#### **Overview**

After a number of software installations and un-installations, the registry becomes full of nagging file references pointing to where the files used to reside but no longer exist. Registry First Aid will find any files and folders that may have been moved on your hard drive and help you correct the registry entries that point to them.

Registry First Aid can scan the registry for:

- orphan file/folder references;
- invalid font references;
- auto run programs;
- · obsolete Start Menu items;
- invalid help file references;
- invalid application paths;
- · invalid shared DLLs;
- invalid known DLLs registry references;
- unused software entries.

Registry First Aid finds invalid paths to referenced files, folders or fonts on your drives (if they're moved from their initial locations) and corrects these registry entries to actual located objects. Also, if your registry still retains links to file(s) of deleted applications, Registry First Aid will find these invalid entries and you can delete them. With this powerful tool, your Windows® registry will always be clean and correct.

#### Warning!

Be extremely careful when removing registry entries. Some entries may look like invalid references, but in fact may be used for some other purpose. Always make backup files of your original registry entries when you are <u>prompted</u> by Registry First Aid.

Also, sometimes it would be better to delete not only the string value but also the entire key. An example like this would be when a program that once used a registry entry value has been uninstalled from your computer.

See next:

**Getting started** 

# Registering the software

This software is released as SHAREWARE. You may use this software for evaluation purposes without charge for a period of 30 days. There are some restrictions present in the non-registered version. For a fully functional version you are expected to register this software.

To register Registry First Aid, simply log online to make your payment via the <u>online order page</u>. If you do not have access to the Internet, you can register the software via phone, fax or postal mail. Please see the ORDER.TXT file provided with the program.

#### Registration gives users access to the following features:

- technical support for 1 year after date of purchase;
- fixing more than 10 invalid registry entries for "Invalid paths" and more than 1 for each of the other categories at once;
- no nag-screens;
- no fee for minor upgrades (i.e. from 4.0 up to 4.9).
- Upon receipt of your registration fee with the completed registration form you will receive an e-mail with the registration key (serial number) which will correspond to the registration name given in the registration form.
- Upon receipt of your registration key (serial number) you should start the program, click the Help
  button, select the Enter Registration Serial Number from the menu and the "Registration" window will
  appear. Enter the registration information. Press the Register button. If the information entered is
  correct, the registration will pass successfully. All limitations of the unregistered copy will be removed.
  Otherwise it will be necessary to verify the information and repeat the registration information entry. It is
  a good idea to save your key in a safe place to avoid loss of your registration (if you reinstall your
  system the registration key may be lost).

**Note:** If you haven't received a confirmation letter with your registration key (serial number) within a reasonable amount of time (two business days for credit card payments or two weeks for other payments), please <u>notify us!</u> It may mean that the e-mail address in your order form was invalid. We're very sorry for any inconvenience caused by those delays.

# **Technical support**

Please read carefully the <u>FAQ</u> section of this help file before e-mailing for technical support. Perhaps you'll find an answer there.

### Some tutors that may help you understand how Registry First Aid works:

All movies have VCR type controls to stop, start etc.

- A demo tutor that takes you through a sample run with Registry First Aid and shows what it looks like as
  it goes. <a href="http://www.rosecitydownloads.com/tutor/RFA-Run.exe">http://www.rosecitydownloads.com/tutor/RFA-Run.exe</a>
- This should help you if you are having a hard time understanding how to add items to the Registry First Aid Exclude list. http://www.rosecitydownloads.com/tutor/RFA-Exclude.exe
- This should help you in understanding how to add drives and folders to the Registry First Aid Excluded Paths list. <a href="http://www.rosecitydownloads.com/tutor/RFA-Exclude-Drives-Folders.exe">http://www.rosecitydownloads.com/tutor/RFA-Exclude-Drives-Folders.exe</a>

You may send all questions and suggestions to support e-mail.

To help us to figure out a problem faster, please send us a Registry First Aid bug-report file.

#### To create a bug-report file:

- 1. Go to the Start Menu -> Programs -> Registry First Aid -> Send bugreport.
- 2. A small utility will run and create a bug-report file "Registry First Aid\_bugreport.txt" on your desktop.
- 3. Send that file to us by e-mail.

Please refer to your email program (Outlook, Netscape, etc.) for directions on how to attach a file to an email message.

If the program raised an **Access Violation error** then it automatically created a "reg1aid\_debug.txt" file in the temporary folder. Please include that file as an attachment to your e-mail bug report. To find that file please click on the *Start Menu -> Run.*. and type %temp% into the box. Then press *Enter*. This will open your temporary folder where you can find "reg1aid\_debug.txt" or the "reg1aid\_debug.log" file. Note that "reg1aid\_debug.log" is the same as the "reg1aid\_debug.txt" file, simply renamed after a successful run of the program.

Also, you can provide us with a screenshot of the error that you see which will help us even more.

To create a screenshot, press the "**Print Scrn**" key (above the "Insert" key on your keyboard). Then go to the *Start Menu, Programs, Accessories* and run **Paint**. Go to the *Edit* menu and select *Paste* command. This will create an image with your desktop in **Paint**. Save the image as JPEG file and attach it to a bugreport e-mail.

# **Starting**

Quick Tour: Step 1 of 3

Registry First Aid is designed like a wizard. It will guide you through the entire process of fixing invalid registry entries.

#### Screenshot.

The wizard consists of two parts:

- · checking the registry for errors,
- · searching the registry for unwanted entries.

Each part has three steps:

- Selecting error types (or keywords to search in the registry);
- Verifying found invalid (or unwanted) entries;
- · Fixing the registry.

Also, there's a <u>configuration page</u> opened by clicking the **Advanced settings** button on the **Starting** page. The following options can be configured:

- exclusion list of registry strings;
- paths to search for registry corrections;
- · list of paths excluded from searching for corrections;
- · registry keys excluded from the registry scan;

Each step requires the completion of the previous process as listed above. If you want to repeat a step, you can use the **Back** button. For each step there are information tips that briefly describe what you can do on that particular step. Until you become familiar with Registry First Aid, it is highly recommended that you read the tips.

On the **Starting** page you can select the action which you want to do: **check the registry for errors** or **search the registry for unwanted entries**. Then click on the **Next** button to move to the next wizard page. Depending on the action that you select, on the next page you can either <u>select errors to scan the registry</u> or enter keywords to search.

### Note for machines with multiple Operating Systems (OS) installed.

Press the **Start** button at the bottom of the wizard to process. You can stop the scanning by pressing the **Stop** button at any time during the scan.

Next step >>

See also:

Advanced settings
Selecting the registry errors to scan
Entering keywords to search in the registry

# Verifying found invalid (or unwanted) entries

Quick Tour: Step 2 of 3

While scanning the registry for invalid entries, the wizard opens the "found entries" page. After the registry scanning process has finished, all located entries appear on this page of the wizard.

#### **Screenshot**

The screen is divided into two parts: the navigation bar on the left side and the entries list on the right side. The navigation bar contains <u>registry error categories</u> or <u>safety levels</u> of located errors. Clicking on the top "View by .." buttons will switch the view. Clicking on an item at the left navigation bar (like **Invalid fonts** error category or **Caution** safety level) will open a corresponding list with all the located invalid registry entries.

At this point, you need to decide which entries need to be fixed. Carefully look through the list and deselect the items that you do not want to correct. You may use the right mouse click, <u>pop-up menu</u> to assist in your selections. By default all entries that can be safely corrected are selected. Also, you may choose a correction for any selected invalid entry from the drop-down list of available corrections.

Refer also to Select corrections for found invalid entries topic.

After looking through all found registry keys and selecting the most appropriate corrections for them, you may apply the registry changes by pushing the **Next** button. The wizard will advance to the <u>fixing the registry page</u>.

<< Previous step | Next step >>

See also:

<u>Selecting corrections for found invalid entries</u> <u>Fixing the registry</u>

# Fixing the registry

Quick Tour: Step 3 of 3

On this last wizard page, you have to confirm the deletion or modification of registry keys, and choose a backup file name. You may browse the file system for the folder where you want to save the backup file. The backup files are of **REGEDIT4** format and can help you later to restore the modified registry keys to initial state. See the <u>How to restore modified entries</u> topic.

#### Screenshot

By default the checkbox "Save the undo file (regedit4 format)" is checked. Enter the full path and file name to the edit field below. An example is: "C:\Program Files\RFA\Backups\2001\_04\_27.reg". You may or may not type the filename with the file extension. If the file extension is missing, then the default ".reg" extension will automatically be added. It is possible to use the **Browse** button to locate a path and file name as well. By default the program offers to save the backup file into the "Backups" folder at the program home folder (e.g. "C:\Program Files\RFA\Backups").

If you do not want to save a backup of the registry entries then clear the "Save the undo file (regedit4 format)" checkbox.

#### Note:

- We do not recommend that you skip saving the backup file as you will not be able to restore the modified registry keys if needed later.
- Give different names to backups, each time you clean the registry. By default, backup names contain current date like this "C:\Program Files\RFA\2001\_04\_27\_1026.reg". Usually, you do not need to change them.

To apply changes to the registry, press the **Fix it!** button. If the operation is successful, you will receive an information message. Registry First Aid's wizard will jump back to the <u>found registry entries</u> page where you can select other entries for correction if desired.

