list one at a time. The SmartIcons set you select appears at the top of the dialog box.

You can then add, move, and remove icons in the set, and save or delete sets of SmartIcons. You can also create and edit custom icons from this dialog box.

Choose a task

- Adding an icon to a set of SmartIcons
- Moving an icon within a set of SmartIcons
- Removing an icon from a set of SmartIcons
- Selecting and displaying a set of SmartIcons
- Hiding and showing a set of SmartIcons
- Hiding and showing bubble help for SmartIcons and InfoBox tabs
- Changing the display size of SmartIcons

{button ,AL(`;H_CUSTOMIZING_SMARTICONS_OVER;H_USING_SMARTICONS_OVER;H_CREATING_AN_ICON_STEPS;H_EDITING_AN_ICON_STEPS;H_DELETING_A_SET_OF_SMARTICONS_STEPS;H_SAVING_A_SET_OF_SMARTICONS',0)} See related topics

Attaching a script or macro to an icon

You must attach a script or macro to a custom icon before you can use the icon.

Note To run a script attached to an icon, you must open the script file first. To change the script attached to an icon, click Detach first, and then attach the new script.

1. Choose File - User Setup - SmartIcons Setup.

2. Click Edit Icon.
3. Create or edit the icon.
4. Save and name the new icon.
5. Click Attach Script.
6. Select "Script" or "Macro."
7. Select the script or enter the macro you want to attach to the icon.
8. Click Attach to return to the Edit SmartIcons dialog box.
9. Enter the icon's bubble help in the "Description" box if you haven't already.
10. Click Save.
11. Click Done to return to the SmartIcons Setup dialog box, and then click OK.

{button ,AL(`H_CREATING_AN_ICON_STEPS;H_CUSTOMIZING_SMARTICONS_OVER;H_EDITING_AN_ICON_STEPS;',0)} See related topics

Edit SmartIcons dialog box

You can create, edit, attach scripts and macros to, and save icons from this dialog box. You must attach a script or macro to a custom icon to use the icon.

Choose a task

- Creating an icon
- Editing an icon
- Attaching a script or macro to an icon

{button ,AL(`H_CUSTOMIZING_SMARTICONS_OVER;H_USING_SMARTICONS_OVER',0)} See related topics

Hiding and showing bubble help for SmartIcons and InfoBox tabs

By default, 1-2-3 automatically displays bubble help when you position the mouse pointer over a particular icon or InfoBox tab. You can hide the bubble help if you want.

1. Choose File - User Setup - SmartIcons Setup.

2. Under SmartIcons preferences, do one of the following:
   - Deselect "Show icon descriptions" to hide the bubble help.
   - Select "Show icon descriptions" to show the bubble help.
3. Click OK.

{button ,AL(`H_USING_SMARTICONS_OVER;H_CUSTOMIZING_SMARTICONS_OVER;',0)} See related topics

Overview: 1-2-3 macros

A macro is a series of commands that automates a 1-2-3 task. You can use macros to automate repetitive tasks, streamline complex procedures, and create applications based on 1-2-3.

Creating macros

You create a macro by entering macro commands in a sheet. You can create macros to use just once or to use over and over again.

 See related topics

Running and debugging macros

You run macros either by explicitly starting them or by having them start automatically when you open a workbook. If a macro you create doesn't work correctly, you need to find the error and fix it, a process called debugging.

 See related topics

Using LotusScript

You can also automate your work using LotusScript, a scripting language built into all Lotus SmartSuite products. Using LotusScript, you can record keystrokes, mouse actions, and menu commands. LotusScript comes with a complete development environment for creating, debugging, and running scripts.

You can combine macros and scripts, and convert existing macros to LotusScript.

 See related topics

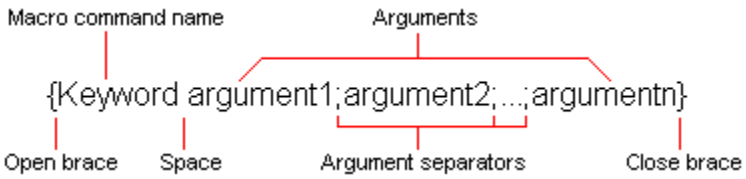
Getting additional Help on macros

1-2-3 provides Help that explains how to use macros, but does not come with Help on individual macro commands. However, you can use the World Wide Web or call Lotus Customer Support to get macro command Help. See Installing Help on macro commands.

{button ,AL(`H_MACRO_COMPATIBILITY_OVER;H_OBSOLETE_MACINTOSH_COMMANDS_OVER;H_123_RELEASE_5_MACRO_COMMAND_EQUIVALENTS_OVER;',0)} See related topics

Parts of a macro

A macro command contains three parts: a keyword, arguments, and argument separators. A macro is made up of one or more macro commands.



Keyword

The first word in a macro command is the keyword, the macro command name. The keyword tells 1-2-3 what action to perform.

Arguments

An argument is the information you want 1-2-3 to use when it performs the command. Depending on the particular macro, an argument can be a single value, a range of cells, text, or a formula.

Arguments can be required or optional. You must enter required arguments, but you can omit the optional ones. Optional arguments are enclosed in [ ] (brackets) in the descriptions you see in the Macro Keywords dialog box and in the Help on individual macro commands.

If a macro contains more than one optional argument, you must use the arguments sequentially. You can't use an optional argument without using the optional arguments that precede it. You can, however, use an optional argument without using subsequent optional arguments.

Argument separators

When you use more than one argument with a macro, you separate the arguments with an argument separator, typically a ; (semicolon). You can specify a different argument separator using the regional settings (country settings) in your operating system.

Quotation marks

Quotation marks enclose the text for text arguments. For example, the following macro uses the text argument Sales Forecast:

```
{EDIT-FIND "Sales Forecast"}
```

1-2-3 assumes that text not enclosed in quotation marks is a range name.

{button ,AL(`H_ARGUMENT_TYPES_OVER;H_CHANGING_THE_ARGUMENT_SEPARATOR_STEPS;H_INSTALLING_MACRO_REFERENCE_HELP_STEPS',0)} See related topics

Writing a macro

You write macros by entering macro commands, with their arguments, in consecutive cells of a sheet.

1. Select the cell where you want to enter a macro command.
2. Type {
3. Press F3 (NAME) to display the Macro Keywords dialog box.
4. If you know the category of the macro command you want, select it in the "Category" list.
5. Select the keyword from the "Macro keywords" list.
6. Click OK.

   The macro command, with argument placeholders, appears in the cell.
7. Replace any argument placeholders with the appropriate arguments.
8. Press ENTER.
9. Repeat these steps for each command in the macro.

After you create the macro, you can assign it a name, document it, and save it.

{button ,AL(`H_WRITING_A_MACRO_DETAILS',1)} See details

{button ,AL(`H_COMMON_ERRORS_IN_MACROS_OVER;H_NAMING_AND_DOCUMENTING_A_MACRO_STEPS;H_SAVING_A_MACRO_STEPS;H_SYNTAX_RULES_FOR_MACROS_OVER;H_PARTS_OF_A_MACRO_OVER;H_123_MACROS_OVER;H_ARGUMENT_TYPES_OVER;H_CALLING_A_SCRIPT_FROM_A_MACRO_STEPS;',0)} See related topics

Details: Writing a macro
You can enter macro commands in the workbook where you store your work or in a macro library, a workbook where you store only macros.

Entering macros by typing
You can also enter a macro command by typing the keyword and the appropriate arguments directly in the cell, and enclosing the entire expression in { } (braces).

Entering multiple macro commands in one cell
You can enter more than one command in a cell, up to 512 characters. In most cases, however, it's best to enter one command per cell, to make the macro easier to read and debug. Some commands, such as the {IF} command, must be followed by at least one more command in the same cell.

Checking the syntax of the macro
1-2-3 doesn't check the syntax of a macro command until you run the macro containing the command. When you run a macro that has incorrect syntax, 1-2-3 displays a message with the name and location of the incorrect command. You can use this information to debug the macro.

Using a macro with just one workbook
If you use a macro with only one workbook, it's simplest to enter the macro in that workbook, along with the data the workbook contains. However, when entering data, you must be careful not to overwrite your macros, and vice versa.

To keep your data and macros intact, follow these guidelines:

- Put macros in a separate sheet rather than in a sheet containing other data. You can name the sheet to make it easier to find.
- If you want to put macros and other data in the same sheet, put the macros below and to the right of the data area. If you don't, inserting or deleting rows and columns in the data area may damage your macros.

If you put the macros and other data in the same sheet, name a cell at the beginning of the macros area with a range name such as Macros. This convention makes it easier to move between the macros area and the data area.

Using a macro with several workbooks
If you use a macro with several workbooks, you can store the macro in a macro library. A macro library is a workbook that contains only macros. You can organize a macro library by using a separate sheet for each group of related macros.

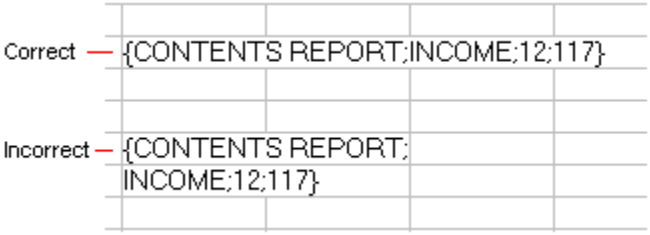
The macro library workbook must be active before you can run a macro stored there. However, you run the macro from the workbook you want it to work on.

{button ,AL(`H_WRITING_A_MACRO_STEPS',1)} Go to procedure

Syntax rules for macros

Starting and ending macros

- Start a macro command with { (open brace), and end it with } (closing brace).
- End a macro with a blank cell or a {QUIT} command.
- Start and end each macro command in the same cell.



Entering macro keywords

- Type the keyword immediately after the open brace, leaving no spaces before the keyword or in the keyword.
- Don't put any spaces between hyphenated words in multi-word keywords, and don't use underscores instead of hyphens.
- You can type the keyword in any combination of uppercase and lowercase letters.

Using spaces

- If you include arguments in the command, separate the keyword from the first argument with one space. If you include no arguments, include no spaces.
- Do not leave any spaces between arguments.
- Other than a single space between the keyword and the first argument, the command should have no spaces except those that are part of text enclosed in " " (quotation marks).

Using arguments

- If a command includes two or more arguments, use an argument separator to separate each argument from the one that follows.
- If you omit an optional argument between two other arguments, enter an argument separator as a placeholder. For example, in the macro command {CONTENTS REPORT;INCOME;;117}, the argument separator takes the place of the omitted optional argument; 117 is the fourth argument.
- In text arguments, enclose literal text in quotation marks. 1-2-3 reads text not enclosed in quotation marks as a range name.
- To enter a quotation mark within text already enclosed in quotation marks, type two quotation marks. For example, to make the macro display the text Now using a "Custom" Macro, use the following command: {INDICATE "Now using a ""Custom"" Macro"}.

Working with text files

- You must open a text file with {OPEN} before using any other text-file manipulation commands.
- Only one text file can be open at a time. If a text file is open when 1-2-3 reaches an {OPEN} command, 1-2-3 automatically closes the first text file before opening the new one. If a text file is open when a macro ends, however, 1-2-3 does not automatically close the text file. You must include a {CLOSE} command in the macro to close the file.
- After successfully executing a text-file manipulation command, 1-2-3 goes directly to the next cell in the macro, ignoring any macro instructions after the command in the same cell. If the command returns an error, the macro continues in the same cell as the command.
- Although some text-file manipulation commands change the contents of cells, 1-2-3 does not automatically recalculate formulas after executing these commands, even when sheet recalculation is set to Automatic. To force recalculation after a text-file manipulation command, follow the command with {CALC}.
- The first byte-pointer position in a text file is reported as 0, not 1.

{button ,AL(`H_123_MACROS_OVER;H_WRITING_A_MACRO_STEPS;H_COMMON_ERRORS_IN_MACROS_OVER;H_PARTS_OF_A_MACRO_OVER;H_CHANGING_THE_ARGUMENT_SEPARATOR_STEPS;H_ARGUMENT_TYPES_OVER;',0)} See related topics

Naming and documenting a macro

You name a macro so that you can easily identify and run it. You document a macro to help you or others remember what the macro does.

Naming a macro

1. Select the first cell of the macro.
2. Choose Range - Name, and enter a name for the macro in the "Name" box.

   You can enter either a multiple-character name, just as you would use for a range, or you can enter a backslash name.
3. Click OK.

Documenting a macro

1. Select the cell immediately to the left of the macro's first cell.
2. If you are documenting a backslash name, type ' (apostrophe) in the cell.
3. Type the name of the macro, and press ENTER.
4. In the rows above the macro, enter a brief description of the macro's function.
5. (Optional) To document macro commands or subroutines, enter a description in the cells to the right of the commands.

{button ,AL(`H_NAMING_AND_DOCUMENTING_A_MACRO_DETAILS',1)} See details

{button ,AL(`H_NAMING_AND_DOCUMENTING_A_MACRO_EX',1)} See example

{button ,AL(`H_123_MACROS_OVER;H_SAVING_A_MACRO_STEPS',0)} See related topics

Details: Naming and documenting a macro

Multiple-character names
A multiple-character name is an ordinary range name. This type of name is convenient for indicating what the macro does. You run a range-name macro with ALT+F3 (RUN) or Edit - Scripts & Macros - Run.

Backslash names
A backslash name consists of a \ (backslash) followed by a single letter; for example, \d. To run a macro with a backslash name, press CTRL+ the letter; for example, CTRL+D. Naming a macro \0 (backslash zero) creates an autoexecute macro that runs automatically every time you open the workbook containing the macro.

If you use \ (backslash) and a letter to name a macro, and this letter corresponds to a keyboard shortcut using CTRL+ the letter, then the macro overrides the keyboard shortcut. For example, the keyboard shortcut for copying the current selection is CTRL+C. If you name a macro \c, pressing CTRL+C will run the macro instead of copying the current selection.

Duplicate names
When naming your macros, be careful not to use names that duplicate built-in 1-2-3 script commands, macro commands, or key names. For example, if you name a macro PRINT and later try to use the 1-2-3 {PRINT} macro command, 1-2-3 will run your macro and not the 1-2-3 {PRINT} macro.

If you assign a name to a macro that is the same as a shortcut for a global script, 1-2-3 will run the script. For example, if you name a macro \d and also assign \d as the shortcut to a script, pressing CTRL+D will run the script, not the macro.

If you try to run a macro when macros with the same name exist in two or more active workbooks, 1-2-3 runs the macro in the current workbook.

{button ,AL(`H_NAMING_AND_DOCUMENTING_A_MACRO_STEPS',1)} Go to procedure
{button ,AL(`H_CREATING_AN_AUTOEXECUTE_MACRO_STEPS;',0)} See related topics

Example: Documenting a macro

The following sheet shows a small macro and its documentation. The macro name is documented to the left of the macro, the description of the macro appears above, and each command has a short description to the right:

```
A       B                                       C
        This macro enters the company name in the current cell

Company {CELL-ENTER "Howard's Fancy Hats"}       Enters name
        {STYLE-FONT-ALL "CaslonOpenFace";24}     Sets font and point size
        {COLUMN-WIDTH 30}                       Widens column to fit
```

Saving a macro

It's a good idea to save a new macro before you run it for the first time. You save a macro the same way you save any other data: save the workbook containing the macro.

1. Make sure the cell pointer is in the workbook you want to save.
2. Choose File - Save to save the workbook containing the macro.

{button ,AL(`H_123_MACROS_OVER;H_SAVING_A_NEW_WORKBOOK_STEPS;H_SAVING_AN_EXISTING_FILE_STEPS;',0)} See related topics

Running a macro

To make a macro perform the commands you entered, you run it. The workbook containing the macro must be active before you can run a macro in that workbook.

1. If necessary, move the cell pointer to the sheet area you want the macro to act on.
2. Choose Edit - Scripts & Macros - Run.

3. Select "Macro."
4. If the macro you want is in a different workbook, select that workbook in the "From" list.
5. In the "Range" box, enter the range name or address of the macro to run.
6. Click Run.

Note If the macro doesn't run as expected, or if you see a message when you run the macro, you need to debug the macro to find and fix the problem.

{button ,AL(`H_RUNNING_A_MACRO_DETAILS',1)} See details

{button ,AL(`H_123_MACROS_OVER;H_DEBUGGING_A_MACRO_STEPS;H_COMMON_ERRORS_IN_MACROS_OVER;H_STOPPING_A_RUNNING_MACRO_STEPS;H_123_RUNNING_A_SCRIPT_STEPS;',0)} See related topics

Details: Running a macro

Other ways to run a macro

To run an unnamed macro, select the first cell of the macro and press ALT+F3 (RUN).

To run a backslash macro, press CTRL and the single-letter name simultaneously. For example, to run a macro named \a, press CTRL+A. The macro overrides any keyboard shortcut assigned to that letter.

Recalculating during a macro

Whether 1-2-3 recalculates formulas while a macro is running depends on the recalculation setting in the most recently opened workbook.

- When you set recalculation to Manual, 1-2-3 recalculates formulas only when it encounters a {CALC}, {RECALC}, or {RECALCCOL} command in a macro, or when you press F9 (CALC) during an interactive macro.
- When you set recalculation to Automatic, 1-2-3 recalculates formulas automatically whenever a command in a macro changes data in the workbook, with the exceptions noted below.

In general, macros run faster with recalculation set to Manual. When recalculation is set to Manual, however, a macro may produce inaccurate results if the macro changes data and then uses the result of a formula that depends on that data. You can avoid inaccurate results by putting a {CALC}, {RECALC}, or {RECALCCOL} command in the macro at any point where data is likely to change.

Commands that don't cause automatic recalculation

The following macro commands change data but don't cause an automatic recalculation, even with recalculation set to Automatic:

{ALERT}	{FILESIZE}	{LET}
{CHOOSE-FILE}	{FOR}	{LOOK}
{CHOOSE-ITEM}	{GET}	{PUT}
{CHOOSE-MANY}	{GET-FORMULA}	{READ}
{CHOOSE-ONE}	{GET-LABEL}	{READLN}
{CONTENTS}	{GET-NUMBER}	{SET}
{DEFINE}	{GET-RANGE}	
{DIALOG}	{GETPOS}	

Instead of recalculating data immediately after performing one of these commands, 1-2-3 defers recalculation until one of the following happens:

- You press ENTER or a pointer-movement key
- A macro command equivalent to ENTER or a pointer-movement key occurs in the macro
- A {CALC}, {RECALC}, or {RECALCCOL} occurs in the macro

{button ,AL(`H_RUNNING_A_MACRO_STEPS',1)} Go to procedure
{button ,AL(`H_SETTING_RECALCULATION_DEFAULTS_STEPS',0)} See related topics

Stopping a running macro

While a macro is running, you can't do anything else in 1-2-3. For this reason, you may sometimes want to stop a macro while it's running.

1. Press CTRL+BREAK while the macro is running.

   Unless the macro contains a {BREAKOFF} command, 1-2-3 stops the macro after it completes the current command, and displays a message.
2. Click OK to clear the message.
3. Resume working in 1-2-3.

Note You can't stop a macro that contains a {BREAKOFF} command. The {BREAKOFF} command prevents users from stopping a macro; the {BREAKON} command restores the ability to stop a macro.

{button ,AL(`H_123_MACROS_OVER;H_DEBUGGING_A_MACRO_STEPS;',0)} See related topics

Debugging a macro

Sometimes when you first run a macro, it doesn't do what you expect, or 1-2-3 displays a message. When a macro doesn't run correctly, you have to find and fix the problem.

1. Choose Edit - Scripts & Macros - Run.

2. Select "Macro."
3. In the "Range" box, enter the range name or address of the macro to run.
4. Click Step to display the Macro Trace window with the first command displayed.
5. Click Step again to execute the first command in the macro and display the next command.
6. Continue clicking Step to execute each command in the macro, one at a time.

   If 1-2-3 encounters an error, it displays a message and stops the macro.
7. (Optional) If a command does not work as expected, click Stop to stop the macro at the cell containing the next macro command.
8. When the macro stops, click OK to dismiss the message, if one appears, and edit the macro.

Note Once macro execution stops, you must start executing the macro from the beginning to further debug the macro. You cannot continue macro execution where you left off, or correct a macro while it is running.

{button ,AL(`H_DEBUGGING_A_MACRO_DETAILS',1)} See details

{button ,AL(`H_123_MACROS_OVER;H_COMMON_ERRORS_IN_MACROS_OVER;H_SYNTAX_RULES_FOR_MACROS_OVER;',0)} See related topics

Details: Debugging a macro

Fixing problems in macros

If 1-2-3 displays a message when you try to run a macro, the problem is usually incorrect syntax, often caused by a typing or spelling error. You can correct these errors by editing the macro commands just as you edit any cell entry. The message tells you the name and location of the incorrect command.

Running a macro to completion

When using the Macro Trace window, you can run a macro to completion by clicking Continue Execution. You can click this button at any time before the macro stops. For example, you might click Step a few times to see how the first few commands work, and then click Continue Execution to run the rest of the macro to the end.

If 1-2-3 encounters an error in the macro after you've clicked Continue Execution, it displays a message and stops the macro.

{button ,AL(`H_DEBUGGING_A_MACRO_STEPS',1)} Go to procedure

Common errors in macros

When debugging a macro, check for the following common errors.

Typing errors

- Incorrectly spelled keywords, such as {WINDOWOFF} instead of {WINDOWSOFF}; or misspelled range names, such as Profits instead of Profit
- A missing hyphen or extra hyphens in a hyphenated macro keyword
- Underscores instead of hyphens in a macro keyword

Extra spaces

Watch for spaces where there shouldn't be any, such as:

- Between the { (open brace) and the keyword in a macro command
- Between arguments
- In an @function within a command
- In a range name
- Before or after a hyphen in a hyphenated word
- As the last character in a cell

Punctuation problems

- Missing braces around a command
- Enclosing a command in ( ) (parentheses) or [ ] (square brackets) instead of { } (braces)
- Missing quotation marks around text arguments that must be enclosed in quotation marks; for example, {CELL-ENTER Rates;Caption} instead of {CELL-ENTER "Rates";Caption}

Problems with arguments

- Missing required arguments
- Arguments of the wrong type; for example, a text argument where 1-2-3 expects a number
- Missing or misplaced argument separators, such as when you intentionally omit an optional argument between two other arguments
- Using an invalid argument separator; see Changing the argument separator for information

Problems with references

- References to nonexistent ranges
- References to range names that are no longer associated with a range
- Range names or addresses without sheet letters or workbook file references, when you need these to specify a location argument

Duplicate names

Watch for script names, macro names, or subroutine names that duplicate macro keywords, such as Quit, Return, or Query.

Problems with recalculation

Be careful not to omit a {CALC}, {RECALC}, or {RECALCCOL} command after a macro command that changes data. 1-2-3 recalculates formulas only when it encounters one of these commands if recalculation is set to Manual.

Macro ends too soon

Make sure your macro doesn't include a blank cell or a cell containing a value, which will end the macro before you meant it to.

{button ,AL(`H_123_MACROS_OVER;H_DEBUGGING_A_MACRO_STEPS;',0)} See related topics

Creating a macro that runs automatically

An autoexecute macro is a macro that runs automatically every time you open the workbook containing the macro.

1. Create the macro.
2. Select the first cell of the macro.
3. Choose Range - Name.
4. In the "Name" box, enter \0 (a backslash, followed by a zero), and click OK.

Note You can have only one autoexecute macro in each workbook.

{button ,AL(`H_CREATING_AN_AUTOEXECUTE_MACRO_DETAILS',1)} See details

{button ,AL(`H_123_MACROS_OVER;H_NAMING_AND_DOCUMENTING_A_MACRO_DETAILS;',0)} See related topics

Details: Creating a macro that runs automatically

How the autoexecute setting affects macro results

The result of certain macros depends on the autoexecute setting in File - User Setup - 1-2-3 Preferences (General tab). For example, suppose a macro contains a {FILE-OPEN} command that opens a workbook containing an autoexecute macro. The macro would give different results depending on the autoexecute setting.

- If "Run file Opened scripts, autoexecute macros" is selected, 1-2-3 opens the workbook and runs the autoexecute macro, but doesn't resume running the original macro.
- If "Run file Opened scripts, autoexecute macros" is not selected, 1-2-3 opens the workbook and continues running the original macro, but doesn't run the autoexecute macro.

Opening multiple files with autoexecute macros

If you open multiple files at once, 1-2-3 checks to see which files contain autoexecute macros. Of those files, 1-2-3 runs only the macro in the last workbook opened.

Using explicit file names

Macros that do not contain explicit file names always operate on the current workbook. If you open more than one workbook at a time, the last workbook opened becomes the current workbook, even if that workbook doesn't have an autoexecute macro. When opening multiple files at once, it is possible to execute an autoexecute macro in one workbook on data in a different workbook, if that workbook was opened after the workbook containing the macro.

Therefore, if you open multiple files at once, be sure to use explicit file names in your autoexecute macros to ensure that the macro will execute against the correct workbook. For example, you should use complete file-name references in all range specifications, as in <<myfile>>A:A1..B6.

