Terminal Server

Commands and Messages

June 1989

This reference manual describes the usage and syntax of all terminal server commands and Terminal Server Configurator (TSC) commands. This manual also lists and describes all status and error messages issued by the server and by the TSC.

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Preface

The *Terminal Server Commands and Messages* manual describes all server commands, keywords, and messages used by the DECserver 100 server, the DECserver 200 server, the DECserver 300 server, the DECserver 500 server and the Ethernet Terminal Server (hereafter referred to as servers). The manual includes Terminal Server Configurator (TSC) commands and messages that are used in conjunction with the DECserver 500 server and the Ethernet Terminal Server.

As noted in the text, command use can differ somewhat among servers. The appendixes in this manual summarize the commands specific to each server.

Intended Audience

This manual is intended for terminal server and TSC users who have some familiarity with the server (and the TSC, where applicable), and who are looking for strictly reference information on command syntax and message descriptions. Users of this manual should already have some concept of server management, including the interrelationships between the server databases as described in the management guide for their server. New users and nonprivileged and secure users can find instruction and complete command information in the user's guide for their server.

Structure of This Manual

Chapter 1 Introduces server command use, including how to set user security levels, how to modify and display information in the permanent and operational databases, and how to access on-line help documentation.

Chapter 2	Alphabetically lists and describes each server and TSC command, including its privilege level, function, syntax, parameters (with possible values and defaults), and an annotated example.
Chapter 3	Lists all server and TSC status and error messages and briefly describes each.
Appendix A	Alphabetically lists all command keywords, showing the minimum abbreviation for each.
Appendix B	Summarizes the DECserver 100 command set (including characteristics).
Appendix C	Summarizes the DECserver 200 command set (including characteristics).
Appendix D	Summarizes the DECserver 300 command set (including characteristics).
Appendix E	Summarizes the DECserver 500 command set (including characteristics).
Appendix F	Summarizes the Ethernet Terminal Server command set (including characteristics).

Conventions Used in This Manual

Conventions are used throughout this manual to present information simply, clearly, and consistently. Familiarizing yourself with these conventions can help you use this manual effectively.

- In reference sections, differences between the servers are sometimes noted using the following codes:

DS100	Indicates the DECserver 100 server.
DS200	Indicates the DECserver 200 server.
DS300	Indicates the DECserver 300 server.
DS500	Indicates the DECserver 500 server (software/hardware).

DS550 Indicates the DECserver 550 server hardware only.

ETS Indicates the Ethernet Terminal Server.

- The RETURN key, which you must press to execute commands, is not shown in command examples.
- All numbers are decimal unless otherwise noted. All Ethernet addresses are given in hexadecimal notation.

The following table lists graphic conventions used in this manual.

Convention	Meaning
`Special type`	This special type indicates system output or user input. System output is in black type; user input is in red type
UPPERCASE	Uppercase letters in command lines indicate keywords that must be entered. You can enter keywords in either uppercase or lowercase. (You can abbreviate command keywords to the smallest number of characters that distinguish the keyword to the server or to the TSC.)
lowercase italics	Lowercase italics in command syntax or examples indicate variables for which either the user or the system supplies a value.
BOLD	In summaries of characteristics, bold type indicates default values.
bold	In text, words appearing in bold type introduce new terms or concepts (and can also be found in the Glossary).
{ }	Braces in command syntax statements indicate that you must specify one of the enclosed values. Do not type the braces.
[ ]	Square brackets in command syntax statements indicate that the enclosed value(s) are optional. You can enter none or one. Default values apply for unspecified options. Do not type the brackets.

Vertical list of options	In command syntax statements, a vertical list of options not enclosed within braces or brackets or parentheses indicates that you may specify none or any number of the options. Unspecified options take a default value.
/	A slash between command verbs indicates related, alternative commands or options. For example, SET/DEFINE PORT refers to both the SET PORT and the DEFINE PORT commands.
key	Press the specified key. For example, RET means that you should press the RETURN key.
CTRL/*x*	Hold down the CONTROL key and then press the key specified by *x*. The server displays this key combination as ^*x*.
. . .	Vertical ellipses (dots) in examples represent either user input or system output that has been omitted.
. . .	Horizontal ellipses (dots) indicate that irrelevant characters or QIO arguments are omitted.

The following syntax statement illustrates the graphic conventions used in this manual.

```
{SHOW   } NODES [node-name][COUNTERS ]
{MONITOR}       [ALL     ][STATUS   ]
                            [SUMMARY  ]
```

When issuing this command, you must include either SHOW or MONITOR and the keyword NODES. If you wish, you can specify a service node name or include the keyword ALL. You can also include one or none of the three choices in the last set of brackets. Where you omit options, the server uses default values.

Keywords can be abbreviated to the shortest form accepted by the server. For example, the following two commands are equivalent:

```
Local> SHOW NODE SALES COUNTERS

Local> SH NOD SALES CO
```

Remember to press the RETURN key to execute your command.

1

Using Terminal Server and TSC Commands

This chapter briefly describes basic use of the server, including on-line help, user security levels, the effects of commands on permanent and operational databases, defaults for characteristics, types of database displays, naming conventions, password specification, and switch character selection.

For more information about using the commands in this manual to manage your server, refer to your server's management guide. Nonprivileged user commands are described in detail in the user's guide for your server.

1.1 On-Line Help

All servers offer on-line help documentation of some kind. This section describes common help format. For server-specific information, consult the user's guide for your server, or type HELP in response to the local mode prompt (The default is Local>).

On most servers, you can display brief descriptions of all server commands and characteristics available for the security level of your port (security levels are discussed in Section 1.2.1). Some servers also offer tutorial help — that is, a brief introduction to using the server and its facilities. DECserver 500 users can optionally display a list of DECserver 500 command syntaxes by enabling the TSC server command LIMITED [HELP].

If your server offers tutorial help, you can access it by entering HELP in response to the user name prompt (Enter username>) or by entering HELP TUTORIAL in response to the local mode prompt.

```
Local> HELP TUTORIAL
```

The server responds with a series of screens containing tutorial information. At the end of each screen, you can press the RETURN key to continue to the next screen, or you can enter a question mark (?) (followed by pressing the RETURN key on DS500 and ETS) to start again with the first screen. Press CTRL/Z at any time to exit from help. Whenever you enter tutorial help, the server begins with the first screen.

If your server offers on-line reference information for server commands, enter the HELP command at the prompt.

```
Local> HELP
```

On-line help is also available for the Terminal Server Configurator (TSC). Enter the HELP command at the TSC prompt.

```
TSC> HELP
```

The TSC on-line help works the same as the server on-line help. In both cases, on-line help responds with a list of command keywords for which information is available, and prompts again.

```
Topic?
```

When you enter a command keyword from the list (for example, DEFINE), on-line help gives you a brief description of the function performed by the command keyword and lists associated subtopics. The help program then prompts for a subtopic. For example:

```
DEFINE Subtopic? PORT
```

In response to this entry, on-line help lists all DEFINE PORT options and prompts again for a subtopic. If you already know which option you want help for, you can skip these intermediate steps by requesting specific help information at the local (or TSC) prompt. For example, to access information about specifying flow control, you can enter one of these commands:

```
Local> HELP SET PORT FLOW CONTROL
```

or

```
TSC> HELP DEFINE PORT FLOW CONTROL
```

To redisplay the options that you can enter in response to a prompt for a topic or subtopic, enter a question mark (?) (and press the RETURN key for DS500 and ETS only). To move to the previous help level prompt, press RETURN at any prompt. To exit from help, press CTRL/Z.

NOTE

Help information uses the graphic conventions [ ] and { }, as described in the Preface. Do not enter these graphic characters in your command lines.

1.2 User Security Levels

This manual describes the complete command set available to the server manager operating at a port that is set to privileged status (see Section 1.2.2). Other users can execute a subset of these commands, depending on the security level of the ports where those users enter commands.

1.2.1 Security Levels of Server Ports

Three levels of security are available for server ports: privileged, nonprivileged, and secure. All ports are nonprivileged by default, but the server manager can change a port's security level to suit the needs of the user (see Section 1.2.2). The characteristics of each security level are as follows:

- **Privileged status** — The user at a privileged port has access to the entire server command set, including commands that manage the server, its ports, and its services. Any user who knows the privileged password can set a port's status to privileged and access these commands (see Section 1.2.2). For security reasons, a server usually has only one privileged user — the server manager. A privileged user can execute all the commands described in Chapter 2 (except any commands that are not supported by the server product being used).

- **Nonprivileged status** — Nonprivileged status is the default for all interactive ports. Users at a nonprivileged port cannot access commands that change the state of the server or other ports, but they can use all commands required for connecting services from an interactive port. Nonprivileged users can also modify certain port characteristics and can display information about the server, its ports, and service nodes. All nonprivileged operations are described in detail in the user's manual for your server. Commands available to nonprivileged users are identified in Chapter 2 with the code NP or S.

- **Secure status** — Secure status restricts the commands that are available on a port to a subset of the nonprivileged commands. This subset includes commands that are required for connecting to services from that particular port. Secure users have access to only limited display information and cannot use the broadcast feature that is available to other nonprivileged users. All commands that you can enter from a secure port are identified in Chapter 2 with the code S.

1.2.2 Setting the Security Level

The server sets all ports to nonprivileged status by default. To set a port to privileged status so that you can enter privileged server management commands, enter the SET PRIVILEGED command. The server then prompts for a password as follows:

```
Local> SET PRIVILEGED
Password>
```

You must enter the correct password to set the port to privileged status. The first time you set privileged status, use the default password SYSTEM. Then use the SET SERVER PRIVILEGED PASSWORD command to set a secret privileged password for your server (see the example under SET PRIVILEGED in Chapter 2). Thereafter, no user can set a port to privileged status without entering the password you defined (unless you reset the server characteristics to their defaults, as described in Section 1.3.1). You should also use the DEFINE SERVER command to set your password in the permanent database (described in Section 1.3) so that the password remains in effect through server initializations. (DS500 and ETS server managers must run TSC to execute the DEFINE SERVER command.)

You can use the SET/DEFINE SERVER PASSWORD LIMIT commands to limit the number of times a user can attempt to enter the privileged password before the server logs out the port. Pressing CTRL/Z at the privileged password prompt causes the server to terminate the SET PRIVILEGED operation without logging out the port.

Once you have established your privileged status on a port, you can enter the full set of privileged server commands, including the option to change the security level of other ports. To set a port to secure status, specify the SECURITY ENABLED option with the SET/DEFINE PORT command (see Chapter 2 for details). To return a secure port to nonprivileged status, simply enter SET/DEFINE PORT SECURITY DISABLED.

When you complete your privileged operations, return the port to nonprivileged status to prevent unauthorized access to the server. You can either log out of the server or use the SET NOPRIVILEGED command. If you temporarily leave a terminal, you can use the LOCK command to guard against unauthorized use. Leaving a port with privileged status unlocked allows another user to modify the privileged password, thereby locking you out of privileged status.

1.3 Databases

All servers have a permanent database and an operational database that define values for all port, server, and local service characteristics. Values set in the server image remain constant through server initializations, while settings in the operational database do not. Since the databases operate differently on the servers, you should read your server's management guide for complete details. In the DECserver 500 and Ethernet Terminal Server products, the permanent database actually resides within the server image on the host system, and you customize the database using TSC commands.

Using the commands described in this manual, you can change the port, server, and service characteristics in one or both databases to customize the operation of your server. You can also display these and other values stored in the databases (see Section 1.3.2).

You use different commands to perform similar operations in each database (see Table 1-1). Only privileged users can modify server and service characteristics. Nonprivileged and secure users can modify some port characteristics.

Table 1-1 lists related server and TSC commands according to the databases they affect. The table briefly describes the command functions and lists the entities that you can specify in each command. Not all servers support all entities, and not all entities can be modified in both databases. Check the command summary for your server in this manual's appendixes to determine use of commands on your server.

Table 1–1: Commands Listed by Database

Permanent Database*	Operational Database	Entity	Command Function
DEFINE	SET	DEVICE LANGUAGE ** PORT SERVER SERVICE SESSION ***	Modifies entries for the entity in the database.
PURGE	CLEAR	LANGUAGE ** SERVICES	Deletes entries for the entity from the database.
LIST	SHOW and	DEVICES	Displays information from the database.
	MONITOR	LANGUAGES ** NODES *** PORTS QUEUE *** SERVER SERVICES SESSIONS *** USAGE ** USERS ***	
CLOSE		TABLE**	Closes a currently open keyboard mapping table.
USE		TABLE**	Selects a keyboard mapping table file and keyboard table for use in keyboard mapping.

* These commands are TSC commands for DS500 and ETS.
** These entities can be specified in TSC commands only.
(Exception: DS500 supports a SET DEVICE command.)
*** These entities can be specified in the operational database only.
(Exception: TSC supports a LIST NODE and a LIST USERS command.)

Values set in the permanent database remain constant through initializations, power losses, and logins. Whenever you initialize the server, the values stored in the permanent database are copied into the operational database.

You can customize your basic server configuration or a port's configuration by using the DEFINE command to change the defaults for any characteristic in the permanent database. Changes in characteristics take effect after the next server initialization, except changes to DECserver 100, DECserver 200, and DECserver 300 port characteristics, which become effective the next time the affected port is logged in. (Consult your server's management guide for details.) Modifications to the permanent database remain in effect until they are changed again, unless you reset the server to its defaults (see Section 1.3.1).

At server initialization, the operational database is a copy of the values in the permanent database. You can then use SET commands to modify these values to suit your current operations. Changes to server characteristics and to service characteristics in the operational database take effect immediately and remain in effect until they are changed again or until the server is reinitialized. Changes to port characteristics in the operational database are effective until they are changed or until the port is logged out. For DS500 and ETS, you can use the SAVE PORT command to save current port characteristics in the port's log-in database between logins (but not across initializations).

1.3.1 Resetting Database Characteristics to Defaults

You can reset all server, service, and port characteristics in the permanent database to their defaults. Such action is useful if you forget the login and privileged passwords that you established. However, Digital Equipment Corporation recommends that you reset the software only when absolutely necessary. Consult your server's management guide for instructions on how to reset the software characteristics.

Following the reset procedure, the login password is once again ACCESS and the privileged password is SYSTEM. To maintain security, you should change these passwords immediately in both databases by using the SET/DEFINE SERVER command (see Chapter 2).

1.3.2 Displaying Information from the Databases

You can display information about the different entities from the permanent and operational databases. Several commands display information about the server, its users, ports, nodes, devices, services, sessions, queues, and usage.

LIST	Displays information from the permanent database.
SHOW	Displays information from the operational database, or displays a snapshot of the current status of the requested entity.
MONITOR	Provides a continuously updated screen display of information from the operational database or of the current status of the requested entity.

The privileged MONITOR commands produce displays that continuously update information. For DS500 and ETS, if the display device supports ANSI escape sequences and you have issued a SET PORT TYPE ANSI command for the port, the changing information is updated in its fixed position on the screen. On terminals that do not support ANSI escape sequences, a new display is generated for each update. The DECserver 100 server, DECserver 200 server, and DECserver 300 servers send MONITOR displays in ANSI escape sequences, regardless of the port TYPE setting (see SET/DEFINE PORT). Do not use MONITOR on terminals that do not support ANSI escape sequences. Digital recommends that you use MONITOR commands sparingly because the continuous displays require more server resources than other commands. For DS500 and ETS, you can run only one MONITOR display at a time.

Press the BREAK key to halt any display immediately. Entering any character during a MONITOR display (or pressing CTRL/O for DS500 and ETS) terminates the monitor function after the current display is fully updated.

Depending on the entity specified in the command (see Table 1-1), you can specify that information be displayed for one, all, or a group of that entity. For example, you can display information for all ports, for one or more specific ports, or for all ports having the same access type. The options for each entity are defined in the individual command descriptions in Chapter 2.

You can also choose from up to four different types of screen displays, depending on the entity and the server product. Some displays are not available to secure users. The display types are as follows:

CHARACTERISTICS	Displays all characteristics that the user or server manager can change using SET or DEFINE commands.
COUNTERS	Displays counters that tally how many times certain events have occurred since the server manager set the counters to zero. You can evaluate counter statistics to assess the operation of the server.
STATUS	Displays detailed information about the entity, including current, highest, and maximum values for some key fields; interrelationships of entities; additional counters; and more.
SUMMARY	Displays a brief summary of information (usually one line) for each entry in a list of entities (for example, a list of services).

All displays are described in detail in the management guide for your server.

1.4 Naming Conventions

Some commands require you to enter a server, node, port, or service name. All of these names must be a string of 1 to 16 characters and cannot be abbreviated. Allowable characters are A to Z, 0 to 9, $, - (hyphen), _ (underscore), and . (period). The DECserver 200 server and DECserver 300 server convert all lowercase letters to uppercase letters.

The exceptions are:

- DS100 allows 1 to 12 characters for port names, and 1 to 14 characters for service names for the PREFERRED SERVICE and DEDICATED SERVICE port characteristics.
- DECnet node names (as opposed to LAT node names) must have 1 to 6 alphanumeric characters, including at least one alphabetic character.

DECnet node names and server names must be unique on a local area network (LAN) and port names must be unique on a server. Digital recommends that you set the server name to match the DECnet node name for the server (see your server's management guide for details). Service names must be unique for each service on the LAN; however, one service may be offered by multiple service nodes.

These naming conventions do not apply to user names or to server or service identification messages.

1.5 Conventions for Specifying Passwords

Unless Chapter 2 states otherwise, all passwords have either 1 to 6 ASCII characters (DS100 and DS200) or 1 to 16 ASCII characters (DS300, DS500, and ETS). When specifying passwords in server commands, either you can enclose the password in quotation marks and include it in the command line, or you can enter the command without the password and let the server prompt you for it. You can omit the password value and be prompted only under the following conditions:

- For DS100, DS200, and DS300, the password characteristic is the only characteristic in the command line.
- For DS500 and ETS, the password characteristic is the last characteristic in the command line.

When issuing TSC commands, you must specify the password in quotation marks on the command line; TSC does not prompt for omitted passwords (see Chapter 2 for details).

The server does not echo a password that is entered in response to a password prompt. When you specify a new password, the server displays a verification prompt and waits for you to reenter the password (which is again not echoed). If both entries match, the password is established and the local mode prompt is displayed. If they do not match, the server returns to the local mode prompt. Some examples of password specification follow:

```
Local> SET SERVER LOGIN PASSWORD "SECRET"
Local>

Local> SET SERVER LOGIN PASSWORD
Password> SECRET
Verification> SECRE
Local -742- Password verification failed
Local> SET SERVER LOGIN PASSWORD
Password> SECRET
Verification> SECRET
Local>
```

Press CTRL/Z at any time to interrupt password processing and return to the local mode prompt (DS500 and ETS also respond if you press the BREAK key).

You can change the server characteristics LOGIN PASSWORD and PRIVILEGED PASSWORD, but you cannot clear them; you can change or clear the service characteristic PASSWORD and the server characteristic MAINTENANCE PASSWORD.

To clear a service characteristic password, specify quotation marks with nothing between them ("") in place of the password in the command line. Alternatively, on DS500 and ETS, you can specify NONE (unquoted) in the command line to clear a password.

To clear MAINTENANCE PASSWORD, you can specify "0" in the command line or, for DS200 and DS300 only, enter 0 in response to the password prompt. (For details, see the command descriptions in Chapter 2.)

1.6 Selecting Switch Characters

You can use the SET/DEFINE PORT command to set FORWARD, BACKWARD, and LOCAL switch characters for switching between sessions or returning to local mode. Use the following guidelines when specifying switch characters.

- Avoid characters that you use for other purposes, such as entering commands or text on the server or service nodes.
- Avoid characters that are used by many video terminals in their escape sequences, such as ~, #, ?,), [, and (.
- Avoid keyboard keys that generate multiple characters, such as arrow keys.

Recommended switch characters include the apostrophe (') and any control character that is not used by the server or by services to which the port connects.

2

Command Descriptions

This chapter contains reference information for using the full set of server and Terminal Server Configurator (TSC) commands and options. TSC users should consult their server's software installation guide for information about invoking the TSC utility on their specific load host.

When differences between the servers are noted in this chapter, the following abbreviations are sometimes used:

- DS100 indicates the DECserver 100 server.
- DS200 indicates the DECserver 200 server.
- DS300 indicates the DECserver 300 server.
- DS500 indicates the DECserver 500 server.
- DS550 indicates the DECserver 550 hardware running DECserver 500 software.
- ETS indicates the Ethernet Terminal Server.

The commands and keywords described in this chapter are summarized in the following appendixes:

- Appendix B — DECserver 100 Command Summary
- Appendix C — DECserver 200 Command Summary
- Appendix D — DECserver 300 Command Summary

- Appendix E — DECserver 500 Command Summary
- Appendix F — Ethernet Terminal Server Command Summary

2.1 Overview of Commands

The following summary briefly describes each server or TSC command. For details on syntax, keywords, privilege requirements, and server support, see the individual command descriptions in this chapter.

- BACKWARDS — Resumes the session preceding your current session.
- BROADCAST — Sends a message to one or more server ports.
- CLEAR SERVICES — Deletes specified local services from the operational database.
- CONNECT — Connects your port to a service.
- CONNECT PORT (DS100, DS200, and DS300 only) — Connects another server port to a service.
- CLOSE TABLE — Close a currently open keyboard mapping table (DS500 software, DS550 hardware only).
- CRASH — Shuts down the server, up-line dumps a copy of server memory, and reinitializes the server.
- DEFINE commands — Modify values for the specified entity (see Table 1-1) in the permanent database.
- DISCONNECT — Disconnects one or more sessions on your port.
- DISCONNECT PORT (DS100, DS200, and DS300 only) — Disconnects a session on a dedicated port.
- EXIT (TSC only) — Exits you from TSC.
- FORWARDS — Resumes the session following your current session.
- HELP — Displays the server or TSC on-line documentation.
- INITIALIZE — Reloads the server software following an optional delay or diagnostic test.
- INITIALIZE CANCEL — Cancels a previous INITIALIZE command that specified a value for DELAY.

- LIST commands — Display information about the specified entity (see Table 1-1) from the permanent database.
- LOCK — Prevents unauthorized use of your terminal in your absence.
- LOGOUT — Logs out one or more ports from the server.
- MONITOR commands — Produce continuously updated displays about the specified entity (see Table 1-1) from the operational database.
- MOVE DEVICE (DS500 only) — Swaps an active line card for a standby line card.
- PURGE commands — Remove specified keyboard mapping tables (DS500 software, DS550 hardware only) or local services from the permanent database.
- REMOVE QUEUE — Removes entries from the server queue of queued connection requests for remote access to ports on the server.
- RESUME — Resumes either the current session or a specified session.
- SAVE PORT (DS500 and ETS only) — Retains the current operational port characteristics after logout.
- SET commands — Modify values for the specified entity (see Table 1-1) in the operational database.
- SET PRIVILEGED — Sets the port you are using to privileged status so that you can enter privileged commands.
- SET NOPRIVILEGED — Resets the port you are using to nonprivileged status so that nonprivileged users cannot enter privileged commands at that port.
- SHOW commands — Display information about the specified entity (see Table 1-1) from the operational database.
- TEST LOOP — Tests the physical connections between your server and another Ethernet node on the network.
- TEST PORT — Sends a test pattern to a port on the server (with or without optional loopback testing).
- TEST SERVICE — Tests communications between the server and a service node.
- USE TABLE — Selects a keyboard table file and keyboard table for use in keyboard mapping (DS500 software, DS550 hardware only).
- ZERO COUNTERS — Resets the specified counters to zero.

2.2 Entering Commands

This section describes command-line editing features for entering server commands. TSC users should consult TSC documentation for a description of that utility's editing conventions.

You can enter server commands in either uppercase or lowercase characters (or a combination of both). Separate the words in a command line by one or more spaces. The following list describes special keys that you can use when entering commands.

Key	Function
DEL	Deletes the last character entered in the current command line.
CTRL/U	Deletes the entire current command line.
CTRL/Z	Operates like CTRL/U except when entered in response to a password prompt or password verification prompt. In that case, it cancels the password processing and causes the server to return to local mode. Exception: CTRL/Z does not unlock a locked terminal (see the LOCK command).
CTRL/R	Retypes the current command line (helpful after using DEL on a hardcopy terminal).
RET	Executes the current command line.

Command lines can contain up to 132 characters (for DS100, DS200, and DS300) or up to 84 characters (for DS500 and ETS). You can continue a command line onto a second terminal display line provided you do not press the RETURN key at the end of the first display line.

On most load hosts, when you enter TSC commands, you can press the up arrow key to recall previously entered TSC commands.

In Local mode, there is no type-ahead facility.

You can interrupt current local mode output by pressing the BREAK key or by entering your local switch character. (DS500 and ETS users who have disabled the BREAK key can press CTRL/O .)

When a command executes (or fails to execute), you may get one of the status or error messages described in Chapter 3. If you make an error in a command line, TSC, DS100, DS200, and DS300 reject the entire command line; DS500 and ETS process the command line up to the error. If you get an error message, check the command syntax and reenter all or part of the command as necessary. When a command has executed successfully, the server or TSC displays a prompt (local mode prompt or TSC>).

2.3 Command Descriptions

The rest of this chapter lists and describes all server and TSC commands in alphabetical order. Each command description includes a short statement of the command function, the complete command syntax, a description of each parameter (including its possible values and defaults), and an example. You can abbreviate command keywords to the smallest number of characters that distinguish the keyword to the server or to the TSC. (Appendix A lists all keywords with their minimum abbreviations.)

NOTE

Not all servers support all commands and keywords described in this chapter. Commands and keywords that are not supported by all servers are flagged with an asterisk (*) (see the description of codes in the following paragraph). For a summary of the commands and keywords supported by your server, refer to the appendixes in this manual, or see the commands quick reference for your server.

The command syntaxes in this chapter use the graphic conventions outlined in the Preface. In addition, the header for each command contains one or more of the following codes to delineate command use.

Code	Privilege or Restriction
S	Command is available to users at secure, nonprivileged, and privileged ports.
NP	Command is available to users at nonprivileged (nonsecure) and privileged ports only.
P	Command is available to users at privileged ports only.
T	Command is available only in TSC (for DS500 and ETS managers only).

(continued)

Code	Privilege or Restriction
R	Full command usage is restricted for secure and nonprivileged users (see under Restrictions in the command description for details).
*	Command is not supported by all servers. (Keywords that are not supported by all servers are followed by an asterisk [*] in the syntax statement or characteristics list.) Read the Restrictions section or the keyword descriptions for more details on flagged items.

For more information about commands in the S or NP categories, see the user's guide for your server. For more information about privileged commands and options, consult the management guide for your server.

Variables that appear frequently in server commands are defined in Table 2-1 rather than in individual command descriptions.

Table 2–1: Common Variables Used in Commands

Variable	Definition
group-list	One or more decimal codes ranging in value from 0 to 255 (0 to 127 for DS100), each representing a group. Specify multiple codes by separating individual numbers with commas (DS100, DS200, and DS300 also allow blanks as separators), by specifying a range of numbers (in ascending order) using a hyphen, or by using a combination of both. For example, the group list 1,3,5-8,14 specifies groups 1, 3, 5, 6, 7, 8, and 14.
node-name	The name of a LAT network node. See Section 1.4 for guidelines on specifying node names.
password	A string of 1 to 6 ASCII characters for DS100 and DS200 or 1 to 16 ASCII characters for DS300, DS500 and ETS. Section 1.5 provides details on password specification.
port-list	A list of one or more port numbers (see *port-number*). You can specify multiple ports in several ways: • You can specify individual port numbers from 1 to 8 (DS200), from 1 to 16 (DS300), from 1 to 32 (ETS), or from 1 to 128 (DS500), separated by commas. (DS200, and DS300 also allow blanks as separators.)

(continued)

Table 2–1 (Cont.): Common Variables Used in Commands

Variable	Definition
	• You can specify a range of port numbers (in ascending order) using a hyphen. • You can use a combination of both formats. For example, the port list 1,6-13,25,32 specifies ports 1, 6 through 13, 25, and 32. For DS100, enter a number for one port only.
port-name	A 1- to 16-character name (1 to 12 characters for DS100) of a server port. See Section 1.4 for guidelines on specifying port names.
port-number	The number of the port connector on the server hardware unit (range: 1 to 8 [DS100, DS200]; 1 to 16 [DS300]; 0 to 32, depending on the number of PAMs and line cards [ETS]; or 0 to 128, depending on the number of line cards [DS500]).
service-name	A 1- to 16-character name assigned to a service on a server. (For DS100, a 1- to 14-character service name specified in the PREFERRED SERVICE or DEDICATED SERVICE port characteristic.) See Section 1.4 for guidelines on specifying service names.

BACKWARDS (S)

Resumes the session preceding your current session in the session list produced by the SHOW SESSIONS command. Your preceding session is the one with the next lower number to your current session. If your current session is 1, your preceding session is the one at the end of the SHOW SESSIONS display.

Restriction

You cannot use BACKWARDS on a port that has the MULTISESSIONS characteristic set to ENABLED (see SET/DEFINE PORT).

Syntax

BACKWARDS

BROADCAST (NP — R)

Sends a message to other server ports.

