

# Restorator USER MANUAL

# 1 Overview

Restorator is a resource editor for Windows. Resources are additional data accompanying a Windows application. Resources are usually part of the application interface. E.g. dialogs, menus, images, text, icons etc. They are usually stored with the executable or dll (see below for other possible <u>Resource Files</u>). Restorator can edit those resource files and thereby change the look and feel or language of an application completely independent of the development and compile tools.

You can edit resources directly in the executable, e.g. by opening an exe file. Main usage:

- For localizing (translating) programs: Restorator allows to localize entire applications: You can edit all resources that contain text, and translate them to different languages. Also, with an external image editor, you can translate texts that appear in images.
- As a resource editor: For developers - manage your .res, .dcr and other files containing resources efficiently with Restorator
- As a skin editor: Modify the user interface of any Windows 32-bit program and create your own custom applications

Restorator makes it easy to view, extract, and change resources like images, icons, text, menus, dialogs, sounds, animations, and many more. Among the file types understood by Restorator are exe, dll, res (resource files), rc (resource compiler), ocx (Active X), scr (screen saver), dcr (delphi component resource) and many other file types.

See <u>Resource Files</u> for a complete listing.

The single best hint is to watch the statusbar whenever you scroll over an option .

## 2 Features

- Restorator helps you to transform an application's appearance. The core features are:
- Easy accessible browsing of resource files
- Manipulation of text elements and dialogs in the application
- Editing dialogs WYSIWYG
- Adding multi language support to applications
- Save modifications to be applied later. *ResPatcher*
- Locating resources on your hard drive
- Locating elements in resources
- Integrate editing tools for images, translation etc.

See also the <u>complete list of features</u> or the <u>list of resources types</u> <u>supported by Restorator</u>.

# 3 What's new in Restorator 2007

See the <u>Version History</u>.

# 4 Usage Tutorials

The tutorials provide the best possibility to understand the power and features of Restorator. They give step-by-step explanations how to achieve certain tasks.

<u>Tutorials</u>

# **5 Keyboard Shortcuts**

Restorator's most important functions can be activated by way of keyboard shortcuts.

Shortcut	Function			
Alt+Enter	Resource Properties (Resource Tree) File Properties (File Browser)			
Ctrl+Left	Go Back (File Browser)			

Ctrl+Right	Go Forward (File Browser)			
Alt+Left	Collapse current resource item in tree			
Alt+Right	Expand current resource item in tree			
Alt+Down	Next Resource			
Alt+Up	Previous Resource			
Ctrl+A	Ctrl+A Select All (text editor, File Browser)			
Ctrl+Alt+N	New Folder (File Browser)			
Ctrl+C	Copy to Clipboard (text editor, Resource Tree)			
Ctrl+D	Detach			
Ctrl+F	Find in Resources			
Ctrl+L	Set Language ID/Locale for a resource or resource tree			
Ctrl+N	New			
Ctrl+O	Open			
Ctrl+R	Run the current exe file			
Ctrl+S	Save			
Ctrl+U	Add Resource			
Ctrl+V	Paste from Clipboard (ab text, resources in resource tree)			
Ctrl+X	Cut to Clipboard (ab text)			
Ctrl+Y	Redo (ab text)			
Ctrl+Z	Undo (ab text)			
Delete	Delete current selection (ab mode), delete resource (Resource Tree) Delete File(s) (File Browser)			
Backspace	Close File (Resource Tree) Parent Folder (File Browser)			
Ctrl+Shift+F	Find Resources			
Ctrl+Shift+G	Grab Resources			
Ctrl+Shift+N	Force File Replace on next Restart			
Ctrl+Shift+R	Create ResPatcher			
Ctrl+Shift+S	Settings			
Ctrl+Shift+V	Paste as new resource file			
Ctrl+Shift+X	Create XP Manifest			
F1	Help			
F2	rename resource (Resource Tree) rename file (File Browser)			
F3	Find Next			

F5	Refresh (File Browser) Update Preview (editing Menus and Dialogs as RC text)	
F6	oggle Edit (ab) Mode (Resource Viewer)	
F8	Commit changes (editing Menus and Dialogs as RC text)	
F9	Switch to Resource Tree	
F10	Switch to Resource Viewer	
F11	Switch to File Browser	
F12	Save As	
Ctrl+F5	Default View Mode (Resource Viewer)	
Ctrl+F6	Hexdump View Mode (Resource Viewer)	
Ctrl+F7	RC View Mode (Resource Viewer)	

# 6 Command line Parameters

With the commandline parameters, you can execute Restorator conveniently from a batch program, for automated execution. It is also possible to incorporate Restorator or a ResPatch into installation programs (like InstallShield) to automate resource patching during installation.

