

Annex Interface for VMS Environments

User's Guide

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Revision Level History



Revision	Description
A	Initial release.



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This manual describes the non-privileged Command Line Interface (CLI) commands associated with an Annex configured for a VMS environment.

The privileged and non-privileged command designations are related to Annex port security. There are two levels of security available for Annex ports:

- Privileged status — The user at a privileged port has access to the entire Annex command set, including commands that manage the Annex, its ports, its sessions, and its services.

Any user who knows the privileged password can set a port's status to *privileged* using the **set privileged** command. For security reasons, an Annex configured as a communications server usually has only one privileged user, i.e., the person managing it.

- Non-privileged status — Non-privileged status is the default for all interactive ports. Users at a non-privileged port cannot access commands that change the state of the Annex or other ports, but they can use all commands required for connecting to LAT services and Internet hosts from an interactive port.

Non-privileged users can also modify certain port characteristics and display information about the Annex, its ports, and service nodes.



All commands documented in this manual are non-privileged commands. For information about privileged commands, see the *Annex Interface for VMS Environments Administrator's Guide*.

Conventions

This document uses the following conventions:

<u>Convention</u>	<u>Meaning</u>
Special type	In command examples, indicates system output.
Bold special type	In command examples, indicates user input.
UPPERCASE	In command lines, indicates keywords that must be entered. Keywords are not case sensitive. You can abbreviate command keywords to the first three characters or to their minimum unique abbreviation.
<i>lowercase italics</i>	In command syntax, indicates variables for which either the user or the Annex supplies a value.
{ }	In command syntax, indicates that you must choose one of the enclosed options. (Do not enter braces.)
[]	In command syntax, indicates that the enclosed values are optional. Enter one or none. (Do not enter brackets.)
Bold type	In characteristics summaries, indicates default values.
,	Indicates related alternate options. For example, set port type [hardcopy, softcopy] refers to the set port type hardcopy and set port type softcopy commands. The comma (,) is not part of the command syntax.

Some additional conventions are used in commentary and syntax examples:

- ❑ The Return key, which you must press to execute all commands, is not shown in the command line displays.
- ❑ The *Local*> prompt, which appears in most examples, is the default Annex prompt.
- ❑ All numbers are in decimal notation unless stated otherwise.
- ❑ All Ethernet addresses are in hexadecimal notation.

The Command Line Interpreter (CLI) is the command interface for the Annex and provides commands that connect you to hosts, manage your jobs (or sessions), display and modify port parameters, and display information about the Annex and the network.

CLI Commands



The non-privileged commands affect only your own CLI session and cannot be used to alter another user's session.

You can shorten any CLI command or host name to the minimum number of letters that differentiate that command from any other. This is referred to as *minimum uniqueness*. You can enter commands and host names in lower case, upper case, or a combination of both. The Annex Interface for VMS Environments performs the appropriate case conversion; passwords, however, are not converted.

[Table 1](#) lists the CLI commands described in this chapter.



All of the non-privileged CLI commands may not be available at your site. Refer any questions to your network administrator.

Table 1. CLI Commands

Command	Description
backwards	Selects next available, lower numbered session to which your port is connected.
close	Closes sessions.
connect	Uses LAT to connect to an advertised LAT service.
dialup	Indicates the port is connected to a dial-up line..
disconnect	Disconnects sessions.
forwards	Selects next available, higher numbered session to which your port is connected.
list port	Displays information about server ports from the permanent database.
list server	Displays information from the permanent database about the server.
list service	Displays the local LAT services to which the server has access.
lock	Locks a port to prevent unauthorized access.
logout port	Logs out of the terminal server and disconnects all sessions.
resume session	Returns to a suspended session.

(continued on next page)

Table 1. CLI Commands (continued)

Command	Description
set port	Specifies or modifies port characteristics immediately.
set privileged	Enables you to perform privileged operations from your port..
set session	Specifies characteristics for your current LAT session.
show port	Displays information from the operational database about server ports.
show server	Displays information from the operational database about the server.
show service	Displays information about LAT services to which you can connect.
show sessions	Displays connected active sessions for your port.
show users	Displays information about interactive port users on the server.



backwards

The **backwards** command resumes the session preceding your current session, based on the list shown using the **show sessions** command. The session with the next lower number relative to your current session is considered the preceding session. For example, if your current session is 4, your preceding session is 3. The **backwards** command wraps to the highest numbered session if your current session is the lowest session number.

