BROCADE

COMMAND REFERENCE GUIDE

Brocade Services Director Command Reference, 17.2

Supporting Brocade Services Director 17.2

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Contents

Preface

Document conventions

The document conventions describe text formatting conventions, command syntax conventions, and important notice formats used in Brocade technical documentation.

Notes, cautions, and warnings

Notes, cautions, and warning statements may be used in this document. They are listed in the order of increasing severity of potential hazards.

NOTE
A Note provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.

ATTENTION
An Attention statement indicates a stronger note, for example, to alert you when traffic might be interrupted or the device might reboot.

CAUTION
A Caution statement alerts you to situations that can be potentially hazardous to you or cause damage to hardware, firmware, software, or data.

DANGER
A Danger statement indicates conditions or situations that can be potentially lethal or extremely hazardous to you. Safety labels are also attached directly to products to warn of these conditions or situations.

Text formatting conventions

Text formatting conventions such as boldface, italic, or Courier font may be used to highlight specific words or phrases.

Format	Description
bold text	Identifies command names.
	Identifies keywords and operands.
	Identifies the names of GUI elements.
	Identifies text to enter in the GUI.
italic text	Identifies emphasis.
	Identifies variables.
	Identifies document titles.
`Courier font`	Identifies CLI output.

Format	Description
	Identifies command syntax examples.

Command syntax conventions

Bold and italic text identify command syntax components. Delimiters and operators define groupings of parameters and their logical relationships.

Convention	Description
bold text	Identifies command names, keywords, and command options.
italic text	Identifies a variable.
value	In Fibre Channel products, a fixed value provided as input to a command option is printed in plain text, for example, **--show** WWN.
[ ]	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
{ **x** | **y** | **z** }	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options. In Fibre Channel products, square brackets may be used instead for this purpose.
x | **y**	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, for example, passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, *member*[*member*...].
\	Indicates a "soft" line break in command examples. If a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

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Document feedback

Quality is our first concern at Brocade, and we have made every effort to ensure the accuracy and completeness of this document. However, if you find an error or an omission, or you think that a topic needs further development, we want to hear from you. You can provide feedback in two ways:

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Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.

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- Brocade Supplemental Support augments your existing OEM support contract, providing direct access to Brocade expertise. For more information, contact Brocade or your OEM.
- For questions regarding service levels and response times, contact your OEM/solution provider.

Using the Command-Line Interface

Connecting to the CLI

This section assumes you have already performed the initial setup of the appliance using the configuration wizard. For detailed information, see the *Brocade Services Director Getting Started Guide*.

To connect the CLI

1. You can connect to the CLI using one of the following options:
   - An ASCII terminal or emulator that can connect to the serial console. It must have the following settings: 9600 baud, 8 bits, no parity, 1 stop bit, and no flow control.
   - A computer with an SSH client that is connected to the appliance Primary port (in rare cases, you might connect through the Auxiliary port).
2. At the system prompt enter the following command if the appliance resolves to your local DNS:

   ```
   ssh admin@host.domain
   ```

   Otherwise, at the system prompt enter the following command:

   ```
   ssh admin@ipaddress
   ```

3. When prompted, enter the administrator password. This is the password you set during the initial configuration process. The default password is password. For example:

   ```
   login as: admin
   Brocade Services Director
   Last login: Wed Jan 20 13:02:09 2010 from 10.0.1.1
   amnesiac >
   ```

   You can also log in as a monitor user (monitor). Monitor users cannot make configuration changes to the system. Monitor users can view statistics and system logs.

Overview of the CLI

The CLI has the following modes:

- **User** - When you start a CLI session, you begin in the default, user-mode. From user-mode you can run common network tests such as ping and view network configuration settings and statistics. You do not enter a command to enter user-mode. To exit this mode, enter exit at the command line.

- **Enable** - To access system monitoring commands, you must enter enable-mode. From enable-mode, you can enter any enable-mode command or enter configuration-mode. You must be an administrator user to enter enable-mode. In enable-mode you can perform basic system administration tasks, such as restarting and rebooting the system. To exit this mode, enter disable at the command line. You cannot enter enable-mode if you are a monitor user.
- **Configuration** - To make changes to the running configuration, you must enter configuration-mode. To save configuration changes to memory, you must enter the write memory command. To enter configuration-mode, you must first be in enable-mode. To exit this mode, enter exit at the command line.

The commands available to you depend on which mode you are in. Entering a question mark (?) at the system prompt provides a list of commands for each command mode.

TABLE 1 Command modes

Mode	Access Method	System Prompt	Exit Method	Purpose
user	Each CLI session begins in user-mode.	host >	exit	• Perform common network tests, such as ping. • Display system settings and statistics.
enable	Enter the **enable** command at the system prompt while in user-mode.	host #	disable	• Perform basic system administration tasks, such as restarting and rebooting the system. • Display system data and statistics. • Perform all user-mode commands.
configuration	Enter the **configure** terminal command at the system prompt while in enable-mode.	host (config) #	exit	• Configure system parameters. • Perform all user and enable-mode commands.

If you have questions about the usage of a command, contact Technical Support.

Entering Commands

The CLI accepts abbreviations for commands. The following example is the abbreviation for the configure terminal command:

```
amnesiac # configure t
```

You can press the tab key to complete a CLI command automatically.

Accessing Online Help

At the system prompt, type the full or partial command string followed by a question mark (?). The CLI displays the command keywords or parameters for the command and a short description. You can display help information for each parameter by typing the command, followed by the parameter, followed by a question mark.

To access online help

- At the system prompt enter the following command:

```
amnesiac (config) # show ?
```

- To display help for additional parameters, enter the command and parameter:

```
amnesiac (config) # access ?
enable           Enable secure network access
inbound          Secure access inbound configuration
amnesiac (config) # access inbound ?
rule             Secure access inbound rule configuration
amnesiac (config) # access inbound rule ?
add              Add a secure network access rule
edit             Edit a secure network access rule
move             Move a secure network access rule
```

Error Messages

If at any time the system does not recognize the command or parameter, it displays the following message:

```
amnesiac (config) # logging files enable
% Unrecognized command "enable".
Type "logging files?" for help.
```

If a command is incomplete, the following message is displayed:

```
amnesiac (config) # logging
% Incomplete command.
Type "logging ?" for help.
```

Command Negation

You can type **no** before many of the commands to negate the syntax. Depending on the command or the parameters, command negation disables the feature or returns the parameter to the default value.

Running the Configuration Wizard

You can restart the configuration wizard so that you can change your initial configuration parameters.

To restart the configuration wizard

- Enter the following set of commands at the system prompt:

```
enable
configure terminal
configuration jump-start
```

Saving Configuration Changes

The show configuration running command displays the current configuration of the system. When you make a configuration change to the system, the change becomes part of the running configuration.

The change does not automatically become part of the configuration file in memory until you write the file to memory. If you do not save your changes to memory, they are lost when the system restarts.

To save all configuration changes to memory, you must enter the write memory command while in configuration-mode.

User-Mode Commands

This chapter is a reference for user-mode system commands.

Entering User-mode

User-mode allows you to enter enable-mode, display system data, and perform standard networking tasks. Monitor users can perform user-mode commands. All commands available in user-mode are also available to administrator users.

To enter user-mode

- Connect to the CLI and enter the following command:

```
login as: admin
Brocade Services Director
Last login: Wed Jan 20 13:02:09 2010 from 10.0.1.1
amnesiac >
```

User-Mode Commands

The following section contains the Services Director commands.

enable

Enters enable mode.

Syntax

enable

Usage Guidelines

You must enter enable mode before you can perform standard network monitoring tasks.

Examples

```
amnesiac > enable
```

exit

Exits the CLI when in user mode; exits configuration mode when in configuration mode.

Syntax

exit

Examples

```
amnesiac > exit
```

ping

Executes the ping utility to send ICMP ECHO_REQUEST packets to network hosts using IPv4 addresses, for troubleshooting.

Syntax

ping [*options*]

Parameters

options

The **ping** command takes the standard Linux options. For detailed information, see the Linux manual (man) page.

Usage Guidelines

The **ping** command without any options pings from the primary or the auxiliary (aux) interface and not the in-path interfaces.

If the primary and auxiliary interfaces are not on the same network as the in-path interfaces, you will not be able to ping an IP address on the in-path interface network unless you have a gateway between the two networks.

To ping from an in-path interface, use the following syntax:

```
ping -I <in-path interface IP address> <destination IP address>
```

Examples

```
amnesiac > ping -I 10.1.1.1 10.11.22.15
PING 10.11.22.15 (10.11.22.15) from 10.1.1.1: 56(84) bytes of data.
64 bytes from 10.11.22.15: icmp_seq=0 ttl=64 time=0.044 ms
64 bytes from 10.11.22.15: icmp_seq=1 ttl=64 time=0.038 ms
64 bytes from 10.11.22.15: icmp_seq=2 ttl=64 time=0.040 ms
```

ping6

Sends ICMP6_ECHO_REQUEST packets to a network host or gateway using IPv6 addresses, for troubleshooting.

Syntax

ping6 [*options*]

Parameters

options

The **ping6** command takes the standard Linux options. For detailed information, see the Linux manual (man) page.

Usage Guidelines

The **ping6** command without any options pings from the primary or the auxiliary (aux) interface.

Examples

```
amnesiac > ping6 fe80::20e:b6ff:fe04:2788 fe80::20e:b6ff:fe02:b5b0
PING fe80::20e:b6ff:fe04:2788(fe80::20e:b6ff:fe04:2788) from fe80::20e:b6ff:fe02:b5b0 primary: 56 data
bytes
64 bytes from fe80::20e:b6ff:fe04:2788: icmp_seq=0 ttl=64 time=1.14 ms
64 bytes from fe80::20e:b6ff:fe04:2788: icmp_seq=1 ttl=64 time=0.186 ms
--- fe80::20e:b6ff:fe04:2788 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 0.186/0.667/1.148/0.481 ms, pipe 2::0101:B3FF:FE1E:8937 2001:38dc:
52::e9a4:c5:1001
```

Related Commands

ipv6 in-path-gateway

show access inbound rules

Displays secure network access inbound configuration.

Syntax

show access inbound rules

Examples

```
amnesiac > show access inbound rules
Secure network access enabled: no

Rule  A Prot Service/ports Src network        iface
----- - ---- ------------- ------------------ --------- ----------------------
      A tcp  7800          0.0.0.0/0
      A tcp  7801          0.0.0.0/0
      A tcp  7810          0.0.0.0/0
      A tcp  7820          0.0.0.0/0
      A tcp  7850          0.0.0.0/0
      A tcp  ssh           10.0.24.7/32
1     A udp  all           0.0.0.0/0                  Allow DNS lookups
2     A udp  53            0.0.0.0/0                  DNS Caching
```

Related Commands

ssh client generate identity user

show access status

Displays secure network access status.

Syntax

show access status

Examples

```
amnesiac > show access status
```

Related Commands

ssh client generate identity user

show alarm

Displays the status of the specified alarm.

Syntax

show alarm *type*

Parameters

type

See the alarm enable on page 141 command for a complete listing and description of alarm types.

Examples

```
amnesiac # show alarm warning_temp
Alarm Id: Warning Temperature
Alarm : The temperature of the appliance is above normal
Enabled: yes
Alarm State: ok
Error threshold: 70
Clear threshold: 67
Last error at: None
Last clear at: None
```

Related Commands

alarm clear, alarm enable, show alarms

show alarms

Displays the status of all alarms.

Syntax

show alarms [**triggered**]

Parameters

triggered

Displays status and configuration of triggered alarms.

Examples

```
amnesiac > show alarms
Alarm Id:          admission_conn
Alarm : Connection Limit Pressure
Status:            ok
----------------------------------------
Alarm Id:          admission_control
Alarm : Admission Control Pressures
Status:            ok
----------------------------------------
Alarm Id:          admission_cpu
Alarm : CPU Pressure
Status:            ok
----------------------------------------
Alarm Id:          admission_mapi
Alarm : MAPI Pressure
Status:            ok
----------------------------------------
Alarm Id:          admission_mem
Alarm : Memory Pressure
Status:            ok
----------------------------------------
Alarm Id:          admission_tcp
Alarm : TCP Pressure
Status:            ok
----------------------------------------
Alarm Id:          arcount
Alarm : Asymmetric Routing
Status:            ok
----------------------------------------
Alarm Id:          block_store
Alarm : Blockstore
Status:            ok
----------------------------------------
<<this is a partial listing>>
```

Related Commands

alarm clear, alarm enable, show alarm

show authentication policy

Displays the status of the authentication policy.

Syntax

show authentication policy

Examples

```
amnesiac > show authentication policy
Authentication policy enabled:                          yes
Maximum unsuccessful logins before account lockout:     none
      Wait before account unlock:                       300 Seconds
Minimum password length:                                6
Minimum upper case characters in password:              1
Minimum lower case characters in password:              1
Minimum numerical characters in password:               1
Minimum special characters in password:                 1
Minimum interval for password reuse:                    5
Minimum characters diff for password change:            4
Prevent dictionary words in password:                   yes
User passwords expire:                                  60 days
Warn user of an expiring password:                      7 days before
User accounts with expired passwords lock:                       305
days
```

Related Commands

authentication policy enable

show bootvar

Displays the software image that is booted upon the next reboot.

Syntax

show bootvar

Examples

```
amnesiac > show bootvar
Installed images:
Partition 1:
rbtsh/linux columbia #1 2004-02-07 19:24:24 root@test:repository
Partition 2:
rbtsh/linux Columbia #2 2004-02-13 17:30:17 root@test:repository
Last boot partition: 1
Next boot partition: 1
```

Related Commands

host-label

show cli

Displays current CLI settings.

Syntax

show cli

Examples

```
amnesiac > show cli
CLI current session settings
Maximum line size:  8192
Terminal width:     157 columns
Terminal length:    15 rows
Terminal type:      xterm
Auto-logout:        30 minutes
Paging:             enabled
CLI defaults for future sessions
Auto-logout:     30 minutes
Paging:          enabled
```

Related Commands

cli default paging enable

show clock

Displays current date and time.

Syntax

show clock [**all**]

Parameters

all

Displays the system time, date, and ntp peers.

Examples

```
amnesiac > show clock
Time: 15:11:13
Date: 2008/10/18
Zone: America North United_States Pacific
```

show email

Displays the current email settings.

Syntax

show email

Examples

```
amnesiac > show email
Mail hub:       exchange
Mail hub port:  30
Domain:         example.com

Event emails
  Enabled: yes
  Recipients:
    example@xxxxxxxx.com

Failure emails
  Enabled: yes
  Recipients:
    example@xxxxxxxx.com

Autosupport emails
  Enabled: no
  Recipient:
    sdauto@brocade.com
  Mail hub:
    eng.xxxxxxxx.com
```

Related Commands

email autosupport enable

show hardware error-log

Displays IPMI system event log entries.

Syntax

show hardware error-log { **all** | **new** }

Parameters

all

Displays all IPMI SEL entries

new

Display IPMI SEL entries since the last **show hardware error-log** command was issued.

licensing info

Display current licenses.

Examples

```
amnesiac > show hardware error-log all
1 | 11/28/2006 11:55:10 | Event Logging Disabled SEL | Log area reset/cleared |
Asserted = yes.
2 | 01/04/2007 21:09:07 | Slot/Connector Drive | Fault Status | Asserted = yes.
3 | 01/07/2007 03:24:07 | Slot/Connector Drive | Fault Status | Asserted = yes.
```

Related Commands

clear hardware error-log

show history

Displays event history.

Syntax

show history [**category** *category*] [**severity** *level*]

Parameters

category *category*

Displays event history for the specified event category:

alarm

cli

config

mgmt

web

severity *level*

Displays the minimum syslog severity threshold for the event category:

emer
: System unusable

alert
: Immediate action

crit
: Critical conditions

err
: Error conditions

warning
: Warning conditions

notice
: Normal but significant condition

info
: Informational messages

debug
: Debug-level messages

Usage Guidelines

Alarms leave no record other than the message log, which is unstructured and not always helpful. Use the **show history** command to help diagnose problems by viewing the event history (an alarm is an example of an event). Other examples of events include a login or a configuration change. An event history displays all events at a glance, allows for the search description of alarms according to several criteria, and puts the alarms in the context of other time-based statistical information.

Examples

```
amnesiac > show history
Enable: yes
Last Ping:  2013-02-12 14:31:49.412973153 -0700
Saved Ping:  2013-03-21 07:25:51.000000000 -0700
```

Related Commands

alarm enable

show hardware watchdog

Displays hardware watchdog information.

Syntax

show hardware watchdog

Examples

```
amnesiac > show hardware watchdog
Enable: yes
Last Ping:  2006-05-12 14:31:49.412973153 -0700
Saved Ping:  2006-04-21 07:25:51.000000000 -0700
```

Related Commands

host-label

show hosts

Displays system hosts.

Syntax

show hosts

Examples

```
amnesiac > show hosts
Hostname: amnesiac
Name server: 10.0.0.2 (configured)
Domain name: domain.com (configured)
Domain name: domain.com (configured)
IP 107.0.0.1 maps to hostname localhost
```

Related Commands

hostname

show host-label

Displays information about the specified host label.

Syntax

show host-label *name* [**detailed**]

Parameters

name

Specify the name of the host label.

detailed

Displays detailed hostname and subnet status information.

Examples

```
amnesiac # show host-label test
10.0.0.0/8, 192.168.0.1/32, 192.168.0.2/32, example.com, xxxxxxxx.com

amnesiac # show host-label test detailed

Subnets:
10.0.0.0/8, 192.168.0.1/32, 192.168.0.2/32

Host example.com:
192.0.43.10/32
Resolved: 2013/03/12 18:54:14

Host xxxxxxxx.com:
192.0.43.10/32
Resolved: 2013/03/12 18:54:14

Next scheduled resolve: 2013/03/13 18:54:09
```

Related Commands

host-label

show images

Displays the available software images and which partition the appliance boots the next time the appliance is restarted.

Syntax

show images [**checksum**]

Parameters

checksum

Displays the Message-Digest 5 algorithm (MD5) checksum of the system images.

Examples

```
amnesiac > show images
Images available to be installed:
webimage.tbz
rbtsh/linux 4.0 #12 2007-05-15 11:54:52 root@test:CVS_TMS/HEAD
image.img
rbtsh/linux 4.0 #17 2007-05-22 16:39:32 root@test:CVS_TMS/HEAD
Installed images:
Partition 1:
rbtsh/linux 4.0-HEAD-2007-06-15-07:19:19 #0 2007-06-15 07:19:19 root@test:CVS_TMS/HEAD
Partition 2:
rbtsh/linux 4.0 2007-05-15 11:54:52 root@test:CVS_TMS/HEAD
Last boot partition: 2
Next boot partition: 2
```

Related Commands

image install

show info

Displays the system information, including the current state of the system.

Syntax

show info

Examples

```
amnesiac > show info
Current User:      admin
Status:            Healthy
Config:            initial
Appliance Up Time: 4h 4m 13s
Number of CPUs:    4
CPU load averages: 0.08 / 0.02 / 0.01
Temperature (C):   0
Serial:            Unknown
Model:             V1000
Revision:          A
Version:           2.3.0-mainline
```

Related Commands

configuration new

show logging

Displays logging and logging filter settings.

Syntax

show logging [**filter**]

Parameters

filter

Displays per-process logging configuration information.

Examples

```
amnesiac > show logging filter
Local logging level: info
amnesiac > show logging
Local logging level: info
Default remote logging level: notice
Remote syslog receiver: 10.10.10.2 (logging level: info)
Number of archived log files to keep: 10
Log rotation frequency: daily
```

Related Commands

logging

show ntp

Displays NTP settings.

Syntax

show ntp [**all**]

Parameters

all

Display NTP settings and active peers.

Examples

```
amnesiac > show ntp
NTP enabled: yes

No NTP peers configured.

NTP servers:
0.vyatta.pool.ntp.org (version 4)       Enabled: yes
1.vyatta.pool.ntp.org (version 4)       Enabled: yes
2.vyatta.pool.ntp.org (version 4)       Enabled: yes
3.vyatta.pool.ntp.org (version 4)       Enabled: yes

No active ntp peers
```

Related Commands

ntp server enable

show ntp active-peers

Displays active NTP peers.

Syntax

show ntp active-peers

Examples

```
amnesiac > show ntp active-peers
No active ntp peers
     remote           refid      st t when poll reach   delay   offset  jitter
==============================================================================
 propjet.latt.ne .XFAC.          16 u    - 1024    0    0.000    0.000   0.000
 mail.coldnortha .XFAC.          16 u    - 1024    0    0.000    0.000   0.000
 services.quadra .XFAC.          16 u    - 1024    0    0.000    0.000   0.000
 yurizoku.tk     .XFAC.          16 u    - 1024    0    0.000    0.000   0.000

     remote       conf  auth  key
==================================
 propjet.latt.ne  yes   none  none
 mail.coldnortha  yes   none  none
 services.quadra  yes   none  none
 yurizoku.tk      yes   none  none
```

Related Commands

ntp server enable

show ntp authentication

Displays NTP authentication settings.

Syntax

show ntp authentication

Examples

```
amnesiac > show ntp authentication
Trusted Keys: 5, 10

KeyID  KeyType   Encrypted Secret
-------------------------------------------------
5      MD5       rP1LTiIVk7QlMyFiLSpAKA==
65534  MD5       2Ovzk2RGghrBJLp6BX+BpSxo1pvz+5CM
```

Related Commands

ntp server enable

show snmp

Displays SNMP server settings.

Syntax

show snmp

Examples

```
amnesiac > show snmp
SNMP enabled: yes
System location:
System contact:
Read-only community: public
Traps enabled: yes
No trap sinks configured.
```

Related Commands

write memory

show snmp acl-info

Displays SNMP access control list settings.

Syntax

show snmp acl-info

Examples

```
amnesiac > show snmp acl-info
Security Names
--------------
Security name                    Community string         Source address
-------------                    ----------------         --------------
There are no configured security names
Groups
------
Group name                       Security model   Security name
----------                       --------------   -------------
There are no configured groups
Views
-----
There are no configured views
Access control lists
--------------------
Group name                       Security level Read view
----------                       -------------- -------------
```

Related Commands

snmp-server enable

show snmp ifindex

Displays the ifindex values for all interfaces.

Syntax

show snmp ifindex

Examples

```
amnesiac > show snmp ifindex
Interface    Ifindex
-----------------------
      aux    1
     eth0    6
     eth1    7
     eth2    8
     eth3    9
     eth4    10
     eth5    11
     eth6    12
     eth7    13
       lo    5
  primary    2
```

Related Commands

snmp-server enable

show snmp usernames

Displays SNMP user settings.

Syntax

show snmp usernames

Examples

```
amnesiac > show snmp usernames

Username             Authentication Protocol  Authentication Key
There are no configured users
```

Related Commands

snmp-server enable

show ssh client

Displays the client settings.

Syntax

show ssh client [**private**]

Parameters

private

Display SSH client public and private keys.

Examples

```
amnesiac > show ssh client
SSH server enabled: yes
```

Related Commands

ssh client generate identity user

show ssh server

Displays the ssh server.

Syntax

show ssh server [**allowed-ciphers** | **publickey**]

Parameters

allowed-ciphers

Display SSH server allowed ciphers.

publickey

Display SSH server-public host key.

Examples

```
amnesiac > show ssh server publickey
SSH server public key: ssh-rsa AAAAB3NzaC1yc2XXXXXXXwAAAQEAwz7zKAc1NbTKSp40mRg7J
9YV5CeoGRQoCEPS17ValtEQbepaQygdifueiejht39837482y74982u7ridejbvgiIYZs/E23zmn212kj
dXFda8zJxJm07RIKOxNDEBUbAUp8h8dkeiejgfoeoriu39438598439gfjeNLfhjWgh1dzeGYycaAoEA
K21Igg+Sg0ELGq2cJ8mMzsSsCq5PnOmj63RAMuRgBdrtBdIAd32fy642PQJveqtfl7MBN6IwTDECRpex
F3Ku98pRefc2h0u44VZNT9h4tXCe8qHpuO5k98oA

amnesiac > show ssh server allowed-ciphers
SSH server allowed ciphers:
---------------------------
aes128-ctr
aes192-ctr
aes256-ctr
```

Related Commands

ssh client generate identity user

show stats cpu

Displays CPU statistics.

Syntax

show stats cpu [**1min** | **5min** | **hour** | **day** | **week** | **month**]

Parameters

1min | **5min** | **hour** | **day** | **week** | **month**

Specify a time interval to display CPU statistics.

Examples

```
amnesiac > show stats cpu
CPU 1
  Utilization:                3%
  Peak Utilization Last Hour: 10% at 2008/10/17 18:10:03
  Avg. Utilization Last Hour: 4%
```

Related Commands

show stats memory

show stats ecc-ram

Displays the ECC error counts.

Syntax

show stats ecc-ram

Examples

```
amnesiac > show stats ecc-ram
No ECC memory errors have been detected
```

Related Commands

show stats memory

show stats fan

Displays the fan statistics.

Syntax

show stats fan

Examples

```
amnesiac > show stats fan
FanId   RPM     Min RPM Status
1       3825    750     ok
2       3750    750     ok
```

Related Commands

show hardware error-log

show stats memory

Displays memory statistics.

Syntax

show stats memory [**1min** | **5min** | **hour** | **day** | **week** | **month**]

Parameters

1min | **5min** | **hour** | **day** | **week** | **month**

Specify a time interval to display CPU statistics.

Examples

```
amnesiac > show stats memory
Total Swapped Over Last Hour:          0 pages
Average Swapped Over Last Hour:        0 pages
Peak Swapped Over Last Hour:           0 pages
Peak Swapped Time:                     2008/10/17 17:37:41
```

Related Commands

show stats ecc-ram

show tcpdump stop-trigger

Displays the configuration settings that trigger the stop of a TCP dump.

Syntax

show tcpdump stop-trigger

Examples

```
amnesiac > show tcpdump stop-trigger
Tcpdump trigger enabled: no
Regex: ntp
Delay: 10
Last triggered on: 2013/01/12 17:33:52
Last triggered by: ntp
```

Related Commands

tcpdump stop-trigger enable, tcpdump stop-trigger regex, tcpdump stop-trigger restart

show tcpdump-x

Displays currently running tcpdumps.

Syntax

show tcpdump-x

Examples

```
amnesiac > show tcpdump-x
No running capture
```

Related Commands

tcpdump stop-trigger enable

show terminal

Displays terminal settings.

Syntax

show terminal

Examples

```
amnesiac > show terminal
CLI current session settings
  Terminal width:     80 columns
  Terminal length:    24 rows
  Terminal type:      xterm
```

show uploads

Displays system dump files uploaded to Brocade Technical Support.

Syntax

show uploads

Usage Guidelines

The **show uploads** command shows the system dump files that have been uploaded to Brocade Technical Support or are in progress. The display shows up to 100 upload statistics, includes whether the upload is completed or in progress, and shows whether or not an error occurred during the upload process. You can clear the upload statistics using the **file upload clear-stats** command.

Examples

```
amnesiac > show uploads

Upload 0:
file: /var/opt/tms/tcpdumps/bravo-sh236_aux_new.cap0
url: ftp://ftp.xxxxxxxx.com/incoming/case_194170_F82JY00002BE4_bravo-sh236_aux_new.cap0
status: finished
percent complete: 100%
start time: 2013/03/25 12:16:40 -0700
finish time: 2013/03/25 12:16:41 -0700
```

Related Commands

file upload clear-stats

show version

Displays the installed software version, including build number.