You can specify as many parameters as you want on one command line. If you want to start Restorator with several batch processes in a row, it's a good idea to allow some time for start up, processing, and closing, etc. When you use the -exit flag, you should wait until Restorator has closed. Then you can check whether the operation has been successful by looking if Restorator created the destfile.

#### **Parameters for Restorator:**

#### -backup and -noBackup

[available since Restorator 2007]

When saving a file, and overwriting an existing file, create [do not create] a backup file of the original file. This setting will override the setting made in the settings dialog in Restorator. If these options are not specified on the command line, the current setting from Restorator's settings dialog is used.

#### -errorLog <log file name>

[available since Restorator 2007]

Specify a log file for the batch operation. All warnings and error messages during batch operation will be written to this file. If the file already exists before invoking Restorator with this parameter, the file will be overwritten.

#### -codepage <codepage>

[available since Restorator 2007 Update 1]

Set the codepage of Restorator to this value, a number in decimal or hexadecimal notation, e.g. "0" for user default codepage, "1252" for Latin I codepage, "1250" for Eastern Europe, etc.

This command line command is equivalent to changing the codepage in the Settings dialog.

#### -open <exe/dll/res/rc file>

[available since Restorator 2007]

Open the specified file. The following batch commands will operate on this file, unless another file is opened with another -open command.

#### -assign <res/rc file or folder>

[available since Restorator 2007]

Assign the specified file or folder to the currently opened file. Requires that you have opened a file with the *-open* command. This command is equivalent to dragging a file or a folder on the exe file in Restorator's left Resource Tree.

#### -assignOn <resource><res/rc file or folder>

[available since Restorator 2007]

Assign the specified file or folder to specified resource of the currently opened file. Requires that you have opened a file with the -open command. The resource is specified as a path: to assign the String folder, just specify String. In order to assign on bitmap 1, specify Bitmap\1 as resource parameter. In order to specify a certain resource of a specific language, use e.g. Bitmap\1\English (United States). You can see the respective path in Restorator's status bar at the bottom when selecting a resource. If the specified resource does not exist, it will be created first. This command is equivalent to dragging a file or a folder on a resource or resource folder in Restorator's left Resource Tree.

#### -delete <resource>

[available since Restorator 2007]

Delete the specified resource or resource folder of the currently opened file. Requires that you have opened a file with the *-open* command. Specify the resource as a path just as with the *-assignOn* command. This command is equivalent to selecting a resource or a resource folder in Restorator's left Resource Tree, and then choosing the delete command from the Resources menu.

#### -save

[available since Restorator 2007]

Save the currently open exe file. Requires that you have opened a file with the -open command.

#### -saveAs <file name>

[available since Restorator 2007]

Save the currently open exe file under the specified name. Requires that you have opened a file with the -open command.

#### -exit

[available since Restorator 2007]

Close Restorator after executing the batch commands. This parameter has 2 implications:

- 1. For the batch operation, Restorator is always started in its own instance, regardless of the setting *Allow multiple Restorator instances*.
- 2. Restorator is always closed after the batch process has finished, regardless if the batch process was successful or not. You can use the log file to check for error messages.

Without -exit, if an instance of Restorator is already running, and the *Allow multiple Restorator instances* setting is not checked, the batch function is executed in the first instance of Restorator.

#### -setLangID <language ID> -setLangIDOn <resource> <language ID>

[available since Restorator 2007 Update 1]

Set the language ID stored with the resource. *-setLangID* will change the language ID of all resources.

With the command *-setLangIDOn*, you can specify a subset of resources to be changed, e.g. if you only specify the resource type, like *-setLangIDOn* String "Russian (default)", all resources of that type will be changed to that language ID.

If a resource is available in multiple languages, setting the language ID will fail, unless you specify the resource name with language, e.g.

-setLangIDOn Dialog\1\English (United States) "Russian (default)

The parameter <language ID> can be a textual representation of the language, or a numerical identifier of the language ID, e.g. "1045" or "0x415" (hexadecimal) for Polish.

The command is equivalent menu function *Set Language ID...* in the Resources menu.

#### -setManifestFromVersion

[available since Restorator 2007 Update 2]

This commands adds a default manifest to the exe file or resource file. The different manifest entries like name and version are retrieved from the version resource.

If a manifest already exists, it is overwritten by this new one.

This command is equivalent to using the *Create Windows XP Manifest* function in Restorator's *Tools* menu.

