Cisco VFrame Data Center Command Reference

Release 1.2

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
http://www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Text Part Number: OL-15325-01

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

CCDE, CCENT, Cisco Eos, Cisco Lumin, Cisco StadiumVision, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn is a service mark; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0804R)

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

Cisco VFrame Data Center Command Reference
© 2007-2008 Cisco Systems, Inc. All rights reserved.

FINAL DRAFT—CISCO CONFIDENTIAL

CONTENTS

FINAL DRAFT—CISCO CONFIDENTIAL

CHAPTER 2

FINAL DRAFT—CISCO CONFIDENTIAL

FINAL DRAFT—CISCO CONFIDENTIAL

Preface

This preface describes who should read the Cisco VFrame Data Center Command Reference, how it is organized, and document conventions.

This preface includes the following sections:

Document Objectives

This document is a guide to the command-line interface (CLI) for the Cisco VFrame Data Center Director operating system software. It explains how to use the CLI and provides a alphabetical list of all available CLI commands.

Audience

We provide this guide to administrators who install, configure, and manage Cisco equipment. This guide assumes that administrators have prior Ethernet, Fibre Channel, and network administration experience.

Document Organization

This guide is organized as follows:

Chapter	Title	Description
Chapter 1	Using the CLI	Describes CLI fundamentals.
Chapter 2	CLI Commands	Describes the commands alphabetically.

FINAL DRAFT—CISCO CONFIDENTIAL

Conventions

This guide uses the following conventions:

Convention	Description
boldface font	Commands, command options, and keywords are in **boldface**. Bold text indicates Chassis Manager elements or text that you must enter as-is.
italic font	Arguments in commands for which you supply values are in *italics*. Italics not used in commands indicate emphasis.
Menu1 > Menu2 > Item…	Series indicate a pop-up menu sequence to open a form or execute a desired function.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
`screen` font	Terminal sessions and information the system displays are in `screen` font.
`boldface screen` font	Information you must enter is in **`boldface screen`** font.
`italic screen` font	Arguments for which you supply values are in *`italic screen`* font.
^	The symbol ^ represents the key labeled Control—for example, the key combination ^D in a screen display means hold down the Control key while you press the D key.
< >	Nonprinting characters, such as passwords are in angle brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

Notes use the following conventions:

Note Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

Cautions use the following conventions:

Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

FINAL DRAFT—CISCO CONFIDENTIAL

Related Documentation

Table 1 describes the documentation available for Cisco VFrame Data Center, Version 1.2.

Table 1 Cisco VFrame Data Center Documentation

Document Title	Available Formats
Cisco VFrame Data Center Documentation Roadmap	This guide is available in the following formats: • Printed document included with the product. • On the product recovery CD-ROM. • On Cisco.com.
Cisco VFrame Data Center Installation and Configuration Guide	This guide is available in the following formats: • On the product recovery CD-ROM. • On Cisco.com.
Cisco VFrame Data Center Administration Guide	This guide is available in the following formats: • On the product recovery CD-ROM. • On Cisco.com. • Included in the online help in HTML and PDF formats.
Context-sensitive online help	To access online help, perform any of the following tasks: • Choose **Help > Contents** to open the help system. • Choose **Help > For This Page** to obtain help on the page currently in the window. • Click the **Help** button in a dialog box.
Release Notes for Cisco VFrame Data Center	On Cisco.com.
Cisco VFrame Data Center Programmer's Guide	This guide is available in the following formats: • On the product recovery CD-ROM. • On Cisco.com.
Cisco VFrame Data Center Regulatory Compliance Information	This guide is available in the following formats: • Printed document included with the product. • On the product recovery CD-ROM. • On Cisco.com.
Cisco VFrame Data Center Open Source Licenses	This guide is available in the following formats: • On the product recovery CD-ROM. • On Cisco.com.
Important Safety Information	Printed document included with the product.

FINAL DRAFT—CISCO CONFIDENTIAL

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

CHAPTER 1

Using the CLI

This chapter provides a general overview of the Cisco VFrame Data Center command-line interface (CLI). It describes how to start a CLI session, how to enter commands, and how to view CLI online help. Details about individual commands appear later in this guide.

This chapter includes the following sections:

Setting Up the Director

This guide assumes that your Director has already been set up. If this is not the case, then set up your Director by connecting to the management port and running the VFrame Data Center **setup** command from the command line. See the *Cisco VFrame Data Center Installation and Configuration Guide* for complete information about how to set up a Director.

Starting a CLI Session

To start a CLI session, perform the following steps:

Step 1 Start an SSH client.

Step 2 Create a connection to the Director.

Step 3 Log in to the Director using **admin** as your username.

FINAL DRAFT—CISCO CONFIDENTIAL

Note admin and macrouser are two types of accounts that you use on a Director. The admin account provides all of the CLI commands. The macrouser account provides a document named LOM_INVENTORY_REFERENCE.TXT. This document is a LOM inventory reference used for building LOM inventory files. See the *Cisco VFrame Data Center Administration Guide* for complete information about the admin and macrouser accounts.

When you are connected, you will see the command line. Example 1-1 shows an example of what you see when you log in:

Example 1-1 VFrame Data Center Director Command Line

```
SSH Secure Shell 3.2.0 (Build 267)
Copyright (c) 2000-2002 SSH Communications Security Corp - http://www.ssh.com/

This copy of SSH Secure Shell is a commercial version
licensed to CD-ROM customer, N/A.

Last login: Tue Nov 13 16:34:06 2007
VFrame Data Center 1.1.4
Copyright 2007, Cisco Systems,Inc.

test-100#
```

Command Modes

Table 1-1 lists the command modes and command prompts.

Table 1-1 Command Modes

Mode	Command Prompt
User EXEC	`Exec#`
Global configuration	`config#`
Ethernet interface configuration	`config-eth#`

You enter a question mark (?) at the CLI prompt to list the commands available in the current mode.

Using User Exec Mode

All CLI sessions begin in user EXEC mode. This mode provides system commands and commands for viewing the system configuration. In user EXEC mode, you can perform the following tasks:

- Ethernet interface configuration
- File management
- Database management
- Debugging
- Installations and upgrades
- System configuration

FINAL DRAFT—CISCO CONFIDENTIAL

- System information management
- Remote connection configuration

Following is a list of the commands available in user EXEC mode:

```
test-100# ?
User Exec commands:
    clear       Clear commands
    config      Enter configuration mode
    copy        Copy commands
    db          Manage Database Server
    debug       Debug commands
    del         Delete file(s)
    exit        Exit from the EXEC
    install     Install and upgrade commands
    no          Disable debugging functions
    ping        Ping a remote ip address
    reboot      Reboot the system
    setup       Configure the system
    show        Show running system information
    shutdown    Shutdown the system
    ssh         Ssh to a remote ip address
    tech        Tech commands
    telnet      Telnet to a remote ip address
    traceroute  Trace the route to a remote ip address
test-100#
```

In user EXEC mode, you access global configuration mode.

Using Global Configuration Mode

When you enter the **config** command in user EXEC mode, you enter global configuration mode. In global configuration mode, you can perform the following tasks:

- Clock management
- GIR management
- IP configuration
- License configuration
- NTP configuration
- HA configuration
- Password management
- VHA configuration

Following is a list of the commands available in global configuration mode:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# ?
Configure commands:
    clock       Hardware clock Configuration
    do          EXEC command
    end         Exit from configure mode
    exit        Exit from configure mode
    gir         Golden Image Repository configuration
    interface   Configure interface
    ip          Configure IP features
    license     License configuration
```

FINAL DRAFT—CISCO CONFIDENTIAL

```
    no          Negate a command or set its defaults
    ntp         NTP Configuration
    redundancy  Redundancy Configuration
    user        Configure user details
    vha         VFrame Host Agent configuration
test-100(config)#
```

From the global configuration mode, you access the Ethernet interface configuration mode.

Using Ethernet Interface Configuration Mode

When you enter the **interface eth <0-2>** command in global configuration mode, you enter ethernet interface configuration mode. In ethernet interface configuration mode, you enable or disable Ethernet interfaces 0, 1 and 2. Following is a list of the commands in ethernet interface configuration mode:

```
test-100# config
Enter configuration commands, one per line.  End with CNTL/Z.
test-100(config)# interface eth 0
test-100(config-eth)# ?
Configure ethernet interface:
    do        EXEC command
    exit      Exit from this submode
    no        Negate a command or set its defaults
    shutdown  Shutdown the interface
test-100(config-eth)#
```

Entering and Exiting Modes

Most commands are mode-dependent. For example, you can configure clock settings in global configuration mode only. To use the various commands, you must enter and exit CLI modes. Use the **exit** and **end** commands to exit modes.

The following example shows you how to enter and exit the global configuration mode:

```
test-100# config
Enter configuration commands, one per line.  End with CNTL/Z.
test-100(config)# exit
test-100#
```

The following example shows you how to enter and exit ethernet interface configuration mode:

```
test-100# config
Enter configuration commands, one per line.  End with CNTL/Z.
test-100(config)# interface eth 0
test-100(config-eth)# exit
test-100(config)# exit
test-100#
```

The following example shows you how to exit ethernet interface configuration mode to the user EXEC mode using the **end** command:

```
test-100(config-eth)# end
test-100#
```

The following example shows you how to exit global configuration mode to the user EXEC mode using the **end** command:

```
test-100(config)# end
```

FINAL DRAFT—CISCO CONFIDENTIAL

```
test-100#
```

Note If you enter the **exit** command in user EXEC mode, your SSH session ends.

Command Help

Enter part of a command string, and end it with a question mark (?) to display options that you can use to complete the string:

```
test-100# c?
clear   config  copy
```

To facilitate command entry, you do not need to enter CLI commands in their entirety. You can enter just enough of each command or argument to make it uniquely identifiable.

```
test-100# cop ?
  backup  Make a local backup
  file    Copy a file to a remote URL.
  logs    Dump logs to a remote URL.
  setup   Copy the setup config to a remote site
  url     URL keywork
```

When enough characters have been entered to uniquely identify a command or keyword in a command string, you can leave the partially-typed command or keyword, enter a space, and then add additional keywords or arguments, or you can press the **Tab** key to complete the commands or keywords to improve readability.

Correcting Commands

The CLI responds to invalid command input by identifying the first letter of the input with an carat immediately below the error, followed by text describing the error. The first example shows a misspelled command.

```
test-100# pong
          ^
% invalid command detected at '^' marker.
test-100#
```

In the next example, part of the command is incorrect. The carat indicates that the **file** keyword cannot immediately follow the **backup** keyword in this command.

```
test-100# copy backup file
                     ^
% invalid command detected at '^' marker.
test-100#
```

The system response to command-line errors is different when you use the question mark (?) to obtain help for a command. In this case, the system repeats your input following the subsequent prompt, as shown in the following example.

