ZIP AND UNZIP - part 2 **Dilwyn Jones**

The first part of this short series should have taught you how to use the Zip and Unzip programs on a fairly basic level.

What you may have gathered by now is that Zip and Unzip are not particularly user friendly - you need to type in cumbersome command lines and remember some obscure comand syntax.

Fortunately, there is a better way.

Archivers Control Panel

Thierry Godefroy has written an extremely useful and quite simple to use front end program for Zip and other archivers. It's called Archivers Control Panel (ACP for short) and it's free. QL Today intends to include a copy on a cover disk, or you can always get the latest version from most QL PD libraries and many QL-related websites.

Archivers Control Panel is available in both French and English language versions. It requires pointer environment and a slightly modified version of the QLiberator compiler runtime extensions file, called QLIB_RUN336mod, which is supplied with the program. The modification to QLIB_RUN corrects a small problem in the original version.

Archivers Control Panel can make use of the Menu Extension from Jochen Merz, but it can also work without it. It just means the difference between having to type in filenames or selecting them from a menu.

The Archivers Control Panel package consists of just three files:

QLIB_RUN336MOD - the modified version of the QLiberator runtime extensions.

ACP_OBJ - this is the program itself.

ACP_HELP - a help file which can be viewed from within the program, or (since it's a simple plain text file) can be loaded into most editors or printed simply by means of a copy command to send it to the printer:

COPY_N flp1_ACP_HELP TO SER1

or

COPY_N flp1_ACP_HELP TO PAR if you have a printer connected to a PAR parallel port.

Since Archivers Control Panel has a very large range of options and commands, you are strongly advised to read the instructions contained within the ACP_HELP file.

Setup

Copy the three Archivers Control Panel files into the required drive and directory on your system. This can be floppy disk such as FLP1_ or a subdirectory on a hard disk such as WIN1_ACP_. In addition to the Archivers Control Panel files, you should also copy into the same place any of the required Archivers programs. For example, if you intend to use Zip and Arc, you should copy the programs called Zip, Unzip and Arc onto the same drive or directory. If you are using the QL Today cover disk, all the required archivers are on that disk, or you can download a file containing the required archivers from Thierry Godefroy's website.

Although it is good practice to include all the archivers (zip, arc, lha, lhq, tar and zoo) just in case you decide at a later date that you need more of these programs than you originally thought. For example, if downloading programs from Thierry Godefroy's website or Tony Firshman's bulletin board, you will find plenty of examples of QL programs there archived with programs other than zip - especially LHA, LHQ and ZOO.

Configuration

Archivers Control Panel has a level 1 configuration block built in, so that you can preset a whole range of options for the program. These settings are altered with the usual Config program, like most pointer driven programs.

The program can be made aware of the DATA_USE and PROG_USE settings, so it is usually good practice for these to be set to the required directory before you start Archivers Control Panel:

PROG_USE FLP1_
DATA_USE FLP1_
EXEC FLP1_ACP_OBJ

The rule of thumb is that the right hand files listing window shows the files on the DATA_USE default drive, and the archiving programs are loaded from the PROG_USE default drive.

But before you get as far as starting the program, it is a good idea to run the Config program first to configure the program prior to use.

ACP has several sections in its built in configuration block. Since there are so many items to configure, the author has split them up into groups. Once you become familiar with which section a particular item is in, you can skip whole groups to get to that one.

So execute the Config program and tell it to load the ACP_OBJ program.

At this stage it would be a good idea to read the ACP_HELP help text file for more detail on

the configuration process, as it is one of the more complex parts of using Archivers Control Panel.

One of the main things you need to know is that if an at symbol ("@") is placed in front of a filename, that is used to indicate "insert the prog_use default device here. For example, if you want to load the help file ACP_HELP from the PROG_USE default drive, you'd specify its filename as @acp_help

The configuration options are as follows.

