

WinZip: a compression program for backup etc.

Download the program from www.winzip.com for a cost of \$30 (you may test the program without any charge).

A WinZip file (extension **.zip**) is termed an *archive*; it includes compressed copies of one or more files. To *archive* or *zip* files means to add compressed copies of files to an archive (.zip) file. To *extract* or *unzip* files means to restore uncompressed versions of the files.

Understanding the archive attribute

The archive attribute is used by backup programs to determine whether a file is new or modified since the last backup. When you create or modify a file, Windows sets the archive attribute on. To see the archive attribute for a file, *right-click* the file in Explorer and select Properties. A checkbox indicates whether the archive attribute is off or on; you may change it manually.

You may instruct WinZip and other backup programs to backup only files with the archive attribute on – and then turn it off. It remains off until you modify the file.

Main operations of WinZip

- *Create new zip-file:* In WinZip click the [New] toolbar button. Decide the name and location of the zip-file.
- *Open existing zip-file:* In WinZip click the [Open] toolbar button and locate the zip-file to be opened.
- *Add files to zip-file:* Click the [Add] toolbar button. You now see a dialogue box (next page).
 - specify names of the files to be added. ***.*** indicates all files in the folder.
 - If you want to add also files in subfolders check:
 - Include subfolders
 - Save full path info
 - If you want to add only files whose archive attribute is on, check:
 - Include only if archive attribute is set
 - Reset archive attribute (turn archive attribute off)
 - Click the [Add] menu button
- *Extract (unzip) files from zip-file:* Open the zip-file with the [Open] toolbar button.
 - Select the files to unzip and click the [Extract] button
 - Choose target folder or check:
 - Use folder names (to keep the original folder structure)
 - In the Extract dialogue box click [Extract].

Use WinZip to back up

On principles for backing up, see Juul (2006), section 18.9. You may use diskettes or CD-Rom, or you may send zip-files by E-mail to another computer. I recommend that you give your zip-files names that include the creation date in a sortable way: **200512191725.zip** for a zipfile created 19 December 2005 at 17:25. In this way it is easy for you to determine the sequence of restoring (unzipping) the backup files.

For a *total backup* select all files (*.*) in your own root folder (e.g. **c:\docs**), and the following options:

- Check: Include subfolders
- Check: Save extra folder info
- Uncheck: Include only if archive attribute is set
- Check: Reset archive attribute

For an *incremental backup* select all files (*.*) in your own root folder, and the options:

- Check: Include subfolders
- Check: Save extra folder info
- Check: Include only if archive attribute is set
- Check: Reset archive attribute

A Stata program for backup:

At the website for An Introduction to Stata for Health Researchers (Juul 2006):

<http://www.stata-press.com/books/ishr> you can download **bkup.ado** and **bkup.hlp**, preferably to **c:\ado\personal**.

bkup requires WinZip with the Command Line add-on to be installed. WinZip is shareware; download both the main program and the Command Line add-on from <http://www.winzip.com>.

The syntax is:

```
bkup [ , full ]
```

full turns the archive bit on for all files in the backup path, leading to a full backup. The default is an incremental backup.

bkup uses WinZip's command line option to make an incremental or a full backup to a compressed file whose name reflects the date and time of creation: **yyyymmddhhmm.zip**, e.g. 200507271921.zip for a file created at 19:21, 27 July 2005.

Using **bkup** requires that all of your "own" files are stored under a main personal folder (e.g. **C:\docs**). **bkup** also takes a backup of files in your personal ado folder (typically **c:\ado\personal**).

Before using `bkup` you must personalize it. Open `bkup.ado` in the Do-file editor and modify, if needed, the location of your main personal folder (initially "`C:\docs`"), the location of the folder where you want the backup-files stored (initially "`C:\backup`"), and the location of your WinZip program (initially "`C:\Program files\winzip\wzzip`").

`bkup.ado` includes a number of DOS attrib commands turning off the archive attribute for file types that you do not want to backup. You may want to modify this list.

`bkup` automatically gives the zip-file a name reflecting the date and time of creation. This lets you easily sort the zip-files chronologically in case you need to make a restore.

Use WinZip to save disk space

This is the original purpose of zip programs. You might decide to remove older versions of your data set from your working folder and keep them in a zip-file.

Send large or multiple files by E-mail

The advantage is obvious with large files. But also with many smaller files it is an advantage to pack them together into one before attaching to the E-mail. The recipient should have a Zip program as well to be able to unzip. The purchased version (not the free download version) of WinZip can create 'self-extracting' zip-files.

Encryption

You may encrypt files using a password of your own choice. The password must be defined *before* archiving files. Use the [Password] button in the Add dialogue box.

If you loose your password you cannot access your data. So beware:

- **Do** select a password that you can remember but nobody else can guess. Long passwords with a mix of numbers, upper- and lowercase letters are recommended.
- **Do** use the same password for all your encrypted files
- **Do not** use your spouse's name, your server logon password nor your credit card pin code
- **Do not** write your password on a yellow sticker at your noticeboard

In the file display encrypted files are shown with a `+` after the filename

Reference:

Juul, S. *An Introduction to Stata for Health Researchers, 2nd ed.* College Station, TX. Stata Press, 2008.