#### << Previous step

### See also:

Make backups when deleting/changing registry entries Found invalid entries listview

# Search the registry for words

Registry First Aid allows you to search the registry keys and/or values for words or strings. It can be started from the <u>Welcome</u> page by selecting the **Search the Registry for Unwanted Entries** radio button and clicking **Next**.

### Screenshot

This feature is useful if you want to find all registry entries that remained from un-installed/removed applications. You can enter a removed program name and it's company name in order to get a list of all entries found in the registry. Then you may delete entries or edit them manually using the <u>Open the registry key with RegEdit</u> command from the right-click pop-up menu.

Please see this link: How you might use the key word search feature.

#### Caution!

This Search tool is NOT to find "BAD" entries, but "ALL" entries that contain a word. It's used to see if entries are left in your registry after uninstalling a program say like Norton Utilities where you could search for words like Symantec and Norton to see what is left behind and then delete WHAT YOU WANT not all that are displayed.

The program searches HKEY\_CURRENT\_USER, HKEY\_USERS\.Default, HKEY\_USERS\Software and HKEY\_LOCAL\_MACHINE registry entries for selected strings. Scanning may take a few minutes depending on your processor and available RAM. Found entries are displayed in the list view on the <u>found registry entries page</u>. Note that HKEY\_CLASSES\_ROOT hive is the subkey \Software\Classes of the HKEY\_LOCAL\_MACHINE hive. So, it is scanned by Registry First Aid too.

#### See also:

Enter keywords to search in the registry
How you might use the key word search feature
Found registry entries listview

# Enter keywords to search in the registry

On this wizard page you can enter or select keywords to search in the registry.

#### Screenshot.

To add a keyword or keywords enter a string of one or more words into the box and press the **Add** button. The string will be added to the list and will have "checked" status. Only items with "checked" status would be searched in the registry.

All items in the list are saved and will appear in each program run.

To remove an item simply click on it to select and press the **Remove** button.

To search a phrase in the registry you can enter more than one word. For example, if you enter "Norton Antivirus" then registry entries containing this phrase exactly (with one space between words) will be found. If you don't know if there are any other words between "Norton" and "Antivirus" then you should add these two words separately and select the **Search for ALL strings** option (see below).

There are some searching options on this wizard page:

**Search for ANY of the strings** - registry keys containing any of selected keywords in the list will be found (OR operation);

**Search for ALL strings** - registry keys containing all selected keywords in the list will be found (AND operation).

Case sensitive - searching can be case sensitive or not.

#### Search in:

Keys - search in registry keys;

Values - search in registry key values:

**Data** - search in registry value data (only in values of string type).

The registry search process will begin when you press the **Start** button at the bottom of the wizard. To return to the previous page press the **Back** button.

# How you might use the key word search feature

This feature, **Search the Registry for Unwanted Entries**, may help you find some registry keys that belong to a software. For example, you just un-installed an application, say "SuperApp". The executable file of the application was, say super.exe. You want to be sure that it's uninstall program removed all application traces from the registry.

To do so, you can:

- 1. select the "search the registry for unwanted entries" option in Registry First Aid,
- 2. enter keywords "SuperApp" and "super.exe" to search for,
- 3. select to search in the Keys, Values and Data checkboxes,
- 4. select the "Search for ANY of the strings" switch,
- 5. run the search.

Registry First Aid will find any registry keys and values containing "SuperApp" or "super.exe" keywords. They may belong to the question application, or may not. By default all found entries aren't selected for removal. It's up to you to look through the list and select only those entries that belong to the application and you want to delete from the registry.

After you selected items for removal and set their correction to "Delete the entry" or "Cut invalid substring", click the Next button to make registry changes.

That's main goal of the **Search the Registry for Unwanted Entries** feature. Of course, you may find another use of it, not only deleting uninstalled application traces.

See also:

Search the registry for words

# Select the registry errors to scan

On this wizard page you can select what error types you want to scan for in the registry.

#### Screenshot.

Options available:

- Invalid Paths;
- Invalid Fonts:
- · Obsolete Start Menu items:
- Invalid Application Paths;
- · Invalid Help Files;
- · Invalid Shared DLLs;
- Auto Run Registry Keys;
- Unused Software Entries;
- Invalid Known DLLs.

The registry scan process will begin when you press the **Start** button at the bottom of the wizard. To return to the previous page, press the **Back** button.

The program scans HKEY\_CURRENT\_USER, HKEY\_USERS\.Default, HKEY\_USERS\Software and HKEY\_LOCAL\_MACHINE registry entries and checks them for selected registry errors. Scanning may take a few minutes depending on your processor and available RAM. Found entries are displayed in the list view on the <u>found registry entries page</u>. Note that the hive HKEY\_CLASSES\_ROOT is the subkey \ Software\Classes of the HKEY\_LOCAL\_MACHINE hive. So, it is scanned by Registry First Aid too.

You can stop the scanning by pressing the **Stop** button at any time during the scan.

#### See also:

<u>Found invalid entries listview</u> Select corrections for found invalid entries

# Select corrections for invalid registry entries

When Registry First Aid completes the registry scanning it will begin to search for matches on drives or paths that are listed in the <u>list of search paths</u>. After completing the search, the program will show all found entries with suggested corrections in the found invalid entries listview.

#### **Screenshot**

The listview can display found invalid registry entries grouped by <u>error category</u> or by <u>safety level</u>. Clicking on a corresponding item (like **Invalid fonts** error category or **Caution** safety level) within the navigation bar at the left side of the window, will open a list with grouped invalid registry entries.

In the list, you can select the entries that you want to correct.

The entries that are checked (selected) in the listview, are the only items that will be corrected. They have a checkmark at the left side.

If you click on an item in the listview, a drop-down list will appear with all available suggested corrections for the invalid registry entry described by the item. If there aren't any obvious corrections to be made, you will have the choice to "Leave the entry without changes" or to "Delete the entry (no matches found)". If there are corrections, then the list will specify the most correct change (default) and others that apply. Select the most appropriate choice by clicking the entry. The choices for the item in the listview have a font color associated with the type of correction as described below:

Available corrections can be highlighted in the following manner:

Leave the entry without changes - black font color;

Delete the entry - olive font color;

Cut invalid substring - magenta font color;

Found correction 1 - green font color;

Found correction 2 - green font color;

and etc.

Click here to read how every entry is displayed in the list.

- To validate found invalid registry entry you can use the <u>right-click context menu</u>. This menu allows you to see the value in the registry using the "REGEDIT" -function. Registry First Aid will run <u>regedit.exe</u> and open the selected registry key. For information on how to edit an entry using <u>regedit.exe</u> please refer to the Windows® help.
- To verify the existence of an invalid file/folder registry reference you can use the **Open the destination folder** command from the <u>pop-up menu</u>. Registry First Aid will open a folder that corresponds to the path where an entry should exist.
- The **Select** option from the <u>pop-up menu</u> allows you select/deselect items in the listview.
- The **Highlight** option from the <u>pop-up menu</u> allows you to operate with "Highlight" flag.

To highlight entries in the listview hold the left mouse button while dragging over the list. The CTRL or SHIFT keys can be used to highlight items in the listview, in the manner like in the Windows® explorer (please refer to the "To select multiple files and folders" Windows® help topic).

• The **Set corrections for highlighted items to...** option from the <u>pop-up menu</u> allows you to set correction for all highlighted items.

Please read the <u>Using the pop-up menu</u> topic for more information about context pop-up menu commands.

After looking through all invalid registry keys and choosing your (most suitable) corrections, you can commence to apply the registry changes by clicking the **Next** button. In the <u>fixing registry page</u> the **Fix It** button will commit your changes, and if you want, an "Undo" file can be created for recovery purposes.

#### See also:

Selecting applicable matches with the invalid entries
Cut Invalid Substring correction
Fixing the registry
Make backups when deleting/changing registry entries
Using the pop-up menu

# How every found entry is displayed in the list

Each item under the **Invalid Paths** consists of three lines (parts):

- the registry key;
- the parameter's name and value;
- the suggested correction.

Each item under the Invalid Fonts consists of three lines (parts):

- the registry key;
- the font name and referenced file name;
- the suggested correction.

Each item under the **Obsolete Start Menu Items** consists of two lines (parts):

- the registry key with obsolete menu item;
- the suggested correction.

Each item under the Invalid Application Paths consists of three lines (parts):

- the registry key with the application exe name;
- the problem description;
- the suggested correction.

Each item under the **Invalid Help Files** consists of three lines (parts):

- the registry key;
- the help file name and path;
- the suggested correction.

Each item under the Invalid Shared DLLs consists of three lines (parts):

- the registry key;
- the invalid shared DLL file path;
- the suggested correction.

Each item under the **Auto Run Programs** consists of three lines (parts):

- the registry key;
- the name, description and path of a program in auto start registry key;
- the suggested correction.

Each item under the **Unused Software Entries** consists of two lines (parts):

- the registry key with obsolete software entry;
- the suggested correction.

Each item under the **Invalid Known DLLs** consists of three lines (parts):

- the registry key;
- the alias, description and file name of invalid DLL;
- the suggested correction.

Different parts of an item can have different font colors:

Registry key and simple text - black font color;

Registry parameter - blue font color;

Invalid value - red font color;

Suggested correction - font color depends on the type of correction (see below).