The first group of options:

* Name of the help file. This is called ACP_HELP and would normally be in the same directory as the Archiver Control Panel program itself. In common with many configuration options, begin this entry with an @ symbol to indicate it's to be loaded from the PROG_USE default device.

* Default archive path. This is the drive where ACP looks for the zip files, zoo files and so on. Leave it empty and it will look on the DATA_USE default drive.

* Current directory. This is the drive where files are compressed from and to. Leave it empty for the program to use the DATA_USE default.

* Temporary files directory. Programs like Zip need to create some temporary files somewhere. You can either specify a specific drive such as RAM1_, or leave it empty and it'll use the DATA_USE drive.

* Sort filenames in the archive window. This will either give you a sorted list of files in the zipped archive or the files can be displayed in the order in which they already exist in the archive.

* Sort filenames in the Current Directory window. The right hand window in ACP shows a list of files on the drive from which files are compressed and to which files are extracted from an archive. Sometimes it is more convenient to have the list of files sorted than to list them in the order in which they're placed on the drive.

* Default size for archiver window. This can be BIG or SMALL.

* Keep archiver messages history. This can be YES or NO.

* Use FIleInfo II (if present) to "execute" files. This can be YES, NO or QUERY, with QUERY meaning that you are asked before it tries to use FileInfo II to execute a data file. Files like Quill DOC files cannot normally be "executed" with an EXEC or similar command, but if you have the FileInfo II software, it allows you to associate programs with given file types and will try to load that program then load the file into it, e.g. FileInfo II can be taught that to "execute" DOC files, it ought to execute Quill, then drive Quill to load the file indicated.

* Save ACP config into environment variables on exit. This can be YES or NO. Environment variables will be a new subject for many readers - see the Environ_Doc file which goes witht he ENV_BIN file on the disk for more details. Use of the environment variables is optional, but if you are a habitual user of environment variables, this can be a useful option.

* Default Archiver. When ACP starts, it highlights which archiving program to use unless you indicate otherwise. I normally set this to ZIP, because 99% of all archives I access are in ZIP file format. It can be any of the six programs ACP knows how to use.

The next section deals with the archiving programs themselves. You are asked to specify details such as the filename and path name for ACP to use to call that particular program. For example, if the program used to decode ARC files is called "ARC" and located in the PROG_USE directory, you may specify @ARC which will in essence result in ACP attempting to load it with a command equivalent to EXEC PROGD$&'ARC'

There's also a few questions specific to some archivers. For example, when ACP is using ZIP or UNZIP, it needs ot know if you want them to be dealt with by commands which are InfoZip and InfoUnzip compatible. Older QL versions of Zip and Unzip may not offer full InfoZip compatibility. You will need to specify if the TAR program is to be handled with GNU TAR compatibility (sorry, I don't know what that means!)

You are then asked for the directories containing GZIP, BZIP2 and COMPRESS. If these are on the PROG_USE default drive, just leave these entries blank.

The next section concerns advanced settings for ACP. The first set of questions asks if you want ACP to fix some of the known bugs in some archivers (these are listed in the help file). For example, LHQ does not normally handle the "*" wildcard correctly. It is worth reading this part of the help files, as knowing about these potential shortcomings will help you to resolve problems which may arise from time to time when using these programs.

Finally, this section asks you to specify any advanced options for the individual archivers. Leave these blank until you become more familiar with these programs.

When you have answered all the questions, save the reconfigured copy of ACP. Of course, it is supplied configured to use from FLP1_ so unless you are going to use it from another device you may not need to reconfigure it at all, unless you want to set some of the more specialised features.

STARTING ACP

ACP is started with a simple EXEC command, e.g. EXEC FLP1_ACP_OBJ. This should bring up a screen as shown in figure 1.

$$$ Figure 1 - ACP's main menu display [acp01.gif] $$$

USE

You'll see at this point that it has two sets of four buttons at the top. The smaller ones at the top left of the program are (clockwise from top left):

MOVE (the double square symbol). Moves the program display around the screen if the screen is bigger than the ACP display.