```
test-100# show interfce ?
% invalid command
test-100# show interfce
```

FINAL DRAFT—CISCO CONFIDENTIAL

Editing the CLI

Command-line editing lets you modify a command-line command that you have just entered or a command line that you entered previously in the CLI session. The CLI supports a variety of ways to edit the currently displayed command line. Table 1-2 lists and describes these options.

Table 1-2 Key Stroke Shortcuts

Key Strokes	Description
Ctrl-A	Moves the cursor to the beginning of the line.
Ctrl-B	Moves the cursor left (back) one character.
Ctrl-D	Deletes the current character.
Ctrl-E	Moves the cursor to the end of the line.
Ctrl-F	Moves the cursor to the right (forward) one character.
Ctrl-K	Deletes text from cursor to the end of the line.
Ctrl-L	Refreshes the input line.
Ctrl-N	Displays the next command in the history queue.
Ctrl-P	Displays the previous command in the history queue.
Ctrl-Q	Returns to user EXEC mode. **Note** If a command is entered on the command line, execute the command before returning to user EXEC mode.
Ctrl-T	Transposes the current and previous characters.
Ctrl-U	Deletes all text to the left of the cursor.
Ctrl-W	Deletes the text of a word up to cursor.
Ctrl-Z	Returns you to privileged EXEC mode.
Esc-B	Moves the cursor left (back) one word.
Esc-C	Converts characters, from the cursor to the end of the word, to upper case.
Esc-D	Deletes characters from the cursor through remainder of the word.
Esc-F	Moves the cursor right (forward) one word.
Esc-L	Converts characters, from the cursor to the end of the word, to lower case.
down-arrow	Displays the next command in the history queue.
up-arrow	Displays the previous command in the history queue.
left-arrow	Moves the cursor left (back) one character.
right-arrow	Moves the cursor right (forward) one character.

Exiting the CLI Session

To exit a CLI session, return to user EXEC mode and enter the **exit** command.

```
test-100# exit
```

The CLI session ends.

FINAL DRAFT—CISCO CONFIDENTIAL

Using the Documentation

The command pages in this guide provide information about each command. Each command page is divided into subsections, providing easy access to information. Each command page begins with a brief, high-level description of the command, followed by the command syntax.

Text Conventions

The following text conventions indicate how the command is entered on the command line:

- Text in **bold** font represents text that you enter exactly as it appears.
- Text in *italicized* font represents variables that you replace with actual values when you enter a command at the command line.
- Square brackets [ ] enclose optional syntax. Do not enter square brackets in the CLI.
- Braces { } enclose required syntax. Do not enter braces in the CLI.
- The pipe character | delineates between selections in syntax. If command X requires argument Y or argument Z, but not both at the same time, the syntax will appears as follows:

  X {**Y** | **Z**}

The following sections describe the subsections in the command descriptions.

Command Description

The Command Description subsection provides a brief, high-level description of the command.

Syntax Description

The Syntax Description subsection provides a table that describes all syntax arguments.

Defaults

The Defaults subsection provides any defaults that are built into the command.

Command Modes

The Command Modes subsection indicates the command mode that you must be in to execute the command.

Usage Guidelines

The Usage Guidelines subsection provides additional information and details to help you use a command to its full potential.

FINAL DRAFT—CISCO CONFIDENTIAL

Command History

The Command History subsection lists when the command was added to the CLI and any changes that were made to the command.

Examples

The Examples subsection provides command examples and output.

Related Commands

The Related Commands subsection provides related CLI commands.

CHAPTER 2

CLI Commands

This chapter includes the VFrame Data Center CLI. The commands in this chapter provide detailed information about the CLI.

FINAL DRAFT—CISCO CONFIDENTIAL

FINAL DRAFT—CISCO CONFIDENTIAL

clear setup

To clear the current setup configuration, use the **clear setup** command in user EXEC mode.

clear setup

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

It will take anywhere from 30 to 60 minutes for the Director to reboot. Once it has rebooted, you can run the **setup** command on the iLO server to reconfigure your Director.

Examples

The following example clears the current setup configuration:

```
test-100# clear setup
Warning: Running clear setup will cause the system to shut down VFrame
Do you really want to clear the setup configuration: (yes/no) [no]? yes
INFO: Removing admin password
No password found for user macrouser.
Broadcast message from root (pts/0) (Wed Dec 27 10:08:55 2006):
The system is going down for reboot NOW!
test-100#
```

Related Commands

Command	Description
setup	Performs system configuration.

FINAL DRAFT—CISCO CONFIDENTIAL

clock

To manage the system clock, use the **clock** command in global configuration mode.

clock {**set** *set-datetime* | **timezone**}

no clock {**set** *set-datetime* | **timezone**}

Syntax Description

set *set-datetime*	Sets the date and time on the system clock. Specify the date and time in *set-datetime*. The format is xx/xx/xxxx xx:xx:xx. The maximum number of characters is 100.
timezone	Sets the time zone you are currently in.

Defaults

The system clock is initially set to factory default.

Command Modes

Global configuration.

Command History

Release	Modification
1.2	This command was introduced.

Examples

The following example sets the time zone:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# clock timezone
Verify if there are running jobs...
There are 0 job(s) running.
Do you want to shut down the VFDC to run clock timezone command? (yes/no) [no] ?
```

Once you answer the preceding question, you enter the VFrame Data Center Director operating system. The redhat-config-date dialog box appears:

1. Choose the time zone you are in.
2. Click **OK**.
3. Press **Enter**.

Related Commands

Command	Description
ntp	Specifies the NTP peer and server.
show clock	Displays the current date and time.

FINAL DRAFT—CISCO CONFIDENTIAL

config

To enter global configuration mode, use the **config** command in user EXEC mode.

config [**terminal**]

Syntax Description

terminal	(Optional) Configures the system from the terminal.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Usage Guidelines

Enter either the **config** or **config terminal** command to enter global configuration mode.

Command History

Release	Modification
1.1	This command was introduced.

Examples

The following example changes EXEC mode to config mode by executing the **config** command:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)#
```

The following example changes EXEC mode to config mode by executing the **config terminal** command:

```
test-100# config terminal
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)#
```

Related Commands

Command	Description
exit	Exits modes.
ip	Configures IP settings.

FINAL DRAFT—CISCO CONFIDENTIAL

copy

To manage system files and patches, use the **copy** command in user EXEC mode.

copy {**backup setup | file** *pname/fname* **url** {**scp:// | ftp://**}*hname/pname*[*/fname*] **| logs url** {**scp:// | ftp://**}*hname/pname* **| setup** {**backup | url** {**scp:// | ftp://**}*hname/pname/fname*} **| url** *url/fname* {**install | license | setup**}}

Syntax Description

backup setup	Restores the local backup of the setup file.
file *pname/fname*	Copies a file to a remote URL. Specify the path and the filename in *pname/fname*. The maximum number of characters is 256.
hname/pname	Specify the hostname and the path in *hname/pname*. The maximum number of characters is 256.
hname/pname/fname	Specify the hostname, the path, and the filename in *hname/pname/fname*. The maximum number of characters is 256. **Note** *fname* is optional when it is used with the **file** command.
install | license | setup	Places a patch in the staging area. Retrieves a license file from a HTTP, TFTP, FTP or SCP server. Copies the local setup file to a remote site.
logs	Copies logs to a remote URL.
setup backup | url	Specify **backup** to create a local backup of the setup file or **url** to copy the setup config to a remote site.
url scp:// | ftp://	Specify the server type. Choose **scp://** or **ftp://**.
url *url/fname*	Retrieves a setup file from a HTTP, TFTP, FTP or SCP server. Specify the URL and filename in *url/file-name*. The maximum number of characters is 256.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Usage Guidelines

Typically, you obtain licenses or packages from Cisco.com.

When you save the license or package, use a name that is 80 characters or less.

The **copy** command is also useful for copying log files to your FTP or SCP server so that you can maintain copies, or send them to the Cisco Technical Assistance Center to help you resolve a problem.

Command History

Release	Modification
1.1	This command was introduced.

FINAL DRAFT—CISCO CONFIDENTIAL

Examples

The following example copies a patch to the installation staging area from an HTTP server that does not require user authentication:

```
test-100# copy url http://maintenance.example.com/vframe/VFrameDebug.zip install
Username:
Getting image files...
[OK]Unzipping files...
[OK]Verifying patch signature...
[OK]Installing files in staging area...
[OK]test-100#
```

The following example restores the local backup of a configuration file:

```
test-100# copy backup setup
Re-initialize the database. Warning erases and initializes all data in the database:
(yes/no) [no]? yes Start database sent mts message to system manager re-initializing the
database...
This will take some time...
```

Note Not all the output is shown in the preceding example.

Related Commands

Command	Description
del install	Deletes a patch from the installation staging area.
show files	Displays information about system files.
show license	Displays information about the product license.

FINAL DRAFT—CISCO CONFIDENTIAL

db

To manage databases, use the **db** command in user EXEC mode.

db {**backup** [**scp://** | **ftp://**]*directory/file-name* | **dev** {**0** | **1** | **2**} | **reset** | **restore** [**scp://** | **ftp://**]*directory/file-name* | **space** *reserved-space*}

Syntax Description

backup	Generates the database backup file.
dev {**0** | **1** | **2**}	Specify the backup device. Choose one of the following: **0**—Local machine **1**—NFS filer **2**—LUN
directory/file-name	Specify the directory and the file name. The maximum number of characters is 128.
reset	Resets the database to the original state.
restore	Restores the current database.
scp:// | ftp://	(Optional) Specifies a server type. Choose either **scp://** or **ftp://**.
space *reserved-space*	Reserves disk space for a database backup. Specify the reserved space in *reserved-space*. Valid reserve space ranges from 2 to 8 Gigabytes.

Defaults

The default path is /nwdisks/2.

Command Modes

User EXEC.

Usage Guidelines

Before you restore a database, disable redundancy if you are using a redundant setup. Also, ensure that no one is logged in to the system.

When you use **backup**, you can include path information. The backup file is created on the backup storage medium selected when using the **setup** command.

When you use **restore**, you can include path information. The backup file must be on the backup storage medium selected when using the **setup** command.

Command History

Release	Modification
1.1	This command was introduced.
1.2	Added the keywords **dev**, **reset** and **space**.

Examples

The following example backs up a database to a file named Jul2006.backup in the /workspace directory:

```
test-100# db backup /workspace/Jul2006.backup
waiting for physical backup to complete
Physical backup is completed.
```

FINAL DRAFT—CISCO CONFIDENTIAL

```
Save backup file
test-100#
```

The following example restores the backup file named Jul2006.backup:

```
test-100# db restore /workspace/Jul2006.backup
Stopping services
Waiting for 12 out of 13 processes to shutdown
Waiting for 10 out of 13 processes to shutdown
Waiting for 8 out of 13 processes to shutdown
Waiting for 7 out of 13 processes to shutdown
Waiting for 5 out of 13 processes to shutdown
Waiting for 4 out of 13 processes to shutdown
Waiting for 2 out of 13 processes to shutdown
Waiting for 1 out of 13 processes to shutdown
Waiting for 1 out of 13 processes to shutdown
Waiting for 0 out of 13 processes to shutdown
Restore DB from file...
Bring up
Wait for DB on-line...
Shutdown DB.
Starting services.
test-100#
```

Related Commands

Command	Description
copy	Manages license files, setup files and logs.
setup	Performs initial system configuration.

FINAL DRAFT—CISCO CONFIDENTIAL

debug services

To display debug and system logs in real time, use the **debug services** command in user EXEC mode. To disable debug display, use the **no** form of this command.

debug services {**aaad** | **daemons** | **database** | **dbmnt** | **dhcpwd** | **hdrh** | **hsrp** | **imagemgmt** | **ntpwd** | **syscfg** | **sysmgr** | **sysmnt** | **system** | **trend** | **vccjava** | **vccvha** | **vframe**}

Syntax Description

aaad	Displays the debug log for the Authentication, Authorization, and Accounting daemon in real time.
daemons	Displays the debug log for system daemons in real time.
database	Displays the debug log for the database service in real time.
dbmnt	Displays the debug log for the database mount service in real time.
dhcpwd	Displays the debug log for the DHCP service in real time.
hdrh	Displays the debug log for the High-Availability Data Replication Helper service.
hsrp	Displays the debug log for the Hot Standby Router Protocol service in real time.
imagemgmt	Displays the debug log for the golden image management subsystem in real time.
ntpwd	Displays the debug log for the NT Password service in real time.
syscfg	Displays the debug log for the system configuration service in real time.
sysmgr	Displays the debug log for the system manager service in real time.
sysmnt	Displays the debug log for the system mount service in real time.
system	Displays system syslog messages in real time.
trend	Displays the debug log for the trend service in real time.
vccjava	Displays the debug log for the Java subsystem in real time.
vccvha	Displays the debug log for the VCC_VHA subsystem in real time.
vframe	Displays VFrame syslog messages in real time.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The **debug** command is similar to the **show logging** command. The difference is that the debug display keeps the log open so that you see messages as they are added to the log. The **show logging** command displays the contents of the log at the time you enter the command.

FINAL DRAFT—CISCO CONFIDENTIAL

Press **Ctrl+C** to end the log display.

Examples

The following is sample output from the **debug services aaad** command:

```
test-100# debug services aaad
Sep 13 14:39:43,364 Added signal handler for SIGHUP
Sep 13 14:39:43,365 AAA daemon starting...
Sep 13 14:39:43,365 active_start()
test-100#
```

The following is sample output from the **debug services database** command:

```
test-100# debug services database
11:20:58 Maximum server connections 8
11:25:58 Checkpoint Completed:  duration was 0 seconds.
11:25:58 Checkpoint loguniq 198, logpos 0x4c9018, timestamp: 0x355777

11:25:58 Maximum server connections 8
11:30:58 Checkpoint Completed:  duration was 0 seconds.
11:30:58 Checkpoint loguniq 198, logpos 0x4d4018, timestamp: 0x3557f7

11:30:58 Maximum server connections 8
11:35:58 Checkpoint Completed:  duration was 0 seconds.
11:35:58 Checkpoint loguniq 198, logpos 0x4df018, timestamp: 0x355877
test-100#
```

Related Commands

Command	Description
show logging	Displays debugging or system logs.
show tech	Displays technical information that is useful for system debugging.

FINAL DRAFT—CISCO CONFIDENTIAL

del install

To delete a patch, use the **del install** command in user EXEC mode.

del install staged *patch_name*

Syntax Description

staged *patch_name*	Installs a patch from the patch staging area. Specifiy the patch name in *patch_name*. The maximum number of characters is 80.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Usage Guidelines

Deleting a patch from the installation staging area does not uninstall the patch. You can not uninstall a patch that you installed using the **install** command.

Use the **show install staged** command to determine the patch name.

Command History

Release	Modification
1.1	This command was introduced.

Examples

The following example deletes the VFrameDebug package from the staging area:

```
test-100# del install staged VFrameDebug
test-100#
```

Related Commands

Command	Description
copy	Manages system files.
install	Installs software upgrades or patches.
show install	Displays information about packages in the installation staging area.

FINAL DRAFT—CISCO CONFIDENTIAL

do

To execute a user EXEC mode command while in any configure mode, use the **do** command in Global configuration mode or ethernet interface configuration mode.

do *exec-command*

Syntax Description

exec-command	Specify any user EXEC mode command.

Defaults

No default behavior or values.

Command Modes

Global configuration.

Ethernet interface configuration.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

Include the parameters required by the command.

Examples

The following example pings 192.0.2.10:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# do ping 192.0.2.10
PING 192.0.2.10 (192.0.2.10) 56(84) bytes of data.
64 bytes from 192.0.2.10: icmp_seq=0 ttl=253 time=0.378 ms
64 bytes from 192.0.2.10: icmp_seq=2 ttl=253 time=0.325 ms
--- 192.0.2.10 ping statistics ---
4 packets transmitted, 2 received, 50% packet loss, time 3016ms
rtt min/avg/max/mdev = 0.325/0.351/0.378/0.032 ms, pipe 2
test-100(config)#
```

Related Commands

Command	Description
exit	Exits ethernet interface configuration mode to global configuration mode, global configuration mode to user EXEC mode, and the current CLI session.
end	Exits ethernet interface configuration mode to user EXEC mode and global configuration mode to user EXEC mode.

FINAL DRAFT—CISCO CONFIDENTIAL

end

To exit modes, use the **end** command in ethernet interface configuration and global configuration modes.

end

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

Global configuration.

Ethernet interface configuration.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The **end** command exits ethernet interface configuration mode to user EXEC mode and global configuration mode to user EXEC mode.

The **exit** command exits ethernet interface configuration mode to global configuration mode, global configuration mode to user EXEC mode, and the current CLI session.

Examples

The following example shows how to enter the global configuration mode and then return to user EXEC mode using the **end** command:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# end
test-100#
```

The following example shows how to enter ethernet interface configuration mode and then return to user EXEC mode using the **end** command:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# interface eth 0
test-100(config-eth)# end
test-100#
```

Related Commands

Command	Description
exit	The **exit** command exits ethernet interface configuration mode to global configuration mode, global configuration mode to user EXEC mode, and the current CLI session.

FINAL DRAFT—CISCO CONFIDENTIAL

exit

To exit modes, use the **exit** command in ethernet interface configuration, global configuration and user EXEC modes.

exit

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Global configuration.

Ethernet interface configuration.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The **exit** command exits ethernet interface configuration mode to global configuration mode, global configuration mode to user EXEC mode, and the current CLI session.

The **end** command exits ethernet interface configuration mode to user EXEC mode and global configuration mode to user EXEC mode.

Examples

The following example shows how to enter global configuration mode then exit using the **exit** command:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# exit
test-100#
```

Related Commands

Command	Description
end	Exits ethernet interface configuration mode to user EXEC mode and global configuration mode to user EXEC mode.

FINAL DRAFT—CISCO CONFIDENTIAL

gir

To manage GIR settings, use the **gir** command in global configuration mode. To disable GIR settings, use the **no** form of this command.

gir {**backup** | **remount** | **restore** | **setup**}

no gir {**backup** | **remount** | **restore** | **setup**}

Syntax Description

backup	Backs up the Golden Image Repository to a remote storage device.
remount	Remounts the Golden Image Repository.
restore	Restores the Golden Image Repository from a previous backup.
setup	Sets up a Golden Image Repository and migrates images to new repository.

Defaults

The default golden image repository is located on the VFrame Data Center Director.

Command Modes

Global configuration.

Command History

Release	Modification
1.1	This command was introduced.
1.2	The keyword **setup-ha-secondary** was deprecated.

Usage Guidelines

To use this command, you must first use **gir setup** on the other system in the redundant pair, and configure an external repository on either an NFS volume or SAN LUN. Use this command to identify the location of the repository.

The **gir** command leads you through golden image repository configuration. You must know the location of the storage you select for the repository. If you are migrating an existing repository, you must also know the login information for the existing location.

Examples

The following example sets up a GIR at192.0.2.10 in the volume testvol1:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# gir setup
Warning: Golden Image Repository setup will require shutting down
         system services, making VFDC temporarily unavailable and
         migration of golden images might take a long time.
Would you like to setup the GIR now (yes/no) [no] ? yes
Enter the new GIR location type: Local, NFS or SAN (L/N/S) ? N
Enter the Filer IP: 192.0.2.10
Enter the Volume Name: testvol1
Migrating to a NetApp filer.
Please enter a username for 192.188.2.57: root
Please enter a password for 192.188.2.57:
```

FINAL DRAFT—CISCO CONFIDENTIAL

```
Would you like to cleanup the old GIR after migration is complete? (yes/no): yes
Proceed with shutting down of system services? (yes/no): yes
Attempting to mount new GIR to a temporary place.
Mount successful.
Waiting for services to shutdown...
Stopped 2 of 2 services
Services are down.
Copying 847668 KB from /gir to /mnt/girtemp... copy is 100% complete
Attempting to unmount the old GIR.
Removing 847668 KB from /gir/*... remove is 100% complete
Unmount successful.
Remounting new GIR to permanent location.
Remount successful.
Starting VCC services.
Updating System Configuration to reflect new GIR.
GIR migrate is complete.
test-100(config)#
```

Related Commands

Command	Description
show gir	Displays information about the golden image repository.

FINAL DRAFT—CISCO CONFIDENTIAL

install

To manage patches, use the **install** command in user EXEC mode.

install {**abort** | **update** *file-name* [**force**]}

Syntax Description

abort	Aborts a failed high availability upgrade.
force	(Optional) Forces the reinstallation of a patch.
update *file-name*	Installs a patch. Specify the patch file name in *file-name*. The maximum number of characters is 32.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

Before you can install a patch, you must copy it into the staging area using the **copy** command. Following is the typical sequence of commands:

- **copy**—To copy the patch from another server to the installation staging area.
- **show install staged**—To verify the patch is in the staging area, and to verify the patch name for use in the installation command.
- **install**—To install the patch.
- **del**—To delete the patch from the staging area.

You cannot uninstall a patch. If you reinstall the entire system software, any patches in the staging area are erased.

Examples

The following example installs a patch called VFrameDebug:

```
test-100# install update VFrameDebug
PROGRESS: extraction finished Fri Jul 28 11:04:59 PDT 2006
PROGRESS: Start upgrade install script
PROGRESS: Install completed OK
test-100#
```

Related Commands

Command	Description
del install	Deletes a patch from the installation staging area.
show install	Displays information about packages in the installation staging area.

FINAL DRAFT—CISCO CONFIDENTIAL

interface

To enter ethernet interface configuration mode, use the **interface** command in global configuration mode. To disable interface settings, use the **no** form of this command.

interface eth *port-number*

no interface eth *port-number*

Syntax Description

eth *port-number*	Accesses ethernet interface configuration mode. Specify the Ethernet port number in *port-number*. Valid port numbers are 0, 1 or 2.

Defaults

No default behavior or values.

Command Modes

Global configuration.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

Most interface configuration, such as specifying the IP address and subnet mask, is done using the **setup** command.