See also:

Cut Invalid Substring correction

Select corrections for invalid registry entries

# **Cut Invalid Substring correction**

The type of correction "**Cut Invalid Substring**" allows to remove invalid part of a registry entry and keep entry in the registry.

For example, you have a complex registry value "Path"="C:\Program Files\Path1;C:\Program Files\Path2;C:\Path3;" and Registry First Aid found that the path "C:\Program Files\Path2" does not exist. Using this correction type you can simply cut the invalid part from the registry value. In this example your new value will be "Path"="C:\Program Files\Path1;C:\Path3;".

In previous versions of Registry First Aid or other registry cleaners you had to modify such entries manually or leave entries without change.

The program automatically suggests this correction for complex registry values. Simple values as "Path"="C:\Program Files\Path1\" aren't suggested with this correction. If you set **Cut Invalid Substring** correction manually then this will cut the whole invalid string marked in red color "C:\Program Files\Path1\" and leave the value "Path" empty but still in the registry.

# **Error Categories**

Registry First Aid can scan the registry for different error categories. Initially, all found registry items are grouped by error category. See a Screenshot.

And they have different icons when displayed in the list grouped by safety level.

• Orphan file/folder references.

Registry entries containing references to nonexistent files or folders.

• Invalid font references.

Invalid records of installed fonts.

Auto run programs.

Registry keys with auto-start programs. Invalid entries are selected for correction by default. All other entries are listed for your information only.

· Obsolete Start Menu items.

Entries remaining after deleted or moved shortcuts from the Start Menu.

• Invalid help file references.

Invalid records of help files registered in the system.

· Invalid application paths.

Invalid records of applications registered in the system.

· Invalid shared DLLs.

Entries remaining after deleted or moved common DLL files, removed applications.

· Invalid known DLLs registry references.

Invalid DLL aliases remaining after moved/deleted .dll files.

· Unused software entries.

Empty registry keys remaining after removed programs. Entries that do not contain any values.

# **Safety levels**

There are three safety levels of found registry errors. Registry entries can be grouped by safety level. <u>See a Screenshot</u>.

And they have different icons when displayed in the list grouped by error category.

### • Green icon.

Entries are safe to correct with default suggested correction.

### · Yellow icon.

Modifying these entries without reviewing may cause problems. Please check suggested corrections.

### • Red icon.

Modify these entries only if you are sure how to correct them. Note that really unsafe entries are in the excluded lists and not displayed.

# Using the pop-up menu

You have access to many additional options and commands from the context pop-up menu.

#### Screenshot

From the right-click pop-up menu you can validate the existence of a selected entry in the registry. To run *regedit.exe* and open a selected registry key select the **Open the registry key with RegEdit** menu command. For information on how to edit an entry using *regedit.exe* please refer to the Windows® help.

To verify the existence of an invalid file/folder registry reference you can use the **Open the destination folder** command. Registry First Aid will open a folder that corresponds to the path where an entry should exist.

The **Select** option from the pop-up menu allows you to make choices in several ways. With this option you can:

- select/deselect all of the items in the listview;
- · select/deselect only items highlighted in the listview;
- invert the selection flag for all items in the listview.

The entries that are checked (selected) in the listview are the only items that will be corrected. They have a checkmark on their left side.

The **Highlight** option from the pop-up menu allows you to operate on "highlight" flags. With this option you can:

- highlight/de-highlight all of the items in the listview;
- highlight/de-highlight only selected items in the listview;
- invert the "highlight" flag for all items in the listview.

To highlight entries in the listview hold the left mouse button while dragging over the list. The CTRL or SHIFT keys can be used to select and highlight items in the listview, in the manner like in Windows® explorer (please refer to the "To select multiple files and folders" Windows® Help topic).

The **Set corrections for highlighted items to...** option from the pop-up menu allows you to set corrections for all highlighted items. With this option you can set correction for every entry:

- to the most suggested:
- to "Leave the entry without change";
- to "Delete the entry".

The **Save found entries into a text file...** command allows you to save all found entries as text. Please refer to the <u>Save found entries into a text file</u> topic.

The **Print all found entries** command allows you to print all found entries. Please refer to the <u>Print all found entries</u> topic.

The **Add highlighted entries into excluded list** command will add registry keys of the highlighted items into an excluded list. This will avoid finding those registry entries as invalid in future scans. Please refer to the <u>Add/Remove registry entries into excluded lists</u> topic for more information.

# Run the registry editor for the selected Registry key

It is possible to run the registry editor and make it open one of the found invalid registry keys. To do so just select any registry reference at the main listview, right mouse click on it and select the **Open the registry key with RegEdit** menu item.

See a screenshot

# Open a folder where the Registry entry points

It is possible to open an Explorer window at the folder that is referenced from an invalid registry entry. It is useful when you want to be sure whether a file actually does exist or not.

To open an Explorer window at the referenced folder, right-click on the selected registry entry and choose the **Open the destination folder** menu item.

See a screenshot

### Save found entries into a text file

The user can save a list of found entries into a text file.

To save entries as text, right mouse click on the found entries list to access the pop-up menu and select the **Save found entries into a text file...** command. <u>See a screenshot</u>. The "file save" dialog will appear. Browse for a folder where you want to save a file and type in a filename and click **OK**.

The created file will contain all entries that you can see under all of the categories. You can open it with Notepad, Wordpad or any text editor program supporting the **TXT** file format.

See also:

Printing all found entries

# **Print all found entries**

The program allows you to print all found invalid entries.

To print entries right mouse click on the found entries list and select the **Print all found entries** command. See a screenshot.

Note that your system may contain a huge list of invalid entries, so printing may take a lot of paper. We recommend <u>saving large lists as text files</u> and then edit them in a text processor (decrease font size, split into columns, etc.) before printing.

See also:

Saving list of found entries

# Search the Internet for information about a selected registry key

The user can search the Internet for information about a selected registry key.

The command "Search the Internet for selected key" is available from the right mouse click pop-up menu over any found registry entry.

See a screenshot of pop-up menu.

Registry First Aid uses Google® search engine.

# **Advanced settings**

Pressing the **Advanced settings** button on the **Starting** page you are able to check and modify the following settings.

- <u>Appearance</u> define how the program will display registry scan process and some additional functionality (<u>Screenshot</u>).
- <u>Exclusion list of registry strings</u> define strings that will be ignored when scanning the registry (<u>Screenshot</u>).
- <u>File paths to search for registry corrections</u> define paths where to search for file/folder matches (Screenshot).
- <u>List of file path excluded from searching for corrections</u> define paths excluded from the disk search (<u>Screenshot</u>).
- Registry keys excluded from the registry scan define registry entries to exclude from the registry scan (Screenshot).
- Colors define colors used in the found registry entries list (Screenshot).

# **Appearance**

On this configuration page you can define settings for scan processes.

There are two group boxes: <u>Registry Scan</u> and <u>Files Scan</u> (<u>Screenshot</u>). Every group box contains settings that control the displaying of scan processes.

This page also contains Registry First Aid Agent configuration settings.

# **Registry Scan group**

Under the Registry Scan group you can find the following options (Screenshot).

### Limit scan by number of errors

This option allows to set a max number of errors to be found per registry scan.

In many cases Registry First Aid finds several hundreds or even thousands of errors in the registry. Scanning for all those errors and finding corrections may take a LOT of time. Also, as it is suggested to verify every correction suggestion, it is very hard to do so with hundreds of errors. With this option you can limit the maximum number of errors increasing the program scanning speed and making it easier to verify the errors found. To clean the whole system, you just will need to make several scans. And guess what? Scanning several times with a limit of 200 errors is FASTER than scanning only one time with 1000 errors found and verifying them all. Note that on the first scan of drives for corrections, their file contents are being cached. So subsequent scans are much faster. Default value is 1000.

### Show warning message

This option defines if a pop-up message on reaching the scan limit will be displayed. That message allows to continue the scan, if you'd like and/or turn off the scan limit for all future registry scans.

#### Freeze found entries list while scanning

Setting this option ON will freeze the list. The found registry entries will not be displayed while the registry scan is in progress. Turning this option ON may increase scanning speed.

#### Show current registry key in status bar

After setting this option ON the program will show currently scanned registry key name in the status bar at the bottom of the program window. Turning this option OFF increases scanning speed.

#### Show progress bar

Setting this option ON will show progress bar displaying scanning process. Turning this option OFF may increase scanning speed.

#### Scan several registry keys simultaneously

Several registry keys can be scanned simultaneously. Setting this option ON require more resources and some computers may be unstable. If there are problems with running registry scan in this mode you can turn this option OFF.

See also:

Files Scan group

# Files Scan group

Under the Files Scan group you can find the following options (Screenshot).

### Show current path in status bar

After setting this option ON the program will show currently scanned path name in the status bar at the bottom of the program window. Turning this option OFF may increase scanning speed.

### Show progress bar

Setting this option ON will show progress bar displaying scanning process. Turning this option OFF may increase scanning speed.

### Scan several disks simultaneously

Several disks can be scanned simultaneously. Setting this option ON require more hardware resources and some computers may become unstable. If you find problems with scanning disks in this mode you can turn this option OFF.