Syntax

show version [**all** | **concise** | **history**]

Parameters

all

Displays version information for the current system image. This option displays the product release and the software version.

concise

Displays the installed software version without build information.

history

Displays upgrade version history.

Examples

```
amnesiac >  show version
Product name:      rbt_sh
Product release:   7.0.2
Build ID:          #0
Build date:        2012-02-15 16:36:45
Build arch:        x86_64
Built by:          root@moscow.nbttech.com
Uptime:            15d 19h 40m 38s
Product model:
System memory:     208 MB used / 3681 MB free / 3890 MB total
Number of CPUs:    4
CPU load averages: 0.02 / 0.03 / 0.00

amnesiac >  show version all
Product release:   1.0.1
RiOS release:      rbt_sh 7.0.2 #202_101 2012-02-15 10:16:14 x86_64 root@basel:s
vn://svn/mgmt/branches/release_branch
Build ID:          #202_101
Build date:        2012-02-15 14:22:27
Build arch:        x86_64
Built by:          root@basel

Uptime:            14h 13m 5s

Product model:     EX760
System memory:     5329 MB used / 10681 MB free / 16010 MB total
Number of CPUs:    4
CPU load averages: 0.36 / 0.40 / 0.32
```

Related Commands

image fetch, image install

show web

Displays current Web settings.

Syntax

show web

Examples

```
amnesiac > show web
web-based management console enabled:
   HTTP enabled: yes
   HTTP port: 80
   HTTPS enabled: yes
   HTTPS port: 443
   Inactivity timeout: 15 minutes
   Session timeout: 60 minutes
   Session renewal threshold: 30 minutes
```

show web prefs

Displays the current Web preferences.

Syntax

show web prefs

Examples

```
amnesiac > show web prefs
Log:
Lines Per Page: 100
```

show web ssl cert

Displays certificate details.

Syntax

show web ssl cert

Examples

```
amnesiac > show web ssl cert
Issued To:
  Common Name:       gen-sh226
  Email:             admin@gen-sh226
  Organization:      Brocade
  Organization Unit:
  Locality:          San Francisco
  State:             California
  Country:           --
Issued By:
  Common Name:       gen-sh226
  Email:             admin@gen-sh226
  Organization:      Brocade
  Organization Unit:
  Locality:          San Francisco
  State:             California
  Country:           --
Validity:
  Issued On:         May  4 22:18:55 2011 GMT
  Expires On:        May  3 22:18:55 2012 GMT
Fingerprint:
  SHA1:
```

slogin

Enables log in to another system securely using SSH.

Syntax

slogin [*options*]

Parameters

options

Specify slogin options. To view options, enter slogin at the system prompt.

Examples

```
amnesiac > slogin -l usertest
```

Related Commands

show ssh client, show ssh server

stats export

Enables the export of statistics.

Syntax

stats export *csv report-name* **after** *yyyy/mm/dd* **before** *yyyy/mm/dd* **email** *email-addr* **filename** *filename*

Parameters

csv

Specify the file format for export: **csv**

report-name

Specify one of the following reports:

cpu_util

CPU utilization

memory

Memory utilization

paging

Paging I/O

appvissummary

Application visibility summary report

appvishistory

Application visibility history report

bw

Aggregate bandwidth

th_peak

Peak throughput

th_p95

P95 throughput

pass

Aggregate pass-through traffic

cpool

Aggregate connection pooling

nfs

Aggregate NFS report

pfs

Aggregate PFS report

conn_history

connection history

dstore

Data store hit

ssl
SSL statistics

ssl_peak
SSL peak statistics

http
HTTP statistics

qos
QoS statistics

qos_inbound
Inbound QoS statistics

snapmirror
Snapmirror statistics

snapmirror_peak
Snapmirror peak statistics

topconversations
Top conversations report

topsenders
Top senders report

topreceivers
Top receivers report

topapplications
Top applications report

after *yyyy/mm/dd*
Includes statistics collected after a specific time.

before *yyyy/mm/dd*
Includes statistics collected before a specific time.

email *email-addr*
Specify the address where the report is to be emailed.

filename *filename*
Specify a filename for the new report.

Examples

```
amnesiac > stats export csv ssl after 2008/09/01 filename ssltest
```

Related Commands

show stats cpu

support show disk

Displays disk statistics for the drive containing the Services Director.

Syntax

support show disk

Examples

```
amnesiac > support show disk
Filesystem           1K-blocks      Used Available Use% Mounted on
rootfs                 2071416   1102520    863672  57% /
udev                   4053260       160   4053100   1% /dev
tmpfs                  4062768         0   4062768   0% /dev/shm
/dev/sda5              2071416   1102520    863672  57% /
tmpfs                  1048576      9576   1039000   1% /lib/modules
tmpfs                  1048576      6348   1042228   1% /lib/firmware
none                     16384       164     16220   2% /tmp
/dev/sda2               132221     67116     58278  54% /boot
/dev/sda1               256665      8504    234908   4% /bootmgr
/dev/sda8             16516084   1496416  14180676  10% /var
/dev/sda9              1035692     33824    949256   4% /config
/dev/sda10             8262068    319380   7522992   5% /data
none                   4062768         0   4062768   0% /dev/shm
encfs                 16516084   1496416  14180676  10% /var/opt/rbt/decrypted
```

Related Commands

show stats memory

terminal

Sets terminal settings.

Syntax

terminal { **length** *lines* | **type** *terminal_type* | **terminal width** *number-of-characters* }

Parameters

terminal length *lines*

Sets the number of lines 0-1024; 0 to disable paging. The **no** command option disables the terminal length.

[**no**] **terminal type** *terminal_type*

Sets the terminal type. The **no** command option disables the terminal type.

terminal width *number-of-characters*

Sets the width number of characters. The **no** command option disables the terminal width.

Usage Guidelines

The **no** command option disables terminal settings.

Examples

```
amnesiac > terminal width 1024
```

Related Commands

show cli, show clock, show terminal

traceroute

Executes the traceroute utility for IPv4 addresses. The traceroute command takes the standard Linux options.

Syntax

traceroute [*options*]

Parameters

options

The **traceroute** command takes the standard Linux options. For detailed information, see the Linux manual (man) page.

Examples

```
amnesiac > traceroute amnesiac
traceroute to amnesiac.domain.com (10.0.0.3), 30 hops max, 38 byte packets
1 amnesiac (10.0.0.3) 0.035 ms 0.021 ms 0.013 ms
```

traceroute6

Executes the traceroute utility for IPv6 addresses. The traceroute6 command takes the standard Linux options.

Syntax

traceroute6 [*options*]

Parameters

options

The **traceroute6** command takes the standard Linux options. For detailed information, see the Linux manual (man) page.

Examples

```
amnesiac > traceroute6 amnesiac
traceroute6 to amnesiac.domain.com (2001:38dc:52::e9a4:c5:6282/64), 30 hops max, 38 byte packets
1 amnesiac (2001:38dc:52::e9a4:c5:6282/64) 0.035 ms 0.021 ms 0.013 ms
```

Related Commands

ipv6 in-path-gateway

Enable-Mode Commands

This chapter is a reference for enable-mode system commands.

Entering enable-mode

You can perform basic system administration tasks in enable mode. Only administrator users can perform enable-mode commands. All commands available in user mode are also available in enable mode.

Configuration-Mode Commands on page 131 describes some enable commands because they are more easily understood in relationship to the feature set of which they are a part.

To enter enable mode

1. Connect to the CLI and enter the following command:

```
login as: admin
Brocade Services Director
Last login: Wed Jan 20 13:02:09 2012 from 10.0.1.1
gen1-sh139 > enable
gen1-sh139 #
```

2. To exit enable mode, enter **exit**. For information about the **exit** command, see exit on page 25.

All the commands available in user mode are also available in enable mode.

Enable-Mode Commands

The following section contains the Services Director commands.

clear arp-cache

Clears dynamic entries from the ARP cache. This command does not clear static entries.

Syntax

clear arp-cache

Examples

```
amnesiac # clear arp-cache
```

Related Commands

show arp

clear hardware edac-ue-alarm

Clears Acknowledge EDAC UE (uncorrectable errors) Alarm.

Syntax

clear hardware edac-ue-alarm

Usage Guidelines

The amber LED light stops blinking on the system.

Examples

```
amnesiac # clear hardware edac-ue-alarm
```

Related Commands

show hardware error-log

clear hardware error-log

Clears IPMI System Event Log (SEL).

Syntax

clear hardware error-log

Usage Guidelines

The amber LED light stops blinking on the system.

Examples

```
amnesiac # clear hardware error-log
```

Related Commands

show hardware error-log

clock set

Sets the system date and time.

Syntax

clock set { *yyyy/mm/dd/hh:mm:ss*}

Parameters

yyyy/mm/dd/hh:mm:ss

Specify the date and time (year, month, day, hour, minutes, and seconds).

Examples

```
amnesiac # clock set 2003/12/31 23:59:59'
```

Related Commands

show clock

configure terminal

Enables configuration from the terminal by entering the configuration subsystem. You must execute the Services Director command first to enter configuration mode.

Syntax

[no] configure terminal

Usage Guidelines

To exit the configuration subsystem, type **exit**.

The **no** command option disables the terminal configuration.

Examples

```
amnesiac # configure terminal
```

Related Commands

show terminal

disable

Exits enable mode.

Syntax

disable

Examples

```
amnesiac # disable
```

Related Commands

exit

file stats delete

Deletes the statistics file.

Syntax

file stats delete *filename*

Parameters

filename

Specify the name of the file to delete.

Examples

```
amnesiac # file stats delete throughput
```

Related Commands

show files stats

file stats move

Renames the statistics file.

Syntax

file stats move *source-filename destination-filename*

Parameters

source-filename

Specify the source file to rename.

destination-filename

Specify the new filename.

Examples

```
amnesiac # file stats move throughput throughput2
```

Related Commands

show files stats

file stats upload

Uploads a specified statistics report file to a remote host.

Syntax

file stats upload *filename destination* | *case-number* }

Parameters

filename

Mandatory. Specify the source filename to upload.

destination

Mandatory. Specify the upload protocol, authentication credentials, remote host, and host filepath for the remote file. Supported protocols are HTTP, FTP and SCP.

NOTE

There is no default setting for this property.

case-number

Mandatory. Specify the customer case number.

Examples

```
amnesiac # file stats upload throughput ftp://admin:password@ftp.test.com/stats 194170
```

Related Commands

show files stats

file tcpdump delete

Deletes a TCP dump output file.

Syntax

file tcpdump delete *filename*

Parameters

filename

Specify the **tcpdump** file to delete.

Examples

```
amnesiac # file tcpdump delete dumpfile
```

Related Commands

file tcpdump upload

file tcpdump upload

Uploads a specific TCP dump output file to a remote host.

Syntax

file tcpdump upload *filename destination* | *case-number* }

Parameters

filename

Mandatory. Specify the source filename to upload.

destination

Mandatory. Specify the upload protocol, authentication credentials, remote host, and host filepath for the remote file. Supported protocols are HTTP, FTP and SCP.

NOTE

There is no default setting for this property.

case-number

Mandatory. Specify the customer case number.

Examples

```
amnesiac # file tcpdump upload dumpfile http://www.test.com/stats 194171
```

Related Commands

file tcpdump delete

file upload clear-stats

Clears the file upload statistics.

Syntax

file upload clear-stats

Usage Guidelines

The file **upload clear-stats** command clears the statistics displayed by the **show uploads** command.

Examples

```
amnesiac > file upload clear-stats
```

Related Commands

show uploads

file upload stop

Stops an upload.

Syntax

file upload stop

Usage Guidelines

The **file upload stop** command stops an upload of a resource.

Examples

```
amnesiac > file upload stop
```

Related Commands

show uploads

image delete

Deletes the specified software image.

Syntax

image delete *image-filename*

Parameters

image-filename

Specify the name of the software image to delete.

Examples

```
amnesiac # image delete snkv1.0
```

Related Commands

show images

image delete-all

Deletes all software image files on the disk.

Syntax

image delete-all

Examples

```
amnesiac # image delete-all
```

Related Commands

show uploads

image fetch

Downloads a software image from a remote host.

Syntax

image fetch *URL,scp://,or ftp://username:password@hostname/path/filename image-filename*

Parameters

URL,scp://, or-ftp://username:password@hostname/path/filename

Specify the upload protocol, the location, and authentication credentials for the remote image file. Press the Enter key to download the image. The image retains the same name it had on the server.

image-filename

Specify a local filename for the image.

Examples

```
amnesiac # image fetch http://www.domain.com/v.1.0 version1.0
```

Related Commands

show images

image install

Installs the software image onto a system partition.

Syntax

image install *image-filename partition*

Parameters

image-filename

Specify the software image filename to install.

partition

Specify the partition number: **1**, **2**.

Examples

```
amnesiac # image install version1.0 2
```

Related Commands

show imageshost reload

image move

Moves or renames an inactive system image on the hard disk.

Syntax

image move *source-image-name new-image-name*

Parameters

source-image-name

Specify the name of the software image to move or rename.

new-image-name

Specify the new name of the software image.

Examples

```
amnesiac # image move www.domain.com/v.1.0 version1.0
```

Related Commands

show images

image upgrade

Installs a system image on the backup boot partition.

Syntax

image upgrade *image-name*

Parameters

image-name

Specify the software image filename to install.

Usage Guidelines

The **image upgrade** command only installs the image on the backup boot partition.

Examples

```
amnesiac # image upgrade image187.img
```

Related Commands

show images

ntpdate

Conducts a one-time synchronization with a specified NTP server.

Syntax

ntpdate *ip-addr*

Parameters

ip-addr

Specify the NTP server with which to synchronize.

Examples

```
amnesiac # ntpdate 10.10.10.1
```

Related Commands

show ntp

reload

Reboots the system.

Syntax

reload [**halt**] | [**force**]

Parameters

halt

Shuts down the system.

force

Forces an immediate reboot of the system even if it is busy.

Examples

```
amnesiac # reload
The session will close. It takes about 2-3 minutes to reboot the appliance.
```

Related Commands

disable

show arp

Displays the contents of the ARP cache. The ARP cache includes all statically configured ARP entries, as well as any that the system has acquired dynamically.

Syntax

show arp [**static**]

Parameters

static

Displays static ARP addresses.

Examples

```
amnesiac # show arp
ARP cache contents
IP 10.0.0.1 maps to MAC 00:07:E9:70:20:15
IP 10.0.0.2 maps to MAC 00:05:5D:36:CB:29
IP 10.0.100.22 maps to MAC 00:07:E9:55:10:09
```

Related Commands

clear arp-cache

show banner

Displays the banner settings.

Syntax

show banner

Examples

```
amnesiac # show banner
Banners:
    MOTD:
    Issue: Brocade Services Director
    Net Issue: Brocade Services Director
```

Related Commands

banner motd

show configuration

Displays the current and saved configuration settings that differ from the default settings.

Syntax

show configuration [**full**]

Parameters

full

Displays all CLI commands and does not exclude commands that set default values.

Examples

```
amnesiac # show configuration
##
## Network interface configuration
##
no interface aux dhcp
interface aux duplex "auto"
no interface aux shutdown
interface aux speed "auto"
interface primary ip address 10.0.0.3 /16
##
## Routing configuration
##
ip default-gateway "10.0.0.1"
##
## Other IP configuration
##
hostname "amnesiac"
ip domain-list domain.com
ip domain-list domain.com
ip name-server 10.0.0.2
##
## Logging configuration
##
logging local "info"
##
## Process Manager configuration
##
pm process mgmtd launch timeout "4000"
pm process sport shutdown order "0"
pm process statsd shutdown order "0"
##
## Network management configuration
##
## Miscellaneous other settings (this is a partial list of settings)
```

Related Commands

configuration new

show configuration files

Displays the list of active and backup configuration files or the contents of a specified file.

Syntax

show configuration [*filename*]

Parameters

filename

Specify the filename. The default filenames are:

initial

Specify the initial configuration.

initial.bak

Specify the initial backup configuration.

cold

Specify the configuration file before SDR has occurred.

working(active)

Specify the current configuration.

working.bak

Specify the current backup configuration.

Examples

```
amnesiac # show configuration files initial
##
## Network interface configuration
##
no interface aux dhcp
   interface aux duplex "auto"
   interface aux ip address 10.0.62.75 /16
   interface aux mtu "1500"
no interface aux shutdown
   interface aux speed "auto"
   interface aux txqueuelen "100"
no interface primary dhcp

##
## Routing configuration
##
   ip default-gateway "10.0.0.1"

##
## Logging configuration
##
   logging 10.1.10.200
   logging 10.1.10.200 trap "info"
<<this is a partial display>>
```

Related Commands

configuration new

show configuration running

Displays running configuration settings that are different from the defaults.

Syntax

show configuration running [**full**]

Parameters

running

Displays system CLI commands to recreate current running configuration.

full

Displays all system CLI commands and does not exclude commands that set default values.

Examples

```
amnesiac # show configuration running
##
## Network interface configuration
##
no interface aux dhcp
   interface aux duplex "auto"
   interface aux ip address 10.0.62.75 /16
   interface aux mtu "1500"
no interface aux shutdown
   interface aux speed "auto"
   interface aux txqueuelen "100"
no interface inpath0_0 dhcp
   interface inpath0_0 duplex "auto"
   interface inpath0_0 ip address 10.11.62.75 /16
   interface inpath0_0 mtu "1500"
no interface inpath0_0 shutdown
   interface inpath0_0 speed "auto"
   interface inpath0_0 txqueuelen "100"
no interface lan0_0 dhcp
   interface lan0_0 duplex "auto"
   interface lan0_0 mtu "0"
no interface lan0_0 shutdown
   interface lan0_0 speed "auto"
   interface lan0_0 txqueuelen "100"
lines 1-23

##(displays running configuration; this is a partial list of settings.)
```

Related Commands

configuration new

show files events config

Displays events configuration.

Syntax

show files events config

Examples

```
amnesiac # show files events config
```

Related Commands

debug generate dump

show files process-dump

Displays a list of crash dump files.

Syntax

show files process-dump

Examples

```
amnesiac # show files process-dump
```

Related Commands

debug generate dump

show files process-dump

Displays a list of crash dump files.

Syntax

show files process-dump

Examples

```
amnesiac # show files process-dump
```

Related Commands

debug generate dump

show files stats

Displays performance statistics files.

Syntax

show files stats

Usage Guidelines

You export performance statistics to files using the **stats export** command.

Examples

```
amnesiac # show files stats
```

Related Commands

show stats cpu, stats export

show files tcpdump

Displays files saved by the tcpdump utility.

Syntax

show files tcpdump

Examples

```
amnesiac # show files tcpdump
unopt.cap
big-noopt.cap
big-opt.cap
big.tgz
big-opt2.cap
```

Related Commands

tcpdump

show fips status

Displays FIPS status information by feature.

Syntax

show fips status

Examples

```
amnesiac > show fips status
CMC Autoregistration: Should not be configured in FIPS mode.
Citrix Basic Encryption: Should not be configured in FIPS mode.FIPS Mode: Disabled. You must save the
configuration and reload the system to enable FIPS mode.
```

Related Commands

fips enable

show hardware all

Displays hardware information such as the current slot configuration.

Syntax

show hardware all

Examples

```
amnesiac # show hardware all
Hardware Revision: B
Mainboard:  Series 3000/5000 motherboard, ................. CMP-00072
Slot 0:     4 Port Copper GigE Network Bypass Card, ....... CMP-00074
Slot 1:     (Empty)
Slot 2:     (Empty)
Slot 3:     (Empty)
Slot 4:     6 Port SATA RAID I/O Card, ..................... CMP-00014
Slot 5:     (Empty)
```

Related Commands

hardware watchdog enable

show interfaces

Displays the running state settings and statistics.

Syntax

show interfaces [*intname*] | [**brief** | **configured**]

Parameters

intname

Specify the interface name. For example, **aux**, **lan0_0**, **wan0_0**, **primary**, **in-path0_0**, **lo**.

brief

Displays the running state settings without statistics.

configured

Displays configured settings for the interface.

Usage Guidelines

The settings and statistics displayed varies when using DHCP.

Examples

```
amnesiac # show interfaces configured
Interface aux configuration
   Enabled:            yes
   DHCP:               no
   Speed:              auto
   Duplex:             auto
   IP address:         10.0.190.139
   Netmask:            255.255.0.0
   MTU:                1500

Interface inpath0_0 configuration
   Enabled:            yes
   DHCP:               no
   IP address:         10.11.192.139
   Netmask:            255.255.0.0
   MTU:                1500
   Failure mode:       Bypass <<fail-to-block or fail-to-bypass>>
<<this is a partial example>>
```

Related Commands

interface

show interfaces

Displays the running state settings and statistics.

Syntax

show interfaces [*intname*] | [**arp** | **arp static** | **brief** | **configured** | **dhcp-lease**]

Parameters

intname

Specify the interface name. For example, **aux**, **lan0_0**, **wan0_0**, **primary**, **in-path0_0**, **lo**.

arp

Displays static and dynamic ARP entries for this interface.

arp static

Displays statically-configured ARP entries for this interface.

brief

Displays the running state settings without statistics.

configured

Displays configured settings for the interface.

dhcp-lease

Displays DHCP lease for this interface.

Usage Guidelines

The settings and statistics displayed varies when using DHCP.

Examples

```
amnesiac # show interfaces configured
Interface aux configuration
   Enabled:            yes
   DHCP:               no
   Speed:              auto
   Duplex:             auto
   IP address:         10.0.190.139
   Netmask:            255.255.0.0
   MTU:                1500

Interface inpath0_0 configuration
   Enabled:            yes
   DHCP:               no
   IP address:         10.11.192.139
   Netmask:            255.255.0.0
   MTU:                1500
   Failure mode:       Bypass <<fail-to-block or fail-to-bypass>>
<<this is a partial example>>
```

Related Commands

interface

show interfaces brief

Displays brief running state for all interfaces

Syntax

show interfaces brief

Usage Guidelines

The settings and statistics displayed varies when using DHCP.

Examples

```
amnesiac # show interfaces brief
Interface primary state
   Up:                 yes
   Interface type:     ethernet
   IP address:
   Netmask:
   IPv6 address:
   Speed:              UNKNOWN
   Duplex:             UNKNOWN
   MTU:                1500
   HW address:         00:0E:B6:02:64:D8
   Link:               no
   Counters cleared date:  2013/11/02 01:06:10

Interface eth0_2 state
   Up:                 no
   Interface type:     ethernet
   IP address:
   Netmask:
   IPv6 address:
   Speed:              UNKNOWN
   Duplex:             UNKNOWN
   MTU:                1500
   HW address:         00:0E:B6:9C:53:5E
   Link:               no
   Counters cleared date:  2013/11/02 01:06:10
<<this is a partial example>>
```

Related Commands

interface

show interfaces configured

Displays configuration for all interfaces.

Syntax

show interfaces configured

Usage Guidelines

The settings and statistics displayed varies when using DHCP.

Examples

```
amnesiac # show interfaces configured
Interface aux configuration
   Enabled:            yes
   DHCP:               yes
   Dynamic DNS DHCP:   no
   DHCPv6:             no
   Dynamic DNS DHCPv6: no
   IP address:         169.254.1.1
   Netmask:            255.255.0.0
   IPv6 address:
   Speed:              auto
   Duplex:             auto
   MTU:                1500
   Counters cleared date:  2013/11/02 01:06:10

Interface lo configuration
   Enabled:            yes
   DHCP:               no
   Dynamic DNS DHCP:   no
   DHCPv6:             no
   Dynamic DNS DHCPv6: no
   IP address:         127.0.0.1
   Netmask:            255.0.0.0
   Speed:              auto
   Duplex:             auto
   MTU:                16436
   Counters cleared date:  2013/11/02 01:06:10

Interface primary configuration
   Enabled:            yes
   DHCP:               no
   Dynamic DNS DHCP:   no
   DHCPv6:             no
   Dynamic DNS DHCPv6: no
   IP address:
   Netmask:
   IPv6 address:
   Speed:              auto
   Duplex:             auto
   MTU:                1500
   Counters cleared date:  2013/11/02 01:06:10
```

Related Commands

interface

show ip default-gateway

Displays the IP default gateway.

Syntax

show ip default gateway [**static**]

Parameters

static

Displays the static default gateway.

Examples

```
amnesiac # show ip default-gateway static
Configured default gateway: 10.0.0.1
```

Related Commands

show ip route

show ipv6 default-gateway

Displays the IPv6 default gateway.

Syntax

show ipv6 default gateway [**static**]

Parameters

static

Displays the static default gateway.

Examples

```
amnesiac # show ipv6 default-gateway static
Configured default gateway: 2001:38dc:52::e9a4:c5:6282/64
```

Related Commands

ipv6 default-gateway

show ipv6 route

Displays active IPv6 routes, both dynamic and static.

Syntax

show ipv6 route [**static**]

Parameters

static

Displays the static default gateway.

Examples

```
amnesiac # show ipv6 route
Destination Network              Gateway                    Interface
::1/128                          ::                         lo
2000::/64                        ::                         primary
2001::20e:b6ff:fe01:58f1/128     ::                         lo
2001::/60                        ::                         aux
2001::/60                        ::                         primary
fe80::200:ff:fe00:0/128          ::                         lo
fe80::200:ff:fe00:0/128          ::                         lo
[partial example]
```

Related Commands

ipv6 route

show ip route

Displays active routes both dynamic and static.

Syntax

show ip route [**static**]

Parameters

static

Displays configured static routes.

Examples

```
amnesiac # show ip route static
Destination       Mask             Gateway
default           0.0.0.0          10.0.0.4
```

Related Commands

ip route

show job

Displays the status of a scheduled job.

Syntax

show job *job-id*

Parameters

job-id

Specify the job identification number.

Examples

```
amnesiac # show job 10
job {job_id}: 10
Status: pending
Name: myjob
Comment: this is a text
Absolute range:
Commands:
show info.
show connections.
show version.
```

Related Commands

job command

show jobs

Displays a list of all jobs.

Syntax

show jobs

Examples

```
amnesiac # show jobs
% No jobs configured.
```

Related Commands

job command

show licenses

Displays VLAB licenses, used for "root" access to the SSC host. Customers do not typically have access to VLAB licenses.

Syntax

show licenses

Examples

```
amnesiac # show licenses
Local: LK1-VLAB-0000-0000-1-3E83-2754-8910
   Index:       1
   Feature:     VLAB
   Valid:       yes
   Active:      yes
   Start date:
   End date:
```

show log

Displays the system logs.

Syntax

show log [**continuous** | **files** *log-number* | **reverse** | **matching**]

Parameters

continuous

Displays the log continuously, similar to the Linux **tail -f** command.

files *log-number*

Displays a list of log files or a specific log file.

reverse

Displays the log information, in reverse order, with the latest entry at the top.

matching

Displays a list of matching log files.

