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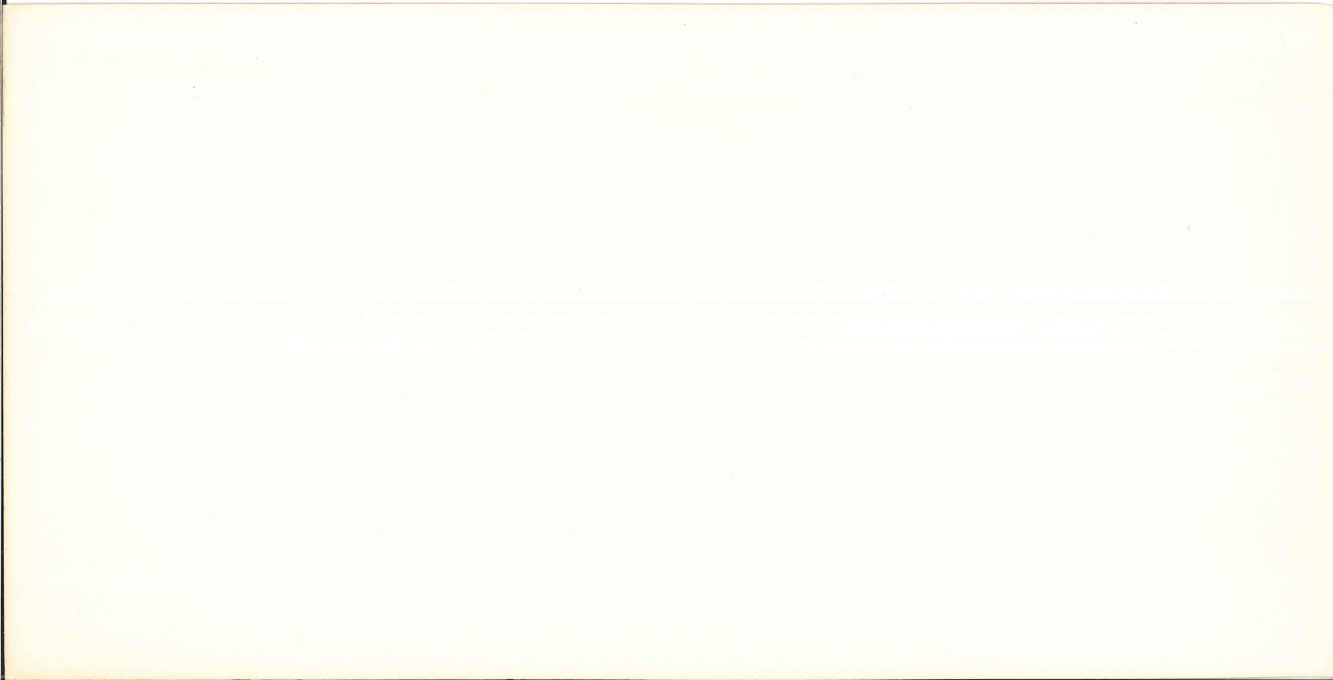


DECnet-DOS

Mini-Reference Guide

AA-GV32A-TV

digital



DECnet-DOS

Mini-Reference Guide

Order No. AA-GV32A-TV

April 1986

This document contains quick reference information on the commands and command syntax for DECnet-DOS utilities. The utilities and their commands (or parameters and switches) are listed in alphabetical order by utility.

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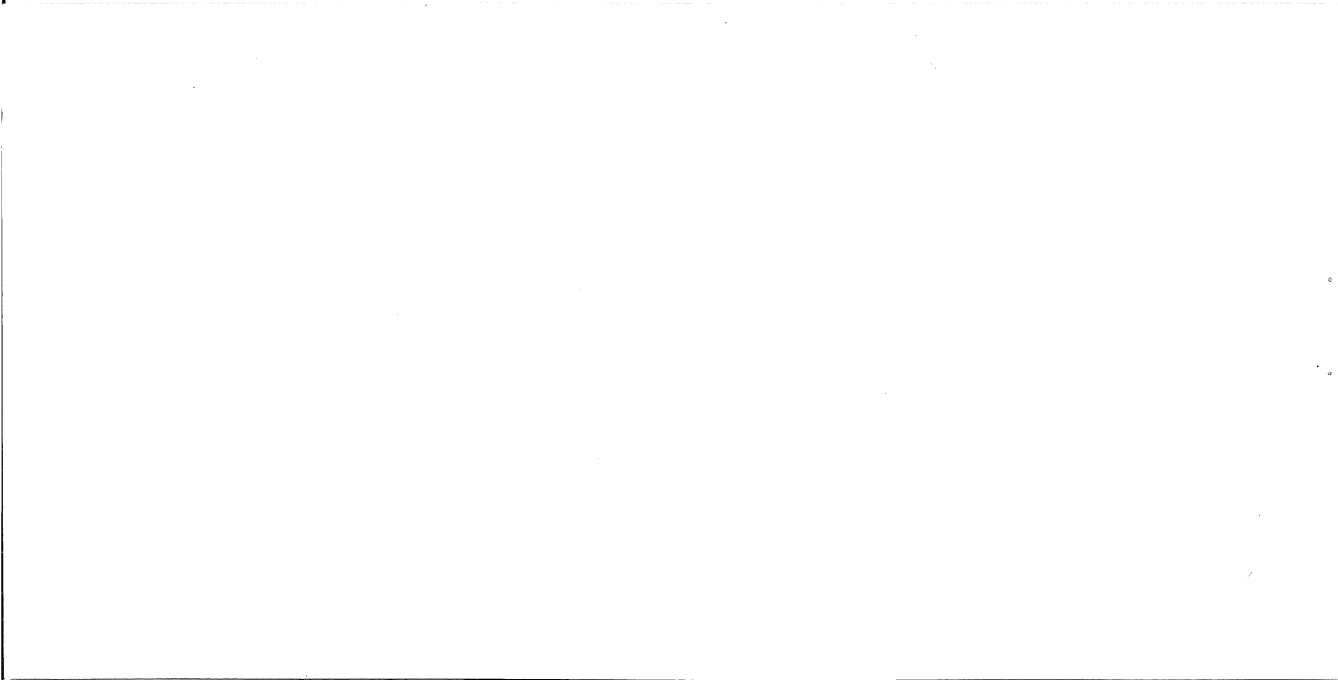
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FAL SWITCHES

The File Access Listener (FAL) provides a way for you to let other nodes access files on your node. The purpose of the FAL utility is to listen for and receive remote access requests from the network. When FAL detects a request to copy a file from your node, it first checks the type of access privilege contained in the request. If it has the proper privilege for access to your node, FAL sends the file data back to the requesting node. You can control the way FAL operates by using switches.