See also:

Registry Scan group

# **Agent settings**

Registry First Aid Agent is a small utility that starts on system boot and stays invisible in the background. This Agent implements some scheduling tasks.

Advanced Settings page contains options to control Agent functionality. There are the following options.

### Automatically run Registry First Aid Agent with Windows startup

Setting this option ON will force Agent to run at system startup. Registry key HKEY\_CURRENT\_USER\ Software\Microsoft\Windows\Current\Version\Run is used to store "RFAAgent" value referring to start-up Agent path.

#### Check for new versions

This option defines how often the program will check for updates. Available values are from 1 to 30 days. Multiple servers are used for version checking. Please refer also to <u>Check the Web for updates</u> topic.

### Registry checking reminder

This option defines how often the program will remind to check the registry for errors. Available values are from 1 to 30 days. It is suggested to check the registry at least once a week.

#### Show Agent icon in the taskbar notification area (near the clock)

It is possible to hide Agent icon from taskbar notification area. It's very useful if you have a large number of icons there or if you don't want the icon visible (if you do not want your computer users to know about running Registry First Aid Agent in the background).

See also:

Check the Web for updates

# Schedule registry scan

This feature lets you automatically start the registry scan on a schedule basis. First clicking on the checkbox **Schedule registry scan** creates a job in Windows' Task Scheduler. User have to set the job properties such as schedule time and user account used for the task. Job properties are accessible from the **Set Schedule Time** link on the same page of the Advanced Settings screen or from the Control Panel -> Task Scheduler icon.

See also: Command line parameters.

# **Excluded registry strings**

In this window the user can set strings that will be ignored when scanning the registry. This means that if a registry entry contains a path like "F:\autorun\auto.exe" and the string "\autorun\auto" is in the excluded strings list, then Registry First Aid will not check this registry entry for any error (will skip this entry). The exclude list is case insensitive.

#### Screenshot.

If a registry key value or data contains ANY of the strings in this list then this registry value or data will not be checked for possible errors. If the program searches for <u>unwanted registry entries</u> such values or data will not be searched.

This feature is useful to exclude CD-ROM, network or removable drive letters from finding them as "invalid" if they do not contain a media that a registry key is referenced to. For example, if your registry contains some references to files on a CD-ROM that currently is not in a drive and you do not want to remove those references from the registry then add your CD-ROM drive letter to the list. You may also add to the list, all your removable media drive letters. By default the excluded list is empty. So all links to files or folders on your removable drives will be found.

#### Items can be active/inactive. Checkbox indicates its state.

To add a string to the list, enter it in the edit box and press the **Add** button. To remove a string from the list, select it and press the **Remove** button.

See also:

Advanced settings

# List of paths where to search for corrections

The list of paths contains paths where to search for file/folder matches. To scan hard drives for registry corrections specify the paths you want to search.

The list is case insensitive.

Screenshot.

Adding paths or local hard drives to the search list is very easy. Click the **Add** button, browse for a path and click **OK**.

If you don't know where moved files might be located, just add all of your hard drives - C, D, etc. By default the list already contains all fixed drives. Note that depending on the size of the drives and number of files, scanning your disks may take a lot of time. Registry First Aid always scans selected folders including their subfolders. In most cases to speed up the process you might only add the Windows® folder (e.g. "C:\Windows") and "C:\Program Files" folder. An overwhelming majority of invalid entries reside in these folders or directory paths.

**Note 1:** If the list contains upper-level folder path then you won't be able to add a subfolder (for example if the "C:\Windows\" folder is in the list, the subfolder "C:\Windows\Subfolder\" can not be added in the list). The reason for this is that the program always scans folders and their subfolders automatically.

**Note 2:** You can set a list of paths excluded from the disks search. Please refer to the <u>List of paths</u> excluded from the search for corrections topic.

Items can be active/inactive. Checkbox indicates it's state.

See also:

Advanced settings

List of paths excluded from the search for corrections

# List of paths excluded from the search for corrections

This list contains paths excluded from the disk search. The list is case insensitive.

#### Screenshot.

Adding paths to the exclusion list is very easy. Just click the **Browse** button, select a path and click **OK** or simply enter a whole path string into the edit box. Entered path strings then can be edited and added into the exclusion list - click the **Add** button.

**Note:** If the list contains an upper-level folder path, then you won't be able to add a subfolder (for example if the "D:\Temp\" folder is in the list, the subfolder "D:\Temp\Subfolder\" can't be added into the list). The reason for this is because the program disables from scanning all folders with their subfolders.

**Tip 1:** To skip searching folders with the same name on all drives simply enter a folder name beginning and ending with "\". For example, to avoid searching for corrections in folders *C:\Recycled*, *D:\Recycled*, and so on, add the string \Recycled\ into the exclusion list.

**Tip 2:** Adding \Recycled\ into the exclusion list will exclude from the scan all folders containing \Recycled\ substring in their path: C:\games\Recycled\, E:\Temporary Internet Files\Recycled\, etc. To avoid this keep the ":" as the first char of excluded path: :\Recycled\.

### Items can be active/inactive. Checkbox indicates it's state.

By default exclusion list contains the following paths: \BOOTWIZ\\RECYCLED\\RECYCLER\\Temporary Internet Files\

See also:

Advanced settings

# Registry entries excluded from the registry scan

On the **Excluded Registry Keys** page you may exclude some registry entries from the registry scanning by adding these entries into one of excluded lists.

Registry First Aid has several lists of registry entries that will be excluded from the registry scanning. The lists are case insensitive.

#### Screenshot

Entries that are in the **Invalid path entries excluded list** will be excluded from analyzing registry for invalid paths. The program will skip these registry entries. Entries from the **Invalid font entries excluded list** will be skipped while analyzing registry for invalid font references. And so on. Every registry problem category has own excluded list. Some lists contain several *default* excluded entries.

Users can add new registry keys to these lists. If the program finds repeatedly the same entry as invalid or empty then the user can add it to the one of excluded lists. If you want to exclude some program entries from to be found as invalid you can also add these entries into the excluded list. Usually you don't know exactly all programs' registry entries that can be found as invalid. So, scan the registry and add to the excluded list those entries that belong to the program you want to exclude (using the <u>right mouse click pop-up menu</u>).

To add or remove an entry you have to select a list from the drop-down box and press the **Add** button, or select an item in the list and press the **Remove** button. It is possible to edit user-added entries using the **Edit** button. **Default excluded entries can't be removed or edited**.

It is always possible to restore default excluded lists using the **Restore default** button. Note that then all user added entries will be lost.

Adding a new registry entry into the excluded list is also available just after registry scanning. To add an entry please do the registry scan, then select the entry to be excluded and add it to the list using the <u>right</u> mouse click pop-up menu.

See also:

Advanced settings

# Colors

These settings allow to customize the view of found registry entries list. Screenshot

The test listview at the right side of the window shows all color changes in time they are changed. Adjustments made on this page can be stored only by clicking the **OK** button. The **Cancel** button will revert all changes back. To restore default colors click the **Restore Default** button.

# Make backups before modifying registry entries

On the last page of the wizard, you are prompted to save a backup of the registry file. Only the modified registry entries are backed up. The backup file is a text file of REGEDIT4 format (used primary in Windows® 95, 98, NT4 and supported by Windows® 2000/XP/2003) and has the ".reg" extension.

### Screenshot

To roll back all changes that were made to the registry refer to the <u>How to restore registry entries from a backup file</u> topic.

By default all backup files are saved in the folder "C:\Program Files\RFA\Backups\". The user can select the folder where backup files are saved and change backup filenames. The last used backup folder can be opened from the *Start menu -> Programs -> Registry First Aid group -> Open Backup folder*.

If you do not want to backup the registry, then uncheck the **Save the undo file** checkbox. **Note that if** you do this, you will not be able to restore modified registry keys.

It is highly recommended to always create a registry backup file. Otherwise you will not be able to restore the modified registry keys if needed.

See also:

Fixing registry

How to restore registry entries from a backup file

# Create full registry backup

Before the scan, Registry First Aid will create a full registry backup. It will show the user an information dialog, and the user must click the **OK** button to continue. To view the help on how to restore the registry from a full backup, the user can click on the **Help** button. The **Cancel** button will close the dialog and stop the registry scan within the program. So, making a full registry backup is required. Registry First Aid calls Windows® registry backup tools.

#### Windows® 98/ME

The program will launch Windows®' Registry scanner and backup utility SCANREGW.EXE. This utility will check the registry integrity. Once complete, you will see a Registry Scan Results dialog box informing you of the scan results (it will tell you whether there were errors or not) and asking if you'd like to create a backup. Click the **Yes** button and *Scanreg* will create a full registry backup with the label "*RFA\_backup*". You can use this label later to restore the registry.

#### Windows® 2000

User should have administrator's privileges on the system.

The program will launch the Windows® 2000 *Backup utility*. You can find the *Backup utility* on the *System Tools* menu.

To create registry backup you need to create Emergency Repair Disk. Click on a third button at the Welcome page of *Backup utility* and select the "Backup the registry" checkbox. You may not insert any floppy disks - simply click Cancel on the prompt. Registry files will be backed up anyway into the system folder "C:\WINNT\repair\RegBack".