Your message should reach the target port device unless one of the following conditions exists:

- The port has the port characteristic BROADCAST set to DISABLED. (DS100, DS200, and DS300 display a warning message in this case.)
- The port is locked.
- A currently active session on the port is set to PASSALL or PASTHRU mode (see SET SESSION).
- The port is logged out.
- The port has a dedicated service.
- The port is running a MONITOR display.
- Output flow control from the server to the port is turned off.

Restriction

Only privileged users can specify ALL or a port list to transmit a message to multiple ports; nonprivileged users must specify a single target port.

Syntax

BROADCAST { PORT *port-list* / ALL } { *"message-text"* / *message-text* }

where

PORT *port-list*

Specifies one or more ports to receive your message. (For DS100, specify one port only.)

ALL

Is a privileged parameter specifying that the message is sent to all ports on the server.

message-text

Is the text of the message (maximum of 115 characters (for DS100, DS200, and DS300) or 72 characters (for DS500 and ETS), as space permits on the command line).

DS100, DS200, and DS300 broadcast the message in all uppercase letters unless you enclose it in quotation marks; you cannot embed quoted text within the message.

Example

```
Local> BROADCAST PORT 7 "Lunch today?"
```

This command sends the string "Lunch today?" to port 7. On DS500 and ETS, the quotation marks are included in the broadcasted message.

CLEAR/PURGE SERVICES (P) *

The CLEAR SERVICES command deletes an entry for one or all local services from the operational database. The PURGE SERVICES command does the same in the permanent database.

You get an error message if you enter the CLEAR SERVICES command under the following conditions:

- Sessions are established with the service.
- CONNECT requests are in the server queue for the service.
- The requested service does not exist.

Restrictions

- DS100 does not support this command.
- For DS500 and ETS, PURGE is a TSC command.

Syntax

$$\left\{\begin{matrix}\text{CLEAR}\\\text{PURGE}\end{matrix}\right\}\ \text{SERVICES}\ \left\{\begin{matrix}\textit{service-name}\\\text{LOCAL}\end{matrix}\right\}$$

where

service-name

Specifies the name of a service to be deleted. If a service is not specified, the server purges the locally defined services.

LOCAL

Specifies that all locally defined services are deleted. LOCAL is the default.

Example

```
Local> PURGE SERVICE LABWORK
```

or

```
TSC> PURGE SERVICE LABWORK
```

This command clears all information for service LABWORK from the permanent database so that it is no longer a locally defined service.

CLOSE TABLE (T)

Closes a previously open keyboard mapping table.

Restriction

This command is valid for DS550 hardware only.

Syntax

CLOSE TABLE

Example

```
TSC> CLOSE TABLE
```

This command closes the currently open keyboard mapping table.

CONNECT (S)

Establishes a session with a service. You can make a connection in several ways:

- Specify only the service.
- Specify the service on a specific service node or on a specific service node and port. (DS200, DS300, DS500, and ETS users can connect to a specific local port without specifying a service node.)
- Enter CONNECT with no parameters to connect to a previously defined preferred service (see the PREFERRED characteristic under SET/DEFINE PORT).

If your port has the MULTISESSIONS characteristic set to ENABLED (see SET/DEFINE PORT), you can use CONNECT to establish one service session per terminal session. For more information about connecting to one or more services, with or without session management, see the user's manual for your server.

If you attempt to connect to a password-protected service, you are prompted for a password. You must enter the password correctly before you can gain access to that service.

Syntax

For DS200, DS300, DS500, and ETS:

CONNECT [*service-name* [NODE *node-name*] [DESTINATION *port-name*]]

For DS100:

CONNECT [*service-name* [NODE *node-name* [DESTINATION *port-name*]]]

where

service-name

Specifies the service to which you want to connect (default: your preferred service). If the service is offered by multiple service nodes, the server connects to the node with the highest service rating.

NODE *node-name*

Specifies a particular service node to which you want to connect (default: the highest-rated node offering the service).

DESTINATION *port-name*

Specifies a particular port to which you want to connect (default: you are connected to the first available port offering the service). DS200/DS300/DS500 and ETS users who specify DESTINATION without specifying NODE are connected to the specified port on the local server node, provided it offers the service. DS100 users must specify a NODE if they specify a DESTINATION.

Examples

```
Local> CONNECT

Local> CONNECT SALES

Local> CONNECT METDATA NODE DATASERVER DESTINATION PORT_6
```

The first command connects the port to its preferred service, provided one is defined. The second command connects the port to the service SALES. The last command connects the port to the service METDATA at port PORT_6 on terminal server DATASERVER.

CONNECT PORT (P) *

Connects another dedicated server port to a service session. For example, use CONNECT PORT to connect a printer to a service. (Use the CONNECT command on the previous page to connect the port you are currently using to any service.) You can make a connection in several ways:

- Specify only the service.
- Specify the service on a specific service node or on a specific service node and port.
- Enter CONNECT PORT with no parameters to connect to the dedicated service previously defined for the target port (see SET/DEFINE PORT DEDICATED).

You cannot use this command to connect another port to a password-protected dedicated service. The target port must be set to LOCAL or DYNAMIC access and must have a dedicated service defined for the port. In addition, the port cannot have a session in progress.

Restriction

DS500 and ETS do not support this command.

Syntax

For DS100:

CONNECT PORT *port-number* [*service-name* [NODE *node-name* [DEST *port-name*]]]

For DS200 and DS300:

CONNECT PORT *port-number* [*service-name* [NODE *node-name*] [DEST *port-name*]]

where

port-number

Specifies the number of the port that you want to connect to a service.

service-name

Specifies the service to which you want to connect the port (default: the dedicated service). If the service is offered by multiple service nodes, the server connects the port to the node with the highest service rating.

NODE *node-name*

Specifies a particular service node to which you want to connect the port (default: the port is connected to the highest-rated node offering the service).

DESTINATION *port-name*

Specifies a particular (destination) port to which you want to connect the specified port (default: the first available port offering the service).

Example

```
Local> CONNECT PORT 3 PRINT_SERVICE
```

This command connects port 3 to the first available port on the highest-rated node offering the service PRINT_SERVICE.

CRASH (P)

Use this command when you have system problems and want to shut down the server and get an up-line dump. When this command is issued, users cannot access the server until the up-line dump completes and the server reinitializes.

Syntax

CRASH

DEFINE DEVICE (T) *

Use this TSC command to specify the TYPE of line card that resides in a particular Q-bus slot on the server and what the line card STATE will be when the server image is down-line loaded. For a CXM04 line card, this command also specifies whether the card will DUMP CXM04 information as part of a server up-line dump. (For a DS500, see SET DEVICE to change STATE or DUMP during server operation.)

TSC uses the specified TYPE to test the validity of user-specified port characteristics that relate to line-card-specific features such as modem control. Also, you must define a CXM04 device TYPE in order to append its executable firmware and keyboard mapping tables to the server image. This must be done prior to down-line loading the server image. If not, the server software cannot load the CXM04 firmware and will not accept the CXM04 line cards.

Restriction

- This command is valid for DS500 only
- CXM04 and DUMP are valid for DS550 hardware only

Syntax

```
DEFINE DEVICE {device-name} TYPE ( CXA16                                  )
              {ALL        }      ( CXB16                                  )
                                 ( CXY08                                  )
                                 ( NONE                                   )
                                 ( CXM04 [ CONFIGURATION {4} ]            )
                                 (                       {8}              )

                            STATE {ONLINE }
                                  {OFFLINE}
                                  {STANDBY}
                            DUMP  {DISABLED}
                                  {ENABLED }
```

NOTE

You must specify at least one of the options (TYPE, STATE, or DUMP).

where

device-name

Specifies the line card being defined. For DS500, the format is LC*n*, where *n* is a value from 1 to 10.

ALL

Specifies that all line cards on the server are being defined. If you specify ALL with DUMP, all line cards must be defined as CXM04 line cards.

TYPE

Specifies the line-card type of the specified device(s).

CXA16

Specifies a CXA16 line card, which supports 16 EIA 423-A data-leads-only ports. The running server assumes any undefined line card is a CXA16.

CXB16

Specifies a CXB16 line card, which supports 16 EIA 422-A (RS-422-A) data-leads-only ports.

CXM04

The CXM04 line card supports the capability of IBM 3270-class terminals to emulate Digital VT220 terminals. Defining this device type appends the executable firmware and the keyboard mapping tables of four VT languages to the server image. (Defining the CXM04 must be done prior to down-line loading the image.) The four supplied languages are North American, British, French, and German. All keyboard mapping tables are automatically removed from the server image when the last device defined as type CXM04 is redefined as a different type.

If you choose CONFIGURATION 4 (either explicitly or by default), the firmware configures the card so that four ports can operate in both VT mode and 3270 mode. This allows a 3270 terminal connected to one of these ports to switch back and forth between VT mode and 3270 mode.

If you choose CONFIGURATION 8, the firmware configures the card so that eight ports can operate in VT mode only.

CXY08

Specifies a CXY08 line card, which supports eight EIA 232-D (RS-232-C) ports with modem signal control or with data leads only.

NONE

Tells the running server to accept any valid line card, except CXM04, that is connected to the hardware unit in the specified device's slot. When TSC or the server checks the line card type to test the validity of port characteristics being specified, it equates NONE with CXA16, regardless of what line card is actually connected to the hardware.

STATE

Specifies what the line card state will be when the server image is down-line loaded.

ONLINE

Redefines the state of a previously defined off line or standby line card. Note, however, that LC9 and LC10 cannot be defined in this manner. These two slots are reserved for standby line cards that can be activated only with the server MOVE DEVICE command.

ONLINE is the normal state (default) for line cards LC1 through LC8.

OFFLINE

Tells the server software to ignore a particular device. However, the off line device must be physically present in the server at the time of initialization.

STANDBY

Defines the line card as a standby line card, allowing you to switch operation later from an active line card to a standby line card.

After defining the device as standby, you must down-line load the server image in order to place that device in a standby status. To activate the standby device, execute the SET DEVICE OFFLINE and MOVE DEVICE commands on the running server. Then switch associated cabling from the (failed) source line card to the standby line card.

The standby line card must be physically present in the server at the time of initialization. Also, the source and standby line cards must be the same type. Once the standby line card becomes active as a result of the MOVE DEVICE command, it cannot return to standby status without reloading the server.

Devices LC9 and LC10 are reserved as automatic standby line cards. Thus any DEFINE STATE for LC9 or LC10 is invalid. However, devices LC1 through LC8 can be defined as standby line cards.

DUMP

Specifies whether a CXM04 line card will dump CXM04 resident information as part of a server up-line dump. DUMP is valid for CXM04 line cards only.

DISABLED

The CXM04 line card will not be part of a server up-line dump. This is the default condition.

ENABLED

The CXM04 line card will dump CXM04 information as part of a server dump.

Examples

```
TSC> DEFINE DEVICE LC8 STATE STANDBY

TSC> DEFINE DEVICE LC5 TYPE CXM04 CONFIGURATION 8 DUMP ENABLED
```

The first command defines device LC8 as a standby line card. The second command defines device LC5 as a CXM04 line card, configures it for VT mode only on all eight ports, and tells the card to dump CXM04 information if an up-line dump occurs.

DEFINE LANGUAGE (T) *

Adds customized keyboard mapping tables for a specified language to the server image. To add new tables for a currently defined language, you must first remove the existing tables for that language (see PURGE LANGUAGE).

NOTE

TSC rejects this command if no server devices are defined as CXM04 (see DEFINE DEVICE TYPE).

Restriction

This command is valid for DS550 hardware only. Note that the IBM 3270 terminals are connected to the 3270 Terminal Option (CXM04) line card in a DECserver 550 terminal server.

Syntax

DEFINE LANGUAGE *language-name* FILE "*file-spec*"

where

language-name

Specifies the name of a language for which keyboard mapping tables are to be loaded into the server image. TSC recognizes only the fifteen VT language names listed in the VT220 Set-Up menu. Thus, the language name for a customized language must be the same as one of the VT languages.

The server image is limited to four language entries. Four VT languages (North American, British, French, and German) are shipped with the CXM04 product, and their keyboard tables are automatically appended to the server image when defining the CXMO4 line card. Because the server image already contains four language entries, you must remove an unused language (PURGE LANGUAGE) before trying to define a new language.

FILE *file-spec*

Specifies the disk location of the keyboard mapping tables for the language being defined.

Example

```
TSC> DEFINE LANGUAGE FRENCH FILE "SYS$COMMON:[DECSERVER]CXM$FRENCH"
```

This command adds keyboard mapping tables for the language FRENCH from the file "SYS$COMMON:[DECSERVER]CXM$FRENCH.KEYS" to the server image.

DEFINE MAPPING (T) *

Customizes a selected keyboard table by changing the mapping of an IBM 3270 keyboard key to a Digital VT220 key.

With the USE TABLE command, you select a keyboard table file and a keyboard table within that file for modification.

The 3270 keys are identified by their scan codes in the keyboard table. Scan codes are mapped to tokens, which, in turn, are mapped to VT220 ASCII characters or escape sequences.

You can map 3270 keys to any VT220 alphanumeric keys (see the limitations described for CAPS_LOCK and ALT/SHIFT under "Restrictions") and to the function and control keys listed in Table 2-2.

Table 2-2: User-Assignable VT220 Keys

Locations	Key Names	
Function keys	PF1-PF4	
Application keypad	KP0-KP9	KPMINUS
	KPCOMMA	KPPERIOD
	KPENTER	ENTER
Top-row function keys	(F6-F20)	HOLD_SCREEN
	SETUP	HELP(F15)
	BREAK	DO(F16)
Editing keypad (E1-E6)	FIND(E1)	INSERT_HERE(E2)
	REMOVE(E3)	SELECT(E4)
	PREV_SCREEN(E5)	NEXT_SCREEN(E6)
Cursor keys	UP	DOWN
	LEFT	RIGHT
Main keyboard keys	TAB	RETURN
	DELETE	COMPOSE

(Continued)

Table 2-2 (Cont.): User-Assignable VT220 Keys

Locations	Key Names
SHIFT/FUNCTION keys	(SF6-SF20)
MVTO specific	MVTO_CONTROL UNDEFINED*
(ASCII control characters)	NUL SOH STX ETX EOT ENQ ACK BEL BS HT LF VT FF CR SO SI DLE DC1 DC2 DC3 DC4 NAK SYN ET CAN EM SUB ESC FS GS RS US DEL
(Diacritical marks)	GRAVE_DIACRIT ACUTE_DIACRIT CIRCUMFLEX_DIACRIT TILDE_DIACRIT RING_DIACRIT UMLAUT_DIACRIT

*The token keyword UNDEFINED indicates that the key is not in use (disabled).

Alphanumeric Keys and Special Characters (GL codes)

Regular alphanumeric keys and special characters have a value equal to their ASCII values and are entered as single characters in quotes or as hexadecimal ASCII codes in the DEFINE MAPPING command. Examples are, "a", "A", "~", and "1", or the corresponding hexadecimal ASCII codes 041, 061, 07E, and 031.

The only exception is that you may not enter the value 0 (zero) to specify the ASCII NUL character; you must use the NUL keyword.

Certain characters have different ASCII codes depending on the language NRC set (National Replacement Character Set). (The NRC set is the keyboard language selected in the VT220 Set-Up.) To ensure accurate mapping, you can look up any character's ASCII code in the table for the same language in the *VT220 Programmer's Pocket Guide* or in the *VT220 Programmer's Reference Manual*.

DEFINE MAPPING (T) *

Syntax

DEFINE MAPPING *scan__code* [STATE *state__type*] KEY *deckey*

where

scan__code

Specifies the scan code of the 3270 keyboard key to redefine. The scan codes have a value of 0 to 7F (hexadecimal). The description for the USE TABLE command shows the scan codes for the 3270 87-key, 102-key, and 122-key keyboards.

STATE

Specifies to use a special key in combination with the scan code. STATE is optional. The *state__type* variable specifies the special key to combine with the scan code: NORMAL (no special key), ALT, SHIFT, CAPS__LOCK, PA2, or ALT__SHIFT (pressing ALT and SHIFT simultaneously). The default is NORMAL.

KEY

Specifies the Digital VT220 key to which the 3270 keyboard key is mapped. You may use one of the function keys shown in Table 2-2, an alphanumeric character within quotes, or a hexadecimal ASCII code with a leading zero.

Examples

```
TSC> USE TABLE USER$64:[JOHN]MY_TABLE.TBL KEYBOARD 102
       CHARACTER MULTINATIONAL
Version 1.0 keyboard table file last modified on 12-JAN-1989 14:58:08
TSC> DEFINE MAPPING 31 STATE ALT KEY PF1
TSC> DEFINE MAPPING 7E KEY ENTER
```

The first command specifies that the DEFINE MAPPING command will use the USER$64:[JOHN]MY__TABLE.TBL keyboard table file, and will modify the 102-key multinational-type keyboard table in that file. Since VARIANT is not specified, the command will use the customer-modifiable table A (the default).

The second command changes the mapping of the 3270 key combination ALT 31 (31 is the scan code) to the VT220 PF1 key.

The third command remaps the 3270 key corresponding to scan code 7E in the default state (NORMAL) to the VT220 ENTER key.

If you use a corresponding table and keyboard, the scan codes will produce the appropriate characters. However, you may see unexpected characters if you do not use a matching keyboard and table, as shown in the following example.

The letter u with an umlaut, ü, has three different ASCII codes:

- FC hexadecimal for the Digital Multinational Character Set
- 7E hexadecimal for the Norwegian, Danish, Finnish, and Swedish NRCS
- 7D hexadecimal for the Swiss and German NRCS

If you modify the Finnish table using a Swiss keyboard and the following commands, the key with scan code 24 is mapped to the ASCII code for ü, (7D hexadecimal on the Swiss keyboard). Thus, the ASCII code 7D hexadecimal is stored with scan code 24 in the FINNISH.KEYS table.

```
TSC> USE TABLE FINNISH.KEYS CHARACTER NATIONAL
Version 1.0 keyboard table file last modified on 12-JAN-1989 14:58:08
TSC> DEFINE MAPPING 24 KEY "ü"
```

If a keyboard is set up to use this modified table by selecting the Finnish language in the Set-Up screen, press the key with scan code 24. This produces the å character instead of ü, since å is the character produced by 7D hexadecimal on those keyboards (and stored for scan code 24 in the table).

Restrictions

Not all scan codes have mappings defined for each state. You can remap only those scan codes that have a defined mapping. Use the LIST MAPPING command to identify which scan codes you can map. Table 2-3 lists scan codes that you should not remap.

Table 2-3: Scan Codes You Should Not Remap

Keyboard	3270 Keyboard Scan Code	Key Name
87-key	4C	LOCK
	4F	ALT
	4D	SHIFT
	4E	SHIFT
102-key	11	RESET
	12	SHIFT
	14	CAPS_LOCK
	19	ALT
	39	ALT
	58	ENTER
	59	SHIFT
122-key	11	RESET
	12	SHIFT
	14	CAPS_LOCK
	19	ALT
	39	ALT
	58	ENTER
	59	SHIFT

You may only use an ASCII hexadecimal code or a single character in quotes to remap in the CAPS_LOCK state.

Emulation Keyboards

The 122-key keyboards in emulation mode and PCs running emulation packages use the 87-key keyboard mapping tables. Be sure to read the documentation for emulation-mode keyboards and PC emulation packages before modifying any keyboard mapping tables for their use. Some scan codes they generate may vary from those on the 87-key keyboard diagram. Some keys generate different scan codes in different key states; other keys do not generate a scan code at all in some key states.

To ensure accurate mapping for 122-key keyboards in emulation mode and for PCs running emulation packages, refer to the documentation for the keyboard or emulation package. This documentation tells you the character (not a scan code) that is produced for a particular key. Then, using the STANDARD VARIANT of the table to be modified, issue the LIST MAPPING ALL command to find the scan code that is mapped to that character. This is the scan code you should modify (in the customer-modifiable VARIANT table) to change that key's mapping.

NOTE

When you modify the 87-key keyboards, the modifications affect all 87-key keyboards that use the table as well as any 122-key keyboards in emulation mode and PC emulation packages.

DEFINE PORT

See SET/DEFINE PORT.

DEFINE SERVER

See SET/DEFINE SERVER.

DEFINE SERVICE

See SET/DEFINE SERVICE.

DISCONNECT (S)

Terminates all sessions or a specific session. To terminate your current session, enter DISCONNECT.

Syntax

DISCONNECT { SESSION *session-number* | ALL }

where

SESSION *session-number*

Specifies a particular session to be disconnected (default: your current session).

ALL

Specifies that all sessions associated with the port are disconnected.

Examples

```
Local> DISCONNECT

Local> DISCONNECT SESSION 1

Local> DISCONNECT ALL
```

The first command disconnects the current session on the port. The second command disconnects session 1. The third command disconnects all sessions on the port.

DISCONNECT PORT (P) *

Terminates the session on another port with a dedicated service defined. To disconnect sessions of interactive users, use the LOGOUT PORT command.

Restriction

DS500 and ETS do not support this command.

Syntax

DISCONNECT PORT *port-number*

where

port-number

Specifies the port you want to disconnect.

Example

```
Local> DISCONNECT PORT 3
```

This command disconnects the session on PORT 3.

EXIT (T)

Exits from the TSC utility. You can also press CTRL/Z instead of typing EXIT.

Syntax

EXIT

FORWARDS (S)

Use this command to resume the session that follows your current session in the session list produced by the SHOW SESSIONS command. The FORWARDS command connects you to the session with the next higher session number than your current session. If your current session has the highest session number, FORWARDS connects you to the session with the lowest session number.

Restriction

You cannot use FORWARDS on a port that has the MULTISESSIONS characteristic set to ENABLED (see SET/DEFINE PORT).

Syntax

FORWARDS

HELP (S)

Use this command to display on-line documentation for the server or for TSC. Chapter 1 provides an overview of the most common form of on-line help. However, help works differently on different servers. For specific information about how the help facility operates on your server, see your user's manual.

Help displays differ for privileged, nonprivileged, and secure users. For example, if you enter HELP at a nonprivileged port, the resulting displays include only those commands and characteristics that can be specified by a nonprivileged user.

The syntax of this command is server specific.

Syntax

For DS100:

HELP [PORT | SERVER]

For DS200/DS300/DS500 and ETS:

HELP [TUTORIAL | *topic* [*subtopic* [*subtopic*]]]

where

PORT

Displays the syntax for port characteristics in the SET/DEFINE PORT command.

SERVER

Is a privileged parameter that displays the syntax for server characteristics in the SET/DEFINE SERVER command.

TUTORIAL

Initiates a series of screens documenting the use of the server and its facilities.

topic
subtopic

Specify a command keyword and possible options for which you want help information.

NOTE

For V2.0 DS500: The server manager can enable DEFINE SERVER LIMITED [HELP] at the TSC prompt to force all help requests to display an abbreviated help screen, which shows the command syntax of all DECserver 500 commands.

Example

```
Local> HELP DEFINE PORT ACCESS
```

or

```
TSC> HELP DEFINE PORT ACCESS
```

This command initiates on-line help documentation for defining the port characteristic ACCESS in the permanent database.

INITIALIZE (P)

Reinitializes the server. By default, the server delays initialization for 1 minute after it processes this command. You can specify no delay, or you can delay initialization for a longer time in order to perform an orderly shutdown of normal operations. If you want, you can also execute a diagnostic test on the server.

The syntax of this command is server specific.

Syntax

For DS100, DS200, and DS300:

```
INITIALIZE [SERVER] [ DELAY minutes                [ COUNT n ] ]
                    [ DISABLE                      [ LOOP    ] ]
                    [ DIAGNOSE { BRIEF  }                       ]
                               { FULL   }                       ]
                               { NORMAL }                       ]
```

For DS500:

```
INITIALIZE [SERVER] [ DELAY minutes ]
                    [ DIAGNOSE      ]
```

For ETS:

```
INITIALIZE [SERVER] [DELAY minutes]
```

where

DELAY *minutes*

Specifies that the initialization procedure is delayed by the specified number of minutes (range: 0 to 1440; default: 1 minute).

DIAGNOSE

Specifies that a test is done on the server hardware. DS500 passes control of the server hardware to the diagnostic ROM program on the server (see the *DECserver 500 Problem Solving* manual for details). On DS100, DS200, and DS300, you can specify the self-test you want to perform. If you omit DIAGNOSE on DS100, DS200, or DS300, the server performs the standard self-test (NORMAL).

BRIEF

Performs internal self-test functions only.

FULL

Performs an extended test that includes an in-depth memory test.

NORMAL

Performs the standard self-test.

ETS uses a switch on the front of the server unit to run diagnostic tests (see the *Ethernet Terminal Server Problem Determination and Service Guide* for details).

DISABLE

Inhibits the CONNECT command and the AUTOCONNECT function after initialization. To reenable them, enter INITIALIZE again without DISABLE.

COUNT *n*

Specifies that the test repeats *n* times (range: 1 to 32767; default: 1).

LOOP

Specifies that the test runs indefinitely. You must interrupt the server power source to stop the test.

Example

```
Local> INITIALIZE DELAY 5
```

This command specifies initialization of the server after 5 minutes have elapsed.

INITIALIZE CANCEL (P)

Use this command to terminate a previous INITIALIZE DELAY command (provided the initialization process has not yet begun).

Syntax

INITIALIZE [SERVER] CANCEL

LIST DEVICES

See SHOW/MONITOR/LIST DEVICES.

LIST LANGUAGES (T) *

Displays information about the languages currently defined in the server image. The display shows from where each language was loaded. This is a TSC command only. For a detailed description of the display, see the *DECserver 500 Management* manual.

NOTE

TSC rejects this command if no server devices are defined as CXM04 (see DEFINE DEVICE TYPE).

Restriction

This command is valid for DS500 only. Note that the IBM 3270-series terminals are connected to the 3270 Terminal Option (CXM04 line card) on a DECserver 550 terminal server.

Syntax

LIST LANGUAGES [*language-name* | ALL]

where

language-name

Displays information about a language currently defined in the server image.

ALL

Displays information about all languages currently defined in the server image. ALL is the default display.

Example

```
TSC> LIST LANGUAGE BRITISH
```

This command displays information about the language BRITISH that is currently defined in the server image.

LIST MAPPING (T) *

Lists the mapping of a single scan code, a scan code state, or all keys in the selected keyboard table.

If you specify ALL for the 3270-key scan code, the list includes the following header information:

- Keyboard language
- Keyboard size
- Character set
- Keyboard table variant

Syntax

LIST MAPPING { *scan_code* | ALL } [STATE { *state_type* | ALL }]

where

scan_code

Specifies the scan code to list. Scan codes have a value of from 0 to 7F hexadecimal. The USE TABLE command description shows the scan codes for the 3270 87-key, 102-key, and 122-key keyboards.

ALL

Lists all keys or, if specified, all keys with the designated state type. If you specify ALL, the following header information is displayed: keyboard language, keyboard size, national or multinational table, and variant (standard or user-modifiable table).

STATE

Specifies a special key in combination with the scan code. The STATE qualifier is optional. The *state_type* parameter specifies the special key to combine with the scan code: NORMAL (no special key), ALT, SHIFT, CAPS_LOCK, PA2, or ALT_SHIFT (pressing ALT and SHIFT simultaneously). The ALL qualifier lists the mapping of the specified key or keys for all states; this is the default.

Example

```
TSC> USE TABLE USER$64:[JOHN]MY_TABLE.TBL KEYBOARD 87
Version 1.0 keyboard table file last modified on 12-JAN-1989 14:58:08
TSC> LIST MAPPING ALL STATE SHIFT
```

The first command specifies that the LIST MAPPING command lists keys in the USER$64:[JOHN]MY_TABLE.TBL keyboard table file. The 87-key table is used, and since CHARACTER and VARIANT were not specified, the defaults (multinational character set and customer-modifiable table A) are used.

The second command lists the table header information and the mapping of all keys with the key-state SHIFT, as follows:

```
Character Set:          Multinational       Keyboard Size:       87
Keyboard Language:      North American      Variant:              A

Keys in State SHIFT are mapped as follows:

Key 8H is mapped to RETURN
Key 9H is mapped to >
Key OCH is mapped to INSERT_HERE (E2)
Key ODH is mapped to REMOVE (E3)


TSC> USE TABLE USER$64:[JOHN]MY_TABLE.TBL KEYBOARD 87
Version 1.0 keyboard table file last modified on 12-JAN-1989 14:58:08
TSC> LIST MAPPING 32 STATE ALT
```

The first command specifies that the LIST MAPPING command lists keys in the USER$64:[JOHN]MY_TABLE.TBL keyboard table file. The 87-key table will be used, and since CHARACTER and VARIANT were not specified, the defaults (multinational character set, and the customer-modifiable table A) will be used.

The second command lists the mapping of the scan code 32 in the key state ALT, as follows:

Example

```
Key 32 State ALT is mapped to .
```

LIST NODE

See SHOW/MONITOR/LIST NODES.

LIST PORTS

See SHOW/MONITOR/LIST PORTS.

LIST SERVER

See SHOW/MONITOR/LIST SERVER.

LIST SERVICES

See SHOW/MONITOR/LIST SERVICES.

LIST TABLES (T)

Lists the keyboard tables in a selected keyboard table file.