Format

FAL [*/switch*]

Valid FAL switches are:

- /ASCII (/A)
- /BINARY (/B)
- /ERROR (/E)
- /LOG (/L)

To use these switches, you must type them on the command line after the FAL command.

/ASCII

When you use the /ASCII switch, all files are transferred as ASCII files.

Format

/ASCII

/BINARY

When you use the /BINARY switch, all files are transferred as binary (or image) files.

Format

/BINARY

/ERROR

When you use the /ERROR switch, FAL will report an error to the remote node if the requesting node is attempting to overwrite an existing file.

Format

/ERROR

/LOG

When you use the /LOG switch, FAL logs the type of access contained in every request it receives. The information is displayed on the screen in front of you. If you do not want the information to appear at your terminal, you can redirect it to an output file.

Format

/LOG:filename

MAIL COMMANDS

The MAIL utility lets you send mail messages and text files to other nodes in the network. The MAIL commands are:

EXIT
HELP
MAIL
SEND

EXIT

The EXIT command allows you to leave the Mail utility.

Format

EXIT

HELP

HELP provides information about the MAIL commands and switches.

Format

HELP [*topic*]

Mail HELP topics and qualifiers include:

/EDIT	MAIL Examples
EXIT	SEND
INIT FILE	SEND Examples
MAIL	/SUBJECT

MAIL and SEND

Both the MAIL command and the SEND command allow you to send mail messages and text files to other users in the network. These commands may be used interchangeably.

Format

MAIL[/switch] [filename]

Valid MAIL or SEND switches are:

/EDIT
/SUBJECT

MAIL PARAMETERS

When you first start the MAIL utility, you are prompted for information. The MAIL program uses this information each time you run the utility. The information is stored in the initialization file (INIT file) called MAIL.DAT. The INIT file contains some or all of these mail parameters:

REPLY__ADDRESS

DEFAULT__NODE

CARBON__COPY

EDITOR

PERSONAL__MESSAGE

REPLY__ADDRESS

You must define the REPLY__ADDRESS parameter when you first run the Mail utility. This is necessary for other users to have a way to respond to your messages or to send you mail. The REPLY__ADDRESS appears as part of the "Reply to" information string.

Format

REPLY__ADDRESS = *nodename::username*

DEFAULT__NODE

DEFAULT__NODE allows you to shorten the address for nodes that you address often. Once you have defined the DEFAULT__NODE in the INIT file, you can send mail to any user on that node simply by specifying their user name.

Format

DEFAULT__NODE = *nodename*

CARBON__COPY

CARBON__COPY is the address to which a copy of your mail message is sent. Each time you send a mail message, a copy of that message automatically goes to the CARBON__COPY address.

Format

CARBON__COPY = *nodename::username*

EDITOR

EDITOR specifies which editor the mail program will use when you want to edit mail messages. You must include the /EDIT switch with a mail command if you want to edit a message or a text file before you send it.

Format

EDITOR = *pathname*

PERSONAL__MESSAGE

The PERSONAL__MESSAGE is a message that other users see whenever you send them mail. The message can contain your name and phone number, or it can be any other descriptive text you wish to create.

Format

PERSONAL__MESSAGE = *descriptive text*

NCP COMMANDS

The Network Control Program (NCP) is the DECnet management utility that accepts commands from your terminal to perform certain network functions. The NCP commands let you identify your node to other nodes in the network, establish node names and default access control information for other nodes, change network parameters, and monitor network activity and network error counters.

The NCP commands are:

CLEAR ACCESS	SET LINE
CLEAR EXECUTOR	SET LINK
CLEAR NODE	SET KNOWN LINKS
COPY KNOWN NODES	SET NODE
DEFINE CIRCUIT	SHOW ACCESS
DEFINE EXECUTOR	SHOW CIRCUIT
DEFINE LINE	SHOW EXECUTOR
EXIT	SHOW LAT
HELP	SHOW LINE
MONITOR LOGGING	SHOW LINKS
QUIT	SHOW NODE
READ LOGGING	ZERO CIRCUIT
SET ACCESS	ZERO EXECUTOR
SET CIRCUIT	ZERO LAT
SET ECHO	ZERO LINE
SET EXECUTOR	

CLEAR ACCESS

The CLEAR ACCESS command removes access information for the designated user or for all users. The access information is stored on a per user basis. It includes the password and access type. FAL uses this information to validate local file access.

Format

CLEAR ACCESS USER *username*

or

CLEAR KNOWN ACCESS

CLEAR EXECUTOR

The CLEAR EXECUTOR command removes specified executor node parameters from the local node's database.

Format

CLEAR EXECUTOR {RECEIVE PASSWORD }
 {TRANSMIT PASSWORD }

NOTE

These passwords are used for asynchronous DDCMP connections only.

CLEAR NODE

The CLEAR NODE command removes parameters stored on the local node for either the specified remote node or all remote nodes known to the local node.

Format

CLEAR KNOWN NODES

or

CLEAR NODE *node-id* [ALL
USER
PASSWORD
ACCOUNT
LAT-HOST]

COPY KNOWN NODES

The COPY KNOWN NODES command copies the node database to a file, leaving out any access information that may be contained in the database.

Format

COPY KNOWN NODES TO *file-id*

DEFINE CIRCUIT

The DEFINE CIRCUIT command defines the characteristic for the circuit state (ON or OFF). The state you indicate will not take effect until the next time you reboot your system.

