

Help Contents

SYMPATHY

Crossword Grid Construction for Microsoft Windows

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Introduction

Sympathy allows you to create professional quality crossword grids with the computer's assistance. You can use Sympathy in place of pencil and paper for all aspects of grid construction:

The grid can be drawn by adding slots for words using the mouse or blacking out cells using the keyboard. Sympathy supports the construction of fully checked grids, blocked grids and barred grids. See the section on Sympathy's Main Window for more information.

Any required thematic words can be placed into the grid and moved around to their ideal positions. Once this has been done, the grid can be completed using Sympathy's automatic filling process. See the Normal Fill Command for more information.

Grids created with Sympathy can be printed directly, or exported as a scaleable picture or bitmap to form part of the complete crossword document. Sympathy can also export a list of answers, providing the template for the set of clues. See the Print Command and Export Command for more information.

New users are advised to start by working through the Sympathy Tutorial which can be opened by using the Tutorial Command on the Help Menu. After that, more detailed help can be found by clicking on the Help button or pressing F1 in the different parts of the application.

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Sympathy Menus

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Sympathy Dialogs

This index lists all the different dialogs in Sympathy.

The following dialogs are modeless: that means you can keep them open while you continue to work in the Main Window:

- [View Properties Dialog](#)
- [Grid Properties Dialog](#)
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- [Light Properties Dialog](#)
- [Cell Properties Dialog](#)
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The following dialogs are modal; these are opened to perform a single action and other parts of the application are disabled until a decision is taken to OK or Cancel them:

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Glossary

100% Checking Mode

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Ximenes

In automatic filling, Sympathy chooses the words to be used at each level.

In interactive filling, the user chooses words from the prioritized list presented by Sympathy.

The Electronic Alveary is Sympathy's companion program for searching for words that match a pattern. Sympathy incorporates a word search window using the same TEA patterns.

In this mode, Sympathy always fills the first light with the same word for a given dictionary and normal commonality setting. This means that each fill with the same starting conditions results in the same grid.

In this mode, Sympathy fills the first word at random. This means that successive fills with the same starting conditions will result in different grids.

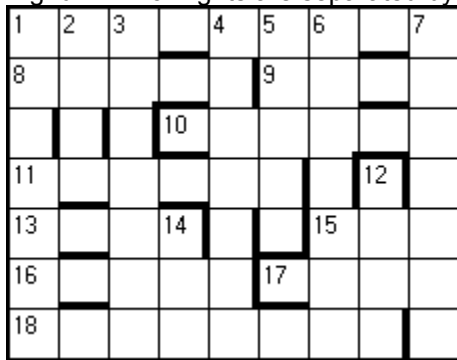
A parameter that influences the way Sympathy chooses words during filling. The commonality of words in a dictionary typically ranges from around -10 to around +10: a word with many commonly used letters of the alphabet (such as STEER in English) has a high positive commonality, whereas a word with many rarely used letters of the alphabet (such as JAZZY in English) has a low negative commonality. Sympathy tries to choose words as close as possible to the user's desired commonality setting.

A diagram including horizontal and vertical spaces for interlocking answers.

A grid in which lights in the same direction are separated by unused cells (blocks) which are usually colored black. For example:

1		2			3	4		5
6				7		8		
		9						
10								11
12				13		14		
15					16			

A grid in which lights are separated by bars, all cells typically being used. For example:



A grid in which there are no unchecked cells: either cells are blocks, or they are crossed by both vertical and horizontal lights. For example:

1	2	3		4	5	6	7
8				9			
10			11		12		
13				14			
		15				16	17
18	19			20			
21			22		23		
24					25		

A light is a horizontal or vertical series of squares in the grid, usually filled with a single clue answer.

An unch is an unchecked cell: i.e. one which is crossed by only one light.

A cell is a single square in the grid; if lights pass through it, then the solver is usually required to enter a single letter into it.

A block is a cell through which no lights pass; it is usually colored black.

A bar is the thick line at a cell boundary needed to delimit the lights in a barred grid.

The diagonal running from the top left hand corner of the grid towards the bottom right hand corner.

The diagonal running from the top right hand corner of the grid towards the bottom left hand corner.

Properties define the appearance of different parts of the grid. Properties can be customized for the whole grid, for a single light, or for a single cell.

In normalized mode, the cells forming a light are ordered from left to right (an across light) and from top to bottom (a down light). This is the mode that is used most of the time.

In unnormalized mode, the cells forming a light can be ordered from right to left (a reversed light) and from bottom to top (an up light) as well as the normal ways (across and down).

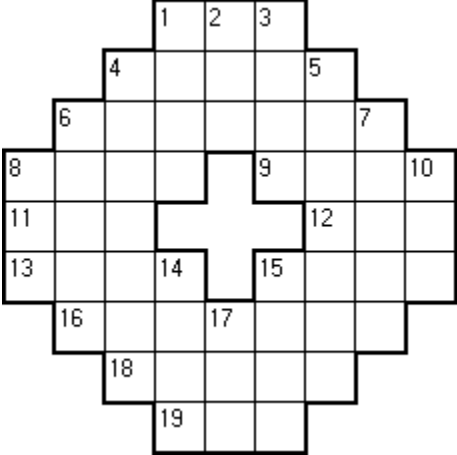
A list of words associated with a grid that the automatic filling process will never use.

A table of minimum and maximum numbers of unchecked letters allowed for particular light lengths.
Sympathy shows which lights lie outside the acceptable range.

Fine horizontal and vertical lines between cells; these provide helpful guidance when the grid is being constructed, but do not appear in printed or exported output.

A printed line separating adjacent cells within a light.

An unused cell in the grid that has been designated as non-printing, rather than a foreground block. Holes are useful for creating irregularly shaped grids like this:



The line surrounding the printed parts of the grid. If there are holes in the grid, they are also surrounded by a border.

A light which only occupies one cell, typically requiring a one letter answer to be entered (these are very rare in crosswords). Single cell lights can be either across or down: Sympathy's direction arrows allow you to see the orientation of single cell lights.

In 100% checking mode, **Enter** or **Return** toggles the selected cell between used and unused and Sympathy joins new used cells to all adjacent ones; this mode is very useful for creating fully checked grids, but cannot be used to create barred grids.

In unconstrained checking mode, bars are drawn between adjacent cells that are not part of the same light. Barred grids can only be created in unconstrained checking mode.

The pseudonym of Derrick Somerset Macnutt, who suggested a standard for the numbers of unches permitted in barred diagrams.

Keyboard Guide

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Help Keys

F1 Help

You can get context specific help in the different parts of Sympathy by pressing the F1 key.

Text Entry Keys

When a Light or Cell is selected, text entered into Sympathy's Main Window becomes associated with that light or cell:

When a light is selected, text entry keys change the text associated with the light at the cursor position. Such text is anchored to the light and moves with the light. Depending on the status of the **Ins** toggle key (shown on the Status Bar) characters typed will either overwrite or insert into the existing text. Pressing the **Backspace** key will remove characters to the left of the cursor, whereas pressing the **Del** key will remove characters to the right of the cursor. As a convenience, alphabetic characters are automatically mapped to their display equivalents (see the section on Alphabet Mapping for more information) and spaces are converted to match-all characters. You can use the Light Properties Dialog to enter any characters you like into a light (including a space), regardless of the alphabet mapping.

You can use the Light Clear Command (which has **Ctrl-Backspace** as an accelerator) to clear all the text anchored to a light.

When a cell is selected, characters normally overwrite the text in both the lights crossing the cell and space (or **Del** or **Backspace**) clears the text in both the lights crossing the cell; however, when **Caps Lock** is on (shown on the Status Bar), characters overwrite the text anchored to the cell and space (or **Del** or **Backspace**) clears the text anchored to the cell. You can use the Cell Properties Dialog to get full control over what appears at a cell (for example, you can have any printable character in a cell, including space, or more than one character in a cell).

