What is WinRAR

WinRAR is a 32-bit Windows version of the RAR archiver - a powerful tool which allows you to create, manage and control archive files. There are several versions of RAR, for a number of operating environments: **Windows**, **Linux**, **DOS**, **OS/2**.

There are **two versions** of RAR for Windows:

- Version with **graphical user interface** - WinRAR.exe;
- Command line **console (text mode) version** - Rar.exe.

WinRAR features

- Complete support of **RAR** and **ZIP** archives;
- Highly sophisticated, original compression algorithm;
- Special **multimedia compression** algorithm;
- **Shell interface** including **drag-and-drop** facility;
- **Command line interface**;
- **Non RAR archives** (**CAB**, **ARJ**, **LZH, TAR, GZ, ACE, UUE, BZ2, JAR**) management;
- **Solid** archiving, which can raise compression ratio by 10% - 50% over more common   methods, particularly when packing a large number of small, similar files;
- **Multivolume archives**;
- Creation of **self-extracting** archives (also multivolume) using the default or optional SFX modules;
- **Recovering** physically damaged archives;
- Support for *Unicode* in file names;
- Other service functions, such as **encryption**, **archive comments** (with ANSI esc sequences support), **error logging**, etc.

WinRAR limitations

The number of files, which can be added to an archive, depends upon the amount of available memory and the length of file names. Roughly 128 bytes of memory are required per archived file for RAR archive. For example, it is recommended to have 128 MB if you are going to archive million of files. WinRAR has been tested to handle over 10 millions files.

The size of a <u>RAR</u> archive, as well as the size of any single file within a RAR archive, is limited to 8,589,934,591 GB (9,223,372,036,854,775,807 bytes). Note that to create archives larger than 4 GB, you need to use NTFS, as older file systems do not support such large files.

The size of a <u>ZIP</u> archive, as well as the size of any single file within a ZIP archive, is limited to 4 GB.

In general the RAR archive format is much better optimized for heavy tasks involving huge number of files and gigabytes of disk space.

Console RAR version

   Additionally to WinRAR you will find, in the distributive, the file *rar.exe*. It is also a 32-bit RAR version for Windows, but it supports only the command line, text mode interface. It is useful to call console RAR from BAT and CMD files, to use it at the DOS prompt and so on. It supports a larger number of command line switches and commands when compared with WinRAR. Though common aspects of the command line WinRAR syntax considered in <u>Command line interface</u> chapter are also true for console RAR, this help file does not contains descriptions of those switches and commands, which are supported only by the console version. You should read ***rar.txt*** file for a detailed description of all console RAR features.

Acknowledgments

WinRAR incorporates compression code by the **Info-ZIP group**, which is used with their permission to handle ZIP archives. There are no extra charges or costs due to the use of this code, and the original compression sources are freely available from http://www.info-zip.org/pub/infozip/ on the Internet.

The idea of WinRAR shell extension was inspired by **Ylian Saint-Hilaire** and his nice "RAR shell extension" program.

WinRAR Win32 SFX modules are compressed using UPX executable file packer written by **Markus F.X.J. Oberhumer** and **Laszlo Molnar**. You may download it from http://wildsau.idv.uni-linz.ac.at/mfx/upx.html. DOS SFX module is compressed by LZEXE written by **Fabrice Bellard**.

Useful hints provided by **Alexander Khoroshev** and **Bulat Ziganshin** allowed to significantly improve RAR compression and speed.

Francesco Indrio <naradamoon@operamail.com> designed all new WinRAR graphics.

And special thanks to **Andrey Spasibozhko** for help in development and promotion of early RAR versions.

Shell and command line modes

   WinRAR may be used in one of two ways: in the graphical shell mode with the standard Windows interface or in the command line. To start the WinRAR shell simply double-click on the WinRAR icon. Then you can use buttons and menus for archiving and extracting. Read the topics below for step-by-step instructions

How to extract files using WinRAR shell mode

How to archive files using WinRAR shell mode

   To use WinRAR in the command line mode it is necessary to open, in the Start menu, either "Programs/MS DOS prompt" or "Run…" window and enter the command text. You can find examples of simple commands for archiving and extracting in the topics below, but a more detailed description of the command line mode is given in the Command line mode help topic. Note that if you run WinRAR from the command line without parameters, the shell mode will be activated.

How to extract files using the command line

How to archive files using the command line

   If you did not disable "Integrate WinRAR into shell" option when installing WinRAR, it is also possible to extract and archive files directly in Windows shell (Explorer or Desktop).   Details may be found below.

How to extract files in Explorer or Desktop

How to archive files in Explorer or Desktop

Quick start: extracting files using WinRAR shell mode

In order to extract file using WinRAR shell mode you must first **open the required archive in WinRAR**. This may be achieved in one of several ways:

- double-click or press Enter on the archive name in Windows shell (Explorer or Desktop). If WinRAR was associated with archives during installation (the default installation option), an archive will be opened in WinRAR. You also may associate WinRAR with archives after installation using Integration settings dialog;

- double-click or press Enter on the archive name in WinRAR window;

- drag-and-drop an archive to the WinRAR icon or window. Before doing this ensure that WinRAR does not already display another archive, otherwise the dropped archive will be added to the currently displayed archive;

- run WinRAR from the command line with a single parameter - the archive name.

When an archive is opened in WinRAR, its contents are displayed. **Select files and folders**, which should be extracted. You may do this using Shift + arrow keys or Shift + left mouse button as in Windows Explorer and other Windows programs. Also in WinRAR it is possible to select files using Space or Ins keys. "Gray +" and "Gray -" keys on the numeric keypad allow the selection of groups of files using file masks.

Having selected one or more files, **click the Extract To button** at the top of the WinRAR window or press Alt+E , enter the destination folder in the dialog box and click on **OK**. This dialog box also offers a few advanced options (see Extraction path and options dialog for more information).

During the extraction process, a window will be displayed showing operation statistics. If you wish to break the extraction process, click on the Cancel button in the command window. You may press the "Background" button in this window to minimize WinRAR to the tray. If the extraction is completed, without errors, WinRAR will return to the shell, in the case of an error, a **Diagnostic message window** will be displayed.

Quick start: archiving files from the WinRAR shell

First, you need to **run WinRAR**. Double-click or press Enter on the WinRAR icon. You can also start it from the Windows "Start menu": enter "Programs" then "WinRAR" and then run the "WinRAR" item.

When WinRAR is running, it displays a list of files and folders in the current folder. You need to **go to the folder, which contains files to archive**. You may use Ctrl+D, the disks list below the toolbar or click on the small disk icon in the bottom left corner, to change the current disk. Press BS, Ctrl+PgUp, small "Up" button below the toolbar or double-click on the folder named ".." to go to the parent folder. Press Enter, Ctrl+PgDn or double-click on any other folder to enter that folder. Ctrl+\ will set the root disk folder as the current folder.

When you have entered the folder with the desired files, **select the files and folders**, which you are going to archive. This may be achieved by using Shift + arrow keys or the mouse as in Windows Explorer and other Windows programs. It is also possible, in WinRAR, to select files using Space or Ins keys. "Gray +" and "Gray -" keys on the numeric keypad allow the selection of groups of files using file masks.

Having selected one or more files, **click on the Add button** at the top of the WinRAR window, press Alt+A or select the "Add files to archive" command in the <u>Commands menu</u>. Enter the destination archive name in the dialog box which appears or simply accept the default name. You may select, in this dialog, the format of the new archive (<u>RAR or ZIP</u>), compression level, volume size and other archiving parameters. This dialog described in details in <u>Archive name and parameters dialog</u> topic. **Click on the OK button** when you are ready to create the archive.

During the archiving process, a window will be displayed showing operation statistics. If you wish to break the archiving process, click on the Cancel button in the command window. You may press the "Background" button in this window to minimize WinRAR to the tray. When archiving is completed, the command window disappears and the newly created archive becomes the currently selected file.

It is also possible to add files, to an existing RAR archive, using <u>drag-and-drop</u>. Select the desired archive in the WinRAR window and press Enter (or double click) on its name. RAR will read the archive and display its contents. You may now add files to the archive by simply dragging them from another program and dropping then to WinRAR.

Quick start: extracting files from the command line

Common command line syntax to extract files with full paths is:

WINRAR   X   [-switches]   <Archive>   [Files]   [@File lists] [Destination folder\ ]

To extract files, ignoring paths, is:

WINRAR   E   [-switches]   <Archive>   [Files]   [@File lists] [Destination folder\ ]

For example if you wish extract the file **LETTER.TXT** to the current folder from the archive **LETTERS.RAR**, use the following command:

WINRAR   X   LETTERS.RAR   LETTER.TXT

Archive extension is optional and may be omitted.

The next command extracts all ***.WAV** files from the archive **Songs** to the folder **Audio**:

*WINRAR   X   Songs   *.WAV   Audio*

It is also possible to list the files to be extracted in a file, rather than listing them on the command line. In this case the name of the file, containing the list of files to be archived, must be given on the command line.   This is indicated by placing the symbol **@** before this file name. Thus, if you create a file, **Binaries,** containing the strings ***.exe** and ***.com,** then execute the command:

WINRAR   X   TOOLS   @Binaries

all files with **EXE** and **COM** extensions from the archive **TOOLS** will be extracted to the current folder.

During the extraction process, a window, containing statistics, will be displayed. If you wish to break the extraction process, click on the **Cancel** button in the command window. You may press the "Background" button in this window to minimize WinRAR to the tray.   If extraction is completed, without problems, WinRAR will terminate, in the case of an error, a **Diagnostic message window** will be displayed.

See **Command-line interface** for detailed commands and switches description.

Quick start: archiving files from the command line

The common command line syntax for archiving files is:

WINRAR   A   [-switches]   <Archive>   [Files]   [@File lists]

For example, if you wish add the file **LETTER.TXT** to the archive **LETTERS.RAR**, type:

WINRAR   A   LETTERS.RAR   LETTER.TXT

If an archive extension is not specified, WinRAR will use the default archive format selected in the default compression profile, but you may override it by specifying either .RAR or .ZIP extension.

The next example: add all ***.WAV** files to the solid RAR archive **Songs**, using multimedia compression:

WINRAR   A   -S   -MM   Songs.RAR   *.WAV

Also it is possible to list the files to be archived in a file, rather than listing them on the command line. In this case the name of the file, containing the list of files to be archived, must be given on the command line.   This is indicated by placing the symbol **@** before this file name. Thus, if you create a file, **Binaries,** containing the strings ***.exe** and ***.com,** then execute the command:

WINRAR   A   TOOLS.ZIP   @Binaries

all files with .**EXE** and .**COM** extensions from the current folder will be added to the ZIP archive **TOOLS**.

During the archiving process, a window, containing statistics, will be displayed. If you wish to break the archiving process, click on the **Cancel** button in the command window. You may press the "Background" button in this window to minimize WinRAR to the tray. If archiving is completed, without problems, WinRAR will terminate, in the case of an error, a **Diagnostic message window** will be displayed.

See **Command-line interface** for detailed descriptions of commands and switches.

Quick start: extracting files in Explorer or Desktop

If you did not disable the "Integrate WinRAR into shell" option when installing WinRAR, it is possible to extract files directly in a Windows shell. Press the right mouse button on archive icon, select "Extract files…" command, enter the destination folder in the dialog box and click the "OK" button. This dialog box offers a few advanced options (see <u>Extraction path and options dialog</u> for more information).

You may also select the "Extract to <folder name>" command to extract to the proposed folder name without additional requests or "Extract Here" to extract to the current folder.

Note that if option "Cascaded context menus" in <u>Integration settings dialog</u> is switched on, you need to open "WinRAR" submenu to access to described above commands. Otherwise they are resided in the top level menu.

Another method is to drag one or several archives using the right mouse button and drop them to the destination folder and then select "Extract Here" in the menu which will appear.

Quick start: archiving files in Explorer or Desktop

   If you did not disable the "Integrate WinRAR into shell" option when installing WinRAR, it is possible to archive files directly in a Windows shell. Select the files you are going to compress, in Explorer or Desktop, press the right mouse button on the selected files and choose "Add to archive…". Enter the destination archive name in the dialog box which appears or accept the default name. You may also select the format of the new archive (RAR or ZIP), compression level, volume size and other archiving parameters. This dialog is described in detail in the Archive name and parameters dialog topic. Click on the OK button when done. An archive will be created in the same folder as the selected files.

   You may also select the "Add to <archive name> archive" command to add to the proposed archive without additional requests. In this case compression settings selected in the default compression profile will be used.

   Note that if the option "Cascaded context menus" in Integration settings dialog is switched on, you need to open "WinRAR" submenu to access to described above commands. Otherwise they are resided in the top level menu.

   Another method is to drag file icons to an existing archive icon and drop them. Files will be added to this archive.

Archive types

RAR versus ZIP

Support of other archive formats

Solid archives

Self-extracting archives (SFX)

Split archives (multi-volume)

Encryption

Archive comment

Protecting archives from damage

Locking archives

How to choose optimal archiving settings

RAR versus ZIP

WinRAR is able to create archives in two different formats: RAR and ZIP. The advantages of each format are described below:

ZIP archives

The main advantage of ZIP format is its popularity. For example, most archives in the Internet are ZIP archives. So if you are going to send an archive to somebody, but you are not sure that your addressee has WinRAR to extract the contents of the archive, it might be a good idea to use the ZIP format. From the other side you may send <u>self-extracting archive</u>. Such archives are slightly larger, but can be extracted without external programs.

Another ZIP advantage is speed. ZIP archives are usually created faster than RAR.

RAR archives

RAR format in most cases provides significantly better compression than ZIP, especially in <u>solid mode</u>. Another important feature of RAR is support of <u>multi-volume</u> archives. They are more convenient and easier to use than so called ZIP "span disks" archives. WinRAR does not support ZIP disks spanning, if you need to create a multi-volume set, use RAR volumes instead.

RAR format also has a few important features absent in ZIP such as <u>recovery record</u>, which allows the physically restoration of damaged data, and <u>locking</u> of important archives to prevent their accidental modification.

RAR format is able to handle files of practically unlimited size (up to 8,589,934,591 GB), when the maximum size of a single file in a ZIP archive is 4 GB. Note that older file systems do not support files larger than 4 GB and you will need to use NTFS to work with such files.

Support of other archive formats

Additionally to complete support of **RAR** and **ZIP** WinRAR provides basic operations for **CAB, ARJ, LZH, TAR, GZ, ACE, UUE, BZ2** and **JAR** files created by other archiving tools: view contents, extract files, show comments and archive information. You do not need to have any external programs to handle these formats.

Solid archives

A solid archive is a RAR archive packed by a special compression method, which treats all files, within the archive, as one continuous data stream. Solid archives are supported only by the RAR archiving format, ZIP archives are always non-solid. The archiving method for RAR archives is a user selectable option and may be Solid or non-Solid.

Solid archiving significantly increases compression, especially when adding a large number of small, similar files. But it also has a few important disadvantages:

- slower updating of existing solid archives;

- encrypted solid archives cannot be modified;

- to extract a single file from a solid archive all preceding files must be analyzed. This makes extraction from the middle of a solid archive slower than extraction from a normal archive, but, if all files are to be extracted from a solid archive, the extraction speed will not be affected.

- if any file in a solid archive is damaged, it will be impossible to extract all files which follow the damaged area. Thus if a solid archive is stored to media such as diskette, it is recommended to make use of the recovery record.

Solid archiving is preferable if:

- the archive is updated rarely;

- it is not necessary to frequently extract a single file or only part of the files from the archive;

- compression ratio is more important than compression speed.

Usually files in a solid archive are sorted by extension. But it is possible to set an alternative file order using a special file, *rarfiles.lst*.

Volumes and self-extracting archives (SFX) may also be solid.

See also: switch -S, switch -DS, rarfiles.lst

Volumes (split archives)

Volumes are parts of a split archive. Volumes are supported only by the RAR archive format, so you cannot create ZIP volumes. Generally volumes are used to store a large archive on several diskettes or other removable media.

The first volume in sequence has a normal **.rar** file extension with subsequent volume extensions enumerated as **.r00, .r01, r02** etc. Volumes may also be <u>solid</u> and <u>self-extracting</u>. A self-extracting volume has a different (i.e. not **.rar**) file extension identifier, for example **.exe** for DOS or OS/2 SFX volumes.

It is impossible to add, update or delete files in created volumes.

To unpack volumes you need to start extraction from the first volume (having .rar extension). If volumes are stored on non-removable media like a hard disk, you need to put all volumes to the same folder before starting extraction.

Self-extracting (SFX) archives

An SFX (**S**el**F**-e**X**tracting) archive is an archive, merged with an executable module, which is used to extract files from the archive when executed. Thus no external programs is necessary to extract the contents of an SFX archive, it is enough to execute it. Nevertheless WinRAR can work with SFX archives as with any other archives, so if you do not want to run a received SFX archive (for example, because of possible viruses), you may use WinRAR to view or extract its contents.