Format

```
DEFINE CIRCUIT STATE {ON }  
                     {OFF }
```

DEFINE EXECUTOR

The DEFINE EXECUTOR command sets executor characteristics. These characteristics will not take effect until the next time you reboot your system.

Format

```
DEFINE EXECUTOR      ADDRESS node-address  
                     MAXIMUM BUFFERS number  
                     MAXIMUM LINKS number  
                     NAME node-name  
                     SEGMENT BUFFER SIZE number
```


DEFINE LINE

The DEFINE LINE command defines the state of the line. It becomes effective with the next system reboot.

Format

```
DEFINE LINE STATE { ON }  
                  { OFF }  
                RECEIVE BUFFERS n
```

EXIT

The EXIT command allows you to exit from NCP and save parameter changes.

Format

```
EXIT
```

HELP

The HELP command displays information about NCP commands on your screen.

Format

```
HELP [command-verb [entity]]
```

MONITOR LOGGING

The MONITOR LOGGING command displays network events as they are being logged. You can stop the display of information logging by pressing any key on the keyboard. You can also use **CTRL/C** to stop the display and exit from NCP at the same time.

Format

MONITOR LOGGING [TO *file-id*]

QUIT

The QUIT command allows you to exit from NCP, and gives you the choice of saving or deleting any parameter changes you may have made. If you have not made any changes, NCP simply exits. If you have made changes, NCP issues a prompt for you to verify whether or not you want to save those changes.

Format

QUIT

READ LOGGING

The READ LOGGING command displays the contents of the event logging buffer. It may be redirected to a specified output file.

Format

READ LOGGING [TO *file-id*]

SET ACCESS

The SET ACCESS command sets incoming access information for the designated user. The access information is stored on a per user basis, and it includes the password and access type.

Format

```
SET ACCESS USER username
                [PASSWORD password]
                [access-type]
```

There are four types of access. They are:

NONE – no access for this user. This is the default.

READ – provides read only access.

WRITE – provides write only access.

ALL – provides both read and write access.

SET CIRCUIT

The SET CIRCUIT command defines or modifies circuit information.

Format

```
SET CIRCUIT [circuit-id] {  
    HELLO TIMER seconds  
    OWNER {DECnet  
           {MOP  
    SERVICE {DISABLED  
            {ENABLED  
    STATE {ON  
          {OFF
```

SET ECHO

The SET ECHO command determines whether a redirected input file is displayed on your screen as the file is executed. The default is OFF (no echo).

Format

```
SET ECHO {ON  
         {OFF
```

SET EXECUTOR

The SET EXECUTOR command sets the executor node's parameters or characteristics.

Format

SET EXECUTOR	ADDRESS <i>node-address</i>
	DELAY FACTOR <i>number</i>
	DELAY WEIGHT <i>number</i>
	IDENTIFICATION <i>id-string</i>
	INACTIVITY TIMER <i>seconds</i>
	INCOMING TIMER <i>seconds</i>
	NAME <i>node-name</i>
	OUTGOING TIMER <i>seconds</i>
	RECEIVE PASSWORD <i>password</i>
	RECEIVE PIPE QUOTA <i>number</i>
	RETRANSMIT FACTOR <i>number</i>
	SEGMENT BUFFER SIZE <i>bytes</i>
	STATE ON
	TRANSMIT PASSWORD <i>password</i>
	TRANSMIT PIPE QUOTA <i>number</i>

SET KNOWN (or ACTIVE) LINKS

The SET KNOWN (or ACTIVE) LINKS command breaks all link connections that are not set with the socket option, SO__KEEPALIVE, and frees the associated sockets.

Format

SET {KNOWN LINKS} STATE OFF
 {ACTIVE LINKS }

SET LINE

The SET LINE command defines or modifies line information.

Format

SET LINE [*line-id*] {
 DEVICE {COM-1}
 {COM-2}
 MODEM {NULL}
 {FULL}
 SPEED *baud-rate*
 STATE {OFF}
 {ON} }

NOTE

Information for DEVICE, MODEM, and line SPEED applies to asynchronous DDCMP configurations only.

SET LINK

The SET LINK command terminates logical link connections that are associated with a specific socket. The socket is also detached.

Format

SET LINK *socket* STATE OFF

SET NODE

The SET NODE command assigns a node name plus access control information to a unique node address.

Format

SET {
 NODE *node-address* NAME *node-name* [*access-info*]
 [LAT-HOST]
 KNOWN NODES FROM *node-id*
 NODE *node-id* FROM *node-id*
}

SHOW CIRCUIT

The SHOW CIRCUIT command displays all the information you set with the SET CIRCUIT command, as well as certain system information. You can either display the information on your screen or redirect it to an output file at the local node.

Format

```
SHOW CIRCUIT [circuit-id] [ CHARACTERISTICS  
                             COUNTERS  
                             STATUS  
                             SUMMARY ] [TO file-id]
```

SHOW EXECUTOR

The SHOW EXECUTOR command displays the executor node information. You can either display the information on your screen, or redirect it to an output file at the local node.

Format

```
SHOW EXECUTOR [ CHARACTERISTICS ] [TO file-id]  
               COUNTERS  
               STATUS  
               SUMMARY
```


SHOW KNOWN ACCESS

The SHOW KNOWN ACCESS command displays the contents of the incoming access database, which is stored in the file DECACC.DAT. If a password is part of the database, it only appears on the screen as three dots (...).

Format

SHOW KNOWN ACCESS [TO *file-id*]

SHOW LAT

The SHOW LAT command displays information about the LAT line you may be using. The information may be directed to a file. This command only works if you have LAT installed on your node.

Format

SHOW LAT [COUNTERS] [TO *file-id*]

SHOW LINE

The SHOW LINE command displays line information. You can either display the information on your screen or redirect it to an output file at the local node.

Format

```
SHOW LINE [line-id] [CHARACTERISTICS  
COUNTERS  
STATUS  
SUMMARY] [TO file-id]
```

SHOW LINKS

The SHOW LINKS command displays summary type information for the specified logical links.