Examples

The following example shows you how to enter ethernet interface configuration mode:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# interface eth 0
test-100(config-eth)#
```

Related Commands

Command	Description
end	Exits ethernet interface configuration to user EXEC mode and global configuration mode to user EXEC mode.
setup	Performs initial system configuration.
show interface	Displays configuration information about the Ethernet interfaces.

FINAL DRAFT—CISCO CONFIDENTIAL

ip

To manage IP settings, use the **ip** command. To disable IP settings, use the **no** form of this command.

ip {**dns** {**domain** *domain-name* | **server** *ip-address*} | **firewall eth** *port-number* {**management** | **data** | **open**}} | **start** | **stop** | **route** *network-ip gateway-ip* [**metric** *metric-value*]}

no ip {**dns** {**domain** *domain-name* | **server** *ip-address*} | **firewall eth** *port-number* {**management** | **data** | **open**}} | **start** | **stop** | **route** *network-ip gateway-ip* [**metric** *metric-value*]}

Syntax Description

data	Sets up the firewall with a date.
dns	Configures DNS settings.
domain *domain-name*	Identifies the domain of the DNS server. Specify the domain name in *domain-name*. The maximum number of characters is 64.
eth *port-number*	Identifies the Ethernet interface. Specify the Ethernet interface port number in *port-number*. Valid port numbers are 0, 1 or 2.
firewall	Configures firewall settings.
management	Sets up the firewall for management.
metric *metric-value*	(Optional) Defines the metric. Specify the metric value in *metric-value*. The maximum number of characters is 32767.
open	Sets up the firewall with no restrictions.
route *network-ip gateway-ip*	Configures a static route. Specify the destination network IP address in *network-ip* and the destination network gateway in *gateway-ip*. The format is A.B.C.D.
server *ip-address*	Identifies the DNS server. Specify the address of the server in *ip-address*. The format is A.B.C.D.
start	Starts the IP tables firewall.
stop	Stops the IP tables firewall.

Defaults

No default behavior or values.

Command Modes

Global configuration.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

These are the firewall settings. Use the **show ip iptables** command to display more detailed information.

- Loopback interface—Permit all access.
- All interfaces (defaults if you start the firewall, even for open interfaces)—Drop these from external sources:

FINAL DRAFT—CISCO CONFIDENTIAL

  - Packets on the FORWARD chain.
  - Packets deemed unclean by the system.
  - Stealth TCP port scans.
  - Packets to ports 2812, 5025, 32772, and 7911.
- Management firewall settings—If you configure an interface to use the management firewall, these additional items are dropped:
  - All DHCP incoming requests.
  - All packets from network 0/24.
  - All packets from 255.255.255.255/24.
  - All access to the database port.
  - All access to the VFDC Host Agent (VHA) port.
  - All access to NFS.
- Data firewall settings—If you configure an interface to use the data firewall, these are the additional actions:
  - All DHCP packets are allowed.
  - All other broadcast traffic is dropped.
- Open firewall settings—If you configure an interface to be open, only the default settings for all interfaces are used.

Examples

The following example adds a DNS server:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# ip dns server 192.168.1.4
test-100(config)#
```

The following example creates a management firewall on eth0:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# ip firewall eth 0 management
test-100(config)# ip firewall start
test-100(config)#
```

Related Commands

Command	Description
show ip	Displays information about IP-related settings.

FINAL DRAFT—CISCO CONFIDENTIAL

license

To install a license, use the **license** command in global configuration mode. To uninstall a license, use the **no** form of this command.

license install *file-name*

no license install *file-name*

Syntax Description

install *file-name*	Installs the product license. Specify the license file name in *file-name*. The maximum number of characters is 80.

Defaults

No default behavior or values.

Command Modes

Global configuration.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

VFrame has these types of product license:

- Managed Switch Port—You must have a license for each switch port to which a managed server is connected. Port limits include ports on Ethernet and Fibre Channel switches. For example, if a server is using one Ethernet connection and two Fibre Channel connections to managed switches, that counts as three managed switch ports. VFrame includes a base license for 100 managed switch ports. If you need more managed ports, you must purchase and install additional managed switch port licenses.

  To determine how many ports you using, open the VFrame GUI and select **Help > About**. The About dialog box displays your current licenses and how many ports you are using.

- High Availability—If you want to enable redundancy on VFrame to provide a high-availability configuration with another VFrame Data Center Director, you must install a high-availability license on the active VFrame Data Center Director.

To obtain and install a product license, follow these steps:

1. Enter the **show license hostid** command to obtain your host ID. If you are obtaining a high-availability license, get the host ID from both VFrame Data Center Directors.
2. Go to Cisco.com and use your host ID to purchase the license you require. Place the license on a server that is accessible to the VFrame Data Center Director and that supports a file download protocol supported by VFrame (for example, SCP, FTP, TFTP, or HTTP).
3. Enter the **copy url** *url_of_license_file* **license** command to download the license to your VFrame Data Center Director. If you are installing a high-availability license, download the license to the active member of the redundant pair.
4. Enter **config** to start configure mode.

FINAL DRAFT—CISCO CONFIDENTIAL

5. Enter the **license** command to install the downloaded license file.
6. Enter **exit** to leave configure mode.
7. Enter **show license status** to verify that the license was installed.

Examples

The following example installs a license:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# license install vfdc_20070531.txt
Successfully installed license file!
test-100(config)#
```

Related Commands

Command	Description
copy url license	Retrieves a license file from a HTTP, TFTP, FTP or SCP server.
show license	Displays information about the VFrame product license.

FINAL DRAFT—CISCO CONFIDENTIAL

ntp

To manage NTP settings, use the **ntp** command in global configuration mode. To disable NTP settings, use the **no** form of this command.

ntp {**peer** *peer-name* [**prefer**] | **server** *server-name* [**prefer**]}

no ntp {**peer** *peer-name* [**prefer**] | **server** *server-name* [**prefer**]}

Syntax Description

peer *peer-name*	Defines the NTP peer. Specify the NTP peer name or IP address in *peer-name*. The maximum number of characters is 80. The format of the address is A.B.C.D.
prefer	(Optional) Specifies a peer or server as a preferred peer or server.
server *server-name*	Defines the NTP server. Specify the NTP server name or IP address in *server-name*. The maximum number of characters is 80. The format of the address is A.B.C.D.

Defaults

NTP is not enabled.

Command Modes

Global configuration.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

If you disconnect from all NTP peers and servers, NTP is not used as the time protocol on your Director. The system clock is then maintained locally.

The system clock can change the peer clock, or the peer clock can change the system clock. The NTP server influences the system clock, but the system does not in turn influence the NTP server clock.

Examples

The following example specifies an NTP peer:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# ntp peer 10.100.40.16
test-100(config)#
```

The following example specifies an NTP server and identifies it as the preferred server:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# ntp server 10.100.40.17 prefer
test-100(config)#
```

FINAL DRAFT—CISCO CONFIDENTIAL

Related Commands

Command	Description
show ntp	Displays the information about the NTP setup for the system.
show clock	Displays the current date and time.

FINAL DRAFT—CISCO CONFIDENTIAL

ping

To test a remote system, use the **ping** command in user EXEC mode.

ping *ip-address*

Syntax Description

ip-address	Specify the IP address of the remote system. The format is A.B.C.D.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The command sends ICMP echo requests and waits for ICMP echo replies. A ping is successful when echo replies are received. A successful ping indicates that the remote system is alive and responsive.

The **ping** command sends four echo requests. Press **Ctrl+C** to end the ping before the four requests are finished.

Examples

The following example pings the remote system 192.0.2.10:

```
test-100# ping 192.0.2.10
PING 192.0.2.10 (192.0.2.10) 56(84) bytes of data.
From 10.100.30.1: icmp_seq=0 Redirect Host (New nexthop: 10.100.30.50)
64 bytes from 192.0.2.10: icmp_seq=0 ttl=64 time=0.642 ms
64 bytes from 192.0.2.10: icmp_seq=1 ttl=64 time=0.070 ms
64 bytes from 192.0.2.10: icmp_seq=2 ttl=64 time=0.065 ms
64 bytes from 192.0.2.10: icmp_seq=3 ttl=64 time=0.069 ms

--- 192.0.2.10 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3011ms
rtt min/avg/max/mdev = 0.065/0.211/0.642/0.248 ms, pipe 2
test-100#
```

Related Commands

Command	Description
traceroute	Determines the router hops between the VFrame system and a remote system.

FINAL DRAFT—CISCO CONFIDENTIAL

reboot

To restart the Director, use the **reboot** command in user EXEC mode.

reboot

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The **reboot** command shuts down the system, and then restarts it. The **shutdown** command shuts down the system without restarting it.

After entering the **reboot** command, you are asked to confirm that you want to reboot the system. If you are connected to the system through an SSH client, you loose connection during the reboot and you must log in again.

If you are rebooting a system that is a member of a high-availability redundant pair and the system is the active member, use the **redundancy resign** command before the **reboot** command. Explicit resignation allows the standby system to take over active status without delay, making the transition smoother than if you simply reboot the system.

Examples

The following example reboots a VFrame Data Center Director:

```
test-100# reboot
Continue with reboot? [y/n] y
Broadcast message from root (pts/0) (Fri Jul 14 10:58:46 2006):
The system is going down for reboot NOW!
test-100#
```

Related Commands

Command	Description
shutdown	Disables or shuts down an interface or the system.

FINAL DRAFT—CISCO CONFIDENTIAL

redundancy

To manage HA settings, use the **redundancy** command in global configuration mode. To disable HA settings, use the **no** form of this command.

redundancy {**coup | enable | hellotime** *hellotime-seconds* **| holdtime** *holdtime-seconds* **| interface | peer** *host-name db-name ha-ipaddress server-ipaddress* **| resign**}

no redundancy {**enable | hellotime | holdtime | interface**}

Syntax Description

coup	Gives permission to a member of a HA pair to take over as the active member.
enable	Enables the redundancy feature.
hellotime *hellotime-seconds*	Enables the hellotime feature. Specify how often the heartbeat signal is sent to the other member of the redundant pair in *hellotime-seconds*. The range is 3 to 30 seconds.
holdtime *holdtime-seconds*	Enables the holdtime feature. Specify how long to assume the peer is still functioning after not receiving a heartbeat in *holdtime-seconds*. The range is 3 to 300 seconds.
interface	Configures the HA interface.
peer *host-name db-name ha-ipaddress server-ipaddress*	Identifies the other member of the redundant pair and enables redundancy. Specify the name of the peer, the name of the peer database, the IP address of the peer high availability interface, and the IP address of the peer server communication interface. The maximum number of characters allowed in each argument is 32.
resign	Takes away the status of active member.

Command Default

Redundancy is disabled.

Hello time is 10 seconds.

Hold time is 20 seconds.

Command Modes

Global configuration.

Usage Guidelines

You have to setup a remote GIR before you can enable redundancy.

You must enable high-availability during initial configuration for any of the **redundancy** commands to work. You also must install and configure the peer correctly.

If you disable redundancy, and reconfigure the system to use the local system as the backup location, the **redundancy enable** command prompts you to select a remote backup location.

If you did not configure the system to use an external database backup location during setup, the **redundacy peer** command prompts you to select a backup location. You must select a remote backup location to successfully configure redundancy.

FINAL DRAFT—CISCO CONFIDENTIAL

Use the **show redundancy status** and **show redundancy config** commands to view the current status and configuration.

For redundancy to work correctly, the **show system services** command will show the hdrh and hsrp services as started. When VFrame is operating in standalone mode, the opposite state is normal for these services.

The **coup** command works only if the member is the standby member of the pair and redundancy is enabled.

The **resign** command works only if the member is the active member of the pair and redundancy is enabled.

Hold time is reset every time a heartbeat is received. After hold time is exceeded, the system assumes the peer is no longer functioning. If the system is currently the standby member of the pair, it takes over as the active member. To avoid unnecessarily quick failover, ensure that hold time is a multiple of hello time.

Command History

Release	Modification
1.1	This command was introduced.
1.2	Added the keyword **interface**.

Examples

The following example identifies a peer and enables redundancy:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# redundancy peer vframepeer.example.com peerdb 192.0.2.10 192.0.2.11
test-100(config)#
```

The following example resigns active status for a member:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# redundancy resign
test-100(config)#
```

The following example takes active status away from the peer:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# redundancy coup
test-100(config)#
```

Related Commands

Command	Description
db	Manages databases.
show redundancy	Displays information about high-availability settings.

FINAL DRAFT—CISCO CONFIDENTIAL

setup

To perform system configuration, use the **setup** command in user EXEC mode.

setup

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The **setup** command leads you through system configuration, asking for input based on previous input. In general, you should rerun this command only if you want to change the high-availability configuration.

Most changes require that you reinitialize the database, which erases all information in the database, including all items you or other users have created using the product. It also removes the golden image repository configuration.

Examples

The following is sample output from the **setup** command:

```
test-100# setup
Setup is used to configure basic VFDC system parameters

Entering System Configuration wizard
Press Ctrl-C to abort configuration dialog at any prompt.
Current/default settings are in square brackets '[]'.
Press Enter to choose current/default value.