{button ,AL(`H_CREATING_AN_AUTOEXECUTE_MACRO_STEPS',1)} Go to procedure

Calling a script from a macro

You can call script subroutines from macros.

1. Select the cell where you want to enter the call to the script.
2. Type {
3. If the script is stored in another workbook, enter the name of the workbook file, enclosed in angle brackets (for example, <<myfile>>).
4. Enter the name of the script.
5. Type } and press ENTER.
6. Enter any other commands in your macro.

{button ,AL(`H_CALLING_A_SCRIPT_FROM_A_MACRO_DETAILS',1)} See details

{button ,AL(`H_CALLING_A_SCRIPT_FROM_A_MACRO_EX',1)} See example

{button ,AL(`H_123_MACROS_OVER;H_COMMON_ERRORS_IN_MACROS_OVER;H_NAMING_AND_DOCUMENTING_A_MACRO_STEPS;H_SAVING_A_MACRO_STEPS;H_SYNTAX_RULES_FOR_MACROS_OVER;H_PARTS_OF_A_MACRO_OVER;',0)} See related topics

Details: Calling a script from a macro

Duplicate names

When you call a script from a macro, be careful that your script name does not duplicate the name of a macro keyword or a named range.

When you specify a script name in a macro, 1-2-3 first checks whether the name is a macro keyword or a range. If 1-2-3 finds a macro keyword by the specified name, it evaluates the command as a macro. If 1-2-3 finds a range by that name, it looks for macro commands at that range. Only if it cannot find a macro keyword or a range name by the specified name does 1-2-3 look for a script to execute.

Running a script in another workbook

If your macro calls a script in another workbook, the workbook containing the script must be active when you run the macro.

{button ,AL(`H_CALLING_A_SCRIPT_FROM_A_MACRO_STEPS',1)} Go to procedure

Example: Calling a script from a macro

The following macro calls a script named GetData, which puts data in cells A1..B15. The macro then names the range and styles the data retrieved by GetData.

```
{GetData}
{RANGE-NAME-CREATE "DATA";A1..B15}
{STYLE-FONT-ATTRIBUTES "BOLD";"ON";"DATA"}
```

Changing the argument separator

The standard separator to use between macro and @function arguments is ; (semicolon). However, you can specify a different character.

1. From the Windows 95 Start menu, choose Settings.
2. From the Settings menu, choose Control Panel.
3. Double-click Regional Settings.
4. Click the Number tab.
5. In the "List separator" box, enter or select the separator you want to use.

   You can use any character as the argument separator. Common separators to use are , (comma) and . (period).

   Note The argument separator cannot be the same as the decimal symbol.

{button ,AL(`H_123_MACROS_OVER;H_FUNC_BASICS;H_PARTS_OF_A_MACRO_OVER;H_FUNCTION_FORMAT_OVER;',0)} See related topics

Installing Help on macro commands

Help on macro commands is not installed by the Install program. If you have the 1-2-3 97 or SmartSuite 97 CD-ROM, you can install macro Help from there. If not, you can download macro Help from the World Wide Web or order a copy from Lotus Customer Support.

Once macro Help is copied to the correct location on your computer, you can access it by using Help - Help Topics or by clicking the Help button in the Macro Keywords dialog box.

Installing macro Help from the CD-ROM

1. Insert the CD-ROM in the appropriate drive.
2. Start the Windows Explorer.
3. Double-click the icon for the CD drive.
4. Open the EXTRA\123\MACROHLP folder.
5. Select the files ssmn60en.hlp and ssmn60en.cnt, and choose Edit - Copy.
6. Open the folder where you installed 1-2-3 (typically \lotus\123), and choose Edit - Paste.

   Macro Help will be available the next time you open Help.

Installing macro Help from the World Wide Web

1. Choose Help - Lotus Internet Support - Lotus Customer Support.

2. In the Hot Topics list, locate the link for 1-2-3 97 Macros Help.
3. Double-click "Installation instructions" to read about how to download the files to your local computer.

   After you download the files, macro Help will be available the next time you open Help.

Getting macro Help from Lotus Customer Support

If you do not have access to the World Wide Web and you do not have a CD-ROM copy of 1-2-3, you can order a copy of macro Help, as well as instructions for installing it, from Lotus Customer Support.

Note 1-2-3 will not automatically remove the macro Help files if you choose to uninstall 1-2-3. Instead, you will need to manually delete these files.

{button ,AL(`H_PHONE_NUMBERS_AND_HOURS_US_OVER;H_PHONE_NUMBERS_AND_HOURS_CANADA_OVER;H_LOTUS_CUSTOMER_SUPPORT_INT_OVER;H_123_MACROS_OVER;',0)} See related topics

Help on macro commands

Use the Macro Keywords dialog box to enter the name of a macro command in a cell, along with argument placeholders. To display the dialog box, enter { (open brace) in a cell and press F3 (NAME).

Choose a topic

Writing a macro
Macro commands A-Z (available only if you have installed Help on macro commands)
Installing Help on macro commands

{button ,AL(`H_123_MACROS_OVER;H_MACRO_COMPATIBILITY_OVER;H_123_RELEASE_5_MACRO_COMMAND_EQUIVALENTS_OVER;H_OBSOLETE_MACINTOSH_COMMANDS_OVER;',0)} See related topics

Macro compatibility

A number of macro commands that were supported in previous releases of 1-2-3 are no longer supported in 1-2-3 97. In addition, the behavior of some macros has changed.

Chart macro commands

These macro commands are no longer supported:

- {CHART-COLOR-RANGE}
- {CHART-PATTERN-RANGE}
- {CHART-SET-PREFERRED}
- {CHART-USE-PREFERRED}

In addition, the {CHART-TYPE} macro command for xy scatter charts works differently in this release. 1-2-3 no longer supports stacked xy scatter charts. Therefore, {CHART-TYPE "xy";1}, {CHART-TYPE "xy";3}, and {CHART-TYPE "xy";5} all generate non-stacked xy scatter charts.

Database macro commands

These macro commands are no longer supported:

- {CROSSTAB}
- {QUERY-UPGRADE}

DDE and OLE macro commands

These macro commands are no longer supported:

- {DDE-ADVISE}
- {DDE-CLOSE}
- {DDE-EXECUTE}
- {DDE-OPEN}
- {DDE-POKE}
- {DDE-REQUEST}
- {DDE-UNADVISE}
- {DDE-USE}
- {LINK-TABLE}

Edit macro commands

The "query" argument in {EDIT-PASTE-SPECIAL} is not supported. If you use the argument, the macro stops and 1-2-3 displays an error message.

File macro commands

The {FILE-SEAL-NETWORK-RESERVATION} macro is no longer supported.

When attempting to find a named print style to use, {PRINT-NAME-USE} looks first in the current workbook. If there is no print style by that name in the current workbook, 1-2-3 looks for an .AL3 file. If it finds the .AL3 file, 1-2-3 creates a new named print style in the current workbook using the file name.

{PRINT-NAME-ADD} never creates an .AL3 file, but instead adds a named print style to the current workbook. If there is already a print style with that name, the macro stops and displays an error message.

Flow-of-control macro commands

These macro commands are no longer supported:

- {LOTUS-LAUNCH}
- {SYSTEM}

Solver macro commands

To use {SOLVER} macros, you must install the Solver add-in. A trial version of the Solver add-in is provided in the \EXTRA\123\SOLVER directory on the 1-2-3 and SmartSuite CD-ROMs. For more information about Solver, contact:

Frontline Systems, Inc.

PO Box 4288
Incline Village, NV 89450

Tel: (702) 831-0300
Fax: (702) 831-0314
Web: http://www.frontsys.com
E-mail: info@frontsys.com

The {BACKSOLVE} macro command works even if the Solver add-in is not installed.

Tools macro commands

These macro commands are no longer supported:

- {ADDIN-INVOKE}
- {REGISTER}
- {UNREGISTER}

In addition, the {AUDIT} macro command is no longer supported; instead, its functionality is provided through the audit cells icon, available in the Extra directory on the 1-2-3 and SmartSuite CD-ROMs:

User environment macro commands

These macro commands are no longer supported:

- {FORM}
- {FORMBREAK}

Version Manager macro commands

These macro commands are no longer supported:

- {RANGE-VERSION?}
- {VERSION-INDEX-COPY}
- {VERSION-UPDATE}

{button ,AL(`H_123_CONVERTING_MACRO_BUTTONS_OVER;H_PHONE_NUMBERS_AND_HOURS_US_OVER;H_PHONE_NUMBERS_AND_HOURS_CANADA_OVER;H_LOTUS_CUSTOMER_SUPPORT_INT_OVER;H_OBSOLETE_MACINTOSH_MACROS_OVER',0)} See related topics

Obsolete 1-2-3 for Macintosh commands

The following macro commands, which worked with 1-2-3 for Macintosh and were supported in previous releases of 1-2-3 for Windows, are no longer supported.

1-2-3 for Macintosh command	Similar 1-2-3 97 functionality
{DATA-DISTRIBUTION}	{DISTRIBUTION}
{DATA-EXTERNAL-CONNECT}	{DATABASE-CONNECT}
{DATA-EXTERNAL-CREATE-TABLE}	{DATABASE-CREATE-TABLE}
{DATA-EXTERNAL-DISCONNECT}	{DATABASE-DISCONNECT}
{DATA-EXTERNAL-SEND-COMMAND}	{DATABASE-SEND-COMMAND}
{DATA-FILL}	{FILL}
{DATA-MATRIX-INVERT}	{MATRIX-INVERT}
{DATA-MATRIX-MULTIPLY}	{MATRIX-MULTIPLY}
{DATA-PARSE}	{PARSE}
{DATA-REGRESSION}	{REGRESSION}
{DATA-REGRESSION-RESET}	No similar macro available
{EDIT-CLEAR-CONTENTS}	{EDIT-CLEAR}
{EDIT-CLEAR-STYLES}	{EDIT-CLEAR}
{EDIT-MOVE-CELLS}	{EDIT-QUICK-MOVE}
{FILE-PRINT}	{PRINT}
{FILE-PRINT-NAME-ADD}	{PRINT-NAME-ADD}
{FILE-PRINT-NAME-USE}	{PRINT-NAME-USE}
{FILE-PRINT-RESET}	{PRINT-RESET}
{FILE-PRINT-SELECTION}	{PRINT}
{FILE-PRINT-SELECTION?}	{PRINT?}
{FILE-PRINT?}	{PRINT?}
{FILE-QUIT}	{FILE-EXIT}
{GRAPH-NEW}	No similar macro available
{GRAPH-VIEW}	No similar macro available
{RANGE-FORMAT}	{STYLE-NUMBER-FORMAT}
{RANGE-FORMAT-RESET}	{STYLE-NUMBER-FORMAT-RESET}
{RANGE-GOTO}	{EDIT-GOTO}
{RANGE-PROTECT}	{PROTECT}
{RANGE-UNPROTECT}	{UNPROTECT}
{ROW-HEIGHT-RESET}	{ROW-HEIGHT-FIT-LARGEST}
{SELECT-ALL-SHEETS}	{SELECT-ALL}
{SELECT-RANGE}	{SELECT}
{SELECT-RANGE-APPEND}	{SELECT-APPEND}
{STYLE-ALIGN}	{STYLE-ALIGN-HORIZONTAL}
{STYLE-BACKGROUND-COLOR}	{STYLE-INTERIOR}
{STYLE-BACKGROUND-PATTERN}	{STYLE-INTERIOR}
{STYLE-FONT-EMPHASIS}	{STYLE-FONT-ATTRIBUTES}
{STYLE-FOREGROUND-COLOR}	{STYLE-INTERIOR}
{STYLE-TEXT-COLOR}	{STYLE-INTERIOR}
{USER-SETUP-UPDATE}	No similar macro available
{WINDOW-CLOSE}	{FILE-CLOSE}

{button ,AL(`H_MACRO_COMPATIBILITY_OVER;',0)} See related topics

Run Scripts & Macros dialog box

Use this dialog box to run existing scripts and macros.

Choose a task

- Running a macro
- Running a script
- Debugging a macro

{button ,AL(`H_123_MACROS_OVER;',0)} See related topics

Overview: Using menus

1-2-3 commands appear on the main menu. To cancel out of a menu, press ESC one or more times.

The main menu

The 1-2-3 commands below always appear on the main menu when a workbook is active.

- File
- Edit
- View
- Create
- Sheet
- Window
- Help

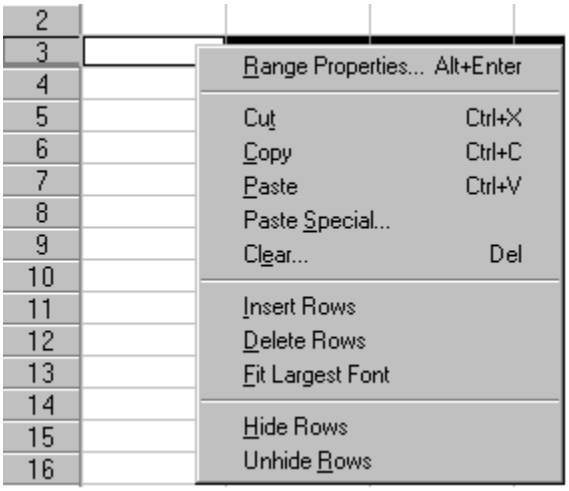
One command on the menu changes, depending on your current selection. For example, if you select a range, the command changes to Range, but if you select a drawing, then the command changes to Drawing.

You will see one of the following commands:

- Range
- Query Table
- Drawing
- Map
- Chart
- Preview
- If you select an OLE object, the name of that OLE object, such as Presentation or Document, appears in the menu.

Shortcut menus

Shortcut menus display useful commands for working with the current selection. To display a shortcut menu, select a range or graphic object, then right-click the selection. For example, if you select a row and then right-click the selection, you will see menu commands appropriate for working with rows, as shown below.



You can't display a shortcut menu while you are editing in a cell or text block, or while a dialog box is open.

The 1-2-3 Classic menu

1-2-3 Classic is the / (slash) command menu of 1-2-3 for DOS Release 3.1, available in 1-2-3 97. For more information, see Overview: 1-2-3 Classic.

{button ,AL(`H_CANCELLING_A_COMMAND_STEPS;H_GETTING_HELP_ON_A_MENU_COMMAND_STEPS;H_UNDOING_A_COMMAND_STEPS;',0)} See related topics

Getting Help on a menu command

Help provides descriptions of the commands on each menu.

1. Click the command on the main menu (for example, File, Edit, View).
2. Press F1 (HELP) to see a Help topic describing each command on that menu.

Tip When you highlight a command, a description appears in the title bar of the 1-2-3 window.

{button ,AL(`H_GETTING_HELP_ON_A_MENU_COMMAND_DETAILS',1)} See details
{button ,AL(`H_USING_MENUS_OVER;H_123_COMMANDS_REF;',0)} See related topics

Details: Getting Help on a menu command
1-2-3 has context-sensitive Help for all menu commands, InfoBox tabs, and dialog boxes.

Other ways to get Help
To display Help on a dialog box, click the Help button. To display Help on an InfoBox tab, click the ?... (question mark) button in the top-right corner of the InfoBox.

{button ,AL(`H_GETTING_HELP_ON_A_MENU_COMMAND_STEPS',1)} Go to procedure

Overview: Versions

As an individual or as part of a team, you can create and work with versions to perform what-if analyses and track spreadsheet changes. You can use versions to test business assumptions, devise strategies based on different business scenarios, or coordinate the contributions of a team or workgroup.

What are versions?

Versions are sets of different data for the same named range. Each version has a name, a date and time of creation and modification, and the name of the person who created or last modified the version. You can also assign styles and protection settings to a version and attach a comment.

For example, you can name a range Revenues and create three versions of the range: HighRev, with values of 600, 500, 400, and 300; MedRev, with values of 500, 400, 300, and 200; and LowRev, with values of 400, 300, 200, and 100.

You can create versions of any named range. For example, as well as creating versions of Revenues, you might name another range Expenses and create versions named HighExp, MedExp, and LowExp.

When you create versions for a named range, all the versions are stored in the cells of the range. 1-2-3 calculates using the values in the currently displayed version. Any style or data changes you make to cells update the version within that range automatically.

Tracking changes to data

Using versions lets you track changes to data. With versions, you can always tell the *who*, *when*, *what*, and *why* of data.

Tracking is especially useful in a workgroup where different team members contribute to the same spreadsheet. You can always tell who created a version and when it was created or modified. From the comments, you can tell what type of data a version contains and why it was created or modified.

Using versions for what-if analysis

Formulas that refer to cells in a versioned range vary according to the version of the range currently displayed. Displaying different versions of a range and comparing the effect on other values in your spreadsheet is a good way to do simple what-if analysis.

For example, you can create High and Low versions for a range named Sales and compare the effect of those versions on other values.

{button ,AL(`;H_SHARING_VERSIONS_WITH_A_TEAM_OVER;H_WORKING_WITH_VERSION_GROUPS_OVER;H_DELETING_VERSIONS_STEPS;H_DISPLAYING_VERSIONS_STEPS;H_CREATING_A_VERSION_STEPS;',0)} See related topics

Overview: Sharing versions with a team

You can increase team productivity by sharing versions and version groups. For example, team members can collaborate on a sales projection by each entering their versions of projected sales and expenses. As the originator of a shared workbook or range, you can distribute a workbook or range to a team, then consolidate the contributions of team members into your original workbook or range.

You can share entire workbooks (or ranges within a workbook) on a network or without a network.

Sharing an entire workbook

To share an entire workbook containing versioned ranges, use File - TeamMail. When you receive changes from team members on your distribution list, you can use File - TeamConsolidate - Merge Versions to merge their changes into the master copy.

 See related topics

Sharing a versioned range

To share just a versioned range in a workbook, use File - TeamReview. When the range has been distributed to team members, it is returned to you automatically, and you can then consolidate it back into a master workbook. The consolidation process creates versions automatically based on the changes received from team members.

 See related topics

Sharing a workbook on a network

You can also share a workbook using a network and workbook reservations. Every team member can read the workbook containing the versions, but only the person who currently has the reservation can make changes.

 See related topics

Creating a version

You can name a range and create versions at the same time, or you can create versions of previously named ranges.

Show me a demo

1. Select the range.
2. Choose Range - Version - New Version.

3. If the range is not already named, enter a name in the "Name of range containing versions" box or accept the default name.
4. Accept the default version name or enter a different name in the "Name of new version" box.
5. (Optional) To copy data in the original named range into the new version, select "Use current data for new version."

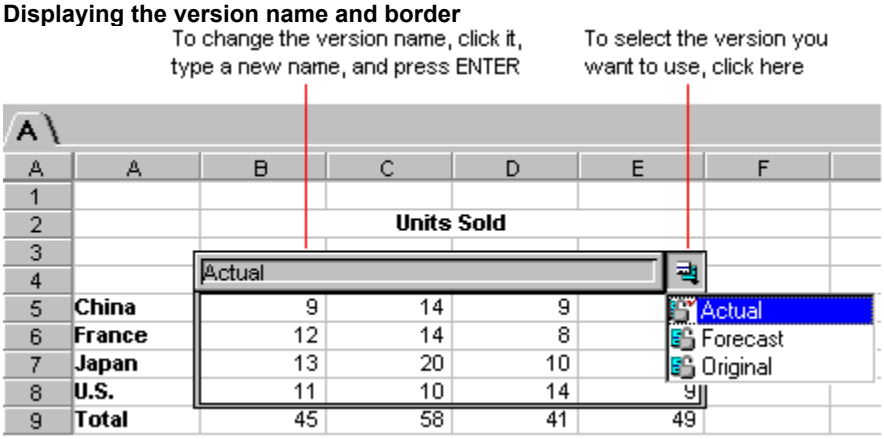
   If you leave this option deselected, the new version is blank.
6. (Optional) Click Next to enter a comment or set options.
7. Click Done.

{button ,AL(`H_CREATING_A_VERSION_DETAILS',1)} See details

{button ,AL(`H_WORKING_WITH_VERSIONS_OVER;H_NAMING_A_RANGE_STEPS;H_CHANGING_VERSION_PROPERTIES_STEPS;H_DELETING_VERSIONS_STEPS;H_DISPLAYING_VERSIONS_STEPS;',0)} See related topics

Details: Creating a version

Displaying the version name and border



Displaying the version name and border makes it easy to:

- Identify ranges that contain versions.
- Display a different version quickly by clicking the arrow next to the version name and selecting a version from the list.
- Get quick access to commands for working with versions. Right-click the version name to display the shortcut menu.

Renaming versions used in @functions

If you change the name of a version used in an @function, you can use Edit - Find & Replace to replace the old name with the new name in the @function.

Turning on version names and borders for the whole workbook

To turn version names and borders on or off for the whole workbook, use File - Workbook Properties (View tab).

Limitations

You can create versions of named ranges only if they contain 2000 or fewer cells.

{button ,AL(`H_CREATING_A_VERSION_STEPS',1)} Go to procedure

{button ,AL(`H_SETTING_VIEW_PREFERENCES_FOR_WORKBOOKS_DETAILS;',0)} See related topics

Options: New Version dialog box (Step 2: Options tab) and Range InfoBox (Versions tab)

Name of current version

You can change the name here. This option appears only on the Range InfoBox (Versions tab).

Comment

The comment you enter in the New Version dialog box appears in the InfoBox when the version is displayed in the sheet.

Show name and border around versions

Displays the version name and a border around the named range. You can change whether the version name and border are displayed by default with File - Workbook Properties (View tab).

Keep styles with version

Retains the styles of the range; you can create a different style, for example, a background color, for each version.

Protection

The protection setting you choose takes effect only after you lock the sheet or workbook.

- Unprotected. You can display, change, or delete the version unless any part of the versioned range is protected with cell protection. Cell protection does not take effect until the workbook is locked.
- Protected. Once the sheet or workbook is locked, you cannot change the version's data or properties, or delete it. You can display it in the sheet unless any part of the versioned range is protected with cell protection.
- Hidden. Once the sheet or workbook is locked, the version name does not appear in lists of versioned ranges, and you cannot display, change, or delete it. The InfoBox also does not display version information for a hidden version.

{button ,AL(`H_PROTECTING_DATA_OVER;H_WORKING_WITH_VERSIONS_OVER;H_CREATING_A_VERSION_DETAILS;',0)} See related topics

Displaying a version

You can display different versions in a sheet. When you display a version, 1-2-3 recalculates all formulas and charts associated with the displayed version.

Show me a demo

1. Choose Range - Version - Display Version.

2. From the "Display version for range" list, select the range containing the version you want to display.
3. From the list of versions, select the version you want to display.
4. If the version is in a part of the sheet outside the displayed area and you want to see the version when you display it, select "Go to version when displayed."
5. Click Display.
6. (Optional) To display another version of the same range, repeat step 3; to display a version of a different named range, repeat steps 2 and 3.
7. Click Done.

Tip If the version name and borders are displayed in the sheet, you can click the arrow next to the name and select the version to display.

{button ,AL(`H_DISPLAYING_VERSIONS_DETAILS',1)} See details

{button ,AL(`H_WORKING_WITH_VERSIONS_OVER;H_CREATING_A_VERSION_STEPS;H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS;H_DELETING_VERSIONS_STEPS;H_CHANGING_VERSION_PROPERTIES_STEPS;',0)} See related topics

Details: Displaying a version

In a locked sheet or workbook, hidden versions don't appear in the list of versions. If all the versions in a range are hidden, the range name does not appear in the "Display version for range" list.

{button ,AL(`H_DISPLAYING_VERSIONS_STEPS',1)} Go to procedure

{button ,AL(`H_OPTIONS_BOX_NEW_VERSION_TAB_OPTIONS_REF;H_PROTECTING_DATA_OVER',0)} See related topics

Changing version properties

You can use the InfoBox to change the version name, comment, and options for displaying, styling, and protecting versions.

1. Select the named range containing the version you want to change.
2. Choose Range - Range Properties.

3. Click the Version tab in the InfoBox.

4. Change one or more properties.
5. (Optional) Move, collapse, or close the InfoBox.

Tip If the version name and borders are displayed in the sheet, you can rename the currently displayed version by clicking the name, typing a new name, and pressing ENTER.

For a description of the options on this InfoBox tab, see Options.

