

Virtual Console

Description

The Virtual Console feature allows you to access dial and router shelves connected to a system controller. During a system controller session, you can connect to a router or dial shelf at the same privilege level as the current system controller session.

By entering one command, you can Telnet directly to a shelf, provide a username and password, and then go to the same privilege level as the system controller.

Benefits

The Virtual Console feature allows you to connect to all managed shelves through one session and switch between sessions easily. You do not have to reenable privileged EXEC mode every time you switch to another shelf session.

This feature is useful when you need to do quick tasks on different managed shelves.

List of Terms

shelf—An access server or router managed by the system controller.

system controller—A Cisco IOS-based device that aids in the monitoring and management of a number of access servers and routers.

Security

The Virtual Console feature has the following security aspects:

- The system controller and managed shelves typically communicate over a private network. Thus, unauthorized access is limited.
- Shelf units will only allow **attach shelf** commands from the IP address for the system controller, as specified in the **syscon address** command.
- The system controller will only accept requests from the connected shelf.

Prerequisites

In order to use the Virtual Console feature, you must first configure the Shelf Discovery and Autoconfiguration feature. Refer to the “Shelf Discovery and Configuration” feature documentation for these tasks.

Virtual Console Tasks

To use the virtual console feature, perform the following tasks beginning in user EXEC or privileged EXEC mode:

Task	Command
On the system controller, connect to the managed shelf.	attach shelf <i>shelf-id</i>
Enter commands on the managed shelf.	

You will be connected to the managed system until one of the following occurs:

- You enter another **attach shelf** command.
- You enter the **exit** or **quit** commands at the EXEC prompt.
- You leave the session idle for a length of time (determined by the **exec-timeout** command on the shelf).
- You locally terminate the connection (^x). (In a Telnet connection, ^x will suspend the connection. With the **attach shelf** command, ^x will break the connection.)

In every case except the first, control is returned to the system controller. In the first case, the connection to the current shelf is closed and a new connection to the specified shelf is opened.

Virtual Console Examples

In the following example, a user connects to a managed shelf from the system controller from user EXEC and privileged EXEC modes. Notice that the user connects to the shelf at the current user privilege level.

```

systemcont> show syscon
Shelf# 2 172.23.66.102 SDB update 09:09:16 PST Jan 27 1998
systemcont> attach shelf 2
Trying 172.23.66.102 ... Open

shelf2> show syscon
Current uptime 09:10:00 PST Jan 27 1998, system controller 172.23.66.100
Last hello packet received at 09:09:16 PST Jan 27 1998
8625 Total SDP packets
    0 packets with bad MD5 hash
    4311 Hello packets received
    4314 Hello packets sent
    0 Command packets received
    0 Command packets sent
shelf2> quit

[Connection to 172.23.66.102 closed by foreign host]
systemcont> enable
Password:
systemcont# attach shelf 2

```

```
Trying 172.23.66.102 ... Open

shelf2# show syscon sdp
Current uptime 09:10:45 PST Jan 27 1998, system controller 172.23.66.100
Last hello packet received at 09:10:14 PST Jan 27 1998
8627 Total SDP packets
    0 packets with bad MD5 hash
    4312 Hello packets received
    4315 Hello packets sent
    0 Command packets received
    0 Command packets sent
shelf2# exit

[Connection to 172.23.66.102 closed by foreign host]
systemcont#
```

Command Reference

This section documents new or modified commands. All other commands used with this feature are documented in the Cisco IOS Release 11.3 command references or in other 11.3 AA feature documentation.

attach shelf

To start a session on a manager dial or router shelf, use the **attach shelf** EXEC command.

attach shelf *shelf-number*

Syntax Description

shelf-number Number of the shelf to attach to. The number can range from 0 to 9999.

Command Mode

EXEC

Usage Guidelines

This command first appeared in Cisco IOS Release 11.3 AA.

If you are connected to a system controller, use this command to start a session with a managed shelf.

If you are already connected to a shelf unit, this command disconnects from the current shelf and connects to the specified shelf.

Example

In the following example, a user connects to a managed shelf from the system controller from user EXEC mode. Notice that the user connects to the shelf at the current user privilege level.

```
systemcont> show syscon
Shelf# 2 172.23.66.102 SDB update 09:09:16 PST Jan 27 1998
systemcont> attach shelf 2
Trying 172.23.66.102 ... Open

shelf2> show syscon
Current uptime 09:10:00 PST Jan 27 1998, system controller 172.23.66.100
Last hello packet received at 09:09:16 PST Jan 27 1998
8625 Total SDP packets
    0 packets with bad MD5 hash
    4311 Hello packets received
    4314 Hello packets sent
    0 Command packets received
    0 Command packets sent
shelf2> quit

[Connection to 172.23.66.102 closed by foreign host]
systemcont>
```

Related Commands

syscon address
syscon shelf-id