INTRODUCTION

This summary lists many of the commonly used commands (with brief descriptions) for FTP and TCP/IP, as well as related z/OS, z/VM, VSE, Linux, and VTAM commands.

This is only a summary. If you need details about a command, refer to the appropriate documentation.

NOTE: All commands are for current operating system releases as of 26 November 2002. If using an earlier release, some commands may not work.

TCP/IP Commands for TSO/E

Note: The following TCP/IP commands should be done from the TSO command panel or the READY prompt.

Note: hostname may be the IP address of the host, or the host name of the host.

- **FTP** *hostname {port}* - Connect to remote host to get/put files. Defaults to port 21.
- **HOMETEST** - Validate TCP/IP configuration.
- **NETSTAT** *option* **{TCP** *procname***}** - Display network status of local host. Use **?** for list of options.
- **NETSTAT ALLCON|CONN** - Display port connections for the TCP/IP stack.
- **NETSTAT ARP ALL|ipaddress** - Display ARP cache for the TCP/IP stack.
- **NETSTAT DEV** - Display the status of the device(s) and link(s) for the TCP/IP stack.
- **NETSTAT GATE|ROUTE** - Display routing information for the TCP/IP stack. (Different views)
- **NETSTAT HOME** - Display IP address(es) for the stack.
- **PING** *hostname* - Sends an echo request to a host name or address to determine if the computer is accessible. Use **?** for list of options.
- **TELNET** *hostname {port}* - Log on to remote host. By default, port 23 is used. Use **?** for list of options.
- **TRACERTE** *hostname* - Trace hops from this host to destination host. Use **?** for list of options.

z/OS Console Commands for TCP/IP

Note: If multiple stacks are running, you must identify the stack in the *procname* field.

- **D TCPIP** - list names and status of TCP/IP stacks.

z/OS Console Commands for TCP/IP cont...

- **D TCPIP,{procname},HELP** - display list of TCP/IP display options. These include -**NETSTAT, TELNET, HELP, DISPLAY, VARY, OMPROUTE, SYSPLEX, STOR.**
- **D TCPIP,{procname},Netstat,ALLCONN|CONN** - display socket information for the TCP/IP stack.
- **D TCPIP,{procname},Netstat,ARP** - display contents of ARP cache for the TCP/IP stack.
- **D TCPIP,{procname},Netstat,DEVlinks** - display Device and link status for the TCP/IP stack.
- **D TCPIP,{procname},Netstat,HOME** - display the IP address(es) for the TCP/IP stack.
- **D TCPIP,{procname},Netstat,ROUTE** - display the routing table for the TCP/IP stack.
- **V TCPIP,{procname},HELP** - display list of TCP/IP vary options. These include - **HELP, OBEYFILE, PKTTRACE, DATTRACE**, **START, STOP, PURGECACHE**
- **V TCPIP,{procname},PURGECACHE,linkname** - purge ARP cache for the specified adapter (linkname from NETSTAT,DEVLINKS).
- **V TCPIP,{procname},START|STOP,devname** - Start or stop the device name identified in NETSTAT DEV output.
- **V TCPIP,{procname},Telnet,xxxx** - performs specified function for TELNET.
    ACT|INACT,luname - Enables|disables lu as VTAM session candidate
    QUIESCE - Blocks new connections.
    RESUME - Ends QUIESCEd state.
    STOP - Ends telnet connections and closes port.

Related z/OS Console Commands

- **D IOS,MIH,DEV=dddd** - MIH value for device

Note: The value for "c's and d's" in the following Display Matrix (D M) command is optional, but if included, must be in parentheses ().

- **D M=CHP{(cc)}|DEV{(dddd)}** - Status of CHPID cc, or summary of all CHPIDs if (cc) is not provided. Display CHPIDs/device status or summary of CHPID status of all devices if (dddd) is not provided.
- **D U,,ALLOC|OFFLINE|ONLINE** - Display information for all devices by selected status.
- **D U,,,dddd{,nnn}** - Display status of devices starting at device dddd for nnn number of devices (default 16).
- **SETIOS MIH,DEV=ddd,TIME=mm:ss** - set MIH time for specified device.
- **V dddd|dddd-dddd,OFFLINE|ONLINE** - vary device(s) offline or online.
- **CF CHP(cc),ONline|OFFline -** Configure online/offline CHPID cc to MVS & hardware.

z/VM Operator Commands

Note: Requires class **B** authority to issue the following commands.
- **Q MITIME** - Display MIH times for devices.
- **Q OSA ACTIVE|ALL -** display status of OSA devices.
- **Q rdev|rdev-rdev** - Display status of real device(s).
- **Q PATHS rdev|rdev-rdev** - Display path status to real device(s) (PIM, PAM, LPM).
- **Q CHPID cc** - Display real CHPID status.
- **VARY OFF|ON rdev|rdev-rdev** - vary device(s) off or online
- **VARY OFF|ON PATH cc FROM|TO rdev|rdev-rdev** - change the status of a path to device(s).
- **VARY OFF|ON CHPID cc** - configure a CHPID off or on to both hardware and software.

z/VM TCP/IP Commands

Note: Your CMS userid must be linked to the TCPMAINT 592 minidisk to execute the following commands.

