Contents

Abstract

This is MPW Mode Help documenting the MPWS (Macintosh Programmer's Workshop and Shell) Mode in Alpha. For Alpha to find it, you must move this file to the Help folder located at the same level as the Alpha application itself.

1 Description

MPW mode allows you to use Alpha as a frontend to MPW (Macintosh Programmer's Workshop) in order to write and to process scripts and commands written in the MPW language. It adds a new menu in the menu bar with all the necessary functionalities.

Main features are: syntax coloring, elaborate system of abbreviations and word completion, immediate help, executing command lines and scripts from within Alpha, retrieving the results in your script or in a separate window, getting or setting the value of all MPW variables and paths, browsing easily in the commands history etc.

MPW mode relies entirely on the capacities of the Tool Server application for communicating with MPW through Apple Events. ToolServer is a complete tool and script execution environment extracted from the MPW Shell that you can use to execute time-consuming, non interactive tools or scripts in the background or on a remote machine. Thus ToolServer can run most of the tools and scripts in the MPW tool suite and most tools and scripts which are written for MPW. The major exceptions are editor and Projector commands. ToolServer is primarily designed to be run using Apple events. As such, it can be run from Alpha.

For this mode to work properly, you must have installed MPW 3.3 or later and the ToolServer software. These programs can be found at

ftp://ftp.apple.com/devworld/Tool_Chest/Core_Mac_OS_Tools/MPW_etc./

Note that the mode here defined is refered to internally as MPWS. We will call it MPW mode in this document though. The reason for naming it MPWS is to avoid conflicts with an already declared MPW mode which is not, though, a standalone mode but is defined in the shellMode.tcl file apparently for technical reasons.

2 Installation

2.1 Automatic installation

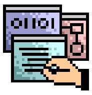
Open the OPEN TO INSTALL file. Opening this file indicates to Alpha that a new package has to be installed: the procedure is automatic. Alpha knows where to store the different elements of your MPW Mode package. The icon though has to be installed manually using ResEdit (see below).

2.2 Manual installation

1. put the mpwMode.tcl file in the Modes subfolder of the Tcl folder which is located at the same level as your Alpha application

2. put the MPW Mode Help file in the Help folder located at the same level as your Alpha application. Next time you launch Alpha, you will have a MPW Mode Help item in the Help menu to edit this file.
3. you have to install the MPW icon as an icon resource in Alpha. Use ResEdit to do that. The icon has ID number 146. See below.
4. launch Alpha. It will detect the presence of a new mode and ask you if you want to rebuild the indices: the answer is 'yes'.

2.3 Installing the menu icon for the MPW mode



In versions of Alpha prior to 7.5, there is no MPW icon so the icon of the MPW application must be added to Alpha's resource fork: to do so, you must have a program to manipulate resources such as 'ResEdit' or 'Resorcerer'. ResEdit is a free software distributed by Apple. Resorcerer is a commercial product.

With ResEdit, open the mpwMode.rsrc file included in the distribution of mpwMode and open, also with ResEdit, the Alpha application (quit it before if it is running): copy and paste the icon resources ics#, ics4 and ics8 from mpwMode.rsrc to Alpha. All these resources have ID number 146 which is normally free.

If you do not fell like installing this icon, you will have to edit the mpwMode.tcl file and replace in the code all the occurences of '146' (without the quotes) by the word MPW. It occurs only in three places.

2.4 After installing

You can install this menu permanently from "Config - Preferences - Menus".

Once the installion is completed, have a look at the mode specific preferences: see below.

3 About MPW and Tool Server

For Tool Server to answer correctly to the requests sent by MPW mode, it is very important that it can find the various scripts and tools it needs: there is a user configureable variable called "Commands" which contains a list of all the directories searched for commands. The usual installation puts the 'Scripts' and 'Tools' folders as well as the ToolServer program itself in the 'MPW_Shell Folder' i-e at the same level as the MPW Shell program. In that case the "Commands" variable would have the following value:

```
:,{MPW}User Commands:,{MPW}Tools:,{MPW}Scripts:
```

where MPW designates the full pathname of the Macintosh Programmer's Workshop.

To check the current value of the "Commands" variable or to modify it, see below 'How to set the value of a variable'. If Tool Server complains that it cannot find a certain command, it generally means that the "Commands" variable is not set correctly. If you do not want to get involved in these settings, an easy workaround is to make aliases of the 'Tools' and of the 'Scripts' folders and put them (with the same name) in the same folder as the Tool Server application itself .