Then backup the *System State*. The *System State* item can be found on the *Backup* tab under *My Computer*. Or you can use the *Backup Wizard* and choose the "Only back up the System State data" option. After choosing to back up the System State, you can select the media to which you want to back up. You can choose a disk file or tape. The Win2K Registry backup utility backs up all of the hives of interest in *%systemroot%\system32\config*, including Default, Software, System, SAM, and Security. However, it also backs up system files, user profiles, and any part of your system required to do a complete system restoration.

As such, you can easily back up the Registry by clicking the Start Backup button.

#### Windows® XP Professional and Home Edition

User should have administrator's privileges on the system.

The program will launch *System Restore Wizard* that can be found manually from the *Start menu -> All Programs -> Accessories -> System Tools -> System Restore*. When *System Restore Wizard* opens, click "*Create a Restore Point*" then click **Next**. Enter a name for this *Restore Point* (for instance, "Before Registry First Aid scan"), and click **Create**. The utility will then take a snapshot of your system so that you can restore to that point sometime in the future.

For additional information about *System Restore* in Windows® XP, click *Help and Support* on the *Start menu*. In the *Search box*, type "system restore", and then press **ENTER**.

#### See also:

Make a backup before deleting/changing registry entries

Restore a full registry backup in Windows® 98

Restore a full registry backup in Windows® ME

Restore a full registry backup in Windows® XP

# Automatically create full registry backups

Windows® XP/2000/2003 allows Registry First Aid to create restore points (on Windows® XP) or system state backups (on Windows® 2000/2003) automatically.

Registry First Aid has the checkbox **Automatically create full registry backup** on the screen just before registry scan. With this option set to ON Registry First Aid will not wait for any input from user to create a restore point or system backup. It will be created automatically using System Restore service or NTBackup utility. If the option is OFF, then Registry First Aid will simply run a backup tool where the user have to make backup manually. This allows to set some specific options such as backup comment or additional files in the backup.

This option is available on Windows® 2000/2003 and Windows® XP only if System Restore service is running.

To check if System Restore service is running please right-click on *My Computer* icon and select the *Properties* menu item. Click on the System Restore tab and ensure that your system drive has the "Monitoring" status.

On Windows® 2000/2003 user can change folder and/or backup file name clicking the **Define backup** file button next to the **Automatically create full registry backup** checkbox.

See also: Create full registry backups

Restore full registry backups in Windows® XP

#### What restore option to choose

If you have a problem with your system after running Registry First Aid corrections you can restore the initial registry state. Registry First Aid makes two types of registry backups: <u>full registry backup</u> made before the scan and <u>backups of modified registry entries</u> made just before modifying the registry.

You can restore the registry using the *Start Menu -> Registry First Aid group -> Registry Restore* shortcut. Or run Registry First Aid and click the **Restore Backup** link at the main window.

The Restoration Wizard will run and you will see two options: **Restore the registry from .reg files** or **Full registry restore from system backup**. See a screenshot.

If you found a problem with your system, first try to restore the most recent *.reg* backup file. Select the **Restore the registry from .reg files** option and click **Next**. You will see a list of available backups. <u>See a screenshot</u>.

More information about restore window.

After selecting backup items to restore, click the **Restore** button. It is suggested to restart Windows® to be sure that registry changes were applied. After reboot check if a problem still exists. If a problem persists you can then restore all of the *.reg* backup files created *after* the date you are sure the system was OK.

If none of *.reg* backup files solved the problem then you can restore the registry from a most recent system backup. Such backups are created by Registry First Aid on a daily basis before scanning the registry. I.e. if you scanned the registry twice yesterday then only one system backup was created. This behaviour can be changed from the <u>Select Registry Errors to Scan</u> wizard page.

Run the Restoration Wizard from the *Start Menu -> Registry First Aid group -> Registry restore* shortcut and select the **Full registry restore from system backup** option. Follow the instructions.

For more information about restoring the registry from full backup or if your system doesn't start, please see one of the next topics:

Restore a full registry backup in Windows® 98

Restore a full registry backup in Windows® ME

Restore a full registry backup in Windows® 2000

Restore a full registry backup in Windows® XP

Registry First Aid uses Windows® restoration tool to create full registry backups and restore. So, it is as safe as Microsoft can guarantee.

If a problem still exists after full registry restoration from a valid system backup then that problem caused by something other than Registry First Aid and doesn't deal with the program's registry correction.

### Restore registry from .reg backup files

On this page of the Restoration Wizard you can see the list of available backup files and it's contents. See a screenshot.

The list shows all .reg backup files created in the last used backup folder. If you did not change backup folder then it is "C:\Program Files\RFA\Backups\" by default. You can view list of .reg backup files in any other folder pointing there with the **Browse** button.

To view or edit any of the backup files from the list select a file and click the **View** button.

To restore any of the backup files from the list click the file and select all entries. Or if you know that your problem deals, for example, with Picture It!<sup>TM</sup> program, then you can select only those entries that have this name in it's registry key, value or data. The **Search** button will be very helpful in finding entries by keywords.

You may also select several backup files or specified backup entries to restore from several backup files by holding **Ctrl** key while clicking by mouse or keyboard space bar on a backup file in the list. The same way of selection is used to select files in Windows® Explorer.

Clicking the **Delete** button will delete all selected .reg backup files. This may help you to free the space by deleting very old backup files.

Although you can select more than one backup file to restore, it is recommended to restore only one backup at once and check if a problem persists.

If you can't run Registry First Aid to restore backups, then the following information will help you. By default, the backup files have the following name format "yyyy\_mm\_dd\_mmss.reg". Here yyyy is year, mm is month, dd is day and mmss are minutes and seconds of date file created. Backup files are saved by default in the folder "C:\Program Files\RFA\Backups\". User can browse this folder with explorer or quick open it from the Start menu -> Programs -> Registry First Aid group -> Open Backup Folder. To manually restore registry entries from a .reg backup file open backup folder, find a backup file that you want to restore and double-click on it. It will run regedit.exe - the default Windows® program - that will ask you if you really want to add this information into the registry. If you answer "Yes" then registry entries from this backup file will be restored.

For the information on how to figure out problem registry entries that should not be modified please refer to the FAQ topic: "After running Registry First Aid, a program does not function correctly. What do I do?"

### Restore full registry backup in Windows® 98

You can read before:

Create full registry backup

In order to restore one of your copies of the registry you must boot into DOS. There are three basic ways to boot into pure DOS.

#### Windows® 98 does start

To restore the registry you can use two ways: automatic and manual.

#### · Automatic method:

To restore the registry to one of it's previous states, you can use the *Start Menu -> Registry First Aid group -> Registry restore* shortcut. You will be prompted to restart Windows®. After restarting you will see a restore screen with all registry backups you have.

#### Manual method:

Boot computer into pure DOS using one of the methods described in the "Windows® 98 does not start" topic, or if you are in Windows® you can go to Start/Shut Down... and select Restart in MS-DOS mode. The computer will restart in pure DOS (not a DOS box in Windows® - very important distinction).

Once you've restarted the computer in MS-DOS mode, type *SCANREG.EXE* /*RESTORE* command. This utility will ask you what backup file you want to restore. You will see a list of backups like the following:

04/02/02	rb004.cab	Not Started	RFA_backup
04/02/02	rb003.cab	Not Started	
04/02/02	rb002.cab	Not Started	RFA_backup
04/02/02	rb001.cab	Started	

Using the arrow keys, select the CAB (the CABs you will see are archived copies of the Registry) you want. The CAB files are listed by date with the most recent copy at the top. The CABs with the "RFA\_backup" labels were created by Registry First Aid before the registry scans. You can restore either the latest Registry First Aid's CAB or the most recent CAB created at the system startup (it has the "Started" label).

Once you've restored the Registry, use the arrow keys to highlight *Exit* and then reboot. You should now be able to boot back into Windows® 98 normally, just as before you edited the Registry or had a problem.

#### Windows® 98 does not start

You should start the computer into pure DOS by holding down the Ctrl key as soon as the BIOS information clears the screen. As soon as the menu appears, press the *Space Bar* (or any other key) once. This will keep the menu active and allow you the time to read over the selections available. Choose Command Prompt Only from the menu. You will then be in *Pure DOS*.

#### OR

If you are having trouble booting your computer, you can use a Windows® 98 boot floppy disk. It can be created from the *Control Panel -> Add/Remove Programs ->* Windows *-> Create boot disk*. Of course, this should be done before any problems can appear. Insert the disk into the floppy drive and reboot the computer.

## Restore full registry backup in Windows® ME

You can read before:
Create full registry backup

In Windows® ME the user doesn't need to reboot in the DOS mode manually.

To restore the registry you can use two ways: automatic and manual.

#### Automatic method:

To restore the registry to one of it's previous states, you can use either the *Start Menu -> Registry First Aid group -> Registry restore* shortcut.

#### Manual method:

Point to the Start menu -> Run... command and type "scanregw /restore" into the prompt.

Backup utility will ask you what backup file you want to restore.

Using the arrow keys, select the CAB (the CABs you will see are archived copies of the Registry) you want. The CAB files are listed by date with the most recent copy at the top. The CABs with the "RFA\_backup" labels were created by Registry First Aid before the registry scans. You can restore either the latest Registry First Aid's CAB or the most recent CAB created at the system startup (it has the "Started" label).

