



PKZIP Explorer® 6.0
Getting Started Manual

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What's New in PKZIP Explorer?

PKZIP Explorer 6.0 presents the following new features.

- **Strong Encryption Algorithms.** In addition to traditional PKZIP encryption, PKZIP 6.0 increases the level of data security by using industry standard algorithms to encrypt your data in a way that makes it much more difficult to decipher.
- **Strong Encryption Using Recipients List.** You can use the Recipients List option with or without a password. Only those who are on the list or know the password can extract the data.
- **AES (Advanced Encryption Standard).** PKZIP 6.0 supports up to 256 bit encryption.
- **BZIP2.** You can use this compression method which provides better compression with greater processor power and memory required.

System Requirements

PKZIP Explorer is intended for use on Microsoft Windows 98, Me, NT 4.0, 2000, and XP systems. Systems running NT 4.0 require Microsoft Internet Explorer 4.0 or later. PKZIP uses several system files installed in conjunction with Internet Explorer. Therefore, Internet Explorer version 4.0, or later must reside on your system prior to installing PKZIP Explorer.

If you plan to use the Strong Encryption feature, you must use Microsoft Internet Explorer 4.0 or newer.

If you plan to use the Digital Signature feature, you must also obtain and install a valid Digital Certificate onto your system prior to using this feature. Visit PKWARE's website for information on where you can get a Digital Certificate.

Version:	Minimum System Requirements:
Windows 98, Me	32 MB RAM; 3.1 MB hard disk space for programs and minimal workspace.
Windows NT 4.0, 2000, XP	64 MB RAM; 3.1 MB hard disk space for programs and minimal workspace.

Installing PKZIP Explorer

PKZIP Explorer is installed using the Microsoft Windows Installer.

To install from CD-ROM:

1. Insert the CD into your drive. The Autorun feature automatically starts the setup program. If the Autorun feature is not enabled on your system, you can run SETUP.EXE directly from the CD.
2. After the setup program has started, follow the instructions provided on-screen to complete the installation.

To install from a PKSFX file:

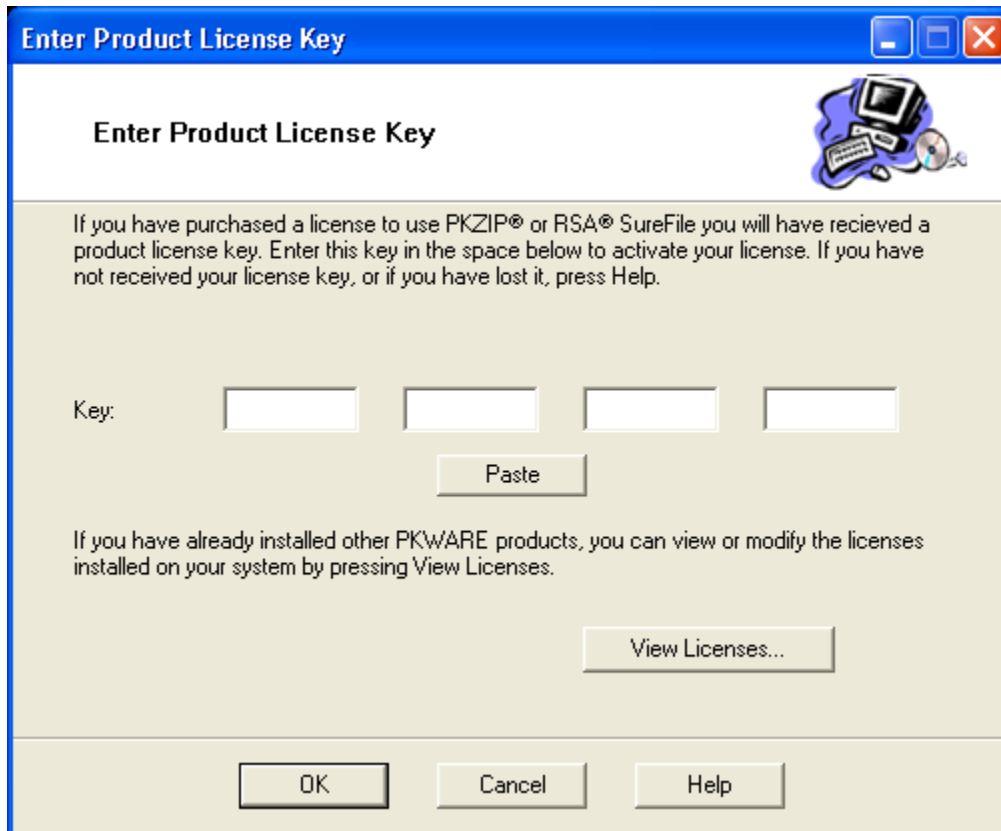
If you are installing a purchased version or an evaluation version of the software downloaded from the Internet (www.pkware.com), you will receive a PKSFX self-extracting file. The Windows Installer is packaged inside the PKSFX file.