Another important point is the location of the 'MPW.Help' file: if Tool Server does not find it, the help requests will not work. If Tool Server complains that it can't find the MPW.Help file, put a copy (or an alias) of this file in the same folder as the Tool Server application itself. Another possible location for the MPW.Help file is in the MPW Preference folder (in the System Folder). Once again the best location for the Tool Server application and for the 'Tools' subfolder is at the same level as the MPW Shell itself.

Please also note that:

1. the variable MPW contains the full pathname of the directory in which the MPW Shell is stored.

2. the variable Boot contains the name of the volume where the system software is stored.

3. the so called "current directory" is the directory in which you create and save files. As you work with the MPW Shell, you can have many files from different directories open at once. The current directory is not necessarily the directory that contains the file you are working on. The current directory is the directory you set with the "Directory" command.

   When you first start MPW, the current directory is MPW i-e MPW Shell's directory. To check which directory is presently the current directory, choose "Command Line..." in Alpha's MPW menu, type "directory", then press the "Execute" button.

4. to use the Desktop Folder in a pathname, you use the variable Boot, which contains the name of the volume on which your system software is stored. The Desktop Folder is a subdirectory of Boot.

4 How to set MPW mode

There exists already an MPW mode in Alpha which is related to the Toolserver Shell (called with ctrl-cmd-Y). So the present MPW mode is in fact identified by the four letters 'MPWS' which stand for Macintosh Programmer's Workshop and Shell.

Now there are different ways of setting MPW mode:

- the opening of a source file with extension .mpw will automatically invoke the MPW Mode and the corresponding menu. You can add other suffices in Config > Preferences > Suffix mapping...

- using the "Open a Worksheet" item in MPW's menu opens a new window called "MPW Worksheet" in MPW mode.

- the opening of a source file with no extension will invoke MPW Mode only if the first line of your file is as follows:

  ```
  %-*-MPWS-*-
  ```

  There is a menu item to insert this magic line automatically. See "Set MPW Mode" in the MPW menu.

- you can also switch between MPW and other modes with the little pop up menu bottom right of the status bar (the rightmost one before the line indicator).

The MPW menu in the menu bar gives you full control on all the features of the MPW mode.

5 How to execute command lines

5.1 Executing a single line

There are several ways of executing a command line. Your current window must be in MPW mode (see above). Put the cursor anywhere in the line you want to execute and hit the 'Enter' key or the 'Command-Return' combination (not Return alone which inserts a simple carriage return).

For instance, type the following line in your source file

```
date -s4
```

leave the cursor on the line and press Enter. A window named "* date -s4 *" is opened displaying the answer: for instance 4/07/2000 19:47:23. (Oh dear, I forgot to tell that today is the fourth of July and that it is now 7:47 pm).

You can also hilite the line you want to execute. If no region is hilited, MPW mode will take the entire line. On some PowerBooks, there is no Enter key, so use Command-Return instead.

Another possibility is to use the "Command Line..." menu item. It brings a window in which you can type a command line and execute it with the Execute button. This comes in handy when you want to execute a command but don't want to write it in your source file. Next time you call the "Command Line..." window, it will display the last command you typed. To experiment, type in for instance:

```
echo {SystemFolder}
```

The answer will be the location of the system folder on your installation. You can call the "Command Line..." window by just pressing the F5 key if you are already in MPW mode.

Choosing "Execute Lines" in the menu is equivalent to pressing Enter or Command-Return.

5.2 Choosing the destination of the result of a command

The result of the execution of a command line (if any) can be either displayed in a separate window or inserted at the cursor's current position in your script: there is a preference setting to choose between these two possibilities (see preferences below).

You can toggle the destination set in the preferences by holding the control key down. If the 'Send Result To Buffer' flag is set then the result is normally sent to the buffer: if you hold the control key down, it will be sent to a separate window instead. And vice-versa.

Similarly if you open the MPW menu with the control key down, the item "Execute Lines" is changed to "Execute and Toggle Target".

5.3 Building and executing a command with a Commando Box

MPW users know the Commando Boxes. You can use Commando Boxes to execute a single command with all possible options in a very user friendly way. Use the "Commando Box..." menu item: you are prompted for the name of an MPW command. MPW mode switches to Tool Server and opens the corresponding 'Commando Box'. You can build there your command with all the options you wish: the result of the command is sent back to Alpha.