Syntax

backwards

close

The **close** command terminates a specific session or all sessions.

Syntax

close [all, session [*session-number*]]

all	Specifies that all associated port sessions are disconnected.
session <i>session_number</i>	Specifies a particular session to be disconnected. The default is your current session.

Examples

This command disconnects session 1:

```
Local> close session 1
```

This command disconnects all sessions on the port:

```
Local> close all
```

connect

The **connect** command requests a connection to a LAT service.

Syntax

connect [LAT] *service-name* [node *node-name*] [destination port *port-name*]

You can type **c** to invoke the **connect** command.

LAT	Specifies that only LAT be used to attempt the connection. (Optional)
<i>service-name</i>	Specifies the LAT service on a server to which you want to connect. If the service is offered by multiple service nodes, the server connects to the node with the highest service rating.
node <i>node-name</i>	Specifies a specific service node to which you want to connect. The default is the highest-rated node offering the service.
destination port <i>port-name</i>	Specifies a specific server port to which you want to connect. The default is the first available port to which you are connected that offers the service.

Examples

This command connects the port to the service called sales:

```
Local> connect sales
```

This command connects the port to the service called *healthdata* at port_5 on the server called *dataserver*:

```
Local> connect healthdata node dataserver destination port_5
```

disconnect

The **disconnect** command terminates a specific session or all sessions.

Syntax

disconnect [all, session [*session-number*]]

all	Specifies that all associated port sessions be disconnected.
session <i>session_number</i>	Specifies a particular session to be disconnected. The default is your current session.

Examples

This command disconnects session 1:

```
Local> disconnect session 1
```

This command disconnects all sessions on the port:

```
Local> disconnect all
```



forwards

The **forwards** command resumes the session that follows your current session in the session list. Display the sessions list by using the **show sessions** command. The **forwards** command resumes the session with the next higher session number relative to your current session. If your current session is 3, **forwards** resumes session number 4, or the next highest number. If your current session has the highest session number, the **forwards** command wraps to the lowest numbered session.

Syntax

forwards

list port

The **list port** command displays information about the server ports from the permanent database. This information includes characteristics assigned using the **define port** command.

Syntax

list port [*port-list*, all] [**characteristics**, *summary*]

<i>port-list</i>	Specifies one or more ports for which information should be displayed. The default is the port you are using. You can use commas, hyphens, or a combination of commands and hyphens to specify which ports should display information. For example, to display information for ports one, two, three, and five you can enter: 1,2,3,5 or 1-3,5.
all	Specifies information for all ports.
characteristics	Displays characteristics that can be set for the specified ports. This is the default when you specify no port, one port, or a list of ports.
summary	Displays the summary screen showing Port Number, Access, Status, and Service Offered. In the <i>Status</i> field, you can have the following values: Connected - The port has a connection to a service. Idle - The port is not in use. Local Mode - The port is in local command mode. Permanent - Used only for list port summary display. The port exists on this server.

list server

The **list server** command displays information from the permanent database about the server. This information includes characteristics that were changed using the **define server** command.

Syntax

list server [characteristics]

characteristics	Specifies that the server will display the current or permanent values for server characteristics that have been defined by the server manager.
-----------------	---

lock

The **lock** command prevents the unauthorized use of your terminal in your absence. When you issue the **lock** command, and if the server characteristic **lock** is **enabled**, the server responds by prompting for a lock password.

Choose a 1- to 16-character password. After you enter the password, which is not displayed on your terminal, the server asks you to enter it again for verification. If both password entries match, the server will display an *unlock password* prompt. Your terminal remains locked until you enter the password again, returning you to local mode. The privileged password will also unlock the port.

Syntax

lock [*time-out*]

<i>time-out</i>	Specifies the amount of time in minutes that the port is locked. After passing this limit, the Annex Interface for VMS Environments resets and unlocks the port.
-----------------	--

Example

```
Local> lock
LOCK PASSWORD> bingo
VERIFICATION> bingo
LOCAL PORT 4 LOCKED
UNLOCK PASSWORD> bingo
Local>
```

If you forget the *unlock password*, you cannot use the port until you log out of, and then into, it again.

logout port

The **logout port** command disconnects a port and any sessions associated with that port on the server. After you log out of a port, the port characteristics in the operational database for that port are reset to match the characteristics defined in the permanent database.