SFX archives usually have .exe extension as any other executable file.

SFX archives are convenient, if you want to give an archive to somebody, but do not know, if they have an appropriate archiver to extract files from it. You may also use SFX archives to distribute your own software. For example, WinRAR package is based on GUI RAR SFX module *Default.sfx*.

To create an SFX archive from the command line you may use the -sfx switch to make a new archive or S command to convert an existing archive to SFX. In WinRAR shell either select "Create SFX archive" option in Archive name and parameters dialog, when creating a new archive or enter into an already existing archive and press "SFX" button.

WinRAR distributive includes several SFX modules for different platforms. All SFX modules have .sfx extension and must be in the same folder as WinRAR. By default WinRAR always uses *Default.sfx* module, but you may specify the name of another module directly in "-sfx" switch or "S" command. For example, to convert *myarchive.rar* to SFX using *WinCon.SFX* module run:

WinRAR SWinCon.SFX myarchive.rar

In the WinRAR shell you may select the desired SFX module from menu, which appeared when executing "SFX" command.

These topics contain information about SFX modules provided in the WinRAR package:

GUI RAR and ZIP SFX modules (Default.SFX and Zip.SFX)

Console RAR SFX module (WinCon.SFX)

DOS and OS/2 RAR SFX modules (Dos.SFX and Os2.SFX)

Encryption

Both RAR and ZIP formats support encryption. To encrypt files you need to specify a password before archiving or directly in the <u>Archive name and parameters</u> dialog. In the command line this is done by using switch <u>-p<pwd></u>. In WinRAR shell, to enter a password you may either press Ctrl+P or select the "Password" command in <u>File menu</u> or click on the small icon of a key in the bottom left corner of the WinRAR window. To enter a password in *Archive name and parameters* dialog press "Set password" button in "Advanced" set of options.

Do not forget to remove an entered password, when it is no longer needed, otherwise you may occasionally archive some files using the password without wishing to. To remove a password, enter an empty string instead of a password or close WinRAR and start it again. While a password exists, the icon of key is red, otherwise it will be yellow. Also, when you start an archive operation using a password, title bar of <u>Archive name and parameters dialog</u> flashes twice.

You do not need to remove a password if you entered it directly in *Archive name and parameters* dialog. Unlike other ways such password is valid only for the single archiving operation and automatically removed after its completion.

When extracting encrypted files, it is not necessary to enter the password before starting the operation, though you may do so. If a password was not entered before extraction and WinRAR encounters an encrypted file, the password will be requested from the user.

Unlike non-solid archives, encrypted <u>solid archives</u> cannot be modified.

Both RAR and ZIP formats use proprietary encryption algorithms, but RAR encryption is significantly stronger. If you need to encrypt important information, it is better to select the RAR archive format.   For real security use passwords of at least 8 characters in length. Do not use words of any language as passwords, it is better to choose a random combination of characters and digits. Note that passwords are case sensitive. Remember that if you lose your password, you will unable to retrieve the encrypted files, not even the WinRAR author is able to extract encrypted files..

Archive comment

You may add an optional text information to RAR and ZIP archives. This information is called an *archive comment*. To add it manually in WinRAR shell mode to the already existing archive use <u>Add archive comment</u> command, to read the comment from a file in the command line - <u>command "c"</u> or switch <u>-z<file></u>.

You also may specify a comment when archiving files directly in the <u>Archive name and parameters</u> dialog.

If an archive, which contains a comment, is opened in WinRAR and the option "Show archive comment" in <u>General settings dialog</u> is on, the comment window will be displayed to the right of the files list. You may change the width of the comment window, dragging its left border with the mouse.

WinRAR is also able to display color ANSI comments, containing so called ANSI Escape Sequences. But you need to have a special editor, if you wish to make source text for such comments. WinRAR itself cannot create ANSI Escape Sequences.

Protecting archives from damage

RAR archive format supports a special type of redundant information called a *recovery record*. If an archive has a recovery record, it can be repaired even in case of physical data damage due to floppy disk failure or data losses of any other kind. The ZIP archive format does not support a recovery record.

To add a recovery record from the command line you may use switch -rr[N] together with any command, which creates or modifies an archive, or command "rr[N]" to add the recovery record to an existing archive. For example:

WinRAR a -rr newarc *.txt

WinRAR d -rr4 newarc dummy.txt

WinRAR rr oldarc

In WinRAR shell mode you may set "Put recovery record" option in Archive name and parameters dialog to add the recovery record to an archive. Another way is to set "Put recovery record" option in the default compression profile. In this case a recovery record will be added to archives after any archive modification.

The recovery record contains up to 32768 recovery sectors. If data are damaged continuously then each recovery sector is able to recover 512 bytes of damaged information. This value may be lower in cases of multiple damage.

The number of sectors may be specified directly in the "rr[N]" command or "-rr[N]" switch (N = 1, 2 .. 32768). If it is not specified by the user, it will be selected automatically according to the archive size: a size of the recovery information will be about 1% of the total archive size, usually allowing the recovery of up to 0.6% of the total archive size of continuously damaged data.

It is also possible to specify the recovery record size in percents to the archive size. In the command line mode just append the percent character to the command parameter. For example:

    winrar rr3% arcname

In the shell mode you may set it either using Protect archive command or setting the recovery record size in the Advanced options of Archive name and parameters   dialog.

The recovery record increases the size of an archive. The size of the recovery record may be approximately determined by the formula:

    <archive size>/256 + <number of recovery sectors>*512 bytes.

To repair a corrupt archive, which has a recovery record, in WinRAR shell mode apply "Repair" command to it. In the command line use command "r". The repaired archive will have name *_recover.rar*. If a corrupt archive does not contain a recovery record or if an archive is not completely recovered due to major damage, a second stage is performed. During this stage only the archive structure is reconstructed and it is impossible to recover files, which fail the CRC validation, but it is still possible to recover undamaged files, which were inaccessible due to the corrupt archive structure. This is useful only for non-solid archives.   When the second stage is completed, the reconstructed archive will be saved as *_reconst.rar*.

Locking archives

RAR archive format supports archive locking. The locked archive cannot be modified by WinRAR. You may lock important archives to prevent their accidental modification.

Use "Lock archive" command in WinRAR shell mode or command "K" in the command line to lock an archive.

How to choose optimal archiving settings

When creating a new archive, you first need to select the archive format. ZIP is preferable only if you are not sure that a receiver of your archive has WinRAR. Otherwise it is recommended to select RAR, which supports more functions and higher compression. Read RAR versus ZIP topic for more information about archive formats.

Regardless of the archive format the next step is selection of compression method. Six compression methods are supported: "Store", "Fastest", "Fast", "Normal", "Good" and "Best". The "Best" method provides highest, but slowest compression, "Fastest" compresses poorly, but is very fast, "Store" merges files into an archive without compression. If you create an archive for distribution or for long storage, probably you should ignore time and use the "Best" compression method to reduce the size as much as possible. But if you are creating your daily backup, "Normal" compression is usually the best choice.

If you selected the ZIP archive format, your preparations are finished on this stage. The features below are supported only by RAR archives.

The next parameter is dictionary size. It can be 64, 128, 256, 512 and 1024KB. Higher values of this parameter lead to better, but slower compression, so from this side it is similar to selecting compression method. Generally the best decision is to set the dictionary size to 1024KB and use the compression method to regulate the size/speed ratio. But a larger dictionary size requires more memory, memory usage can be estimated, approximately, as <dictionary size>*5+2560 KB. If your computer has only 16Mb of memory, you should select a lower dictionary size value, for example, 256 KB. Note that if you create a self-extracting archive using DOS SFX module, the dictionary size must be 64KB, because DOS SFX cannot handle larger dictionary. This limitation does not exist for other SFX modules.

Note that neither compression method nor dictionary size change the extraction speed or extraction memory requirements.

The next option is solid archiving. This mode is explained in the Solid archives topic, so here only the main concept will be given. if you need to maximize compression - use solid mode, if you need to have maximum archive updating speed or if you want to minimize data losses in case of archive damage, do not use solid mode.

A special topic is multimedia compression. It tries to use an additional algorithm to improve compression of data such as digital audio containing up to four 8-bit or two 16-bit channels or true color (24-bit) bitmaps. Improvement in the compression ratio up to 30% over the normal compression may be achieved but when this method is applied to normal data, in most cases it will not change compression. It possible that, when applied to normal data, compression may be only slightly improved or in some cases even decreased. Note that this method cannot improve compression of already packed audio or graphics, so there is no sense to use it with JPEG or MPEG files. But it can show good results on unpacked WAV and true color BMP files.

These are all the main settings, which affect compression ratio and speed. Actually, you do not need to set them before each archiving. Simply select your favorite default values once in the default compression profile, which can be created from Compression settings dialog and later you may change values in Archive name and parameters dialog or using command line switches, when executing WinRAR from the command line. The only exception is archive format, which does not have a selection command line switch. Instead to overwrite the default archive format settings in the command line you should specify complete archive name with .rar or .zip extension. In the WinRAR shell mode, the archive format can be selected in Archive name and parameters dialog in the same way as all other settings.

Introduction to WinRAR interface

This topic briefly describes the main elements of the WinRAR interface.

WinRAR has the following menus: File, Commands, Favorites, Options and Help. Select the appropriate topic to read about commands of a particular menu.

The next interface item is the toolbar. It is placed below menus, but above the file list. Toolbar buttons duplicate items of the Commands menu (note that all items of this menu also have keyboard shortcuts). Some buttons are available only when viewing the contents of a folder, some only when viewing an archive and some in both modes. When WinRAR displays an archive contents, some buttons may absent, if the corresponding archive management functions are not applicable to the archive. If you wish, you may choose buttons to display, remove buttons text or reduce buttons size using General settings dialog or clicking by the right mouse button on the toolbar.

Below the toolbar buttons you will see the small "Up" button and the disks list. "Up" button changes the current folder to the parent. Disks list is needed to select the current disk. You may open it either using mouse or pressing F4 key. It is possible to drag "Up" button and the disks list to the right corner of toolbar. Pressing Ctrl+D or clicking the small "Disk" icon on status bar can also be used to change the current disk.

The list of files is located below the toolbar. It may show either the unpacked contents of the current folder or, if WinRAR is entered to an archive, archived files. These are so called file management and archive management modes. For each file the following parameters are shown: name, size, type and modification time. Archived files also have one additional parameter - packed size. All parameters are organized into columns. By clicking on the column title you may change the files sort order (blue arrow drawn in the title shows sort direction). Also it is possible to change the width of columns by dragging the column title separators with a mouse. Several additional list options are available in the File list dialog.

If an archived file is encrypted, its name is followed by an asterisk. If a file is continued in a next volume, its name is followed by "-->". If a file is continued from a previous volume, its name is followed by "<--". And if a file is continued both in a next and from a previous volume, its name is followed by "<->".

Before processing files you need to select them in the list. In additionally to the standard Windows methods of selecting files WinRAR provides several more keys for this purpose: Space, Ins, "Gray +", "Gray -". More details will be found in the topic Selecting files.

The following keys may be used   to navigate in the file list. BS or Ctrl+PgUp or double-click on the folder with ".." name to go to the parent disk or archive folder. The same action will close an archive, if you are viewing the archive root folder. Press Enter or Ctrl+PgDn or double-click on any other folder to enter to it. The same action applied to an archive name will open this archive. Ctrl+\ sets the root disk folder as the current.

If you press the right mouse button in the files list, the menu containing file management and interface commands will appear. These commands are also accessible in the usual WinRAR menus, toolbar and keyboard, so you may select whichever activation method is most convenient for you.

Depending upon the "Show archive comment" option in General settings dialog and the presence of a comment in the opened archive, the right part of the file list may be overlapped by the archive comment window. You may change the width of the comment window by dragging its left border with the mouse.

The status bar is placed below the files list, at the bottom of the WinRAR window. The left part of the status bar contains two small icons: "Drive" and "Key". By clicking on the "Drive" icon you may change the current disk. To change the current password click on the "Key" icon. Both of these commands are also present in the File menu. By default the "Key" icon is yellow, but if a password is entered, the icon will be

red. The middle part of the status bar shows either the total size of selected files or information about the current operation. The right part of the status bar displays the number and size of files in the current folder.

File management and archive management modes

The WinRAR shell may be in one of two basic states: file management mode or archive management mode.

In the file management mode, a list of files and folders from the current working folder is displayed. You may <u>select</u> these files and folders in the usual Windows fashion, with a mouse or keyboard, and perform different file operations such as archiving or deleting. Also in this mode it is possible to perform test and extract operations with groups of archives.

In the archive management mode, the list of archived files and folders from the currently opened archive is displayed. You also may select files and folders and perform archive specific operations such as extracting, testing or commenting.

In either mode you may change the current folder (real or archived). Press BS, Ctrl+PgUp or double-click on the folder with **".."** name to go to the parent disk or archive folder. The same action will close an archive and return WinRAR to file management mode, if you are viewing the archive root folder. Press Enter, Ctrl+PgDn or double-click on any other folder to enter to it. The same action applied to an archive name will open this archive. Ctrl+\ sets the root disk folder as the current.

To enter WinRAR's file management mode, start WinRAR by simply double-clicking on the WinRAR icon or run WinRAR from the command line with no parameters.

To enter WinRAR's archive management mode, start WinRAR in the file management mode, place the cursor on the desired archive and press Enter or use the "Open archive" command of <u>File menu</u>. Or simply double-click on the archive name in Windows shell (Explorer or Desktop) to open it in WinRAR, but for this to take effect,   WinRAR must have been associated with archives during installation (it is the default installation option). You also may associate WinRAR with archives after installation using <u>Integration settings dialog</u>. And finally, it is also possible to enter directly to the desired archive from the command line, if the archive name is passed to WinRAR in the command line as a single parameter.

Selecting files

Before performing any operation you need to select, in the WinRAR files list, all files and folders which should be processed.

If you need to select only one file, just move the cursor to it and start an operation. There are several methods of file selection. As in other Windows applications you may press arrow keys or the left mouse button while holding Shift key to select a group of files. To select several separate items hold down the Ctrl key and then click each item you want. Press Ctrl+A or use the "Select all" command from File menu to select all the files and folders in the current folder.

All methods described above standard provide non-persistent selection, which is canceled if you move the cursor. Though the standard methods are usually enough, sometimes it is more convenient to have persistent selection, allowing navigation in the current folder without removing the selection from previously marked files. WinRAR provides several keys for this

Space, Ins	Select a file under the cursor and move the cursor down. To deselect a file selected using Space or Ins, press Space or Ins on the name again or use "Gray -" command.
Gray * (on numpad)	Invert the current selection
Gray + (on numpad)	Select files according to an entered wildcard mask
Gray - (on numpad)	Deselect files according to an entered wildcard mask

If no files are selected before starting extraction or testing, all archived files will be extracted or tested. This rule is valid only for test and extract operations.

Viewing files

When you perform a "View file" command, WinRAR shows the contents of the file under the cursor in the <u>internal viewer</u> window regardless of the file contents or configuration settings, but if you were to press Enter on a file name, several different results are possible. If the file under the cursor is an archive, WinRAR will open it and display its contents, otherwise further actions depend upon them settings specified in <u>Viewer settings dialog</u>. With this dialog you may force WinRAR to always use the internal viewer, to open the file in the external viewer, to call a program associated by Windows with this file type or to ask, each time before viewing the file, which action described above should be executed.

WinRAR can be used to view normal files, whether in an archive or not. If an external program is called to view an archived file, WinRAR unpacks this file to a temporary folder, passes its name to the external program and waits for the program to terminate. After this WinRAR tests the file modification time and if it was updated, offers to update this file in the archive and then deletes the temporary folder with the extracted file.

Note that the scheme described above is slightly modified, when Enter is pressed on an archived file, which has .exe extension. In this case WinRAR extracts not only this file, but the complete contents of the archive to the temporary folder and then runs the executable file. The following steps are similar to those described above: WinRAR waits for the executable to terminate, then tests the modification time of the extracted files and if changed or if new files were created, offers to update the archive. The temporary folder and it's contents are then deleted. This method of processing .exe files allows programs to be run directly from an archive. For example, you may use it to install new programs without unpacking a distributive manually, simply enter to an archive and press Enter on setup.exe or install.exe program.

Internal viewer

Commands of the internal viewer.