You can invoke the "Commando Box..." menu item by pressing the F4 key if you are already in MPW mode.

There is a third method to call a Commando Box which is traditionnaly implemented in the MPW application: type a word, then press option-Enter (or option-command-Return). It works here as well. Fourth method ; type your keyword followed by an ellipsis and press Enter.

5.4 Executing multiple lines

In your source file you can also execute several lines consecutively: hilite them and press Enter or Command-Return. Beware that there is a size limitation for Apple Events: if you select too many instructions in a very long script (more than 32k), there might be an overflow. On the other hand, if the answer is too big, you might loose a part of it. In that case, you should consider using the "Execute the Buffer" or "Execute a Script..." menu items as explained below.

The "Built-in Commands" menu item contains a list of the main commands understood by MPW.

You can also launch any application on your hard disk by entering the applications name as a command. For example, if you have an application named BBEdit stored in the HD volume (or whatever its name is), you can start it by entering

```
HD:BBEdit
```

in the "Command Line..." window. If the application is in the MPW folder, you don't even have to write its full path name.

6 How to execute a script

6.1 Executing a script from the menu

If your suite of instructions is too big or generates too big an output, the preceding methods might not work due to the limitations in data exchange through Apple Events (32k). The good method in that case is to have it executed as a script, i-e a separate file containing all the instructions you want to execute. To execute the current window, select "Execute the Buffer" in the MPW mode menu. To execute any script, select "Execute a Script..." in the MPW mode menu. You will be asked about parameters, options or flags to add: a script may require some parameters and accept some options or flags. If you choose 'Yes', you will have a window in which you type the additional information.

One should know that Tool Server doesn't have any console to show its output: its default behavior is to send its output to a file. For instance, if your current window is called Myscript, the output of your script will be sent to a file called Myscript.out. If there are any error messages, they are sent to a file called Myscript.err. These files are located normally in the same folder as your script Myfile.

There is however a possibility to write the .out and the .err files in different folders: the destination folder for these two files is contained in the variables 'BackgroundOut' and 'BackgroundErr'. MPW mode is aware of that and checks the value of these two variables to be able to open the .out or .err files when you use the "Open Out File" or "Open Err File" menu items. If your script doesn't generate any output, there will be of course no .out file. If there is no error in your script, there will be no .err file.

6.2 Executing a script from the command line

Note that you can also execute a script using a simple command line. Call the "Command Line..." menu item and type the full path name of your script with the necessary options: if you do not want to bother with typing an entire path name, there is a "script" button which allows you to navigate in the files hierarchy and designate the script you want to execute: its full pathname will be automatically inserted in the command line (with double quotes to avoid problems with whitespaces). Add any required options and press the Execute button.

When you execute a script like this, the output is sent directly to Alpha in a separate window: there is no issue about .out or .err files.

7 How to set the value of a variable

The MPW menu has submenus named "Built in Commands", "Internal Variables", "User Variables" and "Libraries Variables".

The former contains the names of the built-in commands: clicking on any of them inserts their name at the cursor's position in the current window. The other three menus contain respectively the variables defined by the MPW Shell (whose values are maintained dynamically by the MPW application), the variables used by the MPW Shell which are all configureable and the variables used for libraries and include files (they contain the pathname of the directory containing the corresponding libraries: their value can be set by the user).

Concerning the dynamic variables, when you select them from the submenu, they are included in the source file and enclosed with braces. This is because, since they are not configureable, you shall always use them to get their value. Enclosing a variable name with braces has the same meaning in MPW's syntax than the $ sign in Tcl: it returns the current value of the variable.

In these submenus you can make use of the option and control keys. The signification is as follows:

7.1 Selecting an item while pressing the option key

In that case, all the menu items in the submenus are prefixed with 'get '. This means that you want to know their current value. The answer is given in a separate info window or inserted in your script (see preferences below). For instance, 'MPWVersion' in the Internal Variables will be changed to 'get MPWVersion' if you hold the option key down. The answer could be '3.5' if you are using version 3.5 of MPW.

7.2 Selecting an item while pressing the control key

In that case, all the menu items in the submenus are prefixed with 'set '. This means that you want to give a new value to a certain variable. For instance, 'FontSize' in the "User Variables" submenu will be changed to 'set FontSize' if you hold the control key down. You will be prompted in a special dialog window to set the new value. For instance type '12' to fix a 12pt size used for new windows (note that this affects the font size in MPW, not in Alpha). If the value of a variable is a path, there will be a Browse button in the dialog window to help you navigate to the folder you want to choose so that you don't have to bother about typing a full path name.