If a port is modem- or signal-controlled, the **logout port** command causes outgoing modem signals to be dropped.

Syntax

logout [**port** [*all*, *port-list*, *port-number*]]

all	Logs out of all ports, including the port from which the command is entered.
<i>port-list</i>	Specifies the ports to be logged out. The default is your own port. If your port is not specified in the list, it will not be logged out.
<i>port-number</i>	Specifies the port you want logged out. The default is your own port.

Examples

This command logs out of the port from which the command is entered and disconnects all other sessions at that port:

```
Local> logout
```

resume session

The **resume session** command restarts a session from local mode.

Syntax

resume [**session**] [*session-number*]

You can type **r** to invoke the **resume** command.

<i>session</i> <i>session-number</i>	Specifies any session you want to resume. If you omit this parameter, the server resumes the current session. You can also enter the session number without the keyword session .
---	--

Examples

This command resumes the current session:

```
Local> resume
```

This command resumes session number 4 in your session list:

```
Local> resume session 4
```

set port

The **set port** command modifies the port characteristics in the operational database. These changes take immediate effect, but remain in effect only until the port is logged out. At your next login, port characteristics revert to the values in the permanent database.

Syntax

set port [**all**, *port-list*] *characteristic value*

all	Specifies that the defined characteristics apply to all ports. This privileged parameter is the default.
<i>port-list</i>	Specifies one of more ports where the defined characteristics apply. This is a privileged parameter. The default is your own port.

Restrictions

- ❑ Only privileged users can specify port characteristics for ports other than the port being used.
- ❑ Non-privileged users cannot specify all port characteristics. See *Summary of Port Characteristics* on page A-17 for user security levels of specific characteristics.
- ❑ Characteristics for the remote management port cannot be changed.

Example

In this command, the parameters affect the speed of port 5 in bits per second:

```
Local> set port 5 speed 9600
```


Summary of Port Characteristics

The following characteristics can be set using the **set port** command. The subsections that follow provide the syntax, description, user security level, defaults, and applicable restrictions for each characteristic. Defaults appear in bold type throughout this section.

- ❑ backward switch
- ❑ break
- ❑ character size
- ❑ default session mode
- ❑ dialup
- ❑ flow control
- ❑ forward switch
- ❑ input flow control
- ❑ local switch
- ❑ multisessions
- ❑ output flow control
- ❑ parity
- ❑ speed
- ❑ stop bits
- ❑ type
- ❑ username

set port backward switch

The **set port backward switch** specifies a switch character or string that reopens the next lower numbered session, already established at your port, from within the current session without returning to local mode. When defining this switch, use a unique, unused character (such as Control B) or a string of characters. To clear an existing switch, specify **none**, which is the default.

On virtual (*telnet*) ports, the **backward** switch is limited to one printable character. If the user tries to set this switch to more than one character, i.e., a string, the setting is ignored and the previous **backward** switch is restored.

On non-virtual ports, a **backward** switch string can range from 1 to 16 characters.

Syntax

backward [switch] {string, none}

<i>string</i>	Specifies a character or string (up to 16 characters long) that reopens the next lower numbered session, already established at your port, from within the current session without returning to local mode. It is recommended that you specify an unused Control (^) character. Make sure there are no conflicting uses for the character you select. The Control key ^<key> followed by a character indicates a control sequence (i.e., the key combination ^B means CTRL B).
<i>none</i>	Specifies that there is no character string that can be typed to return to the local command mode. Use none to remove a previously defined backward switch character or string.

set port break

The **set port break** command specifies how the **Break** key is interpreted during a session.

Syntax

set port break {local, remote}

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
remote	Causes the server to ignore Break signals.

set port character size

The **set port character size** command specifies the number of bits per character for data characters that are transmitted/received over the server serial interface (e.g., between the server and the device connected to the port).

Syntax

set port character size {5,6,7,8}

5	Specifies that the port serial interface will transmit/receive data characters using a five-bits-per-character format
6	Specifies that the port serial interface will transmit/receive data characters using a six-bits-per-character format
7	Specifies that the port serial interface will transmit/receive data characters using a seven-bits-per-character format.
8	Specifies that the port serial interface will transmit/receive data characters using an eight-bits-per-character-format. This is the default setting for the character size characteristic.

set port default session mode

The **set port default session mode** command specifies the mode to which all sessions are initially set. This characteristic does not apply to parallel ports.