Menu/Item	Shortcut	Function
File/Exit	Alt+F4	Exit from the internal viewer
Edit/Copy	Ctrl+C	Copy selected text to the clipboard
Edit/Select all	Ctrl+A	Select all viewed text
Edit/Find	Ctrl+F	Find a string in the text
Edit/Find next	F3	Find the next occurrence of a string
View/View as Windows text	Ctrl+W	Use Windows character table
View/View as DOS text	Ctrl+D	Use DOS character table
View/Set Font…	none	Set viewer font
Help/View help	F1	Show internal viewer help

To change the current character table you may click on the right part of the viewer status bar, where the name of the current table is displayed. The default character table may be specified in Viewer settings dialog.

"Add to archive" command

This command is accessible both in <u>file management</u> and in <u>archive management</u> modes.

When WinRAR browses files on a disk, first, you need to <u>select</u> the files and folders, which are to be archived. Then run "Add to archive" command using either <u>Commands menu</u> ,button "Add" on the toolbar or Alt+A keyboard shortcut. Select archive name and parameters in the <u>Archive name and parameters</u> dialog and press Enter to start archiving.

When WinRAR shows archive contents, you need first to run "Add to archive" command, then select files in the appeared dialog and set archive name and parameters as described above.

Command line equivalent: **<u>command "a"</u>**

"View file" command

This command is accessible both in <u>file management</u> and in <u>archive management</u> modes. It opens the file under the cursor in the <u>internal viewer</u>. To run this command use either <u>Commands menu</u> , button "View" on toolbar or Alt+V keyboard shortcut.

See also: **<u>Internal viewer</u>**,   **<u>Viewing files</u>**

"Delete files" command

This command is accessible both in <u>file management</u> and in <u>archive management</u> modes. In file management mode it deletes the selected files and folders to the Recycle Bin, so you have the chance to restore accidentally deleted data. But in archive management mode the selected files and folders are deleted from the archive completely, without any possibility of restoring them later, so you need to be careful here. To run this command use either <u>Commands menu</u> , button "Delete" on the toolbar, Alt+D or Del keyboard shortcuts.

In file management mode you may also completely delete files. Press Shift-Del instead of Del avoid moving files to the recycle bin.

Command line equivalent: **<u>command "d"</u>**

"Repair archive" command

This command is accessible when WinRAR is in the <u>file management mode</u>. It considers the file under the cursor as a corrupt archive and attempts to repair it. To run this command use either <u>Commands menu</u> , "Repair" button on the toolbar or Alt+R keyboard shortcut.

WinRAR is able to repair only RAR and ZIP archives. WinRAR tries to detect the type of the archive automatically using archive data and extension, but user also may set an archive type manually.

The source archive is not changed and the result of the operation is stored into a new archive, which is named *_recover.rar* or *_reconst.rar*. Chances of a successful repair of an RAR archive are significantly higher, if it has a <u>recovery record</u>. Note that a <u>solid archive</u> without a recovery record cannot usually be successfully repaired.

Technical details of archive repairing are provided in the <u>command "r"</u> description ("r" is the command line equivalent of "Repair archive" command).

Command line equivalent: <u>**command "r"**</u>

"Estimate compression" command

   This command is accessible when WinRAR is in the <u>file management mode</u>. It attempts to estimate possible compression ratio and time of selected files and folders using different <u>compression formats</u> and methods. To run this command use either <u>Commands menu</u> , "Estimate" button on the toolbar or Alt+S keyboard shortcut.

   Note that the estimation is performed quickly and roughly, so do not expect an exact result from this command. Nevertheless it can show if it is worth spending time to compress selected data. No consideration is given to the effects of Solid archiving in the estimate.

"Extract without confirmation" command

    This command is accessible only when WinRAR is in the <u>archive management mode</u>. First, you need to <u>select</u> archived files and folders, which are to be extracted. Then run "Extract without confirmation" command using either <u>Commands menu</u> , "Extract" button on the toolbar or Alt+W keyboard shortcut. The selected files will be extracted to the current folder or to the default folder for extracted files, if it is specified in <u>Compression settings</u> dialog. If you need to set a different destination folder or some additional options, use <u>Extract to the specified folder</u> command instead.

Command line equivalent: <u>**command "x"**</u>

"Extract files to the specified folder" command

This command is accessible both in <u>file management</u> and in <u>archive management</u> modes.

In the archive management mode, when WinRAR shows archive contents, first, you need to <u>select</u> archived files and folders, which are to be extracted. Then run "Extract files to the specified folder" command using either <u>Commands menu</u> , "Extract to" button on the toolbar or Alt+E keyboard shortcut. In the <u>Extraction path and options dialog</u> you may specify the destination folder for extracted files and, if necessary, set additional options. After closing this dialog, extraction is started.

In the file management mode it is possible to unpack several archives at once. In general the operation is similar to the described in the previous paragraph, but instead of selecting files inside of archive you need to <u>select</u> archives and folders, where WinRAR should search for archives. If any archives are found, the <u>Extraction path and options dialog</u> will be displayed. After closing this dialog contents of all found archives will be extracted.

Command line equivalent: <u>**command "x"**</u>

"Test archived files" command

This command is accessible both in <u>file management</u> and in <u>archive management</u> modes.

In the archive management mode, when WinRAR shows archive contents, first, you need to <u>select</u> archived files and folders, which are to be tested. Then run "Test archived files" command using either <u>Commands menu</u> , "Test" button on the toolbar or Alt+T keyboard shortcut.

All errors found during test are displayed in the "Diagnostic messages" window. If no errors detected, WinRAR will display a corresponding message.

In the file management mode it is possible to test several archives at once. In general the operation is similar to the described in the previous paragraph, but instead of selecting files inside of archive you need to <u>select</u> archives and folders, where WinRAR should search for archives. When a search is completed, WinRAR will test contents of all found archives.

Command line equivalent: <u>**command "t"**</u>

"Add archive comment" command

    This command is accessible only when WinRAR is in the <u>archive management mode</u>. You do not need to select any files to perform it, just run "Add archive comment" command using either <u>Commands menu</u> "Comment" button on the toolbar or Alt+M keyboard shortcut and enter the <u>archive comment</u> in the appeared dialog.

Command line equivalents: <u>**command "c"**</u>**,** <u>**switch -z<file>**</u>

"Protect archive from damage" command

This command is accessible only when WinRAR is in the <u>archive management mode</u> as a part of the <u>Archive options dialog</u>. You do not need to select any files, just run "Protect archive from damage" command using either <u>Commands menu</u> , "Protect" button on the toolbar or Alt+P keyboard shortcut.

This command adds a <u>recovery record</u> to the currently opened archive. It may help to <u>repair</u> it later in case of small physical damage of the archive data.

Command line equivalent: <u>**command "rr"**</u>

"Lock archive" command

    This command is accessible only when WinRAR is in the <u>archive management mode</u> as a part of the <u>Archive options dialog</u>. You do not need to select any files, just run "Lock archive" command using either <u>Commands menu</u> , "Lock" button on the toolbar or Alt+L keyboard shortcut.

    A locked archive cannot be modified by WinRAR. You may lock important archives to prevent accidental modification.

Command line equivalent: **command "k"**

"Convert archive to SFX" command

This command is accessible only when WinRAR is in the <u>archive management mode</u>. It converts an archive to <u>self-extracting</u>. You do not need to select any files to perform this operation, just run "Convert archive to SFX" command using either <u>Commands menu</u> , "SFX" button on the toolbar or Alt+X keyboard shortcut and select necessary SFX module from the list.

If an archive is already self-extracting, using this command you may also remove an already existing SFX module from archive. In such case WinRAR does not touch the original archive and creates a new archive with the same contents, but without self-extracting module.

If you selected Windows GUI SFX module, which is proposed by default, you may also press "Advanced SFX options…" button to set a number of SFX parameters like the default destination path, a title and window text. Read <u>Advanced SFX options</u> topic to get more information about them.

These topics describe SFX modules provided in the WinRAR package:

<u>GUI RAR and ZIP modules (Default.SFX and Zip.SFX)</u>

<u>Console RAR module (WinCon.SFX)</u>

<u>DOS and OS/2 RAR modules (Dos.SFX and Os2.SFX)</u>

Command line equivalent:　**<u>command "s"</u>**

"Show archive information" command

   This command is accessible only when WinRAR is in the underline_archive management mode. You do not need to select any files to perform this operation, just run "Show archive information" command using either Commands menu , "Info" button   on the toolbar or Alt+I keyboard shortcut.

   This command displays a dialog containing the following information about an open archive:

- archive name (in the dialog title);

- archive type (solid, SFX, volume) and format (RAR, ZIP, CAB, ARJ, LZH, etc.). All these parameters are combined in the single string displayed at the top of the dialog;

- minimal archiver version required for extraction;

- operating system under which the archive was created;

- total number of files;

- total unpacked and packed files length;

- total compression ratio;

- size of self-extracting module or zero for non-SFX archives;

- presence of   the archive comment;

- presence of encrypted files;

- is the archive locked or not;

- a size of maximum continuous damaged area, which still can be repaired in the best case using the recovery record, if it is present in the archive;

- maximum dictionary size used for any file within the archive;

- authenticity information, if presents.

   If the archive has an archive comment, an additional dialog sheet containing this comment is displayed.

File menu

Command	Shortcut	Function
Open archive	Ctrl+O	Open the specified archive. You may also read about <u>other methods</u> to open an archive.
Change drive	Ctrl+D	Change the current drive
Browse for folder	Ctrl+T	Select a new folder from the folders tree
Set password	Ctrl+P	Set the default <u>password</u>. The password must be entered twice to ensure correctness. This password will be used in all archiving and extracting operations.
Select all	Ctrl+A	<u>Select</u> all files and folders
Select group	Gray +	<u>Select</u> all files and folders corresponding to an entered mask
Deselect group	Gray -	<u>Deselect</u> all files and folders corresponding to an entered mask
Invert selection	Gray *	<u>Invert the selection</u> of all files and folders
Exit	Alt+F4	Exit from WinRAR

Depending on "Keep archives history" option in <u>General settings</u> dialog, a few names of recently opened archives can be present below "Exit" command. You may use them to quickly open these archives in WinRAR.

Commands menu

Function	Shortcut
Add files to archive	Alt+A
Extract to the specified folder	Alt+E
Test archived files	Alt+T
View file	Alt+V
Delete files	Del, Shift-Del
Repair archive	Alt+R
Estimate compression	Alt+S
Extract without confirmation	Alt+W
Add archive comment	Alt+M
Protect archive from damage	Alt+P
Lock archive	Alt+L
Convert archive to SFX	Alt+X
Show archive information	Alt+I

Favorites menu

The Favorites menu contains a list of your favorite folders and archives. You may add the currently opened archive or folder to the list using "Add to favorites…" command, which also has Ctrl+F keyboard shortcut. If you select an archive or folder from the list, it will be open in WinRAR. Note that you may quickly open the first ten favorite items without opening the menu, just press Ctrl+1 … Ctrl+0 keys. Ctrl+1 activates the first favorite item, Ctrl+2 - second, …, Ctrl+9 - ninth, Ctrl+0 - tenth.

"Organize favorites" command allows to the editing/deletion of favorites as well as to move them up and down in the list. Select desired items and press the corresponding button to perform any of these operations. To delete a favorite in   addition to the "Delete" button you may use Del key.

Options menu

Command "Settings…" of this menu activates the dialog containing the following WinRAR settings: General, Compression, Paths, File list, Viewer and Integration. Select any of these topics for details. Keyboard shortcut for "Settings…" command is Ctrl+S.

You may export WinRAR settings to a file and import them later using two appropriate commands of the "Import/Export" submenu. The file has "Settings.reg" name and is placed in the same folder as WinRAR.exe. Restoring settings from the file can reduce time required to configure WinRAR if you re-installed Windows or need to move WinRAR to another computer. If WinRAR cannot find settings in Registry and Settings.reg file is present in WinRAR folder, it will be imported automatically.

Another command of this menu is "View log…". It opens,   in the internal viewer , the contents of *rar.log*, which exists in the same folder as WinRAR.exe . Note that you need to switch on "Log errors to file" in General settings dialog to force WinRAR to write errors to the log file. Use "Clear log" menu command to clear contents of the log file. Logging is available only in the registered version.

Help menu

Select "Help topics" command to view the contents of WinRAR help.

Use "WinRAR home page" item to connect to WinRAR home page, where you always may download the latest WinRAR version and register your shareware WinRAR copy online.

"About WinRAR…" command displays the dialog box containing version and copyright information.

How to open an archive from Windows shell

If you did not disable the option "Associate WinRAR with archives" when installing WinRAR, it is really easy to open an archive in WinRAR from Explorer or Desktop. Simply double-click on the archive icon.

You also may associate WinRAR with archives after installation using <u>Integration settings dialog</u>.

Using context menus

If you did not disable the option "Integrate WinRAR into shell" when installing WinRAR, several additional items will be added to the standard file and folder context menus, which appear when you click the right mouse button on a file icon in Explorer or Desktop.

For archives WinRAR adds the items: "Extract files…", "Extract Here" and "Extract to <folder name>", where <folder name> is replaced with the real name of the folder. All the commands call WinRAR to extract archive contents, but the first command allows you to enter the destination folder and some extraction options in Extraction path and options dialog , while the second performs extraction to the current folder and the third to the proposed folder without additional questions.

Also WinRAR modifies "Properties" item of archives context menu to show archive information and, if present, archive comment. The archive information is similar to that displayed by Show archive information command, the only difference is that detailed authenticity information is not shown.

For common files and folders WinRAR adds items: "Add to archive…" and "Add to the archive <archive name>", where <archive name> is replaced with the actual name of the archive. Both commands call WinRAR to add selected files to archive, but the first command allows you to enter the archive name and some compression options in Archive name and parameters dialog, when the second starts adding to the proposed archive without additional questions.

Drag and drop support

WinRAR supports the Windows drag and drop facility.

If, in the file management mode , a single archive is dropped to WinRAR, the archive contents will be displayed and WinRAR will enter archive management mode.

If, in file management mode, a one or more non-archive files are dropped to WinRAR, WinRAR will prompt for an archive name and add these files to that archive.

If, in archive management mode, any files are dropped to WinRAR, these files will be added to the archive. Dropping files is available only into RAR and ZIP archives.

Regardless of the current WinRAR mode and archive format, you may drag files from WinRAR to other programs.

If you did not disable the option "Integrate WinRAR into shell" when installing WinRAR, you may drop files to RAR or ZIP archive icons on the Desktop to add files to an archive. Also if you drag an archive using the right mouse button and drop it to the destination folder, you may select "Extract Here" in the menu which appears to extract all files from the dropped archive to the destination folder.

Command line syntax

It is possible to perform WinRAR commands from the command line. Common command line syntax is described below:

WinRAR <command> -<switch1> -<switchN> <archive> <files...> <@listfiles...> <path_to_extract\>

command	Character combination denoted function to be performed by WinRAR
switch	Switches used to define a specific type of operation, compression strength, type of archive, etc.
archive	The name of the archive to process.
Files	The name(s) of files to be processed.
Listfiles	Listfiles are plain text files contained names of files to process. File names should start at the first column. It is possible to put comments to the listfile after // characters. For example, you may create backup.lst containing the following strings:

> c:\work\doc*.txt   //backup text documents
> c:\work\image*.bmp   //backup pictures
> c:\work\misc

> and then run:

> rar a backup @backup.lst

> You may specify both usual file names and list files in the same command line.

Path_to_extract	Used only with commands **e** and **x**, indicating the folder in which to place extracted files. If ¯this folder does not exist, it will be created.

Notes

a) If neither *files* nor *listfiles* are specified, then ***.*** is implied and WinRAR will process all files;

b) If archive extension is not specified, WinRAR will use the default archive format selected in the default compression profile, but you may override it specifying either .RAR or .ZIP extension;

c) switches entered on the command line override the same configuration settings;

d) for commands **c, e, s, t, rr, k** and **x** wildcards may be used in the archive name. Thus it is possible to process more than one archive with a single command. Moreover, if you specify **-r** switch with these commands, they will search for archives in subfolders;

e) some commands and switches are applicable only to RAR archives, some both to RAR and ZIP and

some to all archive formats. This is dependent upon the functionality provided by the archive format;

f) commands and switches are not case sensitive, you may write them both in upper and in lower case.

Alphabetic commands list

a   add files to an archive

c   add an archive comment

d   delete files from an archive

e   extract files from an archive, ignoring paths

f   freshen files within an archive

k   lock an archive

m   move files and folders to an archive

r   repair a damaged archive

rr[N]   add data recovery record

s[name]   convert an archive to a self-extracting type

s-   remove SFX module

t   test archive files

u   update files within an archive

x   extract files from an archive with full paths

Command **A** - add to an archive

Add specified files and folders to an archive. This is a command line equivalent of the command Add.

Note: because archive volume modification is disabled, this command cannot be used to update an archive volume, only to create one.