{button ,AL(`H_CHANGING_VERSION_PROPERTIES_DETAILS',1)} See details

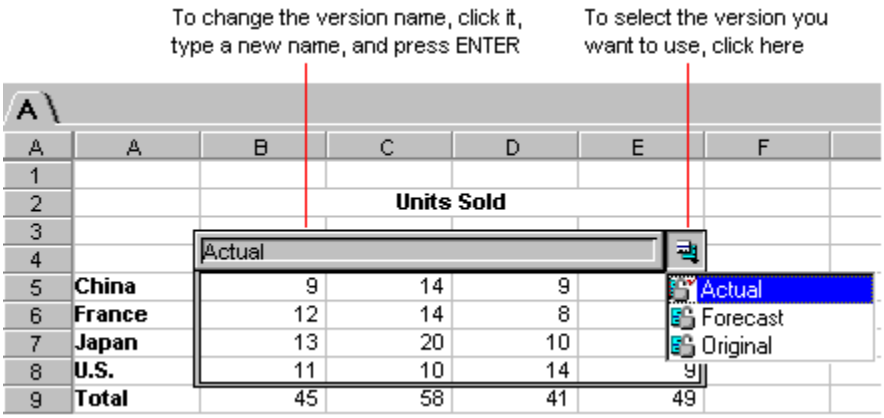
{button ,AL(`H_WORKING_WITH_VERSIONS_OVER;H_CREATING_A_VERSION_STEPS;H_DISPLAYING_VERSIONS_STEPS;H_FINDING_RANGES_AND_OTHER_OBJECTS_STEPS;H_DELETING_VERSIONS_STEPS;',0)} See related topics

Details: Changing version properties

Displaying the version name and border

Displaying the version name and border makes it easy to:

- Identify ranges that contain versions.
- Display a different version quickly by clicking the arrow next to the version name and selecting a version from the list.
- Get quick access to commands for working with versions. Right-click the version name to display the shortcut menu.
- Edit the version name.



Renaming versions used in @functions

If you change the name of a version used in an @function, you can use Edit - Find & Replace to replace the old name with the new name in the @function.

Turning on version names and borders for the whole workbook

To turn version names and borders on or off for the whole workbook, use File - Workbook Properties (View tab).

{button ,AL(`H_CHANGING_VERSION_PROPERTIES_STEPS',1)} Go to procedure

Deleting a version

1. Choose Range - Version - Delete Version.

2. From the "Delete version for range" list, select the range containing the version you want to delete.
3. From the list of versions, select the version to delete.
4. Click Delete.
5. (Optional) To delete another version, repeat steps 2 through 4.
6. Click Done.

{button ,AL(`H_DELETING_VERSIONS_DETAILS',1)} See details

{button ,AL(`H_WORKING_WITH_VERSIONS_OVER;H_CREATING_A_VERSION_STEPS;H_DISPLAYING_VERSIONS_STEPS;H_CHANGING_VERSION_PROPERTIES_STEPS;',0)} See related topics

Details: Deleting a version

What happens when you delete a version?
After you delete a version, 1-2-3 displays one of the remaining versions in the sheet. If there are no other versions for the range, or if all other versions are hidden, the range contains the data for the last version you deleted, but no longer stores the data as a version.

Hidden and protected versions
You cannot delete protected or hidden versions in a locked sheet or workbook, or delete an unprotected version if it is displayed in a locked workbook and one or more cells are protected. The names of hidden versions in a locked workbook do not appear in the list of versions.

{button ,AL(`H_DELETING_VERSIONS_STEPS',1)} Go to procedure
{button ,AL(`H_PROTECTING_DATA_OVER;',0)} See related topics

Creating a version report

You can create a report showing selected versions and their effect on formulas. 1-2-3 creates the report in a new workbook.

1. Choose Range - Version - Report.
2. From the "Report on this range" list, select the name of the range containing the versions you want to include in the report.
3. From the "Include these versions" list, click one or more versions.
4. (Optional) To see the effect of the selected versions on formulas in the sheet, enter the address or name of the range containing the formulas in the "Results of dependent formulas in this range" box.
5. (Optional) To include the data for the selected versions, select "Version data."
6. (Optional) To include the names of people who created or last modified the version, along with the date and time the version was created and modified, select "Creator, editors, and dates."
7. Under Arrange report, select "By columns" or "By rows."
8. Click OK.

{button ,AL(`H_CREATING_A_VERSION_REPORT_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_VERSION_REPORT_EX;',1)} See example

{button ,AL(`H_WORKING_WITH_VERSIONS_OVER;',0)} See related topics

Details: Creating a version report
1-2-3 creates the version report in a new workbook, with the name REPORT followed by a number: for example, REPORT1.123. To view the workbook, choose Window and select the report name. You can print and save this as you would any other workbook.

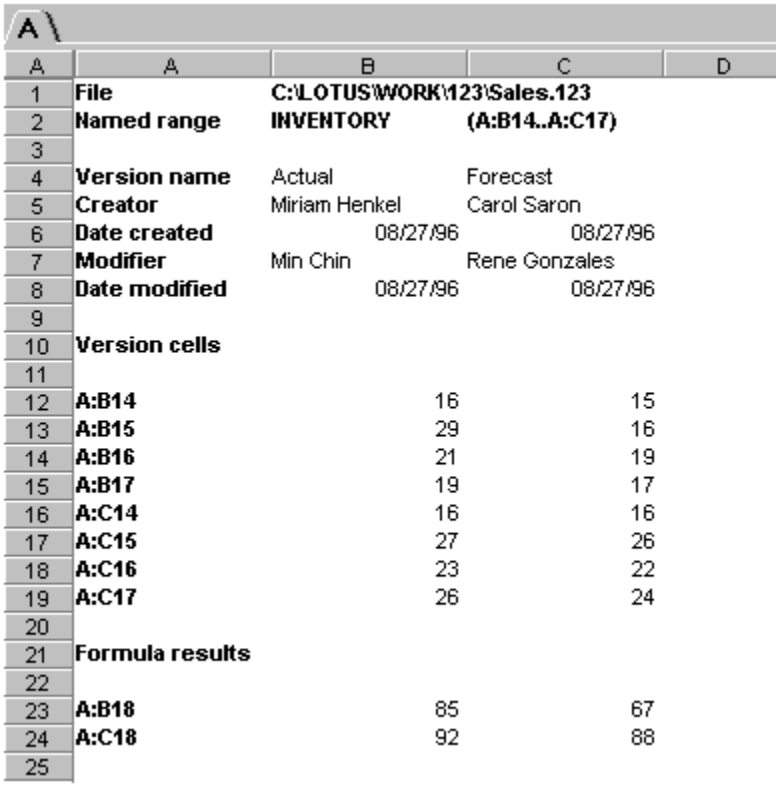
Specifying the range of formulas
If you specify a range in the "Results of dependent formulas in this range" box, 1-2-3 recalculates formulas in active files. Formulas will show the results of the respective versions in the report file.

You can't specify a collection for the range of formulas.

{button ,AL(`H_CREATING_A_VERSION_REPORT_STEPS',1)} Go to procedure

Example: Creating a version report

The illustration below is an example of a version report. This report shows the name of the file containing the versions, the name and address of the versioned range, the reported versions, the version data, and the effect of the versions on the specified formula.



	A	B	C	D
1	**File**	**C:\LOTUS\WORK\123\Sales.123**		
2	**Named range**	**INVENTORY**	**(A:B14..A:C17)**	
3				
4	**Version name**	Actual	Forecast	
5	**Creator**	Miriam Henkel	Carol Saron	
6	**Date created**	08/27/96	08/27/96	
7	**Modifier**	Min Chin	Rene Gonzales	
8	**Date modified**	08/27/96	08/27/96	
9				
10	**Version cells**			
11				
12	**A:B14**	16	15	
13	**A:B15**	29	16	
14	**A:B16**	21	19	
15	**A:B17**	19	17	
16	**A:C14**	16	16	
17	**A:C15**	27	26	
18	**A:C16**	23	22	
19	**A:C17**	26	24	
20				
21	**Formula results**			
22				
23	**A:B18**	85	67	
24	**A:C18**	92	88	
25				

{button ,AL(`H_CREATING_A_VERSION_REPORT_STEPS;',0)} See related topics

Overview: Version groups

You can group versions of different named ranges and name the version group. For example, you can group the HighRev version of Revenues with the LowExp version of Expenses to create a version group named BestCase, or create a version group named WorstCase that combines the LowRev version of Revenues with the HighExp version of Expenses.

Using version groups for what-if analysis

Formulas that refer to cells in a versioned range vary according to the version of the range currently displayed. Displaying different versions of a range and comparing the effect on other values in your spreadsheet is a good way to do simple what-if analysis.

With version groups, you can perform more complex what-if analyses. When you display a version group, all the versions in that group appear in the sheet, affecting any formulas that refer to the versions. You can combine versions into many different groups, display these groups, and compare the various effects.

{button ,AL(`H_WORKING_WITH_VERSIONS_OVER;H_SHARING_VERSIONS_WITH_A_TEAM_OVER;H_CREATING_A_VERSION_GROUP_STEPS;H_DISPLAYING_VERSION_GROUPS_STEPS;H_MODIFYING_A_VERSION_GROUP_STEPS;H_DELETING_VERSION_GROUPS_STEPS;',0)} See related topics

Creating a version group

You can group versions and name the new version group.

Show me a demo

1. Choose Range - Version - Version Groups.

2. Click New Group.
3. Enter a name in the "Name of version group" box or accept the default name.
4. To add a version to the new group, drag it from the "Available versions" list to the "Versions in group" list.
   For each named range, you can select only one version to put in the new version group.
5. To remove a version from the group, drag it outside the "Versions in group" list.
6. From the "Protection for group list," select an option: "Protected," "Unprotected," or "Hidden."
7. (Optional) In the "Comments" box, enter a comment about the version group.
8. Click OK to return to the Version Groups dialog box.
9. Click Done.

{button ,AL(`H_CREATING_A_VERSION_GROUP_DETAILS',1)} See details

{button ,AL(`;H_WORKING_WITH_VERSION_GROUPS_OVER;H_MODIFYING_A_VERSION_GROUP_STEPS;H_DELETING_VERSION_GROUPS_STEPS;H_DISPLAYING_VERSION_GROUPS_STEPS;',0)} See related topics

Details: Creating a version group

Overlapping versioned ranges
Do not include overlapping versions in the same version group. This may result in unpredictable data or data loss in the overlapping cells of the version group.

Expanding and collapsing the "Available versions" and "Versions in group" lists
You can expand and collapse the "Available versions" and the "Versions in group" lists by double-clicking range names.

When a workbook is locked
When a workbook is locked, hidden version groups will not appear under "Version group." You cannot change the properties of protected versions or version groups. However, you can add a protected version to an unlocked version group.

You cannot create a hidden version in a locked workbook.

You can add protected versions to a new version group.

{button ,AL(`H_CREATING_A_VERSION_GROUP_STEPS',1)} Go to procedure
{button ,AL(`H_PROTECTING_DATA_OVER;',0)} See related topics

Displaying a version group

When you display a version group, all the versions in the group appear in the sheet.

1. Choose Range - Version - Version Groups.

2. From the "Version group" list, select the group you want to display.
3. Click Display Group.
4. (Optional) To display another version group, repeat steps 2 and 3.
5. Click Done.

Tip If the version name and borders are displayed in the sheets, you can click the arrow next to the name of a version in the group, and then select the version group to display.

{button ,AL(`H_DISPLAYING_VERSION_GROUPS_DETAILS',1)} See details

{button ,AL(`H_WORKING_WITH_VERSION_GROUPS_OVER;H_CREATING_A_VERSION_GROUP_STEPS;H_MODIFYING_A_VERSION_GROUP_STEPS;H_DELETING_VERSION_GROUPS_STEPS;',0)} See related topics

Details: Displaying a version group

Hidden and protected versions

If a version group contains any hidden versions and the sheet or workbook containing that group is locked, 1-2-3 does not display the hidden versions.

1-2-3 also does not display a versioned range if it is protected with cell protection or if any cells within that range are protected.

{button ,AL(`H_DISPLAYING_VERSION_GROUPS_STEPS',1)} Go to procedure

{button ,AL(`H_OPTIONS_BOX_NEW_VERSION_TAB_OPTIONS_REF;H_PROTECTING_DATA_OVER',0)} See related topics

Changing a version group

You can add or remove versions in a version group.

1. Choose Range - Version - Version Groups.

2. From the "Version group" list, select the group you want to edit.
3. Click Edit Group.
4. To rename the group, enter a new name in the "Name of version group" box.
5. To add a version to the group, drag it from the "Available versions" list to the "Versions in group" list.
6. To remove a version from the group, drag it outside the "Versions in group" list.
7. From the "Protection for group" list, select an option: "Unprotected," "Protected," or "Hidden."
8. In the "Comments" box, enter a comment.
9. Click OK to return to the Version Groups dialog box.
10. Click Done.

{button ,AL(`H_MODIFYING_A_VERSION_GROUP_DETAILS',1)} See details

{button ,AL(`;H_WORKING_WITH_VERSION_GROUPS_OVER;H_CREATING_A_VERSION_GROUP_STEPS;H_DISPLAYING_VERSION_GROUPS_STEPS;H_DELETING_VERSION_GROUPS_STEPS;',0)} See related topics

Details: Changing a version group

Overlapping versioned ranges
Do not include overlapping versions in the same version group. This may result in unpredictable data or data loss in the overlapping cells of the version group.

Protection settings
You can change the protection setting for a version group only if the sheet or workbook is unlocked.

You can protect an unprotected version group in a locked workbook.

You cannot edit the properties of a protected version group in a locked workbook.

Hidden version groups in a locked workbook do not appear in the "Version group" list, so you cannot edit their properties.

{button ,AL(`H_MODIFYING_A_VERSION_GROUP_STEPS',1)} Go to procedure

{button ,AL(`H_OPTIONS_BOX_NEW_VERSION_TAB_OPTIONS_REF;H_PROTECTING_DATA_OVER;',0)} See related topics

Deleting a version group

Deleting a version group does not delete the versions (or the data in the versions) that made up the group.

1. Choose Range - Version - Version Groups.

2. From the "Version group" list, select the group you want to delete.
3. Click Delete Group.
4. (Optional) To delete another version group, repeat steps 2 and 3.
5. Click Done.

{button ,AL(`H_DELETING_VERSION_GROUPS_DETAILS',1)} See details

{button ,AL(`;H_WORKING_WITH_VERSION_GROUPS_OVER;H_CREATING_A_VERSION_GROUP_STEPS;H_DISPLAYING_VERSIONS_STEPS;H_MODIFYING_A_VERSION_GROUP_STEPS;',0)} See related topics

Details: Deleting a version group

Protected or hidden versions
You cannot delete version groups that are protected or hidden if the workbook containing those version groups is locked.

{button ,AL(`H_DELETING_VERSION_GROUPS_STEPS',1)} Go to procedure

{button ,AL(`H_OPTIONS_BOX_NEW_VERSION_TAB_OPTIONS_REF;H_PROTECTING_DATA_OVER;',0)} See related topics

Version Groups dialog box

Choose a task

- Creating a version group
- Displaying a version group
- Changing a version group
- Deleting a version group

{button ,AL(`;H_WORKING_WITH_VERSION_GROUPS_OVER',0)} See related topics

Overview: What-if tables and Backsolving

What-if tables display the results of substituting different values for formula variables. You can use what-if tables to evaluate questions such as "What if my sales went up 30%; how would that affect my profits?"

Backsolving is another way to answer what-if problems that use a formula. Backsolver lets you specify the result of a formula and find the value of one or more variables in the formula.

Setting up and calculating what-if tables

Before making a what-if calculation, you must set up the what-if table in a specific format in the sheet. To set up the table, you enter the formulas and the different values you want to substitute for formula variables.

Then you use Range - Analyze - What-if Table to calculate the formulas using every combination of values for the variables. You can substitute values for one, two, or three variables in formulas. The results appear in one-variable, two-variable, and three-variable what-if tables.

 See example

Backsolving what-if problems

Backsolver lets you specify the result of a formula and see how that changes the value of one or more variables in the formula.

For example, suppose the result of a formula is the monthly payment on a loan, and one of the formula variables is the loan amount. What if you can make a larger monthly payment; how would that affect the amount you can borrow? You can use Backsolver to specify the larger formula result and see how that changes the loan amount variable.

 See example

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{button ,AL(`H_SETTING_UP_A_ONE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_TWO_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_THREE_VARIABLE_WHATIF_TABLE_STEPS;H_CALCULATING_WHATIF_TABLES_STEPS;H_CLEARING_WHATIF_TABLE_SETTINGS_STEPS;H_BACKSOLVING_WHATIF_PROBLEMS_STEPS;',0)} See related topics

Setting up a one variable what-if table

You set up a 1-variable what-if table before using Range - Analyze - What-if Table to calculate the results.

1. Decide where you want the table range and make it big enough for the input values, the formula(s), and the results.

   The height of the table range is one cell more than the number of input values, and the width is one cell more than the number of formulas.

   Caution 1-2-3 writes over any existing data in the results area of the table range.

2. Place the input cell outside the table range.

   To make the input cell easy to locate, label it by entering text, such as "Input cell 1," in the adjacent cell to the left.

3. Leave the top left cell in the table range blank.

4. Enter the formula in the first row of the second column in the table range.

   Each formula in the table must refer to this input cell. To verify that the formula works, you can enter a sample value in the input cell.

   If you are using more than one formula, place each additional formula in the first row of the table range in an adjacent column to the right. Make sure each formula refers to the input cell.

5. Enter the input values in the first column of the table range starting in the second row.

{button ,AL(`H_A_1VARIABLE_WHATIF_TABLE_EX',1)} See example

{button ,AL(`H_WHATIF_TABLES_AND_BACKSOLVING_OVER;H_CALCULATING_WHATIF_TABLES_STEPS;H_CLEARING_WHATIF_TABLE_SETTINGS_STEPS;H_SETTING_UP_A_THREE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_TWO_VARIABLE_WHATIF_TABLE_STEPS;',0)} See related topics

Setting up a two variable what-if table

You set up a 2-variable what-if table before using Range - Analyze - What-if Table to calculate the results.

1. Decide where you want the table range and make sure it has enough room for the two sets of input values, the formula, and the results.

   The height of the table range is one cell more than the number of values for Input cell 1, and the width is one cell more than the number of values for Input cell 2.

   Caution 1-2-3 writes over existing data in the results area.

2. Place the two input cells outside the table range.

   To make the input cells easy to locate, label them by entering text, such as "Input cell 1" and "Input cell 2," in the adjacent cells to the left.

3. Enter the formula in the top left cell of the table range.

   This formula must refer to both input cells. To verify that the formula works, you can enter a sample value in each of the input cells.

4. In the first column of the table range, starting with the cell under the formula, enter the values for input cell 1.

5. In the first row of the table range, starting with the first cell to the right of the formula, enter the values for input cell 2.

{button ,AL(`H_A_2VARIABLE_WHATIF_TABLE_EX',1)} See example

{button ,AL(`H_WHATIF_TABLES_AND_BACKSOLVING_OVER;H_CALCULATING_WHATIF_TABLES_STEPS;H_CLEARING_WHATIF_TABLE_SETTINGS_STEPS;H_SETTING_UP_A_ONE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_THREE_VARIABLE_WHATIF_TABLE_STEPS;',0)} See related topics

Setting up a three variable what-if table

You set up a 3-variable what-if table before using Range - Analyze - What-if Table to calculate the results.

1. Decide where you want the 3D table range and make sure it has enough room for the input values, the formula, and the results.

   The table range must be in the same location in consecutive sheets, and it spans a number of sheets equal to the number of values for input cell 3.

   Caution 1-2-3 writes over existing data in the results area.

2. Place the three input cells outside the table range.

   To make the input cells easy to locate, label them by entering text, such as "Input cell 1," "Input cell 2," and "input cell 3" in the adjacent cells to the left.

3. Enter the formula in a cell outside the table range.

   Make sure the formula refers to all three input cells. To verify that the formula works, you can enter a sample value in each of the input cells.

4. In the first column of the table range in the first sheet, starting in the second row of the table, enter the values for input cell 1.

5. In the first row of the table range in the first sheet, starting in the second column of the table, enter the values for input cell 2.

6. Enter the values for input cell 1 and input cell 2 to the same position in each sheet in the 3D table range.

   In most cases, the values for these input cells are the same in each sheet, and you can copy them from one sheet to the others. These values, however, can also be different in each sheet.

7. Enter a value for input cell 3 in the top left cell of the table range in each sheet.

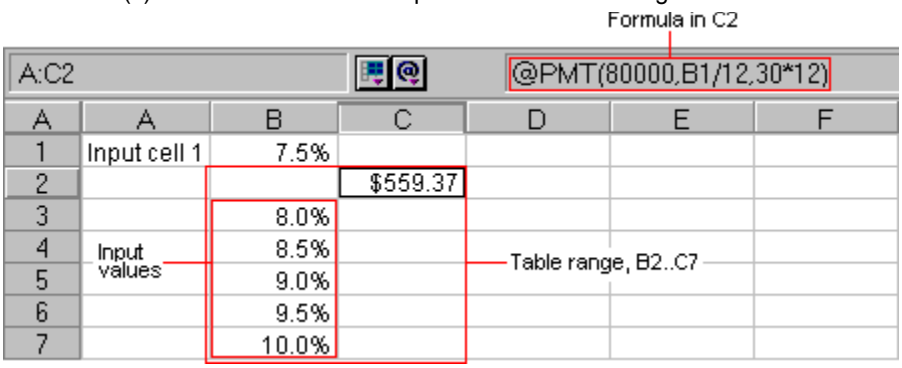
{button ,AL(`H_A_3VARIABLE_WHATIF_TABLE_EX',1)} See example

{button ,AL(`H_WHATIF_TABLES_AND_BACKSOLVING_OVER;H_CALCULATING_WHATIF_TABLES_STEPS;H_CLEARING_WHATIF_TABLE_SETTINGS_STEPS;H_SETTING_UP_A_ONE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_TWO_VARIABLE_WHATIF_TABLE_STEPS;',0)} See related topics

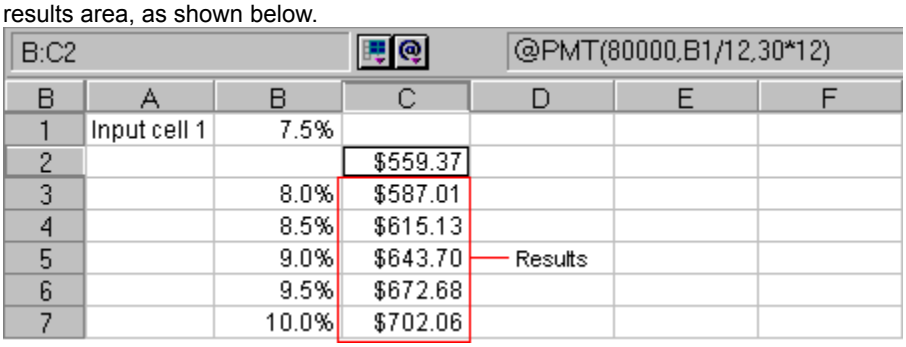
Example: 1-variable what-if table
A 1-variable what-if table displays the results of substituting different values for one variable in one or more formulas.

1-variable table with one formula
You can use a 1-variable table to calculate monthly payments for a 30-year mortgage of $80,000 at various interest rates. In this what-if problem, you substitute values for a single variable: the interest rate.

The illustration below shows how to set up this 1-variable table. You put the input cell outside the table range. You put the formula(s) and the values for the input cell in the table range and leave room for the results.

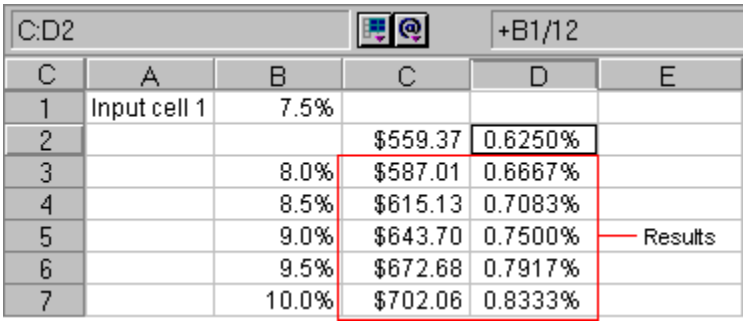


After you use Range - Analyze - What-if Table to calculate the formula in a 1-variable table, the results appear in the results area, as shown below.



1-variable table with more than one formula
You can calculate more than one formula in a 1-variable what-if table, as long as the other formulas all use the same input values.

The table below is the same as the previous one, except that it contains an additional formula to calculate the monthly interest rate.