#### 6 Command line Parameters

#### Restorator

#### **Examples**

Open file.exe, delete Icon resources, save as file2.exe: Restorator.exe -open file.exe -delete Icon -saveAs file2.exe -exit

Open a.exe, assign all resources that exist in all.res, delete RCData\DESCRIPTION resource, assign rcdata.res on the RCData resource, save and exit: Restorator.exe -open a.exe -assign all.res -delete RCData\DESCRIPTION -assignOn RCData rcdata.res -save -exit

Open test.res, assign test.rc, save, open test2.res, assign the file icon.ico, save, and exit. Log everything to log.txt:

Restorator.exe -errorLog log.txt -open test.res -assign test.rc -save -open test2.res -assign icon.ico -save -exit

#### **Command Line Version resource editing**

[available since Restorator 2007 Update 2]

Modifying the version resource can be done with the commands below starting with *-ver*.

The commands that take a <resource> parameter only apply to the version resource referenced in the parameter (the resource name must start with 'Version'). For example, "Version\1" will apply the command to the version resource named "1". If there are multiple version resources with different languages in "Version\1", you can specify the language to fully qualify the selected resource, e.g. "Version\1\Polish (default)" or the equivalent "Version\1\0x0415" (specifying the language as a hexadecimal identifier).

Commands without a <resource> parameter apply to **all** version resource entries in the file, e.g. -verSetString ProductName MyName will set the ProductName field of all version resources. Note, however, that usually there is only one version resource in an exe file or resource file.

Strings can be any arbitrary keys, or one of the predefined ones: Required keys:

CompanyName, ProductName, ProductVersion, OriginalFilename, FileDescription, FileVersion, InternalName Optional standard keys: SpecialBuild, LegalCopyright, LegalTrademarks, PrivateBuild.

For more information on the version resource, refer to the <u>MSDN</u> <u>documentation</u> [online].

#### -verSetString <key> <value>

#### -verSetStringOn <resource> <key> <value>

[available since Restorator 2007 Update 2]

In the first *String Version* block of all or the selected version resource(s), set the string identified by key to the value value. If the key does not exist in the string section, it is added to the list of key/value pairs.

If the file does not have a version resource, or the version resource(s) do not have a *String Version* block, this command reports an error. *-verSetString* affects all version resources, while *-verSetStringOn* only changes the selected resource.

#### Example: modify the file description:

Restorator.exe -open t.exe -verSetString FileDescription "A New Description"

-saveAs t2.exe -exit

Example: modify the file description of the German version resource: Restorator.exe -open t.exe -verSetStringOn "Version\1\German (default)"

FileDescription "Die Beschreibung" -saveAs t2.exe

-exit

Example: modify the numerical file and product version numbers in the string section:

Restorator.exe -open u.exe -verSetString FileVersion 1.2.3.4 -verSetString ProductVersion 1.2.0.0 -saveAs

u2.exe -exit

Example: add a custom string:

Restorator.exe -open v.exe -verSetString "My Own Key" "Test Value"

-saveAs v2.exe -exit

#### -verDelString <key>

#### -verDelStringOn <resource> <key>

[available since Restorator 2007 Update 2]

In the first *String Version* block of all or the selected version resource(s), delete the string identified by key. If the file does not have a version resource, or the version resource(s) do not have a *String Version* block, or the key does not exist in the string section, this command reports an error. *Note:* Per the version resource specification, some keys are required to exist in version resources. See the list above for the required keys in bold. Example: delete the Comment field of all version resources:

Restorator.exe -open t.exe -verDelString Comments -saveAs t2.exe -exit

#### -verSetVersion <file version> <product version>

#### -verSetVersionOn <resource> <file version> <product version> [available since Restorator 2007 Update 2]

In the *Fixed File Info* block of all or the selected version resource(s), set the binary file version and the binary product version. Note that these binary version numbers are the primary versions, e.g. the Windows property sheet will show the file version as the version of the program. The string entries FileVersion and ProductVersion are typically set to the same values as the binary version numbers (possibly appended, e.g. with *RC* or *Beta*), but need

not necessarily.

If the file does not have a version resource, or the version resource(s) do not have a *Fixed File Info* block, this command reports an error. E.g. set the binary file version and product version of all resources: Restorator.exe -open t.exe -verSetVersion 1.2.3.4 1.2.0.0 -saveAs t2.exe -exit

#### -verSetCodepage <codepage>

## -verSetCodepageOn <resource> <codepage> -verSetLang <language ID>

#### -verSetLangOn <resource> <language ID>

[available since Restorator 2007 Update 2]

In the first *String Version* block of the version resource(s), set the codepage (aka character set identifier) or language ID identified by the codepage or language ID parameters. This command will not change the codepage or language ID associated with the resource itself (see command line command -setLangID).

The parameter <language ID> can be a textual representation of the language, or a numerical identifier of the language ID, e.g. "1045" or "0x415" (hexadecimal) for Polish.