Examples:

a) add all ***.hlp** files from the current folder to the archive **help.rar**

WinRAR a help *.hlp

b) archive all files from the current folder and subfolders to 362000 bytes size solid, self-extracting volumes **save.exe, save.r00, save.r01, …,** and add a recovery record to each volume

WinRAR a -r -v362 -s -sfx -rr save

because no file names are specified, all files (*.*) are assumed.

c) if a folder name is specified as an argument in combination with **switch -r**, the entire contents of the folder and all sub-folders will be added to the archive. The following command will add all files from the folder **Bitmaps** to the RAR archive **Pictures** using multimedia compression

WinRAR a -mm -r Pictures.rar Bitmaps

Of course it is still possible to use the normal format and write **Bitmaps*.*** instead of **Bitmaps**.

Command **C** - add an archive comment

This command allows to add <u>comment</u> to an archive. The maximum comment length is 62000 bytes for RAR archives and 32768 bytes for ZIP archives. It is also possible to add an archive comment through <u>archive management</u> command <u>Add archive comment</u>.

Because archive volume modification is disabled, this command is not applicable to volumes. You may use switch <u>-z<file></u> to add a comment to a volume when creating it.

Examples:

a) add comment to the archive *distrib.rar*

WinRAR c distrib.rar

b) Comments may be added from a file by using the <u>-z<file></u> switch.

WinRAR c -zinfo.txt dummy

Command **D** - delete from an archive

Delete specified files and folders from an archive. This is the command line equivalent of the archive management command Delete.

Notes:

1) If after deleting all files are removed from the archive, the empty archive will removed.

2) Because archive volume modification is disabled, this command is not applicable to volumes.

Example:

delete from the archive *dummy* all *.dmy files

WinRAR d dummy *.dmy

Command **E** - extract from an archive ignoring paths

    Extract archived files, ignoring paths, to the current or a specified folder. This is the command line equivalent of the <u>archive management</u> command <u>Extract to the specified folder</u> with the option "Do not extract paths" enabled in the <u>Extraction path and options dialog</u>.

Example:

extract to the current folder all *.doc files from all RAR archives in the current folder

WinRAR e *.rar *.doc

Command **F** - freshen files within an archive

Update files in the archive only if they are older than the files to add. This command will not add new files to the archive. This is the command line equivalent of the command <u>Add to archive</u> with "Fresh existing files only" update mode selected in the <u>Archive name and parameters dialog</u>.

Because archive volume modification is disabled, this command is not applicable to volumes.

See also: <u>command A - add files to archive</u>

Command **K** - lock an archive

   This command prevents any further archive modifications by WinRAR. This is the command line equivalent of the <u>archive management</u> command <u>Lock archive</u>.

Example:

WinRAR k release

Command **M** - move files and folders to an archive

Similar to command a, but files and folders are erased upon successful completion of   the packing operation. This is the command line equivalent of the command Add to archive with the option "Delete files after archiving", enabled in the Archive name and parameters dialog.

Because archive volume modification is disabled, this command cannot be used to update an archive volume, only to create one.

Command **R** - repair a damaged archive

Archive repairing consists of two stages. First, the damaged archive is scanned for a <u>recovery record</u> (see the **rr**   command). If the archive contains a previously added recovery record and if the portion of the damaged data is continuous and less than N*512 bytes, where N is number of recovery sectors placed into the archive, the chance of a successful archive reconstruction is very high. When this stage has been completed, a new archive will be created, called *_recover.rar.*

If a damaged archive does not contain a recovery record or if the archive cannot be completely recovered due to severe damage, a second stage is begun. During this stage only the archive structure is reconstructed and it is impossible to recover files which fail CRC validation, but it is still possible to recover undamaged files which were inaccessible due to a corrupt archive structure. Generally this is useful for non-solid archives. In a damaged solid archive, often, only the first file may be recovered during the second stage.

When this stage has been completed, a new archive will be created, called *_reconst.rar*.

While the recovery process is in operation, WinRAR may prompt the user for assistance when suspicious files are located.

Suspicious entry <possible filename>.   Add it to archive: Yes/No/All

Answer 'Y' to add this entry to the file *_recover.rar*.

This command is the command line equivalent of the <u>file management</u> command <u>Repair archive</u>.

Example:

winrar r buggy.rar

Command **RR[N]** - add data recovery record

Optionally, redundant information (recovery record) may be added to an archive, incurring a small penalty in archive size, which will help to recover archived files in the case of a diskette failure or other data losses.

A recovery record may contain up to 32768 recovery sectors. If the portion of the damaged data is continuous then each sector is able to recover 512 bytes of damaged information, although this value may decrease for multiple areas of damage.

The number of sectors may be specified directly in the "rr[N]" command (N = 1, 2 .. 32768). If it is not specified by the user, it will be selected automatically according to the archive size: a size of the recovery information will be about 1% of the total archive size, usually allowing the recovery of up to 0.6% of the total archive size of continuously damaged data.

You may also append <n> with the percent character to specify the recovery record size in percents to the archive size.

The size of the recovery record may be approximately calculated as :

<archive size> / 256 + <number of recovery sectors> * 512 bytes.

This command is the command line equivalent of the archive management command Protect archive from damage.

Examples:

a) add a data recovery record of the default size (1%) to the archive *backup*

winrar rr backup

b) add a data recovery record to the archive *pictures* and set its size to 3% of the total archive size

winrar rr3% pictures

Command **S[name]** - convert an archive to a self-extracting

This command creates a <u>self-extracting archive (SFX)</u> which, when executed, extracts the files contained within it.

It is also possible to make an SFX archive as the first of a multi-volume sequence, but it should be noted that the size will be larger by the amount of the SFX-module. Should SFX volumes be created using the command <u>**a**</u> with the switches: -v[<size>] -sfx, then you do not need to ensure the volume size - the first volume will be automatically created with the correct size.

This command is the command line equivalent of the <u>archive management</u> command <u>Convert archive to SFX</u>.

Example:

WinRAR s diamant

By default, WinRAR uses for RAR archives SFX module file *<u>default.sfx</u>*, which must exist in the same folder as *winrar.exe* and, for ZIP archives, *<u>zip.sfx</u>* module.   It is possible to specify, in the "s" command, an alternate SFX module name.

For instance, to add the DOS SFX module *<u>dos.sfx</u>* execute:

WinRAR sdos.sfx myinst

Note that the default DOS SFX module cannot process archives with a <u>dictionary size</u> larger than 64 KB.

Command **S-** - remove SFX module

This command removes a self-extracting module from the already existing <u>self-extracting archive (SFX)</u>.

WinRAR creates a new archive without SFX module, the original SFX archive is not deleted.

Example:

WinRAR s- rarsetup.exe

Command **T** - test archived files

This command performs a dummy file extraction, writing nothing to the output stream, in order to validate the specified file(s). This is the command line equivalent of the <u>archive management</u> command <u>Test files</u>.

Example:

test all ***.rar** archives on the current disk

WinRAR t -r *.rar

Command **U** - update files within an archive

This command, as well as <u>command f</u>, updates files in the archive only if they are older than files being added, but unlike "f"**,** it will add new files as well.

This is the command line equivalent of the command <u>Add to archive</u> with "Add and update files" update mode selected in the <u>Archive name and parameters dialog</u>.

Because archive volume modification is disabled, this command is not applicable to volumes.

See also: <u>command A - add files to archive</u>

Command **X** - extract files from an archive with full paths

Extract files and folder with full paths. The folder structure, saved in the archive, is completely restored. This is the command line equivalent of the <u>archive management</u> command <u>Extract</u>.

In a similar manner as <u>command e</u> this command can extract files both to the current folder and to a specified folder.

For example, command:

WinRAR x Fonts *.ttf

will extract *.ttf files from the archive Fonts to the current folder, but the command:

WinRAR x Fonts *.ttf NewFonts

will extract *.ttf files from the archive Fonts to the folder **NewFonts**

You need to use the trailing backslash as in the example above for denoting the destination folder.

Alphabetic switches list

-ac	clear Archive attribute after compression or extraction
-ag[format]	generate archive name using the current date and time
-ao	add files with Archive attribute set
-ap	set path inside archive
-as	synchronize archive contents
-av	apply authenticity verification
-av-	disable adding authenticity verification
-cl	convert file names to lower case
-cu	convert file names to upper case
-df	delete files after archiving
-dh	open shared files
-ds	do not sort archiving files
-ep	exclude paths from names
-ep1	exclude base folder from names
-ep2	expand paths to full
-f	freshen files
-ibck	run WinRAR in background
-inul	disable error messages
-k	lock archive
-kb	keep broken extracted files
-m\<n\>	set compression method
-md\<n\>	select dictionary size
-mm	multimedia compression
-mmf	force multimedia compression
-os	save NTFS streams
-ow	process file security information
-o+	overwrite existing files
-o-	do not overwrite existing files
-p\<pwd\>	set password
-r	recurse subfolders
-r0	recurse subfolders for wildcard names only
-rr[N]	add data recovery record
-s	create a solid archive
-s\<N\>	create solid groups using file count
-se	create solid groups using file extension

-sfx[name]	create self-extracting archive
-sv	create independent solid volumes
-sv-	create dependent solid volumes
-s-	disable solid archiving
-tk	keep original archive time
-tl	set archive time to newest file
-tn\<time\>	process files newer than the specified time
-to\<time\>	process files older than the specified time
-u	update files
-v\<n\>[k|b|f|m|M]	create volumes
-vd	erase disk contents before creating volume
-vp	pause before each volume
-x\<file\>	exclude the specified file
-x@\<listfile\>	exclude files using a specified list file
-y	assume Yes on all queries
-z\<file\>	read archive comment from file
--	stop switches scanning

Switch **-AC** - clear Archive attribute

This switch is designed for backup purposes. If it is used when archiving, "Archive" file attribute will be cleared after compression. Or if it was used when extracting, WinRAR will clear "Archive" attribute of extracted files.

Switch **-AG[format]** - generate archive name using the current date and time

   Appends the current date string to an archive name when creating an archive. Useful for daily backups.

   Format of the appending string is defined by the optional *format* parameter or by "YYYYMMDDHHMMSS" if this parameter is absent. Format string may include the following characters:

Y	year
M	month
MMM	month as text string (Jan, Feb, etc.)
W	a week number (a week starts with Monday)
A	day of week (Monday is 1, Sunday is 7)
D	day of month
E	day of year
H	hours
M	minutes (treated as minutes if encountered after hours)
S	seconds

All other characters are added to an archive name without changes.

Examples:

1) use the default YYYYMMDDHHMMSS format

   winrar a -ag backup

2) use DD-MMM-YY format

   winrar a -agDD-MMM-YY backup

3) use YYYYMMDDHHMM format

   winrar a -agYYYYMMDDHHMM backup

4) use YYYY-WW-A format

   winrar a -agYYYY-WW-A backup

Switch **-AO**   -   add files with Archive attribute set

This switch is designed for backup purposes. If it is used when archiving, only files with "Archive" file attribute will be added to archive.

Example:

add all disk C: files with "Archive" attribute set to the 'f:backup' and clear files Archive attribute

WinRAR a -r -ac -ao f:backup c:*.*

Switch **-AP\<path>** - set path inside archive

The path defined using this switch is merged to file names when adding files to an archive and removed from file names when extracting.

For example, if you wish to add the file *readme.txt* to the folder *DOCS\ENG* of archive *release*, you may run:

WinRAR a -apDOCS\ENG release readme.txt

or to extract *ENG* to the current folder:

WinRAR x -apDOCS release DOCS\ENG*.*

Switch **-AS** -   synchronize archive contents

If this switch is used when archiving, those archived files which are not present in the list of the currently added files, will be deleted from archive. It is convenient to use this switch in combination with -**u** to synchronize contents of an archive and an archiving folder.

For example, after the command:

winrar a -u -as backup sources*.cpp

the archive *backup.rar* will contain only *.cpp files from folder *sources*, all other files will be deleted from the archive. It looks similar to creating a new archive, but with the one important exception: if no files are modified since a last backup, the operation is performed much faster than creation of a new archive.

Switch **-AV** -   apply authenticity verification

If this switch is used, WinRAR will put, in every new and updated archive, information concerning the creator, last update time and archive name. If an archive, containing authenticity verification, is being modified and this switch is not specified, the authenticity verification information will be removed.

In <u>archive management mode</u> it is always possible to read the authenticity information using the <u>Show archive information</u> command. Authenticity information is supported only by <u>RAR archive format</u>.

When creating archive volumes with the "-av" switch, authenticity information will be added to each volume.

In order to enable the authenticity verification feature, the program **must be registered**.   Please read the <u>License and registering information</u> chapter for more information about registering.

If this switch is not specified, authenticity information will be added only if the option "Put authenticity verification" in the default <u>compression profile</u> is switched on.

Example:

add all files from the current folder to the archive "*release"* and add authenticity verification to this archive

WinRAR a -av release

Switch **-AV-** - disable adding authenticity verification

This switch disables the adding of authenticity verification information even if the option "Put authenticity verification" in the default <u>compression profile</u> is on.

Switch **-CL** - convert file names to lower case

   When this switch is used, names of all files extracted from an archive, added to an archive, modified or update within an archive, will be converted to lower case. This is sometimes useful when moving an archive from a case insensitive OS to a case sensitive OS, for example extracting under UNIX, an archive created under DOS.

Example:

extract all files from port.rar converting names to lower case

WinRAR x -cl port

Switch **-CU** - convert file names to upper case

When this switch is used, the names of all files extracted from an archive, added to an archive, modified or update within an archive, will be converted to upper case.

Example:

extract all files from port.rar converting names to upper case

WinRAR x -cu port

Switch **-DF** - delete files after archiving

Move files to archive. This switch in combination with the command **a** performs the same action as the command **m**.

Switch **-DH** - open shared files

Allows to process files opened by other applications for writing.

This switch could be dangerous, because it allows a file to be archived, while that file may be in the process of being modified by an other application. **Use with great care**.

If this switch is not specified, processing of shared files depends on the option "Open shared files" in the default compression profile.

Example:

WinRAR a -dh dbf *.dbf

Switch **-DS** - do not sort archiving files

This switch is meaningful only for <u>solid</u> RAR archives. The compression ratio in solid archives is dependent upon the file order. By default WinRAR sorts files, to be added to a solid archive, by extension. You may disable this sorting using the -ds switch and try to set a more optimal file order. Generally files with similar data should be placed closely together.

Example:

WinRAR a -s -ds tools *.com *.exe *.doc *.txt *.*

Files will be added in the following order: *.com, *.exe, *.doc, *.txt, all other file types.

Note:

file <u>*rarfiles.lst*</u> also may be used to define the order of files in solid archives

Switch **-EP** - exclude paths from names

   With this switch, files are added to an archive without including the path information. This could result in multiple files existing in the archive with the same name.

Example:

archive without paths all *.bas files from the current disk

WinRAR a -r -ep bsources *.bas

Switch **-EP1** -   exclude base folder from names

Do not store the path entered in the command line.

Example:

all files and folders from the folder *tmp* will be added to the archive *test*, but the path in the archived names will not include 'tmp\'

WinRAR   a   -r   -ep1   test   tmp*

This is equivalent to the commands:

cd tmp
WinRAR a -r ..\\test
cd ..

Switch **-EP2** - expand paths to full

Store full file paths (except a drive letter and leading backslash) when archiving.

Switch **-F** - freshen files

May be used with archive extraction or creation. The command string "a -f" is an equivalent to the command f. You could also use the switch "-f" with the command m.

If the switch "-f" is used with the commands x or e, then only old files will be replaced with new versions extracted from the archive. Archived files, without a matching unpacked file, will not be extracted.

The shell mode equivalent of this switch is the "Fresh existing files only" option in the Archive name and parameters dialog and "Fresh existing files" option in the Extraction path and options dialog.

Switch **-IBCK**   -   run WinRAR in background

Minimize WinRAR to tray when starting an archiving or extraction operation.

The shell mode equivalent of this switch is the "Background archiving" option in the <u>Archive name and parameters</u> dialog.

Switch **-INUL** - disable error messages

Disable WinRAR error messages.

Switch **-K**   -   lock archive

This switch prevents any further archive modifications by WinRAR.

Switch **-KB** - keep broken extracted files

This switch disables WinRAR to remove broken files after extraction.

Switch **-M<n>** - set compression method

Choosing <n> from 0 to 5 you may <u>select an appropriate compression method</u>

-m0	*Store*	Add files to archive without compression
-m1	*Fastest*	Fastest method (least compressive)
-m2	*Fast*	Fast compression method
-m3	*Normal*	Normal (default) compression method
-m4	*Good*	Good compression method (more compressive)
-m5	*Best*	Best compression method (most compressive but also most slow)

By default WinRAR uses "-m3" method (Normal compression).