1. Run the PKSFX file to start the installation. It extracts the files needed to install the software and it automatically starts the setup program.
2. Follow the instructions provided by the setup program to complete the installation.

Note: In addition to this manual, you may wish to refer to the online help ([pkzipe.hlp](#)) for detailed information on using and/or configuring PKZIP Explorer.

License Activation

After receiving your product license key, you can activate your PKZIP license by using the license key entry dialog as shown below.



You can access this dialog during installation or from the main Help menu in PKZIP Explorer, select the About Box in PKZIP Explorer. When five days remain in the evaluation period, you will be prompted to enter your product license key. When the prompt appears, enter the license key you received from PKWARE, and press OK to continue.

Starting PKZIP Explorer

After you load the program onto your system, you can open it in different ways.

Click Start | Programs | PKZIP | PKZIP Explorer.

Refer to other sections in this manual; for example, *Opening a .ZIP File*, *Creating a .ZIP File*, *Extracting a .ZIP File*.

Opening a .ZIP File

If the .ZIP file extension is associated with PKZIP Explorer, simply double click the .ZIP file to open and view the contents of that file via PKZIP Explorer. You may also open .ZIP files in PKZIP Explorer by specifying appropriate menu items. The following is an example of the steps one might follow to open and view the contents of a .ZIP file:

1. In Windows Explorer, locate the .ZIP archive you want to open.
2. Click the right button of your mouse on the .ZIP file. A context menu appears.
3. Select PKZIP | Explorer. The contents of the .ZIP file will be displayed in a new instance of Explorer in the right pane under the PKZIP Archive Manager. You may alternately select PKZIP | Explore PKZIP Folder to create (if one has not already been created) a PKZIP Folder Shortcut under the current folder and the contents of the .ZIP file (in the same instance of Explorer) is displayed via this folder.

Creating a .ZIP File

Creating a .ZIP file will compress or store your selected files in an archive for transfer or storage. The following is an example of the steps one might follow to create a new .ZIP file using PKZIP Explorer:

1. In Explorer, highlight the file(s) and/or folder(s) you want to archive.
2. Click your right mouse button. Dependant on the type(s) of files you selected in the previous step, a context menu appears.
3. If you want to add files to a new archive, select PKZIP | Add To New Archive. The Save As dialog appears. If you want to add files to an existing archive, select PKZIP | Add to Existing Archive.
4. Specify a name (e.g., Archive.ZIP) and destination for the .ZIP file and type of archive (.ZIP or .EXE) and click the Save button to proceed. For additional information on creating a self-extracting archive.
5. The PKZIP Explorer Progress dialog appears. As the compression/archival process proceeds, the progress bars on this dialog increment accordingly. Upon successful completion of the archival process, the progress dialog automatically disappears. If there is an error encountered during the archival process, the progress dialog will remain open. The .ZIP file should now reside in the specified destination directory.