Note: hostname may be the IP address of the host, or the host name of the host.

- **FTP** *hostname {port}* - Connect to remote host to get/put files. Defaults to port 21. Enter **FTP ?** for list of options.
- **HOMETEST** - Validate TCP/IP configuration.
- **IFCONFIG** - display network interfaces.
- **IFCONFIG interface UP|DOWN** - Start or stop the specified network interface.
- **NETSTAT** *option* - Display network status of local host. Use **?** for list of options.
- **NETSTAT ALLCON|CONN** - Display all port connections for the TCP/IP stack.
- **NETSTAT ARP *|ipaddress** - Display ARP cache for the TCP/IP stack.
- **NETSTAT DEV** - Display the status of the device(s) and link(s) for the TCP/IP stack.
- **NETSTAT GATE** - Display TCP/IP routing information.
- **NETSTAT HOME** - Display IP address(es) in TCP/IP stack.
- **NETSTAT OBEY START|STOP devname** - Start or stop the device name identified in NETSTAT DEV output.
- **PING** *hostname* - Sends an echo request to a host name or address to determine if the computer is accessible. Use **?** for list of options.
- **TELNET** *hostname {port}* - Log on to remote host. By default, port 23 is used. Use **?** for list of options.
- **TRACERTE** *hostname* - Trace hops from this host to destination host. Use **?** for list of options.

VSE TCP/IP Commands

Note: hostname may be the IP address of the host, or the host name of the host.

- **PING** *hostname* - Sends an echo request to a host name or address to determine if the computer is accessible.
- **Query ARP{,IP=hostname} -** Display contents of ARP cache for the TCP/IP stack.

VSE TCP/IP Commands cont...

- **Query CON{,IP=hostname}** - Display port connections for the TCP/IP stack.
- **Query LINKs{,ID=name}** - Display link status.
- **Query MASKs** - Display contents of subnet mask table.
- **Query ROUTes{ID=name|,IP=hostname}** - Display routing table for the TCP/IP stack.
- **STATUS dddd** - Display device status
- **START LINK=name** -start a link in the TCP/IP stack.
- **STOP LINK=name** -suspends attempts to activate a link.
- **Note:** Use with CTCA and cross-partition links (**not OSA**).
- **TRACERT** *hostname* - Trace hops from this host to destination host.

VTAM Commands

VTAM commands related to OSA cards.

- **D NET,ID=name** - display network named in ID field
  Additional parameters that may be added:
  ,SCOPE=ONLY|ACT|ALL|INACT
  ,E - Gives extended information about the node.
- **D NET,MAJNODES|APPLS** - Shows status of all active major nodes or applications.
- **D NET,PENDING** - Lists nodes in pending states.
- **D NET,TRL** - display list of TRLEs.
- **D NET,TRL,TRLE=trlename** - display status of specific TRLE. (Use this command to display the devices assigned to a QDIO (or MPC) OSA-Express resource.)
- **V NET,ACT,ID=ISTTRL,UPDATE=ALL** - Deletes **all** inactive TRLEs.
- **V NET,ACT,ID=name** - Activates the VTAM resource identified by the name.
- **V NET,INACT,ID=name** - Inactivates the VTAM resource identified by the name.
  ,F|I|U - Deactivate FORCE, IMMEDIATE, or UNCONDITIONAL (if normal inact fails).

TCP/IP Commands for OS/2

Commands must be done from a command prompt window. The commands are listed in upper case for presentation only. They should be entered in lower case.

Note: hostname may be the IP address of the host, or the host name of the host.

- **ARP -A** - Display ARP cache. Use **-?** for options.
- **FTP** *hostname {port}* - Connect to remote host to get/put files. Defaults to port 21. Use **-?** for list of options.

NETSTAT command output may roll through the OS/2 window. To prevent this, add |**more** to the end of the netstat command. (Or direct output to a file by adding >*filename.TXT* to the end of the NETSTAT command.)

- **HOST** *ipaddress* - Sends request to an IP address and returns information about the hostname.
- **NETSTAT -?** - Display a list of options.