Format

```
SHOW {KNOWN LINKS} [TO file-id]  
    {ACTIVE LINKS }
```

SHOW NODE

The SHOW NODE command displays remote node information. You can either display the information on your screen, or redirect it to an output file at the local node.

Format

SHOW NODE *node-id* [STATUS
SUMMARY] [TO *file-id*]

or

SHOW { KNOWN NODES
ACTIVE NODES
ADJACENT NODE }

ZERO CIRCUIT

The ZERO CIRCUIT command zeroes the counters for the circuit.

Format

ZERO CIRCUIT [*circuit-id*] [COUNTERS]

ZERO EXECUTOR

The ZERO EXECUTOR command zeroes the counters associated with and maintained on the executor node.

Format

ZERO EXECUTOR [COUNTERS]

ZERO LAT

The ZERO LAT command zeroes the counters for the LAT line. This command only works if you have LAT installed on your node.

Format

ZERO LAT [COUNTERS]

ZERO LINE

The ZERO LINE command zeroes the counters for the line.

Format

ZERO LINE [*line-id*] [COUNTERS]

NDU COMMANDS FOR VIRTUAL DISKS

The Network Device Utility (NDU) allows you to access up to four virtual disk volumes at a time. Each remote volume is a file that is treated as if it were a hard disk.

The following NDU commands allow you to control the use of remote files as virtual disk volumes.

CLOSE

The CLOSE command ends the connection between the specified drive and the virtual disk file on the remote node.

Format

CLOSE DRIVE *drive*

or

CLOSE NODE *node-name* NDISK *file-name*

CREATE

The CREATE command creates and formats a new remote data file, which is treated as a hard disk, and establishes a connection between a volume name at your local node and the file.

Format

```
CREATE NODE node-name NDISK file-name [DRIVE drive  
USER access-info  
ACCESS {RW  
          RO}  
ALLOCATION n  
MAX n]
```

DELETE

The DELETE command deletes an existing virtual disk file on a remote node.

Format

```
DELETE NODE node-name NDISK file-name [USER access-info]
```

or

```
DELETE DRIVE drive
```

HELP

The HELP command displays information about NDU commands and entities.

Format

HELP $\left[\begin{array}{l} \text{command-verb} \\ \text{entity} \end{array} \right]$

OPEN

The OPEN command establishes a connection between your local node and an existing virtual hard disk at a remote DECnet node.

Format

OPEN NODE *node-name* NDISK *file-name* $\left[\begin{array}{l} \text{DRIVE } \textit{drive} \\ \text{USER } \textit{access-info} \\ \text{ACCESS } \left\{ \begin{array}{l} \textit{RW} \\ \textit{RO} \end{array} \right\} \end{array} \right]$

SHOW

The SHOW command causes NDU to report on the status of all virtual disk(s) and printer.

Format

SHOW STATUS

NDU COMMANDS FOR VIRTUAL PRINTERS

The Network Device Utility (NDU) allows you to access one virtual printer at a time. The remote node which provides the virtual printer saves any text you output to the printer device NPRN in a temporary file. When you stop using the virtual printer, the temporary file is queued for printing at the default printer on the remote node.

The following NDU commands allow you to direct text to a remote node to be queued for printing at a later time.

CLOSE

The CLOSE command ends the connection between the device NPRN and the file on the remote node. The file is then queued to be printed on the remote printer. After the file is printed, it is deleted.

Format

CLOSE PRINTER

CREATE and OPEN

The CREATE and OPEN commands function in the same way. Either command creates a new virtual printer file and makes it ready for use. The printer file is created and then linked to the device NPRN.

Format

CREATE PRINTER NODE *node-name* [NPRINT *file-name*] [USER *access-info*]

OPEN PRINTER NODE *node-name* [NPRINT *file-name*] [USER *access-info*]

HELP

The HELP command displays information about NDU commands on your screen.

Format

HELP $\left[\begin{array}{l} \textit{command-verb} \\ \textit{entity} \end{array} \right]$

SHOW

The SHOW command causes NDU to report on the status of all virtual disk(s) and printer.

Format

SHOW STATUS

NFT COMMANDS

The Network File Transfer Utility (NFT) is a network program that allows you to access remote files. Using NFT, you can copy files between the local node and remote nodes, delete local and remote files, display remote file contents, run batch files on remote nodes, and print files on remote printers.

The following NFT commands allow you to perform operations on local and remote files.

APPEND

The APPEND command adds the contents of one or more input files to the end of an existing output file. You can append either ASCII or binary files to or from remote nodes.

Depending on its position in a command, a file specification is either input (source) or output (destination).

Format

APPEND[/switch] *input-file output-file*

or

APPEND[/switch]

File(s)? *input-file*

To? *output-file*

Valid APPEND switches are:

/ASCII
/DELETE
/IMAGE
/NOLOG
/PRINT
/SUBMIT

COPY

The COPY command creates a new file or a new version of a file at the destination node. You can use the COPY command to copy files from the local node to the remote node, and from the remote node to the local node.

Format

COPY[/switch] *input-file* [*output-file*]

or

COPY[/switch]
File(s)? *input-file*
To? *output-file*

Valid switches to COPY **to** a remote node are:

/ALLOCATION = <i>nnn</i>	/MACY11
/ASCII	/MRS = <i>nnn</i>
/BLOCK	/NOLOG
/CC = <i>xxx</i>	/NOSPAN
/DELETE	/PRINT
/FIXED = <i>nnn</i>	/SUBMIT
/IMAGE	/VARIABLE
/LSA	/VFC = <i>nnn</i>

Valid switches to COPY **from** a remote node are:

/ASCII
/BLOCK
/IMAGE
/NOCONVERT
/NOLOG

DELETE

The DELETE command deletes one or more specified local or remote files.

Format

DELETE[/NOLOG] *file-spec*

or

DELETE[/NOLOG]

File(s)? *file-spec*

DIRECTORY

The DIRECTORY command displays a list of local or remote file names, including the size (in blocks) and the time and date the file was last modified or created.