The LIST TABLES command displays the number of tables, size of the file, creation date, firmware version, and latest modification date of the table file. The command also lists the language, keyboard size, character set, and table variants for each keyboard table in the file.

Use the USE TABLE command to select both a table file and a table within the file.

Syntax

LIST TABLES

Example

```
TSC> USE TABLE TABLES:N_AMERICAN.KEYS
Version 1.0 keyboard table file last modified on 12-JAN-1989 14:58:08
TSC> LIST TABLES
```

The first command selects the TABLES:N__AMERICAN.KEYS keyboard table file, which the second command will use.

The second command produces the following display:

```
Creation Date:      27-FEB-1989       Number of tables:       6
Firmware version:         V1.0        Size in bytes:       6738

Modification Date:  27-FEB-1989

Character set:       Multinational    Keyboard size:         87
Keyboard Language:  North American    Variant:            Standard

Character set:       Multinational    Keyboard size:        122
Keyboard Language:  North American    Variant:            Standard

Character set:       Multinational    Keyboard size:        102
Keyboard Language:  North American    Variant:            Standard

Character set:       Multinational    Keyboard size:         87
Keyboard Language:  North American    Variant:                A

Character set:       Multinational    Keyboard size:        122
Keyboard Language:  North American    Variant:                A

Character set:       Multinational    Keyboard size:        102
Keyboard Language:  North American    Variant:                A
```

LIST USAGE (T)

Displays information about the permanent database, including file name of the image; product type and version number; and the date, time, and DECnet node name of the load host on which the server image file was last customized.

If the usage is also a keyboard mapping table, TSC displays the following table parameters: *file name, keyboard size, character set,* and *variant* of the selected table file. For a detailed description of the display, see the management guide for your server.

Syntax

LIST USAGE

Example

```
TSC>USE TABLE MY_TABLE
Version 1.0 keyboard table file last modified on 21-MAY-1989 08:05:10
TSC>LIST USAGE


Current image is file:  COREY.SYS
DECserver 500, V2.0 (Database V9).
Server image last changed on 29-MAY-1989 at 11:34:29 on PETS


Current table is file:  MY_TABLE.KEYS
122-Key Keyboard
Multinational Character Set
Variant A
```

LIST USERS

See SHOW/MONITOR/LIST USERS.

LOCK (S)

Prevents unauthorized use of your terminal in your absence.

The server responds to a LOCK command by prompting for a lock password (provided the server characteristic LOCK is ENABLED). The password is your choice of 1 to 6 characters (DS100, DS200) or 1 to 16 characters (DS300, DS500 and ETS). After you enter the password, which is not displayed on your terminal, the server prompts you to enter it again for verification. If both password entries match, the server displays an unlock password prompt (Unlock Password>). Your terminal remains locked until you enter the password again, returning you to local mode. (For more information on specifying passwords, see Section 1.5).

Example

```
Local> LOCK
Lock Password> FROGS            (not displayed)
Verification> FROGS             (not displayed)
Local -019- Port 6 locked
Unlock Password> FROGS          (not displayed)
Local>
```

If a user forgets the unlock password, a privileged user must log out the port before it can be logged in and used again.

LOGOUT (S — R)

Logs out a port on the server and disconnects any sessions associated with the port.

On ports that have the MULTISESSIONS characteristic set to ENABLED (see SET/DEFINE PORT), you must specify LOGOUT PORT to disconnect all the terminal sessions and LAT service sessions and to log out the port. For more information about using LOGOUT on servers that support session management, see the user's manual for the server.

After you log out a port on DS100, DS200, or DS300, the port characteristics in the operational database for that port are reset to the values defined in the permanent database. On DS500 and ETS, port characteristics are reset to the values in the log-in database including values saved by the last SAVE PORT command (if any). See your server's management guide for details.

If a port is modem controlled (DS200 or DS500), the LOGOUT command causes outgoing modem signals to be dropped.

Restriction

For DECserver 100, this command is limited to:

LOGOUT [PORT {*port-number*}]

Syntax

LOGOUT [PORT { *port-number* / *port-list* / ALL * }]

For session management:

LOGOUT [PORT]

where

port-number

Is a privileged option specifying the port you want logged out (default: your own port).

port-list

Is a privileged option (not supported in DS100) specifying the port(s) you want logged out (default: your own port).

ALL

Is a privileged option (not supported in DS100) that logs out all ports but port 0 and the port where the command is entered.

LOGOUT PORT

Terminates session management and logs out of the server when the MULTISESSIONS port characteristic is set for ENABLED. (DS200 and DS300 only).

Examples

```
Local> LOGOUT

Local> LOGOUT PORT 5
```

The first command logs out the port where the command is entered and disconnects all sessions at that port. The second command logs out port 5 and disconnects all its sessions.

LOOP

See TEST LOOP.

MONITOR DEVICES

See SHOW/MONITOR/LIST DEVICES.

MONITOR NODES

See SHOW/MONITOR/LIST NODES.

MONITOR PORTS

See SHOW/MONITOR/LIST PORTS.

MONITOR QUEUE

See SHOW/MONITOR QUEUE.

MONITOR SERVER

See SHOW/MONITOR/LIST SERVER.

MONITOR SERVICES

See SHOW/MONITOR/LIST SERVICES.

MONITOR SESSIONS

See SHOW/MONITOR SESSIONS.

MONITOR USERS

See SHOW/MONITOR/LIST USERS.

MOVE DEVICE (P) *

Use this command to swap an active line card for a predefined standby line card of the same type (see DEFINE DEVICE STATE STANDBY). The previously active line card then becomes inoperative; a SHOW DEVICE display will show the line card as "Swapped to LC*n*." Once the standby line card becomes active, you cannot change it back to standby status until the next time you load the server image.

NOTE

Before executing MOVE DEVICE, set the source line card to off line (see SET DEVICE STATE OFFLINE). After MOVE DEVICE, switch the associated cabling from the source line card to the standby line card.

Restriction

This command is valid for DS500 only.

Syntax

MOVE DEVICE *source-device* TO *standby-device*

where

source-device

Specifies an active line card to be swapped with the standby line card. The format is LC*n*, where *n* is the active line card number.

standby-device

Specifies a predefined standby line card to be swapped with the active line card. The format is LC*n*, where *n* is the standby line card number.

Example

```
Local> MOVE DEVICE LC5 TO LC9
```

This command swaps active line card LC5 with standby line card LC9.

PURGE LANGUAGE (T) *

Use this TSC command to remove keyboard mapping tables for the specified language from the server image. TSC automatically removes all keyboard mapping tables from the server image when the last server device defined as a CXM04 is redefined as another device type (see DEFINE DEVICE TYPE).

Restriction

This command is valid for DS500 only.

For 102-key keyboards, you cannot purge the North American language since the only keyboard mapping tables for the 102-key keyboard are supplied in North American.

Syntax

PURGE LANGUAGE *language-name*

where

language-name

Specifies a language that is currently defined in the server image.

Example

```
Local> PURGE LANGUAGE FRENCH
```

This command removes keyboard mapping tables for the language FRENCH from the server image.

PURGE SERVICES

See CLEAR/PURGE SERVICES.

REMOVE QUEUE (P)

Use this command to remove queue entries of queued connection requests for remote access to server ports.

When you remove an entry from the server queue, the server sends a message to the service node that requested the remote access. The message reports that the queued entry was deleted by a server user.

Syntax

REMOVE QUEUE { ALL | ENTRY *entry-number* | NODE *node-name* | SERVICE *service-name* }

where

ALL

Specifies that all entries in the queue are removed from the queue.

ENTRY *entry-number*

Specifies a particular entry that is removed from the queue.

NODE *node-name*

Specifies that all entries initiated at the specified service node are removed from the queue.

SERVICE *service-name*

Specifies that all entries queued for the specified service are removed from the queue.

NOTE

SERVICE is not valid for DS100.

Example

```
Local> REMOVE QUEUE ENTRY 2
```

This command removes entry 2 from the server queue.

RESUME (S)

Resumes a session in local mode.

Syntax

RESUME [SESSION *session-number*]

where

SESSION *session-number*

Specifies the session you want to resume. If you omit this parameter, the server resumes your current session. For DS200 and DS300, you can enter the session number without the keyword SESSION.

You cannot specify a session number on a port that has the MULTISESSIONS characteristic set to ENABLED (see SET/DEFINE PORT). See the user's manual for your server for more information on resuming sessions while using session management.

Examples

```
Local> RESUME

Local> RESUME SESSION 3
```

The first command resumes your current session. The second command resumes session 3 in your session list.

SAVE PORT (P) *

Changes a port's default log-in characteristics to the values currently set in the operational database (except the USERNAME characteristic, which cannot be saved). Thereafter, whenever the port is logged out or whenever a session is terminated on a remote access port, the operational database is reset to these new defaults. These values remain in effect until a new set of characteristics is saved for the port or until the server is reloaded. When the server is reloaded, the operational database is set to match the characteristics in the permanent database. (Use the TSC DEFINE PORT command to change port characteristics, including USERNAME, in the permanent database.) See your server's management guide for a detailed description of the interrelationships between the databases.

NOTE

All ports are saved as nonprivileged unlocked ports, regardless of the port's status when saved.

Restriction

This command is valid for DS500 and ETS only.

Syntax

SAVE PORT [*port-list* | ALL]

where

port-list

Saves the current characteristics for the specified port(s) only (default: the port you are using).

ALL

Saves the current characteristics for all ports except port 0.

Example

```
Local> SAVE PORT 8
```

This command saves the current characteristics for port 8 as that port's default characteristics in the login database.

SET DEVICE (P) *

Use this command during server operation to change the state of a line card or to change the DUMP option for a CXM04 line card. (See DEFINE DEVICE for information on defining line cards before down-line loading the server image.)

Restriction

This command is valid for DS500 only.

Syntax

SET DEVICE {*device-name*} [STATE {ONLINE / OFFLINE}] [DUMP {DISABLED / ENABLED}]

where

device-name

Specifies the line card that is being defined. The format is LC*n*, where *n* is a value from 1 to 10.

STATE

Changes the line card state.

OFFLINE

Tells the server software to deactivate the line card even if the card is physically present. A line card must be set to OFFLINE before executing the MOVE DEVICE command.

ONLINE

Switches a predefined, off-line line card to the normal on-line state. A predefined, off-line line card is set off line by the SET DEVICE OFFLINE command.

NOTE

You cannot change the state of a standby line card until you reload the server, except by executing the MOVE DEVICE command.

DUMP

Specifies whether a CXM04 line card will dump CXM04 information as part of a server up-line dump. DUMP is valid for CXM04 line cards only.

DISABLED

The CXM04 line card will not be part of a server up-line dump.

ENABLED

The CXM04 line card will dump CXM04 information as part of a server dump.

NOTE

Digital recommends that you use the DISABLED option unless you are instructed otherwise.

Examples

```
Local> SET DEVICE LC7 STATE OFFLINE

Local> SET DEVICE LC5 DUMP ENABLED
```

The first command sets device LC7 off line. The second command specifies that device LC5 dump CXM04 information if an up-line dump occurs.

SET/DEFINE PORT (S — R)

Modifies port characteristics.

The DEFINE PORT command modifies port characteristics in the permanent database. For DS100, DS200, and DS300, these changes take effect the next time the port is logged in. For DS500 and ETS, DEFINE is a TSC command; the changes you make take effect the next time you initialize or reload the server.

The SET PORT command modifies port characteristics in the operational database. Such changes take effect immediately but remain in effect only until port logout. For DS100, DS200, and DS300, port characteristics revert to the values in the permanent database at the next login. For DS500 and ETS, port characteristics revert to the values in the log-in database at the next login. However, a privileged DS500 and ETS user can issue the SAVE PORT command for any port to save that port's current operational port characteristics in the log-in database.

NOTE

Certain characteristics, such as ACCESS, AUTOBAUD, and PASSWORD, are not meaningful until the next port login. Therefore, you should use DEFINE commands or SAVE PORT to preserve these characteristics after logout.

Restrictions

1. For DS500 and ETS, DEFINE is a TSC command.
2. For DS100, DS200, and DS300, secure users can issue SET PORT commands but not DEFINE PORT commands. Privileged users and nonprivileged (nonsecure) users can issue both SET PORT and DEFINE PORT commands.
3. Only privileged users can specify port characteristics for ports other than the port being used (see ALL and *port-list*).
4. Secure users can specify only a few characteristics, and some characteristics are reserved for privileged users only. Not all servers support all characteristics. Such restrictions are indicated by codes in the characteristics summary following the command syntax.

Syntax

On the servers:

$$\left\{\begin{matrix}\text{SET}\\\text{DEFINE}\end{matrix}\right\}\left[\text{PORT}\left[\begin{matrix}\textit{port-list}\\\text{ALL}\end{matrix}\right]\right]\ \textit{characteristic}\ [\textit{characteristic(s)}]$$

On the TSC:

$$\text{DEFINE PORT}\ \left\{\begin{matrix}\textit{port-list}\\\text{ALL}\end{matrix}\right\}\ \textit{characteristic}\ [\textit{characteristic(s)}]$$

The *characteristic* options are summarized on the following page. These codes flag special conditions:

S Characteristic can be changed by users at secure ports.

P Characteristic is reserved for users at privileged ports.

* Characteristic or keyword is not valid on all servers.

Defaults are shown in **BOLD** type. Read the characteristics descriptions that follow the summary for specific information, or consult the management guide for your server.

NOTE

For DS100, DS200, and DS300, you cannot change any characteristics for the remote management port. For DS500 and ETS, you can modify only some of the characteristics for port 0, and some defaults are different for that port. See the Management manual for your server for details.

P ACCESS $\left\{\begin{matrix}\textbf{LOCAL}\\\text{REMOTE}\\\text{DYNAMIC}\\\text{NONE}\end{matrix}\right\}$

P ALTERNATE [HOTKEY] $\left\{\begin{matrix}\text{ENABLED}\\\textbf{DISABLED}\end{matrix}\right\}$ (DS500 DEFINE PORT only/ CXM04 card only)

P ALTERNATE [SPEED] { *speed* / **NONE** } *

P AUTHORIZED [GROUPS] { *group-list* / ALL } [ENABLED / DISABLED]

P AUTOBAUD { **ENABLED** / DISABLED } *

AUTOCONNECT { ENABLED / **DISABLED** }

S AUTOPROMPT { **ENABLED** / DISABLED }

S BACKWARD [SWITCH] { *character* / **NONE** }

BREAK { **LOCAL** / REMOTE / DISABLED }

BROADCAST { **ENABLED** / DISABLED }

CHARACTER [SIZE] { 7 / **8** }

P DEDICATED { *service-name* / **NONE** } (DS100 only)

For DS200/300:

P DEDICATED { *service-name* [NODE { *node-name* / **NONE** }] [DEST { *port-name* / **NONE** }] / **NONE** }

For DS500/ETS:

P DEDICATED { *service-name* [NODE *node-name* [DEST *port-name*]] / **NONE** }

P DIALUP {ENABLED / **DISABLED**} *

P DSRLOGOUT {ENABLED / **DISABLED**} *

P DTRWAIT {ENABLED / **DISABLED**} *

FLOW [CONTROL] {CTS / DSR / **XON** / DISABLED}

{**INPUT** / **OUTPUT**} FLOW [CONTROL] {**ENABLED** / DISABLED} *

S FORWARD [SWITCH] {*character* / **NONE**}

GROUPS {*group-list* / ALL} [ENABLED / DISABLED] (Valid for SET PORT only)

P INACTIVITY [LOGOUT] {ENABLED / **DISABLED**}

P INTERRUPTS {ENABLED / **DISABLED**}

P LIMITED [VIEW] {ENABLED / **DISABLED**} *

S LOCAL [SWITCH] {*character* / **NONE**}

P LOCK {ENABLED / **DISABLED**} *

LOSS [NOTIFICATION] {**ENABLED** / DISABLED}

MESSAGE [CODES] { **ENABLED** / DISABLED }

P MODE { **DYNAMIC** / VT / 3270 } * *

P MODEM [CONTROL] { ENABLED / **DISABLED** } *

S MULTISESSIONS { ENABLED / **DISABLED** } *

P NAME *port-name* *

ON-DEMAND [LOADING] { ENABLED / **DISABLED** } *

PARITY [{ **NONE** / EVEN / ODD / MARK * }]

P PASSWORD { ENABLED / **DISABLED** }

For DS100:

P PREFERRED { *service-name* / **NONE** }

For DS200 and DS300:

P PREFERRED { *service-name* [NODE { *node-name* / **NONE** }] [DEST { *port-name* / **NONE** }] } *

For DS500:

P PREFERRED { *service-name* [NODE *node-name* [DEST *port-name*]] / **NONE** } *

QUEUING { ENABLED / **DISABLED** }*

P REMOTE [MODIFICATION] { ENABLED / **DISABLED** }

P RING { ENABLED / **DISABLED** }*

P SECURITY { ENABLED / **DISABLED** }

P SESSION [LIMIT] { *limit* / **NONE** }

P SIGNAL [CHECK] { ENABLED / **DISABLED** } *

[INPUT / OUTPUT] SPEED *speed*

S TYPE { ANSI / HARDCOPY / **SOFTCOPY** }

USERNAME { *"username"* / **NONE** * }

S VERIFICATION { **ENABLED** / DISABLED }

where

port-list

Is a privileged parameter specifying one or more ports to which the defined characteristics apply. (You can specify only one port for DS100.) The default for server commands is your own port; TSC commands require that you specify either one or more ports or ALL.

ALL

Is a privileged parameter specifying that the defined characteristics apply to all ports except port 0 (where applicable).

ACCESS

Is a privileged option that specifies the type of access allowed for the device using the port. Changes in a port's access become effective on port logout (see the note following the SET/DEFINE PORT command description).

LOCAL

Allows access to the server's local mode command set. This is the default.

REMOTE

Allows access to (1) the port device (typically a line printer) by service node applications or (2) a port device offered as a service.

DYNAMIC

Allows either remote access or local access to the port.

NONE

Allows no access to the port.

ALTERNATE [HOTKEY]

Is a privileged option that specifies the alternate hot-key sequence for a port on a CXM04 line card. If a port is connected to a PC that emulates a 3270-class terminal, you need to enable ALTERNATE HOTKEY. PCs cannot use the normal hot-key sequence to switch into VT mode; instead, they use the alternate sequence. DISABLED (default) returns a port to recognition of the normal hot-key sequence.

NOTE

ALTERNATE HOTKEY is valid for DS500 DEFINE commands only.

ALTERNATE [SPEED]

Is a privileged option that specifies a secondary speed for a multispeed modem. NONE (default) clears a previously set alternate speed.

NOTE

ALTERNATE SPEED is valid for DS200 only.

AUTHORIZED [GROUPS]

Is a privileged option that allows you to authorize groups of service nodes to be available to the port. The default is group 0 ENABLED and all other groups DISABLED. Specify ALL to enable or disable all groups for the port. Use the *group-list* format described in Table 2-1 with ENABLED or DISABLED to add groups to or remove groups from the existing list for the port. Specify the *group-list* value without either keyword to replace the existing list with a new one.

AUTOBAUD

Is a privileged option that specifies whether the server automatically detects the speed, parity, and character size of the port device on login and sets the server port characteristics to match (default: ENABLED). The AUTOBAUD function works only if the port device's CHARACTER SIZE and PARITY characteristics are set to either 8 and NONE or 7 and EVEN.

Disable AUTOBAUD for ports set to ACCESS REMOTE or ACCESS DYNAMIC. If you enable AUTOBAUD on ports having a preferred or dedicated service, you must press the RETURN key once more to connect to the service. Changes to this characteristic become effective on port logout (see the note following the SET/DEFINE PORT command description).

AUTOCONNECT

Specifies whether the server automatically connects the port to a dedicated or preferred service at port login, and reconnects the port when connection failures occur (default: DISABLED). If you want to activate the AUTOCONNECT feature on the next port login, you must use DEFINE or SAVE PORT (see the note following the SET/DEFINE PORT command description).

AUTOPROMPT

Specifies whether a login sequence is automatically initiated for the port when the port connects to a service (default: ENABLED).

BACKWARD [SWITCH]

Specifies a switch character that allows you to resume the preceding session in your session list without returning to local mode. You can clear an existing switch by specifying NONE (default).

NOTE

The BACKWARD switch does not work on a port that has the MULTISESSIONS characteristic set to ENABLED.

BREAK

Specifies how the BREAK key is handled during a session.

LOCAL

Causes the server to interpret a BREAK signal as a local switch character and to return you to local mode. This is the default condition.

REMOTE

Causes the server to ignore break signals and to pass them to the connected service.

DISABLED

Causes BREAK signals to be ignored. When BREAK is set to DISABLED, DS100, DS200, and DS300 recognize BREAK signals once you return to local mode, but DS500 and ETS do not.

BROADCAST

Specifies whether the port receives messages sent from other ports (default: ENABLED).

CHARACTER [SIZE]

Specifies the number of bits in data characters exchanged between the port and the server (values: 7 or 8 [default]).

NOTE

You cannot modify CHARACTER SIZE for a port that is currently in the AUTOBAUD process.

DEDICATED

Is a privileged option that specifies a service to which a local access port is permanently assigned (default: no dedicated service). Entering NONE as the value for *service-name* (or for NODE or DESTINATION with DS200, DS300, and DS500) cancels any previous value entered for that field.

Changes to this characteristic become effective on the next port login (see the note following the SET/DEFINE PORT command description). For DS100, DS200, and DS300, you must enable the AUTOCONNECT port characteristic when you specify a dedicated service; the port is then automatically connected to the dedicated service at port login.

DS100, DS200, and DS300 users cannot specify DEDICATED with SET PORT On DS500 and ETS, you can specify DEDICATED with SET PORT provided the target port is not currently logged in. You cannot enable MULTISESSIONS when you have a dedicated service.

DIALUP

Is a privileged option that specifies to the service node that the port is considered attached to a dial-up line (default: DISABLED).

NOTE

DIALUP is not valid for DS100 and DS300.

DSRLOGOUT

For DS200/DS500 – is a privileged option that specifies whether the server should log out a modem-controlled port (EIA-232-D) whose attached device powers down (default: DISABLED). You can enable DSRLOGOUT only if the port hardware supports modem control signals. If you enable DSRLOGOUT, you must disable MODEM CONTROL.

For DS300 – is a privileged option that specifies whether the server should log out an EIA-423-A port (EIA-232-D) whose attached device powers down). You can enable DSRLOGOUT only if the port hardware supports DSR signals. DSRLOGOUT does not work if you have DSR FLOW CONTROL enabled. DSRLOGOUT is disabled by default.

NOTE

DSRLOGOUT is not valid for DS100.

DTRWAIT

Is a privileged option that specifies whether the server asserts DTR and RTS signals when a modem-controlled port (EIA 232-D) is inactive. DISABLED (the default) causes the server to assert Data Terminal Ready/Data Set Ready (DTR/RTS) signals when it is idle; ENABLED causes it to delay asserting DTR/RTS signals until it detects a ring signal from a modem or until a remote connection is made to the port.

Normally, you should specify ENABLED for remote access ports. You cannot enable DTRWAIT if the port does not support modem control signals. Changes to this characteristic become effective on port logout (see the note following the SET/DEFINE PORT command description above).

NOTE

DTRWAIT is not valid for DS100 and DS300.

FLOW [CONTROL]

Specifies the type of flow control utilized by the server to control data transfer to and from the port.

CTS

Specifies Request To Send/Clear To Send (RTS/CTS) modem signal flow control (valid for modem-controlled ports only).

NOTE

CTS is not valid for DS100 and DS300.

DSR

Specifies DTR/DSR signal flow control (For DS200, valid for modem-controlled ports only).

NOTE

DSR is not valid for DS100.

XON

Specifies Transmit On/Transmit Off (XON/XOFF) flow control. XON is the default flow control.

DISABLED

Specifies no flow control.

{INPUT / OUTPUT} FLOW CONTROL

Specifies flow control direction (default: enabled in both directions).

NOTE

INPUT/OUTPUT FLOW CONTROL is not valid for DS500 and ETS.

FORWARD [SWITCH]

Specifies a switch character that allows you to resume the next session in your session list without returning to local mode. You can clear an existing switch by specifying NONE (default).

NOTE

The FORWARD switch does not work on a port that has the MULTISESSIONS characteristic set to ENABLED.

GROUPS

Specifies which of the groups authorized for the port (see AUTHORIZED GROUPS) are currently enabled on the port (that is, your current groups). Use GROUPS to select the nodes and services you want to display for the port.

When you log in to a port, all authorized groups are enabled for the port; therefore, if port characteristics are reset to their defaults, the default for GROUPS matches the default for AUTHORIZED GROUPS (that is, group 0 ENABLED and all other groups DISABLED).

Use the *group-list* format described in Table 2-1 with ENABLED or DISABLED to add or remove groups (within the authorized list). Specify *group-list* without either keyword to replace the existing list with a new list. Specify ALL to enable or disable all authorized groups.

You can specify GROUPS with the SET PORT command only. On DS500 and ETS, you can use the SAVE PORT command to preserve port groups between login.

INACTIVITY [LOGOUT]

Is a privileged option that determines whether the server automatically logs out a port after a period of inactivity (default: DISABLED). For a local access port, if the local access user does not use the port, the server automatically logs out the port after the timeout period. For a remote access port, if there is no activity for a session, the server automatically disconnects the session and logs out the port after the timeout period. Use the server characteristic INACTIVITY TIMER to specify the timeout period.

INTERRUPTS

Is a privileged option that specifies whether a local user can use the BREAK key to disconnect a remote session at an ACCESS DYNAMIC port in order to log in to the server (default: DISABLED).

LIMITED [VIEW]

Is a privileged option that specifies whether a secure port is prohibited from executing SHOW NODES and SHOW SERVICES (default: DISABLED).

NOTE

LIMITED VIEW is valid for DS200/DS300/DS500 only.

LOCAL [SWITCH]

Specifies a switch character that you can use to reenter local mode from service mode. You can clear an existing switch by specifying NONE (default).

LOCK

Specifies whether a port user can issue the LOCK command. When the LOCK characteristic is set to ENABLED on a port (and enabled on the server), the port user can issue the LOCK command to prevent access to the terminal at which the command is entered. The command prevents any input until a user enters the unlock password at that terminal. DISABLED prevents the use of this command.

LOSS [NOTIFICATION]

Specifies whether the user is alerted with a beep when a typed character is lost because of data error or overrun (default: ENABLED).

MESSAGE [CODES]

Specifies whether message codes appear with status and error messages (default: ENABLED).

MODE

Is a privileged option that specifies a port's operating mode if the CXM04 line card was defined by DEFINE DEVICE TYPE CXM04 CONFIGURATION 4 (which configures the card so that four ports can operate in either VT mode or 3270 mode).

DYNAMIC

Allows port to operate in either VT mode or 3270 mode. This is the default mode.

VT

Allows port to run in VT mode only.

3270

Allows port to run in 3270 mode only.

NOTE

MODE is valid for DS500 DEFINE commands only.

MODEM [CONTROL]

Is a privileged option that specifies whether the server manipulates modem control signals. Specify DISABLED (default) for ports connected to devices that do not support modem interactions. If a port is connected to a modem or host system, set MODEM CONTROL to ENABLED. Changes to this characteristic become effective on port logout (see the note following the SET/DEFINE PORT command description).

NOTE

MODEM CONTROL is not valid for DS100 and DS300.

MULTISESSIONS

Specifies whether session management is enabled for the port (default: DISABLED). The port device must be a terminal that supports session management, and the port cannot have a dedicated service (see DEDICATED). When you disable MULTISESSIONS on an active port, all terminal sessions and their associated service sessions are terminated immediately.

NOTE

MULTISESSIONS is valid for DS200, DS300, and DS500 only.

NAME

Is a privileged option that defines a port name that is unique on the server. (See Section 1.4 for naming conventions.) For DS100, you can specify NAME with SET PORT only.

For DS100, DS200, and DS300 users, the default is PORT_*n*, where *n* is the port number. For DS500, the default is CONSOLE (for port 0) or LC-*n*-*n*, where *n*-*n* designates the line card number and the port number within that line card. For ETS, the default is CONSOLE (for port 0) or LC-*n*L or LC-*n*R, where *n* designates the line card number and L or R indicates the port's placement on either the left or right side of its line card. (See the *Ethernet Terminal Server Management Guide* for a table of default port names.)

ON-DEMAND [LOADING]

Is an option that specifies on-demand loading of fonts for those international terminals whose fonts are composed of an unusually large number of characters. ON-DEMAND [loading] ENABLED affects XON/XOFF flow control processing in that it causes the server to ignore XOFF, thus ensuring the continuous flow of characters. The default is DISABLED.

NOTE

ON-DEMAND [loading] is valid for DS200, DS300, and DS500 only

PARITY

Specifies the port parity as MARK (DS100, DS200, and DS300 only), ODD, EVEN, or NONE (default).

NOTE

You cannot modify PARITY for a port that is currently in the autobaud process.

PASSWORD

Is a privileged option that specifies whether a password is required for a user to log in to the server (default: DISABLED). You specify the log-in password by setting the server characteristic LOGIN PASSWORD. Changes to this characteristic become effective on the next port login (see the note following the SET/DEFINE PORT command description).