TCP/IP Commands for OS/2 cont…

- **NETSTAT -A** - Display host network address.
- **NETSTAT -C** - Display host ICMP statistics.
- **NETSTAT -H** - host name for specified IP address.
- **NETSTAT -I** - Display host IP statistics.
- **NETSTAT -N** - Display host network interface details. (Like MAC, speed, and statistics)
- **NETSTAT -P** - Display host ARP cache.
- **NETSTAT -R** - Display host routes.
- **NETSTAT -S** - Display host sockets.
- **NETSTAT -T** - Display host TCP statistics.
- **NETSTAT -U** - Display host UDP statistics.
- **PING** *hostname* - Sends an echo request to a host name or address to determine if computer is accessible. (To cancel, use Ctrl + C.) Use **-?** for list of options.
- **TELNET {-p** *port*} *hostname* - Log on to remote host. By default, port 23 is used. Use **-?** for list of options.
- **TRACERTE** *hostname* - Trace hops from this host to destination host. Use **-?** for list of options.

TCP/IP Commands for Windows[1]

Commands should work for Windows 95, 98, NT, & 2000 [1]. Commands must be done from a command prompt window. The commands are listed in upper case for presentation only. They should be entered in lower case.

Note: hostname may be the IP address of the host, or the host name of the host.

- **ARP -A** - Display ARP cache. Use **-?** for options.
- **FTP** *hostname* - Connect to remote host to get/put files. Defaults to port 21. Use **-?** for list of options.

Note: The output of the NETSTAT command may roll through your window. To prevent this, add |**more** to the end of the netstat command. (Or direct the output to a file by adding >*filename.TXT* to the end of the NETSTAT command.)

- **NETSTAT -?** - Display a list of options.
- **NETSTAT -A** - Display host socket information.
- **NETSTAT -E** - Display host Ethernet statistics.
- **NETSTAT -N** - Display host addresses and ports numerically.
- **NETSTAT -P** *TCP|UDP|IP* - Display connection information for the selected protocol.
- **NETSTAT -R** - Display host routes.
- **NETSTAT -S** - Display host statistics.
- **PING** *hostname* - Sends an echo request to a host name or address to determine if the computer is accessible. Use **-?** for list of options.
- **TELNET** *hostname {port}* - Log on to remote host. By default, port 23 is used. Use **-?** for list of options.
- **TRACERT** *hostname* - Trace hops from this host to destination host. Use **-?** for list of options.

[1]Windows, Windows 95, 98, NT, and 2000 are trademarks of Microsoft Corporation.

TCP/IP Commands for Linux

The commands are listed in upper case for presentation only. They should be entered in lower case.

- **ARP** - Display ARP cache. Use **-?** for options.
- **DMESG |MORE** - Display complete information about the Linux environment including network devices. (|**MORE** keeps output from scrolling.) (>*filename* to send to a file.)
- **FTP** *hostname|ipaddress* - Connect to remote host to get/put files. Defaults to port 21. Use **-?** for options.
- **IFCONFIG** - display network interfaces (like LO,EN0,TR0)
- **IFCONFIG interface UP|DOWN** - Start or stop the selected network interface(EN0,TR0, etc).

For the following **NETSTAT** commands, adding **N** to the option will display **numerical** output. Adding**V** will display **verbose**.

- **NETSTAT -A** - Display all sockets.
- **NETSTAT -I** - Display interface table.
- **NETSTAT -R** - Display host routes.
- **PING** *hostname|ipaddress* - Sends an echo request to a host to determine if the computer is accessible. Use **-?** for options.
- **ROUTE** - Displays IP routing table.
- **TELNET** *hostname|ipaddress {port}* - Log on to remote host. By default, port 23 is used. Use **-?** for options.
- **TRACEROUTE** *hostname|ipaddress* - Trace hops from this host to destination host. Use **-?** for list of options.

FTP Subcommands

- **ascii** - ASCII transfer of text files.
- **binary** - BINARY transfer of binary files.
- **cd** *remote-directory* - Change directory on remote host.
- **close** - Ends the FTP session. After close, OPEN a new connection or QUIT from FTP.
- **delete** *filename* - Delete the file from remote host.
- **dir** *{file destination}* - Gives full directory listing on remote host. *file* - file to be listed. *destination* - where to put listing. Both *file* and *destination* are optional.
- **get** *filename {localfilename}* - Get a file from remote host.
- **hash** - Display a hash sign (#) every time a block of data is transferred. (Useful for large transfers.)
- **help** *{command}* - Displays a description of the command. If a command is not specified, a list of commands is displayed.
- **lcd** *directory* - Change directory on your local machine.
- **ls** *{file destination}* - Like **dir**, but less information.
- **mget** *file-list* - Get multiple files from remote machine.
- **mput** *file-list* - Put multiple files to remote machine.
- **open** *machine-name* - Connect to named machine (IP or host name). Old connection must be **CLOSEd** first.
- **prompt** - Turn prompting off/on for mget and mput.
- **put** *filename {remotefilename}* - Put a file onto remote host.
- **pwd** - Present Working Directory on remote host.
- **quit|bye** - exits FTP.