Examples

```
amnesiac # show log
May 22 20:00:00 localhost /usr/sbin/crond[784]: (root) CMD (/usr/sbin/logrotate /etc/logrotate.conf)
May 22 20:00:00 localhost cli[555]: [cli.INFO]: user admin: CLI got signal 2 (SIGINT)
May 22 20:02:31 localhost cli[555]: [cli.INFO]: user admin: Executing command: show ip route
May 22 20:02:38 localhost cli[555]: [cli.INFO]: user admin: CLI got signal 2 (SIGINT)
Dec 22 20:03:16 localhost cli[555]: [cli.INFO]: user admin: CLI got signal 2 (SIGINT)
May 22 20:04:00 localhost cli[555]: [cli.INFO]: user admin: Executing command: show ip route static
Dec 22 20:05:09 localhost cli[555]: [cli.INFO]: user admin: CLI got signal 2 (SIGINT)
May 22 20:06:44 localhost cli[555]: [cli.INFO]: user admin: Executing command: show limit bandwidth
May 22 20:06:49 localhost cli[555]: [cli.INFO]: user admin: CLI got signal 2 (SIGINT)
```

Related Commands

logging

show papi rest access_codes

Displays the REST API settings.

Syntax

show papi rest access_codes

Usage Guidelines

Use this command to display the access code settings used to gain access to REST APIs.

Examples

```
amnesiac # show papi rest access_codes
ID: b6c1efd5-a20b-4784-b2f2-44bedc9bc107
   Desc: example
   Creator: admin

Code:eyJhdWQiOiAiaHR0cHM6Ly9wZXJmNC1zaDQubGFiLm5idHRlY2guY29tL2FwaS9jb21tb24vMS4wL3Rva2VuIiwgImlzcyI6ICJ
odHRwczovL3BlcmY0LXNoNC5sYWIubmJ0dGVjaC5jb20iLCAicHJuIjogImFkbWluIiwgImp0aSI6ICJiNmMxZWZkNS1hMjBiLTQ3ODQ
tYjJmMi00NGJlZGM5YmMxMDciLCAiZXhwIjogIjAiLCAiaWF0IjogIjEzNjM5Nzk4OTIifQ==
```

Related Commands

papi rest access_code import

show remote ip

Displays the current IP network settings for the remote management port.

Syntax

show remote ip

Examples

```
amnesiac # show remote ip
```

show running-config

Displays the running configuration settings that differ from the defaults.

Syntax

show running-config [**full**]

Parameters

full

Displays all settings, including those set to the default value.

Examples

```
amnesiac # show running-config
(displays running configuration)
```

Related Commands

configuration new

show telnet-server

Displays Telnet server settings.

Syntax

show telnet-server

Examples

```
amnesiac # show telnet-server
TCP reordering enabled:   no
TCP reordering threshold: 3
```

Related Commands

telnet-server enable

show userlog

Displays current user log file in a scrollable pager.

Syntax

show userlog [**continuous** | **files** *file-number*]

Parameters

continuous

Displays new user log messages as they occur.

files *file-number*

Displays archived user log files.

Examples

```
amnesiac # show userlog
Oct 17 15:38:54 amnesiac-sh75 cli[26992]: [cli.NOTICE]: user admin: CLI launched
Oct 17 15:39:00 amnesiac-sh75 cli[26992]: [cli.INFO]: user admin: Executing command:
enable
Oct 17 17:18:03 amnesiac-sh75 cli[26992]: [cli.INFO]: user admin: Executing command:
show version
Oct 17 18:00:00 amnesiac-sh75 cli[26992]: [cli.INFO]: user admin: Executing command matching: show rsp
slots
Oct 17 18:00:36 amnesiac-sh75 cli[26992]: [cli.INFO]: user admin: Executing command matching: show rsp
dataflow RiO
Oct 17 18:00:46 amnesiac-sh75 cli[26992]: [cli.INFO]: user admin: Executing command matching: show rsp
dataflow RiOS
Oct 17 18:00:57 amnesiac-sh75 cli[26992]: [cli.INFO]: user admin: Executing command matching: show rsp
dataflow inpath0_0
Oct 17 18:01:10 amnesiac-sh75 cli[26992]: [cli.INFO]: user admin: Executing command matching: show rsp
images
Oct 17 18:08:22 amnesiac-sh75 cli[26992]: [cli.INFO]: user admin: Executing command:
show service
Oct 17 18:11:18 amnesiac-sh75 cli[26992]: [cli.INFO]: user admin: Executing command: show smb signing
delegation domains
<<this is partial display>>
```

Related Commands

logging

show usernames

Displays a list of user accounts.

Syntax

show usernames *username* [**detailed**]

Parameters

detailed

Displays specified user details.

Examples

```
>> show list of user names <<
amnesiac # show usernames
User               Expire       Lock         Failures     Comment
-------------------------------------------------------------------------------
@admin             Never        Never        0
 john              Never        Never        0
 david             Never        Never        0
*james             Never        Never        0
-monitor           N/A          N/A          N/A
-------------------------------------------------------------------------------
@ = current user, * = also logged in, - = disabled,
! = locked out due to failed logins

>> show details for a listed user <<
amnesiac # show usernames monitor detailed
User monitor details
   Current User:            No
   Logged In:               No
   Disabled:                Yes
   Password Change:         N/A
   Password Expired:        N/A
   Account Locked:          N/A
   Login Failure Lock Out:  N/A
   Login Failure Count:     N/A
   Last Login Failure:      N/A
   Comment:
```

Related Commands

username password

stats clear-all

Clears data for all samples, computed history data points (CHDs), and status for all alarms.

Syntax

stats clear-all

Examples

```
amnesiac # stats clear-all
```

Related Commands

show alarm, show running-config

tcpdump

Executes the tcpdump utility. You can quickly diagnose problems and take traces for Brocade Technical Support. The tcpdump command takes the standard Linux options. For detailed information, see the Linux man page.

Syntax

tcpdump [*options*] [*filter-string*]

Parameters

options

The tcpdump command takes the standard Linux options:

a

Attempt to convert network and broadcast addresses to names.

c

Exit after receiving count packets.

d

Dump the compiled packet matching code in a human readable form to standard output and stop.

dd

Dump packet matching code as a C program fragment.

ddd

Dump packet matching code as decimal numbers preceded with a count).

e

Print the linklevel header on each dump line.

E

Use secret algorithm for decrypting IPsec ESP packets.

f

Print foreign internet addresses numerically rather than symbolically.

F

Use file as input for the filter expression. An additional expression given on the command line is ignored.

i

Listen on interface. If unspecified, tcpdump searches the system interface list for the lowest numbered, configured up interface.

n

Do not convert addresses, such as host addresses and port numbers to names.

N

Do not print domain name qualification of hostnames. For example, if you specify this flag, then tcpdump will print nic instead of nic.ddn.mil.

m

Load SMI MIB module definitions from file module. This option can be used several times to load several MIB modules into tcpdump.

q

Quiet output. Print less protocol information so output lines are shorter.

r

Read packets from created with the -w option.

S

Print absolute, not relative, TCP sequence numbers.

v

(Slightly more) verbose output. For example, the time to live, identification, total length and options in an IP packet are printed. Also enables additional packet integrity checks such as verifying the IP and ICMP header checksum.

w

Write the raw packets to a file rather than parsing and printing them out. They ca later be printed with the -r option. Standard output is used if file is **-**.

x

Print each packet without its link level header in hexidecimal format. The smaller of the entire packet or bytes will be printed.

X

When printing hex, print ascii too. Thus if -x is also set, the packet is printed in hex/ascii. This option enables you to analyze new protocols.

For detailed information, see the Linux man page.

Usage Guidelines

Make sure you take separate tcpdumps for the LAN and WAN to submit to Brocade Support. Make sure you take the tcpdump on the in-path interface.

The most common options are:

- **-n** Do not resolve addresses via DNS
- **-i** <interface> capture on <interface>
- To take traces on lanX_Y and wanX_Y, not inpathX_Y:
- **-e** display layer 2 headers, MAC addresses, and VLAN tags
- **-s** <bytes> capture up to <bytes> bytes per packet
- The default is 96 bytes; not enough for deep packet inspection for Brocade Support, instead use:
- **-s** 0 to capture full frames
- **-w** <file> store the trace in <file> (needed when taking traces for offline analysis)

Common packet filters:

- **src host <ip>** - source IP address is <ip>
- **dst host <ip>** - destination IP address is <ip>
- **host <ip>** - either source or destination is <ip>
- Same for src port, dst port, and port

- Can connect multiple filters together with logical operators: and, or, and not. Use parentheses to override operator precedence. For example:

```
tcpdump -i lan0_0 not port 22
tcpdump -i lan0_0 host 1.1.1.1 and port 2222
tcpdump -i wan0_0 host 3.3.3.3 and (port 4444 or port 5555)
```

Suppose two appliances are having a problem optimizing a connection:

```
Client IP =         10.10.10.10
Client SH IP =     10.10.10.20
Server IP =         11.11.11.11
Server SH IP =     11.11.11.21
```

Take traces on all LAN/WAN interfaces on both appliances to diagnose:

```
C-SH# tcpdump -n -i lan0 host 10.10.10.10 and host 11.11.11.11
C-SH# tcpdump -n -i wan0_0 (host 10.10.10.10 and host 11.11.11.11) or
  (host 10.10.10.20 and host 11.11.11.21)
S-SH# tcpdump -n -i lan0 host 10.10.10.10 and host 11.11.11.11
S-SH# tcpdump -n -i wan0_0 (host 10.10.10.10 and host 11.11.11.11) or
  (host 10.10.10.20 and host 11.11.11.21)
```

Keep the tcpdump running and establish a connection.

If the problem is not obvious, use -w to capture to files, and examine in a tool like Wireshark. Sometimes you can capture very large traces of data and traffic you are interested in is a small subset of the entire trace. To work around this problem, run tcpdump through its own trace to cut down on the number of packets. Use the -r <file> option, to read from a file instead of capture on an interface

```
tcpdump -n -r my_trace.cap -w my_filtered_trace.cap host 5.5.5.5 and port 2323
```

The following example captures both VLAN tagged and untagged traffic on destination port 7850 and ARP packets:

```
tcp -i lan0_0 ((port 7850 or arp) or (vlan and (port 7850 or arp)))
```

Examples

```
amnesiac # tcpdump
tcpdump: listening on primary
18:59:13.682568 amnesiac.domain.com.ssh > dhcp-22.domain.com.3277: P
3290808290:3290808342(52) ack 3412262693 win 5840 (DF) [dscp 0x10]
18:59:13.692513 amnesiac.domain.com.ssh > dhcp-22.domain.com.3277: P 0:52(52) ack
1 win 5840 (DF) [dscp 0x10]
18:59:13.702482 amnesiac.domain.com.ssh > dhcp-22.domain.com.3277: P 0:52(52) ack
1 win 5840 (DF) [dscp 0x10]
```

Related Commands

tcpdump-x all-interfaces

Configuration-Mode Commands

This chapter is a reference for configuration-mode commands.

Entering configuration mode

You can perform configuration tasks while in configuration mode. Only administrator users can perform configuration mode and enable mode commands. All commands available in user mode and enable mode are also available in configuration mode. Monitor users cannot perform configuration tasks.

To enter configuration-mode

1. Connect to the CLI and enter the following commands:

```
login as: admin
Brocade Services Director
Last login: Wed Jan 20 13:02:09 2010 from 10.0.1.1
amnesiac > enable
amnesiac # configure terminal
amnesiac (config) #
```

   You are now in configuration mode.

2. To exit configuration mode, enter **exit**. For information about the **exit** command, see exit on page 25

   For an alphabetical list of commands, see the Index at the end of this book.

   .

Services Director Commands

The following section contains the Services Director commands.

access enable

Enables secure access to an appliance using an internal management Access Control List (ACL).

Syntax

[no] access enable

Usage Guidelines

Appliances are subject to the network policies defined by corporate security policy, particularly in large networks. Using an internal management ACL you can:

- restrict access to certain interfaces or protocols of an appliance.
- restrict inbound IP access to an appliance, protecting it from access by hosts that do not have permission without using a separate device (such as a router or firewall).
- specify which hosts or groups of hosts can access and manage an appliance by IP address, simplifying the integration of appliances into your network. You can also restrict access to certain interfaces or protocols.

This feature provides the following safeguards to prevent accidental disconnection from the appliance.

- It detects the IP address you are connecting from and displays a warning if you add a rule that denies connections to that address.
- It always allows the default appliance ports 7800, 7801, 7810, 7820, and 7850.
- It always allows a previously-connected appliance to connect and tracks any changes to the IP address of the CMC to prevent disconnection.
- It converts well-known port and protocol combinations such as SSH, Telnet, HTTP, HTTPS, SNMP, and SOAP into their default management service and protects these services from disconnection. For example, if you specify protocol 6 (TCP) and port 22, the management ACL converts this port and protocol combination into SSH and protects it from denial.
- It tracks changes to default service ports and automatically updates any references to changed ports in the access rules.
- You can also change the standard port for HTTPS (443) to match your management standards using the web https port on page 619 and web http port on page 611 commands.

Examples

```
amnesiac (config) # access enable
```

Related Commands

show access status, show access inbound rules

access inbound rule add

Adds a secure access inbound rule.

Syntax

[no] access inbound rule add [**allow** | **deny**] **protocol** *protocol-number* **service** *service* **dstport** *port* **srcaddr** *ip-addr* **interface** *interface* **rulenum** *rulenum* | [**log** { **on** | **off** }] | [**override**]

Parameters

allow | **deny**

Specify the action on the rule:

allow

Allows a matching packet access to the appliance. This is the default action.

deny

Denies access to any matching packets.

protocol *protocol-number*

Specify **all**, **icmp**, **tcp**, **udp**, or protocol number (**1**, **6**, **17**) in IP packet header. The default setting is all.

service *service*

Optionally, specify the service name: **http**, **https**, **snmp**, **ssh**, **soap**, **telnet**

dstport *port*

Optionally, specify the destination port of the inbound packet.
You can also specify port ranges: 1000-30000

srcaddr *ip-addr*

Optionally, specify the source subnet of the inbound packet; for example, 1.2.3.0/24

interface *interface*

Optionally, specify an interface name: **primary**, **aux**, **inpath0_0**.

rulenum *rulenum*

Optionally, specify a rule number from **1** to **N**, **start**, or **end**.
The appliances evaluate rules in numerical order starting with rule **1**. If the conditions set in the rule match, then the rule is applied, and the system moves on to the next packet. If the conditions set in the rule do not match, the system consults the next rule. For example, if the conditions of rule **1** do not match, rule **2** is consulted. If rule **2** matches the conditions, it is applied, and no further rules are consulted.

description

Optionally, specify a description to facilitate communication about network administration.

log [**on** | **off**]

Optionally, specify to track denied packets in the log. By default, packet logging is enabled.

override

Specify to ignore the warning and force the rule modification. If you add, delete, edit, or move a rule that could disconnect you from the appliance, a warning message appears. You can specify **override** to ignore the warning and force the rule modification. Use caution when you override a disconnect warning.

Usage Guidelines

The management ACL contains rules that define a match condition for an inbound IP packet. You set a rule to allow or deny access to a matching inbound IP packet. When you add a rule on the appliance, the destination specifies the appliance itself, and the source specifies a remote host.

The ACL rules list contains default rules that allow you to use the management ACL with the RiOS features PFS, DNS caching, and RSP. These default rules allow access to certain ports required by these features. The list also includes a default rule that allows access to the CMC. If you delete the default ACL rules for one of these features and need to restore it.

Examples

```
amnesiac (config) # access inbound rule add allow protocol tcp/udp
dstport 1234 srcaddr 10.0.0.1/16 interface primary rulenum 2
```

Related Commands

show access inbound rules, show access status

access inbound rule edit rulenum

Modifies a secure access inbound rule.

Syntax

[no] access inbound rule edit rulenum *rulenum* **action** [**allow** | **deny**] [**protocol** *protocol-number* **service** *service* **dstport** *port* | **srcaddr** *ip-addr* | **interface** *interface* |] | **log** [**on** | **off**] | [**override**]

Parameters

rulenum *rulenum*

Optionally, specify a rule number from **1** to **N**, **start**, or **end**.
appliances evaluate rules in numerical order starting with rule **1**. If the conditions set in the rule match, then the rule is applied, and the system moves on to the next packet. If the conditions set in the rule do not match, the system consults the next rule. For example, if the conditions of rule **1** do not match, rule **2** is consulted. If rule **2** matches the conditions, it is applied, and no further rules are consulted.

action [**allow** | **deny**]

Specify the action on the rule:

allow

Allows a matching packet access to the appliance. This is the default action.

deny

Denies access to and logs any matching packets.

protocol *protocol-number*

Specify **all**, **icmp**, **tcp**, **udp**, or protocol number (**1**, **6**, **17**) in IP packet header. The default setting is **all**.

service *service*

Optionally, specify the service name: **http**, **https**, **snmp**, **ssh**, **telnet**

dstport *port*

Specify the destination port.
You can also specify port ranges: 1000-30000

srcaddr *subnet*

Specify the source subnet.
For the subnet address, use the format XXX.XXX.XXX.XXX/XX.

interface *interface*

Specify the interface: **primary**, **aux**, **inpath0_0**

description

Optionally, specify a description to facilitate communication about network administration.

log [**on** | **off**]

Optionally, specify to enable or disable log in on this command.\

override

Specify to ignore the warning and force the rule modification. If you add, delete, edit, or move a rule that could disconnect you from the appliance, a warning message appears. You can specify **override** to ignore the warning and force the rule modification. Use caution when overriding a disconnect warning.

Examples

```
amnesiac (config) # access inbound rule edit action allow dstport 1234 srcaddr 10.0.0.1/16 service http
interface primary rulenum 2
```

Related Commands

show access inbound rules, show access status

access inbound rule move

Moves a secure access inbound rule.

Syntax

[no] access inbound rule move *rulenum*] **to** *rulenum* [**override**]

Parameters

rulenum *rulenum*

Specify a rule number from **1** to **N**, **start**, or **end**.

Appliances evaluate rules in numerical order starting with rule **1**. If the conditions set in the rule match, then the rule is applied, and the system moves on to the next packet. If the conditions set in the rule do not match, the system consults the next rule. For example, if the conditions of rule **1** do not match, rule **2** is consulted. If rule **2** matches the conditions, it is applied, and no further rules are consulted.

override

Specify to ignore the warning and force the rule modification. If you add, delete, edit, or move a rule that could disconnect you from the appliance, a warning message appears. You can specify **override** to ignore the warning and force the rule modification. Use caution when overriding a disconnect warning.

Examples

```
amnesiac (config) # access inbound rule move 2 to 4
```

Related Commands

show access inbound rules, show access status

alarm clear

Clears the specified alarm type.

Syntax

alarm *type* **clear**

Parameters

type

See the alarm enable on page 141 command for a complete listing and of alarm types.

Usage Guidelines

Use this command to clear the status of the specified alarm type. If you clear an alarm and the error condition still exists, the alarm might be triggered again immediately. If you need to clear an alarm permanently, use the **no alarm enable** command.

Examples

```
amnesiac (config) # alarm secure_vault_unlocked clear
```

Related Commands

show alarm, show alarms

alarm clear-threshold

Sets the threshold to clear the specified alarm type.

Syntax

[no] alarm *type* **clear-threshold** *threshold-level*

Parameters

type

See the alarm enable on page 141 command for a complete listing and description of alarm types.

threshold-level

Specify the threshold level. The threshold level depends on the alarm type, as do the possible values.

Usage Guidelines

Use this command to set the threshold at which the alarm is cleared.

Examples

```
amnesiac (config) # alarm cpu_util_indiv clear-threshold 70
```

Related Commands

show alarm, show alarms

alarm enable

Enables the specified alarm.

Syntax

[no] alarm *type* **enable**

Parameters

type

autolicense_error
This alarm triggers on a virtual appliance when the Brocade Licensing Portal cannot respond to a license request with valid licenses.

autolicense_info
This alarm triggers if the Brocade Licensing Portal has information regarding licenses for a virtual appliance.

cpu_util_indiv
This alarm indicates whether the system has reached the CPU threshold for any of the CPUs in the system. If the system has reached the CPU threshold, check your settings. If your alarm thresholds are correct, reboot the appliance.

flash_error
This alarm indicates that the system has detected an error with the flash drive hardware. At times, the USB flash drive that holds the system images might become unresponsive; the appliance continues to function normally. When this error triggers you cannot perform a software upgrade, as the appliance is unable to write a new upgrade image to the flash drive without first power cycling the system. To reboot the appliance, enter the reload command to automatically power cycle the appliance and restore the flash drive to its proper function.

fs_mnt
This alarm indicates that one of the mounted partitions is full or almost full. The alarm is triggered when only 7% of free space is remaining.

hardware
This alarm indicates the overall health of the hardware.

ipmi
This alarm indicates that the system has detected an Intelligent Platform Management (IPMI) event. This alarm is not supported on all appliance models.

license_expired
This alarm triggers if any feature has at least one license installed, but all of them are expired.

license_expiring
This alarm triggers if one or more features is going to expire within two weeks.

NOTE
The license expiring and license expired alarms are triggered per feature; for example, if you install two license keys for a feature, LK1-FOOxxx (expired) and LK1-FOO-yyy (not expired), the alarms do not trigger, because the feature has one valid license.

licensing
This alarm is the parent licensing alarm and triggers if any of the appliance_unlicensed alarms are active.

link_duplex
This alarm is triggered when an interface was not configured for half-duplex negotiation but has negotiated half-duplex mode. Half-duplex significantly limits the optimization service results. This alarm is enabled by default.

link_io_errors
This alarm is triggered when the link error rate exceeds 0.1% while either sending or receiving packets. This threshold is based on the observation that even a small link error rate reduces TCP throughput significantly. A properly configured LAN connection should experience very few errors. The alarm clears when the rate drops below 0.05%. This alarm is enabled by default.

link_state:aux:half_duplex
Interface aux Half-Duplex

link_state:aux:io_errors
Interface aux Errors

link_state:aux:link_error
Interface aux Down

link_state:primary:half_duplex
Interface primary Half-Duplex

link_state:primary:io_errors
Interface primary Errors

link_state:primary:link_error
Interface primary Down

linkstate
This alarm indicates that the system has detected a link that is down. The system notifies you through SNMP traps, email, and alarm status. By default, this alarm is not enabled. The no alarm linkstate enable command disables the link state alarm.

local_db_fail
Local Database Failure

local_gluster_fail
Local gluster FS Failure

local_ssc_fail
Local SSC Failure

master_password_fail
This alarm triggers when the Services Director is not running because the master password is corrupt/unavailable/ waiting for user input.

paging
This alarm indicates whether the system has reached the memory paging threshold. If 100 pages are swapped approximately every two hours the appliance is functioning properly. If thousands of pages are swapped every few minutes, then reboot the system. If rebooting does not solve the problem, contact Brocade Support.

peer_ssc_fail
Peer SSC Connectivity Failure.

secure_vault
This alarm indicates a general secure vault error.

secure_vault_unlocked
This alarm indicates whether the secure vault is unlocked. When the vault is unlocked, SSL traffic is not optimized and you cannot encrypt a data store.

ssc_ha_event
hwCluster errors.

ssl
This alarm indicates whether the system has detected an SSL error.

sticky_staging_dir
This alarm indicates that the system has detected an error while trying to create a process dump.

upgrade
This alarm indicates the status of an upgrade.

Usage Guidelines

Enabling alarms is optional.

The **no** command option disables all statistical alarms. The **no alarm <type>enable** command disables specific statistical alarms.

Examples

```
amnesiac # alarm hardware enable
```

Related Commands

show alarm, show alarms

alarm error-threshold

Sets a threshold to trigger an alarm.

Syntax

[no] alarm *type* **error-threshold** *threshold-level*

Parameters

type

See the alarm enable on page 141 command for a complete listing and description of alarm types.

threshold-level

Specify the threshold level. The threshold level and possible values depend on the alarm type.

Usage Guidelines

The **no** version of the command resets the threshold to the default level.

Examples

```
amnesiac (config) # alarm cpu_util_indiv error-threshold 80
```

Related Commands

show alarm, show alarms

alarm rate-limit

Sets the alarm rate-limit values.

Syntax

alarm *type* **rate-limit** [**email** | **snmp**] **term** { **long** | **medium** | **short** } { **count** *value* | **window** *duration-seconds* }

Parameters

type

See the alarm enable on page 141 command for a complete listing and description of alarm types.

email

Sets rules for email.

snmp

Sets rules for SNMP.

term { **long** | **medium** | **short** }

Sets the alarm event rate-limit term value. Valid choices are:

long

medium

short

count *value*

Sets the count value. The default values are 50 (long), 20 (medium), and 5 (short).

window *duration-seconds*

Sets the duration of time, in seconds, that the window remains open. The default values are 604,800 (long), 86,400 (medium), and 3600 (short).

Usage Guidelines

There are three term values--long, medium, and short. Each has a window, which is a number of seconds, and a maximum count. If, for any term value, the number of alarm events exceeds the maximum count during the window, the corresponding email/SNMP notifications are not sent.

Examples

```
amnesiac (config) # alarm  cpu_util_indiv rate-limit email term short window 30
```

Related Commands

show alarm, show alarms

alarms reset-all

Globally sets all alarms to their default settings.

Syntax

alarms reset-all

Usage Guidelines

Use this command to reset all the alarms to their default settings.

Examples

```
amnesiac (config) # alarms reset-all
All alarms reset to default settings
```

Related Commands

show alarm, show alarms

arp

Creates static ARP entries in the ARP table.

Syntax

[no] arp *ip-addr MAC-addr*

Parameters

ip-addr

Specify the IP address of the appliance.

MAC-addr

Specify the MAC address.

Usage Guidelines

The **no** command option disables ARP static entries.

Examples

```
amnesiac (config) # arp 10.0.0.1 00:07:E9:55:10:09
```

Related Commands

show arp

authentication policy enable

Enables the authentication policy for account control.

Syntax

[no] authentication policy enable

Usage Guidelines

An authentication policy enables you to define a set of policies to enforce user login behavior and password strength. Passwords are mandatory when account control is enabled.

After you enable the authentication policy, the current passwords for all users expire. At the next login, each user is prompted to change their password, placing the new password under the account control authentication policy.

When account control is enabled and an administrator uses the **username password 7** command, the password automatically expires. Because the encrypted password cannot be checked against the configured password policy, the user is prompted to change their password at login.

Examples

```
amnesiac (config) # authentication policy enable
```

Related Commands

show alarm, username password 7

authentication policy login max-failures

Sets the maximum number of unsuccessful login attempts before temporarily locking the user's access to the appliance.

Syntax

authentication policy login max-failures *count* [**unlock-time** *seconds*]

no authentication policy login max-failures

Parameters

count

Specify the maximum number of unsuccessful login attempts before a temporary account lockout.

unlock-time *seconds*

Specify the number of seconds the system waits before the user can log in again after an account lockout. If this optional parameter is not specified, the unlock time defaults to 300 seconds.

Usage Guidelines

The **no authentication policy login max-failures** command resets the maximum number of unsuccessful login attempts allowed to the default value, which is zero, indicating that the account lockout is disabled.

Examples

```
amnesiac (config) # authentication policy login max-failures 3
```

Related Commands

show alarm

authentication policy password

Configures the authentication policy password settings for account control.