The parameter <codepage> is a number in decimal or hexadecimal notation, e.g. "0" for user default codepage, "1252" for Latin I codepage, "1250" or "0x4E2" for Eastern Europe, etc.

If the file does not have a version resource, or the version resource(s) do not have a *String Version* block, or <codepage> is not a number or <language ID> is not a valid language identifier, this command reports an error.

See the <u>MSDN documentation</u> [online] for info on the supported language IDs and codepages.

#### -verDelSectionsExceptFirst

#### -verDelSectionsExceptFirstOn <res>

[available since Restorator 2007 Update 2]

This is a special utility command: sometimes, a version resource contains multiple sections. Usually, only the first section is really used, so this command can be used to remove corrupt or conflicting version sections from all or the selected resources.

*Note:* you should know what you are doing before blindly applying this command to resource or exe files, you may accidentally remove vital information from the version resource.

# 6.1 Legacy Parameters (recommened to use the commands above)

#### -assignall <resdir> <srcfile> <destfile>

This function opens srcfile, executes an Assign All on resdir, saves the modified file as destfile and closes the file. The resdir should contain subfolders with the correct resource type names. You can create such a structure for a given Resource File with the function *Extract All* in the Resources menu.

#### -batchClose

This parameter is equivalent to the -exit parameter explained above. Here is an example (of course all on one line):

C:\Program Files\Restorator 2007\Restorator.exe -batchClose -assignall C:\TestFiles C:\SendSX.exe C:\SendSXPatched.exe

#### **Parameters for ResPatches:**

#### -force

This function disables the CRC check that normally verifies that you are actually patching the correct Resource File.

#### -guiless

Do not display main window; patch the file automatically (-auto implicit, but error messages are displayed)

#### -quiet

do not display error messages

#### -auto

Automatically start patching, exit after patching.

#### -dir <dir>

Folder where to apply the patch.

#### -nobackup

Do not create backup files of original Resource Files.

#### -help

Display help text (will not patch anything and ignore other options).

# 7 RC File Support

Since version 2006, Restorator provides extended support for RC files. Previous versions only allowed to export as RC files and to replace single resources with RC files that only contained one resource. Now with Restorator 2006 and later, you can open RC files in the left Resource Tree:

- open RC files with any number of different resources
- These pre-processor commands are supported:
  - #define
  - #undef
  - #include
  - #ifdef
  - #ifndef
  - #if
  - #elif
  - #else
  - #endif
- only non-compound #defines are supported, i.e. complex mathematical expressions are not evaluated.
- #defines are not retained when you save a modified RC file.
- Binary resource definitions are not supported

## 8 Menu

This chapter lists the items in the Restorator menu. Reading through it will help you to understand features and usage. It also serves as a reference.

Please note that the menu items dynamically change when certain elements are selected or in specific modes. If you do not find the item you are looking for, please try to select the element you actually want do use. E.g. operations on a collection of files is available when a folder is selected, not when a single file is selected.

## 8.1 File

Provides functionality to open, save and access <u>Resource Files</u>.

Keyboard shortcut: Ctrl+N

## 8.1.1 New .res file/.dcr file/.rc file.

Add a new empty resource file in the <u>Resource Tree</u>. You can then add resources to this file. These .res files can be used to store any resources and imported into other exe or dll files. You select to create a .res, .dcr, or .rc file. .res files contain compiled resources in the standard Windows resource format. .rc files contain resources in text format. A .dcr file is a Delphi Component Resources and belongs to components of Delphi, to store e.g. the icon of a component.

Keyboard shortcut: Ctrl+O

## 8.1.2 Open

Open a <u>file that contains resources</u> like exe files. You can then browse and edit resources.

Keyboard shortcut: Ctrl+O

## 8.1.3 Save

Save the current file under the current original name. The file that was loaded is overwritten and the modified file is saved. Use *Save As* to store the current file under a different name if you are not sure that you want to overwrite the current file.

Keyboard shortcut: Ctrl+S

## 8.1.4 Save As

Save the current file under a different name. The current file is the Resource File selected in the <u>Resource Tree</u>. Use this menu item to store a modified executable to a different file name to keep the original file unmodified.

Keyboard shortcut: F12

#### 8.1.5 Run

Start the file that is currently selected. This is usable only if an executable file is selected. Use this option to test a modification on the application when the application is actually running.

Keyboard shortcut: Ctrl+R

## 8.1.6 Close

Close the file currently selected in the <u>Resource Tree</u> window.

Keyboard shortcut: BACKSPACE

## 8.1.7 Close all

Close all files open in the <u>Resource Tree</u> window.

#### 8.1.8 Recent Files

A list with the files last opened. Select a file to open it again quickly.