Navigation Keys

The behavior of the keys depends on whether a cell or light is selected:

TAB Navigates through the cells from left to right, top to bottom; and through the lights in number order - acrosses first, then downs.

SHIFT TAB Navigates in the reverse sense to **TAB**.

ARROWS Changes the cell selection in the direction of the arrow.

Ctrl+ARROWS Changes the light selection in the direction of the arrow.

HOME Selects the top left cell, or the first light.

END Selects the bottom left cell, or the last light.

PGUP Selects the top right cell, or the first light in the section (acrosses or downs).

PGDN Selects the bottom right cell, or the last light in the section (acrosses or downs).

If these keys are used when no cell or light is selected, the first or last light (or cell, if no lights have been entered) is selected.

Accelerator Keys

The key or key combinations shown to the right of menu items can be used as accelerators to perform menu commands quickly when working in the Main Window of Sympathy. For example pressing **Ctrl** and **Del** at the same time when a light is selected will cause it to be deleted.

Alphabet Mapping

Dictionaries used with Sympathy have an associated alphabet which determines how crosswords are constructed using that dictionary:

which characters are non-alphabetic and don't normally occupy cells in the grid;

which sets of characters are allowed to cross with each other during filling;

what master character should be displayed for such sets.

Although the alphabet in a dictionary is user configurable, the default mapping provided for use with word lists in the Windows ANSI Character Set will be used in the examples here.

When alphabetic characters are typed into the cell or light that has focus, they are mapped into the equivalent display character: for example, if a lower case **e** is typed in, it is mapped to and displayed as an upper case **E**. Similarly, **é** and **É** and all other accented **Es** are allowed to cross with unaccented **Es**, so are mapped to **E**. If this wasn't done, the words **éclair**, **Expo** and **emu** wouldn't be allowed to cross at their first letters. See the section on [Text Entry Keys](#) for more information.

During automatic filling, the definition of which characters are considered alphabetic is also important, as it's used to determine which characters in a dictionary entry are actually included in the grid. For example, although **dinner-dance** and **dinner table** are both 12 characters long as dictionary entries, they fill 11 letter lights because space and hyphen are non-alphabetic. They are also entered as **DINNERDANCE** and **DINNERTABLE** because of alphabet mapping.

See the help file for the **TEA&Sympathy Dictionary Builder** for more detailed information about alphabets and how to customize them for a word list.

Parts of the main Sympathy Screen

Title Bar

Minimize Icon

Maximize Icon

System Menu

Sizing Border

Scroll Bars

Tool Bar

Status Bar

Main Window

Title Bar

The title bar shows the name of the Sympathy grid (.SYM) file being edited.

If no file name has been specified since a new grid was created, the name is displayed as [Not Saved].

If the grid has been changed without being saved to disk, [Save Required] appears at the end.

If the grid cannot be saved back to the original file (because it is a read-only file or was opened in read-only mode), '(Read-Only)' appears immediately after the name of the file.

Minimize Icon

Clicking on this reduces the Sympathy window to an icon on the desktop.

Maximize Icon

Clicking on this makes the Sympathy window fill the whole display.

System Menu

The standard Windows menu.

Sizing Border

You can resize the Sympathy window by dragging its edges or corners with the mouse.

Scroll Bars

If the window is too small to display the grid completely, horizontal or vertical scroll bars appear. You can use these scroll bars to view the hidden bits of the grid.

Tool Bar

The icons on the tool bar to the left of the grid allow immediate access to the most used functions in Sympathy. To find out which function is performed by an icon, position the pointer over the icon: the text in the Status Bar shows what action will take place.

Status Bar

The status bar below the grid shows the status of the **Caps Lock**, **Num Lock** and **Ins** keys at the right hand side. The text area to the left shows the following information:

Hint text. When the pointer is positioned over a Tool Bar icon or a menu item, hint text describes what action would take place.

Status text. When a light or cell is selected, information about the light or cell is displayed; when a light is being manipulated, information about the new position of the light is shown.

Main Window

The main window contains a view of the crossword grid being edited. This may be slightly different to the printed grid to make editing easier; for example, the grid may be scaled and may have special rules and markers. These "view only" aspects of the grid are controlled using the [View Properties](#) dialog.

When you use the mouse, different things happen depending on the position of the pointer in a [Cell](#): if the pointer is at the edges of the cell, you will interact with the [Light](#) or lights crossing a cell; if the pointer is at the center of the cell you will interact with the cell itself. The shape of the cursor indicates what will happen if the mouse button is pressed at the mouse position.

Pressing the mouse down in the center of a square and releasing in the same square selects the cell. It then has focus and keys pressed will change the text appearing in the cell (see [Text Entry Keys](#)). If the [Cell Properties Dialog](#) is active, all the other properties of the cell can also be seen and changed.

Pressing the mouse down in the center of a square and releasing in a different square creates a new [Light](#). The direction you do this in determines the light direction in [Unnormalized Mode](#). You can create a [single cell light](#) by dragging out of the initial square, then back in again. The [Status Bar](#) shows information about the new light that would be created.

Clicking the mouse on the edge of a square selects the appropriate [Light](#) (if any). That light then has focus with the editing position at the square; keys pressed will change the text associated with the light (see [Text Entry Keys](#)). If the [Light Properties Dialog](#) is active, all the properties of the light can be seen and changed.

You can drag a light to a different position in the grid by pressing the mouse button down over the side of the light, moving the light to the desired position and then releasing the mouse button to drop the light. The [Status Bar](#) shows information about the new light position as you do this.

You can drag the end of a light to a new position (changing its length or direction) by pressing the mouse button down over the end of the light, moving it to the desired position and then releasing the mouse button to drop the light end. The [Status Bar](#) shows information about the new light position as you do this.

The light (plus any symmetrical ones) can be deleted using the [Light Delete](#) command. Similarly, the direction of the light can be reversed using the [Reverse](#) command (this is only available in [Unnormalized Mode](#)).

Double clicking in the center of a square pops up the [Cell Properties Dialog](#) to allow the appearance of the cell to be changed.

Double clicking on the edge of a square crossed by a light pops up the [Light Properties Dialog](#) to allow the appearance of the light to be changed.

Double clicking outside of the grid itself pops up the [Grid Properties Dialog](#) to allow the overall appearance of the grid to be changed.

What's New

The main new features in this release of Sympathy are:

Lookup Configuration. You can use the [Lookup Dialog](#) to configure the methods Sympathy uses to look up words in third party dictionaries.

Word List Merge. You can use the [Word List Merge Command](#) to start the new **TEA&Sympathy Word List Merge** application which allows you to combine different word lists in textual format before building them into a dictionary using the **TEA&Sympathy Dictionary Builder** application.

Letter Distribution Statistics. The [Grid Statistics Dialog](#) now allows you to see the number of times each different letter has been used in a filled grid. You can also opt to display both the light length and letter distributions in descending order of frequency instead of the "natural" order.

Word Search. The [Word Search Dialog](#) now includes a status area below the pattern entry box giving hints on how to complete a pattern successfully.

Recently Opened Grids. The four grids most recently opened in Sympathy are displayed as commands in the [File Menu](#). Using one of the [1,2,3,4 Commands](#) will reload the corresponding grid.

Backup Files. When you change an existing Sympathy grid (.SYM) file, Sympathy will now automatically save one previous version of the grid in a backup file. For example, if you open a file called GRID.SYM the original file will be renamed GRID.BAK when a new GRID.SYM is saved.

Read Only Grids. When you open a Sympathy grid (.SYM) file, you can opt for it to be "read only". This means you can change the grid, but have to choose a new file name when you come to save it.

More Settings Remembered. The settings in the [Print Dialog](#) and [Export Dialog](#) are now automatically "remembered" between Sympathy sessions. The position (and size for the Word Search window) of all the [Sympathy Dialogs](#) is likewise remembered.

What's Changed

No features of Sympathy had to be changed in order to introduce new functionality in this release.

Control Menu Commands

Restore Restores a Sympathy window to its previous size after it has been maximized or minimized.