Once you've selected the backup file to restore, the system will reboot and restore registry files.

## Restore full registry backup in Windows® 2000

You can read before:

<u>Create full registry backup</u>

#### Windows® 2000 Professional and Server

#### Windows® 2000 does start

Log on to Windows® as Administrator.

To restore the registry to one of it's previous states, you can use either the *Start Menu -> Registry First Aid group -> Registry restore* shortcut or run the *Backup utility* from the *Programs -> Accessories -> System Tools* menu.

In the *Backup utility* select the *Restore* tab, choose the backup media, and then select the *System State* check box. Keep in mind that *Backup* will not only restore the registry, but it will also restore all of the system state data.

Note that after the *System State* restoration process is completed, you need to shut down and restart the system. You won't see the results of the restoration immediately.

Wizard Tip: When you start Windows® 2000, you can instantly restore the most recent copy of the registry. To do so, restart your system and when you see the "*Please Select the Operating System to Start*" message, press [F8] and then use arrow keys to select the "*Last Known Good Configuration*" option and press [Enter]. You can also use this quick restore technique in Windows® NT.

#### Windows® 2000 does not start

If Windows® does not start, restart Windows® by using the "Last Known Good Configuration feature": start the computer and then press the F8 key when Windows® begins to start. The Windows® Advanced Options menu appears.

Use the ARROW keys to select "Last Known Good Configuration" (your most recent settings that worked), and then press ENTER. Windows® will restore the computer to the most recent restore point.

If you still have problems with loading the system, you may read <u>Windows 2000/XP/2003 does not boot regardless of try Safe Mode and Last Known Good Configuration</u>.

### **Recovery Console**

The **Recovery Console** is a text-mode command interpreter for Windows 2000 that allows to gain access to files, folders and system services for system troubleshooting.

### Installing Recovery Console.

**Recovery Console** can also be started from the Windows 2000 **setup CD** or the Windows 2000 **setup floppy disks**.

Insert Windows CD and start the computer. Enter Windows 2000 setup. Press ENTER at the "Setup Notification" screen. Then press  $\bf R$  to **repair** a **Windows** 2000 installation, and then press  $\bf C$  to enter into the Recovery Console screen.

To use the Recovery Console, you must know the password for the local Administrator account. If you do not have the correct password, Recovery Console does not allow access to the computer.

At the Recovery Console screen you can use the following commands:

dir list folders/files; copy copy files; del delete files;

cd switch to another directory; attrib change file attributes; chkdsk check a disk for errors;

**diskpart** manage the partitions of a hard disk;

**expand** expand a compressed file:

**fixboot** write a new boot sector onto the system partition; fixmbr repair the master boot record of the boot partition;

format format a disk;
md create a directory;
rd delete a directory;
ren rename a file.

Enter **help [command]** for detailed description of a command.

More information on using **Recovery Console** can be found searching the build-in **Windows Help** for "Recovery Console" words.

### Restore full registry backup in Windows® XP

You can read before:

Create full registry backup

#### Windows® XP Professional and Home Edition

#### Windows® XP does start

Log on to Windows® as Administrator.

To restore the registry to one of it's previous states, you can use either the *Start Menu -> Registry First Aid group -> Registry restore* shortcut or run the *System Restore utility* from the *All Programs -> Accessories -> System Tools* menu.

System Restore starts. On the Welcome to System Restore page, click "Restore my computer to an earlier time" (if it is not already selected), and then click **Next**.

On the Select a Restore Point page, pick a date on the calendar, select in the restore point list the most recent system checkpoint created with the program, and then click **Next**. A System Restore message may appear that lists configuration changes that System Restore will make. Click **OK**.

On the *Confirm Restore Point Selection page*, click **Next**. *System Restore* restores the previous Windows® XP configuration, and then restarts the computer.

Log on to the computer as Administrator. The System Restore Restoration Complete page appears.

#### Click OK.

For additional information about *System Restore* in Windows® XP, click *Help and Support* on the *Start menu*. In the *Search box*, type "system restore", and then press *ENTER*.

#### Windows® XP does not start

If Windows® does not start, restart Windows® by using the "Last Known Good Configuration feature": start the computer and then press the [F8] key when Windows® begins to start. The Windows® Advanced Options menu appears.

Use the ARROW keys to select "Last Known Good Configuration" (your most recent settings that worked), and then press [ENTER].

If a boot menu appears, use the ARROW keys to select *Microsoft Windows*® *XP*, and then press [ENTER]. Windows® XP restores the computer to the most recent restore point.

#### To run the System Restore from the Safe Mode do the following.

Boot into safe mode, log on with an administrator account privileges and type into the command prompt: **%systemroot%\system32\restore\rstrui.exe**. Then press enter.

If you still have problems with loading the system, you may read <u>Windows 2000/XP/2003 does not boot regardless of try Safe Mode and Last Known Good Configuration</u>.

Microsoft KB #307545

# Windows® 2000/XP/2003 does not boot regardless of try Safe Mode and Last Known Good Configuration

If it is not possible to boot in safe mode and last known good configuration is damaged then you can restore the system files from a full registry backup created before Registry First Aid registry scan. If you remember, you were prompted to create a backup of the system state.

In this case you need a second operating system of the same version installed on that machine. You can either install a new OS into another folder (not C:\WinNT originally) or another partition or connect hard drive to a machine with the same Windows version installed.

#### Windows 2000/2003

Boot into your parallel installed system and launch the *Backup utility* from the Programs -> Accessories -> System Tools menu. Click on the Restore Wizard button and select the backup file created before. You may be asked for original container of backed up files - select your problem Windows folder.

#### Windows 2000/2003/XP

If you have no backup files created before the problem then you can restore your system to the state that was just after installing Windows. Then you will probably need to re-install some programs again.

The instructions below will show you how you can replace registry files with backup copies. You need either parallel installed system or <u>install Recovery Console</u>.

Read <u>this topic</u> on how to install Recovery Console and how to use it.

Boot into your parallel installed system, open in explorer your problem Windows folder and find the folder named "Repair" (C:\WINNT\Repair). This folder contains registry backup files created at the time of system installation. It may also contain the "RegBack" subfolder with backup files created by <u>Backup utility</u>.

Please select *View -> Details* from the explorer window to see file creation dates. Find the most recent file with the name "system" from these two folders ("C:\WINNT\repair" and "C:\WINNT\repair\RegBack") and copy it to the "system32\config" directory ("C:\WINNT\system32\config"). If this folder already contains "system" file then rename it to "system.bak" before.

All of the mentioned above folders (*C:\WINNT\repair*, *C:\WINNT\repair\RegBack*, *C:\WINNT\system32\config*) may contain other registry files: "default", "sam", "security", "software", "system". Try to restore first the "system" file and test loading the system. Only if this didn't help then try to restore other registry files one-by-one with testing between restoring.

"system" file is the "HKEY\_LOCAL\_MACHINE\System" registry hive, "default" is the "HKEY\_LOCAL\_MACHINE\.Default" hive, "sam" is the "HKEY\_LOCAL\_MACHINE\SAM" hive and "security" is the "HKEY\_LOCAL\_MACHINE\SECURITY" hive. Both last mentioned files contain system security records. Don't modify these files if you don't know what you're doing exactly. File "software" is the "HKEY\_LOCAL\_MACHINE\Software" hive. It contains registry keys for installed software. If you replace this file then you will have to re-install the most of your programs.

If any of this doesn't help you then your problem was coming not from registry but from damaged system files. You may need to reinstall your system to restore system files.

# **Compacting the registry**

After a short while of deleting, adding and updating the registry data, the data becomes fragmented, with data and free space intermingled. This makes registry access slow. Registry First Aid allows you compact the registry with easy.

The option **Compact the Registry** is available on Windows® 98/ME systems only. After successful registry correction the program automatically offers to the user to compact the registry.

Registry First Aid calls Windows® registry tool *scanreg.exe* with "opt" parameter for compacting, so this operation is as safe as Microsoft can guarantee.

### **Check the Web for updates**

To check for new Registry First Aid versions press the "**Help"** button, then click on the menu item **Check website for new version**. See a screenshot.

Registry First Aid performs version checks multiple servers to be sure users have the very latest version. The program will connect to the home website locations and get information about the latest version. If a new version is detected then the user will be prompted to open the web page to read more about the latest version and how to download the upgrade. These updates are usually free, unless there is a major version upgrade (i.e. from 3.x to 4.x), in which case this will be clearly explained.

No private information will be sent out. The program retrieves only the latest available program version number from the home website locations.

### **Multilanguage Support**

Registry First Aid has a multilanguage support.

#### Switching between languages.

First of all, in the application home folder should be one or more language files. The Language file always has the *.lan* extension. The default language file, *english.lan*, is distributed with the program and is always in the program home folder. You can also create your own language file. See below on how to create your own file.

If the application home folder contains more than one language file, it is possible to switch between languages. Select language on the first page of the program wizard and interface will be changed.

See a screenshot.

#### How to translate the program interface to your language:

Copy the english.lan file at the home application folder to your language name (like the "spanish.lan" or "dutch.lan"), open it with any text editor (please do not use Microsoft Word for these purposes! Notepad is the best for that operation). Replace the right side of the string "Language=English" with your language (like "Language=Spanish") and translate all texts in this file.

