

## General use

|                   |   |
|-------------------|---|
| <b>at</b>         | Run a command at a specified time                               |
| <b>batch</b>      | Run commands when the system is not busy                        |
| <b>bxmxtxt</b>    | Display reason code text  |
| <b>Ceebltdx</b>   | Transform msg source files into loadable message text files     |
| <b>clear</b>      | Clear the screen of all previous output                         |
| <b>command</b>    | Run a simple command  |
| <b>conffignfs</b> | Invoke vfs_pfsctl functions for HFS file systems                |
| <b>date</b>       | Display the date and time                                       |
| <b>echo</b>       | Write arguments to standard output                              |
| <b>edcmtext</b>   | Display editor reason code text                                 |
| <b>exec</b>       | Run a command & open, close, or copy the file descriptors       |
| <b>man</b>        | Print sections of the online reference manual                   |
| <b>nice</b>       | Run a command at a different priority                           |
| <b>passwd</b>     | Change user passwords and password phrases                      |
| <b>print</b>      | Return arguments from the shell                                 |
| <b>printf</b>     | Write formatted output  |
| <b>sh</b>         | Invoke a shell (command interpreter)                            |
| <b>tcsh</b>       | Invoke a tcsh shell   |
| <b>time</b>       | Display processor and elapsed times for a command               |
| <b>uptime</b>     | Report how long the system has been running                     |
| <b>wall</b>       | Broadcast a message to logged-in users                          |
| <b>whence</b>     | Tell how the shell interprets a command name                    |
| <b>whoami</b>     | Display your effective user name                                |
| <b>xc</b>         | Compiler invocation using a customizable configuration file     |
| <b>xC</b>         | C++ compiler invocation using a customizable configuration file |
| <b>xc++</b>       | C++ compiler invocation using a customizable configuration file |

## Controlling the environment

|                  |   |
|------------------|---|
| <b>alias</b>     | Display or create a command alias                                       |
| <b>asa</b>       | Interpret ASA/Fortran carriage control                                  |
| <b>automount</b> | Configure the automount facility  |
| <b>cal</b>       | Display a calendar for a month or year                                  |
| <b>calendar</b>  | Display all current appointments  |
| <b>captoinfo</b> | Prints terminal entries in the termcap file                             |
| <b>chcp</b>      | Set or query ASCII/EBCDIC code pages for the terminal                   |
| <b>configstk</b> | Configure the AF_UENT stack   |
| <b>env</b>       | Display environments, or set an environment for a process               |
| <b>export</b>    | Set export attribs. for variables, or show currently exported variables |
| <b>fc</b>        | Process a command history list  |
| <b>hash</b>      | Create a tracked alias  |
| <b>history</b>   | Process a command history list  |
| <b>id</b>        | Return the user identity  |
| <b>Infocmp</b>   | Compare and print the terminal description                              |
| <b>ipcrm</b>     | Remove message queue, semaphore set, or shared memory ids               |
| <b>ipcs</b>      | Report status of the interprocess communication facility                |
| <b>lm</b>        | Start the login monitor for OCS support                                 |
| <b>locale</b>    | Get locale-specific information   |
| <b>localedef</b> | Define the locale environment   |
| <b>logger</b>    | Log messages  |
| <b>logname</b>   | Return a user's login name  |
| <b>newgrp</b>    | Change to a new group   |
| <b>ocscnfig</b>  | Configure, unconfigure, or query an OCS object                          |
| <b>printenv</b>  | Display the value of environment variables                              |
| <b>r</b>         | Process a command history list  |
| <b>readonly</b>  | Mark a variable as read-only  |
| <b>return</b>    | Return from a shell function or . (dot) script                          |
| <b>script</b>    | Makes a typescript of a terminal session                                |
| <b>set</b>       | Set or unset command options and positional parameters                  |
| <b>shift</b>     | Shift positional parameters   |
| <b>stty</b>      | Set or display terminal options   |
| <b>su</b>        | Change the user ID connected with a session                             |
| <b>sysvar</b>    | Display static system symbols   |
| <b>tic</b>       | Compile term descriptions into terminfo database entries                |
| <b>touch</b>     | Change the file access and modification times                           |
| <b>tput</b>      | Change characteristics of terminals                                     |
| <b>tso</b>       | Run a TSO command from the shell  |
| <b>tsocmd</b>    | Run a TSO/E command from the shell (incl. authorized cmds)              |
| <b>tty</b>       | Return the user's terminal name   |
| <b>uconvdef</b>  | Create binary conversion tables   |
| <b>unalias</b>   | Remove alias definitions  |
| <b>uname</b>     | Display the name of the current operating system                        |
| <b>unset</b>     | Unset values and attributes of variables and functions                  |
| <b>who</b>       | Display information about current users                                 |