Move Enables you to move a Sympathy window to another position.

Size Enables you to change the size of a Sympathy window.

Minimize Reduces a Sympathy window to an icon.

Maximize Enlarges a Sympathy window to its maximum size.

Close Quits the Sympathy application, or closes a Sympathy dialog.

Switch To (Windows 3 only) Opens the Task List, which you can use to switch between running applications and rearrange their windows and icons.

File Menu Commands

New Command

Open Command

Save Command

Save As Command

Print Command

Printer Setup Command

Export Command

1,2,3,4 Commands

Exit Command

New Command

Creates an empty grid with the configuration specified in the [Aspect Ratio Dialog](#).

Open Command

This command enables an existing grid (.SYM) file to be opened for editing. The file is selected using the Open Dialog.

Save Command

This command saves a grid to a grid (.SYM) file. If the grid file name isn't known, the Save As Dialog is popped up to allow the file name to be entered.

This command is disabled until a license to use Sympathy has been installed.

Save As Command

This command saves a grid to a new file. The Save As Dialog is popped up to allow the file name to be entered.

This command is disabled until a license to use Sympathy has been installed.

Print Command

Pops up the Print Grid Dialog to enable the grid to be printed directly to a printer.

Printer Setup Command

Pops up the [Printer Setup Dialog](#) to enable the printer used by Sympathy to be configured.

Export Command

Pops up the Export Dialog to enable the grid to be exported to the clipboard or a file in various different ways.

One common use of this command is to copy the grid to a word processing document for merging with a set of clues.

1,2,3,4 Commands

These menu commands show the name of a grid file previously opened with Sympathy. Select one of the commands to open the same grid file again.

Exit Command

This closes the grid being edited and terminates the application.

Edit Menu Commands

Undo Command

Cut Command

Copy Command

Paste Command

Lookup Command

Lookup Setup Command

Undo Command

This command undoes the previous change to the grid. The change that was undone can be reapplied by using the **Edit Undo Command** a second time.

It is only available when a grid has been changed.

Cut Command

This command deletes all the customized properties for the selected light or cell, copying them to the clipboard. They can then be pasted into several different lights or cells using the Paste Command.

It is only available when a light or cell has been selected.

Copy Command

This command copies all the customized properties for the selected light or cell to the clipboard. They can then be pasted into several different lights or cells using the [Paste Command](#).

It can also be used to copy words in a grid to another Windows application.

This command is only available when a light or cell has been selected.

Paste Command

This command customizes the properties for the selected light or cell using the properties contained in the clipboard, obtained with the Cut Command or Copy Command.

This command is useful for duplicating a particular appearance (e.g. a color or font) into several lights or cells quickly. It can also be used to copy words from another Windows application into the Sympathy grid.

This command is only available when a light or cell is selected and there is some data available in the clipboard.

Lookup Command

This command attempts to look up the word in the selected light in various third party dictionaries: the definition of the word will appear in whichever of the supported dictionaries is running at the time.

The lookup methods that Sympathy tries to use are those configured in the [Lookup Dialog](#).

Note that some other products (such as the **Random House Webster's Unabridged Dictionary**) support lookup from third party software using the standard [Copy Command](#): the Lookup Command has no effect with these dictionaries; instead, you need to press the dictionary software's hot key, or use a floating menu provided by the dictionary software; the dictionary software then does a clipboard copy from Sympathy to find out which word is being looked up.

This command is only available when a light is selected.

Lookup Setup

Pops up the Lookup Dialog, allowing you to configure the dictionary lookup methods used by Sympathy.

View Menu Commands

Properties Command

Graticule Command

View Properties Command

This command pops up the View Properties Dialog which enables the display-only aspects of the grid to be changed.

Graticule Command

This command toggles the display of the Graticule. In the early stages of grid construction, the graticule allows the boundaries between cells to be seen, so it is always enabled by default. When the grid is nearing completion, the graticule can be switched off, allowing the grid to be displayed as it would be printed.

Grid Menu Commands

Properties Command
Dimensions Command
Kill List Command
Unch Model Command
Statistics Command

Restart Command
Reflect Command
Rotate Command
Resize Command

Grid Properties Command

This command pops up the Grid Properties Dialog which enables parameters controlling grid appearance and editing to be changed.

Dimensions Command

This command pops up the Grid Dimensions Dialog which enables the size and position of the grid and its components to be changed.

Kill List Command

This command pops up the Kill List Dialog which allows you to change the Kill List for the grid.

Unch Model Command

This command pops up the Unch Model Dialog which allows you to change the Unch Model for the grid.

Statistics Command

This command pops up the [Grid Statistics Dialog](#) which allows information about the grid to be viewed.

Restart Command

This command deletes all the lights and sets the grid back to the starting configuration: i.e. it will either contain all lights or all blocks, depending on the starting configuration selected in the Aspect Ratio Dialog.

This differs from the New Command in that any properties changed from their defaults in the Grid Properties Dialog or Cell Properties Dialog will be preserved.

Reflect Command

This command reflects the complete grid in the Main Diagonal. This has the effect of turning all the across lights into down lights and vice versa.

Rotate Command

This command rotates the complete grid through 90 degrees anticlockwise.

Resize Command

This command pops up the Grid Resize Dialog which allows grid columns and rows to be added or deleted.

It is only available when a cell is selected to indicate whereabouts in the grid the columns or rows should be added or deleted.

Light Menu Commands

Properties Command

One-shot Fill Command

Light Undo Fill Command

Light Commit Fill Command

Delete Command

Kill Word Command

Reverse Command

Clear Command

Clear All Command

Light Properties Command

This pops up the Light Properties Dialog which allows the appearance of the selected light to be changed.

It is only available when a light has been selected.

Light One-shot Fill Command

This enters the next possible word in the selected light. It can be used to see whether there are any words in the dictionary that can fill a particular light, or to cycle through the possible words at a light just after a fill has completed.

The command doesn't change the letters that are "locked in" by filled crossing lights, unless all the letters are locked in (in which case, they are all ignored).

It is only available when a light has been selected which has at least one cell that doesn't have text entered by the user (or committed after a fill).

Light Undo Fill Command

This clears all the characters in the selected light that have been filled by the computer, either with the One-shot Fill Command or with the Normal Fill Command.

The command doesn't clear the letters that are "locked in" by filled crossing lights, unless all the letters are locked in (in which case, all the computer-filled letters are cleared).

If the selected light has no characters filled by the computer, the command will do nothing.

Use the Filling Undo Fill Command to undo all the lights in a single action.

Light Commit Fill Command

This can be used immediately after an automatic fill to convert characters in the selected light that were entered by the computer into "committed" characters, as if they were entered directly by you.

It is only available when the selected light is completely filled by the computer.

Use the Filling Commit Fill Command to commit all the lights in a single action.

Delete Command

This deletes the selected light and any lights symmetrical to it.

It is only available when a light has been selected.

Kill Word Command

If a light has been filled, the word can be added to the kill list using this command.

This is handy when the filling algorithm uses an undesirable word: when the filling is completed or interrupted, the light containing the word can be selected and the word added to the kill list. When the filling algorithm is run again, a different word will be used.

It is only available when a light has been selected which is completely filled.

Light Reverse Command

This reverses the direction of the light, turning an across light into a reverse light, a down light into an up light and vice versa.

It is only available when a light is selected in Unnormalized Mode.

Light Clear Command

This completely clears the fixed contents (all the characters entered by you) in the selected light.

Light Clear All Command

This clears the fixed contents in all the lights. This is intended as a quick way of reverting to an unfilled grid.

Cell Menu Commands

Properties Command

Block Command

Clear All Command

Cell Properties Command

This pops up the Cell Properties Dialog which allows the appearance of the selected cell to be changed.

It is only available when a cell has been selected.

Block Command

This command is used to place a block at the selected cell, shortening or splitting any lights that used to pass through it.