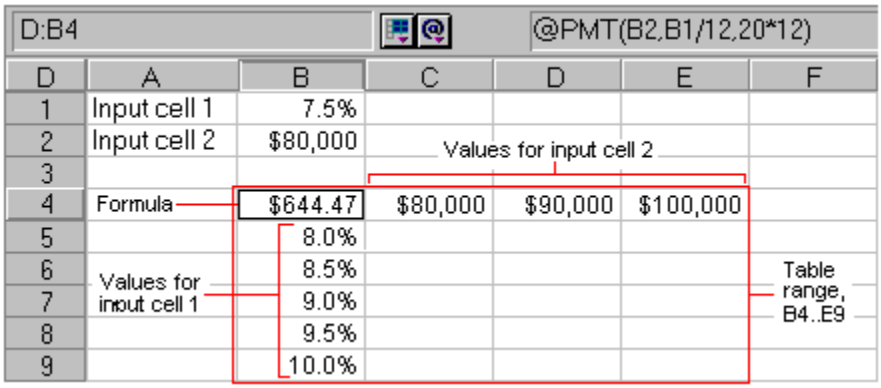


{button ,AL(`H_WHATIF_TABLES_AND_BACKSOLVING_OVER;H_A_2VARIABLE_WHATIF_TABLE_EX;H_A_3VARIABLE_WHATIF_TABLE_EX;H_CALCULATING_WHATIF_TABLES_STEPS;H_SETTING_UP_A_ONE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_THREE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_TWO_VARIABLE_WHATIF_TABLE_STEPS;',0)} See related topics

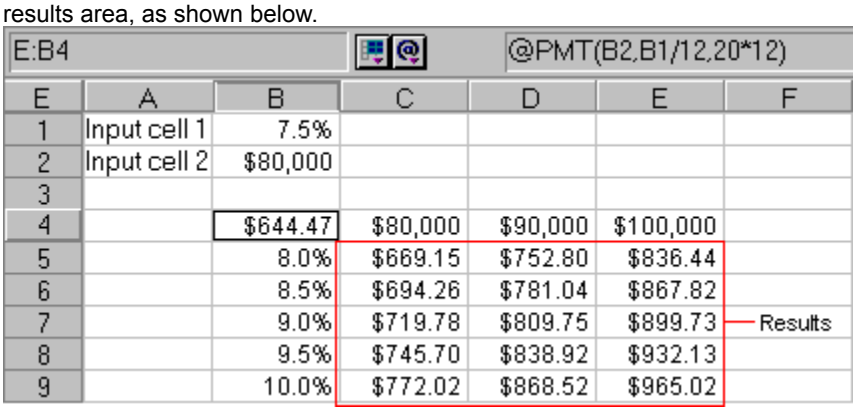
Example: 2-variable what-if table
A 2-variable what-if table displays the result of calculating a formula by substituting different values for two variables.

2-variable table example
You can use a 2-variable table to calculate monthly payments for a 20-year mortgage of $80,000, $90,000, and $100,000 at various interest rates. In this what-if problem, you substitute values for two variables: the mortgage amount and the interest rate.

The illustration below shows how to set up this 2-variable table. You put the two input cells outside the table range which contains a single formula and the values for input cell 1 and input cell 2.



After you use Range - Analyze - What-if Table to calculate the formula in a 2-variable table, the results appear in the results area, as shown below.



{button ,AL(`H_WHATIF_TABLES_AND_BACKSOLVING_OVER;H_A_1VARIABLE_WHATIF_TABLE_EX;H_A_3VARIABLE_WHATIF_TABLE_EX;H_CALCULATING_WHATIF_TABLES_STEPS;H_SETTING_UP_A_ONE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_THREE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_TWO_VARIABLE_WHATIF_TABLE_STEPS;',0)} See related topics

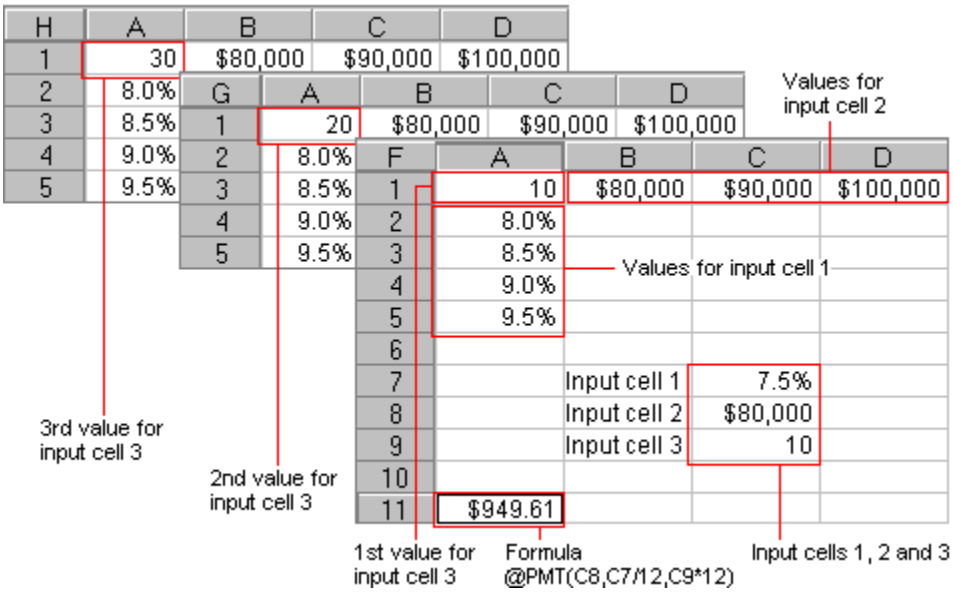
Example: 3-variable what-if table

A 3-variable what-if table displays the results of calculating a formula by substituting different values for three variables.

3-variable table example

You can use a 3-variable table to calculate monthly payments for a mortgage of $80,000, $90,000, and $100,000 using various interest rates, and a number of different terms, such as 10, 20, and 30 years. In this what-if problem, you substitute values for three variables: the mortgage amount, the interest rate, and the term of the loan.

The illustration below shows how to set up this 3-variable table with a 3D range that spans three sheets.



The table range in a 3-variable table is always 3D, and the third variable, the term, is different in each sheet. You put the formula and the three input cells outside the table range, and the formula and input cells appear only in the first sheet. Otherwise, the set-up in each sheet is the same.

After you use Range - Analyze - What-if Table to calculate the formula in a 3-variable table, the results appear in the results area of the table range in each sheet.

{button ,AL(`H_WHATIF_TABLES_AND_BACKSOLVING_OVER;H_A_1VARIABLE_WHATIF_TABLE_EX;H_A_2VARIABLE_WHATIF_TABLE_EX;H_CALCULATING_WHATIF_TABLES_STEPS;H_CLEARING_WHATIF_TABLE_SETTINGS_STEPS;H_SETTING_UP_A_ONE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_THREE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_TWO_VARIABLE_WHATIF_TABLE_STEPS;',0)} See related topics

Calculating what-if tables

After setting up a 1-variable, 2-variable, or 3-variable what-if table, you can calculate the table to see the results.

 See example

1. Select the table range.

   For 1-variable and 2-variable tables, the table range includes the formula(s) and input values, but not the input cell.

   For a 3-variable table, the 3D table range includes the input values, but not the formula or the input cells.
2. Choose Range - Analyze - What-if Table.
3. Under "Select the number of input cell(s)," click 1, 2, or 3 depending on the type of table you are calculating.
4. Specify the input cell(s) in the appropriate input cell box(es).
5. For a 3-variable table, specify the cell that contains the formula in the "Formula cell" box.
6. Click OK.

{button ,AL(`H_CALCULATING_WHATIF_TABLES_DETAILS',1)} See details

{button ,AL(`H_SETTING_UP_A_ONE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_THREE_VARIABLE_WHATIF_TABLE_STEPS;H_SETTING_UP_A_TWO_VARIABLE_WHATIF_TABLE_STEPS;H_WHATIF_TABLES_AND_BACKSOLVING_OVER;',0)} See related topics

Details: Calculating what-if tables

Recalculating what-if tables

To recalculate your most recently calculated what-if table, enter new input values in the sheet and press F8 (TABLE).

{button ,AL(`H_CALCULATING_WHATIF_TABLES_STEPS',1)} Go to procedure

Clearing what-if table settings

You can clear the table range and input cell settings for all what-if tables in the current workbook.

1. Make sure the cell pointer is in the workbook containing the what-if tables whose settings you want to clear.
2. Choose Range - Analyze - What-if Table.
3. Click Reset.

{button ,AL(`H_CALCULATING_WHATIF_TABLES_STEPS;H_WHATIF_TABLES_AND_BACKSOLVING_OVER;',0)}
See related topics

Backsolving what-if problems

You can specify the result of a formula and backsolve to find the value of one or more variables in the formula.

1. Choose Range - Analyze - Backsolver.

2. In the "Make the formula in this cell" box, specify the cell containing the formula.
3. In the "Equal to this value" box, enter the value you want as the result of the formula.
4. In the "By changing cell(s)" box, specify the range containing the variable(s) you want to change.
5. Click OK.

Note Backsolver changes the values of formula variables. If other formulas depend on these variables, 1-2-3 recalculates these formulas. To change the variables back to their original values, press CTRL+Z or click Undo immediately after using Backsolver.

{button ,AL(`H_BACKSOLVING_WHATIF_PROBLEMS_DETAILS',1)} See details

{button ,AL(`H_BACKSOLVER_EXAMPLE_EX',1)} See example

{button ,AL(`H_WHATIF_TABLES_AND_BACKSOLVING_OVER;',0)} See related topics

Details: Backsolving what-if problems

Using Backsolver options

To backsolve what-if problems, enter data for the following options:

- Make the formula in this cell -- enter the address of a cell containing the formula you want to result in a specified value. If you enter a multi-cell range, Backsolver uses only the top left cell in the range. The formula in the cell whose address you enter must refer to the cell(s) specified in the "By changing cell(s)" box, either directly or indirectly. If the formula in the cell you specify contains @functions, each @function must result in a number; the formula cannot use string @functions
- Equal to this value -- specify a numeric value you want as the result of the formula. You can enter a number, formula, or a cell reference. The cell you reference must contain a number or a formula that produces a number. If you enter a formula that contains @functions, these @functions must result in a number.
- By changing cell(s) -- enter the address of one or more cells containing the value(s) you want Backsolver to change. Do not enter the address of protected cells, formula cells, or blank cells. If you enter a range, Backsolver changes the value in each cell by the same percentage.

Note If you enter formulas in the Backsolver dialog box, 1-2-3 evaluates these formulas when you choose OK. You cannot recalculate the formulas by pressing F9 (CALC) while in the dialog box. Also, the next time you open the dialog box, it contains the formula value but not the formula.

{button ,AL(`H_BACKSOLVING_WHATIF_PROBLEMS_STEPS',1)} Go to procedure

Backsolver example
You specify the formula result you want and indicate which variable(s) you want to change. Backsolver then calculates the formula to arrive at the specified result and changes the value of the variable(s) in the sheet.

Changing a single variable
The @PMT formula in the illustration below calculates a monthly loan payment based on a loan amount of $100,000, an interest rate of 12%, and a term of 30 years. Using these values, @PMT results in a monthly loan payment of $1,028.61.

I:B2 @PMT(B1,B3/12,B4*12)

I	A	B	C	D	E
1	Loan Amount	$100,000			
2	Monthly Payment	$1,028.61			
3	Interest Rate	12.0%			
4	Term (years)	30			

What if you can afford a higher monthly payment of $1,200; how does that affect the amount of money you can borrow? You can specify $1,200 as the result of @PMT and backsolve to find the value of the loan amount variable. The illustration below shows how Backsolver recalculates @PMT to result in a monthly payment of $1,200, entering a changed loan amount variable of $116,662 in cell B1.

J:B2 @PMT(B1,B3/12,B4*12)

J	A	B	C	D	E
1	Loan Amount	$116,662.00			
2	Monthly Payment	$1,200.00			
3	Interest Rate	12.0%			
4	Term (years)	30			

Changing several variables
As well as using Backsolver to change the value of a single variable, you can also change more than one variable. You can change a range of variables by the same percentage so a formula results in the value you specify.

In the illustration below, the $299,603 result of @SUM depends on the values of the variables in the range B3..B6.

K:B8 @SUM(B3..B6)

K	A	B	C	D
1	Budget Items			
2				
3	Salaries	$132,786.00		
4	Benefits	$110,954.00		
5	Advertising	$17,896.00	Variables	
6	Office Expenses	$37,967.00		
7				
8	Total Expenses	$299,603.00	Result	

What if you reduce your total expenses to $179,000; how would that affect each budget item? As shown in the illustration below, you can use Backsolver to reduce all the budget items by the same percentage to result in your goal of $179,000.

L:B8 @SUM(B3..B6)

L	A	B	C	D
1	Budget Items			
2				
3	Salaries	$79,333.97		
4	Benefits	$66,290.28	Backsolver changes values in these cells by the same percentage	
5	Advertising	$10,692.10		
6	Office Expenses	$22,683.66		
7				
8	Total Expenses	$179,000.00		

{button ,AL(`H_BACKSOLVING_WHATIF_PROBLEMS_STEPS;H_WHATIF_TABLES_AND_BACKSOLVING_OVER;
',0)} See related topics

What-if Table dialog box

Use this dialog box to calculate a 1-variable, 2-variable, or 3-variable what-if table.

Choose a task

- Calculating what-if tables
- Overview: What-if tables and Backsolver
- Setting up a one variable what-if table
- Setting up a two variable what-if table
- Setting up a three variable what-if table

{button ,AL(`H_A_1VARIABLE_WHATIF_TABLE_EX;H_A_2VARIABLE_WHATIF_TABLE_EX;H_A_3VARIABLE_WHATIF_TABLE_EX;',0)} See related topics

Overview: Workbook windows

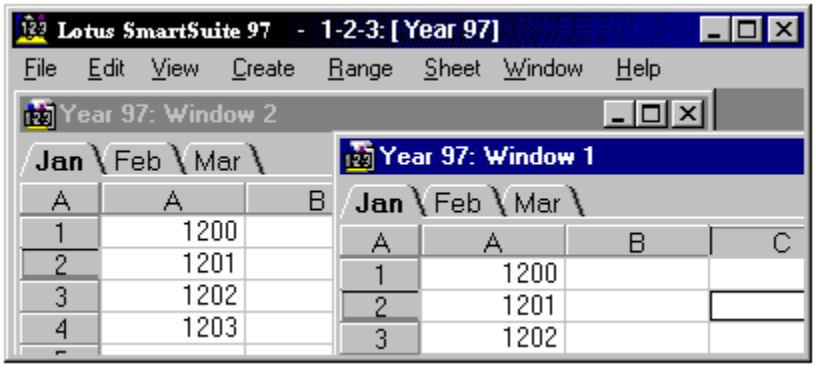
Within the 1-2-3 window, each workbook appears in its own window. You can size, move, arrange, and close Workbook windows.

About Workbook windows

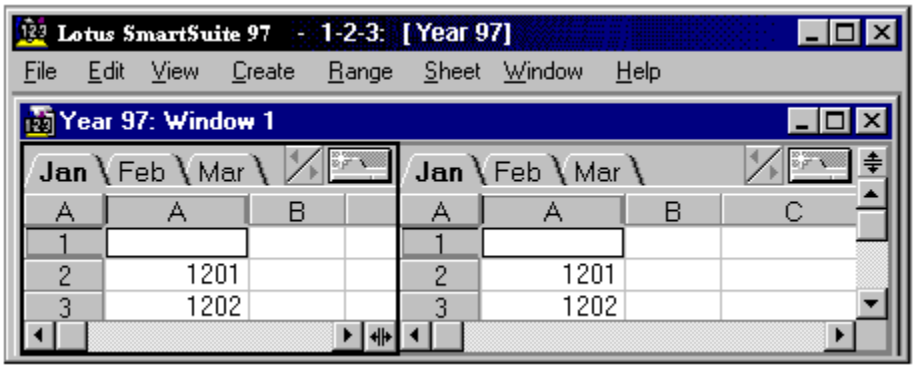
Initially, each 1-2-3 workbook appears in one window. You can create additional windows for the same workbook, and you can split a window into panes to see different parts of the workbook simultaneously. A window can contain up to four panes.

For example, if your workbook contains more than one sheet, you can create a new window and display a different sheet in each window. Or, you can split the window and display a different sheet in each pane.

Workbook windows let you view the same workbook in different windows:



Panes are views of a workbook in one window:



You can scroll the panes of a window together (synchronized scrolling) or independently. Workbook windows scroll independently.

Although you can display multiple Workbook windows simultaneously, you can only work in one window at a time. The active window contains the cell pointer.

Manipulating Workbook windows

Using the mouse is the easiest and most efficient way to size, move, or close windows. You can also use the Window commands and the commands in each window's Control menu.

{button ,AL(`H_WORKBOOK_WINDOWS_OVER;H_CASCADING_WINDOWS_STEPS;H_CREATING_A_NEW_WINDOW_STEPS;H_MOVING_WINDOWS_STEPS;H_SIZING_WINDOWS_STEPS;H_SPLITTING_WINDOWS_STEPS;H_TILING_WINDOWS_HORIZONTALLY_STEPS;H_TILING_WINDOWS_VERTICALLY_STEPS;H_VIEWING_OPEN_WINDOWS_STEPS',0)} See related topics

Viewing open windows

You can select which Workbook window is active.

1. Choose Window.
2. Choose the name of the window you want to display.
3. (Optional) If you have more than nine windows open and do not see the window you want on the menu, choose More Windows.

{button ,AL(`H_VIEWING_OPEN_WINDOWS_DETAILS',1)} See details

{button ,AL(`H_WORKBOOK_WINDOWS_OVER;H_CASCADING_WINDOWS_STEPS;H_TILING_WINDOWS_HORIZONTALLY_STEPS;H_TILING_WINDOWS_VERTICALLY_STEPS',0)} See related topics

Details: Viewing open windows

Related SmartIcons

Arranges open windows diagonally

Arranges open windows side by side

Arranges open windows top to bottom

{button ,AL(`H_VIEWING_OPEN_WINDOWS_STEPS',1)} Go to procedure

Creating a new window

Create additional windows for a workbook to view different portions of the workbook simultaneously.

To create a new window for the current workbook, choose Window - New Window.

{button ,AL(`H_CREATING_A_NEW_WINDOW_DETAILS',1)} See details

{button ,AL(`H_WORKBOOK_WINDOWS_OVER;H_CASCADING_WINDOWS_STEPS;H_SIZING_WINDOWS_STEPS;H_SPLITTING_WINDOWS_STEPS;H_TILING_WINDOWS_HORIZONTALLY_STEPS;H_TILING_WINDOWS_VERTICALLY_STEPS;H_VIEWING_OPEN_WINDOWS_STEPS',0)} See related topics

Details: Creating a new window

Scrolling through multiple Workbook windows
You scroll through each Workbook window independently.

Making changes in a workbook with multiple windows
When you make changes in a Workbook window, the changes are reflected in all windows for that workbook.

How 1-2-3 names multiple windows for a workbook
1-2-3 automatically names each new window. For example, if you create a new window for a workbook named May Expenses, 1-2-3 names the new window May Expenses.Window 2. 1-2-3 names subsequent windows May Expenses.Window 3, and so forth.

Saving and closing a workbook with multiple windows
If you save a workbook with multiple windows, 1-2-3 saves the information for each window.

Related SmartIcons


Arranges open windows diagonally


Arranges open windows side by side


Arranges open windows top to bottom

{button ,AL(`H_CREATING_A_NEW_WINDOW_STEPS',1)} Go to procedure

Moving windows
To move a window, drag the title bar of the window to the new location.

{button ,AL(`H_MOVING_WINDOWS_DETAILS',1)} See details

{button ,AL(`H_WORKBOOK_WINDOWS_OVER;H_CASCADING_WINDOWS_STEPS;H_SIZING_WINDOWS_STEPS;H_TILING_WINDOWS_HORIZONTALLY_STEPS;H_TILING_WINDOWS_VERTICALLY_STEPS;',0)} See related topics

Details: Moving windows

Related SmartIcons

Arranges open windows diagonally

Arranges open windows side by side

Arranges open windows top to bottom

{button ,AL(`H_MOVING_WINDOWS_STEPS',1)} Go to procedure

Sizing windows

You can change the dimensions of a window.

1. Position the mouse pointer on the border or corner of the window so that the mouse pointer changes shape.

2. Drag the border or corner.
3. Release the mouse button when the window is the size you want.

{button ,AL(`H_SIZING_WINDOWS_DETAILS',1)} See details

{button ,AL(`H_WORKBOOK_WINDOWS_OVER;H_CASCADING_WINDOWS_STEPS;H_MOVING_WINDOWS_STEPS;H_TILING_WINDOWS_HORIZONTALLY_STEPS;H_TILING_WINDOWS_VERTICALLY_STEPS;',0)} See related topics

Details: Sizing windows

Dragging a border sizes the window horizontally or vertically. Dragging a corner sizes both horizontally and vertically.

Other ways to size windows

Click this button	To
	Minimize the window to an icon
	Expand the window to its maximum size
	Restore the window to its previous size
	Close the window

Related SmartIcons

Arranges open windows diagonally

Arranges open windows side by side

Arranges open windows top to bottom

{button ,AL(`H_SIZING_WINDOWS_STEPS',1)} Go to procedure

Tiling windows side by side

To tile all windows side by side, choose Window - Tile Left-Right.

{button ,AL(`H_TILING_WINDOWS_HORIZONTALLY_DETAILS',1)} See details

{button ,AL(`H_WORKBOOK_WINDOWS_OVER;H_CASCADING_WINDOWS_STEPS;H_MOVING_WINDOWS_STEPS;H_SIZING_WINDOWS_STEPS;H_TILING_WINDOWS_VERTICALLY_STEPS;',0)} See related topics

Details: Tiling windows side by side
When you tile windows side by side, 1-2-3 displays the active window in the top left corner.

Related SmartIcons


Arranges open windows diagonally


Arranges open windows side by side


Arranges open windows top to bottom

{button ,AL(`H_TILING_WINDOWS_HORIZONTALLY_STEPS',1)} Go to procedure

Tiling windows top to bottom

To tile all windows top to bottom, choose Window - Tile Top-Bottom.

{button ,AL(`H_TILING_WINDOWS_VERTICALLY_DETAILS',1)} See details

{button ,AL(`H_WORKBOOK_WINDOWS_OVER;H_CASCADING_WINDOWS_STEPS;H_MOVING_WINDOWS_STEPS;H_SIZING_WINDOWS_STEPS;H_TILING_WINDOWS_HORIZONTALLY_STEPS;',0)} See related topics

Details: Tiling windows top to bottom
When you tile windows top to bottom, 1-2-3 displays the active window in the top left corner.

Related SmartIcons


Arranges open windows diagonally


Arranges open windows side by side


Arranges open windows top to bottom

{button ,AL(`H_TILING_WINDOWS_VERTICALLY_STEPS',1)} Go to procedure

Cascading windows

Cascading stacks all windows diagonally, with their title bars showing.

To cascade windows, choose Window - Cascade.

{button ,AL(`H_CASCADING_WINDOWS_DETAILS',1)} See details

{button ,AL(`H_WORKBOOK_WINDOWS_OVER;H_MOVING_WINDOWS_STEPS;H_SIZING_WINDOWS_STEPS;H_TILING_WINDOWS_HORIZONTALLY_STEPS;H_TILING_WINDOWS_VERTICALLY_STEPS;',0)} See related topics

Details: Cascading windows
When you cascade windows, 1-2-3 displays the active window on top.

Related SmartIcons


Arranges open windows diagonally


Arranges open windows side by side


Arranges open windows top to bottom

{button ,AL(`H_CASCADING_WINDOWS_STEPS',1)} Go to procedure

Splitting windows

You can split a window into panes to see more than one portion of a sheet at a time.

1. Choose View - Split.
2. Select Top-Bottom, Left-Right, or Four-way.
3. (Optional) To scroll through panes individually, deselect "Synchronize scrolling."
4. Click OK.

{button ,AL(`H_SPLITTING_WINDOWS_DETAILS',1)} See details

{button ,AL(`H_WORKBOOK_WINDOWS_OVER;H_CASCADING_WINDOWS_STEPS;H_CREATING_A_NEW_WINDOW_STEPS;H_VIEWING_OPEN_WINDOWS_STEPS;',0)} See related topics

Details: Splitting windows

Where 1-2-3 splits the window

If you select	1-2-3 splits the window
Top-Bottom	Horizontally, above the cell pointer
Left-Right	Vertically, to the left of the cell pointer
Four-way	Horizontally and vertically, above and to the left of the cell pointer

Other ways to split windows

You can also split a window by dragging the horizontal or vertical splitter to where you want to split the window.

Drag	To split the window
	Horizontally (top to bottom)
	Vertically (left to right)

Adjusting the size of panes

You can drag the horizontal or vertical splitters to adjust the size of a pane. If the window is split four ways, you can adjust the size of all four panes by dragging the four-way splitter, located in the center of the four panes.

Restoring a window to a single pane

You can restore a split window to one pane by choosing View - Clear Split, or by dragging the horizontal or vertical splitters.

Scrolling through split windows

To change whether panes scroll individually or simultaneously, choose View - Synchronize Split or View - Unsynchronize Split.

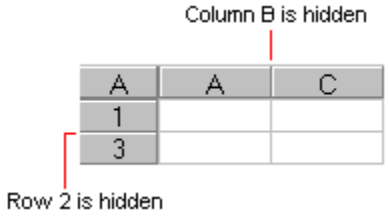
{button ,AL(`H_SPLITTING_WINDOWS_STEPS',1)} Go to procedure

Overview: Hiding data

Hiding cell contents, columns, rows, sheets, and graphic objects is a good way to keep other users of your workbooks focused on what you want them to see rather than on confidential or distracting information.

For example, suppose you have a workbook with two sheets, one that contains data and a chart, and the other that contains macros and calculations. To help users focus on the data and the chart, you can hide the sheet containing the macros and calculations.

When you hide a sheet, 1-2-3 hides the tab of that sheet. When you hide a column or row, 1-2-3 hides the column letter or row number.



You can use the InfoBox to hide selected graphic objects.