The compression method also can be selected through the "Compression method" list in the <u>Archive name and parameters dialog</u>.

Switch **-MD<n>** - select dictionary size

This switch allows <u>the selection of dictionary size</u> <n> in KB. <n> must be 64, 128, 256, 512 or 1024 or a letter 'a', 'b', 'c', 'd' or 'e' accordingly.

The sliding dictionary is a special memory area used by the compression algorithm. If the size of the file being compressed (or the total files size in the case of a solid archive) is greater than the dictionary size, then increasing the dictionary size will generally increase compression ratio, decrease packing speed and increase memory requirements.

The default sliding dictionary size in WinRAR is 1024 KB. In versions of RAR for Windows, Unix and OS/2   it is possible to select from one of five different sizes: 64, 128, 256, 512 or 1024 KB. Unlike compression, extraction speed is unaffected by dictionary size. In the version of RAR for DOS, the sliding dictionary size is fixed and equal to 64 KB, although RAR for DOS provides the capability to extract files from large dictionary archives.

ZIP archives always created using 32KB dictionary. Larger values cannot be used because of restrictions of ZIP format.

The amount of memory required for WinRAR to create RAR archives can be calculated as 5*<dictionary size>+2560KB. About 1 MB is required for extraction and 5*<dictionary size>+3584KB to update solid archives.

The dictionary size may also be selected through the "Dictionary size" list in the <u>Archive name and parameters</u> dialog.

Example:

create a <u>solid archive</u> stuff using a 512KB dictionary and the best compression method

WinRAR a -md512 -m5 -s   stuff

Switch **-MM** - multimedia compression

Enables a special multimedia compression algorithm. This is intended to be used primarily when compressing raw digital audio data such as WAV's up to four 8-bit or two 16-bit channels but also shows good results with true color (24-bit) bitmaps. An improvement in the compression ratio, of up to 30%, may be expected over normal compression. Multimedia compression can be used only with <u>RAR archives</u>.

During archiving of a file, in multimedia mode, RAR performs intelligent data analysis and may use the general or multimedia compression algorithm for different parts of the file depending upon which algorithm is the more suitable. Such analysis allows optimum performance when different data types exist in the same file (This is typical for STM and MOD files).

The switches <u>-m<N></u> "Set compression method" and <u>-s</u> "Create solid archive" also may be used with multimedia compression, but they influence only those parts compressed with the general algorithm.

If -mm is used with data which is not multimedia, the compression ratio, generally, will not be changed but, due to the multimedia analysis overhead, speed is always decreased. So it is not recommended to use -mm with data other than multimedia data.

Shell mode equivalent of this switch is the "Multimedia compression" option in the <u>Archive name and parameters</u> dialog.

Example:

add all *.wav files from the current folder to the archive samples using multimedia compression

WinRAR a -mm samples *.wav

Note: multimedia compression is designed only for a certain file types. E.g. it works well with WAV, STM, MOD and true color bitmaps, but will gain nothing for MID, GIF, JPG or 8-bit bitmaps.

Switch **-MMF** - force multimedia compression

    This switch works as the -mm with one exception: it always compress files as multimedia independent of the multimedia analysis results. Usually this leads to a worse compression ratio, but may be useful in the hypothetical case when RAR cannot correctly detect a multimedia file.

    Usually with "-mmf", archive size will increase, but sometimes it may improve compression for files which consist of only multimedia data (for example WAV, but not STM) due to the avoidance of possible data analysis inaccuracies.

Switch **-OS** - save NTFS streams

This switch has meaning only for NTFS file system under Windows NT and allows to save alternative data streams associated with a file. It is especially important under Windows 2000, which uses streams to keep some file dependent information like file descriptions. If you use WinRAR to backup your NTFS disks, it is recommended to specify this switch.

Shell mode equivalent of this switch is the "Save file streams" option in the <u>Archive name and parameters</u> dialog.

This switch is supported only for RAR archives.

Switch **-OW** - process file security information

Use this switch when archiving to save file security information and when extracting to restore it.

WinRAR stores file owner, group, file permissions and audit information with this switch, but only if you have necessary privileges to read them. Note that only NTFS file system supports the file based security.

Shell mode equivalent of this switch is the "Save file security data" option in the Archive name and parameters dialog.

Switch **-O+** - overwrite existing files

Enables existing files to be overwritten without a user prompt.

Switch **-O-** -   do not overwrite existing files

Enables the skipping of existing files without a user prompt.

Switch **-P<pwd>** - set password

Set a password **<pwd>** to encrypt files during archiving or to decrypt during extracting. The password is case-sensitive. If you omit the password in the command line, you will be prompted to enter it.

In the shell mode a password may be entered through <u>Enter default password</u> dialog or in the <u>Archive name and parameters</u> dialog.

Example:

add the contents of the folder "*games"* to the archive "*secret"*, using the password ZaBaToAd

WinRAR a -pZaBaToAd -r secret games*.*

Notes

1) encrypted <u>solid</u> archives cannot be updated;

2) if you wish to achieve real security do not use a password shorter than 8 characters or one which is easy to guess;

3) do not forget your passwords or your data will be completely lost.

Switch **-R** -   recurse subfolders

Enables subfolder recursion. May be used with the commands: **a, u, f, m, x, e, t, k, rr, c and s**.

When used with the commands **a, u, f or m,** files in all sub-folders will be processed as well as in the current working folder.

When used with the commands **x, e, t, k, rr, c or s**, archives in all sub-folders will be processed as well as in the current working folder.

Examples:

1) add the contents of the disk C to the archive **Backup**

WinRAR a -r Backup c:*.*

2) test all *.rar archives on the current disk

WinRAR t -r *.rar

Switch **-R0** - recurse subfolders for wildcard names only

Similar to <u>switch -r</u>, but when used with the commands **a**, **u**, **f**, **m** will recurse subfolders only for those names, which include wildcard characters '*' and '?'.

Switch **-RR[N]** -   add data recovery record

This switch is used when creating or modifying an archive, to add a data <u>recovery record</u>, containing <n> (n=1…32768) recovery sectors, to the archive. You may also append <n> with the percent character to specify the recovery record size in percents to the archive size.

Shell mode equivalent of this switch is the "Put recovery record" option in the <u>Archive name and parameters</u> dialog.

Examples:

a) add all *.dbf files from the current folder to the archive *WeeklyBackup* and add 8 sectors of data recovery record

WinRAR a -rr8 WeeklyBackup *.dbf

b) add all *.txt files from the current folder to the archive *Books* and set the recovery record size to 3% of the total archive size

WinRAR a -rr3% Books *.txt

See also the **<u>rr[N] command</u>** description and **<u>recovery record</u>** topic.

Switch -S - create solid archive

    Solid is a special archive type. Solid archiving significantly improves the compression ratio at the cost of archive update speed. This switch is meaningful only when creating a new RAR archive.

    Shell mode equivalent of this switch is the "Create solid archive" option in the Archive name and parameters dialog.

Example:

add all *.c and *.h files from the current folder to the solid archive *Sources*

WinRAR a -s Sources *.c *.h

Please refer to the **Solid archives** chapter for further information.

Switch **-S<N>** - create solid groups using file count

Similar to -s, but resets solid statistics after compressing <N> files. Usually decreases compression, but also decreases data losses in case of solid archive damage.

Switch **-SE**   -   create solid groups using extension

   Similar to -s, but reset <u>solid</u> statistics if file extension is changed. Usually decreases compression, but also decreases data losses in case of solid archive damage.

Switch **-SV** - create independent solid volumes

By default WinRAR tries to reset <u>solid</u> statistics as soon as possible when starting a new <u>volume</u>, but only if a lot enough data was packed after a previous reset (at least a few megabytes). This switch forces WinRAR to ignore packed data size and attempt to reset statistics for volumes of any size. It decreases compression, but increases chances to extract a part of data if one of solid volumes in volume set was lost or damaged.

Note that sometimes WinRAR cannot reset statistics even using this switch. For example, it cannot be done when compressing one large file split between several volumes. WinRAR is able to reset solid statistics only between separate files, but not inside of single file.

Ignored, if used to create non-volume archive.

Also you may put this option to <u>RAR environment variable</u> to use it in WinRAR shell.

Switch **-SV-** - create dependent solid volumes

Disables to reset <u>solid</u> statistics between <u>volumes</u>. It slightly increases compression, but significantly reduces chances to extract a part of data if one of solid volumes in volume set was lost or damaged.

Ignored, if used to create non-volume archive.

Also you may put this option to <u>RAR environment variable</u> to use it in WinRAR shell.

See also: <u>*switch -sv*</u>

Switch **-S-** - disable solid archiving

So not use <u>solid</u> archiving even if it was enabled in the default <u>compression profile</u>.

Switch **-SFX[name]** - create self-extracting archive

If this switch is used when creating a new archive, a <u>self-extracting archive (SFX)</u> will be created. By default WinRAR uses as its SFX module the file <u>Default.SFX</u> for RAR archives and <u>Zip.SFX</u> for ZIP archives. These modules must be in the same folder as winrar.exe. It is possible to specify in the "-sfx" switch an alternate SFX module name.

Shell mode equivalent of this switch is the "Create SFX archive" option in the <u>Archive name and parameters</u> dialog.

Note: the <u>DOS SFX module Dos.SFX</u> cannot process archives created with a <u>dictionary size</u> larger than 64 KB.

Examples:

a) create self-extracting solid volumes

WinRAR a -sfx -v360 -s Games

b) create archive using <u>WinCon.SFX</u> module

WinRAR a -sfxWinCon.SFX Gift.rar

See also **s[name]** command.

Switch **-TK** - keep original archive time

Prevents WinRAR from modifying the archive time when changing an archive.

Switch **-TL** - set archive time to newest file

Set the archive time to the time of the newest file in the archive. Forces WinRAR to set the time of a changed archive to the time of the newest file in the archive.

Switch **-TN<time>** - process files newer than the specified time

Use this switch to process only those files, which are newer than the specified time period. Format of the time string is:

[<*ndays*>**d**][<*nhours*>**h**][<*nminutes*>**m**][<*nseconds*>**s**]

For example, use switch -tn15d to process files newer than 15 days and -tn2h30m to process files newer than 2 hours 30 minutes.

Switch **-TO\<time\>** - process files older than the specified time

Use this switch to process only those files, which are older than the specified time period. Format of the time string is:

[*\<ndays\>***d**][*\<nhours\>***h**][*\<nminutes\>***m**][*\<nseconds\>***s**]

For example, use switch -to15d to process files older than 15 days and -to2h30m to process files older than 2 hours 15 minutes.

Switch **-U** - update files

   May be used with archive extraction or creation. The command string **a** **-u** is equivalent to the command **u**. You could also use the switch "-u" with the commands **m**.

   If the switch "-u" is used with the commands **x**   or **e**, then old files would be replaced only if new versions, extracted from the archive, are more recent, but unlike **-f** if an archived file has no matching unpacked file, it will still be extracted.

   Shell mode equivalent of this switch is the "Add and update files" option in the Archive name and parameters dialog and "Extract and update files" option in the Extraction path and options dialog.

Switch **-V\<n>[k|b|f|m|M]** - create volumes

Create volumes with size=**\<n>***1000.

By default this switch uses **\<n>** as thousands (1000) of bytes (not 1024 x bytes). You may also enter the size in kilobytes using the symbol 'k', in bytes using the symbol 'b', in megabytes - 'm', millions of bytes - 'M' or select one of several predefined values using the symbol 'f' following the numerical value. Predefined values can be 360, 720, 1200, 1440 or 2880 and replaced with corresponding floppy disk size. If the size is omitted, autodetection will be used.

If volumes are created on removable media, then after the first volume has been created, user will be prompted with:

Create next volume: Yes/No/Create All

At this moment in time, you should change the disks. Answering 'All' will cause all volumes to be created without a pause.

The first volume file in a multi-volume set will have an extension of .rar, following volumes are numbered from .R00 to .R99.

When extracting or testing a multi-volume archive, you must use only the first volume name (*.rar). If there is no next volume on the drive, the user will be prompted with:

Insert disk with \<next volume name>. OK/Cancel

Insert the disk with the correct volume and press OK.

If while extracting, the next volume is not found, RAR will abort with the error message:

Cannot find \<volume name>

Archive volumes may not be modified. The commands **d**, **f**, **u** or **s** can not be used with multi-volume sets. The command **a** may be used only for the creation of a new multi-volume set.

It is possible, although unlikely, that the file size, of a file in a multi-volume set, could be greater than it's uncompressed size. This is due to the fact that 'storing' (no compression if size increases) cannot be enabled for multi-volume sets.

Archive volumes may be solid and/or self-extracting.

Shell mode equivalent of this switch is the "Volume size" field in the Archive name and parameters dialog.

Example:

create a 1200000 bytes size solid, self-extracting volumes

WinRAR a -v1200 -s -sfx bitmaps

Switch **-VD** - erase disk contents before creating volume

All files and folders on the target disk will be erased before starting archiving operation, when '-vd' is used.   If you create volumes, erasing will be performed before the creation of each volume, giving you the chance to archive to non-empty removable disks. You must be sure that disks do not contain any useful information.

The switch applies only to removable media, the hard disk cannot be erased using it.

Switch **-VP** -   pause before each volume

By default WinRAR asks for confirmation before creating or unpacking next volume only for removable drives.This switch forces WinRAR to ask such confirmation always. It can be useful if disk space is limited and you wish to copy each volume to another media immediately after creating.

Switch **-X<file>** - exclude specified file

Exclude specified file from operation, wildcards may be used. You may specify the switch **-x** several times on the same command line.

Example:

add all *.exe files, except those beginning with **f,** to the archive **bin**

WinRAR a -xf*.* bin *.exe

Switch **-X@<listfile>** - exclude files using a specified list file

Exclude files which names are present in the listfile **<listfile>**

Example:

add all *.exe files, except those which names are present in the *list.txt,*   to the archive **bin**

WinRAR a -x@list.txt bin *.exe

Switch **-Y** - assume Yes on all queries

If this switch is specified, Yes will be the default and automatic reply to all queries.

Switch **-Z\<file\>** - read archive comment from file

　　If this switch specified with any updating archive command, an archive comment will be read from the file and added to the archive.

Example:

add all files from the current folder to the <u>solid archive</u> *Receipts* with an archive comment from file *Receipts.diz*

WinRAR a -zReceipts.diz -s Receipts

Switch **--** - stop switches scanning

This switch tells to WinRAR that there is no more switches in the command line. It could be useful, if either archive or file name starts from '-' character. Without '--' switch such name would be treated as switch.

Example:

add all files from the current folder to the <u>solid</u> archive *-StrangeName*

WinRAR a -s -- -StrangeName

General settings dialog

To activate this dialog select "Settings…" command in <u>Options menu</u> and click on "General" tab. The dialog contents are described below.

System/Low priority

WinRAR uses this parameter to regulate system load in a multitasking environment. Usually the default priority is the best choice, so you do not need to activate this option, but if you frequently run WinRAR in the background while working with other applications, you may wish to set low priority.

System/Keep archives history

By default WinRAR keeps names of a few recently opened archives in <u>File menu</u>, so you may quickly access them again. But if you need to disable it, for example, for security purposes, you may clear this option.

System/Always on top

Place WinRAR window above all other programs. You may set it if you frequently use WinRAR as a drag and drop target.

Toolbar (large buttons, show buttons text, select buttons)

You may change the toolbar look here. Note that small buttons use only an 8 color palette, so if you have problems with displaying large WinRAR buttons, you may clear '*large buttons'* option.

Press "Select buttons…" to open the <u>dialog</u>, where you may specify, which toolbar buttons are to be displayed.

Interface/Enable sound

Enable WinRAR to produce sounds in case of errors or finishing long operations.

Interface/Show archive comment

Display <u>comment</u> window, if an opened archive has a comment.

Interface /Reuse existing window

If an attempt is made to open a new archive executing "WinRAR <arcname>" command or clicking on archive icon and a WinRAR window already exists, the archive will be opened in the already existing window. If this option is not enabled, a new window will be created.

Logging/Log errors to file

Write error messages and information on archive damage to the file *rar.log* in the same folder as WinRAR. This option is available only after <u>registration</u>. Use "View log…" command in <u>Options menu</u> to view contents of log file.

Logging/Limit log file size to <nnn> KB

Enables to limit size of *rar.log* file produced by WinRAR. The minimum allowed log file value is 50KB.

Compression settings dialog

To activate this dialog select "Settings…" command in <u>Options menu</u> and click on "Compression" tab. The dialog contents are described below. Note that most of compression options can be specified via the *Compression profiles/Create default* button.

More details, on different compression parameters, will be found in the topic <u>How to choose optimal archiving settings</u>.

Compression profiles/Create default

In the dialog displayed after pressing this button you may specify default values for most compression options. Online help is available for all sections of the dialog, simply press "Help" button at any time to read detailed options description.