Syntax

[no] authentication policy password { **change-days** *days* | **dictionary enable** | **difference** *count* | **expire** *days* [**warn**] | **length** *length* | **lock** *days* | **lower-case** *count* | **numeric** *count* | **repeat** *count* | **reuse-interval** *count* | **special** *count* | **upper-case** *count* }

Parameters

change-days *days*

Specify the minimum number of days before which passwords cannot be changed.

dictionary enable

Prevents the use of any word found in the dictionary as a password.

difference *count*

Specify the minimum number of characters that must change between an old and new password. The default for the strong security template is 4.

If the **authentication policy password difference <count>** value is set to a value greater than zero, a non-administrator must specify the new and old passwords by entering the **username password [old-password]** command. Administrators are never required to enter an old password when changing an account password.

expire *days*

Specify the number of days the current password stays in effect. To set the password expiration to 24 hours, specify 0. To set the password expiration to 48 hours, specify 1. Specify a negative number to turn off password expiration.

warn *days*

Specify the number of days to warn a user of an expiring password before the password expires. The default for the strong security template is 7.

length *length*

Specify the minimum password length. The default setting for the strong security template is 14 alphanumeric characters.

lock *days*

Specify the number of days before an account with an expired password locks.

lower-case *count*

Specify the minimum number of lowercase letters required in the password. The default for the strong security template is 1.

numeric *count*

Specify the minimum number of numeric characters required in the password. The default for the strong security template is 1.

repeat *count*

Specify the maximum number of times a character can occur consecutively.

reuse-interval *count*

Specify the number of password changes allowed before a password can be reused. The default for the strong security template is 5.

special *count*

Specify the minimum number of special characters required in the password. The default for the strong security template is 1.

upper-case *count*

Specify the minimum number of uppercase letters required in the password. The default for the strong security template is 1.

Usage Guidelines

Passwords are mandatory when account control is enabled. Passwords for all users expire as soon as account control is enabled. This behavior forces the user to create a new password that follows the password characteristics defined in the password policy.

When account control is enabled and an administrator uses the **username password 7** command, the password automatically expires. Because the encrypted password cannot be checked against the configured password policy, the user is prompted to change their password at log in.

Empty passwords are not allowed when account control is enabled.

Examples

```
amnesiac (config) # authentication policy password expire 60 warn 3
```

Related Commands

authentication policy template, username password, username password 7, show alarm

authentication policy template

Specify the authentication policy template for password policy configuration.

Syntax

authentication policy template { **strong** | **basic** }

Parameters

strong

Specifies the strong security policy template.

basic

Specifies the basic security policy template.

Usage Guidelines

The **authentication policy template strong** command sets the password policy to more stringent enforcement settings. Selecting this template automatically pre-populates the password policy with stricter settings commonly required by higher security standards, such as for the Department of Defense.

To remove the strong security template and return to the basic password policy, use the **authentication policy template basic** command.

When account control is enabled for the first time, the password policy is set to the basic template.

Examples

```
amnesiac (config) # authentication policy template strong

amnesiac #  show authentication policy
Authentication policy enabled:                          yes
Maximum unsuccessful logins before account lockout:   3
      Wait before account unlock:                       300 Seconds
Minimum password length:                                14
Minimum upper case characters in password:              1
Minimum lower case characters in password:              1
Minimum numerical characters in password:               1
Minimum special characters in password:                 1
Minimum interval for password reuse:                    5
Minimum characters diff for password change:            4
Prevent dictionary words in password:                   yes
User passwords expire:                                  60 days
Warn user of an expiring password:                      7 days before
User accounts with expired passwords lock:              305 days

amnesiac (config) # authentication policy template basic

amnesiac #  show authentication policy
Authentication policy enabled:                          yes
Maximum unsuccessful logins before account lockout:   none
      Wait before account unlock:                       300 Seconds
Minimum password length:                                6
Minimum upper case characters in password:              0
Minimum lower case characters in password:              0
Minimum numerical characters in password:               0
Minimum special characters in password:                 0
Minimum interval for password reuse:                    0
Minimum characters diff for password change:            0
Prevent dictionary words in password:                   yes
User passwords expire:                                  never
Warn user of an expiring password:                      7 days before
User accounts with expired passwords lock:              never
```

Related Commands

show alarm

authentication policy user lock never

Configures the user account lock settings for account control management.

Syntax

[no] authentication policy user *username* **lock never**

Parameters

username

Specify the user login: **admin**, **monitor**, or **shark**.

Usage Guidelines

The **authentication policy user lock never** command prevents the user's account from being locked after the password expires. This command is available only when account control is enabled.

The **no authentication policy user lock never** command allows the user account to be locked after the password expires.

Examples

```
amnesiac (config) # authentication policy user admin lock never
```

Related Commands

show alarm

authentication policy user login-failures reset

Resets a user account so the user can log in again.

Syntax

[no] authentication policy user *username* **login-failures reset**

Parameters

username

Specify the user login: **admin**, **monitor**, or **shark**.

Usage Guidelines

If a user account is locked because of a failed login count exceeding the configured value, the **authentication policy user login-failures reset** command resets the account so the user can log in again. This command resets the login count to zero, which is the default value.

Examples

```
amnesiac (config) # authentication policy user admin login-failures reset
```

Related Commands

show alarm

banner login

Creates the system log in banner.

Syntax

[no] banner login *message-string*

Parameters

message-string

Specify the login banner message. Enclose the message in quotation marks.

Usage Guidelines

The **no** command option disables the login banner.

Examples

```
amnesiac (config) # banner login "reminder: meeting today"
```

Related Commands

show bootvar

banner motd

Creates the system Message of the Day banner.

Syntax

[no] banner motd *message-string*

Parameters

message-string

Specify the login Message of the Day. Enclose the message in quotation marks.

Usage Guidelines

The **no** command option disables the system Message of the Day banner.

Examples

```
amnesiac (config) # banner motd "customer visit today"
```

Related Commands

show bootvar

boot bootloader password

Sets the password for the bootloader.

Syntax

boot bootloader password { *password* | **0** *password* | **7** *password* }

Parameters

password

Specify a bootloader password in clear text. The password must be at least 6 characters. This option functions the same as the **0 <password>** parameter and is provided for backward compatibility.

0 *password*

Specify a bootloader password in clear text.

7 *password*

Specify a bootloader password with an encrypted string. The encrypted string is the hash of the clear text password and is 35 bytes long. The first 3 bytes indicate the hash algorithm and the next 32 bytes are the hash values.

Examples

```
amnesiac (config) # boot bootloader password 0 182roy
amnesiac (config) # boot bootloader password 7 $1$qyP/PKii$2v9FOFcXB5a3emuvLKO3M
```

Related Commands

show images

boot system

Boots the specified partition the next time the system is rebooted.

Syntax

boot system *partition*

Parameters

partition

Specify the partition to boot: **1** or **2**

Examples

```
amnesiac (config) # boot system 1
```

Related Commands

show images

cli clear-history

Clears the command history for the current user.

Syntax

cli clear-history

Examples

```
amnesiac (config) # cli clear-history
```

Related Commands

show cli

cli default auto-logout

Sets the keyboard inactivity time for automatic log out.

Syntax

[no] cli default auto-logout *minutes*

Parameters

minutes

Specify the number of minutes before log out occurs.

Usage Guidelines

To disable timeout:

```
cli default auto-logout 0
```

The **no** command option disables the automatic logout feature.

Examples

```
amnesiac (config) # cli default auto-logout 25
```

Related Commands

show cli

cli default paging enable

Sets the ability to view text one screen at a time.

Syntax

[no] cli default paging enable

Usage Guidelines

The **no** command option disables paging.

Examples

```
amnesiac (config) # cli default paging enable
```

Related Commands

show cli

cli session

Sets CLI options for the current session only.

Syntax

[no] cli session { **auto-logout** *minutes* | **paging enable** | **terminal length** *lines* | **terminal type** *terminal_type* | **terminal width** *number-of-characters* }

Parameters

auto-logout *minutes*
: Sets the number of minutes before the CLI automatically logs out the user. The default value is 15 minutes. The **no** command option disables the automatic logout feature.

paging enable
: Sets paging. With paging enabled, if there is too much text to fit on the page, the CLI prompts you for the next page of text. The **no** command option disables paging.

terminal length *lines*
: Sets the terminal length. The **no** command option disables the terminal length.

terminal type *terminal_type*
: Sets the terminal type. The **no** command option disables the terminal type.

terminal width *number-of-characters*
: Sets the terminal width. The **no** command option disables the terminal width.

Usage Guidelines

The **no** command option disables CLI option settings.

Examples

```
amnesiac (config) # cli session auto-logout 20
```

Related Commands

show cli

clock timezone

Sets the current time zone.

Syntax

clock timezone *zone*

Parameters

zone

Specify the time zone name: **Africa**, **America**, **Antarctica**, **Arctic**, **Asia**, **Atlantic_Ocean**, **Australia**, **Europe**, **GMT-offset**, **Indian_Ocean**, **Pacific_Ocean**, **UTC**.

Usage Guidelines

The default value is GMT-offset.

Examples

```
amnesiac (config) # clock timezone Africa
```

Related Commands

show clock

configuration copy

Copies a configuration file.

Syntax

configuration copy *sourcename new-filename*

Parameters

sourcename

Specify the name of the source file.

new-filename

Specify the name of the destination file.

Examples

```
amnesiac (config) # configuration copy westcoast eastcoast
```

Related Commands

show info

configuration delete

Deletes a configuration file.

Syntax

configuration delete *filename*

Parameters

filename

Specify the name of the configuration file to delete.

Examples

```
amnesiac (config) # configuration delete westcoast
```

Related Commands

show info

configuration factory

Creates a new configuration file.

Syntax

configuration factory *filename*

Parameters

filename

Specify the name of the destination file.

Examples

```
amnesiac (config) # configuration factory eastcoast
```

Related Commands

show info

configuration fetch

Downloads a configuration file over the network.

Syntax

configuration fetch *URL,-scp://,-or-ftp://username:password@hostname/path/filename* | *filename*

Parameters

URL,-scp://,-or-ftp://username:password@hostname/path/filename

Specify the location of the configuration file to download in URL, scp://, or ftp:// format.

filename

Create a new name for the configuration file.

Usage Guidelines

To copy one configuration file to another appliance, run the following set of commands:

```
configuration fetch <url-to-remote-config> <new-config-name>
    ;; this fetches the configuration from the remote
configuration switch-to <new-config-name>
    ;; this activates the newly fetched configuration
```

Examples

```
amnesiac (config) # configuration fetch http://domain.com/westcoast newconfig
amnesiac (config) # configuration switch-to newconfig
```

Related Commands

show info

configuration jump-start

Restarts a simple configuration wizard.

Syntax

configuration jump-start

Usage Guidelines

The configuration wizard lets you set five basic configuration parameters with a single command. Press Enter to accept the value displayed or enter a new value.

Examples

```
amnesiac (config) # configuration jump-start
Brocade Services Director configuration wizard.

Step 1: Hostname? [host-1234]
Step 2: Use DHCP on primary interface? [no]
Step 3: Primary IP address? [10.62.165.135]
Step 4: Netmask? [255.255.192.0]
Step 5: Default gateway? [10.62.128.1]

You have entered the following information:
   1. Hostname: host-1234
   2. Use DHCP on primary interface: no
   3. Primary IP address: 10.62.165.135
   4. Netmask: 255.255.192.0
   5. Default gateway: 10.62.128.1

To change an answer, enter the step number to return to.
Otherwise hit <enter> to save changes and exit.
To continue setup, navigate your web browser to the address configured above
```

Related Commands

show info

configuration merge

Merges common configuration settings from one system to another.

Syntax

configuration merge *filename new-config-name*

Parameters

filename

Name of file from which to merge settings.

new-config-name

Specify the new configuration name.

Usage Guidelines

Use the configuration merge command to deploy a network of appliances. Set up a template for your appliance and merge the template with each appliance in the network.

The following configuration settings are not merged when you run the **configuration merge** command: failover settings, SNMP SysContact and SysLocation, alarm settings, CLI settings, and all network settings (for example, hostname, auxiliary interface, DNS settings, defined hosts, static routing, and in-path routing).

The following configuration settings are merged when you run the **configuration merge** command: in-path, out-of-path, log settings, protocols, statistics, email, NTP and time, Web, and SNMP.

To merge a configuration file, run the following set of commands:

```
configuration write to <new-config-name>
    ;; this saves the current config to the new name and activates
        ;; the new configuration
configuration fetch <url-to-remote-config> <temp-config-name>
    ;; this fetches the configuration from the remote
configuration merge <temp-config-name>
    ;; this merges the fetched config into the active configuration
        ;; which is the newly named/created one in step 1 above
configuration delete <temp-config-name>
    ;; this deletes the fetched configuration as it is no longer
        ;; needed since you merged it into the active configuration
```

Examples

```
amnesiac (config) # configuration merge tempconfig
```

Related Commands

show info

configuration move

Moves and renames a configuration file.

Syntax

configuration move *sourcename destname*

Parameters

sourcename

Specify the name of the source configuration file.

destname

Specify the name of the new configuration file.

Examples

```
amnesiac (config) # configuration move westcoast eastcoast
```

Related Commands

show info

configuration new

Creates a new, blank configuration file.

Syntax

configuration new *new-filename* | [**keep licenses**]

Parameters

new-filename

Specify the name of the new configuration file.

keep licenses

Creates a new configuration file with default settings and active licenses.

Usage Guidelines

Brocade recommends that you use the **keep licenses** command option. If you do not keep licenses, your new configuration will not have a valid license key.

Examples

```
amnesiac (config) # configuration new westcoast keep licenses
```

Related Commands

show info

configuration revert keep-local

Reverts to the initial configuration but maintains some appliance-specific settings.

Syntax

configuration revert keep-local

Examples

```
amnesiac (config) # configuration revert keep-local
```

Related Commands

show info

configuration revert saved

Reverts the active configuration to the last saved configuration.

Syntax

configuration revert saved

Examples

```
amnesiac (config) # configuration revert saved
```

Related Commands

show info

configuration switch-to

Loads a new configuration file and makes it the active configuration.

Syntax

configuration switch-to *filename*

Parameters

filename

Specify the filename. The default filenames are:

initial

Specify the initial configuration.

initial.bak

Specify the initial backup configuration.

cold

Specify the configuration file before SDR has occurred.

working

Specify the current configuration.

Examples

```
amnesiac (config) # configuration switch-to westcoast
```

Related Commands

show info

configuration upload

Uploads the configuration file.

Syntax

configuration upload *filename http,-ftp,-or-scp-URL-(e.g.-scp://username:password@host/path)* | [**active**]

Parameters

filename

Specify the configuration filename.

http,-ftp,-or-scp-URL-(e.g.-scp://username:password@host/path)

Specify the HTTP, FTP, or scp URL.

active

Sets the uploaded file to the active configuration file.

Examples

```
amnesiac (config) # configuration upload initial scp://test:MyPassword@example/tmp/
```

Related Commands

show info

configuration write

Writes the current, active configuration file to memory.

Syntax

configuration write [**to** *filename*]

Parameters

to *filename*

Save the running configuration to a file.

Examples

```
amnesiac (config) # configuration write
```

Related Commands

show info

debug generate dump

Generates a report you can use to diagnose misconfiguration in deployments.

Syntax

debug generate dump [**full** | **brief** | **rsp** | **stats** | **all-logs** | **blockstore** | **blockstore-fifo**] [**upload** [*case-number* | *url*]]

Parameters

full
: Generate a full system dump.

brief
: Generates a brief system dump.

rsp
: Generate a full system dump, including VMware Server data.

stats
: Generates a full system dump including .dat files.

all-logs
: Generate a full system dump with .dat files and all logs.

blockstore
: Generate a full system dump with .dat files, all logs, and blockstore phash.

blockstore-fifo
: Generate a full system dump with .dat files, all logs, blockstore phash, and fifo.

upload *case-number* | *url*
: Generate a full system dump and specify the customer case number or URL to upload to Brocade Technical Support. Brocade Technical Support recommends using a case number. The case number is a numeric string.

Usage Guidelines

Specifying the case number is a convenient and intuitive method to generate and upload a system dump compared to using a URL. Brocade Technical Support recommends using a case number. You can still specify a full URL in place of a case number. In this case, the report is uploaded to the specified URL instead of the URL constructed from the case number.

If the URL points to a directory on the upload server, you must specify the trailing slash "/". For example, ftp://ftp.xxxxxxxx.com/incoming/and not ftp://ftp.xxxxxxxx.com/incoming. The file name as it exists on the appliance is renamed to the file name specified in the url.

After the dump generation, the upload is done in the background so you can exit the command-line interface without interrupting the upload process.

Examples

```
amnesiac (config) # debug generate dump brief
amnesiac (config) # debug generate dump upload 194170
amnesiac (config) # debug generate dump upload ftp://ftp.xxxxxxxxx.com/incoming/
```

email autosupport enable

Enables automatic email notification of significant alarms and events to Brocade Support.

Syntax

[no] email autosupport enable

Usage Guidelines

The **no** command option disables automatic email notification.

Examples

```
amnesiac (config) # email autosupport enable
```

Related Commands

show email

email domain

Sets the domain for email notifications.

Syntax

[no] email domain *hostname-or-ip-addr*

Parameters

hostname-or-ip-addr

Specify the domain for email notifications (only if the email address does not contain it).

Usage Guidelines

Use the email domain command only if the email address does not contain the domain.

The **no** command option disables the email domain.

Examples

```
amnesiac (config) # email domain example.com
```

Related Commands

show email

email from-address

Sets the address from which email messages appear to come.

Syntax

[no] email from-address *email-addr*

Parameters

email-addr

Specify the full user name and domain to appear in the email "From:" address.

Usage Guidelines

Use the email from-address command to override the default email address used in outgoing email messages, do-not-reply@[hostname].[domainname].

The **no** command option disables the email address configured and returns to the default email address.

Examples

```
amnesiac (config) # email from-address bean@caffeitaly.com
```

Related Commands

show email, show email

email mailhub

Sets the SMTP server for email notifications.

Syntax

[no] email mailhub *hostname-or-ip-addr*

Parameters

hostname-or-ip-addr

Specify the SMTP server for email notifications.

Usage Guidelines

The **no** command option disables the SMTP server.

Examples

```
amnesiac (config) # email mailhub mail-server.example.com
```

Related Commands

show email

email mailhub-port

Sets the email port for email notifications.

Syntax

[no] email mailhub-port *port*

Parameters

port

Specify the email port for email notifications.

Usage Guidelines

The **no** command option disables the email port.

Examples

```
amnesiac (config) # email mailhub-port 135
```

Related Commands

show email

email notify events enable

Enables email notification for events.

Syntax

[no] email notify events enable

Usage Guidelines

The **no** command option disables email notification.

Examples

```
amnesiac (config) # email notify events enable
```

Related Commands

show email

email notify events recipient

Sets the email address for notification of events.

Syntax

[no] email notify events recipient *email-addr*

Parameters

email-addr

Specify the email address of the user to receive notification of events.

Usage Guidelines

The **no** command option disables email address for notification.

Examples

```
amnesiac (config) # email notify events recipient johndoe@example.com
amnesiac (config) # email notify events recipient janedoe@example.com
```

Related Commands

show email

email notify failures enable

Enables email notification of system failures, such as core dumps.

Syntax

[no] email notify failures enable

Usage Guidelines

The **no** command option disables email notification.

Examples

```
amnesiac (config) # email notify failures enable
```

Related Commands

show email

email notify failures recipient

Enables email notification of system failures, such as core dumps.

Syntax

[no] email notify failures recipien t *email-addr*

Parameters

recipient *email-addr*

Specify the email address of the user to receive notification of failures.

Usage Guidelines

The **no** command option disables email notification.

You must enter separate commands for each email address. Each command line accepts only one email address.

Examples

```
amnesiac (config) # email notify failures recipient johndoe@example.com
```

Related Commands

show email

email send-test

Sends a test email to all configured event and failure recipients.

Syntax

email send-test

Usage Guidelines

You can also access this command from enable mode.

Examples

```
amnesiac (config) # email send-test
```

Related Commands

show email

events max-age

Sets the maximum age for keeping history events.

Syntax

events max-age [**minute** | **hour** | **day** | **week** | **month** | **year** | **decade**]

Parameters

period

Specify the time period to keep events:

minute
Specifies one minute.

hour
Specifies one hour.

day
Specifies one day.

week
Specifies one week.

month
Specifies one month.

year
Specifies one year.

decade
Specifies ten years.

Examples

```
amnesiac (config) # events max-age month
```

Related Commands

show files events config

events reset

Resets the history daemon and drop-event history tables.

Syntax

events reset

Examples

```
amnesiac (config) # events reset
```

Related Commands

show files events config

file debug-dump delete

Deletes the specified debug dump file.

Syntax

file debug-dump delete *filename*

Parameters

filename

Specify the filename.

Examples

```
amnesiac (config) # file debug-dump delete mydumpfile.txt
```

Related Commands

show files events config

file debug-dump email

Sends a debug dump file in email to pre-configured recipients.

Syntax

file debug-dump email *filename*

Parameters

filename

Specify the filename.

Examples

```
amnesiac (config) # file debug-dump email mydumpfile.txt
```

Related Commands

show files events config

file debug-dump upload

Uploads the specified debug dump file.

Syntax

file debug-dump upload *filename* { *ftp,-or-scp://username:password@host/path)* | *case-number* }

Parameters

filename

Specify the filename.

ftp, or scp URL (e.g.scp://username:password@host/path)

Specify the FTP or scp URL.

case-number

Specify the customer case number. The case number is a convenient and intuitive method to upload a debug dump file to Brocade Technical Support without using a URL. Brocade Technical Support recommends using a case number. The case number is a numeric string.

Examples

```
amnesiac (config) # file debug-dump upload mydebug.txt scp://me:test@example.com/mypath
amnesiac (config) # file debug-dump upload mydebug.txt 194170
```

Related Commands

show files events config

file process-dump delete

Deletes the specified crash dump file.

Syntax

file process-dump delete *filename*

Parameters

filename

Specify the filename.

Examples

```
amnesiac (config) # file process-dump delete mycrash.txt
```

Related Commands

show files events config

file process-dump upload

Uploads the specified crash dump file.

Syntax

file process-dump upload *filename* { *https,-http,-ftp,-or-scp-URL:-scp://username:password@hostname/path/filename* | *case-number* }

Parameters

filename

Specify the filename.

https,http,ftp, or scp URL: scp://username:password@hostname/path/filename

Specify the URL.

case-number

Specify the customer case number. The case number is a convenient and intuitive method to upload a crash dump file to Brocade Technical Support without using a URL. Brocade Technical Support recommends using a case number. The case number is a numeric string.

Examples

```
amnesiac (config) # file process-dump upload mycrash.txt scp://mylogin:mypassword@myhostname/path/
filename
amnesiac (config) # file process-dump upload mycrash.txt 194170
```

Related Commands

show files events config

fips enable

Enables FIPS mode.

Syntax

[no] fips enable

Usage Guidelines

FIPS is a publicly announced set of validation standards developed by the United States National Institute of Standards and Technology (NIST) for use by government agencies and by government contractors.

FIPS 140-2 is a technical and worldwide defacto standard for the implementation of cryptographic modules. FIPS validation makes the Brocade appliance more suitable for use with government agencies that have formal policies requiring use of FIPS 140-2 validated cryptographic software.

To achieve FIPS compliance on a Brocade appliance, you must run a software version that includes the Riverbed Cryptographic Security Module (RCSM) v1.0, configure the system to run in FIPS operation mode, and adjust the configuration of any features that are not FIPS compliant.

The RCSM is validated to meet FIPS 140-2 Level 1 requirements. Unlike FIPS 140-2 Level 2 validation, which requires physical security mechanisms, Level 1 validates the software only.

For more information on the FIPS implementation, see the *FIPS Administrator's Guide*.

Examples

```
amnesiac (config) # fips enable
amnesiac (config) # service restart
```

Related Commands

show fips status

hardware watchdog enable

Enables the hardware watchdog, which monitors the system for hardware errors.

Syntax

[no] hardware watchdog enable

Examples

```
amnesiac (config) # hardware watchdog enable
```

Related Commands

show hardware error-log

hardware watchdog shutdown

Shuts down the hardware watchdog.

Syntax

hardware watchdog shutdown

Examples

```
amnesiac (config) # hardware watchdog shutdown
```

Related Commands

show hardware error-log

host-label

Configures host label settings.

Syntax

[no] host-label *name* { **hostname** *hostname* [**subnet X.X.X.X/XX**] | **subnet X.X.X.X/XX** [**hostname** *hostname*] }

Parameters

name

Specify the name of the host label.

- Host labels are case sensitive and can be any string consisting of letters, the underscore (_), or the hyphen (-). There cannot be spaces in host labels. There is no limit on the number of host labels you can configure.
- To avoid confusion, do not use a number for a host label.
- Host labels that are used in QoS rules cannot be deleted.
- Host label changes (that is, adding and removing hostnames inside a label) are applied immediately by the rules that use the host labels that you have modified.

hostname *hostname,-.-.-.*

Specify a hostname or a comma-separated list of hostnames.

- Hostnames are case insensitive.
- You can configure a maximum of 100 unique hostnames across all host labels.
- A maximum of 64 subnets and hostnames per host label is allowed.

subnet *X.X.X.X/XX,...*

Specify an IPv4 subnet for the specified host label or a comma-separated list of IPv4 subnets. Use the format X.X.X.X/XX.

Usage Guidelines

Host labels are names given to lists of hosts (IP addresses, IP subnets, and hostnames) that you can specify to match the source and destination network when configuring QoS rules. For example, you can specify host labels to define a set of hosts for which QoS classification and QoS marking rules apply. You can configure a mixture of subnets and hostnames for each label. A maximum of 64 subnets and hostnames per host label is allowed. You can configure a maximum of 100 unique hostnames across all host labels.

Hostnames referenced in a host label are automatically resolved through a DNS. The system resolves them immediately after you add a new host label or after you edit an existing host label. The system also automatically re-resolves hostnames daily. If you want to resolve a hostname immediately, use the **resolve host-labels** command.

Examples

```
amnesiac (config) # host-label test hostname xxxxxxxx.com,example.com subnet 192.168.0.1/32,
192.168.0.2/32,10.0.0.0/8
amnesiac (config) # qos basic classification global-app add global-app-name MyGlobalApp class-name
Realtime vlan 1 traffic all srcport 123 srcnet test
```

Related Commands

show images, show host-label

hostname

Sets the hostname for this system.

Syntax

[no] hostname *hostname*

Parameters

hostname

Specify the hostname. Do not include the domain name.

Usage Guidelines

You cannot change the IP address of a Services Director when:

- the Services Director VA is running the Setup Wizard.
- the Services Director is already part of an HA pair.

The **no** command option removes the hostname for this appliance.

Examples

```
amnesiac (config) # hostname park
```

Related Commands

show hosts

image boot

Boots the specified system image by default.

Syntax

image boot *partition*

Parameters

partition

Specify the partition to boot: **1** or **2**.

Examples

```
amnesiac (config) # image boot 1
```

Related Commands

show version

interface

Configures system interfaces.