Protecting hidden data

You can hide cell contents, but until you protect the hidden cells and lock the sheet or workbook that contains them, the cell contents appear in the contents box and users can edit data in these cells.

However, when you lock the sheet or the workbook, users cannot see or edit the contents of any protected and hidden cell. For more information, see Overview: Protecting data.

Effects of hiding cells, columns, rows, sheets, and graphic objects

- You cannot move the cell pointer to hidden sheets, columns, or rows.
- You cannot print hidden sheets, columns, rows, or graphic objects.
- You can perform 1-2-3 operations on ranges in hidden sheets, columns, or rows.

  To perform a command on a range in a hidden sheet, column, or row, you can type the address or range name in a dialog box or in the InfoBox; or you can select the surrounding sheets, columns, or rows.
- Formulas containing references to ranges in hidden sheets, columns, or rows still work correctly. When creating a formula that refers to data in a hidden sheet, column, or row, type the range name or address in the formula.
- You can prevent changes to hidden data only by protecting it and locking the sheet or workbook.

{button ,AL(`H_DISPLAYING_HIDDEN_COLUMNS_STEPS;H_DISPLAYING_HIDDEN_ROWS_STEPS;H_DISPLAYING_HIDDEN_SHEETS_STEPS;H_HIDING_CELL_CONTENTS_STEPS;H_HIDING_COLUMNS_OR_ROWS_USING_THE_INFOBOX_STEPS;H_DISPLAYING_HIDDEN_COLUMNS_OR_ROWS_USING_THE_INFOBOX_STEPS;H_HIDING_COLUMNS_STEPS;H_HIDING_ROWS_STEPS;H_HIDING_SHEETS_STEPS;H_HIDING_AND_REDISPLAYING_GRAPHICS_STEPS;',0)} See related topics

Hiding cell contents

You can hide confidential or distracting information in selected cells.

1. Select the cells whose contents you want to hide.
2. Choose Range - Range Properties.

3. Click the Security tab in the InfoBox.

4. Select "Hide cell contents."
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_HIDING_CELL_CONTENTS_DETAILS',1)} See details

{button ,AL(`H_HIDING_DATA_OVER;H_THE_INFOBOX_OVER;',0)} See related topics

Details: Hiding cell contents

Protecting hidden cells

If hidden cells are not protected and the sheet or workbook containing them is not locked, commands that enter new data can write over data in the hidden cells.

When you protect hidden cells and lock the sheet or workbook that contains them, users cannot see or edit the contents of these cells.

{button ,AL(`H_HIDING_CELL_CONTENTS_STEPS',1)} Go to procedure

{button ,AL(`H_PROTECTING_DATA_OVER;H_LOCKING_WORKBOOK_CONTENTS_STEPS;H_LOCKING_SHEET_CONTENTS_STEPS;H_PROTECTING_UNPROTECTED_CELLS_IN_A_LOCKED_WORKBOOK_STEPS;H_PROTECTING_UNPROTECTED_CELLS_IN_A_LOCKED_SHEET_STEPS;',0)} See related topics

Hiding sheets

You can hide sheets to prevent display and printing of data.

1. Select the tab of each sheet you want to hide.
2. Choose Sheet - Hide.

{button ,AL(`H_HIDING_SHEETS_DETAILS',1)} See details

{button ,AL(`H_DISPLAYING_HIDDEN_SHEETS_STEPS;H_HIDING_COLUMNS_STEPS;H_HIDING_DATA_OVER;H_HIDING_ROWS_STEPS;',0)} See related topics

Details: Hiding sheets

Other ways to hide sheets
You can hide the current sheet by choosing Sheet - Sheet Properties (Basics tab) and selecting "Hide sheet."

Protecting and locking hidden data
If hidden sheets are not protected and the workbook containing them is not locked, commands that enter new data can write over data in the hidden sheets.

{button ,AL(`H_HIDING_SHEETS_STEPS',1)} Go to procedure

{button ,AL(`H_PROTECTING_DATA_OVER;H_LOCKING_WORKBOOK_CONTENTS_STEPS;H_LOCKING_SHEET_CONTENTS_STEPS;H_PROTECTING_UNPROTECTED_CELLS_IN_A_LOCKED_WORKBOOK_STEPS;H_PROTECTING_UNPROTECTED_CELLS_IN_A_LOCKED_SHEET_STEPS;',0)} See related topics

Hiding columns

You can drag a column border to hide a column.

 **Show me a demo**

1. Position the mouse pointer in the sheet frame on the right border of the column you want to hide.

2. Drag the column border left until the indicator shows the column size as 0 (zero) characters.
3. Release the mouse button.

Note If the current sheet is part of a group, hiding columns in this sheet hides these columns in all sheets in the group.

{button ,AL(`H_HIDING_COLUMNS_DETAILS',1)} See details

{button ,AL(`H_HIDING_DATA_OVER;H_DISPLAYING_HIDDEN_COLUMNS_STEPS;H_HIDING_COLUMNS_OR_ROWS_USING_THE_INFOBOX_STEPS;H_HIDING_ROWS_STEPS;H_GROUPING_SHEETS_STEPS;H_UNGROUPING_SHEETS_STEPS;',0)} See related topics

Details: Hiding columns

Other ways to hide columns
You can also hide columns by choosing Range - Range Properties (Basics tab) and selecting "Hide column."

Hiding several columns at once
To hide more than one column at once, select the entire columns you want to hide and drag the right border of one of them.

Protecting hidden data
If hidden columns are not protected and the sheet or workbook containing them is not locked, commands that enter new data can write over data in the hidden columns.

{button ,AL(`H_HIDING_COLUMNS_STEPS',1)} Go to procedure

{button ,AL(`H_PROTECTING_DATA_OVER;H_LOCKING_WORKBOOK_CONTENTS_STEPS;H_LOCKING_SHEET_CONTENTS_STEPS;H_PROTECTING_UNPROTECTED_CELLS_IN_A_LOCKED_WORKBOOK_STEPS;H_PROTECTING_UNPROTECTED_CELLS_IN_A_LOCKED_SHEET_STEPS;',0)} See related topics

Hiding rows

You can drag a row border to hide a row.

1. Position the mouse pointer in the sheet frame on the bottom border of the row you want to hide.

2. Drag the row border up until the indicator shows the row size as 0 (zero) points.
3. Release the mouse button.

Note If the current sheet is part of a group, hiding rows in this sheet hides these rows in all sheets in the group.

{button ,AL(`H_HIDING_ROWS_DETAILS',1)} See details

{button ,AL(`H_DISPLAYING_HIDDEN_ROWS_STEPS;H_HIDING_COLUMNS_OR_ROWS_USING_THE_INFOBOX_STEPS;H_HIDING_DATA_OVER;H_GROUPING_SHEETS_STEPS;H_UNGROUPING_SHEETS_STEPS;',0)} See related topics

Details: Hiding rows

Other ways to hide rows
You can hide rows by choosing Range - Range Properties (Basics tab) and selecting "Hide row."

Hiding several rows at once
To hide more than one row at once, select the entire rows you want to hide and drag up the bottom border of one of them.

Protecting hidden data
If hidden rows are not protected and the sheet or workbook containing them is not locked, commands that enter new data can write over data in the hidden rows.

{button ,AL(`H_HIDING_ROWS_STEPS',1)} Go to procedure
{button ,AL(`H_PROTECTING_DATA_OVER;',0)} See related topics

Displaying hidden columns

You can drag a column border to display hidden columns.

1. Position the mouse pointer in the sheet frame on the border of a hidden column.

   The pointer changes to gray.
2. Drag the border of the hidden column right until the indicator displays the size you want.
3. Release the mouse button.

Note If the current sheet is part of a group, displaying columns in this sheet displays these columns in all sheets in the group.

{button ,AL(`H_DISPLAYING_HIDDEN_COLUMNS_DETAILS',1)} See details

{button ,AL(`H_DISPLAYING_HIDDEN_ROWS_STEPS;H_HIDING_COLUMNS_STEPS;H_HIDING_DATA_OVER;H_GROUPING_SHEETS_STEPS;H_UNGROUPING_SHEETS_STEPS;',0)} See related topics

Details: Displaying hidden columns

Other ways to display hidden columns
You can also display hidden columns using the shortcut menu. Select entire columns on either side of the hidden one(s), right-click to display the shortcut menu, and choose Unhide Columns.

{button ,AL(`H_DISPLAYING_HIDDEN_COLUMNS_STEPS',1)} Go to procedure

Displaying hidden rows

You can drag a row border to display hidden rows.

1. Position the mouse pointer in the sheet frame on the border of a hidden row.

   The pointer changes to gray.
2. Drag the border of the hidden row down until the indicator displays the size you want.
3. Release the mouse button.

Note If the current sheet is part of a group, displaying rows in this sheet displays these rows in all sheets in the group.

{button ,AL(`H_DISPLAYING_HIDDEN_ROWS_DETAILS',1)} See details

{button ,AL(`H_DISPLAYING_HIDDEN_COLUMNS_STEPS;H_HIDING_COLUMNS_STEPS;H_HIDING_DATA_OVER;H_HIDING_ROWS_STEPS;H_GROUPING_SHEETS_STEPS;H_UNGROUPING_SHEETS_STEPS;',0)} See related topics

Details: Displaying hidden rows

Other ways to display hidden rows

You can also display hidden rows using the shortcut menu. Select entire rows above and below the hidden one(s), right-click to display the shortcut menu, and choose Unhide Rows.

{button ,AL(`H_DISPLAYING_HIDDEN_ROWS_STEPS',1)} Go to procedure

Displaying hidden sheets

1. Choose Sheet - Unhide.

2. Select the sheet(s) you want to display.
3. Click OK.

{button ,AL(`H_DISPLAYING_HIDDEN_SHEETS_DETAILS',1)} See details
{button ,AL(`H_HIDING_DATA_OVER;H_HIDING_SHEETS_STEPS;',0)} See related topics

Details: Displaying hidden sheets

Other ways to display hidden sheets
You can also display hidden sheets using the shortcut menu. Select the tab of any sheet, right-click and choose Unhide Sheets from the shortcut menu. In the Unhide dialog box, select the sheet(s) you want to unhide, and click OK.

{button ,AL(`H_DISPLAYING_HIDDEN_SHEETS_STEPS',1)} Go to procedure

Hiding columns or rows using the InfoBox

1. Select at least one cell in each of the columns or rows you want to hide.
2. Choose Range - Range Properties.

3. Click the Basics tab in the InfoBox.

4. Select "Hide column" or "Hide row."
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_HIDING_COLUMNS_OR_ROWS_USING_THE_INFOBOX_DETAILS',1)} See details

{button ,AL(`H_DISPLAYING_HIDDEN_COLUMNS_OR_ROWS_STEPS;H_DISPLAYING_HIDDEN_COLUMNS_OR_ROWS_USING_THE_INFOBOX_STEPS;H_HIDING_COLUMNS_STEPS;H_HIDING_DATA_OVER;H_HIDING_ROWS_STEPS;H_THE_INFOBOX_OVER;',0)} See related topics

Details: Hiding columns or rows using the InfoBox

Other ways to hide columns and rows
You can also use the mouse to hide columns and rows. For more information, see Hiding columns and Hiding rows.

Protecting hidden data
If hidden columns and rows are not protected and the sheet or workbook containing them is not locked, commands that enter new data can write over data in the hidden columns and rows.

{button ,AL(`H_HIDING_COLUMNS_OR_ROWS_USING_THE_INFOBOX_STEPS',1)} Go to procedure

{button ,AL(`H_PROTECTING_DATA_OVER;H_LOCKING_WORKBOOK_CONTENTS_STEPS;H_LOCKING_SHEET_CONTENTS_STEPS;H_PROTECTING_UNPROTECTED_CELLS_IN_A_LOCKED_WORKBOOK_STEPS;H_PROTECTING_UNPROTECTED_CELLS_IN_A_LOCKED_SHEET_STEPS;',0)} See related topics

Displaying hidden columns or rows using the InfoBox

1. Select a range that spans the hidden columns or rows you want to display.

   For example, to display column B, select a range with at least one cell in column A and column C.
2. Choose Range - Range Properties.

3. Click the Basics tab in the InfoBox.

4. Deselect "Hide column" or "Hide row."

   When a column or row is hidden, the "Hide column" and "Hide row" boxes are gray.
5. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_DISPLAYING_HIDDEN_COLUMNS_OR_ROWS_USING_THE_INFOBOX_DETAILS',1)} See details

{button ,AL(`H_DISPLAYING_HIDDEN_COLUMNS_STEPS;H_DISPLAYING_HIDDEN_ROWS_STEPS;H_HIDING_COLUMNS_OR_ROWS_USING_THE_INFOBOX_STEPS;H_HIDING_DATA_OVER;H_THE_INFOBOX_OVER;',0)} See related topics

Details: Displaying hidden columns or rows using the InfoBox

Other ways to display hidden columns and rows
You can also use the mouse to display hidden columns and rows. For more information, see Displaying hidden columns and Displaying hidden rows.

Width and height of redisplayed columns and rows
When you use the InfoBox to display hidden columns or rows, the width of the redisplayed column and the height of the redisplayed row are the same as before they were hidden.

{button ,AL(`H_DISPLAYING_HIDDEN_COLUMNS_OR_ROWS_USING_THE_INFOBOX_STEPS',1)} Go to procedure

Inserting columns or rows

1. Select a range with at least one cell in as many columns or rows as you want to insert.
2. Choose Range - Insert.
3. To insert columns, select "Columns."
4. To insert rows, select "Rows."
5. Click OK.

Note If the current sheet is part of a group, inserting columns or rows in this sheet inserts columns or rows in all sheets in the group.

{button ,AL(`H_INSERTING_COLUMNS_OR_ROWS_DETAILS',1)} See details

{button ,AL(`H_DELETING_A_RANGE_STEPS;H_DELETING_COLUMNS_OR_ROWS_STEPS;H_DELETING_SHEETS_STEPS;H_INSERTING_A_RANGE_STEPS;H_GROUPING_SHEETS_STEPS;H_UNGROUPING_SHEETS_STEPS;',0)} See related topics

Details: Inserting columns or rows

Other ways to insert columns or rows
To insert columns or rows immediately without displaying a dialog box, select as many entire columns or rows as you want to insert, and choose Range - Insert Column or Range - Insert Row.

How 1-2-3 inserts columns and rows
1-2-3 inserts new rows above the selected rows or range; new columns to the left of the selected columns or range.

Styles of inserted columns or rows
Inserted columns and rows have the same styles and formats as the column to the left of the inserted columns or the row above the inserted rows.

Width and height of inserted columns or rows
Inserted columns have the same width as the column to the left of the inserted columns. Inserted rows have the same height as the row above the inserted rows. For example, inserted records in a database table have the same height as the other records in the table.

How inserting columns and rows affects formulas
When you insert columns or rows, 1-2-3 redefines named ranges and, if necessary, adjusts addresses in formulas.

For example, if you entered the formula +E6*100 and then inserted two columns to the left of column E, 1-2-3 adjusts the address so that the formula becomes +G6*100.

If you insert columns or rows just under or next to a range that a formula refers to, 1-2-3 does not adjust the formula; you must adjust the formula if you want to include the inserted cells.

How inserting columns or rows affects named ranges
If you insert columns or rows into a named range, the named range expands by the number of columns or rows you inserted.

Related SmartIcons


Inserts one or more columns to the left of the selected columns


Inserts blank cells in the selected range and moves existing data down or right


Inserts one or more rows above the selected rows


Inserts one or more sheets before or after the current sheet

{button ,AL(`H_INSERTING_COLUMNS_OR_ROWS_STEPS',1)} Go to procedure

Inserting a range

You can insert a blank range and shift the selected range right or down.

1. Select a range where you want to insert a blank range of the same proportions.
2. Choose Range - Insert.
3. Select "Insert in the selected range only."
4. To shift the selected range right, select "Columns."
5. To shift the selected range down, select "Rows."
6. Click OK.

{button ,AL(`H_INSERTING_A_RANGE_DETAILS',1)} See details

{button ,AL(`H_DELETING_A_RANGE_STEPS;H_DELETING_COLUMNS_OR_ROWS_STEPS;H_INSERTING_COLUMNS_OR_ROWS_STEPS;H_GROUPING_SHEETS_STEPS;H_UNGROUPING_SHEETS_STEPS;',0)} See related topics

Details: Inserting a range

Styles of inserted ranges
When you insert a range, it has the default styles and formats, not those of the range where you inserted it. The range that moves down or to the right keeps its original styles and formats.

How inserting a range affects named ranges
The top-left and bottom-right cells of a named range define the dimensions of the range.

- Inserting a range into a named range can expand it if the inserted range moves the bottom-right cell of the named range.
- Inserting a range above or to the left of a named range can shrink it if the inserted range moves the top-left cell of the named range.

Related SmartIcons


Inserts blank cells in the selected range and moves existing data down or right


Inserts one or more columns to the left of the selected columns


Inserts one or more rows above the selected rows


Inserts one or more sheets before or after the current sheet

{button ,AL(`H_INSERTING_A_RANGE_STEPS',1)} Go to procedure

Deleting columns or rows

1. Select a range with at least one cell in as many columns or rows as you want to delete.
2. Choose Range - Delete.
3. To delete columns, select "Columns."
4. To delete rows, select "Rows."
5. Click OK.

Note If the current sheet is part of a group, deleting columns or rows in this sheet deletes columns or rows in all sheets in the group.

{button ,AL(`H_DELETING_COLUMNS_OR_ROWS_DETAILS',1)} See details

{button ,AL(`H_DELETING_A_RANGE_STEPS;H_DELETING_SHEETS_STEPS;H_INSERTING_COLUMNS_OR_ROWS_STEPS;H_MOVING_A_FORMULA_STEPS;H_GROUPING_SHEETS_STEPS;H_UNGROUPING_SHEETS_STEPS;H_INSERTING_A_RANGE_STEPS;',0)} See related topics

Details: Deleting columns or rows

Other ways to delete columns or rows
To delete columns or rows immediately without displaying a dialog box, select as many entire columns or rows as you want to delete, and choose Range - Delete Column or Range - Delete Row.

How 1-2-3 deletes columns and rows
When you delete columns, the columns to the right move left to take the place of what you deleted. When you delete rows, the rows below move up to take the place of what you deleted.

How deleting columns or rows affects formulas
If you delete a column or row containing a range that a formula refers to, the formula results in ERR. Any other formulas that depend on this formula also result in ERR.

How deleting columns or rows affects named ranges
If you delete columns or rows containing cells that are part of a named range, the named range shrinks by the number of columns or rows you deleted.

If you delete an entire named range while deleting columns or rows, the range name becomes undefined, and you must name the range again to define it.

Related SmartIcons


Deletes all columns in the selected range


Deletes all rows in the selected range


Deletes all sheets in the selected range


Deletes the selected range and moves existing data up or left

---

{button ,AL(`H_DELETING_COLUMNS_OR_ROWS_STEPS',1)} Go to procedure
{button ,AL(`H_NAMING_A_RANGE_STEPS;',0)} See related topics

Deleting a range

1. Select the range you want to delete.
2. Choose Range - Delete.
3. Select "Delete in selected range only."
4. To delete the selected range and move existing data to the left, select "Columns."
5. To delete the selected range and move existing data up, select "Rows."
6. Click OK.

Note If the current sheet is part of a group, deleting a range in this sheet deletes the range in all sheets in the group.

{button ,AL(`H_DELETING_A_RANGE_DETAILS',1)} See details

{button ,AL(`H_DELETING_COLUMNS_OR_ROWS_STEPS;H_DELETING_SHEETS_STEPS;H_INSERTING_A_RANGE_STEPS;H_DELETING_DATA_IN_RANGES_STEPS;H_GROUPING_SHEETS_STEPS;H_UNGROUPING_SHEETS_STEPS;',0)} See related topics

Details: Deleting a range

How deleting a range affects formulas
If you delete a range that a formula refers to, the formula results in ERR. Any other formulas that depend on this formula also result in ERR.

How deleting a range affects named ranges
The top-left and bottom-right cells of a named range define the dimensions of the range.

- Deleting an entire named range,results in the range name becoming undefined, and you must name the range again to define it.
- Deleting a range can affect the size of a named range. When the bottom-right cell or the top-left cell of a named range moves because you deleted a range, the named range becomes smaller.

Related SmartIcons


Deletes the selected range and moves existing data up or left


Deletes all columns in the selected range


Deletes all rows in the selected range


Deletes all sheets in the selected range

{button ,AL(`H_DELETING_A_RANGE_STEPS',1)} Go to procedure
{button ,AL(`H_NAMING_A_RANGE_STEPS;H_MOVING_A_FORMULA_STEPS;',0)} See related topics

Deleting sheets

1. Select the tab of each sheet you want to delete.
2. Choose Sheet - Delete Sheet.

Note You cannot delete all the sheets in a workbook.

{button ,AL(`H_DELETING_SHEETS_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_RANGE_STEPS;H_CREATING_A_SHEET_STEPS;H_DELETING_COLUMNS_OR_ROWS_STEPS;H_GROUPING_SHEETS_STEPS;H_UNGROUPING_SHEETS_STEPS;',0)} See related topics

Details: Deleting sheets

Other ways to delete sheets
Select a range with at least one cell in each sheet you want to delete, and choose Sheet - Delete Sheet.

How deleting sheets affects formulas
If you delete a sheet containing a range that a formula refers to, the formula results in ERR. Any other formulas that depend on this formula also result in ERR.

How deleting sheets affects named ranges
If you delete sheets containing named ranges, the range names become undefined, and you must name the ranges again to define them.

Related SmartIcons

Deletes all columns in the selected range

Deletes all rows in the selected range

Deletes the selected range and moves existing data up or left

---

{button ,AL(`H_DELETING_SHEETS_STEPS',1)} Go to procedure
{button ,AL(`H_NAMING_A_RANGE_STEPS;H_MOVING_A_FORMULA_STEPS;',0)} See related topics

Insert dialog box

Use this dialog box to insert ranges, columns, and rows.

Choose a task

- Inserting a range
- Inserting columns or rows

{button ,AL(`H_CREATING_A_SHEET_STEPS;',0)} See related topics

Delete dialog box

Use this dialog box to delete ranges, columns, and rows.

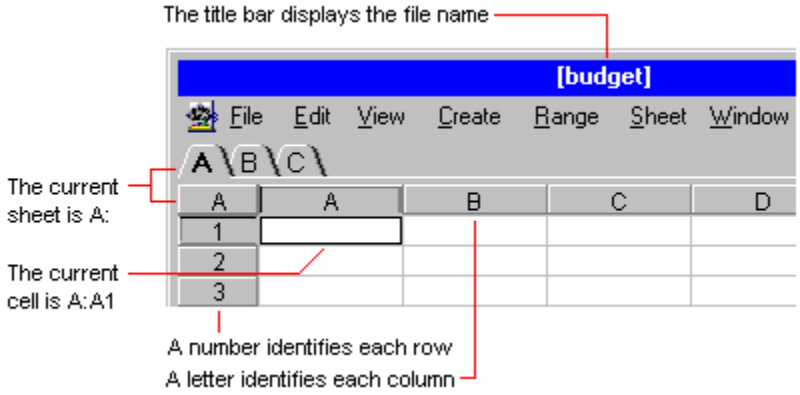
Choose a task

- Deleting a range
- Deleting columns or rows

{button ,AL(`H_DELETING_SHEETS_STEPS;',0)} See related topics

Overview: Sheets

A sheet is an electronic spreadsheet consisting of a grid of 256 columns and 8192 rows.



Column letters and row numbers

Letters identifying each column in a sheet appear in the sheet frame above each column. Columns are lettered A to IV (A to Z, AA to AZ, BA to BZ, and so on to IV).

Numbers identifying each row appear in the sheet frame to the left of each row. Rows are numbered 1 to 8192.

The intersection of a column and a row is called a cell. Each cell has an address consisting of a sheet letter followed by a : (colon), a column letter, and a row letter. For example, cell A:A1 is in sheet A at the intersection of column A and row 1.

The current cell

The rectangular highlight in the sheet is called the cell pointer. The cell that contains the cell pointer is called the current cell. The sheet containing the current cell is called the current sheet.

When a cell is current, you can enter data in that cell, edit the cell contents, and use the InfoBox and menu commands to affect the cell contents and style. To make another cell the current cell, you move the cell pointer.

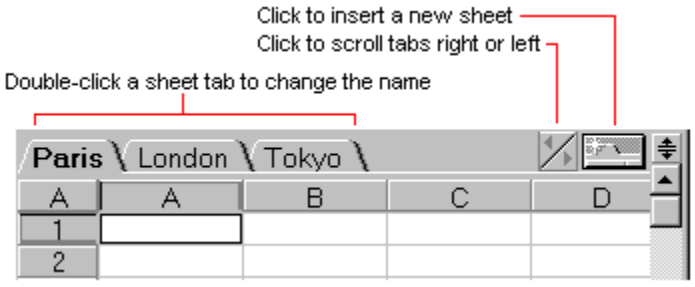
Multiple-sheet workbooks

When you create a workbook, it initially has one sheet. You can create more sheets in the workbook up to a total of 256 sheets. If you have more than one workbook open, the total number of sheets in all the open workbooks cannot exceed 256.