HELP (question mark symbol). Brings up the help file display, as shown in Figure 2. Here, you can press L to scroll down one line, or P to scroll down by one page. You can also click on the little icon which is a representation of a page of text with an up arrow. Press ESC to return to the main menu.

Zzz - this icon puts ACP to sleep in the QPAC2 button frame.

To the top right, the second group of four buttons are:

OPTIONS. This brings up the Options menu, where you can specify features of individual archivers to use. Note that this menu can vary slightly for the different archivers (the example shown is for when using Zip). It asks you to specify features such as whether the archive generated is a specifically QL-format archive, or more general for better compatibility with the same archivers on other computers. For ARC, setting this option ensures that QL file headers are stored in the archive and restored when extracted from the archive. Resetting this option allows _arc files for other operating systems to be handled. For Zip, this implies Pkzip compatibility, where the filenames stored are limited to the MS-DOS style 8.3 filenames. If handling QL files, it is best to set the QDOS Compatibility option to On. Other icons indicate if the archive created is to store the directory path names of files held in level 2 directories on a QL system. OVEWRITE allows you to specify if a file which already exists in the archive is to be replaced if you try to add a file of the same name as one which is already in the archive. A CONFIRMATIONS option allows the archiver to overwrite files automatically without asking the user, but applies only to some of the archivers. DISPLAY MESSAGES toggles whether or not the archiving program can display report messages. COMPRESS FILES lets you toggle whether files are compressed or simply stored as they are in the "real" world. For some archivers, the level of compression can be specified - it is possible to get better compression which is slower, or slightly less compression performed faster. The Encrypt Archive option is for Arc (where it controls file encryption) and Zip (where it controls password protected files - don't forget the password or key you specify here or the archive may be lost forever!)

ACTIONS. With this menu, you can perform given actions on the current archive. For example, click on the Add Files option to add the files selected in the file list window to the current archive. The Delete Files option lets you remove a selected file from the list of files in the current archive.

CONFIGURATION. As the name implies, this option lets you set certain options for ACP in relation to whichever of the six archivers is currently selected for use. You may prefer to leave these alone at first, until you become more familiar with the various elements of ACP

and the individual archivers. Just to complicate matters, this menu varies somewhat depending on which archiver program is in use.

TOOLS. The commands in this menu help you to use Gzip, Bzip2 and Compress on any number of individual files and to split or glue back together a single large file which is split into sections (e.g. large files too big for a single floppy disk). This is rather specialised, so I suggest you leave this alone until you have mastered basic use of ACP and then to read the instructions on using the Tools menu.

Below these small buttons, there is a row of six buttons which specify whether ACP is to use ARC, LHA, LHQ, ZIP, ZOO or TAR archivers. As most archived files on the QL scene seem to use Zip, you are probably better off learning to use ACP with Zip at first, then try out the others as your confidence grows. To change the selected archiver, just click on the name of the one you require.

Below these are another set of four buttons, All, Extract, Add, All. The left hand All button selects all files in the currently selected archive, and the right hand All selects all files displayed in the directory window. Clicking on the same icon a second time reverses the action - if all filenames were selected originally, all are deselected.

The two short and wide windows hold the name of the current archive (e.g. a _zip file) in the left hand box, while the right hand box shows the name of the current drive and directory. Clicking on one of these boxes brings up the usual file selection menu if you have the Jochen Merz Menu Extension (a file called MENU_REXT), or simply asks you to manually type in a filename in one of the boxes if not.

The two large black windows at the bottom are used for showing a list of filenames. The left hand window shows what's contained in the archive, while the right hand window shows the filenames int he currently selected drive and directory. The operation of these two windows is quite simple - files from the right hand window can be compressed into the archive file shown on the left. For example, if you are adding files from FLP1_ into a zip file called RAM1_TEST_ZIP in RAM1_, the left hand box would show a list of files in RAM1_TEST_ZIP and the right hand box would show the list of files on FLP1_. The display is the same whether you are adding files into an archive, or extracting files out of the archive file.