Syntax

[no] interface *interfacename options*

Parameters

interfacename

Specify the interface name: **lo**, **aux**, **lan0_0**, **wan0_0**, **primary**, **in-path0_0**. The interface name varies according to the Brocade product your are configuring. For example: **primary**, **aux**. For details, see the CLI online help.

options

Each interface has the following configuration options:

arp

Adds static entries to the ARP cache - Configure the string of this interface.

dhcprenew

Enables DHCP on the interface or renews DHCP. Setting DHCP on the auxiliary interface only provides an IP lease, and does not update the gateway, routes, and DNS settings.

dhcpdynamicdns

Enables DHCP hostname registration with dynamic DNS.

duplex*speed*

Specify the duplex speed: **auto**, **full**, **half**. The default value is **auto**.

ipaddress*ipaddrnetmask*

Specify the IP address and netmask for the interface.

ipv6address*ipv6addrprefix-length*

Specify the IPv6 address and prefix length for the interface. Your appliance can have both an IPv4 address and an IPv6 address. You can only configure one IPv6 address per in-path interface.

To set an IPv6 address

amnesiac (config) # interface primary ipv6 address 2001:38dc:52::e9a4:c5:6282 64

mtu*speed*

Specify the MTU. The MTU is set on the in-path interface; it propagates automatically to the LAN and the WAN. The **no** command option disables the MTU setting. The default value is 1500.

shutdown

Shuts down the interface.

speed*speed*

Specify the speed for the interface: **auto**, **10**, **100**, **1000**. The default value is 100.

Usage Guidelines

You cannot change the IP address of a Services Director when:

- the Services Director VA is running the Setup Wizard.
- the Services Director is already part of an HA pair.

The **no** command option disables the interface settings.

Examples

```
amnesiac (config) # no interface inpath0_0 fail-to-bypass enable
```

Related Commands

show interfaces, ipv6 in-path-gateway

ip default-gateway

Sets the default gateway for the appliance.

Syntax

[no] ip default-gateway *ip-addr*

Parameters

ip-addr

Specify the IP address of the management interface.

Usage Guidelines

This command is used to set the default gateway for the entire appliance. It is primarily used for the primary or auxiliary (**aux**) interfaces for management, but can also be used for out-of-path optimization configurations as well as PFS.

The **no** command option disables the default gateway IP address.

Examples

```
amnesiac (config) # ip default-gateway 10.0.0.12
```

Related Commands

show logging, ipv6 default-gateway

ip domain-list

Adds a domain name to the domain list for resolving hostnames.

Syntax

[no] ip domain list *domain*

Parameters

domain

Specify the domain name.

Usage Guidelines

The **no** command option removes a domain from the domain list.

Examples

```
amnesiac (config) # ip domain-list example.com
```

Related Commands

show hosts

ip host

Adds an entry to the static host table.

Syntax

[no] ip host *hostname ip-addr*

Parameters

hostname

Specify the hostname.

ip-addr

Specify the IP address.

Usage Guidelines

The **no** command option removes an entry from the static host table.

Examples

```
amnesiac (config) # ip host park 10.10.10.1
```

Related Commands

show hosts

ipv6 default-gateway

Configures a default IPv6 route.

Syntax

[no] ipv6 default-gateway *ipv6-address*

Parameters

ipv6-address

Specify the IPv6 address.

Usage Guidelines

Support for IPv6 is enabled by default. The **no** command option removes the default gateway for IPv6 routing.

Examples

```
amnesiac (config) # ipv6 default-gateway 2001:38dc:52::e9a4:c5:6282
```

Related Commands

show email, ipv6 route

ipv6 in-path-gateway

Configures an in-path IPv6 default gateway.

Syntax

[no] ipv6 in-path-gateway *interface ipv6-address*

Parameters

interface

Specify the interface.

ipv6-address

Specify the IPv6 address of the in-path gateway.

Usage Guidelines

Support for IPv6 is enabled by default. The **no** command option deletes the in-path default gateway for IPv6 routing.

Examples

```
amnesiac (config) # ipv6 in-path-gateway inpath0_0 2001:38dc:52::e9a4:c5:6282
```

Related Commands

ipv6 route, show ipv6 default-gateway

ipv6 route

Adds IPv6 routes in addition to the default gateway, if needed.

Syntax

[no] ipv6 route *IPv6-destination prefix-length gateway*

Parameters

IPv6-destination
Specify the IPv6 address.

prefix-length
Specify the IPv6 prefix length.

gateway
Specify the IPv6 address of the gateway.

Usage Guidelines

Support for IPv6 is enabled by default. The **no** command option removes the specified IPv6 route.

Examples

```
amnesiac (config) # ipv6 route 2001:38dc:52::e9a4:c5:6282 64 2001:38dc:52::1
```

Related Commands

show email, ipv6 default-gateway

ip name-server

Adds a DNS name server.

Syntax

[no] ip name-server *ip-addr*

Parameters

ip-addr

Specify the name server IP address.

Usage Guidelines

The **no** command option removes a DNS name server.

Examples

```
amnesiac (config) # ip name-server 10.10.10.1
```

Related Commands

show hosts

ip route

Adds a static route.

Syntax

[no] ip route *network-prefix netmask netmask-length next-hop-ip-addr*

Parameters

network-prefix
Specify the network prefix.

netmask
Specify the netmask. For example: **255.255.255.0**

netmask-length
Specify the netmask length. For example: */24*

next-hop-ip-addr
Specify the next hop IP address.

Usage Guidelines

The **no** command option disables the static route. If **no ip route** is run with only a network prefix and mask, it deletes all routes for that prefix.

Examples

```
amnesiac (config) # ip route 192 193.166.0/24 10.10.10.1
```

Related Commands

show logging

job command

Schedules CLI command execution for a specified time in the future.

Syntax

[no] job *job-id* **command** *sequence-# "cli-command"*

Parameters

job-id

Specify the job identification number.

sequence-#

Specify the sequence number for job execution. The sequence number is an integer that controls the order in which a CLI command is executed. CLI commands are executed from the smallest to the largest sequence number.

"cli-command"

Specify the CLI command. Enclose the command in double-quotes.

Usage Guidelines

A job includes a set of CLI commands and a time when the job runs. Jobs are run one time only, but they can be reused.

Any number of CLI commands can be specified with a job and are executed in an order specified by sequence numbers. If a CLI command in the sequence fails, no further commands in the job are executed. A job can have an empty set of CLI commands.

The output of all commands executed are viewable after job execution by running the **show job<job-id>** command. The output of each job is only available for the last run; it is re-written upon each execution.

The job output and any error messages are saved. Jobs can be canceled and rescheduled.

The **no job <job-id> command <sequence #>** command option deletes the CLI command from the job.

The **no job <job-id>** command option removes all statistics associated with the specified job. If the job has not executed, the timer event is canceled. If the job was executed, the results are deleted along with the job statistics.

Examples

```
amnesiac (config) # job 10 command 1 "show info"
amnesiac (config) # job 10 command 2 "show connections"
amnesiac (config) # job 10 command 3 "show version"
```

Related Commands

show job, show jobs

job comment

Adds a comment to the job for display when show jobs is run.

Syntax

[no] job *job-id* **comment** ""

Parameters

job-id

Specify the job identification number.

comment ""

Specify the comment for the job. Enclose the description in double-quotes.

Usage Guidelines

The **no** command option deletes the comment.

Examples

```
amnesiac (config) # job 10 "comment this is a test"
```

Related Commands

show job, show jobs

job date-time

Sets the date and time for the job to execute.

Syntax

[no] job *job-id* **date-time** *hh:mm:ss|yyyy/mm/dd*

Parameters

job-id

Specify the job identification number.

hh:mm:ss

Specify the time for the job to execute.

yyyy/mm/dd

Specify the date for the job to execute.

Usage Guidelines

If the time specified is in the past, the job does not execute and is in the inactive state.

The **no** command option disables the date and time settings.

Examples

```
amnesiac (config) # job 10 date-time 04:30:23
```

Related Commands

show job, show jobs

job enable

Enables a CLI command job to execute at the date and time specified in the job.

Syntax

[no] job *job-id* **enable**

Parameters

job-id

Specify the job identification number.

Usage Guidelines

The **no** command option disables jobs.

Examples

```
amnesiac (config) # job 10 enable
```

Related Commands

show job, show jobs

job execute

Forces an immediate execution of a job. The timer (if set) is canceled, and the job is moved to the completed state.

Syntax

job *job-id* **execute**

Parameters

job-id

Specify the job identification number.

Usage Guidelines

You can also access this command from enable mode.

Examples

```
amnesiac (config) # job 10 execute
```

Related Commands

show job, show jobs

job fail-continue

Executes all commands in a job even if a command in the sequence fails.

Syntax

[no] job *job-id* **fail-continue**

Parameters

job-id

Specify the job identification number.

Usage Guidelines

The **no** command option disables this command.

Examples

```
amnesiac (config) # job 10 fail-continue
```

Related Commands

show job, show jobs

job name

Sets the name for the job.

Syntax

[no] job *job-id* **name** *friendly-name*

Parameters

job-id

Specify the job identification number.

friendly-name

Specify a name for the job.

Usage Guidelines

The **no** command option deletes the job name.

Examples

```
amnesiac (config) # job 10 name myjob
```

Related Commands

show job, show jobs

job recurring

Sets the frequency with which to recurrently execute this job.

Syntax

[no] job *job-id* **recurring** *seconds*

Parameters

job-id

Specify the job identification number.

seconds

Specify how frequently the recurring job should execute.

Examples

```
amnesiac (config) # job 10 recurring 36000
```

Related Commands

show job, show jobs

license client fetch

Forces the license client to update immediately.

Syntax

license client fetch

Usage Guidelines

If there is a change in your account (such as if Brocade has given you an extra license), and the change will be updated whenever the license client runs next, but you want to force it to run immediately, then you can use the **license client fetch** command.

Examples

```
amnesiac # license client fetch
```

license client init

Initializes the license client.

Syntax

license client init *license-number*

Parameters

license-number

Specify the license number.

Usage Guidelines

The license client communicates with the license server. It has two main functions:

- It periodically contacts the license server and checks out and renews the license or lease.
- It enables you to query available features, licenses and other metadata such as serial number.

You can configure the license client to communicate with the license server at the company headquarters or the local license server.

The **no** command option deletes the one-time token or license.

Examples

```
amnesiac (config) # license client init 4
```

Related Commands

show licenses

license delete

Deletes the specified license key.

Syntax

license delete *license-number*

Parameters

license-number

Specify the license number.

Examples

```
amnesiac (config) # license delete 4
```

Related Commands

show licenses

license install

Installs a new software license key.

Syntax

[no] license install *license-key*

Parameters

license-key

Specify the license key.

Usage Guidelines

The **no** command option disables this command.

Examples

```
amnesiac (config) # license install SH10_B-0000-1-7F14-FC1F
```

Related Commands

show licenses

license server

Adds a license server.

Syntax

[no] license server *hostname* [**priority** *number*] [**port** *number*]

Parameters

hostname

Specify the hostname of the computer that contains the license server.

priority *number*

Specify the order in which the license server is added. 0 is the highest priority and 9 is the lowest priority. The default priority is 9.

port *number*

Optionally, specify the port number on which the license server is listening. The default is port 80.

Usage Guidelines

The license server provides licenses to Services Director.

The **no** command option deletes the license server specified.

The default license server is the server hosted at Brocade headquarters.

The **no license server <hostname> priority** command resets the priority in which the specified license server is added to the default value (9 is the lowest priority).

The **no license server <hostname> port** command resets the license server port to the default port.

Examples

```
amnesiac (config) # license server MyLicenseServer
amnesiac (config) # show license-servers
Server Name       Port               Priority
---------------   ---------------    ---------------
MyLicenseServer   80                 0
```

logging

Adds a remote system log (syslog) server to the system.

Syntax

[no] logging *ip-addr* | [**trap** *log-level*]

Parameters

ip-addr

Specify the IP address for the syslog server.

trap *log-level*

Specify the trap log level of the syslog server:

emerg

Emergency, the system is unusable.

alert

Action must be taken immediately.

critical

Critical conditions.

err

Error conditions.

warning

Warning conditions.

notice

Normal but significant conditions, such as a configuration change. This is the default setting.

info

Informational messages.

If you have set different log levels for each remote syslog server, this option changes all remote syslog servers to have a single log level.

Usage Guidelines

The **no** command option removes a remote **syslog** server from the system.

Examples

```
amnesiac (config) # logging 10.0.0.2
```

Related Commands

show logging

logging files delete

Deletes the oldest log file or a specified number of the oldest log files.

Syntax

logging files delete oldest *number*

Parameters

oldest *number*

Specify the number of old log files to delete. The range is **1-10**.

Usage Guidelines

You can also access this command from enable mode.

Examples

```
amnesiac (config) # logging files delete oldest 10
```

Related Commands

show logging

logging files rotation criteria frequency

Sets the frequency of log rotation.

Syntax

logging files rotation criteria frequency *rotation-frequency*

Parameters

rotation-frequency

Specify how often log rotation occurs: **monthly**, **weekly**, **daily**. The size of the log file is checked every 10 minutes.

Usage Guidelines

The size of the log file is checked every 10 minutes. If there is an unusually large amount of logging activity, it is possible for a log file to grow larger than the set limit in that period of time.

Examples

```
amnesiac (config) # logging files rotation criteria frequency weekly
```

Related Commands

show logging

logging files rotation criteria size

Sets the size, in MB, of the log file before rotation occurs.

Syntax

logging files rotation criteria size *size*

Parameters

size

Specify the size of the log file to save in MB. The default value is 0 (unlimited).

Usage Guidelines

The size of the log file is checked every 10 minutes. If there is an unusually large amount of logging activity, it is possible for a log file to grow larger than the set limit in that period of time.

Examples

```
amnesiac (config) # logging files rotation criteria size 100
```

Related Commands

show logging

logging files rotation force

Rotates logs immediately.

Syntax

logging files rotation force

Usage Guidelines

The size of the log file is checked every 10 minutes. If there is an unusually large amount of logging activity, it is possible for a log file to grow larger than the set limit in that period of time.

Examples

```
amnesiac (config) # logging files rotation force
```

Related Commands

show logging

logging files rotation max-num

Sets the maximum number of log files to keep locally.

Syntax

logging files rotation max-num *number*

Parameters

number

Specify the number of log files to keep locally. The range is 1-100. The default value is 10.

Usage Guidelines

The size of the log file is checked every 10 minutes. If there is an unusually large amount of logging activity, it is possible for a log file to grow larger than the set limit in that period of time.

Examples

```
amnesiac (config) # logging files rotation max-num 10
```

Related Commands

show logging

logging filter

Sets the minimal level of messages arriving from the specified process to the local subsystem.

Syntax

logging filter *process level*

Parameters

process

Specify the application process:

alarmd
Alarm control and management.

cli
Command-Line Interface.

mgmtd
Device control and management, which directs the entire device management system. It handles message passing between various management daemons, managing system configuration and general application of system configuration on the hardware underneath through the **hald**.

hald
Hardware Abstraction Daemon, which handles access to the hardware.

pm
Process Manager, which handles launching of internal system daemons and keeps them up and running.

sched
Process Scheduler, which handles one-time scheduled events.

rscored
REST Core Services.

rstild
REST Translation Interface.

ssc
Stingray Services Director.

statsd
Statistics Collector, which handles queries and storage of system statistics.

wdt
Watchdog Timer, the motherboard watchdog daemon.

webasd
Web Application Process, which handles the Web user interface.

level

Specify the trap log level:

emerg
Emergency, the system is unusable.

alert
Action must be taken immediately.

critical
Critical conditions.

err
Error conditions.

warning
Warning conditions.

notice
Normal but significant conditions, such as a configuration change. This is the default setting.

info
Informational messages.

If you have set different log levels for each remote **syslog** server, this option changes all remote **syslog** servers to have a single log level.

Usage Guidelines

Use this command to capture data when a appliance is not able to sustain the flow of logging data that is being committed to disk.

This command overrides the **logging local** command. This command creates a global setting that controls all output, including remote hosts.

All CIFS protocol related messages are logged at level **debug**, and the remainder at the level **notice**.

All remote logging hosts (if defined) also log at **logging trap** setting and at the logging filter process.

The **no logging filter all** command deletes all filters.

Examples

```
amnesiac (config) # logging filter cli alert
```

Related Commands

show logging

logging local

Sets the minimum severity of log messages saved on the local syslog servers.

Syntax

[no] logging local *loglevel*

Parameters

log-level

Specify the logging severity level. The follow severity levels are supported:

emerg
Emergency, the system is unusable.

alert
Action must be taken immediately.

crit
Critical conditions.

err
Error conditions.

warning
Warning conditions.

notice
Normal but significant conditions, such as a configuration change. This is the default setting.

info
Informational messages.

The default value is **notice**.

Usage Guidelines

The **no** command option sets the severity level for logging to none (no logs are sent).

Examples

```
amnesiac (config) # logging local notice
```

Related Commands

show logging

logging trap

Sets the minimum severity for messages sent to the remote syslog servers.

Syntax

[no] logging trap *loglevel*

Parameters

loglevel

Specify the logging severity level. The follow severity levels are supported:

emerg
Emergency, the system is unusable.

alert
Action must be taken immediately.

crit
Critical conditions.

err
Error conditions.

warning
Warning conditions.

notice
Normal but significant conditions, such as a configuration change. This is the default setting.

info
Informational messages.

The default value is **notice**.

Usage Guidelines

The **no** command option sets the severity level for logging to none.

Examples

```
amnesiac (config) # logging trap notice
```

Related Commands

show logging

ntp authentication

Configures the Network Time Protocol (NTP) authentication settings to authenticate NTP servers and peers.

Syntax

[no] ntp authentication key *key-id* **secret** { *plaintext* | **0** *plaintext* | **7** *encrypted-string* }

Parameters

key *key-id*

Specify the key identifier. The key ID values must be in the range 1 - 65534.

secret { *plaintext* | **0** *plaintext* | **7** *encrypted-string* }

Specify the shared secret parameter. Choose one of the following:

plaintext

Specify a shared secret in plain text. This option is the same as the 0 <plaintext> option and is provided for backward compatibility.

0*plaintext*

Specify a shared secret in plain text.

7*encryptedstring*

Specify a shared secret with an encrypted string.

Usage Guidelines

The **no** version of the command removes NTP authentication settings.

NTP authentication involves three steps that you can perform in any order:

- Configure a key ID using the **ntp authentication** command.
- Add the configured key ID to the trusted keys list using the **ntp authentication trusted-keys** command.
- Configure the NTP server or peer with the key ID using the **ntp server key** or **ntp peer key** command.

Examples

```
amnesiac (config) # ntp authentication key 56732 secret zza419
```

Related Commands

ntp authentication trusted keys, ntp peer key, ntp server key, show ntp, show ntp authentication

ntp authentication trusted keys

Adds a configured key ID to the trusted keys list.

Syntax

[no] ntp authentication trustedkeys *key-id* [**key id, ...**]

Parameters

key *key-id* [**key id, ...**]

Specify the key identifier. The key ID values must be in the range 1 - 65534. You can specify multiple key IDs in the same list, separated by commas. When specifying multiple key IDs separated by commas, you must enclose them in quotes.

Usage Guidelines

Use this command to add the configured key ID to the trusted keys list.

The **no** command removes a key from the trusted key list.

NTP authentication involves three steps that you can perform in any order:

- Configure a key ID using the **ntp authentication** command.
- Add the configured key ID to the trusted keys list using the **ntp authentication trusted-keys** command.
- Configure the NTP server or peer with the key ID using the **ntp server key** or **ntp peer key** command.

Examples

```
amnesiac (config) # ntp authenticatication trustedkeys 56732
```

Related Commands

ntp authentication, ntp peer key, ntp server key, show ntp authentication

ntp disable

Disables NTP support.

Syntax

[no] ntp disable

Usage Guidelines

The **no** command option enables NTP support.

Examples

```
amnesiac (config) # ntp disable
```

Related Commands

show ntp

ntp enable

Enables NTP support.

Syntax

[no] ntp enable

Usage Guidelines

The **no** command option disables NTP support.

Examples

```
amnesiac (config) # ntp enable
```

Related Commands

show ntp

ntp peer

Enables an NTP peer.

Syntax

[no] ntp peer *hostname* | / | *ip-addr* [**version** *number*]

Parameters

hostname | *ip-addr*
: Specify the NTP peer hostname or IP address.

version-number
: Specify the NTP version number. You do not need to specify the version number for the **no ntp peer** command.

Usage Guidelines

The **no** command option disables an NTP peer.

Examples

```
amnesiac (config) # ntp peer 10.10.10.1
```

Related Commands

show ntp, show ntp active-peers

ntp peer key

Configures an NTP peer with an authentication key ID.

Syntax

[no] ntp peer *host-name* | | *ip-addr* **key** *key-id*

Parameters

hostname | *ip-addr*

Specify the NTP peer hostname or IP address.

key *key-id* [**key id, ...**]

Specify the key identifier. The key ID values must be in the range 1 - 65534. You can specify multiple key IDs in the same list, separated by commas. When specifying multiple key IDs separated by commas, you must enclose them in quotes.

Usage Guidelines

The **no** command option removes the authentication key from the NTP peer configuration.

NTP authentication involves three steps that you can perform in any order:

- Configure a key ID using the **ntp authentication** command.
- Add the configured key ID to the trusted keys list using the **ntp authentication trusted-keys** command.
- Configure the NTP server or peer with the key ID using the **ntp server key** or **ntp peer key** command.

Examples

```
amnesiac (config) # ntp peer 10.10.10.1 key 56732
```

Related Commands

show ntp, show ntp active-peers

ntp server

Configures an NTP server with the default NTP version number or with a specified version number.

Syntax

[no] ntp server *hostname* | / | *ip-addr* | [**version** *number*]

Parameters

hostname | *ip-addr*

Specify the hostname or IP address of the NTP server to synchronize with.

version *number*

Specify the NTP version number of this server. You do not need to specify the version number for the **no ntp server** command.

Usage Guidelines

The **no** command option removes an NTP server.

Examples

```
amnesiac (config) # ntp server 10.10.10.1
```

Related Commands

show ntp, show ntp active-peers

ntp server enable

Enables an NTP server.

Syntax

[no] ntp server *hostname* | / | *ip-addr* **enable**

Parameters

hostname | *ip-addr*

Specify the hostname or IP address of the NTP server.

Usage Guidelines

The **no** command option removes an NTP server.

Examples

```
amnesiac (config) # ntp server companyserver enable
```

Related Commands

show ntp

ntp server key

Configures an NTP server with an authentication key ID.

Syntax

[no] ntp server *hostname* | / | *ip-addr* **key** *key-id*

Parameters

hostname | *ip-addr*

Specify the hostname or IP address of the NTP server to authenticate.

key *key-id*

Specify the key identifier. The key ID values must be in the range 1 - 65534.

Usage Guidelines

The **no** version of the command removes the authentication key from the NTP server.

NTP authentication involves three steps that you can perform in any order:

- Configure a key ID using the **ntp authentication** command.
- Add the configured key ID to the trusted keys list using the **ntp authentication trusted-keys** command.
- Configure the NTP server or peer with the key ID using the **ntp server key** or **ntp peer key** command.

Examples

```
amnesiac (config) # ntp server companyserver key 56732
```

Related Commands

ntp authentication, ntp authentication trusted keys, ntp peer key, show ntp authentication

papi rest access_code import

Imports an existing REST access code.

Syntax

[no] papi rest access_code import desc *description* **data** *data*

Parameters

desc *description*

Describe how the access code will be used.

data *data*

Copy and enter the raw data output generated by the **papi rest access_code generate** command on a peer appliance.

Usage Guidelines

Use the **papi rest access_code import** command to import access codes generated by another appliance so that a client can use the same access code to communicate through the REST API to multiple appliances.

Examples

```
amnesiac (config) # papi rest access_code import desc cascadeflow data <data>
```

Related Commands

show papi rest access_codes

remote dhcp

Enables DHCP on the remote management port.

Syntax

remote dhcp

Examples

```
amnesiac (config) # remote dhcp
```

Related Commands

show remote ip

remote ip address

Manually sets the IP address of the remote management port.

Syntax

remote ip address *ip-addr*

Parameters

ip-addr

Specify the IP address to assign to the remote management port.

Usage Guidelines

Access to the appliance through the remote port requires the use of the IPMI tool utility. You can download a Linux version at http://sourceforge.net/projects/ipmitool/files/. You can obtain a Windows version of the IPMI tool on the Document CD that ships with your system or from the Brocade Support at http://www.brocade.com/en/support.html.

This utility must to be run on an administrator's system outside of the appliance to access the remote port functions. Check the man page for IPMItool for a full list of capabilities (although not all the commands are supported on RiOS hardware platforms).

To configure the remote management port:

- Physically connect the REMOTE port to the network. You cable the remote management port to the Ethernet network in the same manner as the Primary interface.
- Install the IPMItool on the client machine.
- Assuming the IP address is 192.168.100.100, the netmask is 255.255.255.0, and the default gateway is 192.168.100.1, assign an IP address to the remote management port:

```
amnesiac (config) # remote dhcp
 - or -
amnesiac (config) # remote ip address 192.168.100.100
amnesiac (config) # remote ip netmask 255.255.255.0
amnesiac (config) # remote ip default-gateway 192.168.100.1
```

- Verify the IP address is set properly.

```
amnesiac (config) # show remote ip
```

NOTE

Ping the new management IP address from a remote computer, and verify it replies.

To secure the remote port, assign a password to the port:

```
amnesiac (config) # remote password <newpassword>
```

Set the remote port bit-rate to match the current serial port bitrate. Typically, this value is 9.6.

```
amnesiac (config) # remote bitrate 9.6
```

To activate the serial connection:

```
ipmitool -I lanplus -H 192.168.100.100  -P "<password>" sol activate
```

Press the Tilde character (~) to end the serial connection.

NOTE

While your serial connection is established, the actual serial console is disabled. Ending the remote serial connection cleanly with Tilde (~) re-enables the real serial port. If you fail to exit cleanly your actual serial port might not reactivate. If your serial port fails to reactivate, reconnect remotely and exit cleanly using Tilde (~).

Examples

```
amnesiac (config) # remote ip address 192.168.100.100
```

Related Commands

show remote ip

remote ip default-gateway

Manually sets the default gateway of the remote management port.

Syntax

remote ip default-gateway *ip-addr*

Parameters

ip-addr

Specify the IP address of default gateway to assign to remote management port.

Examples

```
amnesiac (config) # remote ip default-gateway 10.0.0.2
```

Related Commands

show remote ip

remote ip netmask

Manually sets the subnet mask of the remote management port.

Syntax

remote ip netmask *netmask*

Parameters

netmask

Specify the subnet mask to assign to the remote management port.

Examples

```
amnesiac (config) # remote ip netmask 255.255.255.0
```

Related Commands

show remote ip

remote password

Sets the password to remotely connect to the remote management port.

Syntax

[no] remote password *password*

Parameters

password

Specify the password to connect to the remote management port.

Usage Guidelines

To set a remote management port password

- On the appliance, assign a password to the remote management port:

```
amnesiac (config) # remote password TestPassword
```

- Using the IPMItool on a remote computer, view the power status of the appliance. If you are using the Windows version of IPMItool, replace all references to **ipmitool** with ipmitool.exe.

```
ipmitool -H <remote port ip address> -P "testpassword" chassis power status
```

Output should state **Chassis Power is on**.

NOTE

You can download a Linux version at http://sourceforge.net/projects/ipmitool/files/. You can obtain a Windows version of the IPMI tool on the Document CD that ships with your system or from the Brocade Support at http://www.brocade.com/en/support.html.