Would you like to configure password for user 'admin' (yes/no) [no] ? yes
Changing password for user admin.
New password:
BAD PASSWORD: it is based on a dictionary word
Retype new password:
passwd: all authentication tokens updated successfully.

Would you like to configure password for user 'macrouser' (yes/no) [no] ? yes
Changing password for user macrouser.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.

Enter hostname [test-100.nbv.cisco.com]:
Enter Management (Northbound) Interface: eth [0]:
```

FINAL DRAFT—CISCO CONFIDENTIAL

```
Enter eth0 IP address [10.100.20.10]:
Enter eth0 netmask [255.255.255.0]:
Enter Server Communication Interface: eth [1]:
Enter eth1 IP address []: 10.100.30.10
Enter eth1 netmask []: 255.255.255.0
Enter default gateway IP address [10.100.20.1]:

Configure DNS Server (yes/no) [yes] ?
Enter the DNS Server IP address [192.188.1.3]:

Enter a unique Database Server name for this system
consisting of up to 32 alphanumeric characters [vccids]:

Would you like to configure HA interface (yes/no) [no] ?

You have entered the following configuration:

Hostname               : test-100.nbv.cisco.com
State                  : Normal
Management Interface   : eth0
Management IP/Netmask  : 10.100.20.10 255.255.255.0
Server Comn Interface  : eth1
Server Comn IP/Netmask : 10.100.30.10 255.255.255.0
Default Gateway IP     : 10.100.20.1
DNS Domain Name        : nbv.cisco.com
DNS Server IP          : 192.188.1.3
VHA connection over SSL: yes
Storage mode           : Storage Template Array
DB backup size estimate: 5000000
DB Server Name         : vccids
DB backup storage      : local
GIR Type               : Unavailable
HA Mode                : standalone

Would you like to apply this configuration (yes/no) [yes] ? yes
Stopping services
Waiting for 0 out of 16 processes to shutdown
Waiting for IDS to go down
Waiting for vcc_java to go down

test-100#
```

Related Commands

Command	Description
clear setup	Clears the current setup configuration.
show redundancy	Displays information about high-availability.
show system	Displays information about the system.

FINAL DRAFT—CISCO CONFIDENTIAL

show cdp

To display information about CDP settings, use the **show cdp** command in user EXEC mode.

show cdp {**all** | **entry** {**all** | **name** *device-name*} | **global** | **neighbors** [**detail**]}

Syntax Description

all	Displays CDP configuration information for all CDP-enabled interfaces.
detail	(Optional) Specify to show full information for each neighbor.
entry all | **name** *device-name*	Displays information about entries in the CDP table. Specify **all** to show all entries or **name** for specific devices. Specify the device name in *device-name*. The maximum number of characters is 256.
global	Displays information about global CDP configuration.
neighbors	Displays information about neighbors that are running CDP.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Examples

The following is sample output from the **show cdp global** command:

```
test-100# show cdp global
Global CDP information:
    CDP enabled globally
    Sending CDP packets every 60 seconds
    Sending a holdtime value of 180 seconds
    Sending CDPv2 advertisements is enabled
test-100#
```

The following is sample output from the **show cdp neighbors** command:

```
test-100# show cdp neighbors
Capability Codes: R - Router, T - Trans-Bridge, B - Source-Route-Bridge
                  S - Switch, H - Host, I - IGMP, r - Repeater

Device ID              Local Intrfce   Hldtme  Capability  Platform      Port ID
switch1.example.com    eth0            174     R S I       WS-C6509-E    Gig3/24

switch1.example.com    eth1            174     R S I       WS-C6509-E    Gig3/37
test-100#
```

Related Commands

Command	Description
show system	Displays information about system services and configurations.

FINAL DRAFT—CISCO CONFIDENTIAL

show clock

To display the current date and time, use the **show clock** command in user EXEC mode.

show clock

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Examples

The following example displays the system clock:

```
test-100# show clock
Fri Jul 28 15:30:32 PDT 2006
test-100#
```

Related Commands

Command	Description
ntp	Enables NTP.
show ntp	Displays information about the Network Time Protocol (NTP) setup.

FINAL DRAFT—CISCO CONFIDENTIAL

show fault

To display information about system errors, use the **show fault** command in user EXEC mode.

show fault {**history** *system-errors* | **status**}

Syntax Description

history *system-errors*	Displays historical information about VFrame system errors. Specify the number of system errors you want to view in *system-errors*. The maximum number of errors is 1000.
status	Displays the current status of all system errors.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

VFrame system fault alarms relate to the functioning of the VFrame Data Center Director instead of your data center equipment and service networks. You can configure notifications for these fault alarms in the SMTP system settings.

VFrame system fault state machines can have these states:

- Clear—There is not an active fault alarm for this fault state machine. If there had been an active fault alarm, it has been resolved.
- Raise—There is an active fault alarm for this fault state machine.

When you use the **show fault history** command, the fault alarm severity is represented by a number. The numbers have the following meanings:

- 0 (Emergency)—The system is unusable.
- 1 (Alert)—You must take action must immediately to resolve the problem.
- 2 (Critical)—This is a critical condition.
- 3 (Error)—This is an error condition

The following are the VFrame system fault notifications:

- HA Peer Unreachable—The local VFDC (VFrame Data Center) is not receiving HSRP packets from the peer VFrame Data Center.

  To resolve the problem, use any of the following:

  - Use the **show redundancy config** command on both the local and peer VFDC to determine the source of the problem.
  - Check the Ethernet cable that connects the peers.

FINAL DRAFT—CISCO CONFIDENTIAL

  - Reboot the peer.
  - Check the redundancy configuration in both peers to ensure they use the correct IP addresses.
- DB Down—The VFrame Data Center database experienced a read/write failure.

  To resolve the problem, use any of the following:
  - Use the **debug services database** command to determine the source of the problem.
  - Reboot the system.
- VFDC Service Is Down—One or more VFrame Data Center system services is not functioning correctly.

  To resolve the problem, use any of the following:
  - Use the **show system status** command to determine which services are down, then use the **debug services <service>** command to find out why the service is down.
  - Use the **tech service reset** command to restart the service.
  - Reboot the system.
- HA Peer Version Mismatch—The VFrame Data Center software installed on one peer is a different version than the software installed on the other peer.

  To resolve the problem, use any of the following:
  - Use the **debug services hsrp** command to determine the source of the problem.
- DB Backup Device Unusable—Either VFrame Data Center is not able to reach the NFS filer or the LUN, or the disk space is low on the NFS filer or LUN.

  To resolve the problem, use any of the following:
  - Use the **debug services sysmnt** to determine the source of the problem.
  - If the fault was generated because the service com IP directory or the VIP directory on the filer was deleted, use the **debug services sysmt** command to find out what directory was deleted, then recreate that directory.
- Disk Space Low for DB Backup—VFrame Data Center is using a local disk for data base backup and the disk space is low.

  To resolve the problem, create space on the local disk.

Examples

The following is sample output from the **show fault status** command:

```
test-100# show fault status
System Fault                      State
====================================
HA Peer Unreachable               CLEAR
DB Down                           CLEAR
DB Backup Down                    CLEAR
VFDC service down                 CLEAR
GIR Unreachable                   CLEAR
VFDC in unlicensed state          CLEAR
test-100#
```

Related Commands

Command	Description
redundancy	Enables HA features.
tech	Performs advanced system debugging.

FINAL DRAFT—CISCO CONFIDENTIAL

show files

To display information about system files, use the **show files** command in user EXEC mode.

show files {**inventory** | **logs** | **tftp**}

Syntax Description

inventory	Displays files in the inventory directory.
logs	Displays files in the logs directory.
tftp	Displays files in the tftp directory.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1.4	This command was introduced.

Examples

The following is sample output from the **show files tftp** command:

```
test-100# show files tftp
/tftp
/tftp/initrd-discos.img
/tftp/WinuUdates-dummy.exe
/tftp/setup.exe
/tftp/vfdcInvTest.iso
/tftp/initrd-discos.img.org
/tftp/linux-discos
/tftp/vha_simdc
/tftp/tftp
/tftp/pxelinux.cfg
/tftp/pxelinux.cfg/default
/tftp/bootlog
/tftp/servers
/tftp/pxelinux.0
/tftp/vha-lnx.i386.rpm
/tftp/vha-esx.i386.rpm
/tftp/config.text
test-100#
```

Related Commands

Command	Description
copy file	Copies a file to a remote URL.
show logging trend	Displays the debug log for the trend service.

FINAL DRAFT—CISCO CONFIDENTIAL

show gir

To display information about the GIR, use the **show gir** command in user EXEC mode.

show gir

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Examples

The following is sample output from the **show gir** command:

```
test-100(config)# show gir
Current GIR Information: NFS - Filer: 192.0.2.10 Volume: testvol1
Size Total (MB): 16384
Size Used (MB):  10609
Inodes Total:    553413
Inodes Used:     198793
test-100#
```

Related Commands

Command	Description
db	Manages databases.
gir	Configures the golden image repository.

FINAL DRAFT—CISCO CONFIDENTIAL

show hardware

To display information about hardware, use the **show hardware** command in user EXEC mode.

show hardware

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Examples

The following is sample output from the **show hardware** command:

```
test-100# show hardware
System: VFDC Server
        Model: HP ProLiant DL380 G4
        Serial No: USE547N3F2
Processor: CPU 0
        Model: Intel(R) Xeon(TM) CPU 3.40GHz
        Freq: 3400.295 MHz,  Cache: 1024 KBytes
Processor: CPU 1
        Model: Intel(R) Xeon(TM) CPU 3.40GHz
        Freq: 3400.295 MHz,  Cache: 1024 KBytes
Processor: CPU 2
        Model: Intel(R) Xeon(TM) CPU 3.40GHz
        Freq: 3400.295 MHz,  Cache: 1024 KBytes
Processor: CPU 3
        Model: Intel(R) Xeon(TM) CPU 3.40GHz
        Freq: 3400.295 MHz,  Cache: 1024 KBytes
Ethernet: eth0
        MAC: 00:14:C2:C0:94:E7
        Max speed: 1000 Mb/s
Ethernet: eth1
        MAC: 00:14:C2:C0:94:E6
        Max speed: 1000 Mb/s
Ethernet: eth2
        MAC: 00:14:C2:44:FC:0C
        Max speed: 1000 Mb/s
Host Bus Adapter: qla2300/0
        Model: QLA2312
        Node WWN: 200000e08b847b8e, Port WWN: 210000e08b847b8e
Disk: /dev/cciss/c0d0
        Size: 69459 MBytes
test-100#
```

FINAL DRAFT—CISCO CONFIDENTIAL

Related Commands

Command	Description
show interface	Displays configuration information about the Ethernet interfaces.

FINAL DRAFT—CISCO CONFIDENTIAL

show ids

To display information about IDS, use the **show ids** command in user EXEC mode.

show ids {**config** | **logs** | **parameters** | **status**}

Syntax Description

config	Displays IDS configuration.
logs	Displays IDS logs.
parameters	Displays IDS parameters.
status	Displays IDS online status.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.2	This command was introduced.

Examples

The following is sample output from the **show ids logs** command:

```
test-100# show ids logs

IBM Informix Dynamic Server Version 10.00.UC1     -- On-Line -- Up 9 days 02:02:
57 -- 108388 Kbytes