## 8.1.9 Last found Files

Provides access to a list with the files that were recently found with the resource finder (Tools > Find Resources). Select a file to re-open it quickly.

## 8.1.10 Exit

This terminates Restorator. If you have unsaved files open in the Resource Tree, you will be asked if you want to save them.

Keyboard shortcut: Alt+F4

## 8.2 Resources

The content of the resource menu is dynamically adjusted depending on the selection in the Resource Tree. You only see the functions that are useful for the current selection.

## 8.2.1 Delete

Delete a specific resource or resource folder. Be careful: the delete operation cannot be undone! Also, in most cases, exe files with missing resources will most likely not run correctly. You should know what you are doing when using this function.

Keyboard shortcut: DEL

## 8.2.2 Rename

The resource folders typically have a default type like *Bitmap* for the group that contains bitmap resources. Select *Rename* to modify the type of the selected group. You can also rename individual resources in order to change the resource name.

Keyboard shortcut: F2

## 8.2.3 Extract|Extract All

This sub-menu contains functions for extracting resources from the selected resource file or resource folder to files on disk. *Extract All* creates files for each resource or sub-resource in the current folder of the File Browser. If the resources are in sub-resource-folders, folders are created for the resources on disk. After changing some of the resources on disk, you can use the *Assign Auto Assign all Resources* function to integrate the changes into the original resource file. This function can be used to conveniently save all resources to disk and then edit the files with other programs. Once editing is done, use *Assign Auto Assign all Resources* to assign all the modified files to the resources (i.e. "commit" the changes on the files).

The powerful RC extraction dialog (*Extract As RC File*) lets you create .rc files from the resources in the currently selected Resource File. You can choose which resources to include, and whether to add all resources into one .rc file or create one .rc file for each resource.

## 8.2.4 Assign|Auto Assign all Resources

This function tries to assign files in the current folder of the File Browser to resources of the current Resource File. It is the reverse operation of *Extract*|*All Resources*. It looks for files with names of the resources and in sub folders with names of the resource folders, exactly as *Extract*|*Extract*|*All Resources* creates the files.

This function can be used to conveniently commit the changes made to files saved to disk with the *Extract Extract All Resources* function: once editing is done, use *Assign Auto Assign all Resources* to assign all the modified files to the resources (i.e. "commit" the changes on the files).

## 8.2.5 Detach

When you have assigned resources (i.e. modified) but want to undo the modification and revert to the original resource, use the Detach function. You can detach single resources or entire resource folders.

Keyboard shortcut: Ctrl+D

## 8.2.6 Res Files

The sub-menu contains functions for working with res files on disk: you can assign the contents of a .res file to the current Resource File/resource folder/resource (Res Files|Assign). Or the powerful Save dialog (Res Files| Save) allows you to create .res files from the resources in the current Resource File with your given criteria (i.e. you can include in the saved .res file only resources of specific languages). You can choose to include all resources in one single .res file, or create one .res file for each resource.

## 8.2.7 Add Resource

Adds a resource in the current resource tree. You can extend applications by including new resources. If the application is selected, you select a type, e.g. bitmap that is created in the bitmap folder. If a folder like bitmap is already selected, you will add a resource to this folder.

Added resources are particularly useful for your created .res, .dcr, or .rc files, or if you want to add custom resources to your own projects.

Note that you cannot edit the name of a string resource due to internal representation of string resources.

Keyboard shortcut: Ctrl+U

Add Item	X
mspaint.exe Type  Windows standard type  Con User-defined type	The type of a resource defines how the data is interpreted by Windows and/or the program. Some types are standardized, you can choose these in the combo box. When you want to define your own type, enter the the type name into the User-defined field. You can specify a number or a name in capital letters.
Name NEW_ICON	Enter the name of this resource here. As for user defined types, use a number or a string.
Language English (United States) Specify here the language of this resource. This is used when you want to specify different resources for different languages.	If one resource is present several times in different languages in a program, Windows will decide which resource will be used in the program. This depends on the locale settings of the computer on which the program is executed. E.g. there is a resource in Italian and one in French, then Italian users will see the Italian version and French users the French one.
OK Cancel Help <<	

## 8.2.8 Set Language ID

Define a Language/Locale ID for the resources contained in the selection. When you start an application, its resources are chosen according to the Locale setting of the operating system. This feature enables you to translate applications that dynamically adjust to the language of the operating system without recompiling the application.

You can also set the code page, but the setting is ignored by Restorator, and as far as we can tell, it is ignored by Windows, too. You can set the code page for ANSI-Unicode conversion in the settings dialog.

Keyboard shortcut: Ctrl+L

## 8.2.9 Copy

Copy the selected resource to the clipboard buffer. You can then paste it in a different location in the resource tree. You can easily transfer a single resource or entire resource folders to another resource file. Some resources types, e.g. bitmaps, can also be pasted into other programs, like an external graphics program.