Please note that each string in the file that should be translated has the *identifier=some text* structure. You should translate ONLY *some text* part of each string since *identifier* part is used by the program to identify text entries. Also do not translate text in the brackets [..].

Check your translation by running the program and selecting your language. If you have problems with testing your language with the program do not hesitate to contact <a href="mailto:rfa@infinisource.com">rfa@infinisource.com</a>.

## **Command line parameters**

Registry First Aid supports several command-line parameters that can be used to automate the program tasks.

Using: reg1aid /parameter

Parameter Description

**fullrestore** starts full registry restore.

**fullbackup** creates full registry backup.

**compactregistry** starts registry compaction. Available only under Windows® 98/ME.

**restwizard** runs the program in registry restore wizard mode.

autoscan automatically starts the registry scan. The program will scan for registry errors selected in a previous run. If a full registry backup is needed and the system does not support automatic creation of registry backups, then full registry backup will not be created.

To run Registry First Aid as a scheduled task you can set the <u>Schedule Registry Scan</u> checkbox.

### Note for machines with multiple Operating Systems installed

Registry First Aid should be installed in/under each Operating System where registry requires checking.

Since Registry First Aid will search disks for registry corrections, it is important to select which drive (or folders) to search for corrections.

If your machine has several Windows® operating systems installed and any another system "Windows" or "Program Files" folder is visible for currently booted system then there're probably many system files with the same name in different folders. Registry First Aid will find all the matched files and may insert a file correction to not currently loaded Windows installation.

In this case the user must exclude folders of other systems from the search for corrections. Please read the topics <u>List of paths where to search for corrections</u> and <u>List of paths excluded from the search for corrections</u>.

Usually we suggest excluding from the correction scan "Windows", "Program Files", "Documents and Settings" folders of other installed systems. Not doing this may replace local system file references (such as C:\Windows\some\_file.dll) with references to a parallel system (E:\WinNT\some\_file.dll). Different Windows® versions may have the same file name, yet different functions within each environment.

#### **FAQ** contents

#### "How-to" questions

If I get an error relating to some deleted Registry item, how do I locate this in the backup, and restore it?

### "Why" questions

Why does a second run of the program still find a few dozen invalid entries?

Why does Registry First Aid find fewer invalid registry entries than some other registry cleaners?

Why doesn't Registry First Aid scan HKEY\_CLASSES\_ROOT hive? Is there a reason for this?

Why doesn't Registry First Aid recognize all my removable drives in the "excluded" list?

Why does Registry First Aid initially show entries as "Delete Entry" and then change to "Leave the entry without change"?

Why after running Registry First Aid, does the program ask if I want to compact the registry? Do I want to do that?

<u>I have the default 'Excluded Paths' listed, such as :\RECYCLER\ etc.., when I'm logged on (XP Home),</u> but not listed when using Registry First Aid under the other two user names on the same PC. Why is that?

<u>I noticed that I have to register the program separately under each user name on the same machine.</u>
<u>Why?</u>

My copy of Registry First Aid finds everything, shows what to correct but when I tell it to correct the items it does nothing. What is wrong?

#### **Problem-related questions**

I have multiprocessor machine and the program raises "Access Violation" error while running the scan.

After cleaning the registry with Registry First Aid, I find a program does not function correctly. What do I do?

"Error reading REG MULTI SZ registry key: "Counter" appears during the registry scan.

Sometimes I get a I/O error when I try to fix the registry errors.

My computer reboots on the second step - scanning disks

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#### Questions related to installation

What is the proper procedure for installing updates? Should I uninstall the previous version?

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# Questions about registering

What are the limitations of the unregistered version?

# Why does Registry First Aid initially show entries as "Delete Entry" and then change to "Leave the entry without change"?

Initially, all found invalid entries are marked as "Delete the entry". Then Registry First Aid searches the hard drives for corrections and decides what correction is the most appropriate for each entry. Registry First Aid makes the decision about which entry can be deleted or not **after** all available corrections have been found.

If they are then unchecked, it's because they are too complex to be determined what you need to do and they require you to analyze what to do with them. If they look like some sort of system item, it is recommended to add them to the excluded list to leave them intact and not check them in the future.

# What are the limitations of the unregistered version?

The unregistered version is limited to fix only up to 10 entries for the "Invalid paths" category and up to 1 entry for each of other categories per scan. To fix more invalid entries you have to re-scan the registry. Or you need to <u>register the program</u> to be able to fix all in a single run.

# Why does Registry First Aid find fewer invalid registry entries than some other registry cleaners?

The hive [HKEY\_CURRENT\_USER] is subset of [HKEY\_USERS\S-1-5-xxxx] that details out the profile of the current user:

The hive [HKEY\_CURRENT\_CONFIG] is a subset of [HKEY\_LOCAL\_MACHINE\Config] that details the current configuration;

The hive [HKEY\_CLASSES\_ROOT] is subset of [HKEY\_LOCAL\_MACHINE\Software\Classes] with class definitions.

Registry First Aid scans only one hive of these doubled keys. For instance, it scans [HKEY\_LOCAL\_MACHINE\Software\Classes] and doesn't [HKEY\_CLASSES\_ROOT]. All corrections applied to only one set will be reflected to another set too.

To avoid deleting of registry entries that are necessary for some programs Registry First Aid has <u>several excluded lists</u>. These excluded lists contain registry entries that should not be deleted or changed. Other registry cleaners may not have that and will find and remove important registry keys.

Registry First Aid has the <u>Excluded Registry Strings List</u>. Into this list, the user can add drive letters of paths to ignore when scanning the registry. For example, if you do not want to remove registry references to files on a CD-ROM that currently is not in a drive or on a removable drive then you can add their drive letters into the this excluded list. Many registry cleaners do not have this type of list and look for all references to all drives. And while scanning you may even see the "Please insert a disk into drive X: (Abort, Retry, Ignore)" message.

Why doesn't Registry First Aid recognize all my removable drives in the "excluded" list?

Earlier versions put my C drive into "include" and correctly put my A, D and E drives into the "exclude".

The Excluded Registry Strings List is empty by default. This is because a lot of registry entries contain file references to removable drives that will never be used again. We have to give users the ability to view **all** invalid entries by default. If a user needs to leave some entries unchanged then he/she will have to <u>add</u> strings into the exclusion list (or <u>add entries into the Excluded Registry Keys List</u>). This is a once-only operation. The program saves excluded lists for future runs.

### Why does a second run of the program still find a few dozen invalid entries?

Some programs save working information in the Windows® registry every time they are run. That information may be information such as paths to currently nonexistent files. For example, you've created a new file in WordPad, saved it into a temporary folder and then moved it to your documents folder. But WordPad has the saved link to the file in the temporary folder as a recently used file. So if you have successfully cleaned the registry and then were working with your computer, after restarting you may get some invalid registry references again. It is normal situation and there's no reason to worry. The main thing is that you get a lot less invalid references than you had before a first clean. For example, 5-10 instead of 700 invalid entries. To avoid invalid references' accumulation in the registry we would like to advise you to clean registry with Registry First Aid regularly.

# "Error reading REG\_MULTI\_SZ registry key : "Counter"" appears during the registry scan.

Probably there is something wrong with the data in the registry...

Please resize the program window to view full registry key name (at the bottom status line) that is scanned when the error appears. For instance this is "[HKEY\_LOCAL\_MACHINE]\Software\Microsoft\ Windows NT\CurrentVersion\Perflib\006".

Anyway, contact our support team - we will try to figure out the problem. Thank you for your help.

# After cleaning the registry with Registry First Aid, I find a program does not function correctly. What do I do?

The best way to figure out a problem registry entry that should not be modified is to correct all invalid registry keys found by Registry First Aid, then re-install the problem software, be sure that it works and scan the registry with Registry First Aid again. More likely, the program will find some new invalid registry entries and some of them will belong to the problem software.

From this moment you can correct every single invalid entry (with creating separate backup files) and test your software after every single correction. If the program doesn't work after last correction then that registry entry should not be modified. Restore it from the last created backup .reg file. Be sure that the program works OK again and add that registry key into exclusion list.

In this way you will able to find one or more registry entries that should not be modified. Add those entries into the excluded list using the right-click pop-up menu over the selected entry.

If you feel you don't want to take the time to do this deep test, you can simply add into exclusion lists all of new found registry entries after re-installing your problem software.

# If you don't have the installation program for the problem software or the above instructions do not help, you can do the following.

- 1. Restore your most recent backup .reg file.
- 2. Check if the problem still exists.
- 3. If the problem exists then restore your next .reg file created before the most recent one. Restore .reg backup files one-by-one in backward order (from the most recent file to the most old). Test for the problem between restoring the backups. Do these steps until you find that the problem disappeared.
- 4. If the problem has gone this means that the latest restored .reg file contains a modified registry key that caused the problem. Please send that backup file to <a href="mailto:rfa@infinisource.com">rfa@infinisource.com</a>. If the problem persists then you can restore the most recent <a href="mailto:full registry backup file">full registry backup file</a>. If that doesn't help then the problem is not coming from a damaged registry.