PREFERRED

Specifies a preferred network service when you issue a CONNECT command for the port but do not specify a service name. The default is no preferred service.

If you specify a value for NODE (or for DESTINATION with DS200/DS300/DS500), the server does not attempt automatic failover. Entering NONE as the value for the preferred *service-name* (or for NODE or DESTINATION with DS200 and DS300) cancels any previous value entered for that field.

If you want to connect automatically to a preferred service on the next port login, you must also enable AUTOCONNECT using the DEFINE PORT or, with DS500, the SAVE PORT command (see the note following the SET/DEFINE PORT command description).

If your server supports session management, see your server's user's manual for details about using session management when a preferred service is defined.

QUEUING

Specifies whether queuing of service connection requests is enabled for the port (default: DISABLED). If you disable QUEUING when requests are already queued, those requests remain in the queue until the service becomes available.

NOTE

QUEUING is valid for DS200, DS300, and DS500 only.

REMOTE [MODIFICATION]

Is a privileged option that specifies whether a LAT service node can remotely modify port characteristics, such as SPEED, CHARACTER SIZE, PARITY, and LOSS NOTIFICATION to match the port characteristics of a remote device on the server. (default: DISABLED).

NOTE

Remote modification enabled on a secure port allows the port user to modify the physical port characteristics. To prevent this, REMOTE MODIFICATION and SECURITY should not be enabled on the same port.

RING

Is a privileged option that specifies whether the port is to assert a periodic Ring Indicator (RI) modem signal until it detects a DSR signal (default: DISABLED). You need the BC22R cable to enable this feature.

NOTE

RING is valid for DS200 only.

SECURITY

Is a privileged option that specifies whether secure status on the port is ENABLED or DISABLED. The default status is nonprivileged, nonsecure.

SESSION [LIMIT]

Is a privileged option that limits the number of permitted service sessions (range: 0 to 8; 0 to 6 for DS100; default: 4). Specifying NONE permits the maximum number of sessions allowed on the server.

SIGNAL [CHECK]

Is a privileged option that specifies whether the server should check for incoming signals on a remote access port before allowing a connection (default: DISABLED). The server rejects an attempted connection if a signal is not present. Once a connection is made, deassertion of the DSR signal disconnects the session and logs out the port.

NOTE

For DS500, specify SIGNAL CHECK ENABLED only for a port that also has MODEM CONTROL set to ENABLED. For DS300, do not use SIGNAL CHECK for a port using DSR flow control. Also for DS300, specify SIGNAL CHECK ENABLED only for a port that has DSRLOGOUT set to DISABLED.

NOTE

SIGNAL CHECK is not valid for DS100.

[INPUT / OUTPUT] SPEED

Specifies the port speed in bits per second. Permissible values include 50 (DS500 and ETS only), 75, 110, 134, 150, 300, 600,1200 (default for ETS port 0), 1800, 2000, 2400, 3600 (ETS only), 4800, 7200 (DS500 and ETS only), 9600 (default for all but ETS port 0), 19200, and 38400 (DS500).

NOTE

You cannot modify SPEED for a port that is currently in the AUTOBAUD process.

You can change the speed in one direction by specifying INPUT SPEED (speed from the terminal to the server) or OUTPUT SPEED (speed from the server to the terminal).

TYPE

Specifies the port device type as ANSI, HARDCOPY, or SOFTCOPY (default). This characteristic affects local mode handling of the DELETE key (HARDCOPY displays deleted characters between backslashes), formatting of SHOW/LIST displays (ANSI clears the screen before each display), and formatting of DS500 and ETS MONITOR displays (ANSI causes MONITOR displays to be updated in place, rather than scrolled).

NOTE

DS100, DS200, and DS300 send MONITOR displays in ANSI escape sequences, regardless of the specified TYPE.

USERNAME

Specifies 1 to 12 (DS100), 1 to 16 (DS200,DS300), or 1 to 20 (DS500 and ETS) ASCII characters (enclosed within quotation marks) as a user name to be associated with the port. For DS100/DS500 and ETS, the default is the value specified with the port characteristic NAME (or its default). For DS200 and DS300, the default is no user name.

DS100 users cannot specify USERNAME with DEFINE PORT. When DS200/DS300/DS500 and ETS users specify USERNAME with DEFINE PORT, the user name prompt no longer appears, starting with the next port login (DS200,DS300) or server initialization (DS500 and ETS). To regain the prompt for subsequent login, enter another DEFINE PORT command and specify a quoted null string ("") for the USERNAME characteristic. (DS500 and ETS also accept NONE (unquoted) to clear a user name.)

NOTE

You cannot use SAVE PORT to retain a user name between login.

VERIFICATION

Specifies whether the server sends informational messages when you connect, disconnect, or switch sessions (default: ENABLED). This command does not affect error and warning messages.

Examples

```
Local> SET PORT 8 AUTHORIZED 1,2,6-19,25 ENABLED SESSION LIMIT 3

Local> DEFINE PORT 5 AUTOCONNECT ENABLED PREFERRED DEVELOP
```

or

```
TSC> DEFINE PORT 5 AUTOCONNECT ENABLED PREFERRED DEVELOP
```

In the first example, the parameters affect the way port 8 can be used in service mode; these settings remain in effect only until the port is logged out. In the second example, the preferred service DEVELOP is permanently assigned to port 5.

SET PRIVILEGED/NOPRIVILEGED (P)

The SET PRIVILEGED command enables the port you are using to perform privileged operations. When you enter the command, the server prompts you for the privileged password. The first time you use your server, enter the default password SYSTEM. Then use the SET SERVER PRIVILEGED PASSWORD command to set your own password immediately so that unauthorized users can not enter privileged commands. (You should also use the DEFINE SERVER command to set your password in the permanent database so that the password remains in effect through server initializations.) When you complete your privileged operations, use the SET NOPRIVILEGED command to set the port back to nonprivileged status to inhibit unauthorized use.

If you set your port to privileged status when the port characteristic MULTISESSIONS is enabled, the privileged status applies to all your terminal sessions.

Syntax

SET { PRIVILEGED | NOPRIVILEGED }

Example

```
Local> SET PRIVILEGED
Password> SYSTEM          (not displayed)
Local> SET SERVER PRIVILEGED PASSWORD
Password> PLANET          (not displayed)
Verification> PLANET      (not displayed)
Local> SET NOPRIVILEGED
```

In this example, the user enters the default password SYSTEM at the password prompt. Having set the port to privileged status, the user changes the privileged password to PLANET and then returns the port to nonprivileged status. The next time someone attempts to enter privileged status on this port, he or she must enter the password PLANET.

SET/DEFINE SERVER (P)

These commands specify server characteristics.

The DEFINE SERVER command modifies the permanent database; however, these changes do not take effect until the next server initialization. The SET SERVER command immediately alters the operational database, but these changes are automatically reset to the permanently defined characteristics after the next initialization.

Restrictions

- For DS500 and ETS, DEFINE is a TSC command.
- LIMITED [HELP] is a TSC command.
- You cannot change some server characteristics using a SET command while any sessions are active (or queued) on the server. Such characteristics are preceded by double asterisks (**) in the following list.

Syntax

{SET / DEFINE} SERVER *characteristic* [*characteristic(s)*]

The *characteristic* options are summarized in the following list. Defaults are shown in **BOLD** type. Double asterisks (**) precede characteristics that you cannot change with a SET command while the server has active sessions. A single asterisk (*) follows characteristics or keywords that are not valid on all servers. Read the characteristics descriptions that follow the summary for specific information or consult the management guide for your server.

ANNOUNCEMENTS {**ENABLED** / DISABLED} *

BACKUP HOSTS [*host*[,*host*[,*host*[,*host*[,*host*]]]]] *

BROADCAST {**ENABLED** / DISABLED}

* * CIRCUIT [TIMER] *milliseconds*

CONSOLE [PORT] { *port-number* / NONE } *

DUMP { **ENABLED** / DISABLED }

HEARTBEAT { ENABLED / **DISABLED** }

* * IDENTIFICATION { *"id-string"* / **NONE** } *

INACTIVITY [TIMER] *minutes*

* * KEEPALIVE [TIMER] *seconds*

LIMITED [HELP] { ENABLED / **DISABLED** } *

LINE FREQUENCY { 50 / **60** } *

LOCK { **ENABLED** / DISABLED }

LOGIN PASSWORD [*"password"*]

MAINTENANCE PASSWORD [*"hex-password"* / **NONE**] *

MULTICAST [TIMER] *seconds* *

* * NAME *server-name*

NODE [LIMIT] { *limit* / NONE }

* * NUMBER *n*

PASSWORD LIMIT { *limit* | NONE }

PRIVILEGED PASSWORD [*"password"*]

PROMPT {*"prompt-string"*} *

QUEUE [LIMIT] { *depth* | NONE }

* * RETRANSMIT [LIMIT] *limit*

[SERVICE] GROUPS { *group-list* | ALL } [ENABLED | DISABLED] *

SESSION LIMIT { *limit* | NONE }

SOFTWARE *file-name* *

where

ANNOUNCEMENTS

Specifies whether the server sends multicast messages over the Ethernet to announce the availability of local services (default: ENABLED). No announcements are sent if no local services are defined.

NOTE

ANNOUNCEMENTS is not valid for DS100.

BACKUP HOSTS

Specifies up to five backup load hosts for down-line loading with the INITIALIZE command and for up-line dumping. The *host* value is a DECnet node name of an assigned load host for the server. If the primary load host fails to respond to the INITIALIZE command or a dump request, backup hosts are tried in the order you specify with BACKUP HOSTS. Setting this characteristic clears all previous backup hosts. To clear existing backup hosts and to have no backup hosts, specify BACKUP HOSTS with no host specifications. The default is no backup host.

NOTE

BACKUP HOSTS is valid in TSC DEFINE SERVER commands only.

BROADCAST

Specifies whether the BROADCAST command is ENABLED (default) or DISABLED for users on port devices.

CIRCUIT [TIMER]

Specifies the interval between messages sent from the server to service nodes (range: 30 to 200 milliseconds [DS100, DS200, and DS300] or 10 to 200 milliseconds [DS500 and ETS]; default: 80). You cannot SET this parameter while any sessions are active.

CONSOLE [PORT]

Designates one server port as the console port (default: port 1).

NOTE

DS500 and ETS users cannot change the console port, which is always port 0.

DUMP

Specifies whether up-line dumping of server memory is performed when a fatal bugcheck occurs (default: ENABLED).

NOTE

The up-line dump process is permanently enabled on DS500 and ETS.

HEARTBEAT

Specifies whether the server reports errors found by its Ethernet collision detection circuitry (default: DISABLED).

IDENTIFICATION

Specifies a brief description of the server for server displays (default: no identification string).

The *id-string* value is a string of from 1 to 40 ASCII characters (1 to 12 for DS100). You must enclose the string in quotation marks ("*id-string*"). To clear an identification string, enter the command with a quoted null string (""). (DS500 and ETS also accept NONE to clear an identification string.) This string also appears in the welcome banner when a user logs into the server.

You cannot set this parameter while sessions are active.

INACTIVITY [TIMER]

Determines the timeout period for ports having the port characteristic INACTIVITY LOGOUT set to ENABLED (range: 1 to 120 minutes; default: 30). The timer determines the length of time that a local access port can be logged in without local user input or output. The timer also determines the length of time that a remote access port can be logged in when there is no activity for a session at that port.

KEEPALIVE [TIMER]

Specifies the interval between messages for circuits on which no data is being transmitted (range: 10 to 180 seconds [200 seconds for ETS]; default: 20). You cannot set this parameter while sessions are active.

LIMITED [HELP]

Specifies an abbreviated on-line command summary of DECserver 500 commands. If LIMITED [HELP] is enabled, all help requests display a summary of all server commands. LIMITED [HELP] is disabled by default.

NOTE

LIMITED [HELP] is valid for TSC DEFINE SERVER commands only.

LINE FREQUENCY

Sets the line frequency (in hertz) on the server to match that of the power supply (specify 50 or 60 [default]).

NOTE

LINE FREQUENCY is valid for TSC DEFINE SERVER commands only.

LOCK

Specifies whether interactive port users can use the LOCK command (default: ENABLED).

LOGIN PASSWORD

Specifies a password that interactive users must enter when they log in to the server. (You must also set the port characteristic PASSWORD to ENABLED in order for the password prompt to appear at port login.)

You can omit the password value if LOGIN PASSWORD is the only characteristic (DS100, DS200, and DS300) or the last characteristic (DS500 and ETS) in the command line. The server then prompts for the password (see the example in Section 1.5).

The default password is ACCESS. This default is in effect when the server is delivered and when you reset the server characteristics to their default values.

MAINTENANCE PASSWORD

Specifies a password that must be entered by remote console operators and by persons using the DECnet NCP TRIGGER or LOAD commands to downline load the server. The default is no password checking.

This password can have 1 to 16 hexadecimal characters (values 0 through 9 and A through F only). If you enter "0" or a quoted null string ("") in the command line, the server does not check for a password. (DS500 and ETS also accept NONE to disable password checking.)

DS200 and DS300 users can omit the password value if MAINTENANCE PASSWORD is the only characteristic in the command line. The server then prompts for the password. Enter the password or 0 in response to the password prompt (see the example in Section 1.5).

For DS500 and ETS, MAINTENANCE PASSWORD is valid for TSC DEFINE SERVER commands only. You must specify NONE or a password in the command line.

NOTE

MAINTENANCE PASSWORD is not valid for DS100.

MULTICAST [TIMER]

Specifies the time to elapse between transmissions of service announcements (range: 10 to 180 seconds; default: 30 for DS200 and DS300, 60 for DS500 and ETS).

NOTE

MULTICAST TIMER is not valid for DS100.

NAME

Specifies a 1- to 16-character name for the server. You cannot set this parameter while sessions are active.

For DS100, DS200, and DS300, the default is LAT_*nnnnnnnnnnn* (where each *n* represents one of the twelve hexadecimal characters in the Ethernet address of the server).

For DS500 and ETS, the default is the DECnet node name for the server, as specified in the load host DECnet node database.

Digital recommends that you set the server name to match the DECnet node name for the server (see your server's management guide for details).

NODE [LIMIT]

Specifies the maximum number of service nodes that the server maintains in its node database. On DS100, the range is 1 to 255 (default: 50). For DS200 users, the range is 1 to 1000 (default: 100). For DS300 users, the range is 1 to 1000 (default: 200). On DS500, the range is 1 to 200 (default: 100). The range for ETS is 32 to 100 (default: 32).

For DS100, DS200, and DS300, NONE implies no limit except the memory constraints of the server. On DS500 and ETS, NONE is equivalent to the maximum number of nodes (that is, 200 for DS500 and 100 for ETS).

You can lower the limit on a running ETS and DS500 systems, provided you do not set a limit below 32 or below the current number of nodes that have active connections.

NUMBER

Specifies a number for the server (range: 0 to 32767 for DS100, DS200, and DS300; 0 to 255 for DS500 and ETS; default: 0). You cannot set this parameter while any sessions are active.

PASSWORD LIMIT

Specifies the number of times a user can try to enter the correct password for any password-protected server operation (range: 0 to 250 for DS100, DS200 and DS300, 1 to 32 for DS500 and ETS; default: 3). If you specify NONE, the attempted operation fails after the maximum allowable number of unsuccessful attempts has been reached (for example, 32 for DS500).

PRIVILEGED PASSWORD

Specifies the password a user must enter following a SET PRIVILEGED command in order to use privileged server commands at the port.

You can omit the password value if PRIVILEGED PASSWORD is the only characteristic (for DS100, DS200, and DS300) or the last characteristic (for DS500 and ETS) in the command line. The server then prompts for the password (see the example in Section 1.5).

The default password is SYSTEM. This default is in effect when the server is delivered and when you reset the server characteristics to their default values.

PROMPT

The *prompt-string* value specifies a unique string of characters that you assign to the server prompt. This string replaces the default prompt "Local>". The *prompt-string* value is a string of 1 to 16 ASCII characters. You must enclose the string in quotation marks ("*prompt-string*"). To set the prompt to "local", enter the command with a quoted null string (""). Local is the default prompt.

NOTE

PROMPT is valid for DS200, DS300, and DS500 only.

QUEUE [LIMIT]

Specifies the maximum number of queued connection requests for remote access to server ports. This number is called the depth of the queue. For DS100, the range is 0 to 40 (default: 24). For DS200 the range is from 0 to 100 (default: 24). For DS300 the range is from 0 to 200 (default: 100). DS500 and ETS have a range of 0 to 32 (default: 8). On all servers, a value of 0 disables the queue, and NONE is equivalent to the maximum number of allowable queued connection requests (for example, 100 on DS200).

RETRANSMIT [LIMIT]

Specifies the number of times a LAT message is retransmitted to a service node when the server receives no acknowledgment messages (range: 4 to 120; default: 8 [10 for ETS]). You cannot set this parameter while any sessions are active.

[SERVICE] GROUPS

Specifies which groups are assigned to all locally defined services and are enabled for the server when it functions as a service node (default: 0 ENABLED, 1-255 DISABLED). Use the *group-list* format described in Table 2-1 with ENABLED or DISABLED to add groups to or remove groups from the existing list. Specify a value for *group-list* without either keyword to replace the existing list with a new one. Specify ALL to enable or to disable all service groups.

NOTE

SERVICE GROUPS is not valid for DS100.

SESSION LIMIT

Specifies the maximum number of active sessions that the server allows at one time. This value differs among the servers.

- DS100 – Range: 0 to 48; default: 24.
- DS200 – Range: 0 to 64; default: 32.
- DS300 – Range: 0 to 128; default: 64.
- DS500 – Range: 0 to 512; default: 256.
- ETS – Range: 0 to 128; default: 64.

NONE means that the limit is equivalent to the maximum number of sessions allowed on the server.

SOFTWARE

Specifies the file name (1 to 9 characters) of the server software load image (default: PS0801ENG for DS100; PR0801ENG for DS200, SH1601ENG for DS300). For more details, refer to the software installation guide for your server.

NOTE

SOFTWARE is not valid for DS500 and ETS.

Examples

```
Local> DEFINE SERVER IDENTIFICATION "TECHSALES OFC4"
```

or

```
TSC> DEFINE SERVER IDENTIFICATION "TECHSALES OFC4"
```

```
Local> SET SERVER CIRCUIT 60 KEEPALIVE 30
```

The first example defines an identification for the server. The second example reassigns values for the circuit timer and the keepalive timer. These values revert to the values in the permanent database when the server is reinitialized.

SET/DEFINE SERVICE (P) *

Specifies local services and their characteristics.

The DEFINE SERVICE command modifies the characteristics of local services in the permanent database. These changes take effect the next time the server is initialized. The SET SERVICE command changes the characteristics in the operational database. These changes are effective immediately but are reset to the permanently defined characteristics during the next initialization.

Restrictions

- DS100 does not support this command.
- For DS500 and ETS, DEFINE is a TSC command that requires you to specify of at least one characteristic.

Syntax

{SET / DEFINE} SERVICE *service-name* [*characteristic* [*characteristic(s)*]]

The *characteristic* options are summarized as follows. Defaults are shown in **BOLD** type. An asterisk (*) follows keywords that are not valid on all servers. Read the characteristics descriptions that follow the summary for specific information or consult the management guide for your server.

CONNECTIONS {**ENABLED** / DISABLED}

IDENTIFICATION {*"id-string"* / **NONE**} *

PASSWORD [*"password"* / **NONE**] *

PORTS {*port-list* / **ALL**} [ENABLED / **DISABLED**]

QUEUE {**ENABLED** / DISABLED}

where

service-name

Specifies the name of the service you wish to define. You cannot specify LOC, LOCA, or LOCAL as service names for DS500 and ETS.

DS200 users can have a maximum of 10 local services defined at one time. DS300 users can have a maximum of 20 local services defined at one time.

CONNECTIONS

Specifies whether the server can accept new connections to the specified service (default: ENABLED). Current sessions are unaffected.

IDENTIFICATION

Specifies a brief description of the service for the server to transmit in multicast messages to advertise the service (default: no description is sent).

The *id-string* value is a string of from 1 to 40 ASCII characters. To clear an identification string, enter the command with a quoted null string (""). (DS500 and ETS also accept NONE to clear an identification string.)

PASSWORD

Specifies a service access password that a user must supply in order to establish a session with the service (default: no password is required).

You can omit the password value when PASSWORD is the only characteristic (DS200, and DS300) or the last characteristic (DS500 and ETS) in the command line. The server then prompts you for the password (see the example in Section 1.5).

To clear an existing password, you must enter the command line with a quoted null string (""). (DS500 and ETS also accept NONE to clear a password.) You cannot clear the password at the prompt.

PORTS

Specifies ports to offer the service (default: ALL DISABLED). Specify *port-list* with ENABLED or with DISABLED to add or remove ports from the existing port list. Specify *port-list* with neither keyword to replace the existing list with a new one. Specify ALL to enable or disable use of the service by all ports.

QUEUE

Specifies whether the server places requests for a local service into the server queue when the service is unavailable (default: ENABLED). Disabling queuing does not affect existing queue entries.

Examples

```
Local> SET SERVICE BOSTON PORTS 1,3,6-8 ENABLED QUEUE DISABLED

Local> DEFINE SERVICE PAY IDENTIFICATION "Accounts Payable"
```

or

```
TSC> DEFINE SERVICE PAY IDENTIFICATION "Accounts Payable"
```

If the service BOSTON does not exist, the first example creates this service on ports 1, 3, 6, 7, and 8 with queuing disabled. If BOSTON does exist, this command adds these ports to the existing port list and disables queuing for the service.

The second example establishes the service PAY with identification "Accounts Payable" in the permanent database.

SET SESSION (S)

Specifies the degree of data transparency for your current session, that is, the last session you entered in service mode.

NOTE

If you SET SESSION to PASSALL or PASTHRU mode, messages broadcast to your port are ignored while you are using the affected session.

Syntax

SET SESSION { INTERACTIVE | PASTHRU | PASSALL }

where

INTERACTIVE

Enables special server characters and messages at the port. This is the default.

PASTHRU

Disables all switch characters and server messages at the port while you are using the affected session. Use this option for ASCII file transfers.

PASSALL

Disables all switch characters, server messages, and XON/XOFF flow control while you are using the affected session. Use this option for binary file transfers.

Example

```
Local> SET SESSION PASSALL
```

This command disables all switch characters, flow control characters, and server messages at the port while you are using the affected session.

SHOW/MONITOR/LIST DEVICES (S — R) *

Displays information about one or all devices on the server. SHOW and MONITOR display information from the operational database (MONITOR provides a continuous display). The TSC LIST DEVICES command displays information from the permanent database. For a detailed description of the displays, see the management guide for your server.

Restrictions

- This command is valid for DS500 and ETS only.
- LIST is a TSC command.
- COUNTERS and STATUS are not valid with LIST.
- MONITOR is a privileged command.

Syntax

```
{SHOW   }
{MONITOR} DEVICES [device-name] [CHARACTERISTICS]
{LIST   }         [ALL        ] [COUNTERS        ]
                                [STATUS          ]
                                [SUMMARY         ]
```

where

device-name

Specifies a device for which information is to be displayed. Possible values for *device-name* are CONSOLE for the CPU module, NETWORK for the Ethernet controller module, PAM-1 or PAM-2 for an ETS device, and LC*n* for a DS500 device (where *n* is a number from 1 to 10).

ALL

Displays information for all available devices on the server. ALL is the default display selection.

CHARACTERISTICS
SUMMARY

Both produce the same display of configuration information about the specified device(s). This is the default display type.

STATUS

Displays the current status of the device.

COUNTERS

Displays current counter values for the specified device(s).

Examples

```
Local> SHOW DEVICE LC6 COUNTERS

TSC> LIST DEVICE NETWORK
```

The first command displays the counters for a DS500 line card, LC6. The second command displays configuration information from the permanent database for the Ethernet device.

SHOW/MONITOR/LIST NODES (S — R)

Display information about service nodes known to the server. SHOW and MONITOR display information from the operational database (MONITOR provides a continuous display). The TSC LIST NODE command displays information about the server (as a service node) from the permanent database. For a detailed description of the displays, see the management guide for your server.

For nonprivileged users, the server displays only those nodes that have at least one of the groups currently selected on the port (as defined by the GROUPS port characteristic). Privileged users can specify ALL to display all nodes in the server database or a specified node regardless of whether the node(s) are included in the port's current group selection. Nodes have Reachable or Unreachable status, depending on whether or not they currently accept connections from server ports.

Restrictions

- LIST NODE is valid only as a TSC command, which displays information for the server as a service node only.
- MONITOR is a privileged command.
- SHOW NODES is not available to DS200/DS300/DS500 ports if the LIMITED VIEW port characteristic is enabled.

Syntax

```
{SHOW   } NODES [node-name] [COUNTERS  ]
{MONITOR}       [ALL      ] [STATUS *  ]
                            [SUMMARY   ]
```

LIST NODE (TSC only)

where

node-name

Specifies a service node for which information is displayed.

ALL

Displays information for all authorized service nodes currently selected on the port that have the status Reachable, Unknown, or Unreachable. If you do not specify ALL, the default display includes only currently selected nodes that are Reachable or Unknown.

COUNTERS

Displays current counter values for the specified node(s).

STATUS

Displays full information about the specified node(s), including name, address, identification string, enabled group codes, and services. This is the default display when you specify a node name. The TSC LIST NODE display is a modified version of the STATUS format.

NOTE

STATUS is not valid for DS100.

SUMMARY

Displays one line summary information for the specified node(s), including node name, status, and identification string. This is always the default display for DS100, and it is the default display for DS200, DS300, DS500, and ETS when you do not specify a node name.

Examples

```
Local> SHOW NODES ALL

Local> SHOW NODE SALES_1
TSC> LIST NODE
```

The first example produces a one-line summary of information from the operational database about each service node that has the status Reachable, Unreachable, or Unknown. The second example generates a display of status information from the operational database for node SALES__1. The third command displays information from the permanent database about the server as the local service node.

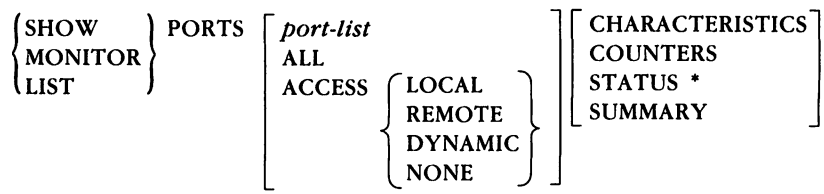
SHOW/MONITOR/LIST PORTS (S — R)

Display information about server ports. This information includes the characteristics that you assign with the SET/DEFINE PORT commands. The LIST command displays information from the permanent database; SHOW and MONITOR display information from the operational database (MONITOR provides a continuous display). For a detailed description of the displays, see the management guide for your server.

Restrictions

- MONITOR is a privileged command.
- Users on secure ports cannot include port specifiers (a port list, ALL, and ACCESS) in these commands.
- COUNTERS and STATUS are not valid with LIST PORTS.
- For DS500 and ETS, LIST is a TSC command.

Syntax



where

port-list

Specifies one or more ports for which information is displayed (default: the port you are using, except with TSC LIST commands, which require a port qualifier). Specify one port only for DS100.

ALL

Specifies that information for all ports is displayed. (On DS500 and ETS, ALL does not include console port.)

ACCESS

Specifies that information is displayed only for ports with ACCESS set to the value you choose (LOCAL, REMOTE, DYNAMIC, NONE). ACCESS is a port characteristic specified with the SET/DEFINE PORT command.

CHARACTERISTICS

Displays characteristics that can be set for the specified port(s). This is the default when you specify no port, one port, or a port list.

COUNTERS

Displays current counter values for the specified port(s).

STATUS

Displays current port status for the specified port(s).

NOTE

STATUS is not valid for DS100.

SUMMARY

Displays one-line summary information for the specified port(s), including port number, accessibility, status, and local services. This is the default when you specify ALL or ACCESS.

Examples

```
Local> SHOW PORT ACCESS REMOTE SUMMARY

Local> SHOW PORTS ALL
```

or

```
TSC> LIST PORTS ALL
```

The first example displays one line of information for each server port that has its ACCESS characteristic set to REMOTE. The second example displays summary from the permanent database for all ports on the server.

SHOW/MONITOR QUEUE (NP — R) *

Display information about entries in the server queue. MONITOR provides a continuous display. For a detailed description of the displays, see the management guide for your server.

Restriction

MONITOR is a privileged command.

Syntax

```
{SHOW   } QUEUE [ ALL                          ]
{MONITOR}       [ ENTRY entry-number *         ]
                [ NODE node-name *             ]
                [ PORT port-number *           ]   (DS200 and DS300 only)
                [ PORT port-name *             ]   (DS500 and ETS only)
                [ SERVICE service-name *       ]
```

where

ALL

Displays information for all queue entries on the server. ALL is the default display selection.

ENTRY *entry-number*

Displays information for the specified queue entry only.

NOTE

ENTRY is valid for DS500 and ETS.

NODE *node-name*

Displays information for all queue entries requested by the specified node.

NOTE

NODE is not valid for DS100.

PORT *port-number*
or
PORT *port-name*

Displays information for all queue entries that could be served by the specified port(s).

(For DS500 and ETS only).

NOTE

PORT is not valid for DS100.