Examples

```
amnesiac (config) # remote password TestPassword
```

Related Commands

show remote ip

resolve host-labels

Forces the system to resolve host labels immediately.

Syntax

resolve host-labels

Usage Guidelines

You can use the **resolve host-labels** command to force a resolve operation instead of waiting for the daily automatic resolve instance. Every time this command is executed, the next automatic resolve instance is reset to occur 24 hours later.

Examples

```
amnesiac # resolve host-labels
```

Related Commands

host-label, show host-label

secure-vault

Manages the secure vault password and unlocks the secure vault.

Syntax

secure vault new-password *password* | **reset-password** *old-password* | **unlock** *password*

Parameters

new-password *password*
Specify an initial or new password for the secure vault.

reset-password *old-password*
Specify the old secure vault password to reset it.

unlock *password*
Specify the current password to unlock the secure vault.

Usage Guidelines

The *secure vault* is an encrypted file system on the appliance where all SSL server settings, other certificates (the CA, peering trusts, and peering certificates) and the peering private key are stored. The secure vault protects your SSL private keys and certificates when the appliance is not powered on.

You can set a password for the secure vault. The password is used to unlock the secure vault when the appliance is powered on. After rebooting the appliance, SSL traffic is not optimized until the secure vault is unlocked with the **unlock <password>** parameter.

Data in the secure vault is always encrypted, whether or not you choose to set a password. The password is used only to unlock the secure vault.

To change the secure vault password

1. Reset the password with the **reset-password <password>** parameter.
2. Specify a new password with the **new-password <password>** parameter.

Examples

```
amnesiac (config) # secure-vault unlock mypassword
```

show ssc access-profile

Displays details for a specified access profile. An access profile is used for vTM user authentication only.

Syntax

show ssc access-profile access-profile-name *access-profile-name*

Parameters

access-profile-name

Specify the name of the required access profile.

Examples

```
amnesiac (config) # show ssc access-profile access-profile-name "LDAP All"
+------------------+-----------------------------------+
| Description      | Value                             |
+------------------+-----------------------------------+
| Name             | LDAP All                          |
| Unique ID        | Access-Profile-ZRVA-MXIE-MI92-U787 |
| Authenticator    | LDAP Server                       |
| Permission Groups | admin                            |
+------------------+-----------------------------------+
```

Related Commands

ssc access-profile add-perm-group, ssc access-profile create access-profile-name, ssc access-profile list, ssc access-profile remove-perm-group, ssc access-profile update access-profile-name

show ssc backup local

Lists local backups produced by the Services Director backup service.

Syntax

show ssc backup local

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc backup local
+---------------------------------------------+---------------------+
| Local Backup files                          | Creation time       |
+---------------------------------------------+---------------------+
| backup_10.62.167.199_2015-09-08_16-53-02.zip | 2015-09-08 16:53:03 |
| backup_10.62.167.199_2015-09-08_16-54-01.zip | 2015-09-08 16:54:03 |
| backup_10.62.167.199_2015-09-08_16-55-01.zip | 2015-09-08 16:55:02 |
| backup_10.62.167.199_2015-09-08_16-56-01.zip | 2015-09-08 16:56:03 |
+---------------------------------------------+---------------------+
```

Related Commands

show ssc backup config, show ssc backup restore remotecfg, ssc backup config create

show ssc backup config

Displays the configured settings for the Services Director backup service.

Syntax

show ssc backup config

Usage Guidelines

The command returns the following values:

remote-sys	IP address of the remote system.
remote-sync-freq	The synchronization frequency (local to remote), expressed as a number of units. Units are days (d), hours (h) and minutes (m). For example, "2d" represents two days.
backup-data-trans	The protocol to perform the remote transfer ("scp" or "ftp"). 2
remote-sys-user	Remote username.
backup-retain	The number of local backup files to be retained. For example, 3.
remote-sys-path	Remote directory for backup files. For example, "/var/home/root".
backup-freq	The backup frequency (to local), expressed as a number of units. Units are days (d), hours (h) and minutes (m). For example, "6h" represents six hours.
remote-sys-pass	Password for the remote user.

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc backup config
+------------------+-------------------------------------------------------+
| Field            | Value                                                 |
+------------------+-------------------------------------------------------+
| remote-sys       | 10.62.166.206                                         |
| remote-sync-freq | 5m                                                    |
| backup-data-trans| scp                                                   |
| remote-sys-user  | sd-backup                                             |
| backup-retain    | 10                                                    |
| remote-sys-path  | /space/sd-backup/sd-backup-test/gold-silver-backups   |
| backup-freq      | 1m                                                    |
| remote-sys-pass  | ******                                                |
+------------------+-------------------------------------------------------+
```

Related Commands

show ssc backup local, show ssc backup restore remotecfg, ssc backup config create

show ssc backup restore remotecfg

Lists remote backups produced by the Services Director backup service.

Syntax

show ssc backup restore

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc backup restore remotecfg
+------------------+-----------------------------------------------------+
| Field            | Value                                               |
+------------------+-----------------------------------------------------+
| remote-sys-user  | sd-backup                                           |
| backup-data-trans | scp                                                |
| remote-sys-path  | /space/sd-backup/sd-backup-test/gold-silver-backups |
| remote-sys-pass  | ******                                              |
| remote-sys       | 10.62.166.206                                       |
+------------------+-----------------------------------------------------+
```

Related Commands

show ssc backup local, show ssc backup config, ssc backup config create

show ssc backup-restore cluster cluster-name backup-name

Displays full details for the specified backup.

Syntax

show ssc backup-restore cluster cluster-name *cluster-id* **backup-name** *backup_id*

Parameters

cluster-id

Specify the required cluster.

backup_id

Specify the required backup schedule.

Usage Guidelines

Use the **show ssc backup-restore cluster cluster-name <cluster_id> backups** command to view all backups for a specified cluster.

Use the **no ssc backup-restore cluster cluster-name <cluster_id> backup-name <backup_id>** command to delete the specified backup.

Examples

```
>> display all backups <<
amnesiac (config) # show ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O backups
+---------------------------+-------------------------------+
| Backups                   | Description                   |
+---------------------------+-------------------------------+
| Backup-2JXH-D3BT-PK72-0SLH | Cluster-AQJE-R4HV-QYR1-9F4O#2 |
| Backup-Y33H-XR2Z-128P-2M0T | Cluster-AQJE-R4HV-QYR1-9F4O#1 |
+---------------------------+-------------------------------+

>> display details for a backup <<
amnesiac (config) # show ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O backup-
name Backup-2JXH-D3BT-PK72-0SLH
+--------------+-------------------------------+
| Field        | Value                         |
+--------------+-------------------------------+
| backup_id    | Backup-2JXH-D3BT-PK72-0SLH    |
| description  | Cluster-AQJE-R4HV-QYR1-9F4O#2 |
| date         | 2016-06-29 15:05              |
| tag          | Backup-2JXH-D3BT-PK72-0SLH    |
| cluster_id   | Cluster-AQJE-R4HV-QYR1-9F4O   |
| size         | 133120                        |
| sequence_num | 2                             |
| retain       | False                         |
+--------------+-------------------------------+

>> delete a backup <<
amnesiac (config) # no ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O backup-name
Backup-2JXH-D3BT-PK72-0SLH
+--------+----------------+
| Field  | Value          |
+--------+----------------+
| Action | Deleted backup |
+--------+----------------+
```

Related Commands

show ssc backup-restore cluster cluster-name backups, ssc backup-restore cluster cluster-name backup now, ssc backup-restore cluster cluster-name restore backup-name, ssc backup-restore cluster cluster-name upload backup-name

show ssc backup-restore cluster cluster-name backups

Displays all backups for a specified cluster.

Syntax

show ssc backup-restore cluster cluster-name *cluster-id* **backups**

Parameters

cluster-id

Specify the name of required cluster.

Usage Guidelines

Use the **show ssc backup-restore cluster cluster-name <cluster_id> backup <backup_id>** command to view all backups for a specified cluster.

Use the **no ssc backup-restore cluster cluster-name <cluster_id> backup-name <backup_id>** command to delete the specified backup.

Examples

```
>> display all backups <<
amnesiac (config) # show ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O backups
+---------------------------+-------------------------------+
| Backups                   | Description                   |
+---------------------------+-------------------------------+
| Backup-2JXH-D3BT-PK72-0SLH | Cluster-AQJE-R4HV-QYR1-9F4O#2 |
| Backup-Y33H-XR2Z-128P-2M0T | Cluster-AQJE-R4HV-QYR1-9F4O#1 |
+---------------------------+-------------------------------+

>> display details for a backup <<
amnesiac (config) # show ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O backup-
name Backup-2JXH-D3BT-PK72-0SLH
+--------------+-------------------------------+
| Field        | Value                         |
+--------------+-------------------------------+
| backup_id    | Backup-2JXH-D3BT-PK72-0SLH    |
| description  | Cluster-AQJE-R4HV-QYR1-9F4O#2 |
| date         | 2016-06-29 15:05              |
| tag          | Backup-2JXH-D3BT-PK72-0SLH    |
| cluster_id   | Cluster-AQJE-R4HV-QYR1-9F4O   |
| size         | 133120                        |
| sequence_num | 2                             |
| retain       | False                         |
+--------------+-------------------------------+

>> delete a backup <<
amnesiac (config) # no ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O backup-name
Backup-2JXH-D3BT-PK72-0SLH
+--------+----------------+
| Field  | Value          |
+--------+----------------+
| Action | Deleted backup |
+--------+----------------+
```

Related Commands

show ssc backup-restore cluster cluster-name backup-name, ssc backup-restore cluster cluster-name backup now, ssc backup-restore cluster cluster-name restore backup-name, ssc backup-restore cluster cluster-name upload backup-name

show ssc backup-restore cluster cluster-name task

Displays full details for the specified backup task.

Syntax

show ssc backup-restore cluster cluster-name *cluster-id* **task** *task_id*

Parameters

cluster-id

Specify the required cluster.

task_id

Specify the required backup task.

Usage Guidelines

Use the **show ssc backup-restore cluster cluster-name <cluster_id> tasks** command to view all tasks for a specified cluster.

Use the **no ssc backup-restore cluster cluster-name <cluster_id> task <task_id>** command to delete the specified task.

Examples

```
>> display all tasks <<
amnesiac (config) # show ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O tasks
+--------------------------------------+
| Backup Tasks                         |
+--------------------------------------+
| BackupRestoreTask-PQ6B-H5PY-JHVM-ZTYI |
| BackupRestoreTask-BAWB-6JKQ-CPB3-R56B |
+--------------------------------------+

>> display a specified task <<
amnesiac (config) # show ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O task
BackupRestoreTask-BAWB-6JKQ-CPB3-R56B
+---------------+--------------------------------------+
| Field         | Value                                |
+---------------+--------------------------------------+
| status        | complete                             |
| backup_id     |                                      |
| creation_date | 2016-06-29 15:01:26                  |
| task_subtype  | backup now                           |
| manager       | 10.62.169.160                        |
| cluster_id    | Cluster-AQJE-R4HV-QYR1-9F4O          |
| error_info    | None                                 |
| task_type     | backup restore                       |
| task_id       | BackupRestoreTask-BAWB-6JKQ-CPB3-R56B |
| instance_id   |                                      |
| cluster_tag   |                                      |
+---------------+--------------------------------------+

>> delete a specified task from a specified cluster <<
gold-01 (config) # no ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O task
BackupRestoreTask-PQ6B-H5PY-JHVM-ZTYI
+-------+--------------+
| Field | Value        |
+-------+--------------+
| Task  | Deleted task |
+-------+--------------+
```

Related Commands

show ssc backup-restore cluster cluster-name tasks, ssc backup-restore cluster cluster-name task retry

show ssc backup-restore cluster cluster-name tasks

Displays all tasks for a specified cluster.

Syntax

show ssc backup-restore cluster cluster-name *cluster-id* **tasks**

Parameters

cluster-id

Specify the name of required cluster.

Usage Guidelines

Use the **show ssc backup-restore cluster cluster-name <cluster_id> task <task_id>** command to view all tasks for a specified cluster.

Use the **no ssc backup-restore cluster cluster-name <cluster_id> task <task_id>** command to delete the specified task.

Examples

```
>> display all tasks <<
amnesiac (config) # show ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O tasks
+---------------------------------------+
| Backup Tasks                          |
+---------------------------------------+
| BackupRestoreTask-PQ6B-H5PY-JHVM-ZTYI |
| BackupRestoreTask-BAWB-6JKQ-CPB3-R56B |
+---------------------------------------+

>> display a specified task <<
amnesiac (config) # show ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O task
BackupRestoreTask-BAWB-6JKQ-CPB3-R56B
+---------------+---------------------------------------+
| Field         | Value                                 |
+---------------+---------------------------------------+
| status        | complete                              |
| backup_id     |                                       |
| creation_date | 2016-06-29 15:01:26                   |
| task_subtype  | backup now                            |
| manager       | 10.62.169.160                         |
| cluster_id    | Cluster-AQJE-R4HV-QYR1-9F4O           |
| error_info    | None                                  |
| task_type     | backup restore                        |
| task_id       | BackupRestoreTask-BAWB-6JKQ-CPB3-R56B |
| instance_id   |                                       |
| cluster_tag   |                                       |
+---------------+---------------------------------------+

>> delete a specified task from a specified cluster <<
gold-01 (config) # no ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O task
BackupRestoreTask-PQ6B-H5PY-JHVM-ZTYI
+-------+--------------+
| Field | Value        |
+-------+--------------+
| Task  | Deleted task |
+-------+--------------+
```

Related Commands

show ssc backup-restore cluster cluster-name task, ssc backup-restore cluster cluster-name task retry

show ssc backup-restore cluster schedule

Display full details for a specified backup schedule.

Syntax

show ssc backup-restore cluster schedule *schedule-id*

Parameters

schedule-id

Specify the required backup schedule.

Usage Guidelines

Use the **ssc backup-restore cluster schedule** command with a **no** command option to delete the specified schedule.

Examples

```
amnesiac (config) # show ssc backup-restore cluster schedule sched-monthly-02
+-------------+-----------------------------------+
| Field       | Value                             |
+-------------+-----------------------------------+
| info        | Monthly (26th) backup schedule    |
| schedule_id | BackupSchedule-HA16-ROZQ-T2PT-B3HG |
| tag         | sched-monthly-02                  |
| frequency   | monthly                           |
| backup_time | 11:30                             |
| offset      | 26                                |
+-------------+-----------------------------------+

amnesiac (config) # show ssc backup-restore cluster schedule sched-daily-01
+-------------+-----------------------------------+
| Field       | Value                             |
+-------------+-----------------------------------+
| info        | Daily backup schedule             |
| schedule_id | BackupSchedule-MF06-31XX-0JWF-55R1 |
| tag         | sched-daily-01                    |
| frequency   | daily                             |
| backup_time | 10:10                             |
| offset      | 100                               |
+-------------+-----------------------------------+
```

Related Commands

show ssc backup-restore cluster schedules, ssc cluster update cluster-name

show ssc backup-restore cluster schedules

Displays a list of all defined backup schedules.

Syntax

show ssc backup-restore cluster schedules

Examples

```
amnesiac (config) # show ssc backup-restore cluster schedules
+---------------------+
| Backup Schedules    |
+---------------------+
| schedule-hourly-01  |
| schedule-monthly-02 |
| schedule-weekly-01  |
| schedule-monthly-01 |
| schedule-daily-01   |
+---------------------+
```

Related Commands

show ssc backup-restore cluster schedule, ssc cluster update cluster-name

show ssc certificate

Displays Services Director SSL certificate in text format.

Syntax

show ssc certificate

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc certificate
Certificate:
    Data:
        Version: 3 (0x2)
        Serial Number:
    Signature Algorithm:
        Issuer:
        Validity
            Not Before: May 29 13:56:14 2013 GMT
            Not After : May 29 13:56:14 2015 GMT
        Subject:
        Subject Public Key Info:
            Public Key Algorithm: rsaEncryption
                Public-Key: (1024 bit)
                Modulus:
<<a partial listing>>
```

show ssc cloud-reg

Displays details for a specified cloud registration resource.

Syntax

show ssc cloud-reg id *name*

Parameters

name

Specify a unique identifier for the cloud registration, either its tag or UUID.

Usage Guidelines

This command does not display the user data required for cloud registration. The **show ssc cloud-reg user-data** command displays this user data.

Examples

```
amnesiac (config) # show ssc cloud-reg id jk-cloud-reg-01
+---------------------+------------------------------+
| Field               | Value                        |
+---------------------+------------------------------+
| tag                 | jk-cloud-reg-01              |
| owner               | Owner-S5HZ-52G9-HZS2-KIAO    |
| email_address       |                              |
| children            | None                         |
| registration_policy | Policy-SH1M-L5BD-5L9L-YFKK   |
| date_created        | 2016-09-07 13:34:32          |
| user_data_id        | UserData-Z28S-AXW9-PAVA-3YE3 |
+---------------------+------------------------------+
```

Related Commands

show ssc cloud-reg user-data, ssc cloud-reg create, ssc cloud-reg delete, ssc cloud-reg list

show ssc cloud-reg user-data

Displays the user-data for a specified cloud registration resource.

Syntax

show ssc cloud-reg user-data id *name*

Parameters

name

Specify a unique identifier for the cloud registration resource, either its tag or UUID.

Usage Guidelines

This command does not display the general properties for the cloud registration. The **show ssc cloud-reg id** command displays this information.

It is intended that you copy the output of this command to the clipboard, and then paste it into the Amazon Web Services (AWS) EC2 instance creation wizard when you create the first cloud-based vTM in a cluster. See the *Brocade Services Director Getting Started Guide* for full details of this process.

This text is always displayed in base64 format.

Examples

```
amnesiac (config) # show ssc cloud-reg user-data id jk-cloud-reg-01
dGltZXpvbmU9RXVyb3BlL0xvbmRvbgphY2NlcHRfbGljZW5zZT1ZZXMKYWNjZXNzX2tleV9pZD08aW
5zZXJ0IGtleSBoZXJlPgpzZWNyZXRfYWNjZXNzX2tleV9pZD08aW5zZXJ0IGtleSBoZXJlPgpwYXNz
d29yZD1LMnY0OU5GUkoKb3duZXI9T3duZXItUzVIWi01Mkc5LUhaUzItS0lBTwpvd25lcl9zZWNyZX
Q9cGFzc3dvcmQKc2RfYWRkcmVzcz0xMC42Mi4xNjkuMTYyOjgxMDAKc2RfY2VydD1NSUlDV0RDQ0Fj
R2dBd0lCQWdJSkFPbUt1L0pRUXB3bk1BMEdDU3FHU0liM0RRRUJDd1VBTUVVeEN6QUpCZ05WQkFZVE
FrRlZNUk13RVFZRFZRUUlEQXBUYjIxbExWTjBZWFJsTVNFd0h3WURWUVFLREJoSmJuUmxjbTVsZENC
WGFXUm5hWFJ6SUZCMGVTQk1kR1F3SGhjTk1UVXdOVEk1TVRVek9EVXlXaGNOTVRjd05USTRNVFV6T0
RVeVdqQkZNUXN3Q1FZRFZRUUdFd0pCVlRFVE1CRUdBMVVFQ0F3S1UyOXRaUzFUZEdGMFpURWhNQjhH
VCQVFVQUE0R05BRENCaVFLQmdRRGw5S25CRjVYR2pqeWZOaTdKUnpxb1JlRjZGKzJydVJYdUFVdG9l
QTFVRUNnd1lTVzUwWlhKdVpYUWdWMmxrWjJsMGN5QlFkSGtnVEhSa01JR2ZNQTBHQ1NxR1NJYjNEUU
eVdwdFJlYnZCdmtOS1NXdXlGc1IvdTR0ekJlWUVzTU5aeXZLTGhodFVxcnRhc0dNam90MnRoaXlITG
9KdUlyZjR4NUZNbTNsbHFNK1c1WGlmUnhJU0F0dW5TMjJnYWI4Ri9QSW5SV01QUVlyeGZ2K3JUQW9S
VHAwK0VSeWNScTMxZ2ZMd0lEQVFBQm8xQXdUakFkQmdOVkhRNEVGZ1FVL2pHVzFnRVVmamd5Rk1uU1
RFZSMFRCQVV3QXdFQi96QU5CZ2txaGtpRzl3MEJBUXNGQUFPQmdRQnB4Y1k5UURRN05tQnlDR2RDVW
VFclZ4T29YdGxzd0h3WURWUjBqQkJnd0ZvQVUvakdXMWdFVWZqZ3lGTW5TVUVyVnhPb1h0bHN3REFZ
hTTHBsS0hpS3A2TktaS2V3TENKeU9WU1FCUXk4eEdSQnhkTUpJaTMxbkRud3lhOUVVVVhGOW9STFNp
c3NaQStwWEplNGtVVDdSMDFqcENXV2QwRzR2NURsK1Vhb2VzYmJmc241cUtnbkpvTUZVUTJ3YmtPdH
E2OWlYcG5hc0ZwNWZsSWloQUFkNFZMR1R3QzRjTm83YXgrUT09CnJlZ2lzdHJhdGlvbl9wb2xpY3k9
UG9saWN5LVNIMU0tTDVCRC01TDlMLVlGS0s=
```

Related Commands

show ssc cloud-reg, ssc cloud-reg create, ssc cloud-reg delete, ssc cloud-reg list

show ssc cluster cluster-name

Displays Services Director cluster details.

Syntax

show ssc cluster cluster-name *cluster_id*

Parameters

cluster_id

Specify the name of the cluster.

Usage Guidelines

The **user_data** property is only populated when a cluster is used for cloud-based vTMs, such as those deployed using Amazon Web Services (AWS) EC2 platform. This property is required when deploying the second cloud-based vTM in a cluster, replacing the AWS user data from the cloud registration. See the *Brocade Services Director Getting Started Guide* for full details of this process.

Examples

```
>> show details for a cluster containing an externally-deployed vTM <<
gold-01 (config) # show ssc cluster cluster-name cluster-01
+-----------------------------+-----------------------------------+
| Field                       | Value                             |
+-----------------------------+-----------------------------------+
| backup_success_sequence_num | None                              |
| backup_failure_count        | None                              |
| schedule_id                 | None                              |
| tag                         | cluster-01                        |
| owner                       | Owner-YNUE-PRBD-E5O4-17XD         |
| backup_next_sequence_num    | None                              |
| children                    | None                              |
| share_tips                  | True                              |
| restore_backup_name         | None                              |
| cluster_port_offset         | None                              |
| last_success_backup         | None                              |
| cluster_type                | Discovered                        |
| last_backup_time            | None                              |
| status                      | Active                            |
| in_use                      | True                              |
| user_data                   | None                              |
| number_backups              | 5                                 |
| members                     | [u'Instance-NO5W-2E2A-HKMS-C92E'] |
| last_failed_backup          | None                              |
| restore_backup_status       | None                              |
| next_backup_time            | None                              |
| task                        | None                              |
| restore_backup_time         | None                              |
| last_backup_status          | None                              |
+-----------------------------+-----------------------------------+

>> show details for a cluster containing a cloud-based vTM <<
platinum-01 (config) # show ssc cluster cluster-name AWS-cluster-01
+-----------------------------
+-------------------------------------------------------------------------------
| Field                       | Value
+-----------------------------
+-------------------------------------------------------------------------------
| backup_success_sequence_num | None
| backup_failure_count        | None
| schedule_id                 | None
| tag                         | AWS-cluster-01
| owner                       | Owner-F95M-3Y0R-FGQA-1DIK
| backup_next_sequence_num    | None
| children                    | None
| share_tips                  | True
| restore_backup_name         | None
| cluster_port_offset         | None
| last_success_backup         | None
| cluster_type                | Discovered
| last_backup_time            | None
| status                      | Active
| in_use                      | True
| user_data                   |
Y2x1c3Rlcl9ob3N0PTEwLjguMi4xMDgKY2x1c3Rlcl9maW5nZXJwcmludD0zMTo0Mzo5QzpDM...
| number_backups              | 5
| members                     | [u'Instance-CIOL-A2FM-3C7O-N9A1']
| last_failed_backup          | None
| restore_backup_status       | None
| next_backup_time            | None
| task                        | None
| restore_backup_time         | None
| last_backup_status          | None
+-----------------------------
+-------------------------------------------------------------------------------
```

Related Commands

show ssc backup-restore cluster schedules, ssc cluster create cluster-name

show ssc dashboard

Displays the dashboard resource for the Services Director. This is a summary of certain Services Director functions.

Syntax

show ssc dashboard

Usage Guidelines

Currently, the dashboard only includes a summary of the state of metering on the Services Director.

To investigate this summary information, see ssc metering warning list on page 486 and show ssc metering warning instance-name on page 291.

Examples

```
amnesiac (config) # show ssc dashboard
+-----------------------------------------+-----------------------------------------------+
| Property                                | Value                                         |
+-----------------------------------------+-----------------------------------------------+
| metering_health > alert_reason          | Possible under-accounting or over-accounting |
| metering_health > alert_level           | 3                                             |
| metering_health > alert_level_short_text | Warning                                       |
+-----------------------------------------+-----------------------------------------------+
```

Related Commands

show ssc metering warning instance-name, show ssc settings metering, ssc metering warning list, ssc settings metering update

show ssc database local

Displays settings for local MySQL database.

Syntax

show ssc database local

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc database local
Use Local Database: : yes
MySQL Port Number:    3306
MySQL Bind Address:   127.0.0.1
```

Related Commands

show ssc database use-local

show ssc database local credentials

Displays local MySQL database credentials.

Syntax

show ssc database local db-file credentials

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc database local credentials
+-------------+-------------+
| DB Username | DB Password |
+-------------+-------------+
| ssc         | my_db_pass  |
+-------------+-------------+
```

Related Commands

ssc database use-local

show ssc database local db-file

Displays available backups for local MySQL database.

Syntax

show ssc database local db-file

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc database local db-file
```

Related Commands

ssc database use-local

show ssc database local max-connections

Displays local MySQL database maximum connections.

Syntax

show ssc database local max-connections

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc database local max-connections
Maximum number of connections to local MySQL DB: 151
```

Related Commands

ssc database use-local

show ssc database remote

Displays settings for remote database used by the Services Director.

Syntax

show ssc database remote | [**db-user-name** *name*] | [**ip-address** *ip-addr*] | [**port** *port*]

Parameters

db-user-name *name*
Displays the user for the remote database used by the Services Director.

ip-address *ip-addr*
Displays the IP address for remote database used by Services Director.

port *port*
Displays the port number for remote database used by Services Director.

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc database remote db-user-name test
Remote Database Port: ssc
```

Related Commands

ssc database remote address

show ssc database use-local

Displays whether to use local MySQL database for Services Director.

Syntax

show ssc database use-local

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc database use-local
Use local MySQL database: yes
```

Related Commands

ssc database use-local

show ssc feature-pack fpname

Displays feature pack details.

Syntax

show ssc feature-pack fpname *name*

Parameters

name

Specify the name of the feature pack.

Examples

```
amnesiac (config) # show ssc feature-pack fpname test
+----------+---------+
| Field    | Value   |
+----------+---------+
| info     |         |
| status   | Active  |
| stm_sku  | STM-200 |
| excluded |         |
+----------+---------+
```

Related Commands

ssc feature-pack create fpname

show ssc high-avail certificate

Displays the high availability certificate for a high availability node.