It acts as a toggle, so that if the cell is already a block, it will be made part of a light - either by lengthening adjacent lights to project into the cell, or by creating new lights that cross the cell. If there are no lights surrounding the cell, then an across single cell light is created.

This command is not available if a block is selected in Unconstrained Checking Mode (this can be set in the Grid Properties Dialog), since the action would be ambiguous - use the mouse to extend adjacent lights over the block as described in the Main Window topic.

Cell Clear All Command

This is a quick way of clearing all the text anchored to cells.

Filling Menu Commands

Properties Command

Word Search Command

Normal Fill Command

Unch Fill Command

Filling Undo Fill Command

Filling Commit Fill Command

Filling Properties Command

This pops up the Filling Properties Dialog which allows the behavior of the automatic filling process to be changed.

Word Search Command

This pops up the Word Search Dialog which allows you to search for words in the currently loaded dictionary that match a pattern. If a light is selected, the default pattern is one that will find all the words that could be used to fill the light.

Normal Fill Command

This starts a complete fill of the grid; during filling, the Fill In Progress Dialog appears allowing the automatic filling to be interrupted.

It is only available when there are unfilled lights in the grid.

Unch Fill Command

This can be used immediately after a normal fill to adjust the unches to a different commonality level (set using the Filling Properties Dialog).

It is only available between running the Normal Fill Command and the Filling Undo Fill Command or Filling Commit Fill Command commands.

Filling Undo Fill Command

This can be used immediately after an automatic fill to clear all the characters entered by the computer.

It is only available after running the Normal Fill Command.

Use the Light Undo Fill Command to undo the fill in a single light.

Filling Commit Fill Command

This can be used immediately after an automatic fill to convert all the characters entered by the computer to "committed" characters as if they were entered directly by you. Only the committed characters are printed, exported and saved to the grid (.SYM) file.

It is only available after running the Normal Fill Command.

Use the Light Commit Fill Command to commit the fill in a single light.

Tool Menu Commands

Dictionary Builder Command
Word List Merge Command

Dictionary Builder Command

This command starts the **TEA&Sympathy Dictionary Builder**. This is a separate application that allows you to build word lists in text form into a TEA&Sympathy Dictionary (.TSD) file which can be used for filling in Sympathy.

Word List Merge Command

This command starts **TEA&Sympathy Word List Merge**. This is a separate application that allows you to combine word lists in text form.

Since the merge application only works on Windows 95 and NT, this command is not available in the Windows 3.1 version of Sympathy.

Help Menu Commands

[Contents](#)

[How to Use Help](#)

[Tutorial](#)

[About Sympathy](#)

Help Contents Command

Starts the help application and displays the contents page of the Sympathy help file.

How to Use Help Command

Starts help on How to Use Help topic.

Tutorial Command

Opens the Sympathy Tutorial document.

About Sympathy Command

This opens Sympathy's [About Box](#).

View Properties Dialog

This allows properties that only affect the displayed appearance to be changed:

Zoom To allows the grid to be scaled up or down from the normal (100%) setting.

Light Direction Arrows Shown controls how light direction arrows are displayed for lights. Direction arrows are used for two purposes: to point out the lights with unching outside that set in the Unch Model; and also to show the direction of lights entered in Unnormalized Mode which otherwise isn't obvious.

Filling Redisplay Frequency controls how often the display will update when the filling process is running. The grid takes time to redisplay, so the faster settings will slow the filling down a little.

Underunched Color controls the color used to display the direction arrows for underunched lights.

Overunched Color controls the color used to display the direction arrows for overunched lights.

Main Branch Filling Color controls the color used to display words entered as the "main branch" during filling.

Side Branch Filling Color controls the color used to display words entered in a "side branch" during filling. This is also the color that's used for uncommitted words after filling completes.

Save As Defaults saves the settings in the SYMPATHY.INI file so they are the defaults when the program starts up.

Grid Properties Dialog

This allows properties that affect the appearance of the complete grid to be changed. Some of these can be overridden for a light (using the [Light Properties Dialog](#)) or a cell (using the [Cell Properties Dialog](#)).

Grid properties can either have a default value taken from the SYMPATHY.INI file, or a customized value saved in the grid (.SYM) file. The box to the left of the property name is checked if the property has been customized for the grid. The property reverts to the default value if you uncheck the box; if the box is checked, the value shown for the property is saved with the grid.

Description allows a description of the grid to be saved with it.

Numbering determines whether lights are automatically numbered by default.

Number Posn determines whether lights are numbered in their first cell or the top left cell. For across and down lights, these are the same; but for back and up lights (created in [Unnormalized Mode](#)) these are different: If the setting is **First Cell**, numbers always appear at the first cell, i.e. the lowest cell in up lights and the rightmost cell in back lights. If the setting is **Top Left Cell**, numbers always appear in the top left cell, i.e. the topmost cell in up lights and leftmost cell in back lights. This is useful if you want to hide the use of reverse direction lights from the solver.

Symmetry determines the set of lights that are added, moved and deleted when a single light is manipulated. The icons in the combo box provide a graphical illustration of the symmetry modes.

Checking Mode can be set to **100%** to force the grid to join all adjacent used [Cells](#) into [Lights](#) after any change; this [100% Checking Mode](#) is very useful for creating [Fully Checked](#) grids. If this behavior isn't desired, the **Unconstrained** setting should be selected ([Barred Grids](#) can only be constructed in [Unconstrained Checking Mode](#)).

Direction Mode determines whether lights are normalized when they are added. In [Normalized Mode](#), only across and down lights are allowed: if you attempt to make lights back or up, they flip round. In [Unnormalized Mode](#) reverse and up lights are allowed; these are filled from right to left and bottom to top, whether manually, or by the computer. Light direction arrows can be enabled in the [View Properties Dialog](#) allowing the directions to be seen.

Background determines the default background color for lights in the grid. Clicking on the existing color pops up the [Color Selection Dialog](#) which allows the color to be changed. The background color can be overridden for individual lights using the [Light Properties Dialog](#) and for individual cells using the [Cell Properties Dialog](#).

Foreground determines the color used for the [border](#), [bars](#), [blocks](#) and [rules](#). Clicking on the existing color pops up the [Color Selection Dialog](#) which allows the color to be changed.

Number font determines the font used for numbering the grid. Clicking on the existing font pops up the [Font Selection Dialog](#) which allows the font to be changed.

Text font determines the default text font used for lights in the grid. Clicking on the existing font pops up the [Font Selection Dialog](#) which allows the font to be changed. The text font can be overridden for individual lights using the [Light Properties Dialog](#) and for individual cells using the [Cell Properties Dialog](#).

Block Type determines whether [blocks](#) are by default the foreground color (typically black) or a [hole](#) in the grid.

Save as defaults saves a group of properties in the SYMPATHY.INI file, which means they will be the default for all grids edited in Sympathy.

Grid Statistics Dialog

This displays statistics about a grid; it is modeless, so it can be kept open while the grid is worked on.

Summary Information is displayed in the left hand column:

Columns is the number of vertical columns that could be used in the grid.

Rows is the number of horizontal rows that could be used in the grid.

Across Lights is the number of across lights in the grid.

Down Lights is the number of down lights in the grid.

Total Lights is the sum of the across and down lights.

Average light length is the average length of all the lights.

Unchecked cells is the number of cells crossed by one and only one light.

Checked cells is the number of cells crossed by both an across and down light.

Checking is the checking level averaged over all the lights, expressed as a percentage.

Consecutively Unched Lights displays any lights that exceed the maximum number of consecutive unches set up in the [Unch Model](#) for the grid.

Overunched Lights displays any lights that have too many unchecked cells for their length, according to the information set up in the [Unch Model](#).

Underunched Lights displays any lights that have too few unchecked cells for their length, according to the information set up in the [Unch Model](#).

The unch rules used in this view are set up in the [Unch Model Dialog](#).

Detailed Information about light and letter distributions in a grid can be seen in the right hand column.