Options entered in this dialog are stored in the default <u>compression profile</u>, which name is "Default Profile", and are automatically restored before every archiving operation.

Compression profiles/Organize

Opens the dialog to organize <u>compression profiles</u>. In this <u>Organize profiles</u> dialog you may delete existing profiles or edit their parameters. For example, you may rename a profile or set it as default. Read online help associated with this dialog for more information.

Default folder for archives

If this field is not empty and an archive name does not contain a full path, an archive will be created in the specified folder. For example, if you entered the path to your Desktop, archives created by WinRAR will appear on the Desktop.

If this field is empty and an archive name does not contain a full path, archives will be created in the same folder as the files archived.

Default folder for extracted files

You may enter here a name of the folder,   which will be used as a base to construct the destination folder in <u>Extract without confirmation</u> and <u>Extract files to the specified folder</u> commands. WinRAR builds the destination path in these extraction commands merging the default folder and an archive name. It may be convenient to enter Desktop path here, so you will immediately see unpacked data on your Desktop.

Append archive name to path

This option is used only if the default folder for extracted files is specified and it controls if archive name is appended to the default folder name when constructing the destination path.

Paths settings dialog

To activate this dialog select "Settings…" command in <u>Options menu</u> and click on "Paths" tab. The dialog contents are described below.

Folder for temporary files

WinRAR uses this folder to create temporary files. If this field is blank all temporary files and folders will be created in the current folder.

Folder for temporary files/Use only when working with removable disks

For hard disks generally it is faster to create a temporary archive in the current folder, but for floppies it is more efficient to create an archive on hard disk and then copy it to floppy. To implement such behavior you should enter *Folder for temporary files* and switch on this option.

Folder for temporary files/Browse

Press this button to select temporary folder from tree.

Start-up folder

You may enter here a folder, which will be opened each time WinRAR is started. Note that this option has meaning only if *Restore last working folder on start-up* option is switched off, otherwise the last opened folder will be set.

Start-up/Restore last working folder on start-up

If this option is enabled, WinRAR will set the last viewed folder, when executed without parameters.

Start-up /Browse

Press this button to browse for start-up folder.

File list settings dialog

To activate this dialog select "Settings…" command in <u>Options menu</u> and click on "File list" tab. The dialog contents are described below. Note that "Show grid lines", "Full row select" and "Selection" options may have no effect in Windows 95 with old common controls library. In later Windows versions all options are available.

List type (List view or Details)

Selects either *List view* (multicolumn, only file icons are displayed) or *Details view* (single column, an additional size, date and type information is provided for each file). The default mode is *Details view.*

List style/Show grid lines

Show grid lines in the file list.

List style/Full row select

Use the full row cursor.

File names/Show archives first

Display archives in the file list before all other files regardless the current sort mode.

File names/Allow all uppercase names

By default WinRAR displays uppercase file names as lowercase. Switching this option on forces WinRAR to show all names in the original case.

File names/Merge volumes contents

If this option is enabled and you open the first <u>volume</u>, WinRAR also tries to read and display contents of all next volumes available in the same folder as the first volume. So instead of looking at files contained only in the first volume, you will see files contained in the first and all following volumes.

File names/Set font…

Select font for the file list.

Selection

Here you may set different styles of mouse selection in the list. Set "Single click to open an item", if you wish Internet browsers style selection. In this mode you also may choose if you need to underline file names.   The default WinRAR mode is "Double click to open an item"

Viewer settings dialog

To activate this dialog select "Settings…" command in <u>Options menu</u> and click on "Viewer" tab. The dialog contents are described below.

On Enter run

Selects default action, when the user presses Enter on a file. Possible actions are:

Internal viewer	Use the <u>internal WinRAR viewer</u>
External viewer	Use an external viewer. You should define the name in the "External viewer name" field
Associated program	Use default Windows viewer for file type
Ask	Ask the user for the desired viewer type each time after pressing Enter

Note that these settings are ignored for two file types: archives (in <u>file management mode</u>) and executables (in both modes). On Enter WinRAR always tries to open archives and to run exe files. If Enter is pressed on an archived exe file, WinRAR extracts the entire archive contents to a temporary folder, runs the exe file, waits for it to terminate, updates the source archive if necessary and then deletes the temporary folder and all of its contents. This provides the convenient method of installing applications directly from archives.

Unlike Enter, <u>View file</u> command always opens a file in the <u>internal WinRAR viewer</u>.

Internal viewer /Use DOS encoding

Depending upon this option the internal viewer will open files using either Windows (if the option is not set) or DOS codepage. It is also possible to change the codepage of the currently opened file using "View as…" commands in the "View" menu of the internal viewer.

Internal viewer /Reuse existing window

If this option is off, WinRAR creates a separate internal viewer window for each viewing file. When the option is on, the already existing window is reused, so only one instance of the viewer is opened.

External viewer name

You may enter here the name of program, which will be used as viewer, if you set option "On Enter run external viewer". A name of the file to view will be passed to this program as a single parameter.

Integration settings dialog

To activate this dialog in WinRAR select "Settings…" command in <u>Options menu</u> and click on "Integration" tab. The same set of options also is available when installing WinRAR, so it is possible to change the described below options both during installation and later, in WinRAR settings.

Associate WinRAR with (RAR, ZIP, CAB, ARJ, LZH, etc.)

You may select here, for which archive formats WinRAR will be registered as the default viewer. It is a good idea to leave these options selected, as it will allow you to open archives in WinRAR simply pressing Enter on an archive name or icon in Explorer or Desktop.

Interface/Put WinRAR to Desktop

Put WinRAR icon to the Desktop.

Interface/Put WinRAR to Start Menu

Put WinRAR icon to the Start Menu.

Interface/Create WinRAR program group

Create a WinRAR program group in Start Menu/Programs

Shell integration/Integrate WinRAR into shell

Allows the use of <u>context menus</u> and <u>drag and drop</u> for handling WinRAR archives.

Shell integration/Cascaded context menus

Place all items added by WinRAR to file and archive context menus into submenu.

Shell integration/Icons in context menus

Add small icons to items added by WinRAR to file and archive context menus.

Compression profiles

Compression profile is a set of different compression options, which can be quickly retrieved before starting an archiving operation. Instead of specifying an archive type, a volume size, a compression method and other options each time when you need to make a new archive, you may create several profiles storing options for your typical archiving operations and later select a required profile from the menu to restore all the options.

Compression profiles have names, which are displayed in the profiles list. It is recommended to give sensible names to profiles, it simplifies their further usage. You may select a profile in Archive name and parameters dialog, just press the "Profiles" button, choose a required item in the drop down list and all options saved in the profile will be restored. WinRAR provides a few predefined profiles, for example, for creating an e-mail attachment and for files backup, but you may delete them if you wish.

There are two ways to create a new profile. You may open "Archive name and parameters" dialog, set the desired options, press the button "Profiles" and select the menu item "Save current settings to a new profile". The Profile parameters dialog which appears contains the profile name field, where you should enter a name of the new profile. A few profile options are also available in this dialog. The most important option is "Set profile as default". If you set it, the profile will be automatically selected before every archiving operation. Other options allow to save archive and file names, create a shortcut on Desktop and immediately run archiving after selecting a profile. Read the description of the Profile parameters dialog for detailed information about these options.

Another method of creating a new profile is to press the "Create default" button in the Compression settings dialog. In this case you only need to set the desired archiving options in the dialog which appears and press the "OK" button. The new profile created by this method becomes the default profile with the name "Default Profile". Unlike the first, this method does not provide access to advanced profile parameters such as storing archive and file names or creating a shortcut and it is convenient to create the default profile without additional questions. But if you need more flexibility, use the first method.

You cannot change compression options stored in a profile, but it is possible to change profile parameters, for example its name or default status. To edit profile parameters or to delete existing profiles use the Organize profiles command, which is accessible from both the profiles menu in "Archive name and parameters" dialog and from the "Compression settings" dialog. Using this command you may assign a new profile as default or remove the default status from all profiles.

"Profile parameters" dialog

In this dialog you can describe a new <u>compression profile</u> or edit parameters of an existing profile. It contains the following items:

Profile name

The profile name is a text string describing a profile. It may contain space characters, for example, the name "Create e-mail attachment" is valid. It is recommended to give sensible names to profiles, it simplifies their identification and management. This field is required and cannot be empty

Save archive name

If this option is on, the archive name specified in the field below is saved in the profile and will be restored when selecting this profile. If the option is off, an archive name will be proposed by WinRAR, as usual.

Save selected file names

If this option is on, the file names specified in the field below are saved in the profile. So if you select the profile later, WinRAR will compress files saved in the profile instead of files selected before activating the profile.

Initially this field contains names of files currently selected in WinRAR file list, but you may edit them or enter new names here. Folder names and wildcards are allowed. For example, you may create a profile containing "C:\" as the selected file name to backup the whole C: disk.

If this option is off, WinRAR will compress currently selected files.

Set profile as default

If a profile is marked as default, it will be automatically selected when opening the <u>Archive name and parameters</u> dialog before every archiving operation. It is convenient to create a default profile with your favorite compression options, so you do not need to set them every time. Only one profile can be set as default. If no profiles are marked as default, the archiving dialog will be initialized by the standard set of archiving options.

Immediate execution

If you select a profile having the *Immediate execution* parameter set on, the archiving operation will be started immediately, without possibility to modify compression settings or an archive name. It can be useful for routine compression operations, because you do not need to press the "OK" button every time after selecting such a profile.

Create shortcut on Desktop

This option is available only if *Save selected file names* option is enabled. If selected, WinRAR will create the icon with a profile name on Desktop, so you may activate a profile later simply clicking on this icon. For example, you may create a profile to backup your data and put its icon to the Desktop to simplify this operation.

"Organize profiles" dialog

In this dialog you may edit some parameters of existing compression profiles or delete them. You cannot create a new profile here, methods of creating a new profile are described in the Compression profiles topic.

To edit profile parameters you need to put the cursor to a profile name, press the "Edit" button and set parameters in the Profile parameters dialog to desired values. Note that compression options stored in the profile cannot be changed, you may modify only a few profile related parameters like its name and default status. If you need to modify compression options, you need to create a new profile having the same name as the existing profile.

To delete a profile put the cursor to its name and press the "Delete" button.

You may easily find the default profile in the list of profiles in this dialog, it has the small WinRAR icon ("books") to the left of its name.

RAR environment variable

   Default switches may be added to the Windows environment variable, RAR, using the SET command. Most of switches specified in this variable are used only when WinRAR executed in the <u>command line mode</u>. Switches <u>**-cl**</u>, <u>**-cu**</u>, <u>**-tk**</u>, <u>**-tl**</u>, <u>**-p**</u> are used both in shell and in command line modes.

Example

The command

SET RAR=-s -m5 -md1024

will force WinRAR to create <u>solid archives</u> using best compression and a 1024 KB dictionary when executed in the command line mode.

RARFILES.LST - set file order in solid archives

Files in a solid archive are usually sorted by extension. It is possible to set an alternative file order using a special file, **rarfiles.lst** (this should be in the same folder as Winrar.exe). It is already provided in the WinRAR distributive, but may be customized for user files set. This is a plain text file, which defines the order of files when a solid archive is created. The file *rarfiles.lst* may contain file names, wildcards and a special entry - **$default**. The default entry defines the place in the order list for files not matched with other entries in *rarfiles.lst*.

Tips to provide improved compression and speed of operation:

- Similar files should be grouped together in the archive if possible;

- Frequently accessed files should be placed at the beginning.

Example:

this is a simple example of *rarfiles.lst*

file_id.diz

readme.*

*.doc

*.txt

*.hlp

*.inf

*.exe

*.dll

$default

*.rar

GUI RAR and ZIP SFX modules (Default.SFX and Zip.SFX)

Using these two modules you may create GUI (graphic mode) self-extracting archives for 32-bit Windows version (Windows 95, 98, NT and so on). These modules cannot be executed under Windows 3.1 or DOS.

Use *Default.SFX* module for RAR archives and *Zip.SFX* for ZIP archives.

Both these modules support simple setup commands. You may put them to the SFX archive comment. Setup commands are listed below. Click on the command name for the detailed description.

Delete	Delete a file before extraction
ExtSign	Allow an external signature
License	Display a program license
Overwrite	Select files overwrite mode
Path	Set the default destination path
Presetup	Run the specified program before extraction
Setup	Run the specified program after successful extraction
Silent	Skip the start dialog
TempMode	Unpack to the temporary folder
Text	Add text to the SFX dialog text window
Title	Set SFX dialog title

Here you may look at the simple example of the complete installation script.

Note

It is allowed to edit Windows resources contained in SFX modules to adapt them for your needs. For example, you may wish to add bitmaps to the start dialog. SFX modules are compressed by UPX tool, so you need their original non-compressed versions to edit resources, which are present on http://www.rarsoft.com, in the archive *UnpSFX.rar*.

WinRAR does not provide tools or documentation for modifying resources. It is rather complicated process and if you wish to do so, you must already have a resource editor and you must know how to work with it. But you do not need to edit resources if the standard SFX start dialog is acceptable for you.

SFX commands: Delete

Delete=<filename>

    Delete the specified file in the destination folder before extraction. Several *Delete* commands are allowed.

    If a file specified in the *Delete* command is locked and cannot be deleted, SFX module will try to rename it to temporary name before extraction and delete after Windows reboot. Success of this operation depends on Windows version.

Example:

Delete=winrar95.exe
Delete=rarlng.dll

SFX commands: ExtSign

ExtSign

   Informs SFX that an additional data in a free format may be present at the end of archive. Its main purpose is to allow to sign SFX archive using external programs. If this command is not specified, SFX may display an error message when encountering an unknown data at the end of archive.

Example:

ExtSign

SFX commands: License

License=<title of the license dialog>
{
license text1
license text2
…
}

Display the software license when starting SFX. User may either accept it and continue extraction or decline and quit.

SFX module merges and reformats the specified text strings to fit them optimally into the dialog. So if you wish to start a new paragraph, you need to put the empty string before it.

A few HTML tags are recognized and processed in the output text:

<b>, <i>, <h?>, <u>, <s>, <font size=? color="#??????" face="…">, <br>, <p>

Refer to any HTML manual for detailed description of these tags. As it is important to keep a size of SFX module reasonably small, HTML support is very limited, but it should be still enough to improve text look.

Example:

License=End user license agreement
{
All copyrights to RAR are exclusively owned by the author.

This program is shareware. Anyone may use this software during a test period.
Following this test period, you MUST register.
}

SFX commands: Overwrite

Overwrite=[n]

    If 'n' is 0, the user will be asked before overwriting existing files. It is the default behavior and the O*verwrite* command does not need to be specified for it. If 'n' is absent or equal to '1', all files are overwritten without a confirmation. If 'n' is equal to '2', all existing files will not be overwritten.

Example:

Overwrite=1

SFX commands: Path

Path=<path>

    Set the default destination path for unpacked files. Absolute paths started from '<drive letter>:' are used without changes. If *<path>* contains only a name, it will be appended to the path of the "Program Files" folder. If you wish to disable such behaviour and create the specified folder in the current folder, start *<path>* definition from '.\' characters.

Examples:

a) set the default path to "Program Files*Calc 3.05"*

Path=Calc 3.05

b) set the default path to "*C:\Calc*":

Path=C:\Calc

c) set "*Calc*" folder without any preceding text as the default path:

Path=.\Calc

SFX commands: Presetup

Presetup=<program>

SFX will try to execute *<program>* before starting extraction. The destination folder is set as the current before executing *<program>*. You may use this command, for example, to remove a previous version of program, when installing a new version over the old one.

Example:

Presetup=uninstall.exe /clean

SFX commands: Setup

Setup=\<program>

    SFX will try to execute *\<program>* after successful extraction. The folder containing extracted files is set as the current before executing *\<program>*

Example:

Setup=setup.exe

Notes

1) If you have problems to use SFX to run InstallShield *setup.exe*, try to execute "setup.exe /SMS" instead of simple "setup.exe". This switch allows SFX to detect termination of the InstallShield setup program.

2) All switches specified in SFX command line are passed to a program from ***Setup=\<program>*** command. SFX itself understands only -s switch, which forces the silent install mode without displaying the start dialog.

SFX commands: Silent

Silent[=Param]

Start extraction without displaying the start dialog.

Param can be either 1 or 2. If *Param* is 1, the start dialog is completely hidden, including the progress bar and file names. If *Param* is 2, the confirmation to start extracting is skipped, but users still see performing of   the archive unpacking.