SERVICE *service-name*

Displays information for all queue entries for the specified service.

NOTE

SERVICE is not valid for DS100.

Example

```
Local> SHOW QUEUE NODE NELSON
```

This command displays information for all queue entries from node NELSON.

SHOW/MONITOR/LIST SERVER (NP — R)

Display information about the server. The LIST command displays information from the permanent database; SHOW and MONITOR display information from the operational database (MONITOR provides a continuous display). For a detailed description of the displays, see the management guide for your server.

Restrictions

- MONITOR is a privileged command.
- COUNTERS and STATUS are not valid with LIST.
- For DS500 and ETS, LIST is a TSC command.

Syntax

```
{SHOW   }
{MONITOR} SERVER [CHARACTERISTICS]
{LIST   }        [COUNTERS       ]
                 [STATUS         ]
                 [SUMMARY *      ]
```

where

CHARACTERISTICS

Displays definable characteristics for the server, including a list of groups offered by the server (as specified by SET/DEFINE SERVER SERVICE GROUPS). This is the default display type.

COUNTERS

Displays current Ethernet datalink protocol and LAT protocol counter values for the server.

STATUS

Displays information about the status of the server.

SUMMARY

Displays summary information for the server, including name, address, identification string, and a summary of all groups currently selected by all ports on the server.

NOTE

SUMMARY is not valid for DS100.

Examples

```
Local> SHOW SERVER COUNTERS
```

```
Local> SHOW SERVER
```

or

```
TSC> LIST SERVER
```

The first example displays the server counters from the operational database. The second example displays server characteristics from the permanent database.

SHOW/MONITOR/LIST SERVICES (S — R)

Display information about services to which you can connect. The LIST command displays information about local services from the permanent server database. SHOW and MONITOR display information about services that are currently available in the operational database (MONITOR provides a continuous display). For a detailed description of the displays, see the management guide for your server.

Restrictions

- MONITOR is a privileged command.
- For DS500 and ETS, LIST is a TSC command.
- SHOW SERVICES is not available to DS200, DS300, and DS500 ports if the LIMITED VIEW port characteristic is enabled.
- The LIST SERVICES command is not valid for DS100.
- STATUS is not valid for LIST SERVICES.
- SUMMARY and ALL are not valid in the DS200/DS300 LIST SERVICES command.

Syntax

```
{SHOW    }          [ service-name ]  [ CHARACTERISTICS * ]
{MONITOR } SERVICES [ LOCAL *      ]  [ STATUS            ]
{LIST *  }          [ ALL          ]  [ SUMMARY           ]
```

where

service-name

Displays information for the specified service(s), provided they are included in your current groups. If you do not specify a service name or LOCAL, the server displays all services that match your current groups.

LOCAL

Displays information for all services (whether available or unavailable) offered by the local server that match your current groups. LOCAL is meaningful only in SHOW and MONITOR commands because LIST commands display only local node services.

NOTE

LOCAL is not valid for DS100.

ALL

Displays information for all services (whether available or unavailable) in the database that match your current groups. Privileged users see all services in the database. ALL is the default selection displayed on SHOW commands. However, if you do not specify ALL in the command, the server displays only the available services.

CHARACTERISTICS

Displays definable characteristics for the specified local service(s), including name, identification string, and ports. For remote services, only the name and identification string are displayed. This is the default when you specify a service name in a TSC LIST command.

NOTE

CHARACTERISTICS is not valid for DS100.

STATUS

Displays information about the specified service(s), including node names and their status, rating, and identification string. This is the default when you specify a service name (except in a TSC LIST command).

SUMMARY

Displays one-line summary information for the specified service(s), including name, status, and identification. This is the default when you do not specify a service name.

Examples

```
Local> SHOW SERVICE DEVELOP
```

```
Local> SHOW SERVICES LOCAL
```

or

```
TSC> LIST SERVICES LOCAL
```

The first example displays status information about service DEVELOP, including all service nodes offering the service. The second example displays summary for all local services from the permanent database.

SHOW/MONITOR SESSIONS (S — R)

Display session information from the operational database for one or all ports on the server. MONITOR provides a continuous display. For a detailed description of the displays, see the management guide for your server.

Restrictions

- MONITOR is a privileged command.
- Secure users cannot specify PORT and ALL.

Syntax

$$\left\{\begin{matrix}\text{SHOW}\\\text{MONITOR}\end{matrix}\right\} \text{SESSIONS} \left[\begin{matrix}\text{PORT } \textit{port-list}\\\text{ALL}\end{matrix}\right]$$

where

PORT *port-list*

Displays sessions for the specified port(s) (default: displays sessions for your port). (Specify only one port for DS100.)

ALL

Displays sessions for all ports on the server. (ALL is not accepted on secure ports.)

Example

```
Local> SHOW SESSIONS PORT 2
```

This command displays session information for port 2.

SHOW/MONITOR/LIST USERS (NP — R)

Display information about port users. SHOW and MONITOR display information from the operational database (MONITOR provides a continuous display). The TSC LIST USERS command displays user names affiliated with ports that have permanent user names (that is, names assigned in a TSC DEFINE PORT USERNAME command). For a detailed description of the displays, see the management guide for your server.

Restrictions

- LIST USERS is valid as a TSC command only.
- MONITOR is a privileged command.

Syntax

```
{SHOW   }
{MONITOR} USERS
{LIST *  }
```

TEST LOOP (P)

Tests the physical connections between your server and another Ethernet node on the network. For more information about loop node testing, see the management guide for your server.

Syntax

TEST LOOP *e-address1* [COUNT *n* * | WIDTH *n* * | HELP { FULL | RECEIVE | TRANSMIT } ASSISTANT *e-address2*]

where

e-address1

Specifies the Ethernet address of the target node. An Ethernet address is a string of 12 hexadecimal digits in the form *nn-nn-nn-nn-nn-nn*.

COUNT *n*

Specifies the number of loops (range: 1 to 65535; default: 1).

NOTE

COUNT is valid for DS500 and ETS only.

WIDTH *n*

Specifies the number of characters per loop (range: 0 to 1470; default: 0). When the width is 0, an empty message is sent but comparison testing is not done.

NOTE

WIDTH is valid for DS500 and ETS only.

HELP

Specifies the type of help desired from an assistant node.

FULL

Relays both outgoing and returning server transmissions.

RECEIVE

Relays transmissions returning to the server.

TRANSMIT

Relays outgoing server transmissions.

ASSISTANT
e-address2

Specifies the Ethernet address of the assistant node.

Example

```
Local> TEST LOOP 08-00-2B-02-24-43 HELP TRANSMIT ASSISTANT
 08-00-2B-00-16-C3
```

This command specifies that node 08-00-2B-00-16-C3 should relay outgoing server transmissions to target node 08-00-2B-02-24-43.

TEST PORT (S — R)

Tests a port on the server. This command causes the server to send a stream of characters to the specified port. Irregularities in the rotating ASCII pattern indicate possible problems with the terminal or with the connection of the port to the server. For more information about this test, see the Management manual or user's manual for your server.

Restriction

Only privileged users can specify the LOOPBACK parameter and can test a port other than their own (see the *port-number* parameter).

Syntax

TEST [PORT [*port-number* [LOOPBACK { EXTERNAL / INTERNAL }]]] [COUNT { *n* / NONE* }] [WIDTH *n*]

where

PORT *port-number*

Is a privileged parameter specifying the port to be tested (default: your own port).

NOTE

If you are testing a port that is not logged in, you must set the AUTOBAUD port characteristic to DISABLED for that port. For DS500 and ETS, you can test such a port with AUTOBAUD ENABLED if you also specify LOOPBACK.

LOOPBACK

Is a privileged parameter specifying that test data is looped back from an external port loopback connector or from the internal port hardware (default: no loopback).

NOTE

You cannot specify LOOPBACK from the port you are testing; you must enter TEST PORT *n* LOOPBACK from another port. LOOPBACK EXTERNAL is not supported on ports connected to CXM04 line cards.

COUNT *n*

Specifies the number of test lines to be sent (range: 1 to 65535; default: 23 lines). DS100, DS200, and DS300 users can specify NONE to produce a continuous display, then press any key to terminate it. DS500 and ETS users press the BREAK key to terminate a test; they can press CTRL/O or the local switch character if the port characteristic BREAK is set to DISABLED.

WIDTH *n*

Specifies the number of characters per line (range: 1 to 132 for DS100, DS200, and DS300, or 1 to 80 for DS500 and ETS; default: 80).

Example

```
Local> TEST PORT 3 COUNT 90 WIDTH 60 LOOP INTERNAL
```

This command directs the server to loop internally ninety 60-character lines to port 3.

TEST SERVICE (P) *

Tests end-to-end communications between the server and a service node. When the test is completed, the server displays a report of the test results. For more information about this test, see the management guide for your server.

Restrictions

- This command is not valid for DS100.
- For DS200, DS300 and DS500, you can enter this command only at a port that has the MULTISESSIONS port characteristic disabled.

Syntax

TEST SERVICE *service-name* [NODE *node-name* | DESTINATION *port-name* | COUNT { *n* | NONE } | WIDTH *n* | LOOPBACK { EXTERNAL | INTERNAL }]

where

service-name

Specifies the name of the service to be tested.

NODE *node-name*

Specifies the service node to be tested (default: the highest rated node that supports the specified service).

DESTINATION *port-name*

Specifies which port offering the service is to be tested.

COUNT *n*

Specifies the number of test buffers to be sent (default: 1). If you enter COUNT NONE, the test is continuous. You can terminate the test by pressing the BREAK key or by entering your local switch character.

WIDTH *n*

Specifies the number of characters per buffer (range: 1 to 180; default: 80).

LOOPBACK

Specifies that test data is looped back from the external target port connector or from the internal target port hardware. If you omit LOOPBACK, the test data is returned by the LAT protocol software on the target service node.

Example

```
Local> TEST SERVICE SALES DESTINATION 6 WIDTH 132 LOOP EXTERNAL
```

This command directs the server to loop externally a one-buffer display of 132-character lines to the service SALES on port 6.

USE TABLE (T) *

Selects a keyboard table file and keyboard table for use in keyboard mapping.

The DEFINE MAPPING, LIST MAPPING, and LIST TABLES commands require an open keyboard table file. See the descriptions of these commands in this chapter.

NOTE

You must use the CLOSE TABLE command to close a currently open keyboard table file before opening another table file with the USE TABLE command. (See the CLOSE TABLE command description in this chapter.)

The USE TABLE command displays the date on which the file was last modified.

Syntax

USE TABLE {*file-spec*} [KEYBOARD {87 | 102 | 122}]

[CHARACTER {NATIONAL | MULTINATIONAL}][VARIANT {STANDARD | A}]

where

filespec

Specifies the standard keyboard table file to display and modify with keyboard mapping.

KEYBOARD

Designates an 87-key, 102-key, or 122-key keyboard table in the keyboard table file. The default is 122. Figures 2-1, 2-2, and 2-3 show these keyboards and their scan codes. Note that the 87-key tables are also used by emulation-mode keyboards and by PCs running emulation software.

CHARACTER

Specifies the national character set or the multinational character set table. The default is multinational.

VARIANT

Selects a Digital-supplied standard table or a table that can be modified. The STANDARD qualifier specifies the standard table; it cannot be modified. The A qualifier specifies a table that can be modified. If VARIANT is omitted, the default is A.

Example

```
TSC> USE TABLE USER$64:[JOHN]MY_TABLE.KEYS KEYBOARD 87
```

This command produces the following display:

```
Version 1.0 keyboard table file last modified on 12-JAN-1989 14:58:08
```

This command specifies that the LIST MAPPING and DEFINE MAPPING commands will use the USER$64:[JOHN]MY__TABLE.KEYS keyboard table file, and modify the 87-key keyboard table in that file. Since CHARACTER is not specified, the Digital Multinational Character Set (DMCS) file will be used. Since VARIANT is not specified, the customer-modifiable table A (the default) will be used. The LIST TABLES command will display all tables in the file USER$64:[JOHN]MY__TABLE.KEYS.

Figure 2-1: 87-Key Keyboard

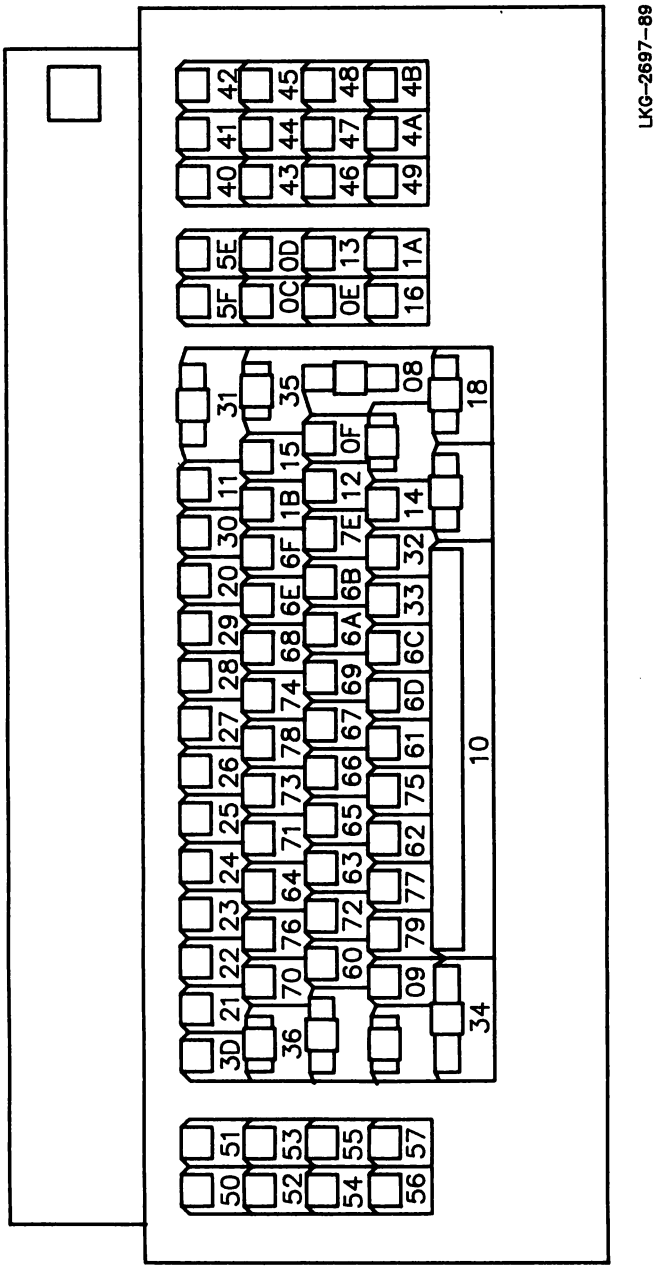
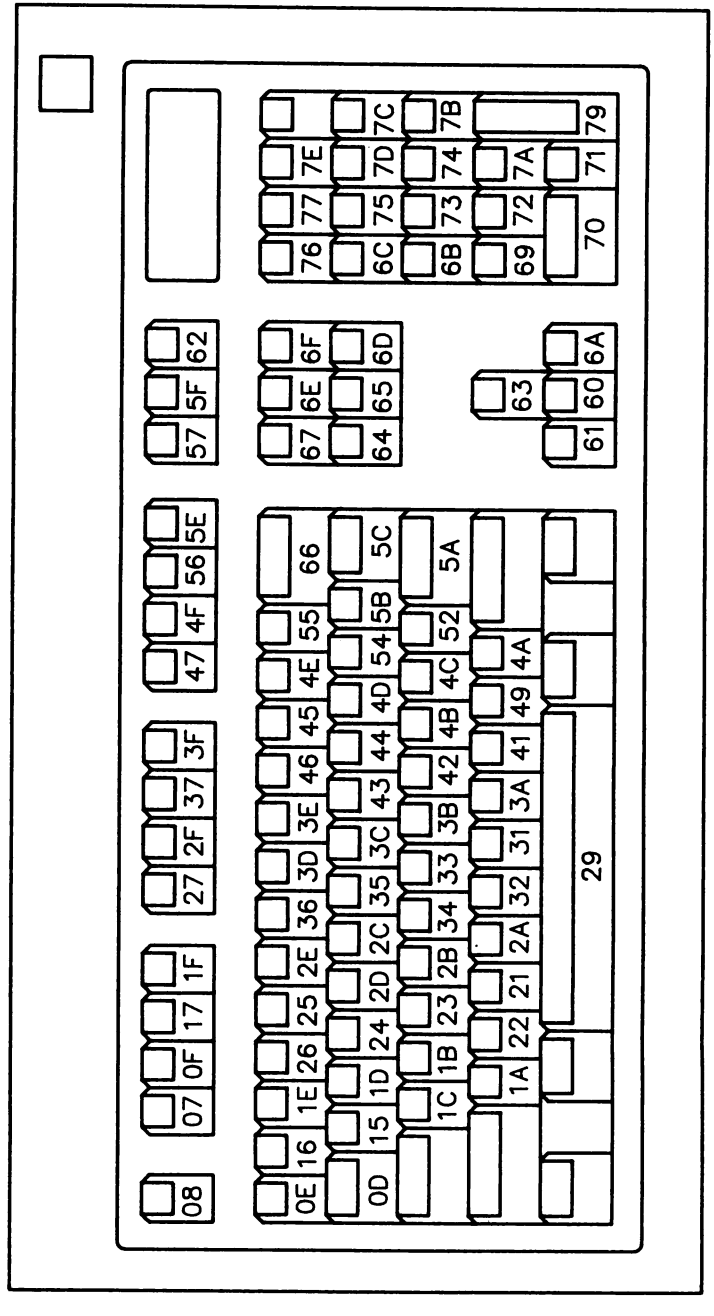
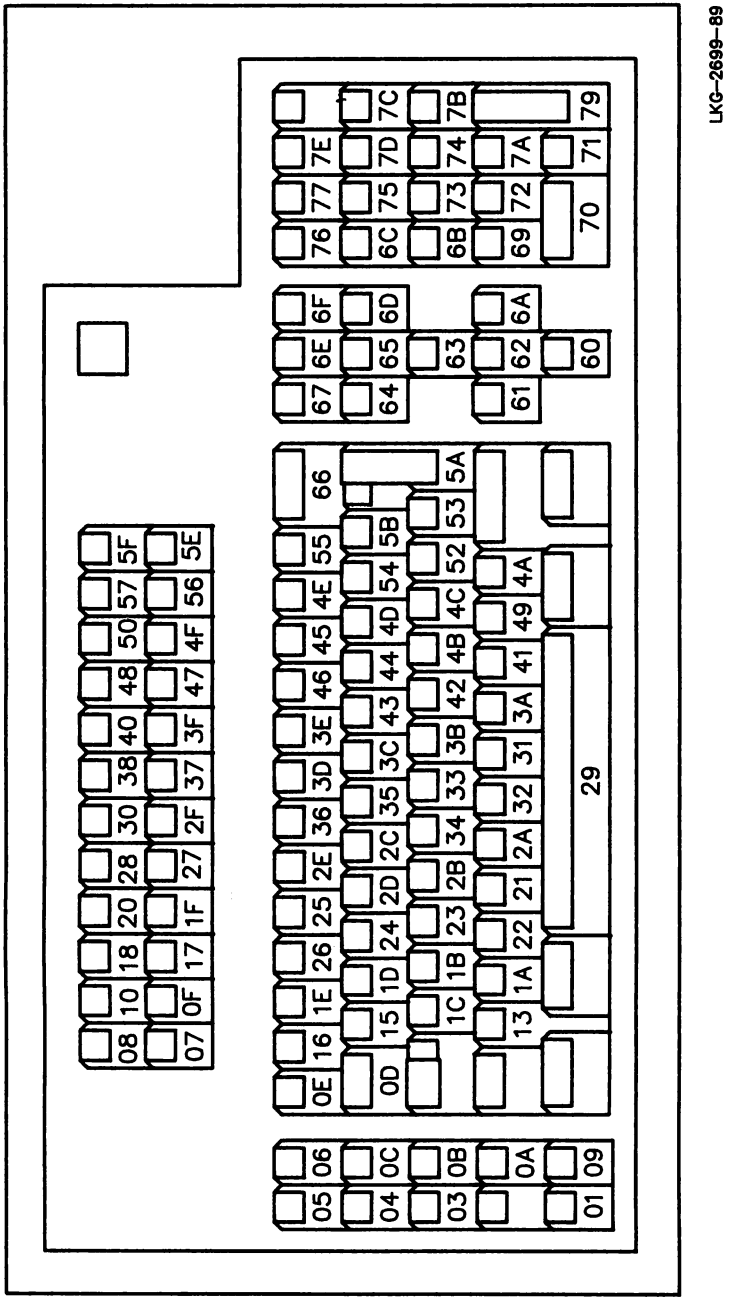


Figure 2-2: 102-Key Keyboard



LKG-2698-89

Figure 2-3: 122-Key Keyboard



ZERO COUNTERS (P)

Reset counters for the server, nodes, ports, and devices (where applicable). If you enter this command with no parameters, only the server counters are zeroed.

ZERO [COUNTERS] does not zero the up-time counter in displays. This counter is reset only after an initialization or power up of the server.

Syntax

ZERO [COUNTERS] [ALL | DEVICE *device-name* * | NODE *node-name* | PORT *port-list*]

where

ALL

Specifies that all counters (except port) are set to zero.

DEVICE
device-name

Specifies that counters are set to zero for the specified device only. Specify CONSOLE to clear the counters for the CPU and console module, or specify NETWORK to clear the counters for the Ethernet device. To clear counters for a DS500 line card, specify LC*n* (where *n* is a value from 1 to 10).

To clear counters for a DS550 line card, specify LC*n* (where *n* is a value from 1 to 10). To zero counters for an ETS device, specify PAM-1 or PAM-2.

NOTE

DEVICE is valid only for DS500 and ETS.

NODE *node-name*

Specifies that counters for data exchanges between the server and the specified service node be set to zero.

PORT *port-list*

Specifies that error counters and status counters for the specified port(s) be set to zero. (You can specify only one port on DS100.)

Example

```
Local> ZERO COUNTERS NODE SALES_1
```

This command zeroes the counters for data exchanges between the service node SALES__1 and the server. The counters listed in the display for SHOW NODE SALES__1 COUNTERS read "0" immediately after you execute this command.

3

Status and Error Messages

This chapter lists and briefly explains all status and error messages issued by the servers and by the Terminal Server Configurator (TSC). For more information about troubleshooting, refer to the documentation for your server (either the management manual or the problem solving manual).

3.1 Server Messages

The following sections describe the format and meaning of server error and status messages.

NOTE

If you make an error in a command line, DS100, DS200, and DS300 reject the entire command line; DS500 and ETS process the command line up to the error. You can use SHOW/LIST commands to see which characteristics were successfully updated.

3.1.1 Format and Types of Messages

Server error and status messages have the following format:

Local [*-nnn-*] *status-or-error-message-text*

By default, message text is preceded by the 3-digit message code (*nnn*) that indicates the message type (as summarized in Table 3-1). However, you can disable message codes (for all but the 900 series of messages) at any port by using the SET/DEFINE PORT MESSAGE CODES DISABLED command (see Chapter 2).

There are seven classes of status and error messages. Each class has a separate set of message codes. Table 3-1 summarizes the types of messages and lists the message codes for each class.

Table 3–1: Classes of Status and Error Messages

Message Codes	Types of Messages
000-099	Informational messages – Normal responses to user commands
100-199	Warning messages – Warnings about unexpected events or unwanted effects
200-299	Connection error messages – Reasons for terminating or not establishing service connections
500-599	Server-specific informational messages – Normal responses to user commands
600-699	Server-specific warning messages – Warnings about unexpected events or unwanted effects
700-799	User error messages – Reasons why user commands are not honored
900-999	Server-specific console messages – Status and error messages issued from the server's read-only memory (ROM)

Messages with codes of 0 to 499 are common to all Digital Equipment Corporation terminal servers. Messages with codes of 500 to 999 can differ among server types. (Unused message codes within these ranges are reserved for future use.)

3.1.2 Message Text and Explanations

For ease of reference, this chapter lists server messages in numerical order by code. Italic type is used for variable text within messages. For example, in an actual message, the value for *service-name* is the name of a particular service.

3.1.2.1 Informational Messages (000–099)

Local -010- Session *n* to *service-name* [on node *node-name*] established

This message follows the successful connection to a service (if the port characteristic VERIFICATION is ENABLED). The node name is displayed if it is different from the service name.

Local -011- Session *n* disconnected from *service-name*

This message follows the normal termination of a session, for example, a session terminated with the DISCONNECT command. This message appears only if the port characteristic VERIFICATION is set to ENABLED.

Local -012- *service-name* session *n* resumed

This message follows the resumption of a session (if the port characteristic VERIFICATION is set to ENABLED).

Local -013- Continuing attempts to connect to *service-name*

This message follows an unsuccessful CONNECT request or an abnormal termination when the port characteristic AUTOCONNECT is set to ENABLED. A preceding error message explains the unsuccessful connection or termination. The server reissues this message if the reason for the connection failure changes.

Local -014- All sessions disconnected

This message follows a DISCONNECT ALL command.

Local -015- Connection to service *service-name* queued at node *node-name*
Service position *n*, node position *n*

A CONNECT request to a service has been queued at the service node. Service position *n* indicates the lowest queue position (relative to all requests for the specified service). Node position *n* represents the maximum queue position (relative to all requests for that service node). The actual queue position may fall somewhere between these, depending on activity at the service node.

Local -016- Attempting failover to *service-name* on node *node-name*

This message follows a timeout to a service node when the server is attempting to connect to the requested service on another node.

Local -017- Queued at position *n* to *service-name* [on node *node-name*]

This message follows the queuing of a connection request when the requested service is already in use and the requesting port has the QUEUING characteristic set to ENABLED. The node name displays if it is different from the service name. This message is issued whenever the queue position changes.

Local -018- Queued access to *service-name* canceled

This message follows user cancellation of a queued connection request.

Local -019- Port *n* locked

This message follows successful execution of the LOCK command.

Local -020- Logged out port *n* [on *server-name*]

This message appears on a port that has been logged out by a LOGOUT command or by other conditions.

Local -030- Session management activated

This message follows the activation of session management by a SET command or by the act of logging in to a server that has session management permanently enabled.

Local -031- Session management terminated

This message follows termination of session management when the user logs out of the port or sets MULTISESSIONS to DISABLED.

Local -032- Session management for session *n* terminated

This message follows the termination of session management for the specified session. Session management remains active for other sessions.

3.1.2.2 Warning Messages (100–199)

Local -101- *n* other session(s) active

Either you issued the CONNECT request when you already had at least one active session, or you issued the DISCONNECT command when you had more than one active session.

Local -102- No other sessions active

You issued the FORWARDS command, BACKWARDS command, or switch character when only one session was active. The current session is successfully resumed.

Local -111- Port(s) with broadcast disabled not notified
Broadcast disabled at port *n*

Your message was not broadcast to one or more ports because the BROADCAST characteristic is DISABLED on those ports. Some servers display the secondary line for each such port.

Local -120- WARNING – Access to service is not secure

Session status information cannot be passed between the server and the attached device because modem signals are not present. This is not a problem if the device is a nonsecure printer; however, if the port device is a non-LAT host system, users could access other users' data.

Local -198- WARNING – Terminal server shutdown has been canceled

The server manager issued the INITIALIZE CANCEL command.

Local -199- WARNING – Terminal server shutdown in *n* minutes

This message is issued at regular intervals to all interactive terminals after a privileged user issues an INITIALIZE DELAY command. The message displays the number of minutes remaining until the server is reinitialized. No additional notice follows the one-minute message.

3.1.2.3 Connection Error Messages (200–299)

Local -201- Connection to *service-name* not established
No response within timeout period

A CONNECT request or autoconnect attempt was unsuccessful. The service node did not respond within the time specified by the RETRANSMIT LIMIT server characteristic. The probable cause is that the service node is down. This condition causes the service node status to change to Unreachable. For more information, refer to the problem solving manual for your server.

Local -202- Connection to *service-name* not established
Communication protocol error

A CONNECT request or autoconnect attempt failed because of a LAT protocol error in a message sent by a service node. For more information, refer to the problem solving manual for your server.

Local -203- Connection to *service-name* not established
Service node retransmission limit exceeded

A CONNECT request or autoconnect attempt failed because the service node reached its retransmit limit.

Local -206- Connection to *service-name* terminated
No response within timeout period

An existing connection terminated abnormally because the service node did not respond within the time specified by the RETRANSMIT LIMIT characteristic. The probable cause is that the service node is down. This condition causes the service node status to change to Unreachable. For more information, refer to the problem solving manual for your server.

Local -207- Connection to *service-name* terminated
Communication protocol error

An existing connection terminated abnormally because of a LAT protocol error in a message sent by a service node. For more information, refer to the problem solving manual on troubleshooting for your server.

Local -208- Connection to *service-name* terminated
Service node retransmission limit exceeded

An existing connection to the specified service terminated abnormally because the service node reached its retransmit limit.

Local -210- Connection not established, queued access timeout

A port with QUEUING enabled failed on an attempt to connect to a service using queued access. Either the service node does not support queuing or the queue entry timed out before the connection could be made.