The settings in the **Distribution** and **Order** boxes control what information is displayed:

Light Lengths shows the number of lights with each different length.

Use of Letters shows the number of occurrences of each letter.

Natural shows the information in the natural collation sequence, i.e. increasing light lengths or alphabetical order of letters.

Frequency shows the information in frequency order, with the most common light length or letter at the top and the least common at the bottom.

Light Properties Dialog

This dialog allows properties that affect the appearance of a single light to be changed.

Light properties can either have a default value derived from the grid properties, or a customized value saved with the light in the grid (.SYM) file. The box to the left of the property name is checked if the property has been customized for the light. The property reverts to the default value if you uncheck the box; if the box is checked, the value shown for the property is saved with the light.

If the properties for an across and down light are incompatible, the across light property takes precedence. In the case of incompatible numbers and contents, the incompatibility is shown on the display using reverse video.

Number determines the number printed for the light. If numbering is enabled in the [Grid Properties Dialog](#) a default number will be displayed for the light. This can be overridden with a different number or text; if no number is required for the light, this can be achieved by deleting the text in the box. Note that the "number" can in fact be any printing characters desired.

Text font determines the text font used for the light; a default font is determined from the setting in the [Grid Properties Dialog](#). Clicking on the existing font pops up the [Font Selection Dialog](#) which allows the font to be changed. The text font can be overridden for individual cells using the [Cell Properties Dialog](#).

Background determines the background color for the light; a default color is determined from the setting in the [Grid Properties Dialog](#). Clicking on the existing color pops up the [Color Selection Dialog](#) which allows the color to be changed. The background color can be overridden for individual cells using the [Cell Properties Dialog](#).

Text determines what word is displayed in a light. This could have been entered by you or by the [Filling Commit Fill Command](#) after running the automatic filling process.

The text is placed a cell at a time into the light. If the text string is shorter than the length of the light, the remaining contents is padded with non-displaying match-all characters. If the text string is longer than the length of the light, the surplus characters are ignored.

Case differences are significant here, so that lower case letters could be entered if necessary (text entered directly in the [Main Window](#) can be changed because of [Alphabet Mapping](#)).

Non-alphabetic characters can also appear in the string: dot('.') is the match-all character and this can be used to pad out the string. Other characters are displayed as-is. The automatic filling algorithm makes no attempt to fill a light consisting ONLY of printing characters (anything that can be entered other than a dot). However, if a light includes at least one match-all character, the [Normal Fill Command](#) will try to fill it, provided that all the other characters are alphabetic.

By default, each cell accounts for a single character of the light contents; however, it is possible for cells to have more than one character, or no character at all, allocated for them using the [Cell Properties Dialog](#).

Cell Properties Dialog

This dialog allows properties that affect the appearance of a single cell to be changed.

Cell properties can either have a default value in the context of the grid and light properties, or a customized value saved with the cell in the grid (.SYM) file. The box to the left of the property name is checked if the property has been customized for the cell. The property reverts to the default value if you uncheck the box; if the box is checked, the value shown for the property is saved with the cell.

If the properties for a cell are incompatible with those for the light(s) crossing it, the cell property takes precedence. In the case of incompatible numbers and contents, the incompatibility is shown on the display using reverse video.

Block Type determines whether a block is shown as the foreground color (typically black) or a hole in the grid. This can only be changed for a cell that has no lights running through it.

Text associates characters (usually just one) with a cell. It is intended to be used for thematic material not associated with an individual light (e.g. messages in diagonals).

Case differences are significant here, so that lower case letters could be entered if necessary (text entered directly in the Main Window can be changed because of Alphabet Mapping).

The text can also be non-alphabetic: the filling algorithm makes no attempt to re-fill a light where ALL the cells contain printing characters. However, if a light contains an unfilled cell, the Normal Fill Command will try to fill it, but will only succeed if all the other characters are alphabetic.

The text can consist of more than one character: for example, if '..' is entered as the text for a cell, two characters from the crossing light(s) will be entered into the cell. The text can also consist of no characters at all: this is one way of creating a completely blank cell in an otherwise filled grid; text from the light will skip the empty cell. Note, however, that the Normal Fill Command will not fill lights with no-character or multi-character cells: such lights must be completely filled by you before the automatic filling algorithm is started.

Text font determines the text font used for the cell; a default font is determined in the context of the grid and light(s). Clicking on the existing font pops up the Font Selection Dialog which allows the font to be changed.

Background determines the background color for the cell; a default color is determined in the context of the grid and light(s). Clicking on the existing color pops up the Color Selection Dialog which allows the color to be changed.

Number determines the number printed in the normal (top left hand or north-west corner) position in the cell.

If the cell needs to be numbered because of a light crossing it, then it will have a default number; this number can be overridden.

If the cell has no number by default, one can be added by editing the property. Note that the "number" can in fact be any printing characters desired.

NE Number, SE Number, SW Number allow numbers to be entered in the north-east, south-east and south-west corners of the cell.

Filling Properties Dialog

This dialog allows properties affecting the automatic filling algorithm to be changed.

Dictionary. Clicking on **Change...** allows you to pop up the Open Dialog to change the dictionary used for filling; the dialog box will allow you to search for a dictionary file. When a valid dictionary is loaded, its description, length range and number of entries are displayed.

First Word allows you to choose between Consistent First Word Mode and Random First Word Mode.

Start Mode determines whether filling starts in Automatic Filling or Interactive Filling mode. Once filling has been started, it is possible to switch between these modes using the Fill In Progress Dialog.

Normal Letter Commonality is the commonality setting that controls the words chosen when the Normal Fill Command command is used. With extreme positive values, the filling algorithm will choose the "easiest" words to fill around; with extreme negative values, the filling algorithm will choose the most "difficult" words to fill around.

In general, the higher the setting, the faster the fill. Lowering the setting causes the fill times to lengthen unpredictably.

This feature can be used to establish that a grid is fillable on the highest setting, then to lower the setting to see if any more "interesting" results appear given sufficient time.

Unch Letter Commonality is the commonality setting that controls the choice of words when the Unch Fill Command command is used. With extreme positive values, the filling algorithm will choose the most common letters and letter combinations; with extreme negative values, the filling algorithm will choose the rarest letters and letter combinations.

Unlike the **Normal Letter Commonality**, the setting doesn't greatly affect the unch filling time, which is linearly dependent on the dictionary size.

This can be used to force in the rarest possible words (by just changing unches) after a normal fill.

Word Search Dialog

This dialog allows you to search for words in the currently loaded dictionary (the one shown in the [Filling Properties Dialog](#)) that match a particular pattern. If a [light](#) is selected, the pattern defaults to one that will find all the words that can fill the light.

To search for a word, type a pattern into the box to the right of the **Pattern:** label. Here are some example patterns (see [TEA Patterns](#) for more information):

q....r	finds 6 letter words starting q and ending r
;torque	finds the anagrams of torque
quo*er	finds words of any length beginning quo and ending er
;toque.	finds words including the letters of toque and one other letter
;torque*	find words of any length including all the letters of torque
q.[ai]..r	finds 6 letter words starting q and ending r with a or i as the 3rd letter
;toque[pqr]	finds words including the letters of toque and p, q or r
....e.;torque	finds anagrams of torque having e as the 5th letter
q.(;rats)	finds 6 letter words starting q and ending with an anagram of rats
q.....;(ar)	finds 6 letter words starting q and including a followed by r

The **Start** button stays grayed out until a valid pattern has been entered and hints are shown in the area immediately below. The box for entering patterns is a combo box, so that you can also recall previously entered patterns from the list.

Press the **Start** button to start searching. The matched words will appear in the list labeled **Matches**. When a search is running, the length of the words being scanned is shown at the center of the progress bar and the progress bar itself shows what proportion of the words of that length have already been scanned. The number to the left of the progress bar is the number of successful matches.

Press the **Stop** button to stop a search: after doing this, you can press **Continue** to continue the search.