## Managing directories

|                 |  |
|-----------------|--|
| <b>basename</b> | Return the nondirectory components of a path name        |
| <b>cd</b>       | Change the working directory                             |
| <b>chgrp</b>    | Change the group owner of a file or directory            |
| <b>chmod</b>    | Change the mode of a group or directory                  |
| <b>chown</b>    | Change the owner or group of a file or directory         |
| <b>chroot</b>   | Change the root directory for the execution of a command |
| <b>dircmp</b>   | Compare directories                                      |
| <b>dirname</b>  | Return the directory components of a path name           |
| <b>ls</b>       | List file and directory names and attributes             |
| <b>mkdir</b>    | Make a directory   |
| <b>mount</b>    | Logically mount a file system                            |
| <b>mv</b>       | Rename or move a file or directory                       |
| <b>pathchk</b>  | Check a path name  |
| <b>pwd</b>      | Return the working directory name                        |
| <b>rm</b>       | Remove a directory entry                                 |
| <b>rmdir</b>    | Remove a directory                                       |
| <b>unlink</b>   | Removes a directory entry                                |



## Daemons

|                |   |
|----------------|---|
| <b>cron</b>    | Run commands at specified dates and times                     |
| <b>inetd</b>   | Handle login requests   |
| <b>rlogind</b> | Validate rlogin requests                                      |
| <b>uucpd</b>   | Invoke uucico for TCP/IP connections from remote UUCP systems |

## Printing files

|                |  |
|----------------|--|
| <b>cancel</b>  | Cancel print queue requests (stub command)                     |
| <b>infocmp</b> | Compare and print the terminal description                     |
| <b>lp</b>      | Send a file to a printer                                       |
| <b>lpstat</b>  | Show status of print queues (stub command)                     |
| <b>pr</b>      | Format a file in paginated form and send it to standard output |

## Writing shell scripts

|                  |   |
|------------------|---|
| <b>autoload</b>  | Indicate function name not defined              |
| <b>dspmsg</b>    | Display selected messages from message catalogs |
| <b>functions</b> | Display or assign attributes to functions       |
| <b>getconf</b>   | Get configuration values                        |
| <b>getopts</b>   | Parse utility options                           |
| <b>integer</b>   | Mark each variable with an integer value        |
| <b>read</b>      | Read a line from standard input                 |
| <b>type</b>      | Tell how the shell interprets a name            |
| <b>typeset</b>   | Assign attribs & values to variables            |
| <b>xargs</b>     | Construct an argument list and run a command    |