Example:

Silent=2

SFX commands: TempMode

TempMode=[Question][@Title]

    This command forces SFX to create a temporary folder, extract all files to it, start the program specified in *Setup* command and remove the temporary folder including all its contents after completing the *Setup* program. The SFX automatically sets the <u>silent mode</u> to skip the the start dialog when performing these operations. If *TempMode* command is present, a script should also have *Setup* command and must not include *Path* command.

    TempMode command may have the optional string parameter, which is used to define a question and question title displayed before extraction. In such case extraction is started only if user selects "Yes" button.

Examples:

a) TempMode

b) TempMode=Do you wish to continue installation of Calculator 3.05?@Calculator setup

SFX commands: Text

This command supports two versions of the syntax:

a)

Text=<string>

b)

Text
{
string1
string2
…
}

It adds the specified text strings to the text output window of SFX module. When SFX module encounters *Text* command the first time, it resets the default contents of this window before adding *<string>*. Following commands append *<string>* to the already existing text.

Depending on the used syntax this command may add either a single string or several strings at once.

When the second version of the syntax is used, SFX module merges and reformats the specified text strings to fit them optimally into the dialog. So if you wish to start a new paragraph, you need to put the empty string before it.

A few HTML tags are recognized and processed in the output text:

<b>, <i>, <h?>, <u>, <s>, <font size=? color="#??????" face="…">, <br>, <p>

Refer to any HTML manual for detailed description of these tags. As it is important to keep a size of SFX module reasonably small, HTML support is very limited, but it should be still enough to improve text look.

Examples:

a) add the single string to the dialog window
Text=Here is the my new program

b) add the specified text to the dialog window
Text
{
*   Most interesting features of this program are:*

- support of the windows clipboard;

- processing of files up to 10KB size each;
}

SFX commands: Title

Title=<title>

Set a title of SFX window.

Example:

Title=Calculator, version 3.05

SFX commands: script sample

    The script below sets the dialog title to "Calculator 3.05", changes text displayed in the dialog, sets the default extraction path to "Program Files\Calculator", enables overwriting of the already existing files and executes setup.exe after extracting all files.


```
Title=Calculator 3.05
Text
{
Calculator is shareware. Anyone may use this
software during a test period of 40 days.
Following this test period or less, if you wish
to continue to use Calculator, you MUST register.
}
Path=Calculator
Overwrite=1
Setup=setup.exe
```

Console RAR SFX module (WinCon.SFX)

Using this module you may create <u>self-extracting archives</u>, which can be extracted in text mode under any 32-bit Windows version (Windows 95, 98, NT and so on). These modules cannot be executed under Windows 3.1 or DOS.

This module supports the following command line switches:

-e   Extract from archive (default action)

-t   Test archive files

-v   Verbosely list contents of archive

-?   Show help

DOS and OS/2 RAR SFX modules (Dos.SFX and Os2.SFX)

Using this modules you may create <u>self-extracting archives</u>, which can be extracted in text mode under DOS (Dos.SFX module) or OS/2 (Os2.SFX). DOS SFX module can also work in a DOS box under OS/2, Windows and other OS in DOS emulation mode. OS/2 SFX module works only under OS/2

Both modules support the same set of command line switches:

-e   Extract from archive (default action)

-t   Test archive files

-v   Verbosely list contents of archive

-?   Show help

DOS SFX module cannot extract archives, which were created with <u>dictionary size</u> larger than 64KB and it does not support long file names. Other SFX modules do not have such limitations.

Frequently asked questions

Questions listed in this FAQ

Q: Is WinRAR Year 2000 compliant ?

Q: I still cannot understand how to use WinRAR to extract files.

Q.   When I download a RAR archive using Netscape Navigator or Communicator, the file is corrupt, what's wrong?

Q: RAR incorporates a number of different compression "methods", what are the advantages and disadvantages of using them and which one would you recommend for daily use?

Q: I've heard a lot about "Solid" archives. What are they and how can I use them?

Q: How could a user of my BBS (E-mail system, FTP server etc.) extract files from RAR archives while RAR is shareware and one must register after a 40 day evaluation period?

Q: Where can I get the latest releases of WinRAR?

Q: I received "CRC error" message when extracting. What does it mean?

Q: I failed to extract files from a solid multivolume RAR archive because one archive volume was damaged (bad floppy diskette). Help me!

Q: There appear to be no facilities available to convert my existing archived files to RAR format.

Q: I forgot my password, please help me!

Q: Why WinRAR does not delete its temporary files in the Windows temporary folder?

Questions and answers

Q: Is WinRAR Year 2000 compliant ?

A: Yes. WinRAR uses the 32-bit DOS date format internally, which is able to represent years up to 2100. WinRAR functionality does not perform date subtractions, so it has no problems in this area.

Q: I still cannot understand how to use WinRAR to extract files.

A: Please read <u>Shell and command line mode</u> topic. It contains pointers to descriptions of several different ways to extract files.

Q: When I download a RAR archive using Netscape Navigator or Communicator, the file is corrupt, what's wrong?

A: Apache HTTP server erroneously reports the RAR archive type as text/plain and as a result, Netscape Navigator/Communicator treats the file as plain text.   To prevent this happening, those webmasters,   who use Apache, should create *.htaccess* file in each directory which has RAR archives and add the following string to it:

    AddType application/x-rar-compressed rar

    If .htaccess already exists, this string should be added to the already existing file.

Q: RAR incorporates a number of different compression "methods", what are the advantages and disadvantages of using them and which one would you recommend for daily use?

A: I tried to answer to this question in the topic <u>How to choose optimal archiving settings</u>.

Q: I've heard a lot about "Solid" archives. What are they and how can I use them?

A: Please see the topic Solid archives

Q: How could a user of my BBS (E-mail system, FTP server etc.) extract files from RAR archives while RAR is shareware and one must register after a 40 day evaluation period?

A: The RAR distribution archive contains a free UnRAR utility, UnRAR.EXE, which can be used, without paying a license fee, by anyone wanting to extract archives created by RAR.   As an additional BONUS to this, the source code of a portable UnRAR is available on http://www.rarsoft.com. Note that the RAR algorithm is proprietary and you must not use UnRAR sources to reverse engineer it.

Q: Where can I get the latest releases of WinRAR

A: Visit WinRAR home page http://www.rarsoft.com

Q: I received "CRC error" message when extracting. What does it mean ?

A: The extracted file is corrupt either because of archive damage or problems with hardware. If an archive is damaged, but has a recovery record, you may try to repair it, otherwise it is impossible to restore damaged data. Note that in the case of solid archive all files after a damaged file will be lost.

Q: I failed to extract files from a solid multivolume RAR archive because one archive volume was damaged (bad floppy diskette). Help me!

A: First of all, you should use RAR recovery record when storing archives onto unreliable media such as floppies. Generally, it is not recommended to create solid archives in this case, use the normal (non solid) mode instead.

   If you have a damaged volume of solid archive, try to repair the damaged volume. It helps if RAR recovery was used when creating archive. You may check for the presence of a recovery record in the archive using Show archive information command. Rename recovered volume, _recover.rar (if recovery were not used, WinRAR builds only _reconst.rar) to the actual volume name and try to unpack your archive again, starting from the first volume.

Q: There appear to be no facilities available to convert my existing archived files to RAR format.

A: You may download a free archive conversion utility called RCVT from the our site.

Q: I forgot my password, please help me!

A: WinRAR encryption does not have any backdoor. Even if I forget a password to any my archive, I shall not be able to restore it. So please do not ask me to help in this situation.

Q: Why WinRAR does not delete its temporary files in the Windows temporary folder?

A: It happens when you use drag and drop to extract files or open archived files with an external viewer. In such case files may still be in use when closing WinRAR and moreover, there is no reliable way to detect if the external program still needs these unpacked files. So WinRAR does not delete them immediately, instead, when you run WinRAR the next time, all temporary files older than one hour will be deleted.

   If you do not want to involve the temporary folder when extracting files at all, use either "Extract To" command in WinRAR shell or "Extract To" item in the archive context menu instead of drag and drop.

Hints

How to install an application from an archive

You may install or run an application directly from an archive. Just enter to an archive and press Enter on setup.exe or install.exe program. When Enter is pressed on an archived file, which has .exe extension WinRAR extracts the entire contents of the archive to a temporary folder and then runs the executable file. When the executable has terminated, WinRAR tests the modification time of the extracted files and if any files were changed or if new files were created, Offers to update the archive and then deletes the temporary folder and its contents.

If you want to use WinRAR to handle archives, but an external program changed archive associations

Some programs may register themselves as the default archive viewer even without asking. If this happens and you want to re-register WinRAR again, select "Settings…" item in <u>Options</u> menu, activate <u>Integration settings dialog</u>, select archive formats to associate with WinRAR and press Enter.

How to install WinRAR in silent mode

If you need to install WinRAR to a large number of computers, it may be boring to answer to setup questions again and again. In such case you may run WinRAR installation with switch -s to skip all questions and use default settings.

License and registration information

Select one of the following topics:

WinRAR license

Registration information

Information for registered users of WinRAR 2.00 - 2.50

WinRAR license

The RAR (and its Windows version - WinRAR) archiver are shareware. This means:

1. All copyrights to RAR and WinRAR are exclusively owned by the author - Eugene Roshal.

2. Anyone may use this software during a test period of 40 days. Following this test period of 40 days or less, if you wish to continue to use WinRAR, you MUST register.

3. There are 5 basic types of licenses issued for WinRAR, these are:

    a.   A single computer USAGE license.   The user purchases ONE license to USE the WinRAR archiver on ONE computer.

    b.   A Multiple USAGE license.   The user purchases a number of USAGE licenses for use, by the purchaser, the purchaser's employees or accredited agents, on the same number of computers.

    c.   A SITE USAGE license. The user purchases a single USAGE license, authorizing the USE of RAR, by the purchaser, the purchaser's employees or accredited agents, on an unlimited number of computers at the same physical SITE location. This SITE location would normally be defined as a single building, but could be considered to be a number of buildings within the same, general, geographical location, such as an industrial estate or small town.

    d.   A CORPORATE, NATIONAL or INTERNATIONAL USAGE license.   The user purchases a single USAGE license, authorizing the USE of WinRAR, by the purchaser, the purchaser's employees or accredited agents, on an unlimited number of computers, regardless of location, but owned or under the control of the purchaser.

    e.   A CORPORATE, RESALE license. The user purchases a license for a limited and specified number of copies for the purpose of reselling individual licenses to a third party with WinRAR being included as a part of another application or system.   This license does NOT allow the direct reselling of WinRAR as a stand-alone product.

Once registered, the user is granted a non-exclusive license to use WinRAR on as many computers as defined by the licensing terms above according to the number of licenses purchased, for any legal purpose. The registered WinRAR software may not be rented or leased, but may be permanently transferred, in it's entirety, if the person receiving it agrees to the terms of this license.   If the software is an update, the transfer must include the update and all previous versions.

4. The RAR/WinRAR unregistered trial version may be freely distributed, with exceptions noted below, provided the distribution package is not modified in any way.

    a.   No person or company may distribute separate parts of the package with the exception of the UnRAR components, without written permission of the copyright owner.

    b.   The RAR/WinRAR unregistered trial version may not be distributed inside of any other software package without written permission of the copyright owner.

    c.   Hacks/crack, keys or key generators may not be included on the same distribution.

    d.   We would like a copy of the CD/magazine, when it is ready for shipment.   Please send to : Softronic Oy, PL 97, 02101 Espoo, Finland.   This is not an obligation but we like to keep records of such distributions for the WinRAR Hall of Fame.

5. To register you must complete the registration form and send it, with registration fee, to one of the

authorized registration sites, see rar_site.txt.

6. WinRAR archiver is distributed "as is".   No warranty of any kind is expressed or implied.   You use at your own risk. Neither the author nor the agents of the author will be liable for data loss, damages, loss of profits or any other kind of loss while using or misusing this software.

7. There are NO additional license fees, apart from the cost of registration, associated with the creation and distribution of RAR archives, volumes, self-extracting archives or self-extracting volumes.   Legally registered owners may use their copies of RAR to produce archives and self-extracting archives and to distribute those archives free of any additional RAR royalties.

8. You may not use, copy, emulate, clone, rent, lease, sell, modify, decompile, disassemble, otherwise reverse engineer, or transfer the licensed program, or any subset of the licensed program, except as provided for in this agreement.   Any such unauthorized use shall result in immediate and automatic termination of this license and may result in criminal and/or civil prosecution.

Neither RAR binary code, WinRAR binary code, UnRAR source or UnRAR binary code may be used or reverse engineered to re-create the RAR compression algorithm, which is proprietary, without written permission of the author.

RAR and WinRAR keyfiles may not be distributed, except as stated in item 3) above, outside of the area of legal control of the person or persons who purchased the original license, without written permission of the copyright holder.

All rights not expressly granted here are reserved by Eugene Roshal.

9. Installing and using RAR signifies acceptance of these terms and conditions of the license.

10. If you do not agree with the terms of this license you must remove WinRAR files from your storage devices and cease to use the product.

    Thank you for using the original WinRAR.

                            Eugene Roshal

Registration information

You register RAR because, as registered user, you

1) Encourage the author to further develop and improve RAR, making possible new RAR releases;

2) May use RAR in commercial and other environments;

3) Gain access to the Authenticity Verification and other advanced features;

4) Access support and assistance, via E-mail and RAR Support Sites, worldwide;

5) Gain the right to use ALL future RAR releases, on the same OS platform, in the registered mode. When a major version number is changed, it may be deemed necessary, due to the activities of hackers, to change the registration method. If this happens, an upgrade diskette will be available from your local registration site for a small charge to cover postage and handling.

What you need to register

If you wish to become a registered RAR user, all you need to do is make a payment to the author, via one of the local registration sites listed in **rar_site.txt**. Many registration sites will accept credit cards, all will accept cash or cashier's cheque.

Please see the file **order.txt** in the WinRAR distributive for details and pricing.

You may visit WinRAR home page for registering online or to read the latest sites list.

Registration procedure:

Upon receipt of your registration fee with the completed registration form you will receive a registration key file which will correspond to the registration string given in the registration form.

Upon receipt of your registration key file you should put it to the WinRAR folder. If the key is archived, in a .RAR file, please extract the key from the archive in order to register your copy of WinRAR.

It is possible, depending upon the facilities available at your local registration site, to have the key delivered to you by e-mail or by your local postal service on diskette.

Information for registered users of WinRAR 2.00 - 2.50

WinRAR and Rar for Linux versions 2.60 and above are registered with a new, very secure, AV registration seal. The main advantage of this new authenticity verification code is a significant increase in the strength of the registration code and thus it's use as a means of identification of the origin of a sealed archive.

Unfortunately this also means that the old registration keyfiles will not operate with the latest versions of Rar-Linux and WinRAR and thus all keyfiles must be changed. This is a cost-free process to the registered user and instructions for receiving the new keyfiles are given below:

1)   You must locate your old registration information and this will be found either in the original e-mail which was sent to you when you registered or alternatively in the file RAR.INI in the folder where the RAR files are stored.

You will need the registration CODE, and the registration NAME.

2)   Create a PLAIN TEXT e-mail message as follows:

Recipient: NewKey@rarsoft.com

Subject: Whatever you like

The body of the message must contain only two lines, as described below:

Registration code
Registration name

Example:

ABCDEF12345678

James Bloggs photo Co., Ltd

If you purchased more than one license for RAR, please submit ONLY the FIRST AV code and it's associated text string.   If anything other than the FIRST AV code is supplied, the robot will be unable to locate your keyfile for upgrade.

Please note: The e-mail message must NOT be in HTML format, otherwise it is in danger of being ignored.   If you are using an HTML e-mail program, then be sure to turn HTML OFF when creating this message.

3)   Send the e-mail message and a reply, containing either further instructions or your new key will be sent to you within 24 hours.   You will need to keep your key in a safe place and be sure not to let anyone else have copies of them.

The new key will be returned to you with an e-mail message and a file attached.   The attachment will be called RARKEYS.RAR and will contain one, or more, file:

RARREG.KEY   ..   Your keyfile for WinRAR/Linux.

If you purchased multiple keyfiles, these will be included in the returned archive as .002, .003 etc.

To register WinRAR, simply copy the file RARREG.KEY (or RARREG.002, 003 etc) into the same

folder as WinRAR and it will automatically be registered.

If you have any difficulties with the change, please contact the registration site from whom you purchased the original registration and they will help to resolve any problems you may have.

If you are unable to send your information by e-mail you may contact us at the address below:

Softronic Oy

PL 97

02101 Espoo

Finland

Archive name and parameters dialog

This dialog is displayed when executing <u>Add to archive</u> command before adding files to an archive.

Options contained in this dialog are divided into a few separate groups. Select any of the items below for a detailed description of the group:

<u>General options</u>

<u>Advanced options</u>

<u>Files</u>

<u>Backup options</u>

<u>Comment</u>

Archive name and parameters dialog: general options

The dialog contains the following items:

- destination archive name

Enter the name manually or press the "Browse" button to browse for the archive name. You may enter a name containing a disk letter or the full path to the archive.