Local -2*nn*- Connection to *service-name* not established
rejection-reason-text

A CONNECT request or autoconnect attempt failed because the service node rejected the CONNECT request. The rejection reason text explains why the node rejected the request.

Code	Rejection Reason Text
-211-	Protocol error: illegal circuit
-212-	Protocol error: credits
-213-	Protocol error: start/run
-214-	Protocol error: maximum < current
-215-	Logic error: duplicate queue entry
-216-	No other users on this virtual circuit
-217-	Insufficient service resources
-218-	Service user disconnect request
-219-	Service not available
-220-	Server user disconnect request

Code	Rejection Reason Text
-221-	Insufficient node resources
-222-	Server shutdown in progress
-223-	Node user disconnect
-224-	Circuit timer out of range
-225-	Invalid service class
-226-	Invalid message or slot received
-227-	Time limit expired
-228-	No progress being made
-229-	Service not offered on requested port
-230-	Object port name not known
-231-	Invalid password
-232-	Service in use
-233-	No such service
-234-	Service disabled
-235-	Requested entry not in queue
-236-	Immediate access rejected
-237-	Access denied
-238-	Corrupted solicit request
-239-	Invalid/unexpected reason code

For more information about dealing with messages 224 and 226, refer to the problem solving manual on troubleshooting for your server.

Local -2*nn*- Connection to *service-name* terminated
termination-reason-text

An existing connection was terminated by the service node. The termination reason text explains why the node terminated the connection.

Code	Termination Reason Text
-251-	Protocol error: illegal circuit
-252-	Protocol error: credits
-253-	Protocol error: start/run
-254-	Protocol error: maximum < current
-255-	Logic error: duplicate queue entry
-256-	No other users on this virtual circuit
-257-	Insufficient service resources
-258-	Service user disconnect request
-259-	Service not available

Code	Termination Reason Text
-260-	Server user disconnect request
-261-	Insufficient node resources
-262-	System shutdown in progress
-263-	Node user disconnect
-264-	Circuit timer out of range
-265-	Invalid service class
-266-	Invalid message or slot received
-267-	Time limit expired
-268-	No progress being made
-269-	Service not offered on requested port
-270-	Object port name not known
-271-	Invalid password
-272-	Service in use
-273-	No such service
-274-	Service disabled
-275-	Requested entry not in queue
-276-	Immediate access rejected
-277-	Access denied
-278-	Corrupted solicit request
-279-	Invalid/unexpected reason code

For more information about dealing with messages 264 and 266, refer to the problem solving manual for your server.

3.1.2.4 Informational Messages (500–599)

Local -501- From port *n*, *username*
message-text

A broadcast message has been issued to your port from the specified port and user. The broadcast message text appears on the second line.

Local -511- Test complete *n*, bytes written, *n* error(s) detected

A loopback test initiated by a TEST PORT command has completed. The message displays the number of bytes written and/or read during the test and the number of errors or data discrepancies detected. The number of errors is usually zero. If the number of errors is a value other than zero, refer to the problem solving manual for your server.

Local -512- Loop test successful

A TEST LOOP command was executed with no errors.

Local -513- Loop test failure

A TEST LOOP command failed. Either the response timed out or data returned in the message is corrupt. For more information, refer to the problem solving manual for your server.

Local -514- Test complete *n* buffers sent, *n* buffer(s) in error

This message appears when you enter the TEST SERVICE command. It displays the number of data packets sent to the requested service and the number of buffers in which at least one byte was in error.

3.1.2.5 Warning Messages (600–699)

Local -601- Internal memory error in port parameters
Terminal server defaults in effect

Parameters in the port's permanent database are corrupt, and factory-set defaults were used during port login. For more information, refer to the problem solving manual for your server.

Local -602- Internal memory error in server parameters
System defaults in effect

Parameters in the permanent server database are corrupt, and factory-set defaults were used during port login. For more information, refer to the problem solving manual for your server.

Local -603- Illegal server name in effect
Contact server manager

The server NAME characteristic in the permanent database contains illegal characters. This condition can occur when you down-line load a new version of the server software and a server name assigned in an earlier version of the server is copied from the permanent database to the operational database. The name generates an error if it is not a legal name under the new server software. Use the DEFINE SERVER command to redefine the NAME characteristic, and then down-line load the server again.

Local -604- Illegal server identification length, string truncated
Contact server manager

The server IDENTIFICATION characteristic exceeds 12 characters. This condition can occur when you initialize the server with a new version of the server software while the server is running an old software version. To correct the identification string, use the DEFINE SERVER command to redefine the IDENTIFICATION characteristic, and then reinitialize the server.

Local -605- Illegal defined service name removed from port
Contact server manager

The name of a dedicated or preferred service in the permanent database exceeds 14 characters. This condition can occur when you down-line load a new version of the server software, and a service name assigned in an earlier version of the server (which supported service names of up to 16 characters) is copied from the permanent database to the operational database. Use the SET/DEFINE PORT command to redefine the DEDICATED or PREFERRED characteristic.

3.1.2.6 User Error Messages (700–799)

Local -701- Command syntax error

You entered a command incorrectly. Either you omitted a command keyword, or a valid keyword was followed by invalid options.

Local -702- Keyword "*keyword*" not known or ambiguous

You entered a command incorrectly. The keyword specified by *keyword* was not recognized by the server, was out of order, or did not have enough characters to make it unique.

Local -703- Value invalid or out of range, ["*n*"]

A value (specified by *n* on some servers) is out of range or is invalid under the current circumstances. For example, you cannot set a lower node limit on a running DECserver 500 server.

Local -704- Operation requires privilege

You entered a privileged command or option from a nonprivileged port.

Local -705- Entry [*entry-id*] not in queue

You specified a nonexistent queue entry in a REMOVE QUEUE or SHOW/MONITOR QUEUE command. Use SHOW QUEUE ALL to check the queue entries.

Local -706- Secure operation requires privilege

A command or an option that is not available on secure ports was entered at a port having the SECURITY characteristic ENABLED.

Local -707- Existing or queued connections prevent operation

You issued the CLEAR SERVICE command when there were existing or queued connections to the service. Before entering this command, you must disable queuing and connections on the service and log out of the sessions, if necessary. Consult the management guide for your server.

Local -709- Service [*service-name*] not offered by node [*node-name*]

The service you specified is not offered by the node you specified in a CONNECT command. Use SHOW SERVICES and SHOW NODES to check service names and node names.

Local -710- Node [*node-name*] not known

You specified a node name that is either unreachable or unknown to the server. Use the SHOW NODES command to check node names.

Local -711- Service [*service-name*] not known

You specified a service name that is unknown to the server in a SHOW SERVICES command, a CONNECT command, or an autoconnect attempt. Either the service name is invalid, or no nodes in the server database offer the service. For more information, refer to the troubleshooting guide for your server.

Local -712- No connection established

You entered a DISCONNECT, RESUME, FORWARDS, or BACKWARDS command when there was no established connection.

Local -713- Connection already established

You issued the CONNECT PORT *n* command for a port on which you already have an active session, or you issued the SET PORT MULTISESSIONS ENABLED command for a port that already has an active session.

Local -714- Preferred service has not been defined

You issued the CONNECT command without a service name when no preferred service is defined. Either set or define the PREFERRED port characteristic, or reissue the CONNECT command with a service name.

Local -715- Service [*service-name*] not currently available

No node offering the service specified in a CONNECT command or autoconnect attempt is currently reachable. For more information, refer to the problem solving manual for your server.

Local -716- Access to service *service-name* denied

You attempted to connect to a service that you are not authorized to use; that is, your port has no group code in common with any service node that offers the service. For more information, refer to the problem solving manual for your server.

Local -717- Session [*n*] not established

You attempted to disconnect or resume a specific session (identified by *n* on some servers) that does not exist.

Local -718- Session limit reached

You issued the CONNECT command for a port that already has the maximum number of active sessions allowed (as specified by the SESSION LIMIT port characteristic). You must disconnect one of the active sessions before you can establish a new one.

Local -719- Insufficient resources to complete operation

A command cannot be executed. Retry the command. For more information, refer to the problem solving manual for your server.

Local -721- No dedicated service on port *n*

You issued the CONNECT PORT *n* or a DISCONNECT PORT *n* command to a port that does not have a dedicated service defined. These commands apply only to ports with a dedicated service.

Local -722- Server disabled

Your CONNECT request does not work because the server has been disabled by the INITIALIZE DISABLE command. Retry the command after the server has been initialized.

Local -724- Service node connection limit reached

You issued the CONNECT command or a TEST SERVICE command that would have caused the maximum number of virtual circuits allowed on the server to be exceeded. The server can support only 16 (DS100 and DS200); 32 (DS300); or 64 (DS500 and ETS) virtual circuits at a time.

Local -725- Access to node *node-name* denied

Your CONNECT request specifies a node that is not offered as one of your authorized groups.

Local -726- Node *node-name* not reachable

Your CONNECT request specifies a node that is currently unreachable. Issue the SHOW NODES command to see which nodes have the status Reachable.

Local -728- Parameter cannot be modified with connection established/pending

Your SET SERVER command specifies characteristics that cannot be changed while connections exist at any port. Either wait until all port users end their sessions, or issue the DEFINE SERVER command to change the characteristics and then issue an INITIALIZE command to make them operational.

Local -729- Parameter cannot be modified by a SET command

You tried to SET a characteristic that cannot be modified in the operational database. For DS100, DS200, and DS300, use DEFINE to specify the characteristic, and then log out the port to effect the change. For DS500 and ETS, use DEFINE to specify the characteristic, and then issue the INITIALIZE command to effect the change.

Local -730- Temporary resource conflict – please try again

An internal resource conflict temporarily prevents execution of a command. Retry the command.

Local -731- Port not configured for loopback test

You issued the TEST PORT LOOPBACK command without a port number (you cannot loop back to your own port). You can also get this error message on the DECserver 200 server if the port you specified is under session management control or if the port is operating at different input and output speeds.

Local -733- Port [*n*] already under test

You issued the TEST PORT command for a port that is already being tested. Only one port test can be active at a time.

Local -734- Invalid operation from a remote [management] console

You issued the SET/DEFINE PORT or SHOW/LIST/MONITOR PORT command for the remote management port during a remote management session.

Local -735- Service [*service-name*] does not support requested test

The service or service node that you requested in a TEST SERVICE command does not support the specified test.

Local -736- Parameter cannot be modified by a DEFINE command

A characteristic that you specified in a DEFINE command cannot be stored in the permanent database. For example, you can specify the GROUPS characteristic only in a SET command; to establish groups in the permanent database, you must issue a DEFINE command with the AUTHORIZED GROUPS characteristic.

Local -740- Illegal use of reserved keyword

You cannot specify LOC, LOCA, or LOCAL as a service name.

Local -741- Illegal password

You specified an illegal password. The password must have from 1 to 6 ASCII characters (DS100 and DS200) or 1 to 16 ASCII characters (DS300, DS500, and ETS).

Local -742- Password verification failed

The verification password on a LOCK command or a SET PASSWORD command did not match the specified password. Reenter the entire command.

Local -743- Illegal port name in effect, remote access denied

You specified an invalid port name on an attempt to set port access to ACCESS REMOTE or ACCESS DYNAMIC. Remote service nodes cannot connect to the port using an illegal port name in VMS commands.

Local -746- Monitor currently in use

You issued the MONITOR command when another MONITOR command is still in effect. You must halt the first monitor display before the server can begin a second one.

Local -747- No entries removed

You issued the REMOVE QUEUE command for entries that do not exist.

Local -748- No entries in local system queue

You issued the REMOVE QUEUE command when there are no entries in the queue.

Local -750- Another port has this name

You specified a name that is already assigned to another port in a SET/DEFINE PORT NAME command.

Local -751- Broadcast command disabled

You issued the BROADCAST command on a server that has disabled the broadcast facility.

Local -752- Service limit reached

You attempted to SET or DEFINE more than 10 services on the server.

Local -753- Lock command disabled

You issued the LOCK command on a server that has disabled the lock facility.

Local -754- Command function disabled

Digital's maintenance function has permanently disabled the command function for the loaded server image. Reload the server image to enable the command function.

Local -756- Specified server name already in use

You issued the SET SERVER NAME command specifying a name that already exists in the database.

Local -757- Device LC*n* is not in proper state

You issued the SET DEVICE STATE or a MOVE DEVICE command in which the line card LC*n* is not in the correct state to be able to execute the command.

Local -758- Devices LC*n* and LC*m* are not of the same type

You issued the MOVE DEVICE command in which the two line cards specified are not the same device type. It is not possible to swap an active line card that are not of the same type.

Local -761- Port hardware does not support modem signals

You entered a command relating to modem control on an EIA-423-A port, which does not support modem signals.

Local -764- Port(s) with permanent usernames defined not affected

You tried to modify a characteristic that cannot be changed for a port that has a permanent user name.

Local -770- Invalid operation with multisessions enabled

You issued the local mode command that cannot be used with session management.

Local -771- Invalid response from attached device

Session management is terminated for one of the following reasons: (1) An attempt by the server to initiate session management failed when the device did not respond to session management commands; (2) An irrecoverable error occurred during a session management dialogue; (3) The terminal and server versions of session management do not match.

Local -772- Queued access failed, error or no response from service

A queued request was accepted by the service node, but access to the node failed before the connection was completed. Possible causes are as follows: (1) The service node crashed; (2) The server manager removed the queue entry from the local queue; (3) Queuing is not enabled on the service or on the service node; (4) The service node queue limit has been exceeded, (5) There is a lack of memory space at the service node; (6) The requesting port and the service node do not share at least one group.

Local -773- Keyword "*keyword*" not known

You specified a keyword that the server does not recognize.

Local -774- Keyword "*keyword*" ambiguous

You have not included enough letters in the keyword to identify it to the server.

Local -775- No sessions active at any port

You issued the SHOW SESSIONS ALL command when there were no active sessions at any port.

Local -776- Invalid port

The specified port is out of range. Either you specified a number greater than 32 (ETS) or 128 (DS500 and DS550), or the line card for the specified port is missing.

Local -780- Parameter inappropriate for the console port

You tried to set a characteristic for port 0 that does not make sense (for example, SET PORT 0 AUTOBAUD ENABLED).

Local -781- Port(s) in autobaud state not changed

You tried to change the port characteristic CHARACTER SIZE, SPEED, or PARITY for a port that was currently in the autobaud state. Wait and retry the command.

Local -782- Invalid speed

You tried to set a speed that the server does not support.

Local -783- No services will be seen from port

You issued the SET GROUPS command that disabled all current groups.

Local -785- Name contains blanks or illegal characters

You issued the command containing an illegal service name or an illegal node name (see Chapter 1).

Local -786- Name must be from 1 to 16 characters

Either you omitted a name or you specified a name longer than 16 characters.

Local -788- Port has dedicated service status

You issued the command that cannot be executed because the target port has a dedicated service.

Local -789- Still disconnecting

You attempted an operation that cannot be performed until a previous DISCONNECT command finishes processing. Wait and try again.

Local -791- Command not supported by target device

You issued a command relating to a port on the CXM04 line card that does not support that command.

Local -794- Type only one character or control sequence

You tried to specify more than one character as a switch character. Reissue the command using only one character or control sequence.

Local -795- Logged in ports not changed

You attempted to SET a port characteristic that cannot be changed while the target port is logged in. For example, you cannot set a port to a dedicated service unless the port is logged out. Reissue the command when the port is logged out.

Local -796- One or more ports not in correct state for operation

The command you issued did not take effect on one or more ports. Three possible reasons are that: (1) The port was in the AUTOBAUD or test state; (2) The port was in help mode; (3) The port was displaying local output.

Local -798- No services are known to the local system

You issued the SHOW SERVICES command when there were no services in the server database.

3.1.2.7 Console Messages (900–999)

Messages in this section appear under one of the following circumstances:

- When you enter the INITIALIZE command
- When you power up the server
- When a fatal error occurs

These messages appear only on the console port device; message codes are always enabled for them.

Local -901- Initializing DECserver *address* – ROM BL *n*, H/W Rev *x.x*
or
Local -901- Initializing DECserver *address* – ROM V*n.n.n*
or
Local -901- Initializing DECserver *address* – ROM BL *n.n.n*, H/W Rev *x*

This message occurs on server initialization approximately 10 seconds after power up or after execution of the INITIALIZE command. The message displays the following information:

- Ethernet address of the server (*address*)
- Base level (BL *n* for DS100, DS200), (BL *n.n.n* for DS300), or version number (V*n.n.n* for DS500) of the internal ROM firmware
- Current hardware revision level (*x.x*, DS100, DS200) and (*x* for DS300)

Local -902- Waiting for image load

This message normally appears once after the server sends a request-for-load to load hosts during initialization. However, if the load fails or if no load host volunteers, this message is repeated.

Local -903- Loading from host *address*

For most servers, this message indicates that a load host with the Ethernet address specified by *address* has volunteered to down-line load the server. For DS300, this message indicates that the load host has begun to down-line load the server. This message usually occurs once for each initialization.

Local -904- Image load complete

A down-line load has completed successfully. Following this message, the server software takes control of the server.

Local -905- Waiting for image dump

The server requested a load host to perform an up-line dump following a server fatal bugcheck or crash. This message appears once for each up-line dump request, which can be repeated up to three times if a dump fails.

Local -906- Dumping to host *address*

This message occurs each time the server starts an up-line dump to a dump host.

Local -907- Image dump complete

The server successfully completed an up-line dump, and the self-test code is taking control of the server.

Local -908- Resetting console terminal

This message appears after a fatal bugcheck. Immediately after the fatal error, internal ROM software uses the current console port characteristics for status messages. Following up-line dump, the console port characteristics are reset to those stored in the permanent database. This message indicates when the reset occurs.

Local -910- Image load not attempted, network communication error

An Ethernet loopback test failed during the self-test. An attempt to down-line load the server would not be successful and could cause network problems. See the *DECserver 100 Problem Determination Guide* for troubleshooting information.

Local -911- WARNING – Non-fatal hardware error detected
Server code *nnnn* terminal codes *nn nn nn nn nn nn nn nn*

The self-test detected a nonfatal hardware error. Placement of from one to four 1s in the server code field (*nnnn*) indicates the type(s) of error:

- 1*nnn* – Ethernet heartbeat error
- *n*1*nn* – Ethernet loopback error
- *nn*1*n* – Hardware revision level checksum error
- *nnn*1 – Server parameters checksum error

A terminal code (*nn*) displays for each port on the server. Placement of a 1 in an *nn* field indicates the type of error:

- 1*n* – Port error
- *n*1 – Port parameters checksum error

See the *DECserver 100 Problem Determination Guide* for troubleshooting information.

Local -912- Load failure, timeout

A down-line load sequence was interrupted because a load message was not received within 30 seconds (DS100, DS200, and DS300) or 90 seconds (DS500). The load sequence is restarted. For more information, refer to the problem solving manual for your server.

Local -913- Fatal Bugcheck PC = *n*, SP = *n*, SR = *n*, MEM = *n*, CODE = *n*

For DECserver 200 or DECserver 500, a server crash occurred and was recorded in an orderly fashion. The message displays the PC, SP, and SR registers at the time of the crash. Certain errors, such as address errors, include additional information in the MEM field. CODE gives the reason for the crash. For more information, refer to the problem solving manual for your server.

or

Local -913- Fatal Bugcheck, PC = *n* SP = *n* SR = *n* M = *n* C = *n*

For Decserver 300, a server crash occurred and was recorded in an orderly fashion. The message displays the PC, SP, and SR registers at the time of the crash. Certain errors, such as address errors, include additional information in the M field. C gives the reason for the crash. For more information, refer to the problem solving manual for your server.

Local -914- Dump failure, timeout

A timeout condition occurred during an up-line dump. A dump is retried up to three times, and the server displays this message each time the dump fails on a timeout.

Local -915- Transmission failure after ten attempts

A transmission attempt failed on ten successive retries. For more information, refer to the problem solving manual for your server.

Local -916- Illegal load image, load aborted

The server software being down-line loaded specifies illegal sections of server memory. Ask the system manager of the load host to reinstall the server software and to initialize the server again. For more information, refer to the problem solving manual for your server.

Local -920- Parameter checksum error on port(s) *n*
Local -921- Factory-set parameters applied to port(s) *n*
or
Local -920- Parameter checksum error on port *n*
Local -921- Factory-set parameters will be applied to port *n*

These messages occur together for any port on which a checksum error was detected in the permanent characteristics. Digital's preset characteristics (defined in Chapter 2) are applied to the port when the software is down-line loaded.

Local -922- Port hardware error on port(s) *n*
Local -923- Port(s) *n* has been disabled
or
Local -922- Port hardware error on port(s) *n*
Local -923- Port(s) *n* will be disabled

These messages occur together for any port on which the self-test detects a fatal hardware error. The port cannot be used.

Local -924- Modem signal error on port *n*
Local -925- Port *n* may be used with data leads only

These messages occur together when the self-test diagnostic detects a modem control signal error on the specified port. The port can be used with data leads only, even if MODEM is set to ENABLED.

Local -925- Port(s) *n* may be used with data leads only
Local -926- DSR/DTR hardware error on port(s) *n*

These messages occur together if the self-test diagnostic detects a DSR/DTR signal error on the specified DECserver 300 port. The port can be used with data leads only.

Local -930- Server parameters checksum error
Local -931- Factory-set server parameters applied
or
Local -930- Server parameters checksum error
Local -931- Factory-set server parameters will be applied

These messages occur together when a checksum error is detected in the permanent server characteristics. Digital's preset characteristics (defined in Chapter 2) are applied to the server at initialization.

Local -932- Hardware revision level checksum error

A checksum error was detected in the hardware revision level of the permanent characteristics.

Local -935- Service characteristics checksum error
Local -936- Service has been disabled
or
Local -935- Service characteristics checksum error
Local -936- Service will be disabled

These messages occur together for any service on which a checksum error is detected in the permanent characteristics. Information on the service is unavailable to the server.

Local -941- Transceiver loopback error
Local -942- Image load not attempted
Local -950- Troubleshooting procedures should be followed

These messages occur together when the self-test fails to loop back a signal to the Ethernet transceiver. Usually this means that the server is not properly connected to a transceiver, but it can also indicate a bad transceiver or a bad transceiver cable. Message 950 indicates that the error is not self-recoverable (see the problem solving manual for your server).

Local -943- Transceiver heartbeat error
Local -944- Check transceiver type for heartbeat support

These messages occur together when the server HEARTBEAT characteristic is enabled and a self-test did not detect the heartbeat signal. If you are using an H4000 or DELNI network concentrator, these messages could indicate a transceiver problem. If you are using a third-party transceiver or an 802.3 transceiver that does not support heartbeat, you can ignore this error.

Local -951- DECserver will retry operation in *n* minutes
or
Local -951- DECserver will retry operation in *n* seconds

This message occurs on load failure or with message 941 to indicate when the self-test or the load operation will be retried.

Local -952- Enter ^P to restart selftest

This message appears with messages 941, 942, and 950 after an Ethernet loopback failure. It allows self-test to be restarted by pressing CTRL/P on the console terminal.

Local -953- Attempting to locate load host [*frame-format*]

The server transmitted a load request, using the specified frame format, in an attempt to locate a load host.

Local -954- Attempting to locate dump host [*frame-format*]

The server transmitted a dump request, using the specified frame format, in an attempt to locate a dump host.

Local -955- Host *host-address* located [*frame-format*]

This message appears with message 953 or 954 and indicates that a host supporting the specified frame format has been located.

Local -956- Requesting load from host *host-address*

The server requested an image load to the specified host.

Local -957- Requesting dump to host *host-address*

The server requested a memory dump to the specified host.

Local -958- Boot request received from host *host-address*

The server received a valid request from the specified host to initiate a down-line load of the server software.

3.2 Terminal Server Configurator Messages

The following sections describe the format and meaning of the Terminal Server Configurator (TSC) status and error messages.

NOTE

If you make an error in a command line, TSC rejects the entire command line.

3.2.1 Format and Types of Messages

TSC status and error messages have the following format:

%TSC-*t-ccccc*, *status-or-error-message-text*

where

t — Is a code indicating the message type:

E (error)	An error in the command prevents its execution.
F (fatal)	The command is valid, but an error occurred that precludes further execution by TSC.
W (warning)	The command executed, but other unexpected action was also taken (for example, a string that was too long was truncated).
I (informational)	These messages accompany E, F, or W messages to provide further information, such as expected values for command fields.

ccccc — Is a 6-character alphabetic code that abbreviates the message text.

message-text — Is text that explains the error or status condition.

3.2.2 Message Text and Explanations

This section lists TSC error and status messages in the following order:

- Error messages
- Fatal messages
- Warning messages
- Informational messages

Within each category, messages are listed in alphabetical order by the 6-character message code. Italic type is used for variable text within messages. For example, in an actual message, the value for *keyword* is the specific keyword being described.

3.2.2.1 Error Messages

%TSC-E-AMBKEY, Specified KEY constant ambiguous

The literal key is ambiguous – for example, the string "F1" could be F10, F11, F12 ... Reissue the command using a non- ambiguous literal key.

%TSC-E-BADCHR, *keyword* contains illegal character(s), *"x"*

You specified one or more illegal characters in a name, identification string, or password associated with the specified keyword. The first illegal character is displayed in quotation marks.

%TSC-E-BADVAL, Value of *keyword* invalid or out of range, *"value"*

The value displayed in quotation marks is invalid or out of range for the specified keyword.

%TSC-E-COMONE, Comments must start in column one

You must flag comment lines (usually in a command file) by including an exclamation point in column 1.

%TSC-E-INCOMP, Incomplete command line

You executed a command line that was missing a required keyword or value at the end.

%TSC-E-INVCHS, Invalid national selector value

The national selector value you specified is invalid. Specify either the National character set or the Multinational character set (default).

%TSC-E-INVDKEY, Invalid KEY constant specified

Reissue the command, using a single quoted character, a valid hexadecimal ASCII code value with a leading zero, or one of the key token values specified in the DEFINE MAPPING command description.

%TSC-E-INVKYB, Invalid keyboard type

The keyboard type you specified is invalid. Specify an 87-key, 102-key, or 122-key (default) keyboard.

%TSC-E-INVSCD, Scan code invalid or not in table

The value entered for scan code is not valid, or is not defined in the table in use for the specified key state.

Check whether the scan code specified is valid for the keyboard size in use, using the keyboard diagrams or the LIST MAPPING command. If it is not, reissue the command with a valid scan code. If the scan code is valid for the specified keyboard size, then it is not defined in this table for the key-state specified.

%TSC-E-INVTTY, Invalid typewriter selector value

The typewriter selector value you specified is invalid. Specify a valid typewriter selector value.

%TSC-E-INVVAR, Invalid variant selector value

The variant selector value you specified is invalid. Specify either the Standard table or the user-modifiable table A (default).

%TSC-E-KBCLOS, Unable to close keyboard mapping file

TSC cannot close the specified keyboard mapping file. Usually the host system generates several system-specific messages prior to this one.

%TSC-E-KBMODI, Unable to modify keyboard mapping file

You have tried to modify a standard keyboard table which cannot be modified.

Issue a new USE TABLE command specifying variant A, which is a customer modifiable keyboard file.

%TSC-E-KBOPEN, Unable to open keyboard mapping file

TSC cannot find, open, or access the specified keyboard mapping file. Usually the host system generates several system-specific messages prior to this one.

%TSC-E-KBREAD, Unable to read keyboard mapping file

The specified keyboard mapping file opened normally but cannot be read. TSC exits the file and displays this message. The state of the file is unknown.

%TSC-E-KYBFNF, Specified keyboard mapping file not found

The keyboard mapping file you specified is either invalid or missing. Specify a valid keyboard mapping file.

%TSC-E-LIMREA, Language limit of (*nnn*) reached, language not added

(For 3270 Terminal Option only) The predefined limit of languages has been reached. You cannot add another language unless you delete (PURGE) one of the predefined languages.

%TSC-E-LIMREA, Predefined service limit of (*nnn*) reached, service not added

(For 3270 Terminal Option only) The predefined limit of services has been reached. You cannot add another service unless you delete (PURGE) one of the defined services.

%TSC-E-MISQUO, Trailing quote not found

You omitted the closing quotation mark (") in a quoted string.

%TSC-E-NETERR, Network Management Listener (NML) error

The Network Management Listener (NML) failed to process a DEFINE SERVER BACKUP HOSTS command or a LIST SERVER command (when back-up hosts are already defined). Usually the host system generates its own error messages in addition to those provided by TSC.

%TSC-E-NOAPND, Unable to append *file-spec* to image

Firmware file *file-spec* not appended.

TSC cannot append to the server image one of the files required for support of the 3270 Terminal Option product. (The files are either firmware that supports components of the CXM04 line card or translation tables that map 3270 terminal keys to VT220 functions.) This message may be followed by an information message (%TSC-I-APPSTS or %TSC-NOLIC) that explains why TSC could not append the file.

%TSC-E-NOAPNH, Command not supported on RSX hosts.

You attempted to execute a CXM04 line card command on an RSX system. TSC cannot execute this command on an RSX system.

%TSC-E-NOEXEC, Command *type-command* cannot be executed.

TSC cannot execute the specified command. This message may be followed by an information message (%TSC-I-NODEVI) that explains why TSC could not execute the command.