Format

DIRECTORY[/switch] [*file-spec*]

Valid DIRECTORY switches are:

/BRIEF

/FULL

EXIT

The EXIT command exits from an NFT operation and returns control to the DOS operating system.

Format

EXIT

HELP

The HELP command displays information about NFT commands and switches on your screen.

Format

HELP $\left[\begin{array}{l} \textit{command-verb} \\ \textit{/switch} \end{array} \right]$

PRINT

The PRINT command queues a remote file to be printed on a remote printer. You must indicate the file to be printed. The file will be printed on the system default printer.

Format

PRINT $\textit{[/switch]}$ *file-spec*

or

PRINT[/switch]
File(s)? *file-spec*

Valid PRINT switches are:

/DELETE
/NOLOG

SET

The SET command allows you to set default access control information as well as disk and directory information for up to ten nodes.

There are no valid switches for the SET command.

Format

SET *node-spec*::[*file-spec*]

or

SET
Node? *node-spec*::[*file-spec*]

The *node-spec* in this case is a remote node name, followed by access control information (in quotation marks). For example:

BERGIL "BURTON *password*"

SHOW

The SHOW command displays the temporary default table of remote access information for the specified node. The password is not displayed on the screen. Instead, the character string *password* is displayed in its place.

There are no valid switches for the SHOW command.

Format

SHOW [*node-name::*]

SUBMIT

The SUBMIT command requests that the specified command file be run on the remote node. The specified remote node must support command file submission and execution.

Format

SUBMIT[/NOLOG] *remote-filespec*

or

SUBMIT[/NOLOG]

File(s)? *remote-filespec*

TYPE

The TYPE command displays the contents of a local or remote file on your screen. You should use this command for ASCII files only.

Format

TYPE *file-spec*

or

TYPE

File(s)? *file-spec*

NTU COMMANDS

The Network Test Utility (NTU) allows you to display information about your node and how it is interacting with the network. You can use NTU to pinpoint problems you may have in connecting your node to the network. Since problems can occur in any of the network components, the NTU commands let you perform various tests which check the operation of each component. The tests check the operation of your local node, the connection to the remote node, and the communication hardware between them.

The NTU commands are:

CLEAR ACCESS
CLEAR ACCOUNT
CLEAR COUNT
CLEAR DEFAULTS
CLEAR LENGTH
CLEAR PASSWORD
CLEAR USER
CLEAR WITH
EXIT
HELP
LOOP CIRCUIT (DDCMP)
LOOP CIRCUIT (ETHER)
LOOP EXECUTOR
LOOP LINE CONTROLLER
LOOP NODE
MIRROR
MONITOR LOGGING
READ LOGGING
SET ACCOUNT
SET CIRCUIT
SET COUNT

SET ECHO
SET LENGTH
SET LINE STATE
SET LINK
SET PASSWORD
SET USER
SET WITH
SHOW ACTIVE LINKS
SHOW ACTIVE NODES
SHOW ADJACENT NODE
SHOW CIRCUIT
SHOW DEFAULTS
SHOW EXECUTOR
SHOW KNOWN LINKS
SHOW KNOWN NODES
SHOW LINE
SHOW NODE
ZERO CIRCUIT
ZERO EXECUTOR
ZERO LINE

CLEAR ACCESS

The CLEAR ACCESS command removes the user-id, password, and accounting information that was stored by a previous SET or LOOP command.

Format

CLEAR ACCESS

CLEAR ACCOUNT

The CLEAR ACCOUNT command clears the accounting information that was stored by a previous SET or LOOP command.

Format

CLEAR ACCOUNT

CLEAR COUNT

The CLEAR COUNT command resets the number that indicates how many times you want to repeat a specific test to its default value of 1.

Format

CLEAR COUNT

CLEAR DEFAULTS

The CLEAR DEFAULTS command resets all the loopback parameters to their original values, which are: null for *user-id*, *password*, and *account*; 1 for COUNT; 40 for LENGTH; and MIXED for TYPE.

Format

CLEAR DEFAULTS

CLEAR LENGTH

The CLEAR LENGTH command resets the number that indicates the message length to its default value of 40.

Format

CLEAR LENGTH

CLEAR PASSWORD

The CLEAR PASSWORD command removes the password that was stored by a previous SET or LOOP command.

Format

CLEAR PASSWORD

CLEAR USER

The CLEAR USER command removes the user-id that you initially stored with the SET or LOOP command.

Format

CLEAR USER

CLEAR WITH

The CLEAR WITH command resets the binary format indicated for the test message to its default value of MIXED. (See SET WITH for more details.)

Format

CLEAR WITH

EXIT

The EXIT command lets you leave NTU. Whenever you issue this command, NTU attempts to restore the DECnet line to the **ON** state. (You can also use **CTRL/Z** **RET** to exit from NTU.)

Format

EXIT

HELP

The HELP command provides information about the NTU commands. Entering HELP alone results in a display of the available commands. You can further qualify the information you seek by specifying HELP followed by a command name (and optionally an entity).

Format

HELP [*command__verb* [*entity*]]

LOOP CIRCUIT (for Asynchronous DDCMP Configurations)

The LOOP CIRCUIT command invokes loop tests for the DECnet circuit. These tests verify that network communication is possible between your local node and the adjacent node, or between your local node and a local or a remote modem.

For asynchronous DDCMP configurations, this command causes NTU to run a loopback test to a loopback plug, a modem, or an adjacent node. When you issue this command, NTU displays a menu for you to select the location of the loopback connector.

Format

LOOP CIRCUIT [COUNT *n*] [WITH ONES/ZEROES/MIXED] [LENGTH *n*]

LOOP CIRCUIT (for Ethernet Configurations)

The LOOP CIRCUIT command invokes loop tests for the DECnet circuit. These tests verify that network communication is possible between your local node and a remote node.

For Ethernet configurations, this command causes NTU to run a loopback test to a specific Ethernet address or to a multicast Ethernet address.