For the 'Commands' and 'DirectoryPath' variables, the dialog window is more elaborate since they can contain a list of directories (not a single one). You can add or remove paths to these lists.

8 Completions

A very handy feature of MPW mode (like in many other modes in Alpha) is word completion. To enable it, you must load the elecCompletion package (in Config - Preferences - Features) and choose your completion key (default is F1). You can then type the first letters of a command or a keyword and then hit the F1 key: MPW mode will complete automatically.

For instance, type 'Scre' and hit the F1 key: it is completed immediately to 'ScreenUpdateDelay'.

Now type just 'All' then hit the F1 key: 'All' will become 'Allow'. Hit the F1 key again ; a window shows up with a list of all possible completions:

```
"AllowCmdsOnlyInWorkSheet" "AllowColorizing"
"AllowColorUserExperience" "AllowDraggingOut"
"AllowMultipleUndo" "AllowWhiteSpaceDelimiter".
```

Pick up the one you want to be inserted in the current window.

Note that, the MPW language being case insensitive, you can type everything in lowercase. Thus 'scre' will yield 'screenupdatedelay'.

8.1 Abbreviations

Another aspect of completion is the use of abbreviations. If you type 'bg' and hit the F1 key, you get:

```
Begin

End
```

the cursor being positioned at the place of the first bullet : use the Tab key to jump to the next bullet. This works with 'for', 'loop', 'if' and 'ifel'. The latter expands to:

```
If

Else

End
```

There are four contractions concerning the output redirections:

```
d'so Dev:StdOut
d'se Dev:StdErr
d'n Dev:Null
d'c Dev:Console
```

Finally there is a very intuitive system of abbreviations for long variable names which are compound names, like 'ScreenUpdateDelay'. You can just type the initial letters (initials of the words composing the variable name): for instance here just type 'sud' and then hit the F1 key to get 'ScreenUpdateDelay'. There are only two ambiguous situations:

- 'sd' could be ShellDirectory, SuppressDialogs or ShutDown. MPW mode defines 'sd', 'sdg', 'sdn' resp.
- 'tf' could be TempFolder or TraceFailures. MPW mode defines 'tf' and 'tfs' resp.

Here is the complete list of abbreviations:

ac	AllowColorizing
acoiws	AllowCmdsOnlyInWorkSheet
acue	AllowColorUserExperience
ado	AllowDraggingOut
ai	AutoIndent
amu	AllowMultipleUndo
awsd	AllowWhiteSpaceDelimiter
be	BackgroundErr

`bo`	`BackgroundOut`
`bs`	`BackgroundShell`
`cfd`	`CursorForDragging`
`cod`	`CheckOutDir`
`cs`	`CaseSensitive`
`dcl`	`DeleteCharLeft`
`dcr`	`DeleteCharRight`
`deof`	`DeleteEndOfFile`
`deol`	`DeleteEndOfLine`
`dfs`	`DontFlushServers`
`dfv`	`DontFlushVolumes`
`dnr`	`DuplicateNameRevisions`
`dp`	`DirectoryPath`
`ds`	`DynaScroll`
`dsof`	`DeleteStartOfFile`
`dsol`	`DeleteStartOfLine`
`dwl`	`DeleteWordLeft`
`dwr`	`DeleteWordRight`
`ews`	`ExtendWordSet`
`fs`	`FontSize`
`get`	`GetErrorText`
`gfn`	`GetFileName`
`gli`	`GetListItem`
`hc`	`HeapCheck`
`hhk`	`HideHelpKey`
`icp`	`IgnoreCmdPeriod`
`imc`	`InhibitMarkCopy`
`lnr`	`LockNameRevisions`
`mcl`	`MoveCharLeft`
`mcr`	`MoveCharRight`
`mef`	`MakeErrorFile`
`meof`	`MoveEndOfFile`
`meol`	`MoveEndOfLine`
`mld`	`MoveLineDown`
`mlu`	`MoveLineUp`
`mpd`	`MovePageDown`
`mpu`	`MovePageUp`
`mro`	`ModifyReadOnly`
`msof`	`MoveStartOfFile`
`msol`	`MoveStartOfLine`
`mwl`	`MoveWordLeft`
`mwr`	`MoveWordRight`
`nkl`	`NewKeyboardLayout`
`nkm`	`NewKeyMap`
`nwr`	`NewWindowRect`
`onr`	`ObsoleteNameRevisions`
`opf`	`ObsoleteProjectorFile`
`pf`	`PrefsFolder`
`po`	`PrintOptions`
`pv`	`ProjectorVersion`