Note: You may alternately create a new .ZIP file by double clicking New PKZIP File.ZIP via the PKZIP Archive Manager. You may subsequently add (or remove) files and folders to (from) your .ZIP file using drag and drop and/or via the Add Dialog. The Modifying a .ZIP file topic contains detailed information on creating a .ZIP file in this fashion.

To add files to an existing archive, use the Add files dialog or the menu item, Add to Existing Archive.

Extracting a .ZIP File

Extracting will uncompress or copy stored files out of the archive. All files in an archive can be extracted at once or individual files can be extracted as needed. The following is an example of the steps one might follow to extract files archived in a .ZIP file using PKZIP Explorer:

1. To extract individual file(s) and/or folders archived in a .ZIP file, open the .ZIP file in Explorer by following the instructions in the Opening a .ZIP file section and proceed to step 2. To extract all files archived in a .ZIP file locate the .ZIP archive you want to open and click your right mouse button on that file. A context menu appears.

To invoke the Extract dialog, select the Extract... menu item. The Extract dialog appears allowing you to manually specify a destination directory. You may alternately select PKZIP | Extract Here to extract the contents of the archive into the directory where the .ZIP archive resides.

To create a directory (e.g., "Test") under the directory where the .ZIP archive resides (with the same name as the .ZIP archive) and extract all files in that directory, select the Extract to menu item.

These last two items are also available via your right click drag and drop context menu. To access these menu items, highlight the .ZIP file and while holding down your right mouse button drag the file to some drop point (e.g., desktop). When you release the right mouse button these items will be available on the right click context menu that appears. The extract destination directory in such instances is relative to the drop point. After specifying a destination directory via one of these methods, proceed to step 3.

2. In Explorer, highlight the file(s) and/or folder(s) you want to extract. You may drag these files from Explorer and drop then onto an appropriately enabled destination. The files and/or folders will be automatically extracted to the specified drop point. You may also specify various standard control key accelerators (e.g., Ctrl-C to copy; Ctrl-P to paste) to perform extraction operations from an open .ZIP file. Furthermore, you may want to invoke the extraction dialog via the Explorer menu/toolbar or the right click context menu. After specifying a destination directory via one of these methods, proceed to step 3.
3. The PKZIP Explorer Progress dialog appears. As the extraction process proceeds, the progress bars increment accordingly. Upon successful completion of the extraction process, the Log dialog automatically disappears. If there is an error encountered during the extraction process, the Log dialog will remain open. Assuming that you are viewing the contents of the .ZIP file via PKZIP Explorer, you may click the Details button for error particulars. Furthermore, the View Log toolbar button visually represents (Green = Successful; Red = Error) whether the extraction process was successful or not.

Modifying a .ZIP File

Adding and/or deleting files in a .ZIP file via PKZIP Explorer works somewhat differently than these same operations do in Explorer. For instance, in Explorer, when you highlight a file and depress the Delete key, that file is immediately sent to the recycle bin. In PKZIP Explorer, when you highlight a file and depress the Delete key, PKZIP Explorer will display an icon (i.e., indicating that this file is to be deleted, directly to the left of the file icon). Similarly, when you add a file to archive/compress via drag and drop or copy/paste, PKZIP Explorer will display an icon (i.e., indicating that this file is to be added, directly to the left of the file icon). The .ZIP file is not modified until you explicitly instruct PKZIP Explorer to save the changes. The following is an example of the steps one might follow to modify an existing .ZIP file using PKZIP Explorer.

1. Locate and open the .ZIP file you want to modify in Windows Explorer.
2. You may specify files/folders to add to the .ZIP archive by clicking the Add toolbar button to invoke the Add Dialog or by dragging them from a source location dropping them in the right pane of the Explorer window. You may alternately use copy (e.g., Ctrl-C) and paste (e.g., Ctrl-V/P) functionality to specify files/folders to add to the .ZIP archive. PKZIP Explorer will display an icon (i.e., indicating that these file(s) and/or folder(s) are to be added). You may specify files/folders to delete in the .ZIP archive by highlighting the files you want to delete and clicking your Delete key or selecting the Delete menu item. PKZIP Explorer will display an icon (i.e., indicating that these file(s) and/or folder(s) are to be deleted). You may create a new (recursed) folder in a .ZIP archive by selecting the New Folder menu/toolbar item and specifying a folder name if desired.
3. After you are finished modifying your .ZIP file, save the file by selecting the Save menu item available under the File menu or your right-click context menu. You may also click the 'Save' button on your toolbar. To save your modifications to another .ZIP file select the Save As or Save Copy As menu items.