%TSC-E-NOMEMY, No memory for attempted operation

Insufficient virtual memory.

Increase the paging file quota (PGFLQUO) for the process.

%TSC-E-NONEMP, *keyword* must be from *value* to *value* characters long

You entered a command without a required quoted string. Reenter the command and include a string within the range defined in the message.

%TSC-E-NONETL, Command cannot be executed, no network link

You do not have sufficient privileges to issue a DEFINE SERVER BACKUP HOSTS command.

%TSC-E-NORDEF, Specified scan code cannot be redefined

The scan code specified is a special key, for which the mapping may not be redefined in the state specified.

No user action.

%TSC-E-NOTAPP, Parameter *keyword* cannot be changed on selected port(s)

You attempted to define port characteristics that conflict with other defined characteristics. For example, you cannot change hardware parameters on the console port or enable modem control on a port having a device type that does not support modem signals.

%TSC-E-NOTDEF, No such HELP TOPIC is defined

You specified a help topic that is undefined or you misspelled the help topic.

%TSC-E-NOTDEF, No such LANGUAGE is defined

(For 3270 Terminal Option) You specified an undefined language, or you misspelled the language name. Languages must be defined in the server database with the DEFINE LANGUAGE command.

%TSC-E-NOTDEF, No such NODE is defined

Either you misspelled the node name or you specified an undefined node name. The only node known to the server is the server itself. Specify the server name (node name).

%TSC-E-NOTDEF, No such SERVICE is defined

Either you misspelled the service name or you specified an undefined service name. Services must be defined in the server database with the DEFINE SERVICE command.

%TSC-E-NOTUNQ, Specified language name is not unique

You tried to define a language name already in use. Use the LIST LANGUAGE command to display language names already in use.

%TSC-E-NOTUNQ, Specified port name is not unique

You attempted to assign the same port name to more than one port. For example, you specified more than one port in a DEFINE PORT NAME command, or you tried to initialize a port whose default port name is assigned to another port.

%TSC-E-NPURGE, Language not purged, at least one language must be defined

You attempted to purge the last language from the server image. At least one language must be in the server image at all times.

%TSC-E-QUOTED, Quoted string expected

Either you forgot to enclose a string in quotation marks (" ") or you forgot to include the string. A pointer indicates the position where the opening quotation marks were expected.

%TSC-E-RDONLY, Keyboard mapping table is read only

You tried to modify a standard keyboard table that cannot be modified. Issue a new USE TABLE command specifying variant A, which is the customer-modifiable keyboard table.

%TSC-E-RMSERR, Record Management Services error

Record management services (RMS) failed on a TSC command. Usually the host system generates its own error messages in addition to those provided by TSC.

%TSC-E-RSRVDN, Name is a reserved keyword or abbreviation, "*name*"

You specified a reserved keyword or a valid abbreviation of a reserved keyword when you attempted to define a name. The rejected name is displayed in quotation marks.

%TSC-E-SYNERR, Command syntax error, "*keyword*" is not recognized

The keyword displayed in quotation marks is unknown, ambiguous, or invalid in the context in which you specified it. A circumflex (^) under the command line points to the bad keyword.

%TSC-E-SYSERR, System services error

TSC unsuccessfully tried to use a system service, such as obtaining system time. Usually the host system generates its own error messages in addition to those provided by TSC.

%TSC-E-TBNOTF, Specified table was not found

The keyboard mapping table file does not exist, or the table selected does not exist in the keyboard mapping table file.

Reissue the USE TABLE command, specifying only the filename. Then issue the LIST TABLES command to see the tables that are available in the keyboard table file. Reissue the USE TABLE command specifying one of the tables in the file.

%TSC-E-TOOBIG, *keyword* too long, "*xxxxxxxxxxxxxx*"

The string you entered for the specified keyword exceeds the maximum allowable length. The maximum number of characters allowed in your string is displayed in quotation marks.

%TSC-E-TOOMNY, Too many entries in list

You exceeded the maximum number of entries allowed in a list.

3.2.2.2 Fatal Messages

%TSC-F-FATALB, Fatal internal bug was detected, please submit an SPR

A software problem makes continued operation of the configurator unreliable. Exit TSC (if not done automatically), assume the server image is corrupted, and submit a Software Performance Report (SPR).

%TSC-F-IMMDEX, Unable to modify or extend image file, "*file-spec*"

The file displayed in quotation marks opened normally but cannot be edited. TSC exits the file and displays this message. The state of the file is unknown; assume that any changes made during the current session are lost.

%TSC-F-IMREAD, Unable to read image file, "*file-spec*"

The file displayed in quotation marks opened normally but cannot be read. TSC exits the file and displays this message. The state of the file is unknown; assume that any changes made during the current session are lost.

%TSC-F-VERNSP, File has an unsupported database version, "*file-spec*"

The server image file displayed in quotation marks contains a database version number that is not supported by TSC. This file is closed when you exit TSC.

3.2.2.3 Warning Messages

%TSC-W-DEVDIS, MODEM, DSRLOGOUT, DTRWAIT, and/or CTS/DSR FLOW CONTROL disabled

A DEFINE DEVICE command changed the device type to one that does not support modem signals. TSC examines all corresponding ports and disables the characteristics cited in the message. The message %TSC-I-PRTAFT lists any ports whose modem characteristics have been disabled. Flow control on the affected ports defaults to XON.

%TSC-W-SPEDIS, Defining a speed has disabled autobaud on some port(s)

You defined the input speed or output speed for one or more port(s) that had the AUTOBAUD characteristic enabled, causing AUTOBAUD to be disabled on those ports (the ports are listed in a companion %TSC-I-PRTAFT message).

3.2.2.4 Informational Messages

%TSC-I-BADCRC, File fails CRC check

TSC cannot append the 3270 Terminal Option firmware or keyboard translation table to the server image because the file's CRC (cyclic redundancy check) character does not match the file's original CRC character. If the file was customized, make sure the new CRC character matches the original CRC character. If you are using your own language facility, make sure you include the proper CRC check in the file.

%TSC-I-CMDFIL, Unable to open command file, "*file-spec*"

TSC cannot find, open, or access the specified command file. Usually the host system generates several system-specific messages prior to this one.

%TSC-I-CMDSUP, Option not supported on *version-type(s)*

This message lists version types that do not support a rejected command reported in a previous message.

%TSC-I-DEFBAK, Due to network problems DEFINE BACKUP HOSTS command cannot be used

You cannot use the DEFINE BACKUP HOSTS command because TSC failed to establish a link with the Network Management Listener (NML) utility at startup.

%TSC-I-EXECNN, Unable to obtain executor node name

TSC could not find the name of its host node in a call to the Network Information and Control Exchange (NICE) utility. As a result, the LIST USAGE display fills the node name field with question marks. This display is changed on exit from TSC only if a change was made to the server image.

%TSC-I-FILCNG, Source file modified while being appended

TSC cannot access the server image to append the 3270 Terminal Option firmware or keyboard translation table to it. Either the server image file is locked or deleted or its protection was changed.

%TSC-I-FMOPEN, Unable to open firmware file, "*file-spec*"

TSC cannot find, open, or access the specified firmware file. This error is typically accompanied by a record management services error and a status code.

%TSC-I-FMREAD, Unable to read firmware file, "*file-spec*"

The file displayed in quotation marks opened normally but cannot be read. TSC exits the file and displays this message. This error is typically accompanied by a record management services error and a status code.

%TSC-I-FRMSIZ, Wrong file length

The file you attempted to append to the server image was the wrong size.

%TSC-I-ILLSIZ, File has an illegal size

TSC cannot append the 3270 Terminal Option firmware or keyboard translation table to the server image because the current file size differs from the original file size (the file has been modified since configuration).

%TSC-I-MAXENT, Maximum number of entries in list is *nn*

You entered a command that had too many entries in a list. This message defines the maximum number of entries allowed.

%TSC-I-NETCLO, Network close request unsuccessful

A Network Management Listener (NML) link was established, but a subsequent close request was rejected.

%TSC-I-NETCON, Network connection request unsuccessful

A Network Management Listener (NML) connection request was rejected.

%TSC-I-NETDIS, Unable to disconnect logical link to network

A Network Management Listener (NML) disconnect command was rejected.

%TSC-I-NETOPN, Network open request unsuccessful

A Network Management Listener (NML) link was established, but a subsequent call to NML failed because of an open error.

%TSC-I-NETRCV, Error occurred in receiving a network message

A Network Management Listener (NML) link was established. A subsequent send message request to determine a node name or number was accepted. This request came back with an error.

%TSC-I-NETSEN, Error occurred in sending a network message

A Network Management Listener (NML) link was established, but a subsequent send message request to determine a node name or number was rejected.

%TSC-I-NETSTS, Status code(s) *code(s)*

This message displays any octal error code resulting from a failed Network Management Listener (NML) call.

%TSC-I-NETUNK, Unknown message type received from network object NML

The response type received from the Network Management Listener (NML) is unknown to the TSC.

%TSC-E-NMLERR, Error returned by network object NML

A Network Management Listener (NML) call was completed, but the node name/number translation was not made because of an improperly set up field or fields.

%TSC-I-NODEVI, No line card is currently defined as type CXM04

You attempted to execute a CXM04 line card command when a type CXM04 line card is not currently defined.

%TSC-I-NODTRN, Unable to translate node name to node number, "*node-name*"

You specified a node name in a SET SERVER BACKUP HOSTS command that is not listed in the network node database.

%TSC-I-NOHELP, Unable to open help file, "*file-spec*"

TSC cannot open or to access the help file specified in the message.

%TSC-I-NODEVI, No license for 3270 terminal option

You do not have a license for the 3270 terminal option.

%TSC-I-NOTIME, Unable to obtain date and time from system

The host system rejected a TSC date and time request that is used to set the field containing the time when the server image was last changed.

%TSC-I-PRTAFT, Affected port(s): *port-list*

This message lists all ports that are affected by an error reported in a previous message.

%TSC-I-RMSSTS, Status code(s): *code(s)*

This message displays any octal error code resulting from a failed record management services (RMS) call.

%TSC-I-SIZSTR, Maximum size *nn* characters

This message gives the maximum size for a name, identification string, or password.

%TSC-I-SYSSTS, Status code(s): *code(s)*

This message displays any octal error code resulting from a failed host system call.

%TSC-I-UNOPEN, Unable to open image file for writing, "*file-spec*"

The configurator cannot open the file you specified at the server image prompt. The file may be write protected, or another program may be currently accessing the image. This is not a fatal error; the configurator prompts again for a file.

%TSC-I-VALRNG, Expected range *value* to *value*

When you have specified an out-of-range value, this message specifies the range of legal values.

A

Keyword Abbreviations

This appendix lists all command keywords in alphabetical order. Capitalized letters indicate the minimum abbreviation for each keyword. Keywords that are not used in the same context may have the same abbreviations.

ACcess
ALL
ALTernate
ANnouncements
ANsi
ASsistant
AUTHorized
AUTOBaud
AUTOConnect
AUTOPrompt

BAckup
BAckward
BAckwards
BREak
BRief
BROadcast

CAncel
CHaracter
CHaracteristics
CHEck
CIrcuit
CLear
CLOse
CODes
CONFiguration
Connect
Connections
COnsole
CONtrol
COUnt
COunters
CRASH
CTs
CXA16
CXB16
CXM04
CXY08

DEdicated
DEFine
DElay
DEStination
DEVices
DIAgnose
DIalup
DIsable
DIsabled
DIsconnect
DSr
DSrlogout
DTrwait
DUmp
DYnamic

ENabled
ENtry
EVen
Exit
EXternal

FIle
FLow
Forward (characteristic)
Forwards (command)
Frequency
Full

Groups

HArdcopy
Heartbeat
Help
HOsts
HOTkey

Identification
INActivity
INItialize
INPut
Interactive
INternal
INTerrupts

Keepalive

LAnguages
LIMit
LIMited
LIne
LIst
LOAD
LOADing
LOCal
LOCK
LOGin
LOgout
LOOp
LOOpback
LOSs

MAintenance
MArk
MEssage
MODe
MOdem
MOVe
Monitor
More
MUlticast
MUltisessions

NAme
NODe
NODes
NONe
NOPrivileged
NOTification
NUmber

ODd
ON-demand
OUtput
Override

PARity
PASsall
PASsword

PASThru
POrt
POrts
PREferred
PRIvileged
PROmpt
Purge

Queue
Queuing

REceive
REMote
REMove
Resume
RETransmit
RIng

SAve
SECurity
SERVEr
SERVIce
SESsion
SEt
SHow
SIGnal
SIZe
SOftcopy
SOftware
SPeed
STAndby
STatus
SUmmary
SWitch

Test
TImer
TO
TRansmit
TUtorial
TYpe

USAge
Username
USErname (TSC)
Users

VIew
Verification
VT220

Width

Xon

ZERo

B

DECserver 100 Command Summary

This appendix summarizes all DECserver 100 commands and characteristics. See Chapter 2 for detailed descriptions.

This appendix uses the graphic conventions outlined in the Preface.

B.1 DECserver 100 Commands

BACKWARDS

BROADCAST { PORT *port-number* / ALL } { *"message-text"* / *message-text* }

CONNECT [*service-name* [NODE *node-name* [DESTINATION *port-name*]]]

CONNECT PORT *port-number* [*service-name* [NODE *node-name* [DEST *port-name*]]]

CRASH

DEFINE [PORT [*port-number* / ALL]] *characteristic* [*characteristic(s)*]

(See Section B.2.1 for a list of port characteristics.)

DEFINE SERVER *characteristic* [*characteristic(s)*]

(See Section B.2.2 for a list of server characteristics.)

DISCONNECT [SESSION *session-number* | ALL]

DISCONNECT PORT *port-number*

FORWARDS

HELP [PORT | SERVER]

INITIALIZE [SERVER] [DELAY *minutes* [COUNT *n* | LOOP] | DISABLE | DIAGNOSE {BRIEF | FULL | NORMAL}]

INITIALIZE [SERVER] CANCEL

LIST PORTS [*port-number* | ALL | ACCESS {LOCAL | REMOTE | DYNAMIC | NONE}] [CHARACTERISTICS | SUMMARY]

LIST SERVER [CHARACTERISTICS]

LOCK

LOGOUT [PORT *port-number*]

LOOP — See TEST LOOP.

MONITOR commands — See SHOW commands.

REMOVE QUEUE {ALL | ENTRY *entry-number* | NODE *node-name*}

RESUME [SESSION *session-number*]

SET [PORT [*port-number* | ALL]] *characteristic* [*characteristic(s)*]

(See Section B.2.1 for a list of port characteristics.)

SET { PRIVILEGED / NOPRIVILEGED }

SET SERVER *characteristic* [*characteristic(s)*]

(See Section B.2.2 for a list of server characteristics.)

SET SESSION { INTERACTIVE / PASTHRU / PASSALL }

{SHOW } NODES [*node-name*] [COUNTERS]

{MONITOR} [ALL] [SUMMARY]

{SHOW / MONITOR} PORTS [*port-number* / ALL / ACCESS { LOCAL / REMOTE / DYNAMIC / NONE }] [CHARACTERISTICS / COUNTERS / SUMMARY]

{SHOW / MONITOR} QUEUE [ALL]

{SHOW / MONITOR} SERVER [CHARACTERISTICS / COUNTERS / STATUS]

{SHOW / MONITOR} SERVICES [*service-name* / ALL] [STATUS / SUMMARY]

{SHOW / MONITOR} SESSIONS [PORT *port-number* / ALL]

{SHOW / MONITOR} USERS

[TEST] LOOP *e-address1* [HELP { FULL / RECEIVE / TRANSMIT } ASSISTANT *e-address2*]

TEST [PORT [*port-number* [LOOPBACK { EXTERNAL / INTERNAL }]]] [COUNT { *n* / NONE }] [WIDTH *n*]

ZERO [COUNTERS] [ALL | NODE *node-name* | PORT *port-number*]

B.2 DECserver 100 Characteristics

Keywords shown in **BOLD** type are the default values preset by Digital Equipment Corporation.

B.2.1 DECserver 100 Port Characteristics

ACCESS {**LOCAL** | REMOTE | DYNAMIC | NONE}

AUTHORIZED [GROUPS] {*group-list* | ALL} [ENABLED | DISABLED] Default: 0 ENABLED, 1-127 DISABLED

AUTOBAUD {**ENABLED** | DISABLED}

AUTOCONNECT {ENABLED | **DISABLED**}

AUTOPROMPT {**ENABLED** | DISABLED}

BACKWARD [SWITCH] {*character* | **NONE**}

BREAK {**LOCAL** | REMOTE | DISABLED}

BROADCAST {**ENABLED** | DISABLED}

CHARACTER [SIZE] {7 | **8**}

DEDICATED {*service-name* | **NONE**}

FLOW [CONTROL] { **XON** / DISABLED }

{ **INPUT** / **OUTPUT** } FLOW [CONTROL] { **ENABLED** / DISABLED }

FORWARD [SWITCH] { *character* / **NONE** }

GROUPS { *group-list* / ALL } [ENABLED / DISABLED]

Valid with SET PORT only
Default: 0 ENABLED,
1-127 DISABLED

INACTIVITY [LOGOUT] { ENABLED / **DISABLED** }

INTERRUPTS { ENABLED / **DISABLED** }

LOCAL [SWITCH] { *character* / **NONE** }

LOSS [NOTIFICATION] { **ENABLED** / DISABLED }

MESSAGE [CODES] { **ENABLED** / DISABLED }

NAME *port-name*

Valid with SET PORT only
Default: PORT *n*

PARITY { EVEN / ODD / MARK / **NONE** }

PASSWORD { ENABLED / **DISABLED** }

PREFERRED { *service-name* / **NONE** }

SECURITY { ENABLED / **DISABLED** }

SESSION LIMIT { *limit* / **NONE** }

Default: 4

[INPUT / OUTPUT] SPEED *speed*

Default: 9600

TYPE { ANSI / HARDCOPY / **SOFTCOPY** }

USERNAME *"user-name"*

Default: port name

VERIFICATION { **ENABLED** / DISABLED }

B.2.2 DECserver 100 Server Characteristics

BROADCAST { **ENABLED** / DISABLED }

CIRCUIT [TIMER] *milliseconds*

Default: 80

CONSOLE [PORT] { *port-number* / NONE }

Default: port 1

DUMP { **ENABLED** / DISABLED }

HEARTBEAT { ENABLED / **DISABLED** }

IDENTIFICATION *"id-string"*

Default: no ID

INACTIVITY [TIMER] *minutes*

Default: 30

KEEPALIVE [TIMER] *seconds*

Default: 20

LOCK { **ENABLED** / DISABLED }

LOGIN PASSWORD [*"password"*]

Default: ACCESS

NAME *server-name*

Default: LAT_*nnnnnnnnnnn*

NODE [LIMIT] {*limit* / NONE}	Default: 50
NUMBER *n*	Default: 0
PASSWORD LIMIT {*limit* / NONE}	Default: 3
PRIVILEGED PASSWORD [*"password"*]	Default: SYSTEM
QUEUE [LIMIT] {*depth* / NONE}	Default: 24
RETRANSMIT [LIMIT] *limit*	Default: 8
SESSION LIMIT {*limit* / NONE}	Default: 24
SOFTWARE *file-name*	Default: PS0801ENG

C

DECserver 200 Command Summary

This appendix summarizes all DECserver 200 commands and characteristics. See Chapter 2 for detailed descriptions.

This appendix uses the graphic conventions outlined in the Preface.

C.1 DECserver 200 Commands

BACKWARDS

BROADCAST { PORT *port-list* / ALL } { *"message-text"* / *message-text* }

CLEAR SERVICES { *service-name* / LOCAL }

CONNECT [*service-name* [NODE *node-name*] [DESTINATION *port-name*]]

CONNECT PORT *port-number* [*service-name* [NODE *node-name*] [DEST *port-name*]]

CRASH

DEFINE [PORT [*port-list* / ALL]] *characteristic* [*characteristic(s)*]

(See Section C.2.1 for a list of port characteristics.)

DEFINE SERVER *characteristic* [*characteristic(s)*]

(See Section C.2.2 for a list of server characteristics.)

DEFINE SERVICE *service-name* [*characteristic* [*characteristic(s)*]]

(See Section C.2.3 for a list of service characteristics.)

DISCONNECT [SESSION *session-number* | ALL]

DISCONNECT PORT *port-number*

FORWARDS

HELP [TUTORIAL | *topic* [*subtopic* [*subtopic*]]]

INITIALIZE [SERVER] [DELAY *minutes* [COUNT *n* | LOOP] | DISABLE | DIAGNOSE { BRIEF | FULL | NORMAL }]

INITIALIZE [SERVER] CANCEL

LIST PORTS [*port-list* | ALL | ACCESS { LOCAL | REMOTE | DYNAMIC | NONE }] [CHARACTERISTICS | SUMMARY]

LIST SERVER [CHARACTERISTICS | SUMMARY]

LIST SERVICES [*service-name* | LOCAL] [CHARACTERISTICS]

LOCK

LOGOUT [PORT { *port-list* | ALL }]

LOOP — See TEST LOOP.

MONITOR commands — See SHOW commands.

PURGE SERVICES { *service-name* | LOCAL }

REMOVE QUEUE { ALL | ENTRY *entry-id* | NODE *node-name* | SERVICE *service-name* }

RESUME [SESSION *session-number*]

SET [PORT [*port-list* | ALL]] *characteristic* [*characteristic(s)*]

(See Section C.2.1 for a list of port characteristics.)

SET { PRIVILEGED | NOPRIVILEGED }

SET SERVER *characteristic* [*characteristic(s)*]

(See Section C.2.2 for a list of server characteristics.)

SET SERVICE *service-name* [*characteristic* [*characteristic(s)*]]

(See Section C.2.3 for a list of service characteristics.)

SET SESSION { INTERACTIVE | PASTHRU | PASSALL }

{ SHOW | MONITOR } NODES [*node-name* | ALL] [COUNTERS | STATUS | SUMMARY]

{ SHOW | MONITOR } PORTS [*port-number* | ALL | ACCESS { LOCAL | REMOTE | DYNAMIC | NONE }] [CHARACTERISTICS | COUNTERS | STATUS | SUMMARY]

{SHOW / MONITOR} QUEUE [ALL | NODE *node-name* | PORT *port-number* | SERVICE *service-name*]

{SHOW / MONITOR} SERVER [CHARACTERISTICS | COUNTERS | STATUS | SUMMARY]

{SHOW / MONITOR} SERVICES [*service-name* | LOCAL | ALL] [CHARACTERISTICS | STATUS | SUMMARY]

{SHOW / MONITOR} SESSIONS [PORT *port-list* | ALL]

{SHOW / MONITOR} USERS

[TEST] LOOP *e-address1* [HELP {FULL / RECEIVE / TRANSMIT} ASSISTANT *e-address2*]

TEST [PORT [*port-number* [LOOPBACK {EXTERNAL / INTERNAL}]]] [COUNT {*n* / NONE}] [WIDTH *n*]

TEST SERVICE *service-name* [NODE *node-name* | DESTINATION *port-name* | COUNT {*n* / NONE} | WIDTH *n* | LOOPBACK {EXTERNAL / INTERNAL}]

ZERO [COUNTERS] [ALL | NODE *node-name* | PORT *port-list*]

C.2 DECserver 200 Characteristics

Keywords shown in **BOLD** type are the default values preset by Digital Equipment Corporation.

C.2.1 DECserver 200 Port Characteristics

ACCESS { **LOCAL** | REMOTE | DYNAMIC | NONE }

ALTERNATE [SPEED] { *speed* | NONE }

AUTHORIZED [GROUPS] { *group-list* | ALL } [ENABLED | DISABLED] Default: 0 ENABLED, 1-255 DISABLED

AUTOBAUD { **ENABLED** | DISABLED }

AUTOCONNECT { ENABLED | **DISABLED** }

AUTOPROMPT { **ENABLED** | DISABLED }

BACKWARD [SWITCH] { *character* | **NONE** }

BREAK { **LOCAL** | REMOTE | DISABLED }

BROADCAST { **ENABLED** | DISABLED }

CHARACTER [SIZE] { 7 | **8** }

DEDICATED { *service-name* [NODE { *node-name* | **NONE** }] [DESTINATION { *port-name* | **NONE** }] | **NONE** }

DIALUP { ENABLED | **DISABLED** }

DSRLOGOUT { ENABLED | **DISABLED** }

DTRWAIT { ENABLED | **DISABLED** }

FLOW [CONTROL] { CTS | DSR | **XON** | DISABLED }

{ **INPUT** | **OUTPUT** } FLOW [CONTROL] { **ENABLED** | DISABLED }

FORWARD [SWITCH] { *character* | **NONE** }

GROUPS { *group-list* | ALL } [ENABLED | DISABLED]

Valid with SET PORT only
Default: 0 ENABLED,
1-255 DISABLED

INACTIVITY [LOGOUT] { ENABLED | **DISABLED** }

INTERRUPTS { ENABLED | **DISABLED** }

LIMITED [VIEW] { ENABLED | **DISABLED** }

LOCAL [SWITCH] { *character* | **NONE** }

LOSS [NOTIFICATION] { **ENABLED** | DISABLED }

MESSAGE [CODES] { **ENABLED** | DISABLED }

MODEM [CONTROL] { ENABLED | **DISABLED** }

MULTISESSIONS { ENABLED | **DISABLED** }

NAME *port-name* Default: PORT_*n*

ON-DEMAND [LOADING] { ENABLED / **DISABLED** }

PARITY { EVEN / ODD / MARK / **NONE** }

PASSWORD { ENABLED / **DISABLED** }

PREFERRED { *service-name* [NODE { *node-name* / **NONE** }] [DESTINATION { *port-name* / **NONE** }] / **NONE** }

QUEUING { ENABLED / **DISABLED** }

REMOTE [MODIFICATION] { ENABLED / **DISABLED** }

RING { ENABLED / **DISABLED** }

SECURITY { ENABLED / **DISABLED** }

SESSION [LIMIT] { *limit* / **NONE** } Default: 4

SIGNAL [CHECK] { ENABLED / **DISABLED** }

[INPUT / OUTPUT] SPEED *speed* Default: 9600

TYPE { ANSI / HARDCOPY / **SOFTCOPY** }

USERNAME *"user-name"*
username

VERIFICATION {**ENABLED** / DISABLED}

C.2.2 DECserver 200 Server Characteristics

ANNOUNCEMENTS {**ENABLED** / DISABLED}

BROADCAST {**ENABLED** / DISABLED}

CIRCUIT [TIMER] *milliseconds* Default: 80

CONSOLE [PORT] {*port-number* / NONE} Default: port 1

DUMP {**ENABLED** / DISABLED}

GROUPS — See SERVICE GROUPS.

HEARTBEAT {ENABLED / **DISABLED**}

IDENTIFICATION *"id-string"* Default: no ID

INACTIVITY [TIMER] *minutes* Default: 30

KEEPALIVE [TIMER] *seconds* Default: 20

LOCK {**ENABLED** / DISABLED}

LOGIN PASSWORD [*"password"*] Default: ACCESS

MAINTENANCE PASSWORD [*"hex-password"*] Default: 0, no password checking

MULTICAST [TIMER] *seconds* Default: 30

NAME *server-name* Default: LAT_*nnnnnnnnnnnn*

NODE [LIMIT] {*limit* | NONE} Default: 100

NUMBER *n* Default: 0

PASSWORD LIMIT {*limit* | NONE} Default: 3

PRIVILEGED PASSWORD [*"password"*] Default: SYSTEM

PROMPT [*"prompt-string"*] Default: LOCAL>

QUEUE [LIMIT] {*depth* | NONE} Default: 24

RETRANSMIT [LIMIT] *limit* Default: 8

[SERVICE] GROUPS {*group-list* | ALL} [ENABLED | DISABLED] Default: 0 ENABLED, 1-255 DISABLED

SESSION LIMIT {*limit* | NONE} Default: 32

[SOFTWARE] *file-name* Default: PR0801ENG

C.2.3 DECserver 200 Service Characteristics

CONNECTIONS {**ENABLED** | DISABLED}

IDENTIFICATION *"id-string"* Default: no ID

PASSWORD [*"password"*] Default: no password

PORTS {*port-list* | **ALL**} [ENABLED | **DISABLED**]

QUEUE {**ENABLED** | DISABLED}

D

DECserver 300 Command Summary

This appendix summarizes all DECserver 300 commands and characteristics. See Chapter 2 for detailed descriptions.

This appendix employs the graphic conventions outlined in the Preface.

D.1 DECserver 300 Commands

BACKWARDS

BROADCAST { PORT *port-list* / ALL } { *"message-text"* / *message-text* }

CLEAR SERVICES { *service-name* / LOCAL }

CONNECT [*service-name* [NODE *node-name*] [DESTINATION *port-name*]]

CONNECT PORT *port-number* [*service-name* [NODE *node-name*] [DEST *port-name*]]

CRASH

DEFINE [PORT [*port-list* / ALL]] *characteristic* [*characteristic(s)*]

(See Section D.2.1 for a list of port characteristics.)

DEFINE SERVER *characteristic* [*characteristic(s)*]

(See Section D.2.2 for a list of server characteristics.)