You can use **S** with the **ALT** key held down to navigate to the list of matches; you can use **A** with the **ALT** key held down to navigate back to the pattern entry box.

If a [light](#) is selected, you can select a word in the list and press **Commit** to copy the word into the light.

If you have a supported third party dictionary installed on your computer and want to check the meaning of any word in the list produced by a word search, select the word you are interested in and click on the **Lookup** button (or press return with the **Ctrl** button held down). Sympathy also works with dictionaries that use clipboard copy to do lookup (such dictionary applications use a hot key sequence or a floating menu to do lookup). The lookup methods that Sympathy tries to use are those configured in the [Lookup Dialog](#).

You can copy the results of a word search to the Windows clipboard by selecting the words you are interested in and clicking on the **Export** button.

Press **Setup...** to change your word search configuration using the [Word Search Properties Dialog](#).

TEA Patterns

[Simple Templates](#)

[Templates with Choice Lists](#)

[Templates with Wildcards](#)

[Simple Anagrams](#)

[Anagrams with Choice Lists](#)

[Anagrams with Wildcards](#)

[Templates and Anagrams Combined](#)

[Sub-Patterns](#)

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Simple Templates

The simplest form of pattern is just a template with letters at the positions that must be matched and match-all characters at other positions.

In the examples given in this section, '.' is used as the match-all character. In fact, you can use any non-alphabetic character as a match-all character.

Examples:

....

lists all the four letter dictionary entries, and

m.nt.a

lists all the dictionary entries matching the template M-NT-A:

mantra
mantua

Templates with Choice Lists

If the character at a position in a dictionary entry is known to be one of a set of letters, then this situation can be represented using a choice list.

A choice list is entered by giving the list of possible letters between square brackets '[' and ']'. The complete choice list matches just one letter in the dictionary entry.

If the list of letters begins with a caret ('^'), the sense is negated: only letters not in the choice list are matched.

Examples:

[abcd]ean

lists the four letter dictionary entries starting with either A, B, C or D and ending EAN:

bean
dean

we[air]..er

lists the 7 letter dictionary entries starting with either WEA, WEI or WER and ending --ER:

weather
weigher
Werther

q[^u]..

lists the 4 letter dictionary entries starting with Q, but not followed by U:

qadi
qoph

Templates with Wildcards

Gaps in the template that can be of variable length are indicated by the "*" wildcard. The "*" wildcard matches zero or more letters in the dictionary entry. The use of wildcards implies that dictionary entries of different lengths may be found.

Examples:

bluest*

lists dictionary entries of any length starting with BLUEST:

blue streak
bluestocking
bluestone

robin

lists dictionary entries of any length including ROBIN anywhere:

cock-robin
marsh-robin
robin
Robin Hood
robing
robing room
robinia
Robinson
round robin
sea-robin
wake-robin
etc.

.boule.

lists dictionary entries of any length including BOULE anywhere except the start and end:

éboulement
probouleutic
tabbouleh

Simple Anagrams

Anagrams are specified by including a semicolon (;) in the pattern, followed by the elements of the pattern that can be matched in any order:

Examples:

;easting

lists all the anagrams of EASTING:

easting
genista
ingesta
seating
teasing

Anagram patterns can also include match-all characters. Like the anagram letters, they can be matched at any position in the dictionary entry.

;string.

lists all the dictionary entries including the letters in STRING plus one arbitrary letter:

gastrin
G-string
resting
rusting
sorting
staring
stinger
stringy

Anagrams with Choice Lists

Choice lists can be used in anagram patterns, when one of the constituent letters in the anagram isn't known exactly.

A choice list is entered by giving the list of possible letters between square brackets '[' and ']'. The complete choice list matches just one letter in the dictionary entry.

If the list of letters begins with a caret ('^'), the sense is negated: only letters not in the choice list are matched.

Examples:

`;br[au]sh`

lists the anagrams of BRUSH and BRASH:

brash
brush
shrub

`;q[^u][^u][^u][^u]`

lists the five letter dictionary entries containing a Q, but no U:

Aqaba
bar-b-q
faqir
lqbal
Iraqi
Qajar
qanat
Qatar
Q-boat
Q-celt
Qeshm
qibla
Q-ship
talaq

Anagrams with Wildcards

Wildcards can be used in anagram patterns, when the dictionary entry being sought is known to contain a particular set of letters, but its exact length isn't known.

Examples:

`;abcdefg*`

lists the dictionary entries of any length including all the letters A-G:

black-figured
negative feedback

Templates and Anagrams Combined

A template and anagram can be used together. A ';' marks the boundary between the template part of the pattern and the anagram part of the pattern.

Examples:

..a....;eastng

lists the anagrams of EASTING that also match the template --A----:

seating
teasing

The number of letter positions specified in the template and anagram do not have to agree. When the anagram has more letters than the template, only the number of letters required for the template need to be matched from the anagram part.

....;donet

lists all the dictionary entries that can be made up from 4 out of the 5 letters of DONET:

dent
done
don't
dote
Eton
node
note
tend
toed
tone

If the template includes a wildcard, then the range of dictionary entry lengths from the smallest length implied by the template to the length implied by the anagram is treated as above.

.....*;sportscaster

lists dictionary entries longer than 9 letters made up of the letters in SPORTSCASTER:

prostrate
Sarcoptes
spectator
sports-car
sportscast
sportscaster

When the anagram has fewer letters than the template, the anagram is automatically padded with match-all characters to the length of the template.

.....w;krs
.....w;krs*
.....w;krs.....

are all equivalent and list the 8 letter dictionary entries ending W and including the letters K, R and S anywhere along their length:

rickshaw

Sub-patterns

Sub-patterns can also be used as a match element within the template or anagram part of a pattern. Sub-patterns are surrounded with round brackets '(' and ')'.

If a sub-pattern is specified as part of the template, the sub-pattern is matched at the exact position within the template. The usual reason for doing this is to include an anagram specification within a template.

Examples:

.(;reed).

lists the 6 letter dictionary entries that have an anagram of REED as the middle 4 letters:

greedy
Hedera
teredo
verdet

If the sub-pattern is specified as part of the anagram, then the sub-pattern can AS A UNIT be matched anywhere in a dictionary entry. This is useful when a dictionary entry is known to contain a particular sequence of letters, but where the exact position isn't known:

.a.....er;(and)

lists the 13 letter dictionary entries that match the template -A-----ER and include the letters AND together, at any position:

candle-lighter
candle-snuffer
salt and pepper
tar and feather

Macros

Macros are a quick way of entering a common sequence of characters into a pattern. Sympathy supports two macro characters - at ('@') and hash ('#'). When these are encountered in a pattern, they are replaced by the characters set up in the Word Search Properties Dialog.

One common use for this would be to set up choice lists specifying vowels and consonants: by default @ expands to [aeiou] and # expands to [^aeiou].

Examples:

#@#@#@#@#@#@#@#@#@

lists the 14 letter dictionary entries containing consonants and vowels alternately:

pararosaniline
recapitulative
rehabilitative
supererogative
verisimilitude

Escaping Special Characters

If a special character used in the TEA syntax ever needs to be specified as a real 'letter', this can be done by preceding it with the backslash ('\') escape character.

Note, however, that most standard dictionaries will be built such that non-alphabetic characters (including all the special characters in the TEA syntax) are insignificant and therefore considered as match-alls. The need to escape special characters is really only relevant to dictionaries built with a non-standard Alphabet Mapping.

Examples:

```
;.\..\.\.\.\..
```

lists the four letter abbreviations in a dictionary where dot is alphabetic:

```
I.N.R.I.  
R.S.V.P.  
S.P.Q.R.  
U.S.S.R.
```

Word Search Properties Dialog

This dialog allows you to configure the way the Word Search Dialog works.

In the **Length Range Searched** section, you can configure the shortest and longest dictionary entries that will be searched for using the **Minimum Letters** and **Maximum Letters** settings: it is often useful to set these in conjunction with patterns containing wild cards so that searching doesn't extend beyond dictionary entries of a particular length range.