## Controlling processes

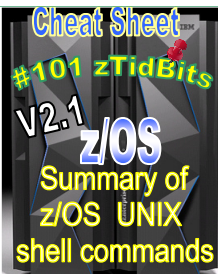
|                 |  |
|-----------------|--|
| <b>bg</b>       | Move a job to the background                           |
| <b>bpjtrace</b> | Activate or deactivate traces for processes            |
| <b>crontab</b>  | Schedule regular background jobs                       |
| <b>fg</b>       | Bring a job into the foreground                        |
| <b>jobs</b>     | Return the status of jobs in the current session       |
| <b>kill</b>     | End a process or job, or send it a signal              |
| <b>nohup</b>    | Start a process that is immune to hangups              |
| <b>ps</b>       | Return the status of a process                         |
| <b>renice</b>   | Change priorities of a running process                 |
| <b>sleep</b>    | Suspend execution of a process for an interval of time |
| <b>stop</b>     | Suspend a process or job                               |
| <b>submit</b>   | Submit a batch job for background processing           |
| <b>suspend</b>  | Send a SIGSTOP to the current shell                    |
| <b>time</b>     | Display processor and elapsed times for a command      |
| <b>times</b>    | Get process and child process times                    |
| <b>wait</b>     | Wait for a child process to end                        |
| <b>ulimit</b>   | Set process limits                                     |

## Working with UUCP

|                      |   |
|----------------------|---|
| <b>uucc</b>          | Compile UUCP configuration files                              |
| <b>uucico daemon</b> | Process UUCP file transfer requests                           |
| <b>uucp</b>          | Copy files between remote UUCP systems                        |
| <b>uucpd</b>         | Invoke uucico for TCP/IP connections from remote UUCP systems |
| <b>uulog</b>         | Display log information about UUCP events                     |
| <b>uuname</b>        | Display list of remote UUCP systems                           |
| <b>uupick</b>        | Manage files sent by <b>uuto</b> and <b>uucp</b>              |
| <b>uustat</b>        | Display status of pending UUCP transfers                      |
| <b>uuto</b>          | Copy files to users on remote UUCP systems                    |
| <b>uux</b>           | Request command execution on remote UUCP systems              |
| <b>uuxqt daemon</b>  | Carry out command requests from remote UUCP systems           |

## Distributed File System zFS

|                           |                           |   |
|---------------------------|---------------------------|---|
| <b>zfsadm agrinfo</b>     | <b>zfsadm format</b>      | <b>zfsadm help</b>  |
| <b>zfsadm apropos</b>     | <b>zfsadm grow</b>        | Displays a list of commands in a command suite.                                       |
| <b>zfsadm attach</b>      | <b>zfsadm help</b>        |   |
| <b>zfsadm config</b>      | <b>zfsadm lsaggr</b>      | <b>zfsadm help -topic command</b>   |
| <b>zfsadm configquery</b> | <b>zfsadm lsfs</b>        | Displays the syntax for one or more commands.   |
| <b>zfsadm convert</b>     | <b>zfsadm lssys</b>       |   |
| <b>zfsadm define</b>      | <b>zfsadm query</b>       | <b>zfsadm apropos -topic string</b>   |
| <b>zfsadm delete</b>      | <b>zfsadm quiesce</b>     | Displays a short description of any commands that match the specified <i>string</i> . |
| <b>zfsadm detach</b>      | <b>zfsadm setauditfid</b> |   |
| <b>zfsadm fileinfo</b>    | <b>zfsadm unquiesce</b>   |   |



The z/OS shell is based on the Korn Shell that originated on a UNIX system. As implemented for z/OS UNIX System Services, this shell conforms to POSIX standard 1003.2-1992.

This list presents z/OS shell commands grouped by the task a user might want to perform. Similar tasks are organized together. Stub commands (**cancel**, **cu** and **lpstat**) are not listed because their functions are not supported by z/OS UNIX System Services.