Format

LOOP CIRCUIT [WITH ONES/ZEROES/MIXED] [LENGTH *n*] [COUNT *n*]

or

LOOP CIRCUIT NODE *node-id*

[WITH ONES/ZEROES/MIXED] [LENGTH *n*] [COUNT *n*]

or

LOOP CIRCUIT PHYSICAL__ADDRESS *hh-hh-hh-hh-hh-hh*

[WITH ONES/ZEROES/MIXED] [LENGTH *n*] [COUNT *n*]

LOOP EXECUTOR

The LOOP EXECUTOR command invokes the loop test for your local (executor) node. It verifies the operation of your local node by checking the local network software. This test verifies that your local node software has been properly installed.

Format

LOOP EXECUTOR [COUNT *n*] [WITH MIXED/ONES/ZEROES] [LENGTH *n*]

LOOP LINE CONTROLLER

The LOOP LINE CONTROLLER command performs a loopback test within your local node, at the device level. This command can only be used with Ethernet configurations, and requires the use of the DECNA loopback connector (part number 12-22196-01).

Format

LOOP LINE CONTROLLER

LOOP NODE

The LOOP NODE command invokes the loop test for the remote node. It verifies that your node can communicate with a specified remote node. To perform this test, you need to include any network parameters that are necessary for accessing the loopback mirror on the remote node. These parameters may include the node-id, the user-id, the password, and the account.

Format

```
LOOP NODE node-id [ USER user-id  
                     PASSWORD password  
                     ACCOUNT account  
                     COUNT n  
                     WITH ONES/ZEROES/MIXED  
                     LENGTH n ]
```

MIRROR

The MIRROR command allows a LOOP NODE test to be run from a remote system that supports the NCP loop node test (such as a DECnet-DOS V1.1 system). The maximum size of a message that NCP will loop back is 512 bytes.

Format

```
MIRROR
```

MONITOR LOGGING

The MONITOR LOGGING command displays network events as they are being logged. You can stop the display of information logging by pressing any key on the keyboard. You can also use **CTRL/C** to stop the display and exit from NTU at the same time.

Format

MONITOR LOGGING [TO *file-id*]

READ LOGGING

The READ LOGGING command causes the system to display information about network events that is contained in the event logging buffer. These events are logged continuously. READ LOGGING lets you read the most current network information.

The information appears on the screen in front of you, or you can redirect the output to a specific file.

Format

READ LOGGING [TO *file-id*]

SET ACCOUNT

The SET ACCOUNT command lets you specify the account to use for accessing the mirror on a remote node. You can use up to 39 characters to define the account.

Format

SET ACCOUNT *account*

SET CIRCUIT

The SET CIRCUIT command defines or modifies circuit information.

Format

SET CIRCUIT [*circuit-id*] {
HELLO TIMER *seconds*
OWNER {DECnet
MOP}
SERVICE {DISABLED
ENABLED}
STATE {ON
OFF}}

SET COUNT

The SET COUNT command lets you specify the number of times to repeat any of the NTU tests. The default value is 1, but you can change this at any time using SET COUNT. You can assign any value that is in the range of 1 to 32,767.

Format

SET COUNT *n*

SET ECHO

The SET ECHO command determines whether a redirected input file is displayed on your screen as the file is executed. The default is OFF (no echo).

Format

SET ECHO {ON }
 {OFF }

SET LENGTH

The SET LENGTH command lets you specify the length of the test messages to be sent over the network. The default value is 40, but you can change this at any time using SET LENGTH. You can assign any value from 1 up to 512.

Format

SET LENGTH *n*

SET LINE STATE

This command allows you to turn the state of the line to **OFF** or **ON**. The line is the communication path that connects your node to the adjacent node.

Format

SET LINE STATE {OFF }
 {ON }

SET LINK

The SET LINK command terminates logical link connections that are associated with a specific socket. The socket is also detached.

Format

SET LINK *socket* STATE OFF

SET PASSWORD

The SET PASSWORD command lets you specify the password to use for accessing a mirror on the remote node. You can use up to 39 characters to define the password.

Format

SET PASSWORD *password*

SET USER

The SET USER command lets you specify the access control information necessary for accessing the mirror on the remote node. You can set either the user's name or the user's node address with this command. (If you decide to provide the user's name, you must also provide the appropriate password for that name.)

Format

SET USER *user-id*

SET WITH

The SET WITH command lets you specify the type of format to use for sending loopback messages. The format is always binary (ONES and ZEROES), but you have a choice as to how the binary numbers are arranged. There are three ways to arrange the binary format:

- All ONES (11111111)
- All ZEROES (00000000)
- Mixed ONES and ZEROES (01010101)

The default format is MIXED.

Format

SET WITH {
ONES
ZEROES
MIXED
}

SHOW ACTIVE LINKS

The SHOW ACTIVE LINKS command displays summary type information for all active links between the executor node and the adjacent node (or other remote nodes with active logical links to your node).

Format

SHOW ACTIVE LINKS [TO *file-id*]

SHOW ACTIVE NODES

The SHOW ACTIVE NODES command displays the executor node, the adjacent node, and a list of all the nodes that currently have active links to your local node.

Format

SHOW ACTIVE NODES [TO *file-id*]

SHOW ADJACENT NODE

The SHOW ADJACENT NODE command displays information for the adjacent node.

Format

SHOW ADJACENT NODE [TO *file-id*]

SHOW CIRCUIT

The SHOW CIRCUIT command displays information about the specified circuit.

Format

SHOW CIRCUIT [*circuit-id*] [CHARACTERISTICS
COUNTERS
STATUS
SUMMARY] [TO *file-id*]

SHOW DEFAULTS

The SHOW DEFAULTS command displays all of the current default values set either by the system or with the SET or LOOP command. SHOW DEFAULTS displays the values for the following:

- Loop Count
- Data Length
- Data Type
- User-id (if applicable)
- Password (if applicable)
- Account (if applicable)

Format

SHOW DEFAULTS

SHOW EXECUTOR

The SHOW EXECUTOR command displays information about the local node.

Format

```
SHOW EXECUTOR [ CHARACTERISTICS ] [ TO file-id ]  
                [ COUNTERS  
                [ STATUS  
                [ SUMMARY
```

SHOW KNOWN LINKS

The SHOW KNOWN LINKS command displays summary type information for all logical links known to the local node.