Selection of files is easy - just click on the names of the files required. You should use the left button on a mouse, or SPACE if using the keyboard. Look at the diagram in Figure 1 - we are working with an archive called win1_archivers_ARC_ZIP in the left hand window, and the QL Today cover disk in FLP1_ shown in the right hand window. Suppose we wish to add the boot program into ARC_ZIP - we would just click on the "boot" filename in the right hand window, then click on the Add button to send a copy of "boot" into ARC_ZIP. Multiple files can be selected - try clicking on "boot", "acp_help" and "acp_obj" and send copiesof all three intot he archive. If you do the same thing twice, depending on configuration options which have been set up, the archiver will either overwrite the original, query whether to overwrite, or perhaps create a duplicate entry in the archive, whichis not always useful of course.

To extract files from an archive, just click on the names of the files to extract and click on the

Extract button which will decompress the files and send them to the drive and/or directory indicated on the right hand side. Some archivers can be set to delete files as they are extracted - thankfully, Zip does not normally do this, as it is all too easy to lose files by careless mistakes when learning to use these programs!

To view a file in the right hand window, just select the names of all files to view, then click on a filename by pressing the right mouse button (or ENTER if using the keyboard). This will ask if you wish to process the files with File Info II. Reply Yes or No - if you reply with N it will try to view the file with its own built in text file viewer.

To view a file from the archive in the left hand window, just select the name and it will try to display that file in its built in text viewer. Trying to view an executable program will normally show all sorts of rubbish characters on screen, although it can be useful sometimes if you are unsure of the content of a file from its name.

And that's really all there is to using ACP at a basic level. Just remember to select the right program from the list of six, select the archive file in the left hand window, and the drive to which or from which files are to be archived from or de-archived to, select the files required then click on Extract or Add as required.

Unzip Librarian

This is a much more basic affair than ACP, but it still has its uses for those who are rather put off by the sometimes bewildering number of options and raw power of ACP.

As its name implies, it is purely intended to be used with Unzip and Unzip. It makes no use of extended options on Unzip, its purpose is simply to simplify unzipping files.

It's available in two versions, one for pointer environment users, called ULIB_OBJ, and a pointer driven version called ULIB_PTR_OBJ. Thos eversions have no compiler runtimes included, so versions with names ending in RTM are slightly longer, but have the compiler runtime extensions built in.

Pointer Version

See Figure 7. This has a list of drive names across the top, and a list of buttons 1 to 8 for selection of drive numbers. The <- icon lets you go back down one directory level on a system which has sub-directories. Alternatively, click on the F2 box to manually type in a drive and directory name. The large window in the centre shows a list of files in the current directory. In this list, click on the name of a zipped file and the files will be unzipped to the drive/directory shown in the F3 box at the bottom. The F4 box contains the location of the unzip program - if yours is on FLP1_ you'd change what's shown to FLP1_ otherwise Unzip Librarian would not be able to find the Unzip program to do the unzipping of files.

Non-Pointer Version

See figure 8 for a screen dump from this version of the program. The controls are very similar - press F1 to specify where the Unzip program is stored on your system, F2 to enter the name of the drive and directory where the zipped file is stored, and F3 to enter where to unzip the stored file to. Press F5 to force a read of the selected location. <- lets you go back down one directory level. Pressing F4 redraws the display if required.

In the files window, select the zip file required and press ENTER on its filename. Sub-directories are indicated by a '>' character before the name - press ENTER on a sub-directory name to enter that directory.

Press ENTER on the filename of the zipped file and the decompression process begins.

Next issue: In the next (and concluding) issue, I'll discuss the use of my Zip Manager program.