rpf	RenameProjectorFile
sb	SearchBackward
scl	SelectCharLeft
scr	SelectCharRight
sd	ShellDirectory
sdg	SuppressDialogs
sdn	ShutDown
seof	SelectEndOfFile
seol	SelectEndOfLine
sf	SystemFolder
sld	SelectLineDown
slu	SelectLineUp
so	StackOptions
soc	SaveOnClose
spd	SelectPageDown
spu	SelectPageUp
ssof	SelectStartOfFile
ssol	SelectStartOfLine
sss	SetShellSize
st	SearchType
stf	SysTempFolder
sud	ScreenUpdateDelay
sw	SearchWrap
swl	SelectWordLeft
swr	SelectWordRight
tf	TempFolder
tfs	TraceFailures
to	TileOptions
tst	ToolSleepTime
twc	TabWidthChar
unr	UnlockNameRevisions
uonr	UnObsoleteNameRevisions
uopf	UnObsoleteProjectorFile
upd	UpdateProjectorDatabase
usf	UseStandardFile
usk	UnSetKey
ws	WordSet
zh	ZoomHeight
zw	ZoomWidth
zwr	ZoomWindowRect

9 Getting help about a command

To get help about any built-in MPW command and about its syntax, you just have to command-double-click on its name: that is to say, double-click while pressing the command key down. For instance, command-double-clicking on the word 'date' will display a separate window with the following information (or insert the information at the cursor's location):

```
Date            # write the date and time
```

```
 Date ([-a | -s | -s4 | -u] [-st] [-d | -t]
           [-c seconds | -utc]) | ([-n] [-utc]) | [-x date]
     -a          # abbreviated date (e.g. Wed, Jun 14, 1995)
     -s          # short date (e.g. 6/14/95)
     -s4         # short date, using 4-digit year (e.g. 6/14/1995)
     -u          # uniform output format, "YYYY MM DD HH:MM:SS"
     -st         # omit seconds from time format
     -d          # write date only
     -t          # write time only
     -c seconds  # write date corresponding to seconds
     -x date     # write seconds corresponding to date
     -n          # write seconds since January 1, 1904
     -utc        # write output converted to Universal
                 # Time Coordinates
```

10 Key bindings

As explained above, the Enter key and the Command-Return combination are used to execute a command line. If you press the Shift key simultaneously, the result will be inserted in the current window.

Use Ctrl-Cmd-Return to execute the buffer.

To enclose a variable name in braces, place the cursor anywhere in the word and use ctrl-(. To remove any encloser around a word or a region, hilite it and use ctrl-) .

Call the "Command Line..." window with the F5 key.

Call the "Commando Box..." window with the F4 key. Alternatively, type a keyword, then press Option-Enter or Option-Command-Return, to call up the Commando Box corresponding to this keyword.

The "Show Bindings" menu item displays a window with a summary of all the existing key bindings in MPW mode. Some of these functionalities are not accessible from the menu, only with the corresponding key binding.

Key combination	Signification
cmd-return or enter	execute a line or a selection
ctrl-cmd-return or ctrl-enter	execute and toggle result’s destination
ctrl-cmd-enter	execute the buffer as script
opt-ctrl-cmd-return	execute a script...
opt-enter or opt-cmd-return	open command’s commando box
F4 or ctrl-opt-k	ask for commando box...
F5	open command line window
F6	open special chars palette
ctrl-up	browse up in commands history
ctrl-down	browse down in commands history
ctrl-”	surround with ” ”
ctrl-’	surround with ’ ’
ctrl-‘	surround with ‘ ‘
ctrl-(	surround with ( )
ctrl-opt-(	surround with
shift-ctrl-opt-(	surround with [ ]
ctrl-<	surround with < >
ctrl-opt-<	surround with << >>
ctrl-)	remove any encloser

11 Complete description of the menu items

Explanations for the MPW menu items:

Switch To MPW Launch the MPW application in front.