Keyboard shortcut: Ctrl-C

## 8.2.10 Paste

Paste a copied resource in the current location in the resource tree. For some resource types (e.g. bitmaps) you can paste data copied in external programs, like images copied in an external graphics program.

Keyboard shortcut: Ctrl-V

## 8.2.11 Browse to "folder location"

In the File Browser, change the folder to the one where the selected resource file is located.

## 8.2.12 Find in Resources

Use this function to search the selected resources in the <u>Resource Tree</u> for search words. When the word is found, the resource is displayed in the Resource Viewer and the occurrence, if visible, highlighted. This function is looking for the given words/string within resources. If you are looking for Resource Files that contain resources with specific criteria, select '*Find Resources*' in '*Tools*'.

Keyboard shortcut: Ctrl-F

## 8.2.13 Find Next

Finds the next occurrence of the search word used in *Find in Resources*.

Keyboard shortcut: F3

## 8.2.14 Properties

Shows additional information on selected resource or resource folder. It has some additional information for exe files like section headers.

Key	board	shortcut:	Alt+ENTER
INC 1	ybbulu	Shortcut.	

Name:	121	
Tune:	Bitman	
Language:	Neutral	
Data size:	1372842 byte	
Data Offset:	42992 (0xA7F0)	
Data Type	Bitmap	
Data Descrip	tion: 900 v 572 - 24 bit colore	
Changed (as: Default Filena	signed): No ame: 131.bmp	
Changed (as: Default Filena Supported typ	signed): No ame: 131.bmp bes for extracting/assigning:	
Changed (as: Default Filena Supported typ Extension	signed): No ame: 131.bmp bes for extracting/assigning: Description	
Changed (as: Default Filena Supported typ Extension *.bmp *.ipg	signed): No ame: 131.bmp bes for extracting/assigning: Description Bitmap image JPEG image	
Changed (as: Default Filena Supported typ Extension *.bmp *.ipg *.res	signed): No ame: 131.bmp bes for extracting/assigning: Description Bitmap image JPEG image Resource file	
Changed (ass Default Filena Supported typ Extension *.bmp *.ipg *.res *.rc	signed): No ame: 131.bmp bes for extracting/assigning: Description Bitmap image JPEG image Resource file Text rc file	
Changed (as: Default Filena Supported typ Extension *.bmp *.ipg *.res *.rc	signed): No ame: 131.bmp bes for extracting/assigning: Description Bitmap image JPEG image Resource file Text rc file	

Keyboard shortcut: Ctrl-F5

## 8.3 Resource Viewer

The Resource Viewer displays the resources that you select in the Resource Tree. If you select a resource file or a resource folder, it will display the contents of the file or folder, respectively.

There are **3 view modes** for the resources:

## 8.3.1 1. Default mode

The *Default Mode* is displaying each resource in its "natural" representation. I.e. images are displayed as images, textual resources like strings are presented in a text field, etc. If Restorator does not know a resource's type, it is displayed as a hex dump (see below). Suited for browsing the content and understanding the structure of the resource file without accidental modifications.

0	🖿 🔍 🔐 🕒 🧼   Res Viewer: 🔜	
L	Hesource viewer File Browser	
	Attributes	? 🗙
	Width: Height: Units O Inches O Cm O Pixels Colors O Black and white O Colors	OK Cancel Default

Image: Example of the display of a dialog in Default mode.

## 8.3.2 2. Hexdump mode

Displays resource content in a Hexadecimal display mode. Suitable for data that cannot be displayed in its "natural" format, e.g. not readable as text or viewable as image. Use the H toolbutton to select the hex dump mode.

<u> </u>		$\sim$	- Th	-			_	-			-	•	Dee
5	] 🔍	LHP		Ų	Re	s Viewe	er:		RC	ab	1 4		4 MBS
De		Mieurer			<u> </u>								
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Keyboard shortcut: Ctrl-F6

## 8.3.3 3. RC mode

The *Resource Mode* is displaying readable information about the resource in the viewer window. It shows the structure of the individual resource in the RC file format. This is always a textual representation of the resource. Sometimes it displays more information than the *Default mode*. Use the *RC* toolbutton to select the RC mode.

Keyboard shortcut: Ctrl-F6



Image: Example of RC display mode.