Syntax

set port default session mode {**interactive**, **pasthru**, **passall**, **transparent**}

interactive	Specifies that the server will initially set all sessions so that all switching characters, and XON/XOFF flow control recognition, are enabled. This is the default.
pasthru	Specifies that the server will initially set all sessions so that all switching characters are interpreted as data. Note that XON/XOFF flow control may still be used in this mode.
passall	Specifies that the server will initially set all sessions so that all switching characters, and XON.XOFF flow control recognition are disabled. Use this mode whenever full data transparency is required, but option negotiations need to be recognized.
transparent	Specifies that the server will initially tell its partner that a LAT session is <i>passall</i> , but act locally as if it were <i>pasthru</i> . This mode is invalid for LAT sessions on ports whose port access characteristic is <i>remote</i> or <i>dynamic/LAT</i> . Use this mode whenever full data transparency is required, but no option negotiations are to be recognized.

set port dialup

The **set port dialup** option sets the **dialup** characteristic to indicate whether or not the port is connected to a dial-up line. When a Lat port connects to a host, the current state of that port's **dialup** characteristic is passed in the LAT connect message. The host then takes appropriate action for a dial-up line based on the setting of the **dialup** characteristic.

Syntax

port [*port-list*, all] **dialup** {enabled, disabled}

<i>port-list</i>	Specifies the ports that are connected to a dial-up line.
all	Specifies that all ports are connected to a dial-up line.
enabled	Indicates the port is connected to a dial-up line.
disabled	Indicates the port is not connected to a dial-up line. This is the default.

Example

A **show port *port-list* characteristics** command display looks like this:

```
Local> show port port-list characteristics
Enabled Characteristics:
Autobaud, Autoprompt, Broadcast, Dialup, Inactivity Logout,
Input Flow Control, Lock, Loss Notification, Message Codes,
Output Flow Control, Verification
```

set port flow control

The **set port flow control** command specifies the type of flow control used by the server to control data transfers to and from the port.

Syntax

set port flow [control] {CTS, XON, enabled, disabled}

CTS	Configures the control lines for flow control (CTS/RTS).
XON	Specifies XON/XOFF flow control. The server sends XOFF when its buffers are nearly full, and sends XON when the buffer level reaches a safe level. This is software flow control.
enabled	Specifies XON/XOFF. This is the default.
disabled	Specifies no flow control and disables RTS and CTS control signals.

set port forward switch

The **set port forward switch** specifies a switch character or string that reopens the next available, higher-numbered session already established at your port. When defining this switch, use a unique, unused character (such as Control F) or a string of characters. To clear an existing switch, specify **none**, which is the default.

On virtual (*telnet*) ports, the **forward** switch is limited to one printable character. If the user tries to set this switch to more than one character, i.e., a string, the setting is ignored and the previous **forward** switch is restored.

On non-virtual ports, a **forward** switch string can range from 1 to 16 characters.

Syntax

forward [switch] {string, none}

<i>string</i>	Specifies a character or string (up to 16 characters long) that reopens the next available, higher-numbered session already established at your port. It is recommended that you specify an unused Control (^) character. Make sure there are no conflicting uses for the character you select. The Control key ^<key> followed by a character indicates a control sequence (i.e., the key combination ^F means CTRL F).
none	Specifies that there is no character string that can be typed to return to the local command mode. Use none to remove a previously defined forward switch character or string.

set port input flow control

The **set port input flow control** command specifies flow control direction.

Syntax

set port input flow [control] {enabled, disabled}

CTS	Configures the control lines for flow control (CTS/RTS).
XON	Specifies XON/XOFF flow control. The server sends XOFF when its buffers are nearly full, and sends XON when the buffer level reaches a safe level. This is software flow control.
enabled	Specifies XON/XOFF. This is the default.
disabled	Specifies no flow control and disables RTS and CTS control signals.

set port local switch

The **set port local switch** command specifies a switch string you can use to reenter local mode from service mode. The switch string or character can be a keyboard character; however, you should use a unique string or character (such as Control L). You can clear an existing switch by specifying **none**, which is the default.

Syntax

set port local [switch] {*string*, none}

<i>string</i>	Specifies the string (up to 16 characters long) that a user will type to return to the local command. It is recommended that you specify an unused CTRL character. Be sure that there are no conflicting uses for the character you select. If you do specify a CTRL character, when you type the character it will be displayed as ^<key>. For example, if you type CTRL B, your terminal will echo the characters ^B. You can use the ^<key> followed by a character to indicate a control sequence (i.e., the key combination ^B means CTRL B).
none	Specifies that there will not be a string that a user can type to return to the local command mode. This command can be used to remove a previously-defined local switch character.

set port multisessions

The **set port multisessions** command allows a terminal to display two active session windows simultaneously on a single communications line.