The PKZIP Explorer Progress dialog appears. As the compression/archival process proceeds, the progress bars on this dialog increment accordingly. Upon successful completion of the archival process, the progress dialog automatically disappears. If there is an error encountered during the archival process, the progress dialog will remain open. The updated .ZIP file should now reside in the specified destination directory.

Digital Certificates

PKZIP Explorer intended for use on Microsoft Windows 98, Me, NT 4.0, 2000, and XP systems. If you plan to use the Digital Signature or Strong Encryption features available with PKZIP Explorer on systems running Windows NT 4.0, you must install Microsoft Internet Explorer 4.0 or later. PKZIP uses several system security files installed in conjunction with Internet Explorer. Therefore, Internet Explorer (version 4.0 or newer) must be on your system before you install PKZIP Explorer.

You must also obtain and install a valid Digital Certificate on your system before using the Digital Signature feature of PKZIP Explorer. These certificates must be a minimum of 1024-bit RSA format. Visit PKWARE's website for information on where you can get a Digital Certificate.

<http://www.pkware.com/catalog/certificate.htm>

Strong Encryption

PKWARE has added the ability to use strong encryption when compressing files. This new feature adds a higher level of security for your data. If your version of PKZIP is licensed to use this feature, you will be able to choose from several strong encryption algorithms to encrypt your files. If your copy of PKZIP is not licensed to use this feature, contact PKWARE at 1-414-354-8699, or visit www.pkware.com, for information on how to activate strong encryption.

With strong encryption you can encrypt your files using AES, RC2, RC4, DES, or 3DES algorithms.

- AES – 128
- AES – 192
- AES – 256
- 3DES – 112 bit
- 3DES – 168 bit
- DES
- RC2 – 128 bit
- RC2 – 64 bit
- RC2 – 40 bit
- RC4 – 128 bit
- RC4 – 64 bit
- RC4 – 40 bit

Using strong encryption to encrypt your files is as easy as selecting a list of files to compress into a .ZIP file. After configuring your encryption settings, simply create your .ZIP file as you normally do, and your files will be automatically encrypted as they are compressed.

IMPORTANT: PKWARE has introduced support for the use of strong encryption with .ZIP files. If you plan to share with others the .ZIP files you create using this strong encryption feature, you should first make sure the recipients have a compatible version of PKZIP 5.0, or newer, so they can decrypt your files.

The strong encryption feature lets you choose to use either a traditional password or an X.509 digital certificate for encryption. If you plan to use a digital certificate, you must first obtain and install a valid digital certificate onto your system. Visit PKWARE's website for information on where you can get a Digital Certificate.

If you plan to use the Digital Signature or Strong Encryption features available with PKZIP for Windows on systems running Windows NT 4.0, you must install Microsoft Internet Explorer 4.0 or greater. PKZIP uses several system security files installed in conjunction with Internet Explorer. Therefore, Internet Explorer, 4.0 or later, must be on your system before you install PKZIP for Windows.

File Capacities

The original .ZIP file format has faithfully met the needs of computer users since it was introduced by PKWARE in 1989. As computer technology has advanced over time, storage capacities have increased dramatically. These increases make the numbers and sizes of files that seemed unimaginable 10 years ago a reality today. To extend the utility of the .ZIP file format to meet these changing system needs, PKWARE has extended the

.ZIP file format to support more than 65,535 files per archive and archive sizes greater than 4 Gigabytes (GB).