## 8.3.4 Editing Resources

Activate the Edit Mode (with the *ab* tool button or by pressing F6) in order to modify resources inside of Restorator. It allows editing text-based resources within Restorator. Text-based resources are strings, menus, Delphi forms, etc. For dialog and version resources, it opens the special dialog or version editor. For menus, it displays a menu in an own window so that you can try the menu in action. When you made changes, press F8 to commit them into the resource file. Press F5 to update the preview window. Depending on which view mode you are, you may have different ways of editing the same resource. Currently, this applies to dialogs, which can be edited in RC Mode as text, and in Default Mode with a graphical user interface.

Keyboard shortcut: F6

## 8.3.5 Autosize

This applies to images only: if enabled, the images are automatically resized to fit the size of the Resource Viewer. It helps to preview the resource. Deactivate if you want to see the original size that is used when displayed in the application.

## 8.4 Tools

Provides advanced functionality for special tasks and offers cutomization for integration with other editing applications.

## 8.4.1 Settings...

Configuration of Restorator for display and behavior options. The settings have reasonable default settings.

Settings	
General Saving Shell Integration Viewer Text Editor File Browser Advanced	<ul> <li>Show Tooltips</li> <li>Allow multiple Restorator instances</li> <li>Number of recently used files in file menu: 10 </li> <li>Number of recently found files in file menu: 20 </li> </ul>
	OK Cancel

## 8.4.2 Find Resources

With the Find Resources tool, you can find exe or res files that contain a specific text or that have specific named resources.

Keyboard shortcut: Shift+Ctrl+F

## 8.4.3 Grab Resources

With the Grab Resources tool, you can extract all resources of a specified type from all or selected files on your hard disk.. E.g. extract all images that are contained in any application in "C:\Program Files". This can be a great tool to instantly get a huge collection of images, icons, cursors, etc. See the <u>tutorials</u> for more info on its usage.

Keyboard shortcut: Shift+Ctrl+G

## 8.4.4 Create ResPatcher...

With the ResPatcher Wizard, you can create a standalone program that can redo all your modifications to a program. You are able to distribute your distilled manipulations to an application without distributing the application itself. See the tutorials for more info on its usage.

ResPat	cher Wizard 🛛 🔀			
Crea	ate your own ResPatcher !			
What is a ResPatcher ? This is a stand-alone program that will redo all your modifications to a file which contains resources. Restorator needn't be present for running it.				
Why would I need it ? When you want to make your modifications available to other persons, ResPatcher is a good choice. It avoids copyright problems (you don't give away a copyrighted program), and its size is normally smaller than the complete modified program.				
This ResPatcher will be based on: C:\WINDOWS\system32\shell32.dll				
Press	Press Next to continue.			
	Previous Next Cancel			

## 8.4.5 Create Windows XP Manifest...

With the Manifest tool, you can add a Windows Manifest resource to an exe file. This will enable Windows look'n'feel (theme) to your application. This will freshen the look of older applications!

Keyboard shortcut: Shift+Ctrl+X

## 8.4.6 Force File replace on next restart

Use this tool if you cannot replace files while Windows runs. With this function you can conveniently replace programs that are always running (i.e. auto starting programs) or even Windows system files like the Explorer.

Tip: On Windows 2000 and XP, you need to use this function in the "Safe Mode" if you want to modify Windows files. Otherwise, the file protection will automatically restore the original file with the next reboot.

Keyboard shortcut: Shift+Ctrl+N

8	Menu
---	------

🔤 File operations on next restart					
Many files cannot be overwritten while Windows runs (e.g. Explorer.exe). Here you can enter files which will be overwritten or deleted the next time you start Windows.					
Add an entry					
C:\windows\system32\shell32.dll Recent files Browse					
O Replace this file with the source file ✓ Make backup of this file					
C:\test\shell32	2.dll Recent files Browse				
Delete source file					
Operation	Source File Destination File				
Replace	C:\windows\system32\shell32.dll C:\test\shell32.dll				
Delete selected entries Add entry OK Cancel					

## 8.4.7 Edit file associations

Edit the file types to which Restorator is associated. You can double click those files in the explorer to open them with Restorator. Also you can select which files you want to be able to open from the Explorer's context menu.

#### 8.4.8 Configure tools...

Define applications that will be added in this *tools* menu to be easily accessible at all times. E.g. if you often use a graphics program in conjunction with Restorator, you can add the graphics program to the tools and have instant access to it.

#### 8.4.9 Resource Tree

Use this function to activate the left Resource Tree.

## 8.5 Help

## 8.5.1 Help

Diplay this help file.

## 8.5.2 FAQ

See answers to <u>frequently asked questions</u>

## 8.5.3 Tutorial

Links to <u>tutorials</u> for step-by-step guides to the features of Restorator.

## 8.5.4 Buy Restorator

This will display a screen to guide you to <u>purchase Restorator</u> through our secure server.

The full version does not have a 30 days limit and it won't add nag strings to menu, dialog, and version resources. It also unlocks the Grab Resources, and Create ResPatcher tools.