In the **Pattern expansions** section, you can configure how the @ and # macros are expanded within TEA Patterns.

In the **Fonts** section you can choose which font will be used to display the pattern and matched output. Click in the box to the right of **Pattern:** to change the font used in the pattern input box. Click in the box to the right of **Matches:** to change the font used in the list of matched output; this font is also used for the printed output.

In the **Matches** section you can determine whether the output will appear in the same order as in the dictionary or sorted alphabetically: dictionaries used with Sympathy will typically be ordered based on letter frequency. Check **Sorted** to get alphabetically sorted output.

Save As Defaults allows the current settings to be saved to the TEA.INI file so they will apply every time you use Sympathy (and the stand-alone version of TEA if it installed in the same directory as Sympathy).

Aspect Ratio Dialog

This appears when a new grid is created so you can enter the number of rows and columns.

Number of columns allows the number of columns to be set, either by entering the number as text, or by using the arrows.

Number of rows allows the number of rows to be set, either by entering the number as text, or by using the arrows.

Start with determines the initial configuration of the grid: if a Fully Checked grid is being constructed, it is probably easiest to start with **All lights** and add blocks where necessary using the Block Command; otherwise, it is probably easiest to start with **No lights** and add them using mouse actions in the Main Window.

Save as Defaults saves the chosen settings as the defaults that will be used each time the application starts up.

OK should be pressed to create the new grid when the desired configuration has been entered.

Cancel can be used to abandon creation of the new grid.

Open Dialog

This is the Windows common dialog box for selecting the name of a file to be opened. Its main use is to select a Sympathy grid (.SYM) file for opening.

It is also used from the Filling Properties Dialog to select a dictionary (.TSD) file for use by the automatic filling algorithm.

Print Dialog

This is the Windows common dialog box for changing print options, such as which printer should be used, whether to print to file, the number of copies and the collation.

The page range cannot be changed as the pages to be printed are determined by the settings in the Print Grid Dialog.

Save As Dialog

This is the Windows common dialog box for selecting the name of a file to be saved. It is used to determine the name of a Sympathy grid (.SYM) file.

Print Grid Dialog

This dialog allows parameters affecting how a grid is printed to be changed.

Grid Alignment allows the alignment of the grid on the paper (**Left**, **Centered** or **Right**) to be changed temporarily. The default setting is that set up in the [Grid Dimensions Dialog](#).

Grid Offset X and **Grid Offset Y** allow the offset of the grid from its normal position to be changed temporarily. The default values and units are those set up in the [Grid Dimensions Dialog](#).

Check **Print** in the **Blank Grid** area to print the solver's grid (where answers aren't included); **With Numbers** can be unchecked if cell numbers aren't required in the solver's grid.

Check **Print** in the **Solution Grid** area to print the puzzle solution (where answers are included); **With Numbers** can be unchecked if cell numbers aren't required in the solution grid.

Print... should be pressed to print the grid when the desired parameters have been entered. The [Print Dialog](#) opens, allowing further printer options to be set before printing commences.

Cancel can be used to abandon printing of the grid.

Setup... can be clicked to pop up the [Printer Setup Dialog](#) allowing the page setup used by Sympathy to be changed.

Printer Setup Dialog

This is the Windows common dialog box allowing the page setup to be configured.

Printer Cancel Dialog

This is the Windows common dialog box allowing a print job to be canceled.

Color Selection Dialog

This is the Windows common dialog box allowing a color to be selected.

Font Selection Dialog

This is the Windows common dialog box allowing a font to be selected.

Export Dialog

This dialog allows the grid to be exported to be used by another application.

Data to export allows you to decide between the following different ways of exporting the grid:

as a **Picture** (.WMF file) for inclusion in a word processing document, perhaps

as **Text** for sending by e-mail, for example

as a device independent **Bitmap** (.BMP format)

as a **List of Answers**, providing a template for a set of clues

as **Across TEXT** for conversion to an on-line puzzle in Across format

Destination allows you to decide whether data should be copied to the **Clipboard** or saved to a **File**. If **File** is specified, you will be prompted for a file name after **OK** is pressed. The default file name is based on the name of the Sympathy Grid (.SYM) file.

NOTE. To copy a grid to a word processing document, export a **Picture** to the **Clipboard** and paste it in.

Include answers determines whether the solver's grid (answers shouldn't be included) or the solution grid (answers should be included) is exported.

Include numbers determines whether cell numbers are included in the exported output.

OK should be pressed to export the grid when the desired parameters have been entered.

Cancel can be used to abandon exporting of the grid.

License Dialog

This dialog allows you to enter a license key and enable all the features of Sympathy.

To enter a license, follow the instructions included with your license key.

Fill In Progress Dialog

This dialog pops up when grid filling is in progress. The filling process starts with a quick check on all the lights with unfilled cells, and stops if any of the following problems are found:

There is no word that will fill a light, taking into account the lights crossing it.

A light includes cells that have multiple characters.

A light includes cells that have non-alphabetic characters.

In the above cases, the light which caused the filling to stop is displayed. Note that the filling process can operate when there are cells with multiple characters or non-alphabetic characters, but only if they are embedded in lights that have been completely filled by you.

If this first stage completes successfully, Sympathy tries to fill the whole grid; if an unfilled light is selected, the fill starts at that light; otherwise Sympathy chooses a good place to begin; depending on the Start Mode defined in the [Filling Properties Dialog](#), filling will start in either [Automatic Filling](#) or [Interactive Filling](#) mode:

In Automatic Filling the dialog simply displays status information. Click on **Interrupt** to pause the filling process and switch to Interactive Filling mode.

In Interactive Filling mode, the dialog displays the possible words for the light being filled. The words are listed with an indication of their commonality on the left hand side and sorted so that the words closest to the normal filling commonality (set in the [Filling Properties Dialog](#)) are displayed at the top. If you don't want to use any of the words in the list, but know another word that fits, you can enter this word in the box labeled **Word**:

If you have a supported third party dictionary installed on your computer and want to check the meaning of a word in the list, select the word you are interested in and click on the **Lookup** button (or press **Return** with the **Ctrl** button held down). The lookup methods that Sympathy tries to use are those configured in the [Lookup Dialog](#).

If a word is displayed that you never want to see used in the grid, you can select it and click on the **Kill** button: the word will be added to the [Kill List](#), which means it won't be offered again and wouldn't be used in [Automatic Filling](#) either.

When you are happy with the word shown, click on **Next** or press **Return** to continue with Interactive Filling; double-clicking on an entry in the list is a quick way of selecting a word and doing a next; click on **Back** if you want to go back a level and change a previously filled light; click on **Continue** to switch to Automatic Filling.

During either type of filling, pressing **Abandon** quits the filling process. If this happens, the words entered up to that point are left transiently in the grid. It is possible to add any of these words to the [Kill List](#) by selecting the light and using the [Kill Word Command](#), which stops them being used again.

OK appears when the fill has completed or failed and must be pressed to dismiss the dialog before work can continue. The results are possible:

The filling process completely fills the grid. Any letters entered by the computer are considered transient and not really part of the grid until they are committed. They are identified by being in the different color set up in the [View Properties Dialog](#).

The filling algorithm fails to fill the grid after testing all the possible combinations of words in the dictionary. In this case, no particular light will be indicated as causing the problem, as the filling algorithm

is failing due to the combined constraints of a number of lights.

Filling is abandoned.

When the fill completes, the dialog displays the elapsed time taken; if the fill failed, the reason for the failure is given.

About box

This displays status, version and copyright information about Sympathy.

Kill List Dialog

This dialog allows the list of words that the filling algorithm does not use to be changed.

To add a word to the kill list, enter it into the box below the list and press the **Enter** key or click on **Add**. To delete words, either double click on them, or select one or more of them in the list and click on **Delete**.

To dismiss the dialog, click on the **C**lose button.

Unch Model Dialog

This dialog allows the rules used to report on exceptional Unching to be changed. These rules form the Unch Model.