DEFINE SERVICE *service-name* [*characteristic* [*characteristic(s)*]]

(See Section D.2.3 for a list of service characteristics.)

DISCONNECT [SESSION *session-number* | ALL]

DISCONNECT PORT *port-number*

FORWARDS

HELP [TUTORIAL | *topic* [*subtopic* [*subtopic*]]]

INITIALIZE [SERVER] [DELAY *minutes* [COUNT *n* | LOOP] | DISABLE | DIAGNOSE { BRIEF | FULL | NORMAL }]

INITIALIZE [SERVER] CANCEL

LIST PORTS [*port-list* | ALL | ACCESS { LOCAL | REMOTE | DYNAMIC | NONE }] [CHARACTERISTICS | SUMMARY]

LIST SERVER [CHARACTERISTICS | SUMMARY]

LIST SERVICES [*service-name* | LOCAL] [CHARACTERISTICS]

LOCK

LOGOUT [PORT { *port-list* | ALL }]

LOOP — See TEST LOOP.

MONITOR commands — See SHOW commands.

PURGE SERVICES { *service-name* | LOCAL }

REMOVE QUEUE { ALL | ENTRY *entry-id* | NODE *node-name* | SERVICE *service-name* }

RESUME [SESSION *session-number*]

SET [PORT [*port-list* | ALL]] *characteristic* [*characteristic(s)*]

(See Section D.2.1 for a list of port characteristics.)

SET { PRIVILEGED | NOPRIVILEGED }

SET SERVER *characteristic* [*characteristic(s)*]

(See Section D.2.2 for a list of server characteristics.)

SET SERVICE *service-name* [*characteristic* [*characteristic(s)*]]

(See Section D.2.3 for a list of service characteristics.)

SET SESSION { INTERACTIVE | PASTHRU | PASSALL }

{ SHOW | MONITOR } NODES [*node-name* | ALL] [COUNTERS | STATUS | SUMMARY]

{ SHOW | MONITOR } PORTS [*port-list* | ALL | ACCESS { LOCAL | REMOTE | DYNAMIC | NONE }] [CHARACTERISTICS | COUNTERS | STATUS | SUMMARY]

```
{SHOW    } QUEUE [ ALL                    ]
{MONITOR }       [ NODE node-name         ]
                 [ PORT port-number       ]
                 [ SERVICE service-name   ]

{SHOW    } SERVER [ CHARACTERISTICS ]
{MONITOR }        [ COUNTERS        ]
                  [ STATUS          ]
                  [ SUMMARY         ]

{SHOW    } SERVICES [ service-name ] [ CHARACTERISTICS ]
{MONITOR }          [ LOCAL        ] [ STATUS          ]
                    [ ALL          ] [ SUMMARY         ]

{SHOW    } SESSIONS [ PORT port-list ]
{MONITOR }          [ ALL            ]

{SHOW    } USERS
{MONITOR }

TEST LOOP e-address1 [ HELP {FULL    } ASSISTANT e-address2 ]
                     [      {RECEIVE }                      ]
                     [      {TRANSMIT}                      ]

TEST [ PORT [ port-number [ LOOPBACK {EXTERNAL} ]]] [ COUNT {n   } ] [WIDTH n]
     [      [             [          {INTERNAL} ]]]       {NONE} ]

TEST SERVICE service-name [ NODE node-name                ]
                          [ DESTINATION port-name         ]
                          [ COUNT {n   }                  ]
                          [       {NONE}                  ]
                          [ WIDTH n                       ]
                          [ LOOPBACK {EXTERNAL}           ]
                          [          {INTERNAL}           ]

ZERO [COUNTERS] [ ALL              ]
                [ NODE node-name   ]
                [ PORT port-list   ]
```

D.2 DECserver 300 Characteristics

Keywords shown in **BOLD** type are the default values preset by Digital Equipment Corporation.

D.2.1 DECserver 300 Port Characteristics

ACCESS { **LOCAL** | REMOTE | DYNAMIC | NONE }

AUTHORIZED [GROUPS] { *group-list* | ALL } [ENABLED | DISABLED] Default: 0 ENABLED, 1-255 DISABLED

AUTOBAUD { **ENABLED** | DISABLED }

AUTOCONNECT { ENABLED | **DISABLED** }

AUTOPROMPT { **ENABLED** | DISABLED }

BACKWARD [SWITCH] { *character* | **NONE** }

BREAK { **LOCAL** | REMOTE | DISABLED }

BROADCAST { **ENABLED** | DISABLED }

CHARACTER [SIZE] { 7 | **8** }

DEDICATED { *service-name* [NODE { *node-name* | **NONE** }] [DESTINATION { *port-name* | **NONE** }] | **NONE** }

DSRLOGOUT { ENABLED | **DISABLED** }

FLOW [CONTROL] { DSR / **XON** / DISABLED }

{ **INPUT** / **OUTPUT** } FLOW [CONTROL] { **ENABLED** / DISABLED }

FORWARD [SWITCH] { *character* / **NONE** }

GROUPS { *group-list* / ALL } [ENABLED / DISABLED]

Valid with SET PORT only
Default: 0 ENABLED,
1-255 DISABLED

INACTIVITY [LOGOUT] { ENABLED / **DISABLED** }

INTERRUPTS { ENABLED / **DISABLED** }

LIMITED [VIEW] { ENABLED / **DISABLED** }

LOCAL [SWITCH] { *character* / **NONE** }

LOSS [NOTIFICATION] { **ENABLED** / DISABLED }

MESSAGE [CODES] { **ENABLED** / DISABLED }

MULTISESSIONS { ENABLED / **DISABLED** }

NAME *port-name*

Default: PORT_*n*

ON-DEMAND [LOADING] { ENABLED / **DISABLED** }

PARITY { EVEN / ODD / MARK / **NONE** }

PASSWORD { ENABLED / **DISABLED** }

PREFERRED { *service-name* [NODE { *node-name* / **NONE** }] [DESTINATION { *port-name* / **NONE** }] / **NONE** }

QUEUING { ENABLED / **DISABLED** }

REMOTE MODIFICATION { ENABLED / **DISABLED** }

SECURITY { ENABLED / **DISABLED** }

SESSION LIMIT { *limit* / NONE }

Default: 4

SIGNAL [CHECK] { ENABLED / **DISABLED** }

[INPUT / OUTPUT] SPEED *speed*

Default: 9600

TYPE { ANSI / HARDCOPY / **SOFTCOPY** }

USERNAME { *"username"* }

Default: no username

VERIFICATION { **ENABLED** / DISABLED }

D.2.2 DECserver 300 Server Characteristics

ANNOUNCEMENTS { **ENABLED** / DISABLED }

BROADCAST { **ENABLED** / DISABLED }

CIRCUIT [TIMER] *milliseconds* — Default: 80

CONSOLE [PORT] { *port-number* / NONE } — Default: port 1

DUMP { **ENABLED** / DISABLED }

GROUPS — See SERVICE GROUPS.

HEARTBEAT { ENABLED / **DISABLED** }

IDENTIFICATION *"id-string"* — Default: no ID

INACTIVITY [TIMER] *minutes* — Default: 30

KEEPALIVE [TIMER] *seconds* — Default: 20

LOCK { **ENABLED** / DISABLED }

LOGIN PASSWORD [*"password"*] — Default: ACCESS

MAINTENANCE PASSWORD [*"hex-password"*] — Default: 0, no password checking

MULTICAST [TIMER] *seconds* — Default: 30

NAME *server-name* — Default: LAT_*nnnnnnnnnnnn*

NODE [LIMIT] { *limit* / NONE } — Default: 200

NUMBER *n* — Default: 0

PASSWORD LIMIT { *limit* / NONE } — Default: 3

PRIVILEGED PASSWORD [*"password"*] Default: SYSTEM

PROMPT {*"prompt-string"*] Default: Local>

QUEUE [LIMIT] {*depth* | NONE} Default: 100

RETRANSMIT [LIMIT] *limit* Default: 8

[SERVICE] GROUPS {*group-list* | ALL} [ENABLED | DISABLED] Default: 0 ENABLED, 1-255 DISABLED

SESSION LIMIT {*limit* | NONE} Default: 64

[SOFTWARE] *file-name* Default: SH1601ENG

D.2.3 DECserver 300 Service Characteristics

CONNECTIONS {**ENABLED** | DISABLED}

IDENTIFICATION *"id-string"* Default: no ID

PASSWORD *"password"* Default: no password

PORTS {*port-list* | **ALL**} [ENABLED | **DISABLED**]

QUEUE {**ENABLED** | DISABLED}

E

DECserver 500 Command Summary

This appendix summarizes all DECserver 500 commands and characteristics. See Chapter 2 for detailed command descriptions.

This appendix uses the graphic conventions outlined in the Preface.

E.1 DECserver 500 Commands

Sections E.1.1 and E.1.2 summarize the server and TSC commands.

E.1.1 Server Commands

BACKWARDS

BROADCAST { PORT *port-list* / ALL } *message-text*

CLEAR SERVICES { *service-name* / LOCAL }

CONNECT [*service-name* [NODE *node-name*] [DESTINATION *port-name*]]

CRASH

DISCONNECT [SESSION *session-number* / ALL]

FORWARDS

HELP [TUTORIAL | *topic* [*subtopic* [*subtopic*]]]

INITIALIZE [SERVER] [DELAY *minutes*] [DIAGNOSE]

INITIALIZE [SERVER] CANCEL

LOCK

LOGOUT [PORT { *port-list* | ALL }]

LOOP command — See TEST LOOP.

MONITOR commands — See SHOW commands.

MOVE DEVICE *source-device* TO *standby-device*

REMOVE QUEUE { ALL | ENTRY *entry-number* | NODE *node-name* | SERVICE *service-name* }

RESUME [SESSION *session-number*]

SAVE PORT { *port-list* | ALL }

SET DEVICE { *device-name* | ALL } STATE { OFFLINE | ONLINE }
DUMP { DISABLED | ENABLED }

SET [PORT [*port-list* | ALL]] *characteristic* [*characteristic(s)*]

(See Section E.2.1 for a list of port characteristics.)

SET { PRIVILEGED | NOPRIVILEGED }

SET SERVER *characteristic* [*characteristic(s)*]

(See Section E.2.2 for a list of server characteristics.)

Set SERVICE *service-name* [*characteristic* [*characteristic(s)*]]

(See Section E.2.3 for a list of service characteristics.)

SET SESSION { INTERACTIVE | PASTHRU | PASSALL }

{ SHOW | MONITOR } DEVICES [*device-name* | ALL] [CHARACTERISTICS | COUNTERS | STATUS | SUMMARY]

{ SHOW | MONITOR } NODES [*node-name* | ALL] [COUNTERS | STATUS | SUMMARY]

{ SHOW | MONITOR } PORTS [*port-list* | ALL | ACCESS { LOCAL | REMOTE | DYNAMIC | NONE }] [CHARACTERISTICS | COUNTERS | STATUS | SUMMARY]

{ SHOW | MONITOR } QUEUE [ALL | ENTRY *entry-number* | NODE *node-name* | PORT *port-number* | SERVICE *service-name*]

{ SHOW | MONITOR } SERVER [CHARACTERISTICS | COUNTERS | STATUS | SUMMARY]

{ SHOW | MONITOR } SERVICES [*service-name* | LOCAL | ALL] [CHARACTERISTICS | STATUS | SUMMARY]

{ SHOW | MONITOR } SESSIONS [PORT *port-list* | ALL]

{ SHOW | MONITOR } USERS

[TEST] LOOP *e-address1* [COUNT *n* | WIDTH *n* | HELP { FULL | RECEIVE | TRANSMIT } ASSISTANT *e-address2*]

TEST [PORT [*port-number* [LOOPBACK { EXTERNAL | INTERNAL }]]] [COUNT *n*] [WIDTH *n*]

TEST SERVICE *service-name* [NODE *node-name* | DESTINATION *port-name* | COUNT { *n* | NONE } | WIDTH *n* | LOOPBACK { EXTERNAL | INTERNAL }]

ZERO [COUNTERS] [ALL | DEVICE *device-name* | NODE *node-name* | PORT *port-list*]

E.1.2 TSC Commands

CLOSE TABLE

DEFINE DEVICE { *device-name* | ALL } TYPE { CXA16 | CXB16 | CXY08 | NONE | CXM04 [CONFIGURATION { 4 | 8 }] }

STATE { ONLINE | OFFLINE | STANDBY }

DUMP { DISABLED | ENABLED } Valid for CXM04

DEFINE LANGUAGE *language-name* FILE *file-spec*

DEFINE MAPPING *scan-code* [STATE *state-type*] KEY *DEC-key*

DEFINE PORT { *port-list* / ALL } *characteristic* [*characteristic(s)*]

(See Section E.2.1 for a list of port characteristics.)

DEFINE SERVER *characteristic* [*characteristic(s)*]

(See Section E.2.2 for a list of server characteristics.)

DEFINE SERVICE *service-name characteristic* [*characteristic(s)*]

(See Section E.2.3 for a list of service characteristics.)

EXIT (or CTRL/Z)

HELP [*topic* [*subtopic* [*subtopic*]]]

LIST DEVICES [*device-name* / ALL] [CHARACTERISTICS / SUMMARY]

LIST LANGUAGES [*language-name* / ALL]

LIST MAPPING {*scan-code*} [STATE { *state-type* / ALL }]

LIST NODE

LIST PORTS { *port-list* / ALL / ACCESS { LOCAL / REMOTE / DYNAMIC / NONE } } [CHARACTERISTICS / SUMMARY]

LIST SERVER [CHARACTERISTICS / SUMMARY]

LIST SERVICES [*service-name* / LOCAL / ALL] [CHARACTERISTICS / SUMMARY]

LIST TABLES

LIST USAGE

LIST USERS

PURGE LANGUAGE *language-name*

PURGE SERVICES { *service-name* | LOCAL }

USE TABLE {*file-spec*} [KEYBOARD { 87 | 102 | 122 }]
[CHARACTER { NATIONAL | MULTINATIONAL }] [VARIANT { STANDARD | A }]

E.2 DECserver 500 Characteristics

Keywords shown in **BOLD** type are the default values preset by Digital Equipment Corporation.

E.2.1 DECserver 500 Port Characteristics

You cannot modify all port characteristics for port 0, and some default values are different for that port. See the *DECserver 500 Management* manual for details.

ACCESS { **LOCAL** / REMOTE / DYNAMIC / NONE } *

ALTERNATE [HOTKEY] { ENABLED / **DISABLED** } * (CXM04 card only)

AUTHORIZED [GROUPS] { *group-list* / ALL } [ENABLED / DISABLED] (Default: 0 ENABLED, 1-255 DISABLED)

AUTOBAUD { **ENABLED** / DISABLED } *

AUTOCONNECT { ENABLED / **DISABLED** }

AUTOPROMPT { **ENABLED** / DISABLED }

BACKWARD [SWITCH] { *character* / **NONE** }

BREAK { **LOCAL** / REMOTE / DISABLED }

BROADCAST { **ENABLED** / DISABLED }

CHARACTER [SIZE] { 7 / **8** }

DEDICATED { *service-name* [NODE { *node-name* / **NONE** }] [DESTINATION { *port-name* / **NONE** }] / **NONE** }

(Valid for DS500 V1.0 only)

DEDICATED { *service-name* [NODE *node-name* [DESTINATION *port-name*]] / **NONE** }

(Valid for DS500 V1.1 or greater)

DIALUP { ENABLED / **DISABLED** }

DSRLOGOUT { ENABLED / **DISABLED** }

DTRWAIT { ENABLED / **DISABLED** } *

FLOW [CONTROL] { CTS / DSR / **XON** / DISABLED }

FORWARD [SWITCH] { *character* / **NONE** }

GROUPS { *group-list* / ALL } [ENABLED / DISABLED]

(Valid for SET PORT only
Default: 0 ENABLED,
1-255 DISABLED)

INACTIVITY [LOGOUT] { ENABLED / **DISABLED** }

INTERRUPTS { ENABLED / **DISABLED** }

LIMITED [VIEW] { ENABLED / **DISABLED** }

LOCAL [SWITCH] { *character* / **NONE** }

LOCK { DISABLED / **ENABLED** } *

LOSS [NOTIFICATION] { **ENABLED** / DISABLED }

MESSAGE [CODES] { **ENABLED** / DISABLED }

MODE { **DYNAMIC** / VT / 3270 } (DS500 DEFINE PORT only/ CXM04 CONFIGURATION 4 only)

MODEM [CONTROL] { ENABLED / **DISABLED** } *

MULTISESSIONS { ENABLED / **DISABLED** }

NAME *port-name* (Default: LC-*n*-*n*)

ON-DEMAND [LOADING] { ENABLED / **DISABLED** } *

PARITY { EVEN / ODD / **NONE** }

PASSWORD { ENABLED / **DISABLED** } *

PREFERRED { *service-name* [NODE *node-name* [DESTINATION *port-name*]] / **NONE** }

QUEUING { ENABLED / **DISABLED** }

REMOTE [MODIFICATION] { ENABLED / **DISABLED** }

SECURITY { ENABLED / **DISABLED** }

SESSION [LIMIT] { *limit* / **NONE** } (Default: 4)

[INPUT / OUTPUT] SPEED *speed* (Default: 9600)

TYPE {ANSI / HARDCOPY / **SOFTCOPY**}

USERNAME {*"username"* / NONE} (Default: port name)

VERIFICATION {**ENABLED** / DISABLED}

E.2.2 DECserver 500 Server Characteristics

ANNOUNCEMENTS {**ENABLED** / DISABLED}

BACKUP HOSTS [*host* [,*host* [,*host* [,*host* [,*host*]]]]] Valid for DEFINE SERVER only
Default: no backup host

BROADCAST {**ENABLED** / DISABLED}

CIRCUIT [TIMER] *milliseconds* (Default: 80)

GROUPS — See SERVICE GROUPS.

HEARTBEAT {ENABLED / **DISABLED**}

IDENTIFICATION {*"id-string"* / **NONE**}

INACTIVITY [TIMER] *minutes* (Default: 30)

KEEPALIVE [TIMER] *seconds* (Default: 20)

LIMITED [HELP] {ENABLED / **DISABLED**} * (Valid for TSC only)

LINE FREQUENCY {50 / **60**} (Valid for DEFINE SERVER only)

LOCK {**ENABLED** / DISABLED}

LOGIN PASSWORD [*"password"*] (Default: ACCESS)

MAINTENANCE PASSWORD [*"hex-password"* / **NONE**] (Valid for DEFINE SERVER only)

MULTICAST [TIMER] *seconds* (Default: 60)

NAME *server-name* (Default: DECnet node name of the server)

NODE [LIMIT] {*limit* / NONE} (Default: 100)

NUMBER *n* (Default: 0)

PASSWORD LIMIT {*limit* / NONE} (Default: 3)

PRIVILEGED PASSWORD [*"password"*] (Default: SYSTEM)

PROMPT {*"prompt-string"*} (Default: Local >)

QUEUE [LIMIT] {*depth* / NONE} (Default: 8)

RETRANSMIT [LIMIT] *limit* (Default: 8)

[SERVICE] GROUPS {*group-list* / ALL} [ENABLED / DISABLED] (Default: 0 ENABLED, 1-255 DISABLED)

SESSION LIMIT {*limit* / NONE} (Default: 256)

E.2.3 DECserver 500 Service Characteristics

CONNECTIONS { **ENABLED** | DISABLED }

IDENTIFICATION { *"id-string"* | **NONE** }

PASSWORD [*"password"* | **NONE**]

PORTS { *port-list* | **ALL** } [ENABLED | **DISABLED**]

QUEUE { **ENABLED** | DISABLED }

F

Ethernet Terminal Server Command Summary

This appendix summarizes all Ethernet Terminal Server commands and characteristics. See Chapter 2 for detailed descriptions.

This appendix employs the graphic conventions outlined in the Preface.

F.1 Ethernet Terminal Server Commands

Sections F.1.1 and F.1.2 summarize the server and TSC commands.

F.1.1 Ethernet Terminal Server – Server Commands

BACKWARDS

BROADCAST { PORT *port-list* / ALL } *message-text*

CLEAR SERVICES { *service-name* / LOCAL }

CONNECT [*service-name* [NODE *node-name*] [DESTINATION *port-name*]]

CRASH

DISCONNECT [SESSION *session-number* / ALL]

FORWARDS

HELP [TUTORIAL
       topic [*subtopic* [*subtopic*]]]

INITIALIZE [SERVER] [DELAY *minutes*]

INITIALIZE [SERVER] CANCEL

LOCK

LOGOUT [PORT { *port-list* }]
              { ALL }

LOOP command — See TEST LOOP.

MONITOR commands — See SHOW commands.

REMOVE QUEUE { ALL
               ENTRY *entry-number*
               NODE *node-name*
               SERVICE *service-name* }

RESUME [SESSION *session-number*]

SAVE PORT [*port-list*]
          [ALL]

SET [PORT [*port-list*]] *characteristic* [*characteristic(s)*]
    [[ALL]   ]

(See Section F.2.1 for a list of port characteristics.)

SET { PRIVILEGED }
    { NOPRIVILEGED }

SET SERVER *characteristic* [*characteristic(s)*]

(See Section F.2.2 for a list of server characteristics.)

SET SERVICE *service-name* [*characteristic* [*characteristic(s)*]]

(See Section F.2.3 for a list of service characteristics.)

SET SESSION { INTERACTIVE }
            { PASTHRU   }
            { PASSALL   }

```
{SHOW    } DEVICES [ device-name ] [ CHARACTERISTICS ]
{MONITOR }        [ ALL         ]   [ COUNTERS        ]
                                    [ SUMMARY         ]

{SHOW    } NODES [ node-name ] [ COUNTERS ]
{MONITOR }       [ ALL       ]  [ STATUS   ]
                                [ SUMMARY  ]

{SHOW    } PORTS [ port-list                                ] [ CHARACTERISTICS ]
{MONITOR }       [ ALL                                      ]  [ COUNTERS       ]
                 [ ACCESS { LOCAL   }                       ]  [ STATUS         ]
                          { REMOTE  }                       ]  [ SUMMARY        ]
                          { DYNAMIC }                       ]
                          { NONE    }                       ]

{SHOW    } QUEUE [ ALL                    ]
{MONITOR }       [ ENTRY entry-number     ]
                 [ NODE node-name         ]
                 [ SERVICE service-name   ]

{SHOW    } SERVER [ CHARACTERISTICS ]
{MONITOR }        [ COUNTERS        ]
                  [ STATUS          ]
                  [ SUMMARY         ]

{SHOW    } SERVICES [ service-name ] [ CHARACTERISTICS ]
{MONITOR }          [ LOCAL        ]  [ STATUS         ]
                    [ ALL          ]  [ SUMMARY        ]

{SHOW    } SESSIONS [ PORT port-list ]
{MONITOR }          [ ALL            ]

{SHOW    } USERS
{MONITOR }

[TEST] LOOP e-address1 COUNT n
                       WIDTH n
                       HELP { FULL     } ASSISTANT e-address2
                            { RECEIVE  }
                            { TRANSMIT }

TEST [ PORT [ port-number [ LOOPBACK { EXTERNAL } ] ] ] [COUNT n] [WIDTH n]
                                     { INTERNAL }
```

TEST SERVICE *service-name* NODE *node-name*
DESTINATION *port-name*
COUNT { *n* | NONE }
WIDTH *n*
LOOPBACK { EXTERNAL | INTERNAL }

ZERO [COUNTERS] [ALL | DEVICE *device-name* | NODE *node-name* | PORT *port-list*]

F.1.2 Ethernet Terminal Server – TSC Commands

DEFINE PORT { *port-list* | ALL } *characteristic* [*characteristic(s)*]

(See Section F.2.1 for a list of port characteristics.)

DEFINE SERVER *characteristic* [*characteristic(s)*]

(See Section F.2.2 for a list of server characteristics.)

DEFINE SERVICE *service-name characteristic* [*characteristic(s)*]

(See Section F.2.3 for a list of service characteristics.)

EXIT (or CTRL/Z)

HELP [*topic* [*subtopic* [*subtopic*]]]

LIST DEVICES [*device-name* | ALL] [CHARACTERISTICS | SUMMARY]

LIST NODE

LIST PORTS [*port-list* | ALL | ACCESS { LOCAL | REMOTE | DYNAMIC | NONE }] [CHARACTERISTICS | SUMMARY]

LIST SERVER [CHARACTERISTICS | SUMMARY]

LIST SERVICES [*service-name* | LOCAL | ALL] [CHARACTERISTICS | SUMMARY]

LIST USAGE

LIST USERS

PURGE SERVICES {*service-name* | LOCAL}

F.2 Ethernet Terminal Server Characteristics

Keywords shown in **BOLD** type are the default values.

F.2.1 Ethernet Terminal Server – Port Characteristics

You cannot modify all port characteristics for port 0, and some default values are different for that port. See the *Ethernet Terminal Server Management Guide* for details.

ACCESS {**LOCAL** | REMOTE | DYNAMIC | NONE}

AUTHORIZED [GROUPS] {*group-list* | ALL} [ENABLED | DISABLED] Default: 0 ENABLED, 1-255 DISABLED

AUTOBAUD {**ENABLED** | DISABLED}

AUTOCONNECT {ENABLED | **DISABLED**}

AUTOPROMPT {**ENABLED** | DISABLED}

BACKWARD [SWITCH] {*character* | **NONE**}

BREAK { **LOCAL** | REMOTE | DISABLED }

BROADCAST { **ENABLED** | DISABLED }

CHARACTER [SIZE] { 7 | **8** }

DEDICATED { *service-name* [NODE *node-name* [DESTINATION *port-name*]] | **NONE** }

DIALUP { ENABLED | **DISABLED** }

DSRLOGOUT { ENABLED | **DISABLED** }

DTRWAIT { ENABLED | **DISABLED** }

FLOW [CONTROL] { CTS | DSR | **XON** | DISABLED }

FORWARD [SWITCH] { *character* | **NONE** }

GROUPS { *group-list* | ALL } [ENABLED | DISABLED]

Valid for SET PORT only
Default: 0 ENABLED,
1-255 DISABLED

INACTIVITY [LOGOUT] { ENABLED | **DISABLED** }

INTERRUPTS { ENABLED | **DISABLED** }

LOCAL [SWITCH] { *character* | **NONE** }

LOSS [NOTIFICATION] { **ENABLED** | DISABLED }

MESSAGE [CODES] {**ENABLED** / DISABLED}

MODEM [CONTROL] {ENABLED / **DISABLED**}

NAME *port-name*

Default: default port-name

PARITY {EVEN / ODD / **NONE**}

PASSWORD {ENABLED / **DISABLED**}

PREFERRED {*service-name* [NODE *node-name* [DESTINATION *port-name*]] / **NONE**}

SECURITY {ENABLED / **DISABLED**}

SESSION [LIMIT] {*limit* / **NONE**}

Default: 4

SIGNAL [CHECK] {ENABLED / **DISABLED**}

[INPUT / OUTPUT] SPEED *speed*

Default: 9600

TYPE {ANSI / HARDCOPY / **SOFTCOPY**}

USERNAME {*"username"* / NONE}

Default: port name

VERIFICATION {**ENABLED** / DISABLED}

F.2.2 Ethernet Terminal Server – Server Characteristics

ANNOUNCEMENTS { **ENABLED** / DISABLED }

BACKUP HOSTS [*host* [,*host* [,*host* [,*host* [,*host*]]]]] Valid for DEFINE SERVER only
Default: no backup host

BROADCAST { **ENABLED** / DISABLED }

CIRCUIT [TIMER] *milliseconds* Default: 80

GROUPS – See SERVICE GROUPS.

HEARTBEAT { ENABLED / **DISABLED** }

IDENTIFICATION { *"id-string"* / **NONE** }

INACTIVITY [TIMER] *minutes* Default: 30

KEEPALIVE [TIMER] *seconds* Default: 20

LINE FREQUENCY { 50 / **60** } Valid for DEFINE SERVER only

LOCK { **ENABLED** / DISABLED }

LOGIN PASSWORD [*"password"*] Default: ACCESS

MAINTENANCE PASSWORD [*"hex-password"* / **NONE**] Valid for DEFINE SERVER only

MULTICAST [TIMER] *seconds* Default: 60

NAME *server-name* Default: DECnet node name of the server

NODE [LIMIT] { *limit* / NONE } Default: 32

NUMBER *n* — Default: 0

PASSWORD LIMIT { *limit* / NONE } — Default: 3

PRIVILEGED PASSWORD [*"password"*] — Default: SYSTEM

QUEUE [LIMIT] { *depth* / NONE } — Default: 8

RETRANSMIT [LIMIT] *limit* — Default: 10

[SERVICE] GROUPS { *group-list* / ALL } [ENABLED / DISABLED] — Default: 0 ENABLED, 1-255 DISABLED

SESSION LIMIT { *limit* / NONE } — Default: 64

F.2.3 Ethernet Terminal Server – Service Characteristics

CONNECTIONS { **ENABLED** / DISABLED }

IDENTIFICATION { *"id-string"* / **NONE** }

PASSWORD [*"password"* / **NONE**]

PORTS { *port-list* / **ALL** } [ENABLED / **DISABLED**]

QUEUE { **ENABLED** / DISABLED }

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Terminal Server
Commands and Messages
AA-LD83B-TK

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