The regular version will give you a life-long right for free updates of Restorator. Additionally, support by email is guaranteed.

## 8.5.5 About

Display Copyright and version info about Restorator.

## 8.6 Context Menu

The context menu apears whenever the right mouse button is clicked. The presented functions are conviently accessible.

Most of the available functions are also acessible through the menu and are described there. The new functions are described below, together with screeenshots of the available menu.



Image: Example of a RightClick context menu on an application



Extract/Assign .res files with the given criteria.

Image: Example of a RightClick context menu on a resource folder





## 8.6.1 Add to Recent Files

Includes the selected file in the list of recent files. Doing so helps to easily access the file later through the *Files->RecentFiles* menu.

## 8.6.2 Collapse Tree

Closes all open folders and reduces the icons to the resource file. This helps to start over the browsing of the resource file.

## 8.6.3 Sort Tree

Rearranges the order of resource files. Helpful if several resource files are open in the same time.

## 8.6.4 Properties

This will open a dialog displaying information about the selected file. Very helpful to see the status of resource files and resources.

Keyboard shortcut: Alt+Enter

# 9 License

The trial version is limited to a 30-day trial period. See <u>purchase</u> for information how to purchase Restorator.

Restorator and ResPatches may be distributed freely without charge. Anyone distributing Restorator for any kind of remuneration must first contact the author for authorization. If you want to sell ResPatches, royalties apply. Please contact Bome Software for details.

When using Restorator, you must agree to the license agreement, which is contained in Restorator's distribution as the file <u>license.txt</u>.

# 10 Uninstall

To remove Restorator from your computer:

- 1. Close Restorator
- 2. On the taskbar, click the Start menu button to open the Start menu.
- 3. Choose Settings > Control Panel. The Control Panel opens.
- 4. Double-click the Add/Remove Programs button. The Add/Remove Programs Properties dialog box opens.
- 5. If necessary, click the Install/Uninstall tab to bring it to the front.
- 6. Scroll through the list box to find Restorator.
- 7. Highlight Restorator.
- 8. Click the Add/Remove button. The Uninstall setup program starts.
- 9. Follow the on-screen prompts.

# 11 Acknowledgements

For GIF reading, this software is based, in part, on the work of Anders Melander.

Portions of the code are partially based on the work of the Independent JPEG Group.

This software is distributed with the UPX exe packer/unpacker; thanks for the authors for this useful application.

For PNG reading, this software is based, in part, on the work of Gustavo Huffenbacher Daud.

# 12 Appendix A: Glossary

## A.1 Resource Tree

Left pane of the Restorator application (per default).

The Resource Tree displays all resource files that are currently open. The display is arranged in a tree that arranges resources in hierarchical levels.

The Resource Tree is used to browse and select resources in the open files.

To display resources, drag .exe file from into this window. Use right click on resources for common operations.

## A.2 Resource Viewer

Right pane of the Restorator application (per default).

The Resource Viewer displays the individual resources that are selected in the <u>Resource Tree</u>. You can view or edit them here.

## A.3 Resources

Resources are additional data accompanying a Windows application. Resources are usually part of the application interface. E.g. dialogs, menus, images, text, icons etc. They are stored with the executable or dll (see below for other types of <u>Resource Files</u>). Restorator can edit those resource files and thereby change the look and feel or language of an application. You do not need any other tools, compilers, or even the source code of the application - Restorator is completely independent of other tools.

## A.4 Resource Files

Resource files are any files that contain resources and can be opened and edited with Restorator.

Common Resource files are:

File Type	Extension	Description
Executable	.exe	Regular executable windows application.

DLL (Dynamic Link Library)	.dll	Additional binary loaded upon program execution.
Resource File	.res	
Textual Resource File	.rc	
Screen Saver	.scr	Screensaver resource activated when computer is idle.
ActiveX Control	.0CX	Micrsoft active X control.
ActiveX Type Library	.tlb	
Device Driver	sys/.drv/.tsp	
Control Panel Applet	.cpl	
Multimedia Codec	.acm/.ax	
Delphi Package	.dpl	
Borland Package	.bpl	
Converter	.cnv/.wpc	
Graphics import filter	.flt	
Delphi Component Resource	.dcr	

See the <u>technical specifications</u> for a list of resource types known by Restorator.

# Appendix B: Software License Agreement

SOFTWARE LICENSE AGREEMENT

\*\*\* Please read this entire AGREEMENT \*\*\*

#### LICENSE:

\* This limited use software license agreement (the "AGREEMENT") is a legal agreement between you ("LICENSEE"), the end-user, and bome.com for the use of the Restorator software product ("SOFTWARE").

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