A letter identifies each sheet from A to IV. The letter for each sheet appears in the top left corner of the sheet and on the sheet tab.

Sheet tabs

Each sheet has a tab at the top left corner. You can double-click the tab and enter a name for the sheet. You can also color the sheet tabs to organize your sheets visually.



To go to and display any sheet in a multiple-sheet workbook, just click its tab. You can also display more than one sheet at the same time by cascading or tiling windows. For more information, see Cascading windows, Tiling windows side by side, and Tiling windows top to bottom.

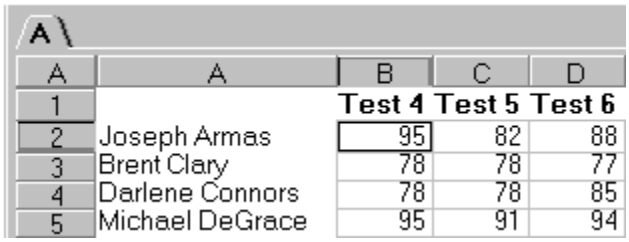
To select a 3D range, select the range on the first sheet in the range, and then SHIFT+click the tab of the last sheet in the range.

When you have more sheets than you can see in the Sheet window, you can click the tab-scroll arrows to scroll the tabs left or right without changing the current selection. SHIFT+click the tab-scroll arrows to scroll the tabs to the first

or last sheet in the workbook.

Freezing titles

You can freeze column and row titles to keep them in view as you scroll through the sheet.



	A	B	C	D
1		Test 4	Test 5	Test 6
2	Joseph Armas	95	82	88
3	Brent Clary	78	78	77
4	Darlene Connors	78	78	85
5	Michael DeGrace	95	91	94

To freeze titles, you can drag a column and row border or use the View - Titles command. You can unfreeze titles when you no longer need to keep them in view.

{button ,AL(`H_CHANGING_TAB_COLOR_STEPS;H_CLEARING_FROZEN_TITLES_STEPS;H_CREATING_A_SHEET_STEPS;H_DELETING_A_SHEET_NAME_STEPS;H_DELETING_A_SHEET_STEPS;H_FREEZING_COLUMNS_AND_ROWS_AS_TITLES_STEPS;H_GROUPING_SHEETS_STEPS;H_HIDING_OR_SHOWING_TABS_STEPS;H_NAMING_A_SHEET_STEPS;H_NAMING_A_SHEET_USING_THE_INFOBOX_STEPS;H_UNGROUPING_SHEETS_STEPS;',0)} See related topics

Creating a sheet

You can create new sheets and place them before or after the current sheet.

1. Choose Create - Sheet.

2. Click the arrows or enter the number of sheets you want to create in the "Number of sheets" box.
3. Under Place, select an option.
4. Click OK.

Tip You can click the New Sheet button to create a new sheet after the current sheet.

{button ,AL(`H_CREATING_A_SHEET_DETAILS',1)} See details

{button ,AL(`H_CREATING_A_SHEET_STEPS_RT;H_DELETING_SHEETS_STEPS;H_SHEETS_OVER;',0)} See related topics

Details: Creating a sheet

How 1-2-3 inserts new sheets

- After current sheet -- Inserts new sheet(s) after the current sheet. If a 3D range is selected, this option inserts sheets after the first sheet in the 3D range.
- Before current sheet -- Inserts new sheet(s) before the current sheet. If a 3D range is selected, this option inserts sheets before the first sheet in the 3D range.

Restrictions on number of sheets

A workbook cannot contain more than 256 sheets.

How creating new sheets affects formulas

When you create new sheets, 1-2-3 redefines named ranges and, if necessary, adjusts addresses in formulas.

For example, if you entered the formula +A:A1+B:A1+C:A1 and then created three sheets after sheet A, 1-2-3 adjusts the address so that the formula becomes +A:A1+E:A1+F:A1.

{button ,AL(`H_CREATING_A_SHEET_STEPS',1)} Go to procedure

Naming a sheet

The fastest way to name a sheet is to enter the name directly on the sheet tab.

 **Show me a demo**

1. Double-click the tab of the sheet you want to name.
2. Enter a name according to the naming conventions.
3. Press ENTER.

{button ,AL(`H_NAMING_A_SHEET_DETAILS',1)} See details

{button ,AL(`H_NAMING_A_SHEET_USING_THE_INFOBOX_STEPS;H_NAMING_CONVENTIONS_OVER;H_SHEETS_OVER;',0)} See related topics

Details: Naming a sheet

Duplicate sheet names
You cannot enter duplicate sheet names in the same workbook.

Naming sheets automatically
If 1-2-3 recognizes the name of the current sheet as part of a fill sequence, you can automatically name sheets that you create before or after the current sheet.

For example, suppose the current sheet is named January. If you click the New Sheet button twice, 1-2-3 places two new sheets after January and automatically names them February and March. If you use Create - Sheet to create two sheets before the one named January, 1-2-3 automatically names them November and December.

The default SmartFill lists for sheet tabs are the same as the ones for filling ranges. You can also create custom SmartFill lists for naming sheets. For more information, see Overview: Creating custom fill lists.

Using sheet names in formulas
When referring to a range in a formula or @function, you can use a sheet name in place of a sheet letter. For example, if the name of sheet B is Tokyo, you can refer to cell B5 in that sheet as Tokyo:B5.

If a sheet has a name, 1-2-3 converts sheet letters in formula references to the corresponding sheet names. For example, if the name of sheet A is Chicago, 1-2-3 converts the formula +A:A5-B:A3 to +Chicago:A5-B:A3.

{button ,AL(`H_NAMING_A_SHEET_STEPS',1)} Go to procedure

Naming a sheet using the InfoBox

You can use the InfoBox to change the name of the current sheet.

1. Choose Sheet - Sheet Properties.

2. Click the Basics tab in the InfoBox.

3. Enter the sheet name in the "Sheet name" box.
4. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_NAMING_A_SHEET_USING_THE_INFOBOX_DETAILS',1)} See details

{button ,AL(`H_CHANGING_TAB_COLOR_STEPS;H_HIDING_OR_SHOWING_TABS_STEPS;H_NAMING_A_SHEET_STEPS;H_SHEETS_OVER;H_THE_INFOBOX_OVER;',0)} See related topics

Details: Naming a sheet using the InfoBox

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Using sheet names in formulas
When referring to a range in a formula or @function, you can use a sheet name in place of a sheet letter. For example, if the name of sheet B is Tokyo, you can refer to cell B5 in that sheet as Tokyo:B5.

If a sheet has a name, 1-2-3 converts sheet letters in formula references to the corresponding sheet names. For example, if the name of sheet A is Chicago, 1-2-3 converts the formula +A:A5-B:A3 to +Chicago:A5-B:A3.

{button ,AL(`H_NAMING_A_SHEET_USING_THE_INFOBOX_STEPS',1)} Go to procedure

Hiding or showing sheet tabs

1. Choose File - Workbook Properties.

2. Click the View tab.

3. To hide tabs, deselect "Sheet tabs."
4. To show tabs, select "Sheet tabs."
5. Click OK.

{button ,AL(`H_HIDING_OR_SHOWING_TABS_DETAILS',1)} See details

{button ,AL(`H_CHANGING_TAB_COLOR_STEPS;H_NAMING_A_SHEET_STEPS;H_SHEETS_OVER;',0)} See related topics

Details: Hiding or showing sheet tabs

Other ways to hide and show tabs
You can also use View - Set View Preferences to hide and show sheet tabs.

Other ways to navigate between sheets
When the sheet tabs are hidden, you can use CTRL+PG UP to go from one sheet to the next and CTRL+PG DN to go to the previous sheet.

{button ,AL(`H_HIDING_OR_SHOWING_TABS_STEPS',1)} Go to procedure

Changing sheet tab color

To organize your sheets visually, you can assign a color to the tab of the current sheet.

1. Choose Sheet - Sheet Properties.

2. Click the Basics tab in the InfoBox.

3. Select a color from the "Tab color" box.
4. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_CHANGING_TAB_COLOR_DETAILS',1)} See details

{button ,AL(`H_HIDING_OR_SHOWING_TABS_STEPS;H_NAMING_A_SHEET_STEPS;H_SHEETS_OVER;H_THE_INFOBOX_OVER;',0)} See related topics

Details: Changing sheet tab color

Other ways to change sheet tab color

You can also change sheet tab color using the shortcut menu. Select the tab, right-click to display the shortcut menu, choose Sheet properties, and select a color from the "Tab color" box on the Basics tab.

{button ,AL(`H_CHANGING_TAB_COLOR_STEPS',1)} Go to procedure

Grouping sheets

You can group contiguous sheets to apply styles, formats, and other settings of one sheet to other sheets in the group.

1. Choose Sheet - Group Sheets.

2. Specify the first sheet in the group in the "First sheet of group" box.
3. Specify the last sheet in the group in the "Last sheet of group" box.
4. In the "Copy styles from this sheet" list, click the sheet whose styles you want to apply to the group.
5. Click OK.

Caution You can lose data if you forget that sheets are grouped. For example, while sheets are grouped, if you delete a column in one sheet, you delete it in all sheets in the group.

{button ,AL(`H_GROUPING_SHEETS_DETAILS',1)} See details
{button ,AL(`H_SHEETS_OVER;H_UNGROUPING_SHEETS_STEPS;',0)} See related topics

Details: Grouping sheets
Sheet letters or names on the tabs of grouped sheets appear in italics. Also, when a grouped sheet is the current sheet, "Grp" appears in the status bar.

Effects of grouping sheets
1-2-3 applies the following styles, formats, and settings from the specified sheet to all other sheets in the group: number formats, fonts and text attributes, colors, alignments, row height, column width, protection settings, frozen titles, page breaks, and outlines. If you change a setting in any one grouped sheet, all sheets in the group change.

Do not group sheets if you want to keep styles or other settings unique to a particular sheet. When you group sheets, the settings of the specified sheet overwrite any existing ones in the other sheets in the group.

Ungrouping does *not* restore the styles, formats, and settings applied to a sheet before grouping.

Advantages of grouping sheets
Grouping sheets is a convenient way to make sheets look the same. For example, suppose you want twelve sheets to contain expense figures for each month of the year. Style one sheet and then group the twelve sheets to apply the same styles to the other sheets.

Related SmartIcons

Ungroups grouped sheets

{button ,AL(`H_GROUPING_SHEETS_STEPS',1)} Go to procedure

Ungrouping sheets

1. Move the cell pointer to a sheet that is a member of the group you want to ungroup.
2. Choose Sheet - Clear Sheet Group.

{button ,AL(`H_UNGROUPING_SHEETS_DETAILS',1)} See details

{button ,AL(`H_GROUPING_SHEETS_STEPS;H_SHEETS_OVER;',0)} See related topics

Details: Ungrouping sheets
The Sheet - Clear Sheet Group command is available only when the current sheet is part of a group. After you ungroup sheets, the "Grp" indicator no longer appears in the status bar.

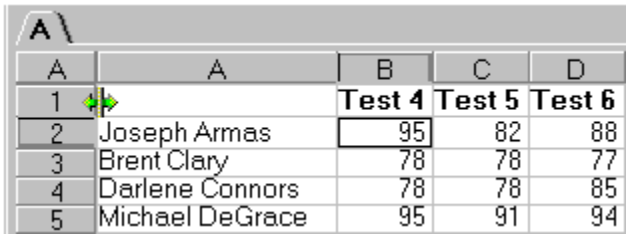
{button ,AL(`H_UNGROUPING_SHEETS_STEPS',1)} Go to procedure

Freezing columns and rows as titles

You can drag the sheet border to freeze columns, row, or both so column and row titles remain in view as you scroll through the sheet.

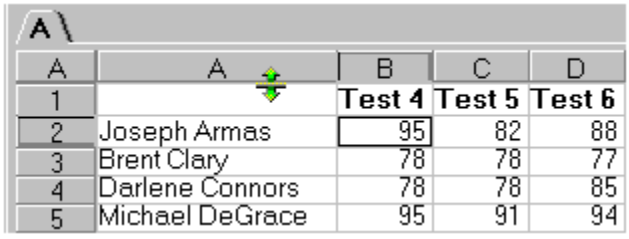
Show me a demo

1. To freeze columns, position the mouse pointer on the border of the sheet frame to the right of the row numbers and drag right to the last column you want to freeze.



	A	B	C	D
1		Test 4	Test 5	Test 6
2	Joseph Armas	95	82	88
3	Brent Clary	78	78	77
4	Darlene Connors	78	78	85
5	Michael DeGrace	95	91	94

2. To freeze rows, position the mouse pointer on the border of the sheet frame below the column letters and drag down to the last row you want to freeze.



	A	B	C	D
1		Test 4	Test 5	Test 6
2	Joseph Armas	95	82	88
3	Brent Clary	78	78	77
4	Darlene Connors	78	78	85
5	Michael DeGrace	95	91	94

Note No gridlines appear in the frozen title area.

{button ,AL(`H_FREEZING_COLUMNS_AND_ROWS_AS_TITLES_DETAILS',1)} See details

{button ,AL(`H_CLEARING_FROZEN_TITLES_STEPS;H_FREEZING_TITLES_USING_THE_COMMAND_STEPS;H_SHEETS_OVER;',0)} See related topics

Details: Freezing columns and rows as titles

Sizing frozen columns or rows
To size frozen columns, position the mouse pointer on the right border of the last frozen column and drag right or left.

To size frozen rows, position the mouse pointer on the bottom border of the last frozen row and drag up or down.

How sizing the Sheet window affects frozen titles
If you size the Sheet window so that only the frozen title area is visible, 1-2-3 unfreezes the titles. To restore them, increase the size of the Sheet window and freeze the titles again.

Editing frozen titles
To move the cell pointer into the title area, press HOME and then use the arrow keys to move the pointer where you want to enter or edit a title.

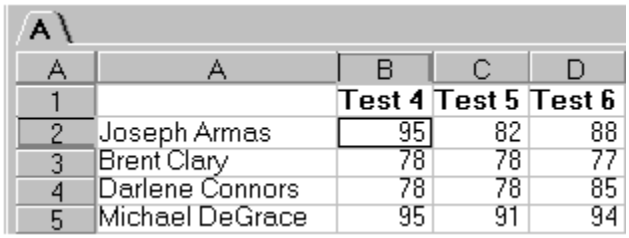
Putting graphic objects in the title area
You can put graphic objects, such as script or macro buttons, in the frozen title area. The graphic objects remain visible along with the titles as you scroll through the sheet. This way, you can scroll to data in the sheet and still have the button available to run a script or macro.

{button ,AL(`H_FREEZING_COLUMNS_AND_ROWS_AS_TITLES_STEPS',1)} Go to procedure

Freezing titles using the command

You can freeze columns, rows, or both so column and row titles remain in view as you scroll through the sheet.

1. Do one of the following:
   - To freeze columns, position the cell pointer one cell to the right of the columns you want to freeze.
   - To freeze rows, position the cell pointer one cell below the rows you want to freeze.
   - To freeze both columns and rows, position the cell pointer in the cell below the rows and to the right of the columns you want to freeze.



	A	B	C	D
1		**Test 4**	**Test 5**	**Test 6**
2	Joseph Armas	95	82	88
3	Brent Clary	78	78	77
4	Darlene Connors	78	78	85
5	Michael DeGrace	95	91	94

2. Choose View - Titles.
3. Select one or both options.

   Note Selecting both of these options freezes both rows and columns as titles. Deselecting these options, clears frozen titles.
4. Click OK.

Note No gridlines appear in the frozen title area.

{button ,AL(`H_FREEZING_TITLES_USING_THE_COMMAND_DETAILS',1)} See details

{button ,AL(`H_SHEETS_OVER;H_CLEARING_FROZEN_TITLES_STEPS;H_FREEZING_COLUMNS_AND_ROWS_AS_TITLES_STEPS;',0)} See related topics

Details: Freezing titles using the command

How 1-2-3 freezes column and row titles
To freeze both columns and rows, select both options.

- Rows above current cell -- Freezes the rows above the cell pointer.
- Column left of current cell -- Freezes the columns to the left of the cell pointer.

How sizing the Sheet window affects frozen titles
If you size the Sheet window so that only the frozen title area is visible, 1-2-3 unfreezes the titles. To restore them, increase the size of the Sheet window and freeze the titles again

Sizing frozen columns or rows
To size frozen columns, position the mouse pointer on the right border of the last frozen column and drag right or left.

To size frozen rows, position the mouse pointer on the bottom border of the last frozen row and drag up or down.

Editing frozen titles
To move the cell pointer into the title area, press HOME and then use the arrow keys to move the pointer where you want to enter or edit a title.

Putting graphic objects in the title area
You can put graphic objects, such as script or macro buttons, in the frozen title area. The graphic objects remain visible along with the titles as you scroll through the sheet. This way, you can scroll to data in the sheet and still have the button available to run a script or macro.

{button ,AL(`H_FREEZING_TITLES_USING_THE_COMMAND_STEPS',1)} Go to procedure

Clearing frozen titles

1. To clear frozen column titles, position the mouse pointer on the right border of the last frozen column and drag left to the row numbers.
2. To clear frozen row titles, position the mouse pointer on the bottom border of the last frozen row and drag up to the column letters.

{button ,AL(`H_CLEARING_FROZEN_TITLES_DETAILS',1)} See details

{button ,AL(`H_FREEZING_COLUMNS_AND_ROWS_AS_TITLES_STEPS;H_SHEETS_OVER;',0)} See related topics

Details: Clearing frozen titles

Other ways to clear frozen titles
Move the cell pointer to the sheet whose titles you want to clear, choose View - Titles, deselect "Row" and "Column," and click OK.

{button ,AL(`H_CLEARING_FROZEN_TITLES_STEPS',1)} Go to procedure

Deleting a sheet name

You can delete a sheet name so that the original sheet letter reappears on the sheet tab.

1. Double-click the sheet tab.
2. Press DEL or BACKSPACE.
3. Press ENTER.

{button ,AL(`H_DELETING_A_SHEET_NAME_DETAILS',1)} See details

{button ,AL(`H_CHANGING_TAB_COLOR_STEPS;H_DELETING_SHEETS_STEPS;H_HIDING_OR_SHOWING_TABS_STEPS;H_NAMING_A_SHEET_STEPS;H_SHEETS_OVER;',0)} See related topics

Details: Deleting a sheet name

How deleting sheets names affects formulas

When you delete a sheet name, 1-2-3 replaces the name with the correct sheet letter in formulas and @functions. For example, if the name of sheet B is Tokyo, and you delete the name, 1-2-3 changes the formula +Tokyo:A5-C:A3 to +B:A5-C:A3.

{button ,AL(`H_DELETING_A_SHEET_NAME_STEPS',1)} Go to procedure

Overview: Selecting sheet areas

You select a sheet area to indicate where you want to enter data or perform a command.

What you can select

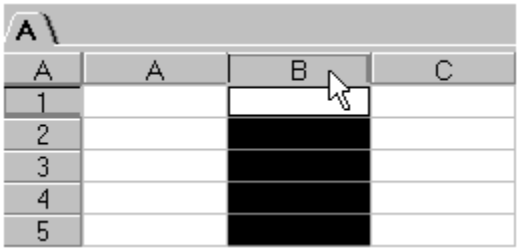
You can select the following sheet areas:

- A cell -- The basic unit of a sheet formed by the intersection of a column and a row. Select a cell to enter or edit text, numbers, and formulas.

- A range -- A block of cells that can be as small as a single cell, or as large as all the sheets in a workbook. A range is represented as the addresses of its top left and bottom right cells. Select a range to perform actions on a contiguous group of cells; for example, to copy, move, and style the cells, or to create a version.

- A 3D range -- A range that spans two or more contiguous sheets and includes the same cells in those sheets.
- A collection -- A group of non-contiguous ranges, selected at the same time. The ranges can touch, not touch, or overlap.

- A column or row -- You can move, copy, insert, and delete entire columns or rows, or create an outline by demoting columns or rows.



- A sheet -- A spreadsheet "page," consisting of a grid of 256 columns and 8192 rows, in the workbook. Clicking the sheet letter selects all the cells in the sheet. Clicking the sheet tab selects the sheet as an object. For example, if you want to delete the contents of a sheet and leave the sheet blank, select the sheet letter and press DEL. If you want to delete a sheet, click the sheet tab and choose Sheet - Delete Sheet.

How to tell what's selected

Selection indicator

The selection indicator displays the address or name of the current selection.

"Properties for" box

The "Properties for" box at the top of the InfoBox tells you whether you are changing the properties for the currently selected range, sheet, or graphic object.

Context menu

The context menu, located between Create and Sheet on the main menu, changes depending on what is selected. For example, if you select a drawing, you see Drawing in the menu, but if you select a range, that menu item changes to Range.

{button ,AL(`H_SELECTING_A_RANGE_FROM_A_DIALOG_BOX_STEPS;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_SHEET_AREAS_OVER;H_SELECTING_A_COLLECTION_OF_RANGES_STEPS;H_SELECTING_A_RANGE_ACROSS_SHEETS_STEPS;H_SELECTING_A_RANGE_STEPS;H_SELECTING_A_SINGLE_CELL_STEPS;H_SELECTING_COLUMNS_OR_ROWS_STEPS;H_SELECTING_SHEETS_STEPS;H_SELECTING_SHEET_AREAS_OVER;',0)} See related topics

Quick summary of selection techniques for sheet areas

The table below summarizes the techniques for selecting sheet areas.

To select	Do this
Cell	**Mouse**: Click the cell.
	Keyboard: Use the pointer-movement keys to move the cell pointer to the cell.
Range	**Mouse:** Drag across the range.
	Keyboard: Press SHIFT and use the pointer-movement keys to highlight the range.
3D range	Select the range in the first sheet, then SHIFT+click the tab of the last sheet in the range.
Collection	Select the first range, then hold down CTRL and select the other ranges.
Column or row	Click the column letter or row number.
Sheet	Click the sheet tab once to make the sheet current, then click it again to select the sheet.
All cells in a sheet	Click the sheet letter in the sheet frame (not the sheet tab).

Selecting sheets

You can select the sheet tab to change the properties of the sheet (the sheet defaults), or you can select all the cells in the sheet.

To select the sheet tab, click the tab once to make the sheet current, then click the tab again.

To select all the cells in a sheet, click the sheet letter.

Tip Select multiple sheets to change the properties of several sheets at once. To select several sheets, select the first sheet tab, then SHIFT+click or CTRL+click the other sheet tabs.

{button ,AL(`H_SELECTING_SHEETS_DETAILS',1)} See details

{button ,AL(`H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_SHEET_AREAS_OVER;H_SELECTING_A_COLLECTION_OF_RANGES_STEPS;H_SELECTING_A_RANGE_ACROSS_SHEETS_STEPS;H_SELECTING_A_RANGE_STEPS;H_SELECTING_A_SINGLE_CELL_STEPS;H_SELECTING_COLUMNS_OR_ROWS_STEPS;H_SELECTING_SHEETS_STEPS;H_SELECTING_SHEET_AREAS_OVER;',0)} See related topics

Details: Selecting sheets
To select a sheet, you must use the mouse.

Making changes to entire sheets
Use Sheet - Sheet Properties to make changes to one or more entire sheets. See Overview: Sheet defaults for more information.

Canceling a selection
To cancel a selection, press ESC or click anywhere in the sheet.

{button ,AL(`H_SELECTING_SHEETS_STEPS',1)} Go to procedure

Selecting a single cell

To enter data in a cell or perform a command on a cell, you must select it.

To select a single cell, click the cell.

Tip If the cell you want to select isn't visible, use F5 (GOTO), or the scroll bars to find it.

{button ,AL(`H_SELECTING_A_SINGLE_CELL_DETAILS',1)} See details

{button ,AL(`H_SELECTING_A_RANGE_FROM_A_DIALOG_BOX_STEPS;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_SHEET_AREAS_OVER;H_SELECTING_A_COLLECTION_OF_RANGES_STEPS;H_SELECTING_A_RANGE_ACROSS_SHEETS_STEPS;H_SELECTING_A_RANGE_STEPS;H_SELECTING_A_SINGLE_CELL_STEPS;H_SELECTING_COLUMNS_OR_ROWS_STEPS;H_SELECTING_SHEETS_STEPS;H_SELECTING_SHEET_AREAS_OVER;',0)} See related topics

Details: Selecting a single cell

Other ways to select a single cell

- Use the pointer-movement keys to move the cell pointer to the cell.
- To select a cell and display the shortcut menu, right-click the cell.

{button ,AL(`H_SELECTING_A_SINGLE_CELL_STEPS',1)} Go to procedure

Selecting a range

To perform a command on a range, you must select the range.

1. Move the mouse pointer to a corner of the range.
2. Hold down the left mouse button and drag across the cells you want to select.
3. Release the mouse button when the range is highlighted.

Tip You can ALT+double-click any cell in a range to select the entire range, if the range borders a blank column or row.