Not included - tcsh shell commands

## Managing files

|                   |  |
|-------------------|--|
| <b>amblist</b>    | Display formatted information from object & executable files     |
| <b>as</b>         | Use the HLASM assembler to produce object files                  |
| <b>cat</b>        | Concatenate or display text files                                |
| <b>chaudit</b>    | Change audit flags for a file                                    |
| <b>chlabel</b>    | Set the multilevel security label to files and directories       |
| <b>cksum</b>      | Calculate and display checksums and byte counts                  |
| <b>cmp</b>        | Compare two files  |
| <b>col</b>        | Remove reverse line feeds  |
| <b>comm</b>       | Show and select or reject lines common to two files              |
| <b>compress</b>   | Lempel-Ziv file compression                                      |
| <b>copytree</b>   | Make a copy of file hierarchy while preserving all file attribs. |
| <b>cp</b>         | Copy a file  |
| <b>csplit</b>     | Split text files   |
| <b>ctags</b>      | Create tag files for <b>ex</b> , <b>more</b> , and <b>vi</b>     |
| <b>dot</b>        | Run a shell file in the current environment                      |
| <b>cut</b>        | Cut out selected fields of each line of a file                   |
| <b>dd</b>         | Convert and copy a file  |
| <b>df</b>         | Display the amount of free space in the file system              |
| <b>diff</b>       | Compare two text files and show the differences                  |
| <b>du</b>         | Summarize usage of file space                                    |
| <b>ed</b>         | Use the <b>ed</b> line-oriented text editor                      |
| <b>egrep</b>      | Search a file for a specified pattern                            |
| <b>ex</b>         | Use the <b>ex</b> text editor                                    |
| <b>excrecover</b> | Retrieve <b>vi</b> and <b>ex</b> files                           |
| <b>extattr</b>    | Set, reset, or display extended attributes for files             |
| <b>expand</b>     | Expand tabs to spaces  |
| <b>fgrep</b>      | Search a file for a specified pattern                            |
| <b>file</b>       | Determine file type  |
| <b>filecache</b>  | Manage file caches   |
| <b>find</b>       | Find a file meeting specified criteria                           |
| <b>fold</b>       | Break lines into shorter lines                                   |
| <b>head</b>       | Display the first part of a file                                 |
| <b>iconv</b>      | Convert characters from one code set to another                  |
| <b>join</b>       | Join two sorted, textual relational databases                    |
| <b>line</b>       | Copy one line of standard input                                  |
| <b>link</b>       | Create a hard link to a file                                     |
| <b>ln</b>         | Create a link to a file  |
| <b>mkfifo</b>     | Make a FIFO special file   |
| <b>mkdir</b>      | Make a FIFO or character special file                            |
| <b>mount</b>      | Logically mount a file system                                    |
| <b>more</b>       | Display files on a page-by-page basis                            |
| <b>mv</b>         | Rename or move a file or directory                               |
| <b>nl</b>         | Number lines in a file   |
| <b>nm</b>         | Display symbol table of object, library, and exec files          |
| <b>obrowse</b>    | Browse a file  |
| <b>od</b>         | Dump a file in a specified format                                |
| <b>odit</b>       | Edit a file  |
| <b>pack</b>       | Compress files by Huffman coding                                 |
| <b>paste</b>      | Merge corresponding or subsequent lines of a file                |
| <b>patch</b>      | Change a file using diff output                                  |
| <b>pcat</b>       | Display Huffman-packed lines on standard output                  |
| <b>pg</b>         | Display files interactively                                      |
| <b>sed</b>        | Start the <b>sed</b> noninteractive stream editor                |
| <b>sort</b>       | Start the sort-merge utility                                     |
| <b>spell</b>      | Detect spelling errors in files                                  |
| <b>split</b>      | Split a file into manageable pieces                              |
| <b>strings</b>    | Display printable strings in binary files                        |
| <b>sum</b>        | Calculate and display checksums and block counts                 |
| <b>tabs</b>       | Set tab stops  |
| <b>tail</b>       | Display the last part of a file                                  |
| <b>tee</b>        | Duplicate the output stream                                      |
| <b>tr</b>         | Translate characters   |
| <b>tsort</b>      | Sort files topologically   |
| <b>umask</b>      | Set or return the file mode creation mask                        |
| <b>uncompress</b> | Undo Lempel-Zev compression of a file                            |
| <b>unexpand</b>   | Compress spaces into tabs  |
| <b>uniq</b>       | Report or filter out repeated lines in a file                    |
| <b>unmount</b>    | Remove a file system from the file hierarchy                     |
| <b>unpack</b>     | Decode Huffman packed files                                      |
| <b>uudecode</b>   | Decode a transmitted binary file                                 |
| <b>uencode</b>    | Encode a file for safe transmission                              |
| <b>vi</b>         | Use the display-oriented interactive text editor                 |
| <b>wc</b>         | Count newlines, words, and bytes                                 |
| <b>zcat</b>       | Uncompress and display data                                      |