Usage Guidelines

This command is identical to the ssc high-avail certificate on page 413 command.

show ssc high-avail list

Displays a list of nodes in the current HA pair.

Usage Guidelines

This command is identical to the ssc high-avail list on page 429 command.

show ssc host host-name

Displays Brocade vTM instance host details.

Syntax

show ssc host host-name *name* **dns** | [**interface** *interface-name*] | [**interfaces**] | [**status-check** [**true** | **false**]]

Parameters

name

Specify the name of the host.

dns

Displays host DNS information.

interface *interface-name*

Displays host interface information.

interfaces

Displays host interfaces.

status-check [**true** | **false**]

Specify **true** or **false** to display host status check information.

Examples

```
amnesiac (config) # show ssc host host-name host61 dns
+-------------+---------------------------------+
| Field       | Value                           |
+-------------+---------------------------------+
| Nameservers | 10.0.0.0,10.0.0.3,10.0.0.4      |
| Dns Search  | example.com                     |
+-------------+---------------------------------+
```

Related Commands

ssc host add host-name

show ssc host-ova

Displays the imported host OVA.

Syntax

show ssc host-ova

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc host-ova
Imported Host OVAs
---------------------------------------
rvbd-host.ova
```

Related Commands

ssc import-host-ova file

show ssc instance instance-name

Displays Brocade vTM instance details.

Syntax

show ssc instance instance-name *name* [**status-check** [**true** | **false**]] [**show-passwords** [**true** | **false**]]

Parameters

name

Specify the name of the Traffic Manager instance.

status-check

Specify **true** or **false** to display a status check of the (deployed) instance.

show-passwords

Specify **true** or **false** to display the administration password.

Examples

```
amnesiac (config) # show ssc instance instance-name violet-01 show-passwords true
+------------------------------+------------------------------+
| Field                        | Value                        |
+------------------------------+------------------------------+
| status                       | Active                       |
| metrics_date                 | None                         |
| cpu_usage                    |                              |
| managed                      | False                        |
| metrics_peak_RPS             | None                         |
| license_name                 | universal_v3                 |
| rest_address                 | 10.62.169.165:9070           |
| tag                          | violet-01                    |
| snmp_address                 | 10.62.169.165:161            |
| creation_date                | 2015-12-29 10:08:34          |
| bandwidth                    | 100                          |
| container_configuration_json | {}                           |
| cluster_id                   | Cluster-RNPP-UIP9-RUA7-Q2JU  |
| stm_feature_pack             | STM-400_full                 |
| container_name               |                              |
  .
  .
  .
| admin_password               | password                     |
| management_address           | 10.62.169.165                |
| container_configuration      |                              |
| rest_enabled                 | True                         |
| ui_address                   | 10.62.169.165:9090           |
| metrics_peak_SSL_TPS         | None                         |
| host_name                    |                              |
+------------------------------+------------------------------+
```

Related Commands

ssc instance create instance-name

show ssc license enterprise

Displays Services Director enterprise license details.

Syntax

show ssc license enterprise [**add-on** *key* | **bandwidth** *key* | **controller** *key*]

Parameters

add-on *key*

Specify the add-on license key.

bandwidth *key*

Specify the bandwidth license key.

controller *key*

Specify the name of the controller license key.

Examples

```
amnesiac (config) # show ssc license enterprise bandwidth 342015-5e846d4cc34886a93f3c58857e21f1cf
+--------------------------
+-------------------------------------------------------------------------------------+
| Field                    |
Value                                                                                 |
+--------------------------
+-------------------------------------------------------------------------------------+
| status                   |
Active                                                                                |
| valid_until              |
2016-10-07                                                                            |
| timestamp                |
2016-09-27T21:37:13.1475037433                                                        |
| controller_license       |
ERSSC381243-0000-42B9                                                                 |
| bandwidth                |
5000.0                                                                                |
| valid_from               |
Perpetual                                                                             |
| serial                   |
342005                                                                                |
| license_key              | LK1-ERSSCTPSTM_B_400:5:342015:20160927T2137131475037433-0000-42B9-5-
C237-4F74-84AA |
| controller_license_serial |
381243                                                                                |
| stm_sku                  |
STM-400                                                                               |
| valid                    |
True                                                                                  |
+--------------------------
+-------------------------------------------------------------------------------------+
```

Related Commands

show ssc license license-name, show ssc license-file

show ssc license license-name

Displays the details for the named license.

Syntax

show ssc license license-name *unique-name*

Parameters

unique-name

Specify the unique name of the license.

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
>> check available licenses <<
amnesiac (config) # ssc license list
+--------------+
| License      |
+--------------+
| universal_v4 |
| legacy_9.3   |
+--------------+

>> show the legacy license <<
amnesiac (config) # show ssc license license-name legacy_9.3
+------------------------+-------------+
| Field                  | Value       |
+------------------------+-------------+
| status                 | Active      |
| health_check_results   | []          |
| info                   |             |
| last_health_check_time | None        |
| default                | True        |
| health_check_status    | Not yet run |
| generic_errors         | None        |
| type                   | legacy      |
+------------------------+-------------+

>> show the universal license <<
amnesiac (config) # show ssc license license-name universal_v4
+------------------------+-----------------------------------------------------------------------+
| Field                  | Value                                                                 |
+------------------------+-----------------------------------------------------------------------+
| status                 | Active                                                                |
| health_check_results   | []                                                                    |
| info                   | Universal license, installed with v2.6 of the Services Director |
| last_health_check_time | None                                                                  |
| default                | True                                                                  |
| health_check_status    | Not yet run                                                           |
| generic_errors         | None                                                                  |
| type                   | universal                                                             |
+------------------------+-----------------------------------------------------------------------+
```

Related Commands

ssc license list, show ssc license-file

show ssc license-file

Displays the Services Director license key.

Syntax

show ssc license-file

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc license-file
LK1-ERSSC563111-0000-41FD-5-954B-E6F7-85B1
```

Related Commands

ssc license list, show ssc license license-name

show ssc manager manager-name

Displays Services Director manager details.

Syntax

show ssc manager manager-name *name*

Parameters

name

Specify the name of the Services Director manager.

Examples

```
amnesiac (config) # show ssc manager manager-name amnesiac
+------------+---------+
| Field      | Value   |
+------------+---------+
| management | enabled |
| monitoring | shared  |
| metering   | all     |
| licensing  | enabled |
+------------+---------+
```

Related Commands

ssc manager update manager-name

show ssc metering warning instance-name

Displays metering warning information for a specified Traffic Manager instance.

Syntax

show ssc metering warning instance-name *name*

Parameters

instance-name *name*

Specify the name of the required Traffic Manager instance.

Usage Guidelines

Any current instance can be specified. Where no warning exists, this is indicated.

To identify all instances with a warning, see ssc metering warning list on page 486.

Examples

```
>> list all instances with a warning raised <<
amnesiac (config) # ssc metering warning list
+-----------+
| Instance  |
+-----------+
| cerise-02 |
| sienna-01 |
+-----------+
>> show warning details for first failed instance (over-accounting example)
amnesiac (config) # show ssc metering warning instance-name cerise-02
+------------------------+---------------------------------------------+
| Field                  | Value                                       |
+------------------------+---------------------------------------------+
| alert_reason           | Possible uptime over-accounting             |
| alert_level            | 3                                           |
| alert_level_short_text | Warning                                     |
| alert_resolution_text  | Mark instance as deleted if no longer in use |
| name                   | Instance-3ZXD-61IX-KZEC-6IO6                |
| tag                    | cerise-02                                   |
| monitor_date           | 2016-06-22 14:33:11                         |
| licensed_date          | 2016-06-20 14:27:09                         |
| metrics_date           | None                                        |
+------------------------+---------------------------------------------+
>> show warning details for second failed instance (under-accounting example)
amnesiac (config) # show ssc metering warning instance-name sienna-01
+------------------------+-----------------------------------------------------+
| Field                  | Value                                               |
+------------------------+-----------------------------------------------------+
| alert_reason           | Possible under-accounting                           |
| alert_level            | 3                                                   |
| alert_level_short_text | Warning                                             |
| alert_resolution_text  | Enable REST or SNMP connectivity for this instance  |
| name                   | Instance-NPIS-A6ZB-MSA3-680Q                        |
| tag                    | sienna-01                                           |
| monitor_date           | 2016-06-22 14:33:10                                 |
| licensed_date          | 2016-06-20 14:27:48                                 |
| metrics_date           | None                                                |
+------------------------+-----------------------------------------------------+
>> show instance with no warning raised
amnesiac (config) # show ssc metering warning instance-name violet-01
+------------------------+------------------------------+
| Field                  | Value                        |
+------------------------+------------------------------+
| alert_level            | 1                            |
| alert_level_short_text | OK                           |
| name                   | Instance-6BT2-ALAX-KN14-32RA |
| tag                    | violet-01                    |
| monitor_date           | 2016-06-22 14:59:11          |
| licensed_date          | None                         |
| metrics_date           | None                         |
+------------------------+------------------------------+
```

Related Commands

show ssc dashboard, show ssc settings metering, ssc metering warning list, ssc settings metering update

show ssc owner

Displays a specified owner.

Syntax

show ssc owner *name*

Parameters

name

Specify the name of the owner.

Examples

```
>> list all owners <<
amnesiac (config) # ssc owner list
+---------------------------+------+
| Owner ID                  | Tag  |
+---------------------------+------+
| Owner-HSC1-T4QV-BXPB-Z4CZ | HC   |
| Owner-NS3F-FHQ4-RO11-5Y0A | JK   |
| Owner-58I2-2N4F-IXG0-8084 | TK   |
| Owner-JJM6-0UII-JUAH-R979 | JRRT |
+---------------------------+------+

>> list details for listed owner 'HC' <<
amnesiac (config) # show ssc owner owner-id HC
+---------------+---------------------------+
| Field         | Value                     |
+---------------+---------------------------+
| instances     | []                        |
| tag           | HC                        |
| timezone      | Europe/Lisbon             |
| email_address |                           |
| children      | None                      |
| secret        | n28mjx1uyU                |
| clusters      | []                        |
| owner_id      | Owner-HSC1-T4QV-BXPB-Z4CZ |
+---------------+---------------------------+
```

Related Commands

ssc owner create, ssc owner delete, ssc owner list, ssc owner update

show ssc registration

Displays details for a specified self-registration request.

Syntax

show ssc registration *registration-id*

Parameters

registration-id

Specify the ID for the self-registration request.

Usage Guidelines

Some fields will only be populated once the request is Accepted:

- instance_name
- feature_pack
- bandwidth
- owner
- access_profile (optional).

Examples

```
>> show registration request for Pending request <<
amnesiac (config) # show ssc registrations registration-id Reg-QG91-KJMS-DK4T-2FWY
+----------------------+--------------------------------------+
| Field                | Value                                |
+----------------------+--------------------------------------+
| snmp_address         | 10.62.169.167:161                    |
| registration_message | Cerise 10.4 registration             |
| bandwidth            | None                                 |
| owner                | None                                 |
| email_address        | jkilby@brocade.com                   |
| instance_name        | None                                 |
| uuid                 | 1013592c-a9bb-3301-9675-005056a643af |
| hostname             | 10.62.169.167                        |
| declined_reason      | None                                 |
| instance_version     | 10.4a1                               |
| status               | Pending                              |
| snmp_community       | public                               |
| admin_address        | 10.62.169.167:9090                   |
| rest_address         | 10.62.169.167:9070                   |
| feature_pack         | None                                 |
| cluster_identifier   | Cluster-C21U-O3MQ-EE3G-BUIZ          |
| registration_time    | 2016-03-20 15:36:14                  |
| instance_id          | None                                 |
| management_ip        | 10.62.169.167                        |
| pending_time         | 2016-03-20 15:36:14                  |
| access_profile       | None                                 |
+----------------------+--------------------------------------+
>> show registration request for Accepted request <<
amnesiac (config) # show ssc registrations registration-id Reg-QG91-KJMS-DK4T-2FWY
+----------------------+--------------------------------------+
| Field                | Value                                |
+----------------------+--------------------------------------+
| snmp_address         | 10.62.169.167:161                    |
| registration_message | Cerise 10.4 registration             |
| bandwidth            | 100                                  |
| owner                | JK                                   |
| email_address        | jkilby@brocade.com                   |
| instance_name        | cerise-01                            |
| uuid                 | 1013592c-a9bb-3301-9675-005056a643af |
| hostname             | 10.62.169.167                        |
| declined_reason      | None                                 |
| instance_version     | 10.4a1                               |
| status               | Accepted                             |
| snmp_community       | public                               |
| admin_address        | 10.62.169.167:9090                   |
| rest_address         | 10.62.169.167:9070                   |
| feature_pack         | STM-400_full                         |
| cluster_identifier   | Cluster-C21U-O3MQ-EE3G-BUIZ          |
| registration_time    | 2016-03-20 15:36:14                  |
| instance_id          | None                                 |
| management_ip        | 10.62.169.167                        |
| pending_time         | 2016-03-20 15:36:14                  |
| access_profile       | TAC                                  |
+----------------------+--------------------------------------+
```

Related Commands

ssc registration list, ssc registration update, ssc registration delete

show ssc reg-policy

Displays a specified registration policy.

Syntax

show ssc reg-policy *name*

Parameters

name

Specify the name of the registration policy.

Examples

```
>> list all self-reg policies <<
amnesiac (config) # ssc reg-policy list
+---------------------------+----------------+
| Policy ID                 | Tag            |
+---------------------------+----------------+
| Policy-MHM8-AB62-SI2J-DNUX | jk-self-reg-01 |
| Policy-I7A7-3DN2-6IEB-QF96 | jk-self-reg-02 |
| Policy-8QU3-ZERY-8IW6-3W6J | self-reg-01    |
+---------------------------+----------------+

>> display all details for a listed self-reg policy <<
amnesiac (config) # show ssc reg-policy policy-id tk-reg-policy-01
+---------------------------+---------------------------+
| Field                     | Value                     |
+---------------------------+---------------------------+
| instance_version_range_low  | 10.0                    |
| bandwidth                 | 100                       |
| tag                       | tk-reg-policy-01          |
| children                  | None                      |
| management_ip_subnet      | 10.62.128.0/18            |
| feature_pack              | STM-400_full              |
| access_profile            | None                      |
| instance_version_range_high | 11.0                    |
| policy_id                 | Policy-XI6P-5JLU-QQUL-9BR7 |
+---------------------------+---------------------------+
```

Related Commands

ssc reg-policy create, ssc reg-policy delete, ssc reg-policy list, ssc reg-policy update

show ssc sd-authenticator

Displays full details of a specified Services Director authenticator. This can be for an LDAP, RADIUS or TACACS+ server.

Syntax

show ssc sd-authenticator auth-name *authenticator-name*

Parameters

authenticator-name

Specify the name of the Services Director authenticator.

Examples

```
>> List Services Director authenticators <<
amnesiac (config) #  ssc sd-authenticator list
+--------------+-----------------------------------+
| Name         | Unique ID                         |
+--------------+-----------------------------------+
| bbotservices | Authenticator-Y4RC-M3OI-J1BE-5N96 |
+--------------+-----------------------------------+

>> Display details for the TACACS+ authenticator <<
amnesiac (config) # show ssc sd-authenticator auth-name Authenticator-Y4RC-M3OI-J1BE-5N96
+------------------------------+---------------------------+
| Description                  | Value                     |
+------------------------------+---------------------------+
| Name                         | bbotservices              |
| Type                         | tacacs_plus               |
| Status of SD authenticator   | enabled                   |
| Server Address               | bbotservices.cam.demo.com |
| SD Authentication Type       | pap                       |
| Fallback SD permission group |                           |
| Server Port                  | 4900                      |
| Timeout                      | 10                        |
| Group Field                  | permission-group          |
| Secret                       | *****                     |
| Group Service                | zeus                      |
+------------------------------+---------------------------+
```

Related Commands

ssc sd-authenticator add ldap auth-name, ssc sd-authenticator add radius auth-name, ssc sd-authenticator add tacacs_plus auth-name, ssc sd-authenticator list, ssc sd-authenticator test auth-name, ssc sd-authenticator update ldap auth-name, ssc sd-authenticator update radius auth-name, ssc sd-authenticator update tacacs_plus auth-name

show ssc sd-permission-group

Displays details for a specified Services Director permission group.

Syntax

show ssc sd-permission-group pg-name *permission-group*

Parameters

permission-group

Specify the required permission-group.

Usage Guidelines

This command is also available in user and enable mode.

Typically, there is a single Services Director permission group, with full access. The name of this permission group matches the group returned by the authenticator.

Examples

```
>> show permissions for the admin group <<
amnesiac (config) # show ssc sd-permission-group pg-name admin
+---------------------+--------------------------------------+
| Field               | Value                                |
+---------------------+--------------------------------------+
| description         |                                      |
| permission_group_id | Permission-Group-XG8K-FUYG-WKKV-9IKP |
| tag                 | admin                                |
| children            | None                                 |
+---------------------+--------------------------------------+
```

Related Commands

ssc sd-permission-group create pg-name, ssc sd-permission-group list, ssc sd-permission-group update pg-name

show ssc server

Displays the Services Director server settings.

Syntax

show ssc server

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc server
SSC REST port number: 8100
```

Related Commands

ssc server rest-port-num

show ssc server thread

Displays Services Director server threads.

Syntax

show ssc server thread

Examples

```
amnesiac (config) # show ssc server thread
+-----------------+-------+
| Field           | Value |
+-----------------+-------+
| threads         | 25    |
| action threads  | 5     |
| monitor threads | 10    |
+-----------------+-------+
```

Related Commands

ssc service enable

show ssc settings con-lic

Displays the number of days set to send a warning about the expiration of the controller license.

Syntax

show ssc settings con-lic

Examples

```
amnesiac (config) # show ssc settings con-lic
+----------------------+-------+
| Field                | Value |
+----------------------+-------+
| expiry_warning_days | 30    |
+----------------------+-------+
```

Related Commands

ssc license enterprise controller list

show ssc settings deployment

Displays the number of Brocade vTM instances that can be deployed.

Syntax

show ssc settings deployment

Parameters

No parameters.

Examples

```
amnesiac (config) # show ssc settings deployment
+---------------+-------+
| Field         | Value |
+---------------+-------+
| max_instances | 0     |
+---------------+-------+
```

Related Commands

ssc license enterprise controller list

show ssc settings external-ip

Displays the external IP corresponding to the Services Endpoint Address when Services Director is running in a private network behind a NAT.

Syntax

show ssc settings external-ip

Parameters

No parameters.

Examples

```
amnesiac (config) # show ssc settings external-ip
+-------------+--------------+
| Field       | Value        |
+-------------+--------------+
| external_ip | 10.62.150.30 |
+-------------+--------------+
```

Related Commands

ssc settings external-ip

show ssc settings fla-check

Displays whether the FLA checker is enabled for the Services Director.

Syntax

show ssc settings fla-check

Examples

```
amnesiac (config) # show ssc settings fla-check
+--------------------+-------+
| Field              | Value |
+--------------------+-------+
| fla_check_enabled | True  |
+--------------------+-------+
```

Related Commands

ssc settings fla-check enable

show ssc settings licensing

Displays alert threshold and alert threshold interval settings.

Syntax

show ssc settings licensing

Examples

```
amnesiac (config) # show ssc settings licensing
+--------------------------+-------+
| Field                    | Value |
+--------------------------+-------+
| alert_threshold          | 1     |
| alert_threshold_interval | 300   |
+--------------------------+-------+
```

Related Commands

ssc settings licensing update alert-threshold

show ssc settings logging

Displays metering, inventory, and license log settings.

Syntax

show ssc settings logging

Examples

```
amnesiac (config) # show ssc settings logging
+-------------------+-------+
| Field             | Value |
+-------------------+-------+
| metering_logging  | 0     |
| inventory_logging | 0     |
| license_logging   | 0     |
+-------------------+-------+
```

Related Commands

ssc settings logging update

show ssc settings master-password

Displays the status of the master password. This can either be Active or Changing .

Syntax

show ssc settings master-password

Examples

```
amnesiac (config) # show ssc settings master-password
+------------------+--------+
| Field            | Value  |
+------------------+--------+
| status           | Active |
+------------------+--------+
```

Related Commands

ssc settings master-password update

show ssc settings metering

Displays metering and log check interval settings.

Syntax

show ssc settings metering

Examples

```
amnesiac (config) # show ssc settings metering
+--------------------------+-------+
| Field                    | Value |
+--------------------------+-------+
| alerts_and_notifications | True  |
| snmp_enabled             | True  |
| log_check_interval       | 3600  |
| meter_interval           | 3600  |
+--------------------------+-------+
```

Related Commands

show ssc dashboard, show ssc metering warning instance-name, ssc metering warning list, ssc settings metering update

show ssc settings monitoring

Displays Services Director monitoring settings.

Syntax

show ssc settings monitoring

Examples

```
amnesiac (config) # show ssc settings monitoring
+-----------------------------------+-------+
| Field                             | Value |
+-----------------------------------+-------+
| controller_failure_period         | 180   |
| instance_failure_period           | 180   |
| host_failure_period               | 180   |
| instance_monitor_interval         | 60    |
| monitor_email_interval            | 60    |
| host_monitor_interval             | 60    |
| overdue_monitoring_warning_period | 300   |
| controller_monitor_interval       | 60    |
+-----------------------------------+-------+
```

Related Commands

ssc settings monitoring update

show ssc settings security

Displays Services Director security settings.

Syntax

show ssc settings security

Examples

```
amnesiac (config) # show ssc settings security
+--------------------------------+-------+
| Field                          | Value |
+--------------------------------+-------+
| user_lockout_duration_minutes | 15    |
| max_login_attempts             | 3     |
+--------------------------------+-------+
```

Related Commands

ssc settings security update

show ssc settings throughput

Displays Services Director bandwidth-pack expiry warning settings.

Syntax

show ssc settings throughput

Examples

```
amnesiac (config) # show ssc settings throughput
+----------------------+-------+
| Field                | Value |
+----------------------+-------+
| expiry_warning_days | 30    |
+----------------------+-------+
```

Related Commands

ssc settings throughput update exp-warningdays

show ssc sku sku-name

Displays Services Director SKU details.

Syntax

show ssc sku [**show-all** [**true** | **false**]**sku-name** *name*

Parameters

name

Specify the name of the SKU.

Usage Guidelines

By default, the auto-completion for **sku-name** only includes SKUs that are compatible with your license.

The **show-all** switch affects how auto-completion of **sku-name**. If **show-all** is set to true, the auto-completion for the SKU names includes all SKUS, and not just those that are compatible with your license.

Examples

```
>> auto-completion (tab key) is limited to SKUS that are compatible with your license <<
amnesiac (config) # show ssc sku sku-name <tab>
ENT-ADVANCED    ENT-ENTERPRISE  ENT-WAFPROXY    STM-100         STM-200         STM-300
STM-400         STM-WAFPROXY

>> auto-completion (tab key) includes all SKUS, and not just those that are compatible with your
license <<
amnesiac (config) # show ssc sku show-all true sku-name <tab>
BR-ADC-UTILM-WAFP1G-U-01    BR-ADC-UTLM-ADV150M-U-01    BR-ADC-UTLM-ENT10G-U-01     BR-ADC-UTLM-ENT60M-
U-01     BR-ADC-UTLM-STD500M-U-01
BR-ADC-UTILM-WAFP3G-U-01    BR-ADC-UTLM-ADV1G-U-01      BR-ADC-UTLM-ENT10M-U-01     BR-ADC-UTLM-STD100M-
U-01    BR-ADC-UTLM-STD5G-U-01
BR-ADC-UTILM-WAFP400M-U-01  BR-ADC-UTLM-ADV200M-U-01    BR-ADC-UTLM-ENT150M-U-01    BR-ADC-UTLM-STD10G-
U-01     BR-ADC-UTLM-STD60M-U-01
BR-ADC-UTILM-WAFP50M-U-01   BR-ADC-UTLM-ADV20M-U-01     BR-ADC-UTLM-ENT1G-U-01      BR-ADC-UTLM-STD10M-
U-01     ENT-ADVANCED
BR-ADC-UTILM-WAFP5G-U-01    BR-ADC-UTLM-ADV300M-U-01    BR-ADC-UTLM-ENT200M-U-01    BR-ADC-UTLM-STD150M-
U-01    ENT-ENTERPRISE
BR-ADC-UTLH-ADVHRLY-U-01    BR-ADC-UTLM-ADV3G-U-01      BR-ADC-UTLM-ENT20M-U-01     BR-ADC-UTLM-STD1G-
U-01      ENT-WAFPROXY
BR-ADC-UTLH-ENTHRLY-U-01    BR-ADC-UTLM-ADV40M-U-01     BR-ADC-UTLM-ENT300M-U-01    BR-ADC-UTLM-STD200M-
U-01    STM-100
BR-ADC-UTLH-STDHRLY-U-01    BR-ADC-UTLM-ADV500M-U-01    BR-ADC-UTLM-ENT3G-U-01      BR-ADC-UTLM-STD20M-
U-01     STM-200
BR-ADC-UTLM-ADV100M-U-01    BR-ADC-UTLM-ADV5G-U-01      BR-ADC-UTLM-ENT40M-U-01     BR-ADC-UTLM-STD300M-
U-01    STM-300
BR-ADC-UTLM-ADV10G-U-01     BR-ADC-UTLM-ADV60M-U-01     BR-ADC-UTLM-ENT500M-U-01    BR-ADC-UTLM-STD3G-
U-01      STM-400
BR-ADC-UTLM-ADV10M-U-01     BR-ADC-UTLM-ENT100M-U-01    BR-ADC-UTLM-ENT5G-U-01      BR-ADC-UTLM-STD40M-
U-01     STM-WAFPROXY

>> show details for an included SKU <<
amnesiac (config) # show ssc sku sku-name STM-400
+----------------------
+-------------------------------------------------------------------------------------------+
| Field               |
Value                                                                                       |
+----------------------
+-------------------------------------------------------------------------------------------+
| status              |
Active                                                                                      |
| pricing_model       |
hourly                                                                                      |
| add_on_skus         | [u'ADD-FIPS', u'ADD-WAF', u'ADD-WEBACCEL']                                          |
| feature_tier        |
STM-400                                                                                     |
| features            | anlyt : Enable Realtime
Analytics.                                                  |
|                     | auto  : Enable
Autoscaling.                                                          |
|                     | bwm   : Enable Bandwidth Management
classes.                                                |
|                     | cache : Enable Web
Caching                                                               |
|                     | comp  : Enable
Compression                                                           |
|                     | cr    : Do not limit the user to cut-down RuleBuilder content routing for
TrafficScript. |
|                     | evnts : Enable Events and
Actions                                                     |
|                     | glb   : Enable Global Load
Balancing                                                   |
|                     | java  : Enable
Java.                                                                 |
|                     | kcd   : Kerberos Constrained
Delegation                                                  |
|                     | lbcel : Array of
cells.                                                                |
|                     | lbcon : Least connection
```

```
based.                                                                  |
|                     | lbfail: Balance failure class (used only for testing & debugging
purposes).              |
|                     | lbone : Always choose first node in a pool (used only for testing & debugging
purposes). |
|                     | lbrnd :
Random.                                                                                 |
|                     | lbrob : Round
robin.                                                                          |
|                     | lbrsp : Fastest response
times.                                                                  |
|                     | lbwcon: Weighted least connection
based.                                                  |
|                     | lbwrob: Weighted round
robin.                                                    |
|                     | loca  : Enable Location
support.                                                  |
|                     | moni  : Enable Active
Monitors                                                    |
|                     | rate  : Enable Rate Shaping
classes.                                                |
|                     | rb    : Do not limit the user to RuleBuilder for
TrafficScript.                          |
|                     | rhi   : Route Health
Injection.                                                  |
|                     | slm   : Enable Service Level
Monitoring.                                             |
|                     | spasp : ASP session
persistence.                                                 |
|                     | spip  : IP-based session
persistence.                                              |
|                     | spj2  : J2EE session
persistence.                                                |
|                     | spkip : Application cookie session
persistence.                                          |
|                     | spnam : Named node session
persistence.                                           |
|                     | spsar : Transparent session
affinity.                                             |
|                     | spssl : SSL session ID session
persistence.                                        |
|                     | spuni : Universal session
persistence.                                           |
|                     | spxze : X-Zeus-backend cookie session
persistence.                                    |
|                     | ssl   : Enable
SSL                                                                     |
|                     | svcprt: Enable Service Protection
classes                                                 |
|                     | ts    : Enable
TrafficScript                                                         |
|                     | xml   : Enable XML functions in
TrafficScript.                                        |
| info
|                                                                                                 |
| stm_sku             |
STM-400                                                                                         |
| fixed_resource_usage |
None                                                                                            |
| ent                 |
True                                                                                            |
| resource_unit       |
None                                                                                            |
| csp                 |
True                                                                                            |
+---------------------
+-----------------------------------------------------------------------------------------------+
```

Related Commands

ssc sku list

show ssc stm images

Displays list of Brocade vTM imported images

Syntax

show ssc stm images

Examples

```
amnesiac (config) # show ssc stm images
---------------------------------------
ZeusTM101_Linux-x86_64.tgz
```

Related Commands

ssc stm import-image file

show ssc stm license-file

Displays a list of Brocade Virtual Traffic Manger licenses.