The specification for the .ZIP file format has been publicly available and distributed by PKWARE in a file called APPNOTE.TXT. This file documents the internal data structures and layout that define a .ZIP archive. The extensions introduced by PKWARE fully support all the features of your existing archives and newer versions of PKZIP that support these new extensions will continue to read all of your current archives.

Prior to the 4.5 release, versions of PKZIP were limited to storing no more than 65,535 files in a .ZIP archive. Earlier versions of the original PKZIP for DOS could (and still can) store no more than 16383 files per .ZIP archive.

Another limitation that existed prior to the 4.5 version of PKZIP was that a single .ZIP archive could not be larger than 4 GB (4,294,967,295 bytes). Earlier versions of PKZIP for DOS cannot process .ZIP archives larger than 2 GB (2,147,483,647 bytes).

The extended .ZIP file format specification available with PKZIP 4.5 supports creating .ZIP archives containing over 4 billion files and having sizes larger than 9 quintillion bytes. These are only theoretical limits and most computer systems in common use today do not have enough storage capacity or available memory to create and store .ZIP archives approaching these limits.

The practical limits imposed by a typical computer in use today and configured with 128MB to 256MB of memory will support compressing up to approximately 262,144 files. Compressing this number of files can take a long time. Since it is not practical to reach the theoretical limits supported by the extended .ZIP file format, PKZIP 4.5 (or newer), will currently not compress or extract more than 2,147,483,647 files.

The actual limits on the numbers of files and sizes of archives can vary depending on the operating system you are using. The tables below list the capacities available in PKZIP 4.5 for different operating systems.

Windows NT/2000/XP, Unix	Current Version
Archive size	9 EB *
Number of files in archive	2 G **
Number of segments for spanned and split archives	4 G
Size of segments for spanned and split archives	4 GB
PKSFX size	2 GB
PKSFX Patch size	2 GB

Windows 98/Me, Linux	Current Version
Archive size	4 GB *
Number of files in archive	2 G **
Number of segments for spanned and split archives	4 G
Size of segments for spanned and split archives	4 GB
PKSFX size	2 GB
PKSFX Patch size	2 GB

Your available system resources limit the performance you can expect from PKZIP when processing large numbers of files or large archives. If you are compressing large numbers of files on a computer with insufficient memory, you can expect slow, or possibly incomplete processing if your available memory is depleted.

When compressing large files, it is a good idea to make sure you have your temporary folder set to a location on a drive with sufficient disk space available to process large files. It is currently not recommended to use Drag-and-Drop with very large files or with very large numbers of files due to the additional system overhead required when Windows processes the files.

PKSFX self-extracting file sizes are limited to the size of an executable program file supported by the underlying operating system. This currently is 2 GB for most operating systems. This means you should not create a PKSFX file that is larger than 2 GB. PKZIP will be able to create PKSFX files larger than this limit, however, they will not run on most operating systems. You can create and run split PKSFX files that are larger than 2 GB as long as each split segment is not larger than 2 GB.

Support for more than 65,535 files in an archive and archive sizes greater than 4 GB are features not available in versions of PKZIP released prior to PKZIP Suite 4.5. If you create archives that take advantage of these new features, you should be aware that older versions of PKZIP will not be able to recognize all of the files in the new archives you create that exceed the capacities of the older programs. If you plan to send a large archive to a friend or associate, they will need a compatible version of PKZIP to extract the contents of the file(s) you send.

Versions of PKZIP prior to 4.5 will not recognize these new features and will be unable to view or extract any files in your archives that are dependent on these features. Also, any .ZIP compatible programs you may be using from other companies will not be able to access all of the contents of your large archives. They may report that an archive is too large, or they may incorrectly report that the archive has errors. To ensure access to data in your large archives, always use genuine PKZIP.

* Actual archive size depends upon available storage space - the theoretical limit is 9 EB.

** Actual number of files may vary depending on available memory and resources. The theoretical limit is actually 4 G but the practical limit for most current system configurations is about 262,144 files

Note: 4 GB is equal to 4,294,967,295 bytes.
9 EB is equal to 9,223,372,036,854,775,807 bytes.