{button ,AL(`H_SELECTING_A_RANGE_DETAILS',1)} See details

{button ,AL(`H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_SHEET_AREAS_OVER;H_SELECTING_A_COLLECTION_OF_RANGES_STEPS;H_SELECTING_A_RANGE_ACROSS_SHEETS_STEPS;H_SELECTING_A_RANGE_STEPS;H_SELECTING_A_SINGLE_CELL_STEPS;H_SELECTING_COLUMNS_OR_ROWS_STEPS;H_SELECTING_SHEETS_STEPS;H_SELECTING_SHEET_AREAS_OVER;H_SELECTING_A_RANGE_FROM_A_DIALOG_BOX_STEPS;',0)} See related topics

Details: Selecting a range

Other ways to select a range

- With the cell pointer in one corner of the range, SHIFT+click the diagonally opposite corner.
- With the cell pointer in one corner of the range, hold down SHIFT and use the pointer-movement keys to highlight the range.
- Press F4 to anchor the cell pointer, then use the pointer-movement keys to highlight the range.

Reshaping a selection

To extend or shrink a range to a particular cell, SHIFT+click that cell.

Canceling a selection

To cancel a selection, press ESC or click anywhere in the sheet.

Selecting a range while using the InfoBox or a dialog box

While the InfoBox is displayed, you can select any range whose properties you want to change. In some dialog boxes and InfoBox tabs, you can select a range by using the range selector.

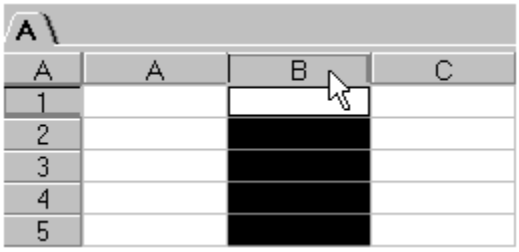
{button ,AL(`H_SELECTING_A_RANGE_STEPS',1)} Go to procedure

{button ,AL(`H_SELECTING_A_RANGE_FROM_A_DIALOG_BOX_STEPS;',0)} See related topics

Selecting columns or rows

Selecting a column or row selects all the cells in that column or row.

To select a column or row, click the column letter or row number.



{button ,AL(`H_SELECTING_COLUMNS_OR_ROWS_DETAILS',1)} See details

{button ,AL(`H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_SHEET_AREAS_OVER;H_SELECTING_A_COLLECTION_OF_RANGES_STEPS;H_SELECTING_A_RANGE_ACROSS_SHEETS_STEPS;H_SELECTING_A_RANGE_STEPS;H_SELECTING_A_SINGLE_CELL_STEPS;H_SELECTING_COLUMNS_OR_ROWS_STEPS;H_SELECTING_SHEETS_STEPS;H_SELECTING_SHEET_AREAS_OVER;',0)} See related topics

Details: Selecting columns or rows
To select rows or columns, you must use the mouse.

Selecting multiple columns or rows
To extend the selection to consecutive columns or rows, SHIFT+click the letter of the last column or the number of the last row in the range. You can also drag across column letters or row numbers.

To add non-consecutive columns or rows to your selection, CTRL+click the letter of each column or the number of each row.

Canceling a selection
To cancel a selection, press ESC or click anywhere in the sheet.

{button ,AL(`H_SELECTING_COLUMNS_OR_ROWS_STEPS',1)} Go to procedure

Selecting a collection of ranges

A collection can include single cells, ranges, 3D ranges, and entire columns, rows, and sheets.

1. Select the first range in the collection.
2. Hold down CTRL while selecting the ranges you want to add to the collection.

3. (Optional) To add a range in another sheet, CTRL+click the sheet tab to display the sheet, and hold down CTRL while selecting the range.

Tip To remove a range from a collection, CTRL+click the range. To re-shape an individual range in a collection, hold down CTRL and drag within that range.

{button ,AL(`H_SELECTING_A_COLLECTION_OF_RANGES_DETAILS',1)} See details

{button ,AL(`H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_SHEET_AREAS_OVER;H_SELECTING_A_RANGE_ACROSS_SHEETS_STEPS;H_SELECTING_A_RANGE_STEPS;H_SELECTING_A_SINGLE_CELL_STEPS;H_SELECTING_COLUMNS_OR_ROWS_STEPS;H_SELECTING_SHEETS_STEPS;H_SELECTING_SHEET_AREAS_OVER;',0)} See related topics

Details: Selecting a collection of ranges

Adding a 3D range to a collection
Hold down CTRL while selecting the range in the first sheet of the 3D range and CTRL+SHIFT+click the sheet tab of the last sheet you want to include in the 3D range.

Canceling a selection
To cancel a selection, press ESC or click anywhere in the sheet.

Which commands apply to collections?
Not all commands that apply to ranges apply to collections. For example, you can't name or copy a collection. Most styling commands you perform in the InfoBox do apply to collections, with the exception of named style commands.

If a command doesn't apply to a collection, 1-2-3 will either perform the command on the current range in the collection (the range containing the cell pointer) or display a message.

{button ,AL(`H_SELECTING_A_COLLECTION_OF_RANGES_STEPS',1)} Go to procedure

Selecting a range across sheets

To perform a command on a 3D range, you must first select the 2D range.

1. Select the range in the first sheet of the 3D range.
2. SHIFT+click the sheet tab of the last sheet you want to include in the range.

Tip To cancel a selection, press ESC or click anywhere in the sheet.

{button ,AL(`H_SELECTING_A_RANGE_ACROSS_SHEETS_DETAILS',1)} See details

{button ,AL(`H_SELECTING_A_RANGE_FROM_A_DIALOG_BOX_STEPS;H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_SHEET_AREAS_OVER;H_SELECTING_A_COLLECTION_OF_RANGES_STEPS;H_SELECTING_A_RANGE_ACROSS_SHEETS_STEPS;H_SELECTING_A_RANGE_STEPS;H_SELECTING_A_SINGLE_CELL_STEPS;H_SELECTING_COLUMNS_OR_ROWS_STEPS;H_SELECTING_SHEETS_STEPS;H_SELECTING_SHEET_AREAS_OVER;',0)} See related topics

Details: Selecting a range across sheets

Selecting a range across sheets with the keyboard
Select the range in the first sheet, then press CTRL+SHIFT+PG UP or CTRL+SHIFT+PG DN to extend your selection to the next sheet in the 3D range.

Checking your selection
You can use the selection indicator to check the address of your 3D selection.

{button ,AL(`H_SELECTING_A_RANGE_ACROSS_SHEETS_STEPS',1)} Go to procedure

Selecting a range from a dialog box

You can select a range from within some dialog boxes and InfoBox tabs by using the range selector.

1. Click the range selector to hide the dialog box or InfoBox.

The pointer changes to the range selector pointer.

2. Select the range.
3. When you release the mouse button, the dialog box or InfoBox reappears, with the range address entered.

Tip You don't have to hide the dialog box or InfoBox to select a range. If the range is visible, click the "Range" box and use the mouse to select the range.

{button ,AL(`H_SELECTING_A_RANGE_FROM_A_DIALOG_BOX_DETAILS',1)} See details

{button ,AL(`H_QUICK_SUMMARY_OF_SELECTION_TECHNIQUES_FOR_SHEET_AREAS_OVER;H_SELECTING_A_COLLECTION_OF_RANGES_STEPS;H_SELECTING_A_RANGE_ACROSS_SHEETS_STEPS;H_SELECTING_A_RANGE_STEPS;H_SELECTING_A_SINGLE_CELL_STEPS;H_SELECTING_COLUMNS_OR_ROWS_STEPS;H_SELECTING_SHEETS_STEPS;H_SELECTING_SHEET_AREAS_OVER;',0)} See related topics

Details: Selecting a range from a dialog box

Specifying a range using the keyboard
In the dialog box or InfoBox, click the "Range" box, then use the pointer movement keys to move the cell pointer to a corner of the range. Press . (period) to anchor the cell pointer, then use the pointer movement keys to select the range. Press ENTER to complete your selection.

Note 1-2-3 must be in Point mode.

Specifying a range name using the navigator
In the dialog box or InfoBox, click the "Range" box, then click the navigator and select from the list of named ranges in the current sheet.

{button ,AL(`H_SELECTING_A_RANGE_FROM_A_DIALOG_BOX_STEPS',1)} Go to procedure

Overview: Sizing columns and rows

You can change column width and row height by dragging the column or row border, or by using the InfoBox.

Changing column width

You can change column width to fit a particular number of characters, or you can set the width to fit the widest entry in the column.

When a value is too wide to fit in a cell, it appears in Scientific format or as a line of *** (asterisks).

D	A	B
1	Population	**********
2		

To display the value, widen the column.

D	A	B
1	Population	3,675,900
2		

Changing row height

1-2-3 automatically adjusts row height to match the height of the tallest font in the row, or to fit text that you wrap in a cell.

You can change row height to a particular number of points or reset it to fit the tallest font in the row.

{button ,AL(`H_FITTING_THE_TALLEST_ROW_ENTRY_STEPS;H_FITTING_THE_WIDEST_COLUMN_ENTRY_STEPS;H_SIZING_COLUMNS_STEPS;H_SIZING_COLUMNS_USING_THE_INFOBOX_STEPS;H_SIZING_ROWS_STEPS;H_SIZING_ROWS_USING_THE_INFOBOX_STEPS;H_WRAPPING_DATA_IN_A_CELL_STEPS;',0)}
See related topics

Sizing columns

You can size a column by dragging the column border.

 **Show me a demo**

1. Position the mouse pointer on the column border to the right of the column letter.

2. Drag the border right or left until the column is the width you want.

   As you drag, an indicator appears displaying the column width in characters.

3. Release the mouse button.

{button ,AL(`H_SIZING_COLUMNS_DETAILS',1)} See details

{button ,AL(`H_SIZING_COLUMNS_AND_ROWS_OVER;H_SIZING_COLUMNS_USING_THE_INFOBOX_STEPS;H_SIZING_ROWS_STEPS;H_SIZING_ROWS_USING_THE_INFOBOX_STEPS;H_FITTING_THE_WIDEST_COLUMN_ENTRY_STEPS;',0)} See related topics

Details: Sizing columns

Setting the column width in characters
1-2-3 sizes columns in whole-character increments from 0 (zero) to 240 characters. Setting column width to 0 hides the column. For more information about displaying hidden columns, see Displaying hidden columns.

Sizing several columns at once
To size more than one column at once, select the entire columns and drag the border of one of them.

You can also select several entire columns and double-click the right border of one of them; each selected column adjusts to fit its widest entry.

How changing column width affects values
When a column is too narrow to display an entire value as formatted, the value appears in Scientific format or as a line of *** (asterisks). To display the value, you must widen the column to the width of the formatted value.

How changing column width affects labels
If a label is longer than the cell it occupies and the cells to the right are blank, 1-2-3 displays the label across the blank cells. If the cells to the right contain data, 1-2-3 displays only the part of the label that fits in the cell where it is entered.

To see the complete label, you must widen the column or wrap the text in the cell. For more information, see Wrapping data in a cell.

{button ,AL(`H_SIZING_COLUMNS_STEPS',1)} Go to procedure

Sizing rows

You can size a row by dragging the bottom row border.

 **Show me a demo**

1. Position the mouse pointer on the bottom border of the row.

2. Drag the border up or down until the row is the height you want.

   As you drag, an indicator appears displaying row height in points.

3. Release the mouse button.

{button ,AL(`H_SIZING_ROWS_DETAILS',1)} See details

{button ,AL(`H_SIZING_COLUMNS_AND_ROWS_OVER;H_SIZING_COLUMNS_STEPS;H_SIZING_COLUMNS_USING_THE_INFOBOX_STEPS;H_SIZING_ROWS_USING_THE_INFOBOX_STEPS;H_FITTING_THE_TALLEST_ROW_ENTRY_STEPS;',0)} See related topics

Details: Sizing rows

Setting the row height in points

1-2-3 sizes rows in points from 0 (zero) to 255 points. Setting row height to 0 hides the row. For more information about displaying hidden rows, see Displaying hidden rows.

When you set the row height to a specific number of points, it no longer adjusts automatically to match the largest font in the row.

How changing fonts affects row height

If you change data in a selected range to a smaller font and the rows in the range do not contain any data in a larger font, the row height decreases according to the new font height. Row height, however, does not decrease to less than the default font size set for the sheet.

When you change row height, the heights of fonts in the row do not change.

Sizing several rows at once

To size more than one row at once, select the entire rows you want to size and drag the border of one of them.

You can also select several entire rows and double-click the bottom border of one of them; each row adjusts to fit its tallest entry.

Sizing rows to fit their tallest entry adjusts each row in the selected range to fit the largest font in the row or to fit the alignment orientation selected on the Alignment tab in the InfoBox.

{button ,AL(`H_SIZING_ROWS_STEPS',1)} Go to procedure

Sizing columns using the InfoBox

You can use the InfoBox to size columns to a particular width in characters, to the default width, or to fit the widest entry.

1. Select at least one cell in each column you want to size.
2. Choose Range - Range Properties.

3. Click the Basics tab in the InfoBox.

4. To set the width in characters, select "Width" and click the arrows or enter a number in the "Width" box.
5. To reset the column to the default width, select "Default width."
6. To size the column to its widest entry, click the icon shown below.

7. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_SIZING_COLUMNS_USING_THE_INFOBOX_DETAILS',1)} See details

{button ,AL(`H_SIZING_COLUMNS_AND_ROWS_OVER;H_SIZING_COLUMNS_STEPS;H_SIZING_ROWS_STEPS;H_SIZING_ROWS_USING_THE_INFOBOX_STEPS;H_THE_INFOBOX_OVER;H_FITTING_THE_WIDEST_COLUMN_ENTRY_STEPS;',0)} See related topics

Details: Sizing columns using the InfoBox

Setting column width
The Basics tab in the InfoBox has options for setting column width.

- Width -- Sizes columns in whole characters from 0 (zero) to 240 characters. Setting column width to 0 hides the column. For more information about displaying hidden columns, see Displaying hidden columns.
- Default width -- Sets columns to the default width. 1-2-3 adjusts columns to the default width set with Sheet - Sheet Properties. The initial default width is 9 characters.

How changing column width affects values
When a column is too narrow to display an entire value as formatted, the value appears in Scientific format or as a line of *** (asterisks). To display the value, you must widen the column to the width of the formatted value.

How changing column width affects labels
If a label is longer than the cell it occupies and the cells to the right are blank, 1-2-3 displays the label across the blank cells. If the cells to the right contain data, 1-2-3 displays only the part of the label that fits in the cell where it is entered.

To see the complete label, you must widen the column or wrap the text in the cell. For more information, see Wrapping data in a cell.

Sizing to a maximum of 240 characters
When you size a column to fit the widest entry, 1-2-3 widens the column to a maximum of 240 characters. If your widest entry exceeds this limit, 1-2-3 may display only the first 240 characters. No data is lost. When you click the cell containing the widest entry, all the data appears in the contents box.

{button ,AL(`H_SIZING_COLUMNS_USING_THE_INFOBOX_STEPS',1)} Go to procedure

Sizing rows using the InfoBox

You can use the InfoBox to size rows to a particular number of points or to fit the tallest font in the row.

1. Select at least one cell in each row you want to size.
2. Choose Range - Range Properties.

3. Click the Basics tab in the InfoBox.

4. To set the height in characters, select "Height" and click the arrows or enter a number in the "Height" box.
5. To size the row to its tallest entry, select "Fit largest font."
6. (Optional) Move, collapse, or close the InfoBox.

{button ,AL(`H_SIZING_ROWS_USING_THE_INFOBOX_DETAILS',1)} See details

{button ,AL(`H_SIZING_COLUMNS_AND_ROWS_OVER;H_SIZING_COLUMNS_STEPS;H_SIZING_COLUMNS_USING_THE_INFOBOX_STEPS;H_SIZING_ROWS_STEPS;H_THE_INFOBOX_OVER;H_FITTING_THE_TALLEST_ROW_ENTRY_STEPS;',0)} See related topics

Details: Sizing rows using the InfoBox

Setting row height
The Basics tab in the InfoBox has options for setting the row height.

- Height -- Sets row height in points from 0 (zero) to 255 points. When you set the row height to a specific number of points, it no longer adjusts automatically to match the largest font in the row.
- Fit largest font -- Adjusts each row in the selected range to fit the largest font in the row or to fit the alignment orientation selected in the InfoBox Alignment tab.

How changing fonts affects row height
If you change data in a selected range to a smaller font and the rows in the range do not contain any data in a larger font, the row height decreases according to the new font height. Row height, however, does not decrease to less than the default font size set for the sheet.

When you change row height, the heights of fonts in the row do not change.

Hiding and displaying rows
Setting row height to 0 hides the row. For information about displaying hidden rows, see Displaying hidden rows.

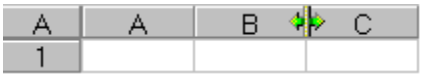
{button ,AL(`H_SIZING_ROWS_USING_THE_INFOBOX_STEPS',1)} Go to procedure

Fitting the widest column entry

You can use the mouse to change column width to fit the widest entry in the column.

Show me a demo

1. Position the mouse pointer on the column border to the right of the column letter.



2. Double-click the border.

Tip If a column contains both text and numbers and you want to size it to fit the widest numerical entry, SHIFT+double-click the column border.

{button ,AL(`H_FITTING_THE_WIDEST_COLUMN_ENTRY_DETAILS',1)} See details

{button ,AL(`H_FITTING_THE_TALLEST_ROW_ENTRY_STEPS;H_SIZING_COLUMNS_AND_ROWS_OVER;H_SIZING_COLUMNS_STEPS;H_SIZING_ROWS_STEPS;H_WRAPPING_DATA_IN_A_CELL_STEPS;',0)} See related topics

Details: Fitting the widest column entry

Sizing to a maximum of 240 characters
When you size a column to fit the widest entry, 1-2-3 widens the column to a maximum of 240 characters. If your widest entry exceeds this limit, 1-2-3 may display only the first 240 characters. No data is lost. When you click the cell containing the widest entry, all the data appears in the contents box.

Sizing several columns at once
To fit the widest entry in more than one column at once, select the entire columns you want to size and double-click the right border of one of them. Each selected column adjusts to fit its widest entry.

Related SmartIcons

Sizes columns to fit the widest entries in the current selection

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{button ,AL(`H_FITTING_THE_WIDEST_COLUMN_ENTRY_STEPS',1)} Go to procedure

Fitting the tallest row entry

You can use the mouse to change row height to fit the tallest font in the row.

1. Position the mouse pointer on the bottom border of the row.

2. Double-click the border.

{button ,AL(`H_FITTING_THE_TALLEST_ROW_ENTRY_DETAILS',1)} See details

{button ,AL(`H_SIZING_ROWS_USING_THE_INFOBOX_STEPS;H_FITTING_THE_WIDEST_COLUMN_ENTRY_STEPS;H_SIZING_COLUMNS_AND_ROWS_OVER;H_SIZING_COLUMNS_STEPS;H_SIZING_ROWS_STEPS;',0)} See related topics

Details: Fitting the tallest row entry

Sizing several rows at once

To fit the tallest entry in more than one row at once, select the entire rows you want to size and double-click the bottom border of one of them. Each selected row adjusts to fit its tallest entry

Sizing rows to fit their tallest entry adjusts each row in the selected range to fit the largest font in the row or to fit the alignment orientation specified on the Alignment tab in the InfoBox.

{button ,AL(`H_FITTING_THE_TALLEST_ROW_ENTRY_STEPS',1)} Go to procedure

Overview: Working with Internet connections

Using 1-2-3, you can open any workbook from an FTP (File Transfer Protocol) or a Web (World Wide Web) server via the Internet. You can also save a workbook to an FTP server and publish a range on a Web page.

Before you can open or save a workbook on the Internet:

- Your computer and the server must both be connected to the Internet.
- Your computer must have a WinSock-compatible TCP/IP stack installed.
- The server must meet one of the following criteria:
  - The server must be a public Web server.
  - The server must support anonymous FTP.
  - The server must support FTP and you must have an account with permission to access files.

When you open a workbook on the Internet, 1-2-3 copies the workbook to your workstation where you can make changes. To write the changes to the FTP server, you must save the modified workbook to the Internet. You must also have Write permission to an FTP server to save changes.

You can maintain a list of addresses to FTP servers that you use often. You can also add, edit, or delete FTP connection information.

Access to FTP servers can be anonymous or require a user ID and password. You can access an FTP server directly or via a firewall (proxy server).

If you regularly connect to the same server, you can set Internet Options so that you automatically connect to that server when opening or saving a file on the Internet. You can also capture a transaction record of the date, time, and full path from which a file was copied when you open a workbook.

For each Internet connection, a log is kept of the messages sent to and from the Internet server. The log file is called LTSNET.LOG and is stored in the operating system's temporary directory. 1-2-3 maintains only a log of the most recent connection. Each time you connect to a server, the previous file is overwritten.

{button ,AL(`;H_123_ADDING_CONNECTION_INFORMATION_FOR_INTERNET_HOSTS_STEPS;H_123_ADDING_EDITING_OR_SETTING_A_DEFAULT_PROXY_STEPS;H_123_CONFIGURING_INTERNET_OPTIONS_STEPS;H_123_CONNECTING_TO_LOTUS_CUSTOMER_SUPPORT_STEPS;H_123_CONNECTING_TO_THE_LOTUS_FTP_SITE_STEPS;H_123_CONNECTING_TO_THE_LOTUS_HOME_PAGE_STEPS;H_123_CONNECTING_TO_THE_LOTUS_REF_LIB_STEPS;H_123_EDITING_CONNECTION_INFORMATION_FOR_INTERNET_HOSTS_STEPS;H_123_OPENING_A_DOCUMENT_FROM_A_WEB_SERVER_ON_THE_INTERNET_STEPS;H_123_OPENING_A_DOCUMENT_FROM_AN_FTP_SERVER_ON_THE_INTERNET_STEPS;H_123_PUBLISHING_A_RANGE_STEPS;H_123_SAVING_A_DOCUMENT_TO_AN_FTP_SERVER_ON_THE_INTERNET_STEPS;H_123_SEARCHING_INTERNET_STEPS;H_123_WEB_BUTTON_STEPS',0)} See related topics

Connecting to the Lotus home page

1. Choose Help - Lotus Internet Support.
2. Choose Lotus Home Page.

{button ,AL(`;H_123_CONNECTING_TO_LOTUS_CUSTOMER_SUPPORT_STEPS;H_123_CONNECTING_TO_THE_LOTUS_FTP_SITE_STEPS;H_123_CONNECTING_TO_THE_LOTUS_REF_LIB_STEPS',0)} See related topics

Connecting to Lotus Customer Support

1. Choose Help - Lotus Internet Support.
2. Choose Lotus Customer Support.

{button ,AL(`;H_123_CONNECTING_TO_THE_LOTUS_FTP_SITE_STEPS;H_123_CONNECTING_TO_THE_LOTUS_HOME_PAGE_STEPS;H_123_CONNECTING_TO_THE_LOTUS_REF_LIB_STEPS',0)} See related topics

Connecting to the Lotus FTP site

1. Choose Help - Lotus Internet Support.
2. Choose Lotus FTP Site.

{button ,AL(`;H_123_CONNECTING_TO_LOTUS_CUSTOMER_SUPPORT_STEPS;H_123_CONNECTING_TO_THE_LOTUS_HOME_PAGE_STEPS;H_123_CONNECTING_TO_THE_LOTUS_REF_LIB_STEPS',0)} See related topics

Connecting to the Lotus SmartSuite Reference Library page

To connect to the Reference Library home page, click the SmartSuite Reference Library icon in the set of Internet SmartIcons.

Note If you can't see the set of Internet SmartIcons, choose View - Show Internet Tools.

{button ,AL(`H_123_WORKING_WITH_INTERNET_CONNECTIONS_OVER;H_123_CONNECTING_TO_LOTUS_CUSTOMER_SUPPORT_STEPS;H_123_CONNECTING_TO_THE_LOTUS_FTP_SITE_STEPS;H_123_CONNECTING_TO_THE_LOTUS_HOME_PAGE_STEPS',0)} See related topics

Opening a workbook from a Web server on the Internet

1. Choose File - Open.
2. Click Internet.

3. Select "WWW" as the server type.
4. Specify the Web page file name.
5. If you use a server proxy, select "Use proxy" and specify the proxy name.
6. Click Open.

{button ,AL(`H_123_OPENING_A_DOCUMENT_FROM_A_WEB_SERVER_ON_THE_INTERNET_DETAILS',1)} See details

{button ,AL(`;H_123_OPENING_A_DOCUMENT_FROM_AN_FTP_SERVER_ON_THE_INTERNET_STEPS',0)} See related topics

Details: Opening a workbook from a Web server on the Internet

Server type
Enables you to select either "FTP" (File Transfer Protocol) or "WWW" (World Wide Web).

File name
Displays a list of previously used Web page addresses.

Use Proxy
Identifies that your internal network is connected to the Internet via a firewall acting as a proxy server. If unsure, check with your system administrator.

Note If you choose "Use Proxy" you must have already set up your proxy information. If you do not have proxy information set up, choose Edit Proxies and specify proxy information.

Proxy Information: Proxy
Identifies the network address of your proxy server. If unsure, check with your system administrator.