## Computing and managing logic

|                                 |  |
|---------------------------------|--|
| <b>bc</b>                       | Use the arbitrary-precision arithmetic calculation language              |
| <b>break</b>                    | Exit from a for, while, or until loop in a shell script                  |
| <b>colon</b> or <b>:</b>        | Do nothing, successfully   |
| <b>continue</b>                 | Skip to the next iteration of a loop in a shell script                   |
| <b>dot</b> or <b>.</b>          | Run a shell file in the current environment                              |
| <b>eval</b>                     | Construct a command by concatenating arguments                           |
| <b>exec</b>                     | Run a command and open, close, or copy the file descriptors              |
| <b>exit</b>                     | Return to the parent process from which the shell was called or to TSO/E |
| <b>expr</b>                     | Evaluate arguments as an expression                                      |
| <b>false</b>                    | Return a nonzero exit code   |
| <b>grep</b>                     | Search a file for a specified pattern                                    |
| <b>left bracket</b> or <b>[</b> | Test for a condition   |
| <b>let</b>                      | Evaluate an arithmetic expression  |
| <b>test</b>                     | Test for a condition   |
| <b>trap</b>                     | Intercept abnormal conditions and intrpts.                               |
| <b>true</b>                     | Return a value of 0  |

## Developing or porting application programs

|                  |   |
|------------------|---|
| <b>ar</b>        | Create or maintain library archives   |
| <b>awk</b>       | Process programs written in the <b>awk</b> language   |
| <b>c89</b>       | Compile, link-edit, and assemble Standard C source code and create an executable file                 |
| <b>c++/cxx</b>   | Compile, link-edit, and assemble C++ and Standard C source code and create an executable file on z/OS |
| <b>cc</b>        | Compile, link-edit, and assemble Common Usage C source code and create an executable file on z/OS     |
| <b>dbx</b>       | Use the debugger  |
| <b>dbgld</b>     | Create a module map for debugging   |
| <b>dspcat</b>    | Display all or part of a message catalog  |
| <b>genscat</b>   | Create or edit message catalogs   |
| <b>lex</b>       | Generate a program for lexical tasks  |
| <b>Make</b>      | Maintain program-generated and interdependent files   |
| <b>mkcatdefs</b> | Preprocess a message source file  |
| <b>runcat</b>    | Pipe output from mkcatdefs to genscat   |
| <b>strip</b>     | Remove unnecessary information from an executable file  |
| <b>yacc</b>      | Use the <b>yacc</b> compiler  |

## Communicating with the system or other users

|              |                                 |
|--------------|---------------------------------|
| <b>mail</b>  | Read and send mail messages     |
| <b>mailx</b> | Send or receive electronic mail |
| <b>mesg</b>  | Allow or refuse messages        |
| <b>talk</b>  | Talk to another user            |
| <b>write</b> | Write to another user           |

## Working with archives

|             |   |
|-------------|---|
| <b>ar</b>   | Create or maintain library archives                               |
| <b>cpio</b> | Copy in/out file archives   |
| <b>pax</b>  | Interchange portable archives                                     |
| <b>tar</b>  | Manipulate the <b>tar</b> archive files to copy or back up a file |

† The **egrep** utility is fully supported for compatibility with older UNIX systems. However, use **grep -E** instead because it may provide greater functionality and is considered the standard for portable UNIX applications as defined by POSIX.2 IEEE standard 1003.2-1992.