Syntax

port [*port-list*, all] **multisessions** {enabled | **disabled**}

<i>port-list</i>	Defines the ports that will support dual session management.
all	All ports will support dual session management.
enabled	The terminal can display two active session windows simultaneously on a single communication line. Enabling a port for multisessions allows an attached terminal to be put into multisessions mode, but does not actually put the terminal into multisessions mode (i.e., the port recognizes incoming protocol messages but does not initiate protocol messages from the terminal server).
disabled	The terminal will not support dual session management.

Example

The display for a **show port** (or **list port**) command with multisessions enabled looks like this:

```
Local>show port port-list characteristics
```

```
Enabled Characteristics:
Autobaud, Autoprompt, Broadcast, Inactivity Logout,
Input Flow Control, Lock, Loss Notification, Message Codes,
Multisessions, Output Flow Control, Verification
```

set port output flow control

The **set port output flow control** command is a non-privileged option that specifies flow control direction.

Syntax

set port output flow [control] {enabled, disabled}

enabled	Specifies that the server port will use flow control for output data communications. This is the default.
disabled	Specifies that the server port will not use flow control for output data communication.

set port parity

The **set port parity** command specifies the port parity as even, odd, or none.

Syntax

set port parity {even, odd, none}

even	Specifies that the port will ensure that each character byte that is transmitted or received contains an even number of 1's, including the parity bit. If the port receives a byte that contains an odd number of 1 bits, it indicates to the server that an error has occurred.
odd	Specifies that the port will ensure that each character byte that is transmitted or received contains an odd number of 1's, including the parity bit. If the port receives a byte that contains an even number of 1 bits, it indicates to the server that an error has occurred.
none	Specifies that the port will not include a parity bit for error checking. This is the default.

set port speed

The **set port speed** command specifies the port speed in bits per second. The permitted values are 50, 75, 110, 134.5, 150, 200, 300, 600, 1200, 1800, 2400, 3600, 4800, 9600, 19200, and 38400. The default is **9600**. Port speed refers to both input and output speeds.

Syntax

set port speed *speed*

<i>speed</i>	Specifies the input and output port speed, in bits per second, to which the specifies ports will be set. Split speed operation (input speed is different from output speed) is not supported.
--------------	---

set port stop bits

The **set port stop bits** command instructs the server to use 1, 1.5, or 2 stop bits when outputting a character.

Syntax

set port stop [bits] {1,1.5, 2}

bit value	Specifies the number of bit time intervals between successive characters. The default is 1 .
-----------	---

set port type

The **set port type** command specifies the port device as hardcopy or softcopy. This option affects the local mode handling of the **Delete** key. Hardcopy displays deleted characters between backslashes.

Syntax

set port type {hardcopy, softcopy}

hardcopy	Specifies that the terminal is a hardcopy (a printing or non-video terminal) terminal, or will emulate the operation of a hardcopy terminal. Generally, this means that the attached device produces output on paper. For this type of device, when you delete characters, the deleted characters are echoed between backslash characters (\).
softcopy	Specifies that the terminal produces output on a video display. This type of terminal does echo character deletions when you use the Delete key. This is the default.

set port username

The **set port username** command allows the user name associated with a port to consist of from 1 to 16 ASCII characters (null string, “ ”). The default is no username.

Syntax

set port username {*username*}

<i>username</i>	Specifies the name to be assigned to the port. The name can be between 1 to 16 ASCII characters in length. You must enclose the name in quotation marks if it contains blanks or tabs. The server accepts the name exactly as it is specified, including spaces, commas, and upper-case or lower-case letters. To cancel a previously-defined username, specify a null string. Strings longer than 16 characters are truncated.
-----------------	---

set privileged

The **set privileged** command allows the port you are using to perform privileged operations. More than one port on a terminal server can be privileged. You cannot use this command unless you know the privileged password.

When you issue the **set privileged** command, you must supply the privileged password, which is set using the **define server privileged password** command.

The local command mode prompt changes to indicate that the port is privileged. For example, the default local command mode prompt for a non-privileged port is *Local>*. The default local command mode prompt for a privileged port is *Local>>*.