Proxy Information: Port
Identifies the port number or your proxy server. If unsure, check with your system administrator.

{button ,AL(`H_123_OPENING_A_DOCUMENT_FROM_A_WEB_SERVER_ON_THE_INTERNET_STEPS',1)} Go to procedure

Opening a workbook from an FTP server on the Internet

1. Choose File - Open.
2. Click Internet.

3. Select "FTP" as the server type.
4. Select a host domain name address from the "FTP Servers" box.
5. Click Connect to connect to the host.
6. Select the file type of the file you want to open from the "List files of type" box.
7. Specify the file you want to open.
8. Click Open.

{button ,AL(`H_123_OPENING_A_DOCUMENT_FROM_AN_FTP_SERVER_ON_THE_INTERNET_DETAILS',1)} See details

{button ,AL(`;H_123_OPENING_A_DOCUMENT_FROM_A_WEB_SERVER_ON_THE_INTERNET_STEPS',0)} See related topics

Details: Opening a workbook from an FTP server on the Internet

Server type
Enables you to select either "FTP" (File Transfer Protocol) or "WWW" (World Wide Web).

FTP Servers
Displays host domain name addresses or descriptions for the FTP server you selected.

List by description
Enables you to view FTP servers by a description rather than an address. You can determine the host description when you add or edit host information.

Look in
Displays all the directories for a specific drive.

File name
Displays all the files in the selected directory.

List files of type
Enables you to specify a file format.

Status bar
Displays a brief description of the file, such as access rights, owner, size, date, time, and file name. It also displays login status and errors.

{button ,AL(`H_123_OPENING_A_DOCUMENT_FROM_AN_FTP_SERVER_ON_THE_INTERNET_STEPS',1)} Go to procedure

Saving a workbook to an FTP server on the Internet

1. Choose File - Save As.
2. Click Internet.

3. Select a host domain name address or description from the "FTP Servers" box.
4. Click Connect to connect to the host.
5. Select the file type.
6. Specify the file you want to save.
7. Click Save.

{button ,AL(`H_123_SAVING_A_DOCUMENT_TO_AN_FTP_SERVER_ON_THE_INTERNET_DETAILS',1)} See details

{button ,AL(`;H_123_PUBLISHING_A_RANGE_STEPS',0)} See related topics

Details: Saving a workbook to an FTP server on the Internet

FTP Servers
Displays host domain name addresses or descriptions for the FTP server you selected.

List by description
Enables you to view FTP servers by a description rather than an address. You can determine the host description when you add or edit host information.

Save in
Displays all the directories for a specified drive.

File name
Displays the name of the file you are saving.

Save as type
Enables you to specify a file format for saving the file.

{button ,AL(`H_123_SAVING_A_DOCUMENT_TO_AN_FTP_SERVER_ON_THE_INTERNET_STEPS',1)} Go to procedure

Configuring Internet options

If you regularly connect to the same server, you can set Internet Options so that you automatically connect to that server when opening or saving a file on the Internet.

1. Choose File - Internet.
2. Choose FTP Connection Setup.
3. Select the desired options.
4. For each "Auto connect" option you select, specify the domain name address of the server.
5. Click OK.

{button ,AL(`H_123_CONFIGURING_INTERNET_OPTIONS_DETAILS',1)} See details

Details: Configuring Internet 0ptions

Auto connect Open from Internet
Logs you in (requires a password, if needed) to the specified server when you choose Open from Internet.

Auto connect Save to Internet
Logs you in (requires a password, if needed) to the specified server when you choose Save to Internet.

Capture record of Open from Internet
Records the date, time, and full path from which a file was copied when you open a document.

The record is added to the document's description or, if the host application supports it, creates a more detailed record. For example, in Word Pro, a Version Remark is created indicating the current editor, the full path, date/time, and directory listing for the original file from which the copy was opened.

{button ,AL(`H_123_CONFIGURING_INTERNET_OPTIONS_STEPS',1)} Go to procedure

Adding, editing, or setting a default proxy

For guidance using proxies, see your system administrator.

1. Choose File - Internet.
2. Choose FTP Connection Setup.
3. Click Hosts.
4. Select "Use Proxy."
5. Click Edit Proxies.
   - To add a proxy, click New, specify the proxy address and port, click Save, and click Done.
   - To edit a proxy, select the proxy address, specify the new information, click Save, and click Done.
   - To make a proxy the default, select the proxy address, select "Default proxy," click Save, and click Done.
6. Click Done to return to the FTP Hosts dialog box.
7. Click Done.
8. Click OK.

Adding connection information for Internet hosts

1. Choose File - Internet.
2. Choose FTP Connection Setup.
3. Click Hosts.
4. Click New.
5. Specify the host address, description, and connection information.
6. If you use a proxy, select "Use proxy" and specify a proxy.
7. Click Save.
8. Click Done.
9. Click OK.

{button ,AL(`H_123_ADDING_CONNECTION_INFORMATION_FOR_INTERNET_HOSTS_DETAILS',1)} See details

Details: Adding connection information for Internet hosts

Host description
Displays a description of the host. You can specify any desired descriptive name for a host domain name address.

Host address
Displays host domain name addresses of the FTP servers.

User ID
Identifies you as someone with an account on the host. A system administrator assigns you this name. A user ID is not required for anonymous FTP.

Password
Gives you access to your account. A system administrator originally assigns you a password which you can change. For anonymous FTP, you should use your e-mail address as the password.

Initial directory at remote host
Displays this directory when you first connect to the selected host domain name address.

Anonymous FTP
Identifies that the remote host supports FTP without requiring a user ID and password. You should use your e-mail address as the password.

Passive (PASV)
Identifies that your internal network is connected to the Internet via a firewall that supports passive transfers. If unsure, check with your system administrator.

Use Proxy
Identifies that your internal network is connected to the Internet via a firewall acting as a proxy server. If unsure, check with your system administrator.

Note If you choose "Use Proxy" you must have already set up your proxy information. If you do not have proxy information set up, choose Edit Proxies and specify proxy information.

Proxy Information: Proxy
Identifies the network address of your proxy server. If unsure, check with your system administrator.

Proxy Information: Port
Identifies the port number or your proxy server. If unsure, check with your system administrator.

{button ,AL(`H_123_ADDING_CONNECTION_INFORMATION_FOR_INTERNET_HOSTS_STEPS',1)} Go to procedure

Deleting connection information for Internet hosts

1. Choose File - Internet.
2. Choose FTP Connection Setup
3. Click Hosts.
4. Choose the desired Internet host from the "Host description" box.
5. Click Delete.
6. Click Done.
7. Click OK.

Editing connection information for Internet hosts

1. Choose File - Internet.
2. Choose FTP Connection Setup.
3. Click Hosts.
4. Choose the desired Internet host from the "Host description" box.
5. Make the desired changes to the connection information.
6. Click Save.
7. Click Done.
8. Click OK.

{button ,AL(`H_123_EDITING_CONNECTION_INFORMATION_FOR_INTERNET_HOSTS_DETAILS',1)} See details

Details: Editing connection information for Internet hosts

Host description
Displays a description of the host. You can specify any desired descriptive name for a host domain name address.

Host address
Displays host domain name addresses of the FTP servers.

User ID
Identifies you as someone with an account on the host. A system administrator assigns you this name. A user ID is not required for anonymous FTP.

Password
Gives you access to your account. A system administrator originally assigns you a password which you can change. For anonymous FTP, you should use your e-mail address as the password.

Initial directory at remote host
Displays this directory when you first connect to the selected host domain name address.

Anonymous FTP
Identifies that the remote host supports FTP without requiring a user ID and password. You should use your e-mail address as the password.

Passive (PASV)
Identifies that your internal network is connected to the Internet via a firewall that supports passive transfers. If unsure, check with your system administrator.

Use Proxy
Identifies that your internal network is connected to the Internet via a firewall acting as a proxy server. If unsure, check with your system administrator.

Note If you choose "Use Proxy" you must have already set up your proxy information. If you do not have proxy information set up, choose Edit Proxies and specify proxy information.

Proxy Information: Proxy
Identifies the network address of your proxy server. If unsure, check with your system administrator.

Proxy Information: Port
Identifies the port number or your proxy server. If unsure, check with your system administrator.

{button ,AL(`H_123_EDITING_CONNECTION_INFORMATION_FOR_INTERNET_HOSTS_STEPS',1)} Go to procedure

FTP Hosts dialog box

You can add, edit, or delete FTP connection information.

Choose a task

- Adding connection information for Internet hosts
- Deleting connection information for Internet hosts
- Editing connection information for Internet hosts

Typing a password

Whether you're accessing a remote system or confirming an FTP Host password, you need to enter the appropriate password to continue.

1. Type the password.
2. Click OK.

Open from Internet dialog box

You can open any workbook from an FTP (File Transfer Protocol) or a Web (World Wide Web) server via the Internet. When you open a workbook on the Internet, 1-2-3 copies the workbook to your workstation where you can make changes.

Choose a task

- Opening a workbook from an FTP server on the Internet
- Opening a workbook from a Web server on the Internet

Creating a button link to the Web

You can create a button that links to a Web page by specifying its URL (Universal Resource Locator).

1. Click the Create Internet button icon in the set of Internet SmartIcons.

2. Enter text as you want it to appear on the button.
3. Enter the URL for the Web page.
4. Click OK.
5. Click the sheet to create the button.

Note If you can't see the set of Internet SmartIcons, choose View - Show Internet Tools.

{button ,AL(`H_123_WORKING_WITH_INTERNET_CONNECTIONS_OVER;',0)} See related topics

Publishing a range on the Internet

You can publish a range on the World Wide Web as an HTML table. You specify how you want the table to look and 1-2-3 performs the conversion to HTML.

1. Choose File - Internet - Publish a Range to the Internet.

2. Enter a range in the dialog box, or use the range selector to select a range.
3. Click Next.
4. Format the table as it will display on the Web page.
5. Click Next.
6. Format the entire page as it will display on the Web.
7. Click Next.
8. To see how your page will look, click Preview in Browser.
9. To save your page to a file on disk, click Save as HTML file.
10. To save your page on the Web, click Publish on the Web. This will display the Save to Internet dialog box.

{button ,AL(`H_123_PUBLISHING_A_RANGE_DETAILS',1)} See details

{button ,AL(`H_123_WORKING_WITH_INTERNET_CONNECTIONS_OVER;H_123_SAVING_A_DOCUMENT_TO_AN_FTP_SERVER_ON_THE_INTERNET_STEPS;',0)} See related topics

Searching for text on the Internet

You can search the Internet for text in a 1-2-3 range. 1-2-3 will automatically launch your browser and do a search of Yahoo! for the selected text.

1. Select the range containing the text you want to search for.
2. Click the Search Internet icon in the set of Internet SmartIcons.

Note If you can't see the set of Internet SmartIcons, choose View - Show Internet Tools.

{button ,AL(`H_123_WORKING_WITH_INTERNET_CONNECTIONS_OVER;',0)} See related topics

Details: Publishing a range on the Internet

Formatting the table
To add a title to the table, enter it in the "Show table title" box. To hide the title, deselect "Show table title." To change the appearance of the table, select or deselect "Show cell borders" and "Make columns equal width."

Formatting the page
To format the page as it will appear on the Web, you can add a page title, underline the title, add a description that will appear under the table, and add a line under the description. You can also include a name and e-mail address.

Previewing and saving the page
When your page is complete you can preview it in your Web browser, save it to disk as an HTML file, and publish it on the Web. If you click Publish on the Web, the Save to Internet dialog appears so you can specify where to publish the page.

{button ,AL(`H_123_PUBLISHING_A_RANGE_STEPS',1)} Go to procedure

Saving an HTML file

1. Select the location where you want to save the file.
2. Enter a name in the "File name" box.
3. Click Save.

{button ,AL(`H_123_SAVING_AS_HTML_DETAILS',1)} See details

Details: Saving an HTML file

Options: Save As File dialog box

Save in

Displays the current directory and shows where it fits in the hierarchy on your computer. Below it is a list of directories and files in the selected location. The files listed match the type selected in the "Save as type" list.

File name

Lets you enter a path and file name containing a combined total of up to 259 characters. You can use any combination of letters, numbers, - (hyphens), spaces, _ (underscores), and . (periods) in a file name. 1-2-3 retains uppercase and lowercase characters.

Save as type

Lists HTML files as the default format.

Save

Saves the HTML file in the selected location.

{button ,AL(`H_123_SAVING_AS_HTML_STEPS',1)} Go to procedure

Overview: Opening Notes file attachments from within 1-2-3

You can open file attachments stored in documents in a Lotus Notes database without leaving 1-2-3. You must use a 32-bit version of Notes 4.5 or higher.

Choosing the Notes database

First, choose the Notes database that contains the document you want. The database can be either on your local hard drive or on a server to which you have access.

Choosing the Notes document

Next, choose the Notes document that contains the file attachment you want to open. You must select the view in which the document appears and then the document in that view.

Choosing the file attachment

1-2-3 lists the file attachments that you can open in each Notes document. You can open the following types of attached files:

- Lotus 1-2-3 Workbook (.123, .WK4, .WK3, .WK1, .WT4)
- Lotus 1-2-3 SmartMaster Template (.12M)
- Text (.TXT, .PRN, .CSV, .DAT, .OUT, .ASC)
- Excel (.XLS, .XLT, .XLW)
- Quattro Pro (.WQ1, .WB1, .WB2)
- dBASE (.DBF)
- Paradox (.DB)

1-2-3 opens the file attachment in a separate window.

{button ,AL(`H_123_OPENING_A_WORKBOOK_FROM_A_NOTES_DATABASE_STEPS',0)} See related topics

Opening a Notes file attachment from within 1-2-3

You can open file attachments stored in documents in a Lotus Notes database without leaving 1-2-3. You must use a 32-bit version of Notes 4.5 or higher.

1. Choose File - Open.

2. Click Lotus Notes.
3. Select the server from the "Server" list.

   If prompted, enter your Lotus Notes password and then click OK.
4. Specify the database that contains the file you want to open.

   To choose a database located in a different directory, click Browse.
5. Click Next to select a Notes document.
6. After you have selected the Notes document, click Next to select the file attachment you want to open.

{button ,AL(`H_123_OPEN_FROM_NOTES_DB_OVER',0)} See related topics

Selecting the Notes document

1. Select the document view from the "View" list.
2. Select the document you want from the "Documents in view" list.

   If you want to select a different database, click Back.
3. Do one of the following:
   - Click Next to select the file attachment you want to open.
   - Click Done to open the first file attachment in the selected document.

{button ,AL(`H_123_OPEN_FROM_NOTES_DB_OVER;H_123_OPENING_A_WORKBOOK_FROM_A_NOTES_DATABASE_STEPS',0)} See related topics

Selecting the Notes file attachment

1. Select the attached file you want to open.

   If you want to select a different Notes database or document, click Back.

2. Click Done.

The selected file opens as an untitled file in a new window.

{button ,AL(`H_123_OPEN_FROM_NOTES_DB_OVER;H_123_OPENING_A_WORKBOOK_FROM_A_NOTES_DATABASE_STEPS',0)} See related topics

Overview: Saving files to a Notes database

You can save files as attachments to documents in Lotus Notes databases. You must use a 32-bit version of Notes 4.5 or higher.

You can save these file types as attachments:

- Lotus 1-2-3 Workbook (.123, .WK4, .WK3, .WK1)
- Lotus 1-2-3 SmartMaster (.12M)
- Text (.TXT)
- Excel Worksheet (.XLS)
- Excel Workbook (.XLW)
- dBASE (.DBF)
- Paradox (.DB)

If you are working on a file that you originally opened from a Notes database, you can use File - Save to save the file back to the document that contains it, overwriting the existing file attachment in the document.

Choosing the Notes database

First, choose the Notes database in which you want to save the file. The database can be either on your local hard drive or on a server to which you have access.

Choosing the Notes form and field

Next, choose the Notes form you want to use and the field in which you want to save the file attachment. By default, 1-2-3 selects the first rich text field in the default form in the selected database.

Note You cannot save a file as an attachment if the selected form does not contain any rich text field.

Saving the file as a Notes attachment

Lastly, enter the file name and extension you want to assign to the Notes attachment. 1-2-3 saves the file in a file format based on the extension that you specify.

You can also enter information that you want to display in any text field on the selected form.

{button ,AL(`H_123_SAVING_A_WORKBOOK_TO_A_NOTES_DATABASE_STEPS;',0)} See related topics

Saving a file to a Notes database

You can save files as attachments to documents in Lotus Notes databases. You must use a 32-bit version of Notes 4.5 or higher.

1. Choose File - Save As.

2. Click Lotus Notes.
3. Select the server from the "Server" list.

   If prompted, enter your password and then click OK.
4. Specify the database where you want to save the file.

   To choose a database located in a different directory, click Browse.
5. Click Next to select the Notes form and field in which you want to save the file.
6. After you have selected the form and field, click Next to save the file as a Notes attachment.

{button ,AL(`H_123_SAVE_TO_NOTES_DB_OVER',0)} See related topics

Selecting a Notes form and field

1. Select the form for the Notes document from the "Form" list.
2. Select the field in which you want to save the file attachment from the "Field" list.

   If you want to select a different Notes database, click Back.
3. Click Next to save the file as a Notes file attachment.

{button ,AL(`H_123_SAVE_TO_NOTES_DB_OVER;H_123_SAVING_A_WORKBOOK_TO_A_NOTES_DATABASE_STEPS',0)} See related topics

Saving the file as a Notes attachment

1. Specify the file name and extension in the "File name" box.

   If you want to select a different Notes form or database, click Back.
2. Click Done.

{button ,AL(`H_123_SAVING_A_NOTES_FILE_AS_AN_ATTACHMENT_OR_OLE_OBJECT_DETAILS',1)} See details

{button ,AL(`H_123_SAVE_TO_NOTES_DB_OVER;H_123_SAVING_A_WORKBOOK_TO_A_NOTES_DATABASE_STEPS',0)} See related topics

Details: Saving the file as a Notes attachment

Specifying a file format
When you enter a file name and extension, the extension that you specify determines the format in which 1-2-3 saves the file attachment. You can save attachments in these formats:

- Lotus 1-2-3 Workbook (.123, .WK4, .WK3, .WK1)
- Lotus 1-2-3 SmartMaster (.12M)
- Text (.TXT)
- Excel Worksheet (.XLS)
- Excel Workbook (.XLW)
- dBASE (.DBF)
- Paradox (.DB)

Entering text in the Notes document
You can also specify text that you want to display in other fields in the Notes document. Just select the field you want from the "Non-computed text fields" list and then enter the text in the "Enter text to display in field" box.

{button ,AL(`H_123_SAVING_A_NOTES_FILE_AS_AN_ATTACHMENT_OR_OLE_OBJECT_STEPS',1)} Go to procedure

Choosing a Notes database

1. Under Files of type, select the file type you want.

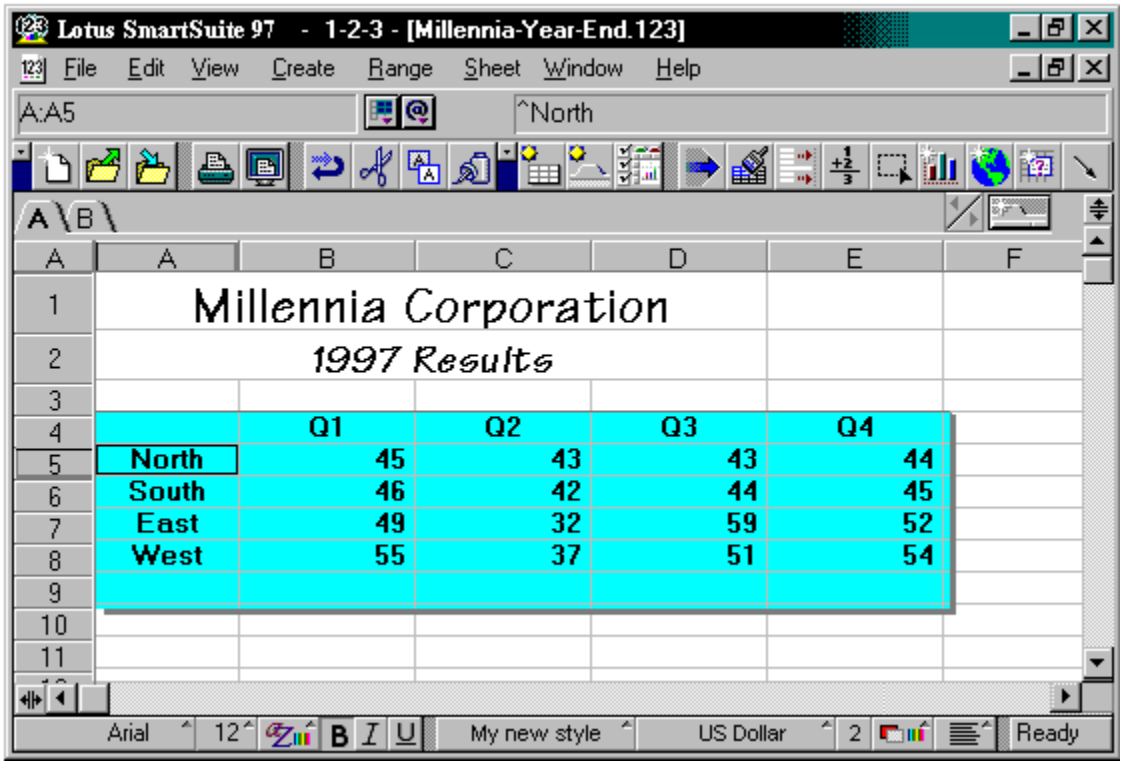
   The default is the Notes database file type.
2. Under Look in, select the directory containing the database you want.
3. Select the database name from the list.
4. Click Open.

{button ,AL(`H_123_OPEN_FROM_NOTES_DB_OVER;H_123_OPENING_A_WORKBOOK_FROM_A_NOTES_DATABASE_STEPS;H_123_SAVE_TO_NOTES_DB_OVER;H_123_SAVING_A_WORKBOOK_TO_A_NOTES_DATABASE_STEPS',0)} See related topics

Overview: Parts of the 1-2-3 window

In the sample 1-2-3 window below, point to the part of the window you want to learn about. When the mouse pointer changes to a hand, click to pop up a description.

Tip Click the Maximize button to see the whole illustration.



{button ,AL(`H_THE_INFOBOX_OVER;H_MODE_INDICATOR_OVER;H_SHEETS_OVER;H_USING_THE_STATUS_BAR_OVER;H_STATUS_INDICATOR_OVER;',0)} See related topics

Alignment
Changes the alignment of the current selection.

Background color
Changes the background color of the current selection.

Bold
Adds bold to the current selection. Click again to remove bold.

Close button
Closes the active window.

Column
Click the column letter to select the whole column.

Contents box

Lets you edit the contents of a cell.

When you finish editing, press ENTER or click the Confirm button:

To abandon an edit, press ESC or click the Cancel button:

Current cell
The cell pointer marks the current cell with an outline.

Decimal places
Changes the number of decimal places for the current selection.

Font color
Changes the font color of the current selection.

Font name
Displays a list of fonts that you can apply to the current selection.

Horizontal splitter
Drag to divide the sheet into horizontal panes.

Italic
Adds italic to the current selection. Click again to remove italic.

Maximize/Restore button

Maximizes the active window. If the window is already maximized, the Restore button appears  .

Menu bar
Contains the commands you use with 1-2-3. Some commands in the menu change depending on the current selection.

Minimize button
Reduces the active window to an icon.

Mode indicator
Shows what mode 1-2-3 is in. For example, Point mode indicates you are selecting a range to work with; Edit mode indicates you are changing cell contents.

Named style
Displays a list of named styles that you can apply to the current selection.

Navigator
Displays the list of named ranges in the current workbook.

New Sheet button
Inserts a new sheet.

Number format
Changes the number format of the current selection. Click to display the list of frequently-used number formats.

Point size
Changes the point size of the current selection.

Row
Click the row number to select the whole row.

Scroll arrow
Click the scroll arrows to move within a window.

Scroll bar
Click the scroll arrows or drag the scroll box to move within a window.

Scroll box
Drag the scroll box to move within the window.

Selection indicator
Displays the address or name of the current selection.

Sheet letter
Selects all cells in a sheet.

Tab-scroll arrows
Click the arrows to scroll left or right to sheet tabs not in view.

Sheet tabs
Click the tabs to move from sheet to sheet.

SmartIcons
SmartIcons are shortcuts for many tasks in 1-2-3. Choose File - User Setup - SmartIcons Setup to customize SmartIcons.

Status bar
The bar along the bottom of the 1-2-3 window. The status bar displays buttons for changing the current selection. For example, you can change fonts, color, alignment, number format, fill pattern, and so on.

Title bar
Displays the name of the current workbook and other information. When you highlight a command, the title bar displays a description of the command. You can move the 1-2-3 window by dragging the title bar.

Underline
Adds an underline to the current selection. Click again to remove underline.

Vertical splitter
Drag to divide the sheet into vertical panes.

@Function selector
Displays the @function menu. Select an @function from the menu to insert it in a cell. You can add your most-used @functions to the menu.