#### **Next steps:**

- 5. Scan the registry with the program.
- 6. Select for correction only first 10-20 found invalid entries and correct them.
- 7. Reboot the computer and check if there is no problem.
- 8. If computer works OK then scan the registry and correct next 10-20 invalid entries. Do the steps 5-8 until you find that the problem re-appeared.
- 9. If the problem re-appeared then the most recent .reg backup file contains the problem registry key within 10-20 modified entries.
- 10. Restore that backup file, scan the registry and correct invalid entries one-by-one with checking your system functionality between corrections.

Following this procedure you will figure out which problem registry key should not be modified. Add that key into the exclusion list - right mouse click on the selected key in the list to pop-up menu and click the **"Add the Entry into the Exclusion List"** menu item.

#### -OR-

After you have restored your program functionality please scan the registry and try to find within found invalid entries a registry key that corresponds to the problem program. Usually it looks like "HKEY\_LOCAL\_MACHINE\Software\your\_problem\_program\_name\....". Unselect all of the found entries, pick only this entry and make changes to the registry (by creating an individual backup file like "C:\ Program Files\\RFA\trouble\_1.reg"). Then run your program and check if it functions properly. If it runs OK then restore that corrected entry and try to find another problem entry using the previous method. When you find the problem entry (after correcting it, your favorite program stops working), add the entry to the

#### exclude list.

After that run the registry scan, make registry changes and be sure that your program works OK (the found problem entry will be excluded from the registry scanning).

This problem finding algorithm is useful for all faults that may appear after repairing the registry using Registry First Aid.

Please, also take the time to send your found excluded registry entries with a detailed description of the problem - what applications do not start, do not work properly, etc. to <a href="mailto:rfa@infinisource.com">rfa@infinisource.com</a>. This will help us to help you to avoid the same problem with future versions of the program.

Running Registry First Aid once a week in the future will decrease the number of invalid registry entries, and correction will not be a problem.

## **How do I uninstall Registry First Aid?**

To uninstall the software, do the following steps:

- \* Click the 'Start' button;
- \* Select 'Settings' -> 'Control Panel';
- \* Double-click on 'Add/Remove Programs' icon;
- \* Select the software name from the list and press 'Add/Remove...' button.

#### OR

- \* Click the 'Start' button;
- \* Select 'Programs', find the software group;
- \* Select 'Uninstall' from submenu.

Usually after a fresh clean install, Registry First Aid creates a unins000.dat in the RFA home folder and can be uninstalled without errors.

To remove Registry First Aid from user's computer he/she can simply delete RFA folder and remove "RFAgent" value using regedit.exe from the registry values:

HKEY\_CURRENT\_USER\Software\Microsoft\Windows\CurrentVersion\Run HKEY\_LOCAL\_MACHINE\Software\Microsoft\Windows\CurrentVersion\Run

# What is the proper procedure for installing updates? Should I uninstall the previous version?

If you want to keep all settings of a previous version (like customized excluded registry entries, excluded drives, paths to search for matches), then you should install each new version over old version without uninstalling into the same folder.

If you never made any changes to the configuration in Registry First Aid, then it does not matter how you install a new version unless you are registered user.

If you are registered user and do not want to enter your registration key (serial number) again then you should install the new program version over the existing one and into the same folder.

# If I get an error relating to some deleted Registry item, how do I locate this in the backup, and restore it?

You can search every backup file for some keywords from an error message or name of the failed software. Then create another .reg file and copy there found data (do not forget to insert "REGEDIT4" at the top of file) and import it into the registry.

# Why doesn't Registry First Aid scan HKEY\_CLASSES\_ROOT hive? Is there a reason for this?

**HKEY\_CLASSES\_ROOT** is the "**Software\Classes**" subkey of "**HKEY\_LOCAL\_MACHINE**" hive. When Registry First Aid scans **HKEY\_LOCAL\_MACHINE** it scans all keys that are in **HKEY\_CLASSES\_ROOT** too.

# Why after running Registry First Aid, does the program ask if I want to compact the registry? Do I want to do that?

After a short while of deleting, adding and updating the registry data, the data becomes fragmented, with data and free space intermingled. This makes the registry access slow. Registry First Aid allows you to compact the registry with ease. It calls Windows® registry tool "scanreg.exe" for compacting, so this operation is safe.

# I have multiprocessor machine and the program raises "Access Violation" error while running the scan.

If Registry First Aid raises errors while scanning the registry then please try the following:

- 1. Run the program.
- 2. Open the Advanced Settings dialog, Appearance tab.
- 3. De-select the "Scan several registry keys simultaneously" option.
- 4. Test the registry scan.

This way, Registry First Aid will use less resources while scanning the registry.

If Registry First Aid raises errors while scanning files for corrections then also de-select the option "Scan several folders simultaneously".

This way, Registry First Aid will use less resources while scanning hard disks.

If the above step didn't solve the problem you can try to deselect the "Show Progress Bar" checkboxes.

Or if your help file supports scripts, you can do this right from here:

Disable threads in the registry scan routine. Click the button and answer "Yes" on prompt to add settings to the registry.

{button Disable Registry Threads, EF("..\disablethreadsreg.reg", `',1)}

Now run the program and test it for errors.

If this doesn't help please disable threads in the disks scan routine: {button Disable Disks Scan Threads,EF("..\disablethreadsdir.reg",`',1)} Run the program and test it.

If the above step didn't solve the problem you can try to disable progress bar appearing while the registry scan is running:

{button Disable Progressbar, EF("..\disableprogressbar.reg", \cdot', 1)}

If this doesn't help too, feel free to contact the support. Probably, we have a solution for you.

{button Restore Settings,EF("..\restorethreads.reg",`',1)}

## Sometimes I get a I/O error when I try to fix the registry errors.

When Registry First Aid is correcting registry entries it creates a temporary backup file in system temporary folder. Perhaps, there're problems with temporary file. Please empty temporary folder before running Registry First Aid:

- 1. Click to the **Start Menu** -> **Run...** , type **%temp%** in the box and click **OK**. This will open temporary folder in explorer window. Delete unnecessary files.
- 2. Reboot your system.

Please also be sure that you close any other applications when you run Registry First Aid. Scanning the registry and hard drives takes a lot of resources and CPU power.

### My computer reboots on the second step - scanning disks

If the computer simply restarts without any error message then there is a problem with your hard drive.

Please check your hard drives with ScanDisk. Right mouse click on a drive letter in "My Computer" folder, select the Properties from pop-up menu, go to the Tools tab and click on "Check Now.." button. Do this with all your hard drives.

Also check the BIOS and Power Management settings and turn off any power safe options for all of your hard drives.

If ScanDisk doesn't help then please try to turn off the "Scan Several Folders Simultaneously" checkbox under the "Files Scan" options in the Advanced Settings page. Registry First Aid will use less resources while scanning hard disks.

Also, it is suggested to stop the step 1 (scanning the registry) at about 100-200 found registry errors and wait for finishing the step 2 (scanning disks for corrections). Less errors will take less time to scan the disks. You can do several such partial corrections to fix all errors.

Please also be sure that you close any other applications when you run Registry First Aid. Scanning the registry and hard drives takes a lot of resources and CPU power.

# Double-clicking on a .reg backup file does not restore backup. Instead, it runs notepad. How to fix this?

This means that the system has lost their **.reg** file program association. You can restore this in the following way:

- 1. open **Registry First Aid** backup folder in explorer;
- 2. hold the **Shift** key on your keyboard and right mouse click on a .reg file to pop-up menu;
- 3. select the "Open with.." command from the menu;
- 3. click "Browse.." button (or "Other.." button in Windows® XP) and select "C:\Windows\regedit.exe" file ("C:\Windows\" is a path where your system is installed). Be sure that the box "Always use this program for such files" is checked.

That's all.

Next time you click on a **.reg** file it will be imported into the registry with help of **regedit.exe** that is default system handler for **.reg** files.

# Registry First Aid always stops on scanning the same registry key

Please write down the exact name of a key where the program stops scanning. Add that key into the all exclusion lists.

Please refer to the topic on how to add a registry key into an exclusion list.

#### Example:

If the program stops at the key: [HKEY\_LOCAL\_MACHINE]\DRIVER\8 then please add the string "\DRIVER\8\" into the "Invalid Paths" exclusion list, "Unused Software" exclusion list, "Invalid Application" exclusion list and to all other exclusion lists.

I have the default 'Excluded Paths' listed, such as :\RECYCLER\ etc.., when I'm logged on (XP Home), but not listed when using Registry First Aid under the other two user names on the same PC. Why is that?

These default excluded paths are set by installation program. If you didn't install Registry First Aid under another user account you don't see these default excluded paths. It is supposed that program will be installed under every user account it may be used. Even into the same folder (C:\Program Files\RFA).

Anyway, you can add the default excluded paths manually.

## I noticed that I have to register the program separately under each user name on the same machine. Why?

This is because Registry First Aid license is personal and can't be used by a person who is not owner of the license. If one Registry First Aid license is

used under several user accounts (user names) then please be sure that you are alone who uses Registry First Aid under that accounts. Please read the **LICENSE.TXT** in the installed program folder.

## My copy of Registry First Aid finds everything, shows what to correct but when I tell it to correct the items it does nothing. What is wrong?

Please be sure you picked up found entries for correction (set checkboxes at the left side of every entry you want to correct) and selected a correction option other than "Leave without changes".

