This command is for privileged users only. Any user who knows the privileged password can use the **set privileged** command.

Syntax

set {privileged, noprivileged}

privileged	Specifies that the port will have privileged status. You can set operational and permanent parameters for the servers, and for any or all ports, sessions, or services.
noprivileged	Specifies that the port will have non-privileged status. You can set parameters for the current port or session. This is the default privilege level.

Example

In this example, the default password **system** is entered at the password prompt:

```
Local> set privileged
Password: system      (not displayed)
Local>>
```

set session

The **set session** command specifies the characteristics for your current LAT session. This current session is the last LAT session you entered while in service mode.

Syntax

set session {**interactive**, **pasthru**, **passall**}

interactive	Enables the special switch characters and messages at the terminal server port. This is the default.
pasthru	Disables all the switch characters and server messages at the server port. This happens while you are in the affected session. Use this option when you transfer ASCII files.
passall	Disables all the switch characters, server messages, and XON/XOFF flow control at the server port. This happens while you are in the affected session. Use this option when you transfer binary files.

Example

While you are in a LAT session, this command disables all the switch characters, flow control characters, and server messages at the port:

```
Local> set session passall
```

show ports

The **show ports** command displays information about the server ports. This information includes the characteristics assigned using the **set port** command. You can enter this command as either singular (**show port**) or plural (**show ports**).

Syntax

show ports [all, *port-list*] [**characteristics**, **summary**]

all	Specifies that the summary information for all ports is displayed. This will always default to a summary screen.
<i>port-list</i>	Specifies single or multiple ports for which information is displayed. The default is the port you are using.
characteristics	Displays the characteristics that can be set for a specified port or ports. This is the default when you specify either no port, one port, or a list of ports.
summary	Displays the summary screen showing Port Number, Access, Status, and Service Offered. The <i>Status</i> field can contain the following values: Connected - The port is connected to a service. Idle - The port is not in use. Local Mode - The port is in local command mode. Permanent - The port exists on this server. Used only for list port summary display.

Examples

This command displays a summary from the operational database of all ports on the server:

```
Local> show ports all
```

This command displays the summary from the operational database for ports 1, 2, and 3 on the server.

```
Local> show ports 1-3 summary
```

PORT	ACCESS	STATUS	SERVICES OFFERED
1	LOCAL	CONNECTED	
2	REMOTE	IDLE	
3	REMOTE	IDLE	

show server

The **show server** command shows a static display of information from the operational database about the server.

Syntax

show server [characteristics]

characteristics	Displays characteristic for the server, including the LAT group codes groups supplied by the server. The server displays the operational values for server characteristics that have been established by the server manager. This is the default.
-----------------	---

Example

This command displays the characteristics of the server defined in the operational database:

```
Local> show server characteristics
```

show service

The **show service** command displays information about LAT services that are currently available in the operational database to which you can connect.

Syntax

show service [all, local, *service_name*] [characteristics, status, summary]

all	Displays information for all LAT services (both available and unavailable) in the database that match your current group codes. This is the default selection displayed on show commands. However, if you don't specify <i>all</i> in the command, the server displays only the available LAT services.
local	Displays information for all LAT services (both available and unavailable) offered by the local server that match your current group codes.
<i>service-name</i>	Displays information for the specified service, if it matches your current group codes.
characteristics	Displays all characteristics for your specified local services, including name, identification string, and ports. Only the name and identification string are displayed for remote LAT services.
status	Displays information about the specified services, including rating, and identification string of node names and their statuses.
summary	Displays a single line of information for each of the services specified, including the name, status and identification of the service. This is the default if no service name is supplied.



Examples

This command displays status information about the service *document*:

```
Local> show services document
```

This command displays the summary from the operational database for all local services:

```
Local> show services local
```


show sessions

The **show sessions** command displays the session number, type, and host service session information from the operational database for the current user's port.

Syntax

show sessions

Example

This command displays session information for the port from which the command was issued:

```
Local> show sessions
```

show users

The **show users** command displays information from the operational database about port users, including the user names, port numbers, statuses, and services used.

Syntax

show users

Example

This command displays user names affiliated with local mode ports that are currently active:

```
Local> show users

                                     24 August 1995 20:05:01

Port Username           Status           Service
 8   A. Morse           Connected       Bingo
11   B. Little          Local Mode
```

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