Format

```
SHOW KNOWN LINKS [ TO file-id ]
```

SHOW KNOWN NODES

The SHOW KNOWN NODES command displays a list of all nodes that are known to DECnet on your local node. You can set these nodes by using NCP. You can perform NTU tests (those that require the use of node names) only to nodes that are known by your system.

Format

```
SHOW KNOWN NODES [ TO file-id ]
```

SHOW LINE

The SHOW LINE command displays information about the DECnet line (ASYNC-1 or ETHER-1) that you are using to communicate over the network.

Format

```
SHOW LINE [line-id] [CHARACTERISTICS  
COUNTERS  
STATUS  
SUMMARY] [TO file-id]
```

SHOW NODE

The SHOW NODE command displays local information about a remote node, which you specify by its name or address. The node information appears on the screen in front of you.

Format

```
SHOW NODE node-id [STATUS  
SUMMARY] [TO file-id]
```

ZERO CIRCUIT

The ZERO CIRCUIT command resets all the counters on the circuit to zero.

Format

```
ZERO CIRCUIT [circuit-id] [COUNTERS]
```

ZERO EXECUTOR

The ZERO EXECUTOR command resets all the counters for your local node to zero.

Format

ZERO EXECUTOR [COUNTERS]

ZERO LINE

The ZERO LINE command resets all the counters for your line to zero.

Format

ZERO LINE [*line-id*] [COUNTERS]

SETHOST PARAMETERS AND SWITCHES

The network virtual terminal utility (referred to as SETHOST) connects your system to a host node and allows your system to emulate (act like) a terminal connected to the host node. Each time you connect or log on to a host, the connection is called a session.

There two techniques for connecting to a host node: LAT and CTERM. When SETHOST connects your node to another node, it checks to see if you have a LAT driver installed. If so, SETHOST first attempts to connect your node to a LAT line. This is the default. If LAT is not available, then SETHOST attempts to connect you using CTERM. You can select CTERM over LAT as the default by using the /CTERM switch.

The maximum number of concurrent sessions you can create depends on the number of network links you established with the NCP command, DEFINE EXECUTOR MAXIMUM LINKS. The number of sessions also depends on the number of links that are currently active.

SETHOST provides a command interface to create and modify different sessions. SETHOST also provides a menu interface which is displayed whenever a session is interrupted. This guide describes the switches used with the SETHOST command interface. For information about the SETHOST menu, refer to the *DECnet-DOS User's Guide*.

The SETHOST command, its parameters, and various switches allow you to create, record, and modify your remote sessions. You can use the parameters and the switches in the command line, or you can use them at the SETHOST prompt.

Format

SETHOST [*node-spec* or *latservicename*] [/switch]

NOTE

Any switches that can take arguments will accept a space, a colon (:), or an equal sign (=) as delimiters to separate the switch from its argument.

/ABORT

The /ABORT switch lets you specify which session you want to abort. You can abort a single session or you can abort all the sessions. To view the current sessions, use the /SHOW switch.

Format

/ABORT = *n*
ALL

/CTERM

The /CTERM switch specifies that CTERM protocol be used for this connection. The default is to attempt to use LAT protocol first. If the LAT attempt fails, the connection is made using CTERM. Only CTERM provides support for multiple sessions.

Format

/CTERM

/EDIT

The /EDIT switch controls the type of command line editing you can perform during your remote session. This switch only applies to CTERM hosts or systems that support command line editing.

Format

/EDIT = *edit-mode*

The three editing modes are:

OVERSTRIKE

INSERT

NONE

/EXIT

The /EXIT switch lets you exit from SETHOST. You can enter the switch after you have typed the SETHOST command.

Format

/EXIT

/HELP

The /HELP switch displays the main help text screen for SETHOST.

Format

/HELP = *topic*

You can get help on the following topics:

node-spec	@	*	?	
/SESSION	/TAKE	/LOG	/HELP	/SAVEDEFAULT
/SHOW	/EDIT	/ABORT	/EXIT	/CTERM
keyboard-layouts		context-switching		
syntax		changing-default-line-editing-mode		

LATSERVICENAME

The LATSERVICENAME parameter lets you specify the LAT service name to use for establishing a remote session.

Format

SETHOST *latservicename*

/LOG

The /LOG switch lets you record the terminal session in a log file. You can specify a file name for recording the session. If you do not specify a name, the default file name is SESSION.LOG.

Format

/LOG:*file-spec*

NODE-SPEC

The NODE-SPEC parameter lets you specify the DECnet node name or DECnet node address to use for establishing a remote session.

Format

SETHOST *node-spec*

/SAVEDEFAULT

This switch lets you save the switch settings to be used as the default for all future sessions. The /SAVEDEFAULT switch only works with the /EDIT and the /CTERM switches. If you use /SAVEDEFAULT and do not specify any switches to be saved, it has no effect.

When you use this switch, SETHOST places your specified defaults in a file called SETHOST.DEF in the DECnet directory. SETHOST reads this file whenever you start the utility.

Format

/SAVEDEFAULT

/SESSION

The /SESSION switch specifies the session number to use for reconnection to a host. You can use the /SHOW switch to determine which sessions are available. You can then use /SESSION to re-establish a connection to a particular session. This switch only applies to CTERM hosts or systems that support multiple sessions.

Format

/SESSION = *n*

/SHOW

The /SHOW switch displays a list of the current sessions and the hosts that connect them to your node. This switch only applies to CTERM hosts or systems that support multiple sessions.

Format

/SHOW

/TAKE

The /TAKE switch calls commands from a local file and sends them to the remote node's processor.