Physical Logging
Buffer bufused  bufsize  numpages   numwrits   pages/io
  P-1  4        16       51332      5399       9.51
      phybegin          physize    phypos     phyused    %used
      1:9793            10000      6767       4          0.04
Logical Logging
Buffer bufused  bufsize  numrecs    numpages   numwrits   recs/pages pages/io
  L-1  0        16       8804706    1129992    537159     7.8        2.1
        Subsystem    numrecs    Log Space used
        OLDRSAM      8804706    1642982588

address  number   flags    uniqid   begin                size     used    %used
483bd0b0 7        U-B----  567      3:53                 2000     2000   100.00
483bd0f8 8        U-B----  568      3:2053               2000     2000   100.00
483bd140 9        U-B----  569      3:4053               2000     2000   100.00
483bd188 10       U-B----  570      3:6053               2000     2000   100.00
483bd1d0 11       U-B----  571      3:8053               2000     2000   100.00
483bd218 12       U-B----  572      3:10053              2000     2000   100.00
483bd260 13       U-B----  573      3:12053              2000     2000   100.00
483bd2a8 14       U-B----  574      3:14053              2000     2000   100.00
483bd2f0 15       U-B----  575      3:16053              2000     2000   100.00
483bd338 16       U-B----  576      3:18053              2000     2000   100.00
483bd380 17       U---C-L  577      3:20053              2000      957    47.85
483bd3c8 18       U-B----  562      3:22053              2000     2000   100.00
```

FINAL DRAFT—CISCO CONFIDENTIAL

```
483bd410 19       U-B----  563      3:24053             2000     2000   100.00
483bd458 20       U-B----  564      3:26053             2000     2000   100.00
483bd4a0 21       U-B----  565      3:28053             2000     2000   100.00
483bd4e8 22       U-B----  566      3:30053             2000     2000   100.00
 16 active, 16 total
test-100#
```

Related Commands

Command	Description
db	Manages databases.

FINAL DRAFT—CISCO CONFIDENTIAL

show install

To display information about patches, use the **show install** command in user EXEC mode.

show install {**history** [**detail** [**name** *patch-name*] | **short**] | **staged** [**detail** [**name** *patch-name*]]}

Syntax Description

detail	Displays detailed installation history or a detailed list of patches in the installation staging area.
history	Displays a history of patches in the installation staging area.
name *patch-name*	(Optional) Identifies a specific patch. Specify the patch name in *patch-name*. The maximum number of characters is 80.
short	Displays brief information about the patches in the installation staging area.
staged	Display patches in the installation staging area.

Command Default

The default for **history** is **short**.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

Use the **show install staged** command after you copy a patch into the staging area to determine the exact name you will need to use on the **install** command.

Examples

The following is sample output from the **show install staged** command:

```
test-100# show install staged

Patches waiting in staging area
Name              Version  Type    Summary
----------------- -------- ------- -------------------
VFRAMEDebug       1.1      update  VFRAME Debug patch
test-100#
```

Related Commands

Command	Description
copy	Manages system files.
install	Manages patches.

FINAL DRAFT—CISCO CONFIDENTIAL

show interface

To display information about the Ethernet interfaces, use the **show interface** command in user EXEC mode.

show interface [**eth** *port-number*]

Syntax Description

eth *port-number*	(Optional) Identifies the Ethernet interface. Specify the port number in *port-number*. Valid port numbers are 0, 1 or 2.

Command Default

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Examples

:The following is sample output from the **show interface eth 0** command:

```
test-100# show interface eth 0
eth0:
     IP address: 10.100.20.10, netmask: 255.255.255.0
     broadcast address: 10.100.20.255
     hardware address: 0:14:c2:c0:94:e7
     Up Broadcast    IfIndex= 2
     Received: 114865 bytes, 892 packets, 0 input errors, 0 drops
     Transmitted: 80600 bytes, 638 packets, 0 output errors, 0 drops
test-100#
```

Related Commands

Command	Description
interface	Provides access to the ethernet interface configuration mode.

FINAL DRAFT—CISCO CONFIDENTIAL

show ip

To display information about IP settings, use the **show ip** command in user EXEC mode.

show ip {**dns** | **firewall** [**eth** *port-number*] | **iptables** | **route**}

Syntax Description

dns	Displays information about the Domain Name System (DNS) settings.
eth *port-number*	(Optional.) Displays information about specific Ethernet interfaces. Specify the port number in *port-number*. Valid port numbers are 0, 1 or 2.
firewall	Displays information about the firewall settings.
iptables	Displays the IP firewall tables.
route	Displays the routing table.

Command Default

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

For information on how to configure the settings displayed by this command, and on the various firewall settings, see the ip command.

Examples

The following is sample output from the **show ip dns** command:

```
test-100# show ip dns
search example.com
domain example.com
nameserver 192.168.1.3
test-100#
```

The following is sample output from the **show ip firewall** command:

```
test-100# show ip firewall
firewall eth0          : management
firewall eth1          : data
firewall eth2          : open
test-100#
```

Related Commands

Command	Description
ip	Manages IP settings.
show interface	Displays information about the Ethernet interfaces.

FINAL DRAFT—CISCO CONFIDENTIAL

show license

To display information about licenses, use the **show license** command in user EXEC mode.

show license {**file** [**all** | **name** *file-name*] | **hostid** | **status**}

Syntax Description

all	Displays all installed licenses.
file	Displays the license files that are installed.
hostid	Displays the host system ID.
name *file-name*	Displays information about a specific license file.
status	Displays the status of the current license.

Command Default

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The list that displays when you use the **all** command does not include downloaded license files.

Examples

The following is sample output from the **show license hostid** command:

```
test-100# show license hostid
0014c2c094e7
test-100#
```

The following is sample output from the **show license status** command:

```
test-100# show license status
Licensed Feature                        License count
-------------------------------------------------
LicVFrameAccessSwitchPortsMax                   100
LicVFrameHA                                     N/A
test-100#
```

Related Commands

Command	Description
copy	Manages system files and patches.
license	Installs a license.

FINAL DRAFT—CISCO CONFIDENTIAL

show logging

To display debug or system logs, use the **show logging** command in user EXEC mode.

show logging {**daemons** | **database** | **dbmnt** | **dhcpwd** | **hdrh** | **hsrp** | **imagemgmt** | **ntpwd** | **syscfgd** | **sysmgr** | **sysmnt** | **system** | **trend** | **vccjava** | **vccvha** | **vframe**}

Syntax Description

daemons	Displays the debug log for system daemons.
database	Displays the debug log for the database service.
dbmnt	Displays the debug log for the database mount service.
dhcpwd	Displays the debug log for the DHCP service.
hdrh	Displays the debug log for the HDRH service.
hsrp	Displays the debug log for the HSRP service.
imagemgmt	Displays the debug log for the golden image management subsystem.
ntpwd	Displays the debug log for the NTPWD service.
syscfgd	Displays the debug log for the system configuration service.
sysmgr	Displays the debug log for the system manager service.
sysmnt	Displays the debug log for the system mount service.
system	Displays system syslog messages.
trend	Displays the debug log for the trend service.
vccjava	Displays the debug log for the Java subsystem.
vccvha	Displays the debug log for the VCC_VHA subsystem.
vframe	Displays VFrame service messages.

Command Default

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.
1.2	The keyword **aaad** was deprecated.

Usage Guidelines

Enter **q** and press **Enter** if you want to stop the log display before reaching the end of the log.

The **debug services** command and the **show logging** command are similar. The difference is that debug displays in real time. It keeps the log open so that you see messages as they are added to the log. The **show logging** command displays the contents of the log at the time you enter the command.

FINAL DRAFT—CISCO CONFIDENTIAL

Examples

The following is sample output from the **show logging vframe** command:

```
test-100# show logging vframed
Dec 26 12:50:28 test-100 sysmnt: Added signal handler for SIG_LOG_INIT
Dec 26 12:51:13 test-100 dbmnt: Added signal handler for SIG_LOG_INIT
Dec 26 12:51:37 test-100 aaad: Added signal handler for SIG_LOG_INIT
Dec 26 12:52:07 test-100 dhcpwd: DHCPWD Starting
Dec 26 12:53:33 test-100 dhcpwd: No dhcp subnets defined in config
test-100#
```

Related Commands

Command	Description
debug services	Displays debug or system logs in real time.
show tech	Displays information useful for system debugging.

FINAL DRAFT—CISCO CONFIDENTIAL

show logins

To display information about CLI log ins, use the **show logins** command in user EXEC mode.

show logins cli [**count** *user-logins*]

Syntax Description

cli	Displays the login history.
count *user-logins*	(Optional) Displays a specific number of logins. Specify the number of logins in *user-logins*. The maximum number of characters is 4294967296.

Command Default

The default for **count** is 10.

Command Modes

User EXEC (Exec)

Usage Guidelines

The login information table displays the following information (from left to right):

- User name. The name reboot indicates that the system was rebooted.
- Connection type. The port number (pts) for connections from a connected network; the TTY line (tty) for connections from the console; or system boot when rebooting the system.
- The date of the connection, start time, and end time, with the total connection time in parentheses.
- The DNS name or IP address from which the user connected. The device might be a VPN concentrator.

If you want to view user login information in the GUI, use the VFrame Administration dialog box.

Command History

Release	Modification
1.1	This command was introduced.

Examples

The following is sample output from the **show login cli** command:

```
test-100# show logins cli
root     pts/0        Mon Jul 24 10:18   still logged in    vpn.example.com
root     pts/1        Fri Jul 21 15:54 - 16:33  (00:39)     vpn.example.com
root     pts/0        Fri Jul 21 15:42 - 16:37  (00:54)     192.168.216.147
reboot   system boot  Fri Jul 21 15:41         (2+18:39)    10.100.20.5
root     pts/0        Fri Jul 21 14:07 - down   (01:27)     192.168.216.147
reboot   system boot  Fri Jul 21 14:06          (01:27)     10.100.20.5
root     pts/0        Fri Jul 21 13:54 - down   (00:05)     192.168.216.147
root     pts/0        Fri Jul 21 11:42 - 13:54  (02:12)     192.168.216.147
reboot   system boot  Fri Jul 21 11:41          (02:18)     10.100.20.5
reboot   system boot  Fri Jul 21 11:34          (00:03)     10.100.20.5
test-100#
```

FINAL DRAFT—CISCO CONFIDENTIAL

Related Commands

Command	Description
exit	Exit modes.
reboot	Restarts the Director.

FINAL DRAFT—CISCO CONFIDENTIAL

show ntp

To display information about NTP settings, use the **show ntp** command in user EXEC mode.

show ntp {**config** | **status** | **trace**}

Syntax Description

config	Displays a list of NTP servers and peers.
status	Displays clock accuracy and the polling interval.
trace	Displays a trace of NTP server relationships.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

You must already have added NTP servers to the configuration to see any output.

Examples

The following is sample output from the **show ntp config** command:

```
test-100# show ntp config
    ntp server 10.68.10.150 prefer
    ntp server 10.68.10.151
test-100#
```

The following is sample output from the **show ntp trace** command:

```
test-100# show ntp trace
127.0.0.1: stratum 3, offset 0.000011, synch distance 0.10518
171.68.10.80: stratum 2, offset 0.003159, synch distance 0.09409
144.254.15.121: stratum 1, offset 0.003738, synch distance 0.00000, refid 'GPS'
test-100#
```

Related Commands

Command	Description
ntp	Manages NTP settings.
show clock	Displays the current date and time.

FINAL DRAFT—CISCO CONFIDENTIAL

show process

To display information about processes running on the Director, use the **show process** command in user EXEC mode.

show process

Syntax Description

This command has no arguments or keywords.

Command Default

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Examples

The following is sample output from the **show process** command:

```
test-100# show process
PID TTY      STAT   TIME COMMAND
    5 ?        SW     0:00 [migration/3]
    4 ?        SW     0:00 [migration/2]
    3 ?        SW     0:00 [migration/1]
    2 ?        SW     0:00 [migration/0]
    1 ?        S      0:07 init
    6 ?        SW     0:00 [keventd]
    7 ?        SWN    0:00 [ksoftirqd/0]
    8 ?        SWN    0:00 [ksoftirqd/1]
    9 ?        SWN    0:00 [ksoftirqd/2]
   10 ?        SWN    0:00 [ksoftirqd/3]
   13 ?        SW     0:00 [bdflush]
   11 ?        SW     0:01 [kswapd]
   12 ?        SW     0:02 [kscand]
   14 ?        SW     0:06 [kupdated]
   15 ?        SW     0:00 [mdrecoveryd]
   23 ?        SW     0:00 [qla2300_dpc0]
   24 ?        SW     0:00 [qla2300_dpc1]
   25 ?        SW     0:00 [scsi_eh_0]
   26 ?        SW     0:00 [scsi_eh_1]
   29 ?        SW     0:15 [kjournald]
   72 ?        SW     0:00 [khubd]
  193 ?        SW     0:00 [kjournald]
  194 ?        SW     0:00 [kjournald]
  195 ?        SW     0:00 [kjournald]
  196 ?        SW     0:00 [kjournald]
  557 ?        S      0:00 syslogd -m 0
  561 ?        S      0:00 klogd -x
  571 ?        S      0:19 irqbalance
  581 ?        S      0:00 portmap
  600 ?        S      0:00 rpc.statd
  687 ?        S      0:01 /usr/sbin/sshd
```

FINAL DRAFT—CISCO CONFIDENTIAL

```
10749 ?        S      0:00  \_ sshd: admin@pts/0
10763 pts/0    S      0:00      \_ /bin/bash /opt/vcc/system/bin/vccsh.sh
10764 pts/0    S      0:00          \_ /opt/vcc/system/bin/vccsh -s /opt/vcc/sys
tem/cfg/main_tree.par
10804 pts/0    S      0:00              \_ /opt/vcc/system/bin/vccsh -s /opt/vcc
/system/cfg/main_tree.par
10806 pts/0    R      0:00              |   \_ /bin/ps -ax --forest
10805 pts/0    S      0:00              \_ more
  706 ?        SW     0:00 [nfsd]
  707 ?        SW     0:00 [nfsd]
  708 ?        SW     0:00 [nfsd]
  709 ?        SW     0:00 [nfsd]
  710 ?        SW     0:00 [nfsd]
  711 ?        SW     0:00 [nfsd]
  712 ?        SW     0:00 [nfsd]
  713 ?        SW     0:00 [nfsd]
  714 ?        SW     0:00 [lockd]
  715 ?        SW     0:00 [rpciod]
  719 ?        S      0:00 rpc.mountd
  728 ?        S      0:00 crond
  745 ?        SW     0:00 [loop0]
  746 ?        SW     0:00 [kjournald]
  772 ?        S      0:02 /opt/vcc/system/bin/sysmgr_main start
  789 ?        S      0:00  \_ /opt/vcc/system/bin/logger --logname /var/log/dae
mons.log --pidfile /var/run/vcc/sysmgrLogger.pid
  790 ?        S      0:44  \_ /opt/vcc/system/bin/monit -s /opt/vcc/config/moni
t.state -Ic /opt/vcc/config/monitrc
  792 ?        S      0:02  |   \_ /opt/vcc/system/bin/monit -s /opt/vcc/config/
monit.state -Ic /opt/vcc/config/monitrc
  793 ?        S      0:04  |       \_ /opt/vcc/system/bin/monit -s /opt/vcc/con
fig/monit.state -Ic /opt/vcc/config/monitrc
  877 ?        S      0:02  \_ /opt/vcc/system/bin/sysmgr_main start
  777 ttyS0    S      0:00 /sbin/agetty ttyS0 9600 vt100-nav
  778 tty1     S      0:00 /sbin/mingetty tty1
  779 tty2     S      0:00 /sbin/mingetty tty2
  780 tty3     S      0:00 /sbin/mingetty tty3
  781 tty4     S      0:00 /sbin/mingetty tty4
  782 tty5     S      0:00 /sbin/mingetty tty5
  783 tty6     S      0:00 /sbin/mingetty tty6
  785 ttyS1    S      0:00 /sbin/agetty -L 9600 ttyS1 vt102
  795 ?        S      0:02 /opt/vcc/system/bin/mon_maild
 1003 ?        S      0:00 /opt/vcc/system/bin/sysmnt
 1018 ?        S     11:22 /opt/informix/10/bin/oninit -Sy
 1019 ?        S      0:17  \_ /opt/informix/10/bin/oninit -Sy
 1020 ?        S      0:14      \_ /opt/informix/10/bin/oninit -Sy
 1021 ?        S      0:03      \_ /opt/informix/10/bin/oninit -Sy
 1022 ?        S      0:18      \_ /opt/informix/10/bin/oninit -Sy
 1023 ?        S      0:02      \_ /opt/informix/10/bin/oninit -Sy
 1024 ?        S      0:03      \_ /opt/informix/10/bin/oninit -Sy
 1025 ?        S      1:42      \_ /opt/informix/10/bin/oninit -Sy
 1026 ?        S      0:02      \_ /opt/informix/10/bin/oninit -Sy
 1027 ?        S      0:02      \_ /opt/informix/10/bin/oninit -Sy
 1028 ?        S      0:02      \_ /opt/informix/10/bin/oninit -Sy
 1029 ?        S      0:02      \_ /opt/informix/10/bin/oninit -Sy
 1030 ?        S      0:02      \_ /opt/informix/10/bin/oninit -Sy
 1031 ?        S      0:02      \_ /opt/informix/10/bin/oninit -Sy
 1302 ?        S      0:00 /opt/vcc/system/bin/syscfgd
 1308 ?        S      1:20 /opt/vcc/system/bin/dbmnt
 1332 ?        S      0:01 /opt/vcc/system/bin/cdpd
 1335 ?        S      0:00 /opt/vcc/system/bin/ntpwd
 1338 ?        SL     0:09  \_ /usr/sbin/ntpd -b -n -U ntp -g -x
 1340 ?        S      0:05 /opt/vcc/system/bin/radiusd
 1373 ?        S      0:31 /opt/vcc/system/bin/aaad
 1398 ?        S      0:00 /usr/sbin/in.tftpd -l -v -s /tftpboot
```

FINAL DRAFT—CISCO CONFIDENTIAL

```
 1448 ?        S      0:02 /opt/vcc/system/bin/image_mgmt
 1551 ?        SN     0:00 /opt/vcc/system/bin/vcc_vha
 1553 ?        SN     0:02  \_ /opt/vcc/system/bin/vcc_vha
 1554 ?        SN     0:09      \_ /opt/vcc/system/bin/vcc_vha
 1555 ?        SN     0:05      \_ /opt/vcc/system/bin/vcc_vha
 1571 ?        S      0:00 /opt/vcc/system/bin/dhcpwd
 1573 ?        S      0:02  \_ /opt/vcc/system/bin/dhcpwd
 1574 ?        S      0:00      \_ /opt/vcc/system/bin/dhcpwd
 1579 ?        S      1:21 /usr/bin/perl -w /home/informix/bin/phyll.pl
24386 ?        S     22:59 /usr/java/jre/bin/java -classpath /opt/vcc/java-app/c
fg/jetty:/opt/vcc/java-app/classes:/opt/vcc/java-app/www/WEB-INF/lib/DMXMLExport
.jar:/opt/vcc/java-app/www/WEB-INF/lib/HPiLOXMLTypes.jar:/opt/vcc/java-app/www/W
EB-INF/lib/ImportExport.jar:/opt/vcc/java-app/www/WEB-INF/lib/LogicalServerXMLTy
 7759 ?        S      0:00 /opt/informix/10/bin/ontape -c
test-100#
```

Related Commands

Command	Description
show tech	Displays information that is useful for system debugging.

FINAL DRAFT—CISCO CONFIDENTIAL

show redundancy

To display information about redundancy settings, use the **show redundancy** command in user EXEC mode.

show redundancy {**config** | **status**}

Syntax Description

config	Displays information about redundancy settings.
status	Displays information about the HSRP and DB servers

Command Default

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Examples

The following is sample output from the **show redundancy config** command:

```
test-100# show redundancy config

        HA Priority:100 Hellotime:10 Holdtime:20
        DB Server Name:         vframehost
        HA Mode:                pair
        DB backup storage:      nfs
        NFS Server IP:          192.168.2.57
        Volume:                 vol/BackupVol1
        HA IP:                  10.3.6.141
        Server Comn IP:         10.100.30.10
        Peer DB Server Name:    vfpeerdb
        Peer HA IP:             10.3.6.132
        Peer Server Comn IP:    10.100.30.11
        Peer hostname:          vframepeer
test-100#
```

The following is sample output from the **show redundancy status** command:

```
test-100# show redundancy status

                Local                    Peer
        HA state: ACTIVE_READY          STANDBY_READY
        DB state: IDS_UP                IDS_UP
        DB mode:  Primary               Secondary
        DB hdr status: in sync
test-100#
```

FINAL DRAFT—CISCO CONFIDENTIAL

Related Commands

Command	Description
redundancy	Manages HA settings.

FINAL DRAFT—CISCO CONFIDENTIAL

show system

To display information about system services and settings, use the **show system** command in user EXEC mode.

show system {**services** | **setup**}

Syntax Description

services	Displays information about system services.
setup	Displays information about the system settings.

Command Default

None.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

When you display the status of system services, the expected state differs depending on whether the system is part of an active redundant pair. If the status is **OK**, the state of that service is the expected state under the current operating conditions.

- Standalone mode—If the system is not part of a redundant pair, all systems should be started except hsrp and hdrh, which should be down.
- Paired mode—If the system is part of a redundant pair, all systems should be started except ids, which should be down. Use the **show redundancy status** command to view the status of the IDS system.

If the status of a service is listed as not OK, you can use the **tech service reset** command to restart the service. If the **tech** command cannot restart the service, you must reboot the system.

Examples

The following is sample output from the **show system services** command:

```
test-100# show system services
Service                 Status          State
-------------------------------------------------------
mon_maild               Ok              Started
hsrp                    Ok              Down
hdrh                    Ok              Down
backup                  Ok              Started
ids                     Ok              Started
dhcpwd                  Ok              Started
vcc_vha                 Ok              Started
image_mgmt              Ok              Started
vcc_java                Ok              Started
tftp                    Ok              Started
aaad                    Ok              Started
```

FINAL DRAFT—CISCO CONFIDENTIAL

```
radiusd                 Ok              Started
ntpwd                   Ok              Started
cdpd                    Ok              Started
syscfgd                 Ok              Started
mts                     Ok              Started
test-100#
```

The following is sample output from the **show system setup** command:

```
test-100# show system setup

Hostname               : vframehost.example.com
Management Interface   : eth0
Management IP/Netmask  : 10.100.20.10 255.255.255.0
Server Comn Interface  : eth1
Server Comn IP/Netmask : 10.100.30.10 255.255.255.0
Default Gateway IP     : 10.100.20.1
DNS Domain Name        : example.com
DNS Server IP          : 10.100.50.25
VHA connection over SSL: no
Storage mode           : Storage Template Array
DB Server Name         : vccids
DB backup storage      : local
GIR Type               : NFS
GIR NFS Filer          : 10.100.50.25
GIR NFS Volume         : girvol1
HA Mode                : standalone
test-100#
```

Related Commands

Command	Description
gir	Manages GIR settings.
setup	Performs system configuration.
tech	Manages advanced system debugging.

FINAL DRAFT—CISCO CONFIDENTIAL

show tech

To display information useful for system debugging, use the **show tech** command in user EXEC mode.

show tech

Syntax Description

This command has no arguments or keywords.

Command Default

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The **show tech** command displays this information:

- System serial number.
- The amount of time the system has been running.
- The amount of system memory.
- The status of system processes.
- Mount points.
- Disk space information.
- CPU information.
- Interface information.
- The routing table.
- Patches that have been installed.
- Syslog messages.

Examples

The following is sample output from the **show tech** command:

```
test-100# show tech

Serial Number:  USE547N3F2

Uptime
15:05:07  up 5 days, 21:17,  1 user,  load average: 0.00, 0.01, 0.00

Memory
             total       used       free     shared    buffers     cached
Mem:       2055436    1442520     612916          0      56864     763928
-/+ buffers/cache:     621728    1433708
```

FINAL DRAFT—CISCO CONFIDENTIAL

```
Swap:       2048136          0     2048136
```

Note Not all the output is shown in the preceding example.

Related Commands

Command	Description
tech	Performs advanced system debugging.

FINAL DRAFT—CISCO CONFIDENTIAL

show version

To display the software version, use the **show version** command in user EXEC mode.

show version

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Examples

The following is sample output from the **show version** command:

```
test-100# show version

    VFrame Data Center
    Version 1.1.0.687
    Compiled on Tue May 22 03:00:38 PDT 2007
    Copyright 2007 by Cisco Systems, Inc

    VHA Versions:
    1.301.linux.1.301
    1.301.windows.1.302

    System Uptime is 0 days, 4 hours, 6 minutes 5 secs

    Hostname is vframehost.example.com

test-100#
```

Related Commands

Command	Description
install	Manages patches.

FINAL DRAFT—CISCO CONFIDENTIAL

shutdown

To disable an Ethernet interface, use the **shutdown** command in global configuration mode. To shutdown a Director, use the **shutdown** command in user EXEC mode. To enable an interface, use the **no** form of the command.

shutdown

no shutdown

Syntax Description

This command has no arguments or keywords.

Command Default

No default behavior or values.

Command Modes

User EXEC.

Ethernet interface configuration.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

If you shut down the system, reboot it using the iLO interface. If you want to shut down the system and restart it immediately, use the **reboot** command.

If you are shutting down a system that is a member of a high-availability pair and the system is the active member, use the **redundancy resign** command before using the **shutdown** command. Explicit resignation allows the standby system to take over active status without delay, making the transition smoother.

Examples

The following example shuts down eth2:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# interface eth 2
test-100(config-eth)# shutdown
test-100(config-eth)#
```

Related Commands

Command	Description
config	Provides access to global configuration mode.
end	Exits modes.
reboot	Restarts the Director.

FINAL DRAFT—CISCO CONFIDENTIAL

ssh

To create an SSH connection to another network device, use the **ssh** command in user EXEC mode.

ssh *ip-address user-name* [**port** *port-number* [**version** {**1** | **2**}] | **version** {**1** | **2**}]

Syntax Description

ip-address	Specify the IP address of the host. The maximum number of characters is 256.
port *port-number*	(Optional) Defines the port used for SSH by the destination host. Specify the port number in *port-number*. Valid port numbers range from 1 to 65535.
user-name	Specify the user name of the host. The maximum number of characters is 80.
version 1 | 2	(Optional) Specifies the version of SSH you want to use. Choose either **1** or **2**.

Command Default

The default SSH port is 22.

The default SSH version is 2.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The **ssh** command creates a standard SSH client connection. Once connected, you are operating in the remote host mode until you quit the SSH connection, typically by entering the **quit** command.

If the remote device accepts the connection, you are prompted for the user password.

Specify a port number only if the remote system is configured to use a port other than the default port for SSH.

Examples

The following example creates an SSH connection to the host 192.0.2.10 using the root user account:

```
test-100# ssh 192.0.2.10 root
root@192.0.2.10's password:
```

Related Commands

Command	Description
telnet	Creates a Telnet connection.

FINAL DRAFT—CISCO CONFIDENTIAL

tech

To manage advanced system debugging, use the **tech** command in user EXEC mode.

tech {**dumptcp** *port-number* [**count** *packets-dumped*] | **dumpthreads** | **renable** | **service reset** *service-name* | **unenable** | **verify**}

Syntax Description

count *packets-dumped*	(Optional) Sets the number of TCP packets dumped to the console when performing a TCP dump. Specify the number of packets in *packets-dumped*. The maximum number of characters is 10000.
dumptcp *port-number*	Performs a TCP packet dump to the console. Specify the port number in *port-number*. Valid port numbers are 0, 1, or 2.
dumpthreads	Writes the current status of all Java threads to the java-app log.
renable	Sets the root user password and enables root access to the system.
service reset *service-name*	Resets a system service. Specify the service in *service-name*. Use one of the following keywords to reset a specific service: • **aaad** • **cdpd** • **dbmnt** • **dhcpwd** • **image_mgmt** • **ntpwd** • **radiusd** • **syscfgd** • **sysmnt** • **tftp** • **vcc_java** • **vcc_vha**
unenable	Disables root access to the system.
verify	Verifies that the software installed on the system is uncorrupted.

Command Default

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

FINAL DRAFT—CISCO CONFIDENTIAL

Usage Guidelines

If you do not specify the **count** parameter, all packets are dumped to the console.

Press **Ctrl+C** to stop a dump.

You must have advanced knowledge of TCP/IP in order to read and understand the information dumped to the console. The information is meant to help advanced users diagnose connection problems in the network.

Examples

The following example dumps three TCP packets:

```
test-100# tech dumptcp 0 count 3
tcpdump: listening on eth0
15:38:05.196657 test-100.nbv.cisco.com.ssh > dhcp-171-71-27-217.cisco.com.2586: P
2316986119:2316986183(64) ack 3375521822 win 16320 (DF) [tos 0x10]
15:38:05.197261 dhcp-171-71-27-217.cisco.com.2586 > test-100.nbv.cisco.com.ssh: . ack 64
win 64592 (DF)
15:38:05.222923 test-100.nbv.cisco.com.32774 > nbv-dns1.nbv.cisco.com.domain:  27830+ PTR?
217.27.71.171.in-addr.arpa. (44) (DF)
9 packets received by filter
0 packets dropped by kernel
test-100#
```

Related Commands

Command	Description
show fault	Displays information about system errors.
show tech	Displays information useful for system debugging.

FINAL DRAFT—CISCO CONFIDENTIAL

telnet

To create a Telnet connection to another network device, use the **telnet** command in user EXEC mode.

telnet *ip-address* [**port** *port-number*]

Syntax Description

ip-address	Specify the IP address of the remote host. The format is A.B.C.D.
port *port-number*	(Optional) Defines the port used for the connection. Specify the port number in *port-number*. The maximum number of characters is 65535.

Command Default

The default Telnet port is 23.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

If the remote host accepts your connection, you are prompted for a username and password to log into the system, if one is required.

If the remote host supports SSH, use the **ssh** command to create a secure connection to the remote host.

Examples

The following example creates a Telnet connection with the host 192.0.2.10 using the root user account:

```
test-100# telnet 192.0.2.10
Trying 192.0.2.10...
Connected to 192.0.2.10.
Escape character is '^]'.
User Access Verification
Username: root
Password:
remotehost>
```

Related Commands

Command	Description
ssh	Creates an SSH connection.

FINAL DRAFT—CISCO CONFIDENTIAL

traceroute

To determine the number of router hops between a Director and a remote system, use the **traceroute** command in user EXEC mode.

traceroute *ip-address*

Syntax Description

ip-address	Specify the destination IP address. The maximum number of characters is 100.

Command Default

No default behavior or values.

Command Modes

User EXEC.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The **traceroute** command sends three ICMP packets to each hop along the route, and displays the number of milliseconds it took to get a response. The output lists each hop. An asterisk appears if the next hop cannot be determined or if no response is received.

Press **Ctrl+C** to stop traceroute if it does not end normally.

Examples

The following example traces a route to host 192.0.2.10:

```
test-100# traceroute 192.0.2.10
traceroute to 192.0.2.10 (192.0.2.10), 30 hops max, 38 byte packets
 1  192.0.2.27 0.435 ms  0.170 ms  0.157 ms
 2  192.0.2.101 0.478 ms  0.312 ms  0.296 ms
 3  192.0.2.10 0.527 ms  0.083 ms  0.084 ms
test-100#
```

Related Commands

Command	Description
ping	Tests a remote system.

FINAL DRAFT—CISCO CONFIDENTIAL

user password

To mange passwords for the user accounts, use the **user password** command in global configuration mode. To disable the password for the admin or macrouser user accounts, use the **no** form of this command.

user password {**admin** | **macrouser**}

no user password {**admin** | **macrouser**}

Syntax Description

admin | **macrouser**	Sets the password for the admin or macrouser account. Choose either **admin** or **macrouser**.

Command Default

No default behavior or values.

Command Modes

Global configuration.

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

The admin account is the default superuser account. The password you configure controls the password for SSH, console sessions, and for logging into the GUI.

After entering the **user password** command, you are prompted for the password and asked to enter it again to confirm it. As you are typing, the password does not appear on your screen, but the system accepts the typed input.

If the system judges the password to be inadequately secure, it notifies you with a BAD PASSWORD message. However, you can ignore the prompt and reenter the password to confirm it.

If you want to choose a different password after receiving the BAD PASSWORD message, you can press **Enter** without reentering the password at the retry password prompt, and you are prompted for a new password.

Examples

The following example changes the admin password:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# user password admin
Changing password for user admin.
New password:
BAD PASSWORD: it is based on a dictionary word
Retype new password:
passwd: all authentication tokens updated successfully.
test-100(config)#
```

FINAL DRAFT—CISCO CONFIDENTIAL

Note The preceding command is successful, even though the BAD PASSWORD message appears.

Related Commands

Command	Description
setup	Performs initial system configuration.

FINAL DRAFT—CISCO CONFIDENTIAL

vha connection

To create an SSL connection with the VFrame host agent, use the **vha** command in global configuration mode. To disable an SSL connection with the VFrame host agent, use the **no** form of this command.

vha connection ssl

no vha connection ssl

Syntax Description

ssl	Creates an SSL connection with the VFrame host agent.

Command Default

The VFrame host agent automatically connects to port 3010, the SSL port.

Command Modes

Global configuration (config)

Command History

Release	Modification
1.1	This command was introduced.

Usage Guidelines

Do not create an SSL connection between the VFrame host agent and the model test server.

If the VFrame host agent fails to connect to port 3010, it automatically connects to port 3000, the TCP port.

You do not need to create a certificate for SSL. VFrame generates a self-signed certificate for SSL.

Examples

The following example creates an SSL connection between the Director and the VFrame host agent:

```
test-100# config
Enter configuration commands, one per line. End with CNTL/Z.
test-100(config)# vha connection ssl
test-100(config)#
```

Related Commands

Command	Description
show system	Displays information about system services and configurations.
ssh	Creates an SSH connection with another device.

FINAL DRAFT—CISCO CONFIDENTIAL

REVIEW DRAFT—CISCO CONFIDENTIAL

INDEX

REVIEW DRAFT—CISCO CONFIDENTIAL

I

L

M

N

O

P

R

S

T

U

REVIEW DRAFT—CISCO CONFIDENTIAL

V

REVIEW DRAFT—CISCO CONFIDENTIAL