The main part of the dialog is a table of the minimum and maximum numbers of unchecked cells allowed for lights of a particular length. There is also a rule for the maximum number of consecutive unchecked cells for lights of any length. This table can be populated using one of the four built-in unch models:

None disables the unch model by setting the minimum number of unches to 0 and the maximum number of unches to the light length.

Blocked Grid sets up an unch model suitable for blocked grids.

Ximenean Barred Grid sets up the rules suggested by Ximenes for barred grids.

Fully Checked sets the rules such that all used cells must be crossed by two lights: this is the constraint for fully checked grids.

The unch model set up from these built-in templates can be modified as desired and saved with the grid being edited or as the default for all grids using the **Save as Defaults** button. The **Customized** check box shows whether the unch model has been customized for the grid being edited.

OK should be pressed to apply the unch model to the grid display and dismiss the dialog. This allows the effect of the model on the grid and grid statistics to be seen.

Cancel can be used to abandon changes to the unch model.

Apply can be pressed to apply the unch model to the grid display without dismissing the dialog. This allows the effect of the model on the grid and grid statistics to be seen.

Grid Resize Dialog

This dialog allows the number of rows and columns in the grid to be changed by inserting or deleting rows and/or columns at any desired position.

The position at which columns and rows are added or deleted is based on the position of a selected cell. A cell must therefore be selected before popping up this dialog.

The **Number of columns** and **Number of rows** fields determine how many columns or rows are added or deleted.

The **Column Action** and **Row Action** determine how the grid is resized:

If **Add cells to left/above selection** is chosen, the number of columns and/or rows entered will be added immediately to the left of and/or above the selected cell.

If **Add cells to right/below selection** is chosen, the number of columns and/or rows entered will be added immediately to the right of and/or below the selected cell.

If **Delete cells at and to right of/below selection** is chosen, the column and/or row containing the selected cell will be deleted, together with columns and/or rows immediately to the right and/or below, as necessary to make up the number of columns and/or rows entered.

Note that when the grid is resized, the symmetry mode set up in the [Grid Properties Dialog](#) is preserved. This can cause unexpected results, with other columns or rows being added or deleted other than those specified. If you don't want symmetry to be taken into account, temporarily set the symmetry mode to none. It's also a good idea to save the grid before a resize, if you're not sure what the effect will be.

OK should be pressed to resize the grid when the desired parameters have been entered.

Cancel can be used to abandon resizing of the grid.

Lookup Properties Dialog

This dialog allows you to configure which lookup methods are used when you try to lookup a word using the Lookup Command or the Lookup buttons in the Word Search Dialog or Fill In Progress Dialog.

Most electronic dictionary packages provide interfaces that allow you to look up words from other applications such as word processors: Sympathy supports three styles of interface that are commonly used:

DDE Interface. Some dictionaries (such as those based on the **CompLex** software) support lookup from other applications using Dynamic Data Exchange.

Message Interface. With some other dictionaries (such as the **American Heritage Dictionary for Windows**), applications must send a Windows message to look up a word.

Application Interface. Some dictionaries (such as the **Cassell Concise Dictionary**) include an application that when run looks up a word.

Dictionaries using the **DDE Interface** and **Message Interface** that were available for testing prior to release are pre-configured in this Sympathy package. Instructions for configuring dictionaries using an **Application Interface** and any new dictionaries available since Sympathy's release can be found on the Bryson Limited web site:

<http://www.bryson.demon.co.uk/>

Lookup with any of the dictionaries can be temporarily switched off by clearing the check box to the left of the configuration entries.

When you click on **Test Lookup**, Sympathy attempts to look up the word to the right of the **Test Word** label using the configuration settings you have.

Save As Defaults saves your configuration to the SYMPATHY.INI file so it will be used every time you run Sympathy.

Grid Dimensions Dialog

This dialog allows parameters affecting the size of the grid to be changed.

Grid dimensions can either have a default value taken from the SYMPATHY.INI file, or a customized value saved in the grid (.SYM) file. The box to the left of the property name is checked if the dimension has been customized for the grid. The dimension reverts to the default value if the box is unchecked; if the box is checked, the current default value is saved with the grid.

Cell Width and **Cell Height** determine the width and height of each cell in the grid.

Bar Width and **Bar Height** determine the width of bars in the vertical or horizontal orientation.

Border Width and **Border Height** determine the width of the vertical border and the height of the horizontal border.

Nr Offset X and **Nr Offset Y** determine the offset of the numbers from the corners of their cells. The offset for the standard (top left hand or NE corner number) is from the top left of the cell to the top left of the number string; for the NE number it is the top right of the number string to the top right of the cell and so on.

Text Offset X and **Text Offset Y** determine the offset of the text from the corner of its cell. The offset is from the top left of the cell to the middle of the text horizontally and the baseline vertically.

Grid Alignment allows you to specify whether the grid will be **Left** or **Right** aligned, or **Centered** on the paper when printed. The **Grid Offset X** and **Grid Offset Y** dimensions move the grid relative to the position defined by the alignment, so to inset the grid by a fixed margin from the right hand side of the paper, select **Right** aligned and specify the margin as a negative **Grid Offset X**. All these settings can be overridden for a single print-out in the [Print Grid Dialog](#).

Units allows the units in which dimensions are displayed in the dialog to be changed. Note that all dimensions are stored internally in twips (a twip is a twentieth of a point).

If the **Width/Height** setting is **Locked**, all changes made to the width dimensions are automatically copied to the height dimensions and vice versa; otherwise, the **Independent** setting applies, and the width and height dimensions can be different.

Bar Style allows you to switch between the two possible styles for printing bars: in the **Lopsided** style, the bar is displayed above and to the left of the rule dividing cells; in the **Centered** style, the bar is centered around the rule dividing cells.

Save As Defaults allows the current settings to be saved to the SYMPATHY.INI file so they will be the defaults for all grids.

OK should be pressed to apply the dimensions to the grid display and dismiss the dialog.

Cancel can be used to abandon changes to the grid dimensions.

Apply can be pressed to apply the dimensions to the grid display without dismissing the dialog.

Tutorial Grids

The following grids supplied with Sympathy provide tutorial examples of increasing complexity:

checked.sym	a simple fully checked US style grid
blocked.sym	a simple 15x15 blocked grid
jumbo.sym	a simple 27x27 blocked grid
barred.sym	a simple 12x12 barred grid
shapes.sym	a fully checked grid with a non-orthogonal shape
colors.sym	a fully checked grid demonstrating light and cell colors
text.sym	a barred grid demonstrating light and cell text
numbers.sym	a barred grid demonstrating light and cell numbers
reverse.sym	a barred grid with reverse sense lights
fonts.sym	a barred grid demonstrating light and cell fonts

History

v0.1 (12 Apr 1993)
v0.2 (11 May 1993)
v0.3 (12 Jun 1993)
v0.4 (26 Sep 1993)

Various releases for Sun/Motif.

v0.5 (27 Mar 1994)
v0.51 (2 Apr 1994)
v0.52 (11 Apr 1994)
v0.6 (31 May 1994)
v0.61 (2 Jun 1994)

Alpha releases for PC/Windows.

v0.7 (22 Jun 1994)

First Beta release for PC/Windows.

v0.8 (21 Aug 1994)

Second Beta release for PC/Windows.

v1.0 (4 Sep 1994)
v1.01 (6 Sep 1994)

First production releases for PC/Windows.

v1.05 (29 Jan 1995)

Beta release.

v1.1 (19 Feb 1995)

First production update of Sympathy v1.

v1.18 (2 Dec 1995)

Public beta release.

v1.2 (7 Jan 1996)

Second production update of Sympathy v1.

v1.21 (8 Apr 1996)

Interim release.

v1.3 (1 Jun 1997)

Third production update of Sympathy v1.

v1.35 (12 Apr 1998)

Public beta release.

v1.4 (6 Jun 1998)

Fourth production update of Sympathy v1.