Format

/TAKE = *file-spec*

or

@*file-spec*

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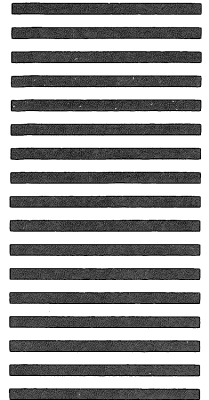
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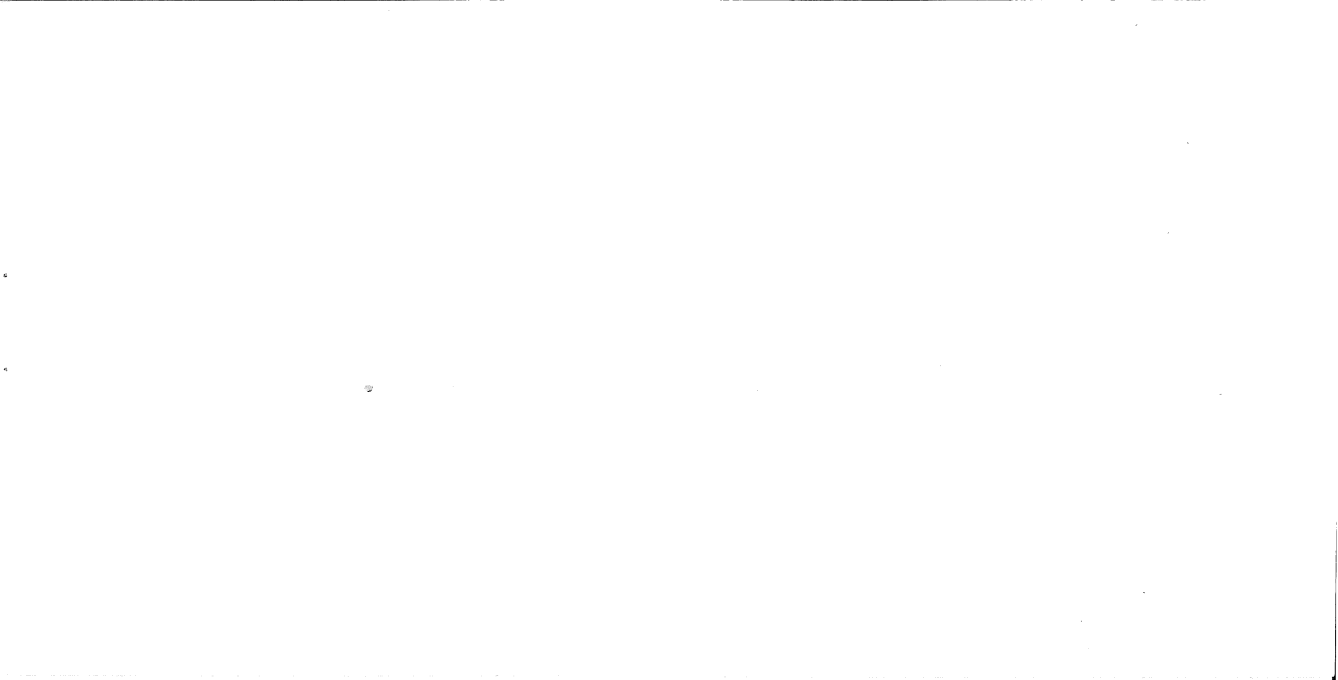
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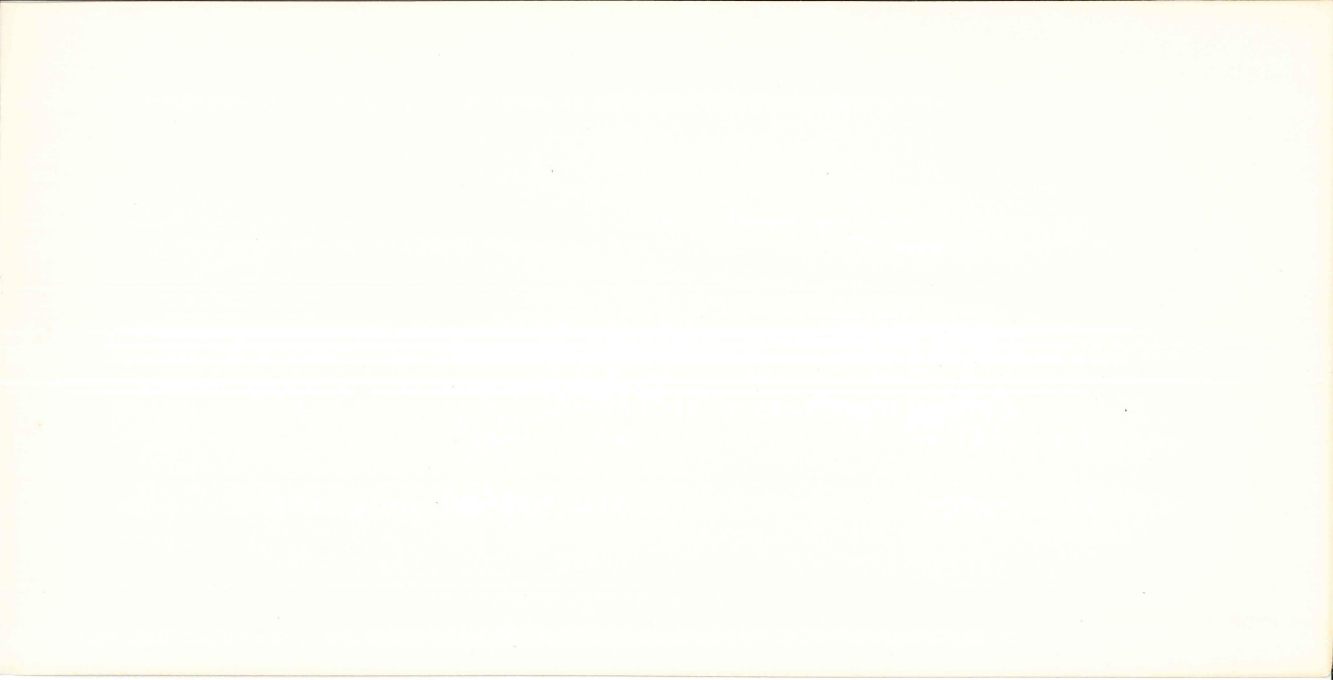
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