- "Profiles" button

Opens the menu allowing to <u>create new</u>, <u>organize</u> and select <u>compression profiles</u>. Compression profiles allow you to quickly restore previously saved compression options or to specify default options for this dialog. WinRAR provides a few predefined profiles optimized for creating e-mail attachments, backup files and other operations. Please see the topic <u>Compression profiles</u> for more information.

- archive format (<u>RAR or ZIP</u>)

If ZIP format selected, some advanced options, not supported by this archive format, will be disabled;

- <u>*compression method*</u>

- <u>*volume*</u> *size, if you wish to create volumes*

By default it is entered in bytes. But if you add a lowercase letter 'k' at the end of the volume size, the entered value will be considered as kilobytes (multiplied by 1024). Use an uppercase 'K' to denote thousand of bytes (multiply by 1000), 'm' means megabytes and 'M' - million of bytes. It is also possible to select the volume size from the list associated with this item. Note that if you are archiving to a removable disk, you may select "Autodetect" from the list and WinRAR will choose the volume size automatically for each new volume.

- *Update mode:*

  Add and replace files (default)

  Always replace archived files, which have same name as files to be added. Always add those files, which are not present in the archive.

  Add and update files

  Replace archived files only if added files are newer. Always add those files, which are not present in the archive.

  Freshen existing files only

  Replace archived files only if added files are newer. Do not add those files, which are not present in the archive.

  Synchronize archive contents

  Replace archived files only if added files are newer. Always add those files, which are not present in the archive. Delete those archived files, which are not present in the added files. It looks similar to creating a new archive, but with the one important exception: if no files are modified since a last backup, the operation is performed much faster than the creation of a new archive.

- "Delete files after archiving" option

Remove successfully archived source files

- "Create SFX archive" option

Creates a self-extracting archive (exe file), which can be unpacked without using any other programs. You may select the type of   SFX module and set a few other SFX parameters like a destination folder in the Advanced options of this dialog.

- "Create solid archive" option

Creates a *solid* archive. Usually gives higher compression ratios, but applies some restrictions. Read the description of *solid archives* for more details.

- "Put authenticity verification" option

Put, in the archive, information concerning the creator, last update time and archive name. In archive management mode it is possible to read the authenticity information using the Show archive information. In order to enable the authenticity verification feature, the program must be registered.   Please read the License and registering information chapter for more information.

- "Use multimedia compression" option

Enables a special multimedia compression algorithm. This is intended to be used primarily when compressing raw digital audio data such as WAV's up to four 8-bit or two 16-bit channels but also shows good results with true color (24-bit) bitmaps.

- "Put recovery record" option

Adds the recovery record,   which may help to restore an archive in case of damage. You may specify a size of the recovery record in the Advanced options of this dialog. The default value is about a percent of the total archive size.

- "Lock archive" option

A locked archive cannot be modified by WinRAR. You may lock important archives to prevent accidental modification.

Archive name and parameters dialog: advanced options

- *"Save file security data" option*

This option has meaning only for NTFS file system under Windows NT/2000 and allows to save file owner, group, access control and audit information. You need to have the necessary privileges in order to use this facility. Processing of security data may decrease the speed of archiving operation, so set this option only if you understand its meaning and really need it, in most cases security processing is not required for home users.

- *"Save file streams" option*

This option has meaning only for NTFS file system under Windows NT/2000 and allows to save alternative data streams associated with a file. It is especially important under Windows 2000, which uses streams to keep some file dependent information such as file descriptions. If you use WinRAR to backup your NTFS disks, it is recommended to enable this option.

This option is supported only for RAR archives.

- *"Background archiving" option*

Minimize WinRAR to tray when starting the archiving process.

- *"Pause after each volume" option*

By default WinRAR asks for confirmation before creating or unpacking next volume only for removable drives.This option forces WinRAR to ask such confirmation always. It can be useful if disk space is limited and you wish to copy each volume to another media immediately after creating.

- "*Recovery record"*

Set a size of the <u>recovery record</u> in percents to the total archive size. The maximum allowed value is 10%. Larger recovery record allows to recover from more serious damages, but at the same time it increases archive size, so 1 - 3% is probably optimal. This input field is available only if you enabled *"Put recovery record"* option in the <u>General options</u> of this dialog.

- *"Dictionary size, KB"*

Size of the dictionary used by the compression algorithm. If your computer has at least 32MB, 1024KB dictionary size will be optimal. Otherwise you need to set a lower value to decrease memory usage. You may read <u>How to choose optimal archiving settings</u> topic for more information.

- *"SFX options"*

Select a <u>self-extracting</u> module and set a number of <u>optional SFX parameters</u> like a destination folder or window title. Note that SFX parameters are applicable only to Windows GUI module and are not supported by console or non-Windows SFX. The *"SFX options"* button is available only if you enabled *"Create SFX archive"* option in the <u>General options</u> of this dialog.

It is possible to store selected SFX options in a <u>compression profile</u>, WinRAR puts commands describing SFX parameters to the <u>archive comment</u>.

- *"Set password"*

Set a password to <u>encrypt</u> archived files. It is valid only during a single archiving operation and overrides

the default password entered in <u>File menu</u>. If the default password is present, it will be restored after the archiving operation is completed. If the default password was absent before starting archiving, it also will be absent after finishing the operation.

Archive name and parameters dialog: files

- Files to add

Names of files and folders to compress. This field is automatically filled by selected file names, but, if necessary, you may edit them manually or press "Append" button to choose more files to add to the list. It is allowed to enter wildcard masks here, in this case WinRAR will search for files matching a mask in the current folder and all subfolders. For example, you may enter:

*.txt *.doc

to archive all .txt and .doc files.

- Files to exclude

File masks and file names to exclude from the archiving operation. For example, you may enter:

*.bak *.tmp

to skip .bak and .tmp files.

- File paths

Select the method of storing file paths in archive. WinRAR may store paths relative to the current folder (default), full file paths except a drive letter and leading backslash character or store only file names without paths. Note that in the latter case it is possible to create an archive containing several files with the same name, so use "Do not store paths" option with care.

- Put each file to separate archive

Put each selected file in the current folder and all files in selected subfolders to separate archives, each archive contains only one file. If you set this option, an entered archive name is ignored and archive names are generated basing on file names.

Archive name and parameters dialog: backup options

- "Erase destination disk contents before archiving" option

All files and folders on the target disk will be erased before starting the archiving operation.   If you create volumes, erasing will be performed before creating of each volume, giving you the chance to archive to non-empty removable disks. But you must be sure that disks do not contain any useful information. The option applies only to removable media, hard disk cannot be erased using this function.

- "Add only files with attribute "Archive" set" option

Only those files which have attribute "Archive" set, will be added. This option is designed for backup purposes.

- "Clear attribute "Archive" after compressing" option

Clear attribute "Archive" on successfully compressed files. This option is designed for backup purposes.

- "Open shared files" option

Allows to process files opened by other applications for writing.This option could be dangerous, because it allows a file to be archived, while that file may be in the process of being modified by an other application. Use with great care.

- "Generate archive name by mask" option

Appends the current date string to an archive name when creating an archive. Useful for daily backups. The date string is formatted by the specified mask. Read description of switch -ag for detailed information on the mask format.

- "Include files of: any time / older than / newer than" option

The default value of this option is "any time", so WinRAR will archive all selected files regardless of their time stamp. But changing it to "older than" or "newer than" you may force WinRAR to archive only those files which are older or newer than a specified number of days, hours and minutes. For example, it can be useful if you wish to archive only files modified in the last 3 days.

- "Set archive time to: current system time / original archive time / latest file time" option

The default value of this option is the "current system time", so every new or modified archive receives the current system time. But you also may set this option to the "original archive time" to prevent the archive time from changing or to the "latest file time" to set the time of a changed archive to the time of the newest file in the archive.

Archive name and parameters dialog: comment

Here you may specify an <u>archive comment</u> to add to a new or updated archive. You may either enter a name of a file containing comment text in the "*Load comment from the file"* field or enter a comment manually in the "*Enter comment manually*" window.

Extraction path and options dialog

This dialog enables you to select the destination folder for extracted files. By default this folder is the same as the archive name and is placed in the current folder, but you may change this default value using Compression settings dialog. You can enter the new path (which will be created if it does not already exist) in the "Destination path" field or select an existing folder from the folders tree pane.

Also this dialog provides several additional options:

Update mode

Extract and replace files (default)

  Extract all selected files.

Extract and update files

  Extract those selected files, which copies either not present in the target folder or older than extracting files.

Freshen existing files only

  Extract only those selected files, which exist in the target folder and older than the corresponding file in the archive. If a file not present on disk, it will be skipped.

Overwrite mode

Ask before overwrite (default)

  Prompts before overwriting a file.

Overwrite without prompt

  Files are overwritten without any prompt.

Skip existing files

  Those files which are present are not overwritten.

Miscellaneous

Do not extract pathnames

  If the option is set, selected files from the root archive folder and from selected subfolders will be extracted into the destination folder. The path information is ignored.

Clear attribute "Archive"

  Clear attribute "Archive" on the extracted files. This option is designed for backup purposes.

Keep broken files

  WinRAR will not delete files which are not extracted properly, for example when the archive is damaged (by default, WinRAR deletes such files). You can try to save part of the information from a broken file.

Enter password for extracted file

You are trying to extract an <u>encrypted</u> file. Enter the password or cancel the extraction.

Enter default password

In this dialog you may enter a default password, which will apply to the add, extract, test and view operations. If the "Show password" option is disabled, you will be asked to type the password twice to ensure correctness.

Confirm file overwrite

The file already exists. You may overwrite it (**Yes** button), skip (**No** button), **Rename**, overwrite all files (**Yes to All** button), skip all existing files (**No to All** button) or **Cancel** the current operation.

Executing archive operation

An archive operation is being executed. Wait until it is finished or press the "Cancel" button to break it immediately. While archiving or extracting you also may press the "Background" button to minimize WinRAR into the tray. It will be restored automatically after finishing the current operation or you may click on the small WinRAR icon in the tray to restore it.

Both when archiving and when extracting, the progress bar at the top of the command window shows processing of the current file.

During archiving operation an additional progress bar is displayed at the bottom of the command window. Yellow part denotes already compressed data and light gray - already processed.

Archive options dialog

This dialog combines the following commands: <u>Protect archive</u>, <u>Lock archive</u> and "Sign archive". All they are supported only by <u>RAR archive format</u>.

Protecting an archive may help to <u>repair</u> it later in case of small physical damage of the archive data. If you wish to protect an archive from damage, you need to specify a size of the **<u>recovery record</u>** in percents to the total archive size. The maximum allowed value is 10%, if you set this field to 0, the recovery record will not be added. Larger recovery record allows to recover from more serious damages, but at the same time it increases archive size, so 1 - 3% is probably optimal.

If you set "Disable archive modifications" option, an archive will be locked. It means that WinRAR will not be able to modify such archive in future. You may lock important archives to prevent accidental modification by WinRAR.

Next option, "Add authenticity information", is avaliable only to registered users and forces WinRAR to put in archive information concerning the creator, last update time and archive name. In <u>archive management mode</u> it is always possible to read the authenticity information using the <u>Show archive information</u> command.

"Advanced SFX options" dialog

This dialog can be activated from <u>Convert archive to SFX</u> command, by pressing "Advanced SFX options…" button. It allows to specify a number of <u>self-extracting</u> archive parameters like the default destination path, a window title and text. It automatically generates a script using script commands described in the <u>topic dedicated to Windows SFX modules</u>, so you do not need to learn the script language and enter the commands manually, just set the desires options.

Note that SFX parameters are applicable only to Windows GUI module and are not supported by console or non-Windows SFX.

SFX parameters in this dialog are combined to a few sub-dialogs described below:

<u>SFX options: General</u>

<u>SFX options: Advanced</u>

<u>SFX options: Modes</u>

<u>SFX options: Text</u>

<u>SFX options: License</u>

SFX options: General

This dialog is a part of the "Advanced SFX options" dialog and includes the following settings:

- Path to extract

Set the default destination path for unpacked files. You may choose to create it in the user's "Program Files" folder, in the current folder or specify an absolute path here. In first two cases an entered path must not include the disk letter or leading backslash, in the third it must have one of them.

Corresponding SFX script command - Path

- Setup program/Run after extraction

SFX will try to execute the specified program after successful extraction. The folder containing extracted files is set as the current before executing the program.

Corresponding SFX script command - Setup

- Setup program/Run before extraction

SFX will try to execute the specified program before starting extraction. The destination folder is set as the current before executing the program. You may use this command, for example, to remove a previous version of program, when installing a new version over the old one.

Corresponding SFX script command - Presetup

- Save current settings as default

Save settings entered in all sections of "Advanced SFX options" dialog including the current section and use them later as default every time when creating a self-extracting archive.

SFX options: Advanced

This dialog is a part of the "Advanced SFX options" dialog and includes the following settings:

- Files to delete in the destination folder

SFX will try to delete the specified file or files in the destination folder before extraction. You may enter more than one file here, in this case file names have to be delimited with spaces.

If a file specified here is locked and cannot be deleted, SFX module will try to rename it to temporary name before extraction and delete after Windows reboot. Success of this operation depends on Windows version.

Corresponding SFX script command - Delete

- Allow external signature

Informs SFX that an additional data in a free format may be present at the end of archive. Its main purpose is to allow to sign SFX archive using external programs. If this option is not enabled, SFX may display an error message when encountering an unknown data at the end of archive.

Corresponding SFX script command - ExtSign

SFX options: Modes

This dialog is a part of the "Advanced SFX options" dialog and includes the following settings:

- Temporary mode/Unpack to temporary folder

This option forces SFX to create a temporary folder, extract all files to it, start the program specified in *Setup program/Run after extraction* field and remove the temporary folder including all its contents after completing the *Setup* program. The SFX automatically sets the silent mode (described below) when performing these operations. If "*Unpack to temporary folder"* option is set, you should also specify *Setup* program and not use *Path to extract* field. You may also set two optional string parameters, which define a question and question title displayed before extraction. In such case extraction is started only if a user selects "Yes" button.

Corresponding SFX script command - TempMode

- Silent mode

By default SFX asks for confirmation to start extraction and allows to user to change the destination folder. If you set "*Silent mode"* to *"Hide start dialog"* this confirmation will be skipped. Select *"Hide all"* if you also wish to hide the extraction progress.

Corresponding SFX script command - Silent

- Overwrite mode

Here you may choose how SFX will handle already existing files: ask before overwrite (default), always overwrite or always skip.

Corresponding SFX script command - Overwrite

SFX options: Text

This dialog is a part of the "Advanced SFX options" dialog and includes the following settings:

- Title of SFX window

Set the specified text as a title of the SFX window.

Corresponding SFX script command - Title

- Text to display in SFX window

Display the specified text in SFX window.

SFX module merges and reformats the specified text strings to fit them optimally into the dialog. So if you wish to start a new paragraph, you need to put the empty string before it.

A few HTML tags are recognized and processed in the output text:
<b>, <i>, <h?>, <u>, <s>, <font size=? color="#??????" face="…">, <br>, <p>

Refer to any HTML manual for detailed description of these tags. As it is important to keep a size of SFX module reasonably small, HTML support is very limited, but it should be still enough to improve text look.

Corresponding SFX script command - Text

SFX options: License

This dialog is a part of the "Advanced SFX options" dialog and includes the following settings:

- Title of license window

Set the specified text as a title of the license window.

Corresponding SFX script command - License

- License text

Display the specified text as software license when starting SFX. User may either accept it and continue extraction or decline and quit.

SFX module merges and reformats the specified text strings to fit them optimally into the dialog. So if you wish to start a new paragraph, you need to put the empty string before it.

A few HTML tags are recognized and processed in the output text:
<b>, <i>, <h?>, <u>, <s>, <font size=? color="#??????" face="…">, <br>, <p>

Refer to any HTML manual for detailed description of these tags. As it is important to keep a size of SFX module reasonably small, HTML support is very limited, but it should be still enough to improve text look.

Corresponding SFX script command - License

Select toolbar buttons

In this dialog you may specify which toolbar buttons are to be displayed when browsing a disk folder ("Show outside of archives" group of options) or viewing archive contents ("Show inside of archives" options). Some buttons may be enabled in both modes, some are available only for file or archive operations.

Archiving with password

In this dialog you may enter a password, which will apply to the archive, which you are going to create now. The entered password will be active during only one current archiving operation. If you need a global password instead, you may enter it using "Password" command in <u>File menu</u>

If the "Show password" option is disabled, you will be asked to type the password twice to ensure correctness.