Execute Lines Send the text selected (hilited) in the current window to Tool Server as instructions to process. If no text is hilited, send the entire line at the cursor’s position. Equivalent keybinding: Enter or Command-Return.

- When pressing the control key down, the previous item becomes:

  Execute and Toggle Target Executes the selection and changes the destination of the result set in the preferences with the flag ’sendResultToBuffer’. If the flag is set, then the result is sent to a separate window instead of the buffer and vice-versa. Equivalent keybinding: Control-Enter or Control-Command-Return.

Execute the Buffer Send the entire current window to Tool Server as a script to execute. Tool Server’s standard output and errors are written in a .out and a .err file. Equivalent keybinding: Control-Command-Enter.

Execute a Script... Prompts for a script file to open and send to Tool Server.

Open Out File Open the output file written by Tool Server while executing a script. This command opens the output of the last executed script. If no script has been recently executed, you are prompted directly for a file to open. If the script generates no output, there won’t be any .out file. See above the discussion concerning the destination folder which can be set with the ’BackgroundOut’ variable.

Open Err File Open the errors file written by Tool Server during the execution of a script. If no script has been recently executed, you are prompted directly for a file to open. If there was no error, there won't be any .err file. See above the discussion concerning the destination folder which can be set with the 'BackgroundErr' variable.

Command Line... Open a small window to type a Unix-like command line in and have it executed. Equivalent key binding: F5

Commando Box... Prompts for the name of an MPW command, then switch to Tool Server and open the Commando Box corresponding to this command. The result of the command executed in the Commando Box is sent back to Alpha. Equivalent key binding: F4

Open a Worksheet Open a window called "MPW Worksheet" in MPW mode. You can open as many windows as you want, enter your commands, execute them etc.

Set MPW Mode Inserts a magic line at the beginning of the current window to turn in MPW mode. Next time you open this file, it will automatically be in MPW mode whatever its extension is.

ToolServer Shell Open a shell window to interact with ToolServer: the only difference with the Worksheet is that you have a prompt and can enter only single line commands. This is exactly the same as the ToolServer Shell menu item in the Utils menu (when you open it with the control key down)

Enclose with... Enclose the current word in a pair of delimiters. You are prompted in the status bar for a delimiter. If you enter a left parenthese, brace or bracket, or a < or << symbol, MPW mode will automatically select the corresponding right delimiter.You can also choose single delimiters, like single, double or back quotes.

If there is no selection, the word around the current cursor's position is enclosed. Otherwise, the entire selection is enclosed.

Equivalent key binding: ctrl-(. There are also several other key bindings to automatically insert some of the delimiters, shortcutting the status bar prompt. See key bindings above.

Remove enclosers Remove any of the above mentioned delimiters around a word or a selection. Equivalent key binding: ctrl-)

MPW Special Chars Submenu to insert the special characters used by the MPW scripts for regular expressions, redirections etc. Very useful if you forgot how to get them from the keyboard.

Characters Palette Display a floating palette of MPW Shell special characters. Click on any of them to insert it at the cursor's position. Equivalent key binding: F6

MPW Help Submenu providing help about various matters and categories. General help can be obtained with the "Help Summary" item. Help summaries are available for each of the MPW commands catgories: Editing, Languages, Resources etc. Command-double-click on any of these words (colored by default in magenta) to bring a more specific help summary. Command-double-click on any syntax word to bring a complete description of its syntax, available options etc.. If the frontmost window is in MPW mode, the results of these commands are inserted at the end of the window ; otherwise a separate window is opened. Available categories are:

CFM-68K
Characters
Commands
Editing
Expressions
FileSystem
Languages
Launch
Miscellaneous
Patterns
PowerMacintosh
Projector
Resources
Scripting
Selections
Shortcuts
System
Variables
Window

Variables Display a summary of the standard MPW shell variables

Expressions Display a summary of MPW expressions

Selections Display a summary of MPW selections

Patterns Display a summary of patterns (regular expressions)

Shortcuts Display a summary of MPW Shell shortcuts

Show Bindings Display in a separate window all the key bindings available in MPW mode.

Show Defined Variables Display the currently defined variables with their value. Those displayed with a -e flag are exported variables.

Built-in Commands Brings a pick-up list of all the MPW built in commands. Enter any initial letter from the keyboard to navigate rapidly in this window.

Internal Variables Submenu containing the name of all the internal variables maintained by MPW. If you choose an item, it is included at the cursor's position enclosed in braces.

When pressing the option key down, each item becomes: 'get item' to get the value of the corresponding variable.

User Variables Submenu containing the name of all the user configureable shell variables. If you choose an item, it is included at the cursor's position.

When pressing the option key down, each item becomes: 'get item' to get the value of the corresponding variable.

When pressing the control key down, each item becomes: 'set item' to set the value of the corresponding variable. See description above.

Librairies Variables Submenu containing the name of all the path variables used by MPW to locate the librairy and include files. If you choose an item, it is included at the cursor's position.

When pressing the option key down, each item becomes: 'get item' to get the value of the corresponding variable.

When pressing the control key down, each item becomes: 'set item' to set the value of the corresponding variable. A navigation window lets you designate the folder. See description above.

12 File Marking

There is no specific file marking for MPW mode.

13 Commands History

The list of all the commands previously executed is called the commands history: you can access this list by option-clicking on the title bar of your current window (if it is in MPW mode of course). This will show you a list of the last used command lines: you can choose any of them and have it inserted in the current window. The Reset History List item allows you to empty this command history. There is a maximum number of command lines which can be stored in the history. By default, this number is equal to 20 but you can modify this value in the mode specific preferences. Long commands (more than 50 chars) are not included in the history.

Alternatively you can navigate through the history of commands using the two key combinations ctrl-UpArrow or ctrl-DownArrow: this will insert at the cursor's position, one after the other, the various commands that have been stored in the history.

14 The Functions pop-up menu

The Functions pop-up menu (symbolized by '' at the top right of the current window) contains a list of all the variable names used (with a 'set' command) in your script.

15 MPW Mode preferences

Remember that the abbreviation for MPW Mode is 'MPWS'. The Preferences... item in the Mode prefs submenu of the Config menu allows you to edit specific preferences for the MPW Mode (if you are in already in MPW Mode; if not, switch to MPW Mode). Most of them should be self-explanatory:

- 'Hist Buffer Size' is the size of the commands history buffer showed when you option-click on the title bar of the current window.
- colors for keywords, strings, comments etc. as usual. The "Variables Color" preference allows to choose a different color for MPW variable names (default is magenta). There is also a color called "Categories Color" used for words such as 'Projector', 'Resources', 'Scripting', 'System' etc. which are neither built-in commands, nor MPW variables (default is cyan).
- alternative key bindings to those defined by default (see Key Bindings above) in case they conflict on your installation with other Alpha software.

- with the 'Send Result To Buffer' flag you can decide permanently that the result of the execution of command lines be sent to the current window rather than to a separate window. Whatever you choose, you still can occasionaly get the opposite behaviour by using the "Execute and Toggle Target" menu item (press the control key down when opening the MPW menu or see key bindings). When you use the "Command Line..." window, there is also a checkbox called 'Insert result in buffer' to redirect the output to the current window.

- the 'Echo From Menu' preference means that 'get' and 'set' commands executed from one of the submenus (Internal Variables etc.) is echoed in the current window.

16 Version History

- 0.1 – 27/06/2000 – Created the MPW Mode including the following features: new MPW menu, submenus to insert MPW macros, syntax coloring, file marking, completion routines...

- 0.2 – 09/08/2000 – Added menu items to enclose words in various quotes. Added mechanism to send the results of command lines either to the current window or to a separate window (new pref). Implemented the 'option-enter' combination to call a Commando box (like in MPW itself). Implemented ctrl-arrow (up and down) to navigate through the commands history.

- 0.3 – 25/06/2001 – Modified for Alpha8 compatibility. Added Worksheets, improved command history, added a special chars palette, show bindings window, improved the enclosing procs.

- 0.4 – 05/07/2001 – Corrected a bug with menu bindings in the "Special Chars" submenu. Added Dev::StdIn. Added a "Show Defined Variables" menu item. Re-arranged help in a submenu.

- 0.4.1 – 16/07/2001 – Added shift-opt-L menu binding for pipe char.

- 0.5 – 18/07/2001 – Changed some keybindings for consistency. Added a menu item "Execute and Toggle Target" to toggle the destination of the result of a command (hold the ctrl key down). It replaces the item "Execute Lines in Buffer". Changed "Open Out/Err" to call getFile when no script processed.

17 Known Problems

Please e-mail any problem or bug you encounter: berdesg@easynet.fr

Visit the Alpha Utilities Web page:
http://perso.easynet.fr/~berdesg/alpha.html

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