Syntax

show ssc stm license-file

Usage Guidelines

This command is also available in user and enable mode.

Examples

```
amnesiac (config) # show ssc stm license-file
# Brocade Virtual Traffic Manager - License Key File
#
# This file enables Virtual Traffic Manager to run subject to the conditions
# specified within the key. The license key should be imported into the product
# using the web administration interface.
#
# The following values are encoded within the encrypted license key, and are
# provided as a reminder to system administrators of the values.
#
# Info:
#   Product:                          Stingray Traffic Manager
#   License Type:                     SSC
#   License Serial:                   1234
#   Issued on:                        Mon, 15 Jul 2017 00:00:00 GMT
#
#   Valid Until:                      Thu, 15 Aug 2017 10:00:00 GMT
#
# Features:
#   Application Firewall:             No
#   Advanced Connection Analytics:    No
#   Aptimizer:                        No
<<partial listing only>>
```

Related Commands

ssc stm import-lic

show ssc user user-name

Displays Services Director user details.

Syntax

show ssc user user-name *name*

Parameters

name

Specify the name of the user.

Examples

```
amnesiac (config) # show ssc user user-name admin
+----------+-------+
| Field    | Value |
+----------+-------+
| username | admin |
| active   | True  |
+----------+-------+
```

Related Commands

ssc user create user-name

show ssc version version-name

Displays Brocade vTM versions available for deployment.

Syntax

show ssc version version-name *name*

Parameters

name

Specify the name of the Traffic Manager version.

Examples

```
amnesiac (config) # show ssc version version-name 10.1
+------------------+-----------------------------+
| Field            | Value                       |
+------------------+-----------------------------+
| info             |                             |
| status           | Active                      |
| version_filename | ZeusTM_101_Linux-x86_64.tgz |
+------------------+-----------------------------+
```

Related Commands

ssc version update version-name

show ssc vtm-authenticator

Displays full details of a specified vTM authenticator. This can be for an LDAP, RADIUS or TACACS+ server.

Syntax

show ssc vtm-authenticator auth-name *authenticator-name*

Parameters

authenticator-name

Specify the name of the vTM authenticator.

Examples

```
>> example LDAP authenticator <<
amnesiac (config) # show ssc vtm-authenticator auth-name "LDAP Server"
+---------------------------+--------------------------------------+
| Description               | Value                                |
+---------------------------+--------------------------------------+
| Name                      | LDAP Server                          |
| Type                      | ldap                                 |
| Server Address            | 10.62.169.169                        |
| DN Method                 | construct                            |
| Filter                    | sAMAccountName=%u                    |
| Base DN                   | OU=users, DC=tekton, DC=local        |
| Fallback permission group | admin                                |
| Server Port               | 389                                  |
| Timeout                   | 30                                   |
| Group Attribute           | memberOf                             |
| Group Field               | CN                                   |
| Bind DN                   | %u@tekton.local                      |
| Group Filter              | (&(memberUid=%u)(objectClass= ...    |
| Search DN                 |                                      |
| Search Password           |                                      |
+---------------------------+--------------------------------------+
>> example RADIUS authenticator <<
amnesiac (config) # show ssc vtm-authenticator auth-name Authenticator-808G-LJWJ-MT3B-WMDZ
+---------------------------+-----------------+
| Description               | Value           |
+---------------------------+-----------------+
| Name                      | RADIUS Server   |
| Type                      | radius          |
| Server Address            | 10.62.167.194   |
| Fallback permission group | admin           |
| Server Port               | 1812            |
| Timeout                   | 30              |
| Group Attribute           | 1               |
| Secret                    | *****           |
| Group Vendor              | 1476            |
| NAS Identifier            | Internal RADIUS |
| NAS IP address            | 127.0.0.1       |
+---------------------------+-----------------+
>> example TACACS+ server <<
amnesiac (config) # show ssc vtm-authenticator auth-name Authenticator-7F1D-A1K3-1PO4-VSEF
+---------------------------+------------------+
| Description               | Value            |
+---------------------------+------------------+
| Name                      | TACACS+ Server   |
| Type                      | tacacs_plus      |
| Server Address            | 10.62.167.195    |
| Authentication Type       | pap              |
| Fallback permission group | admin            |
| Server Port               | 49               |
| Timeout                   | 30               |
| Group Field               | permission-group |
| Secret                    | *****            |
| Group Service             | Hoobland         |
+---------------------------+------------------+
```

Related Commands

ssc vtm-authenticator list, ssc vtm-authenticator add ldap auth-name, ssc vtm-authenticator add radius auth-name, ssc vtm-authenticator add tacacs_plus auth-name, ssc vtm-authenticator update ldap auth-name, ssc vtm-authenticator update radius auth-name, ssc vtm-authenticator update tacacs_plus auth-name

show ssc vtm-permission-group

Displays details for a specified vTM permission group.

Syntax

show ssc vtm-permission-group pg-name *permission-group*

Parameters

permission-group

Specify the required permission-group.

Usage Guidelines

This command is also available in user and enable mode.

There are four default permission groups (**admin**, **Demo**, **Monitoring** and **Guest**), and you can create additional vTM permission groups, see ssc vtm-permission-group create pg-name on page 578.

Each permission supports the following access levels: ro (read-only), full.

Where a permission branch node and all of its leaf nodes share a permission, only the permission branch node and its access level are displayed.

Where all permissions share a single access level, the permission "all" is used. The **admin** permission group has this setting by default.

Examples

```
>> show permissions for the admin group <<
amnesiac (config) # show ssc vtm-permission-group pg-name admin
+--------------+-----------------------------------------------+--------+
| Parameter    | Value                                         |        |
+--------------+-----------------------------------------------+--------+
| Name         | admin                                         |        |
| Unique Name  | admin                                         |        |
| Description  | Full access to all pages                      |        |
| Timeout      | 30                                            |        |
| Permissions: | ---------------------------------------------- | ------ |
|              | Permission String                             | Access |
|              | ---------------------------------------------- | ------ |
|              | all                                           | full   |
+--------------+-----------------------------------------------+--------+

>> show permissions for the Demo group <<
amnesiac (config) # show ssc vtm-permission-group pg-name Demo
+--------------+-----------------------------------------------+--------+
| Parameter    | Value                                         |        |
+--------------+-----------------------------------------------+--------+
| Name         | Demo                                          |        |
| Unique Name  | Demo                                          |        |
| Description  | Full access, except to user management / system |        |
| Timeout      | 30                                            |        |
| Permissions: | ---------------------------------------------- | ------ |
|              | Permission String                             | Access |
|              | ---------------------------------------------- | ------ |
|              | Access_Management                             | ro     |
|              | Alerting                                      | full   |
|              | Appliance_Console                             | none   |
|              | Aptimizer                                     | full   |
|              | Audit_Log                                     | full   |
|              | Backup                                        | ro     |
|              | Bandwidth                                     | full   |
|              | Catalog                                       | full   |
|              | Config_Summary                                | full   |
|              | Configure                                     | full   |
|              | Connections                                   | full   |
|              | Custom                                        | full   |
|              | DateTime                                      | ro     |
|              | Diagnose                                      | full   |
|              | Draining                                      | full   |
|              | Event_Log                                     | full   |
|              | Event_Log!Clear                               | none   |
|              | Extra_Files                                   | full   |
|              | Global_Settings                               | full   |
|              | Help                                          | full   |
|              | Java                                          | full   |
|              | Java!Edit                                     | full   |
|              | License_Keys                                  | ro     |
|              | Log_Viewer                                    | full   |
|              | MainIndex                                     | full   |
|              | Monitoring                                    | full   |
|              | Monitors                                      | full   |
|              | NAT                                           | ro     |
|              | Networking                                    | ro     |
|              | Persistence                                   | full   |
|              | Pools                                         | full   |
|              | Rate                                          | full   |
|              | Reboot                                        | ro     |
|              | Request_Logs                                  | full   |
|              | Restart                                       | ro     |
|              | Rules                                         | full   |
|              | SLM                                           | full   |
|              | SNMP                                          | ro     |
|              | SOAP_API                                      | none   |
|              | SSL                                           | full   |
|              | Security                                      | ro     |
|              | Service_Protection                            | full   |
```

```
|              | Shutdown                                              | ro     |
|              | Statd                                                 | full   |
|              | Support                                               | full   |
|              | Traffic_IP_Groups                                     | full   |
|              | Traffic_Managers                                      | full   |
|              | Traffic_Managers!AddRemove                            | none   |
|              | Traffic_Managers!Upgrade                              | none   |
|              | Virtual_Servers                                       | full   |
|              | Web_Cache                                             | full   |
|              | Web_Cache!Clear                                       | none   |
|              | Wizard                                                | full   |
|              | Wizard!Backup                                         | none   |
|              | Wizard!ClusterJoin                                    | none   |
|              | Wizard!FreeDiskSpace                                  | none   |
|              | Wizard!Restore                                        | none   |
+--------------+-------------------------------------------------------+--------+

>> show permissions for the Guest group <<
amnesiac (config) # show ssc vtm-permission-group pg-name Guest
+--------------+-------------------------------------------------------+--------+
| Parameter    | Value                                                 |        |
+--------------+-------------------------------------------------------+--------+
| Name         | Guest                                                 |        |
| Unique Name  | Guest                                                 |        |
| Description  | Read-only access                                      |        |
| Timeout      | 30                                                    |        |
| Permissions: | ----------------------------------------------- | ------ |
|              | Permission String                                     | Access |
|              | ----------------------------------------------- | ------ |
|              | Access_Management                                     | ro     |
|              | Alerting                                              | ro     |
|              | Appliance_Console                                     | none   |
|              | Aptimizer                                             | ro     |
|              | Audit_Log                                             | none   |
|              | Backup                                                | ro     |
|              | Bandwidth                                             | ro     |
|              | Catalog                                               | ro     |
|              | Config_Summary                                        | ro     |
|              | Configure                                             | ro     |
|              | Connections                                           | full   |
|              | Custom                                                | ro     |
|              | DateTime                                              | ro     |
|              | Diagnose                                              | ro     |
|              | Draining                                              | ro     |
|              | Event_Log                                             | full   |
|              | Event_Log!Clear                                       | none   |
|              | Extra_Files                                           | ro     |
|              | Global_Settings                                       | ro     |
|              | Help                                                  | ro     |
|              | License_Keys                                          | ro     |
|              | Log_Viewer                                            | full   |
|              | MainIndex                                             | ro     |
|              | Monitoring                                            | full   |
|              | Monitoring!Edit                                       | ro     |
|              | Monitors                                              | ro     |
|              | NAT                                                   | ro     |
|              | Networking                                            | ro     |
|              | Persistence                                           | ro     |
|              | Pools                                                 | ro     |
|              | Rate                                                  | ro     |
|              | Reboot                                                | ro     |
|              | Request_Logs                                          | ro     |
|              | Restart                                               | ro     |
|              | Rules                                                 | ro     |
|              | SLM                                                   | ro     |
|              | SNMP                                                  | ro     |
|              | SOAP_API                                              | none   |
|              | SSL                                                   | ro     |
|              | Security                                              | ro     |
|              | Service_Protection                                    | ro     |
|              | Shutdown                                              | ro     |
|              | Statd                                                 | full   |
```

```
|              | Support                                              | ro     |
|              | Traffic_IP_Groups                                    | ro     |
|              | Traffic_Managers                                     | ro     |
|              | Traffic_Managers!AddRemove                           | none   |
|              | Traffic_Managers!Upgrade                             | none   |
|              | Virtual_Servers                                      | ro     |
|              | Web_Cache                                            | full   |
|              | Web_Cache!Clear                                      | none   |
|              | Wizard                                               | ro     |
+--------------+------------------------------------------------------+--------+

>> show permissions for the Monitoring group <<
amnesiac (config) # show ssc vtm-permission-group pg-name Monitoring
+--------------+------------------------------------------------------+--------+
| Parameter    | Value                                                |        |
+--------------+------------------------------------------------------+--------+
| Name         | Monitoring                                           |        |
| Unique Name  | Monitoring                                           |        |
| Description  | Access only to config summary / monitoring pages     |        |
| Timeout      | 30                                                   |        |
| Permissions: | ---------------------------------------------- | ------ |
|              | Permission String                                    | Access |
|              | ---------------------------------------------- | ------ |
|              | Access_Management                                    | none   |
|              | Access_Management!LocalUsers!Edit                    | full   |
|              | Access_Management!LocalUsers!EditOtherUsers          | none   |
|              | Alerting                                             | none   |
|              | Appliance_Console                                    | none   |
|              | Aptimizer                                            | none   |
|              | Audit_Log                                            | none   |
|              | Backup                                               | none   |
|              | Bandwidth                                            | none   |
|              | Catalog                                              | none   |
|              | Config_Summary                                       | full   |
|              | Configure                                            | none   |
|              | Connections                                          | full   |
|              | Custom                                               | none   |
|              | DateTime                                             | none   |
|              | Diagnose                                             | ro     |
|              | Draining                                             | full   |
|              | Event_Log                                            | full   |
|              | Event_Log!Clear                                      | none   |
|              | Extra_Files                                          | none   |
|              | Global_Settings                                      | none   |
|              | Help                                                 | full   |
|              | Java                                                 | none   |
|              | Java!Edit                                            | none   |
|              | License_Keys                                         | none   |
|              | Log_Viewer                                           | full   |
|              | MainIndex                                            | ro     |
|              | Monitoring                                           | full   |
|              | Monitors                                             | none   |
|              | NAT                                                  | none   |
|              | Networking                                           | none   |
|              | Persistence                                          | none   |
|              | Pools                                                | none   |
|              | Rate                                                 | none   |
|              | Reboot                                               | none   |
|              | Request_Logs                                         | none   |
|              | Restart                                              | none   |
|              | Rules                                                | none   |
|              | SLM                                                  | none   |
|              | SNMP                                                 | none   |
|              | SOAP_API                                             | none   |
|              | SSL                                                  | none   |
|              | Security                                             | none   |
|              | Service_Protection                                   | none   |
|              | Shutdown                                             | none   |
|              | Statd                                                | full   |
|              | Support                                              | none   |
|              | Traffic_IP_Groups                                    | none   |
|              | Traffic_Managers                                     | none   |
```

```
|              | Virtual_Servers                                      | none   |
|              | Web_Cache                                            | full   |
|              | Web_Cache!Clear                                      | none   |
|              | Wizard                                               | none   |
+--------------+------------------------------------------------------+--------+
```

Related Commands

ssc vtm-permission-group create pg-name, ssc vtm-permission-group list, ssc vtm-permission-group update pg-name

snmp-server acl

Configures changes to the View-Based Access Control Model (VACM) ACL configuration.

Syntax

[no] snmp-server acl group *name* **security-level** *level* **read-view** *name*

Parameters

group *name*

Specify the name of the SNMP server community.

security-level *level*

Specify the security level for this ACL entry.

noauth

Does not authenticate packets and does not use privacy. This is the default setting.

auth

Authenticates packets but does not use privacy.

authpriv

Authenticates packets and uses privacy.

NOTE

This setting determines whether a single atomic message exchange is authenticated.

NOTE

A security level applies to a group, not to an individual user.

read-view *name*

Specify that read requests will be restricted to this view.

Usage Guidelines

The **no** command option disables an SNMP server community.

Examples

```
amnesiac (config) # snmp-server acl group ReadOnly security-level auth read-view ReadOnly
```

Related Commands

show snmp

snmp-server community

Sets an SNMP read-only server community.

Syntax

[no] snmp-server community *name*

Parameters

name

Specify the name of the SNMP server community.
The # and - characters are not allowed at the beginning of the <name> argument. If you use either of these characters at the beginning of the <name> argument, the CLI returns the following error message:

```
% Invalid SNMP community name
```

Usage Guidelines

You can still access the entire MIB tree from any source host using this setting. If you do not want this type of access, you must delete this option and configure the security name for SNMP ACL support. For details, see snmp-server group on page 331.

This community string overrides any VACM settings.

The **no** command option disables an SNMP server community.

Examples

```
amnesiac (config) # snmp-server community ReaDonLy
```

Related Commands

show snmp

snmp-server contact

Sets the SNMP server contact.

Syntax

[no] snmp-server contact *name*

Parameters

name

Specify the user name of the SNMP server community contact.

Usage Guidelines

The **no** command option disables the SNMP server contact.

Examples

```
amnesiac (config) # snmp-server contact john doe
```

Related Commands

show snmp

snmp-server enable

Enables an SNMP server.

Syntax

[no] snmp-server enable | [**traps**]

Parameters

traps

Enables sending of SNMP traps from this system.

Usage Guidelines

The **no** command option disables the SNMP server or traps.

Examples

```
amnesiac (config) # snmp-server enable traps
```

Related Commands

show snmp

snmp-server group

Configures the View Access Control Model (VACM) group configuration.

Syntax

[no] snmp-server group *group* **security name** *name* **security-model** *model*

Parameters

group *group*

Specify a group name.

security-model *model*

Specify one of the following security models:

v1

Enables SNMPv1 security model.

v2c

Enables SNMPv2c security model.

usm

Enables User-based Security Model (USM).

security-name *name*

Specify a name to identify a requester (allowed to issue gets and sets) or a recipient (allowed to receive traps) of management data. The security name is also required to make changes to the VACM security name configuration.

Usage Guidelines

The **no** command option disables the SNMP server group.

Examples

```
amnesiac (config) # snmp-server group rvbdgrp security-name brocade security-model v1
```

Related Commands

show snmp

snmp-server host

Configures hosts to which to send SNMP traps.

Syntax

[no] snmp-server host { *hostname* | *IPv4-addr* | *IPv6-addr* } **traps** *community-string*

Parameters

hostname | *IPv4-addr* | *IPv6-addr*

Specify the hostname, IPv4 address, or IPv6 address for the SNMP server.

traps *community-string*

Send traps to the specified host. Specify the password-like community string to control access. Use a combination of uppercase, lowercase, and numerical characters to reduce the chance of unauthorized access to the appliance. The # and - characters are not allowed at the beginning of the <community string> argument.

NOTE

If you specify a read-only community string, it takes precedence over this community name and allows users to access the entire MIB tree from any source host. If this is not desired, delete the read-only community string.

Usage Guidelines

The **no** command option disables the SNMP server host.

Examples

```
amnesiac (config) # snmp-server host 10.0.0.1 traps public
```

Related Commands

show snmp

snmp-server host version

Configures the SNMP version of traps to send to the host.

Syntax

[no] snmp-server host { *hostname* | *IPv4-addr* | *IPv6-addr* } **traps version** { **1** | **2 c** | **3 remote-user** *name* } **password encrypted** *key* **auth-protocol** { **MD5** | **SHA** } **security-level** { **noauth** | **auth** | *authpriv* } | **plain-text** *text* **auth-protocol** *MD5* | | *SHA*] [**security-level** *noauth* | | *auth* | | *authpriv*] | [**priv-protocol** { **AES** | **DES** } **priv-key** { **encrypted** *key* | **plain-text** *text* }] [**port** *port*]

Parameters

hostname-or-ip-addr
Specify the hostname, IPv4 address, or IPv6 address for the SNMP server.

traps
Send traps to the specified host.

version *number*
Specify the SNMP version of traps to send to this host:

1
Specifies SNMPv1.

2c
Specifies SNMPv2c.

3
Specifies SNMPv3.

remote-user *name*
For SNMPv3 specify the user name.

password [**encrypted** | **plaintext**]
Specify the password type:

encrypted
Enable encrypted password authentication.

plaintext
Enable plain-text password authentication.

encrypted *key*
For SNMPv3 specify the user password.

auth-protocol *MD5* | *SHA*
Specify the authorization protocol:

MD5
Enable MD5 security protocol.

SHA
Enable SHA security protocol.

security-level *noauth* | *auth* | *authpriv*
Specify the security level:

noauth
Specify no authorization required.

auth
Specify authorization required.

authpriv
Specify authorization and privacy required.

priv-protocol { **AES** | **DES** }
Specify the privacy protocol:

AES
Specify CFB128-AES-128 as the privacy protocol.

DES
Specify CBC-DES as the privacy protocol.

priv-key { **encrypted** *key* | **plain-text** *text* }
Specify the privacy key:

encrypted*key*
Specify encrypted privacy key.

plaintext*text*
Specify plain-text privacy key. The plain-text privacy key must be at least 8 characters.

port *port*
Optionally, specify the destination port.

Usage Guidelines

The **no** command option disables the SNMP server host.

Examples

```
amnesiac (config) # snmp-server host 10.0.0.1 traps version 1 "public 99162?" port 1234
```

Related Commands

show snmp, snmp-server community, snmp-server security-name

snmp-server ifindex

Adds a custom index value for an interface.

Syntax

snmp-server ifindex *interface index*

Parameters

interface

Specify the interface: **wan0_0**, **lan0_0**, **wan0_1**, **lan0_1**, **primary**, **aux**, **inpath0_0**, **inpath0_1**

index

Specify the index.

Examples

```
amnesiac (config) # snmp-server ifindex aux 1234
```

Related Commands

show snmp

snmp-server ifindex-persist

Enables persistent SNMP interface indices.

Syntax

[no] snmp-server ifindex-persist

Usage Guidelines

The **no** command option disables the SNMP server group.

Examples

```
amnesiac (config) # snmp-server ifindex-persist
```

Related Commands

show snmp

snmp-server ifindex-reset

Resets the ifindex values of all interfaces to the factory default value.

Syntax

snmp-server ifindex-reset

Examples

```
amnesiac (config) # snmp-server ifindex-reset
```

Related Commands

show snmp

snmp-server listen enable

Enables SNMP server interface restrictions (that is, it enables access control and blocks requests on all the interfaces).

Syntax

[no] snmp-server listen enable

Usage Guidelines

The **no** command option disables SNMP interface restrictions.

SNMP interface restrictions are not available through the Management Console.

Examples

```
amnesiac (config) # snmp-server listen enable
```

Related Commands

show snmp

snmp-server listen interface

Adds an interface to the SNMP server access restriction list.

Syntax

[no] snmp-server listen interface *interface*

Parameters

interface

Specify the interface: **primary**, **aux**, **inpath0_0**, **rios_lan0_0**, **rios_wan0_0**

index

Specify the index.

Usage Guidelines

If the list of interfaces is empty, none of the interfaces respond to the queries. If the list of interfaces has at least one entry, then the server listens on that subset of interfaces.

To add an interface to the list to listen on:

```
snmp-server listen interface primary
```

To remove an interface from the list:

```
no snmp-server listen interface <interface>
```

Examples

```
amnesiac (config) # snmp-server listen interface aux
```

Related Commands

show snmp

snmp-server location

Sets the value for the system location variable in the MIB.

Syntax

[no] snmp-server location *ip-addr*

Parameters

ip-addr

Specify the IP address of the system.

Usage Guidelines

The **no** command option disables the SNMP server location.

Examples

```
amnesiac (config) # snmp-server location 10.10.10.1
```

Related Commands

show snmp

snmp-server security-name

Configures the SNMP security name.

Syntax

[no] snmp-server security-name *name* **community** *community-string* **source** *IPv4-addr* | / | *IPv6-addr netmask*

Parameters

name

Specify the security name.

community *community-string*

Specify the password-like community string to control access. Use a combination of uppercase, lowercase, and numerical characters to reduce the chance of unauthorized access to the appliance. Community strings allow printable 7-bit ASCII characters except for white spaces. Community strings can not begin with '#' or '-'.

If you specify a read-only community string, it takes precedence over this community name and allows users to access the entire MIB tree from any source host. If this is not desired, delete the read-only community string.

source *IPv4-addr* | *IPv6-addr netmask*

Specify the source IPv4 address or IPv6 address and netmask.

Usage Guidelines

The **no** command option disables the trap interface.

Examples

```
amnesiac (config) # snmp-server security-name brocade community public source 10.1.2.3/24
```

Related Commands

show snmp

snmp-server trap-interface

Configures the system to use the IP address of the specified interface in the SNMP trap header.

Syntax

[no] snmp-server trap-interface *interface*

Parameters

interface

Specify the interface.

Usage Guidelines

The trap interface setting sets which interface IP address is used in the agent-address header field of SNMP v1 trap Protocol Data Units (PDUs). It does set the interface for the trap.

Traps are sent out the Primary interface. If the primary interface is physically disconnected, no traps are sent. Traps can be sent out the auxiliary interface if the trap receiver is reachable from the auxiliary interface.

The **no** command option disables the trap interface.

Examples

```
amnesiac (config) # snmp-server trap-interface aux
```

Related Commands

show snmp

snmp-server trap-test

Generates an SNMP trap test.

Syntax

snmp-server trap-test

Usage Guidelines

Use this command to send a sample trap test to ensure that the SNMP server is monitoring the appliance.

Examples

```
amnesiac (config) # snmp-server trap-test
```

Related Commands

show snmp

snmp-server user

Configures changes to the User-Based Security (UBS) model.

Syntax

[no] snmp-server user *name* **password** { **encrypted** *key* | **plain-text** *text* } **auth-protocol** { MD5 | SHA } [**priv-protocol** { AES | DES } **priv-key** { **encrypted** *key* | **plain-text** *text* }]

Parameters

name

Specify the user name.

password { **encrypted** *key* | **plain-text** *text* }

Specify the password type:

encrypted*key*

Enable encrypted password authentication.

plaintext*text*

Enable plain-text password authentication. The plain-text password must be at least 8 characters.

auth-protocol { MD5 | SHA }

Specify the authorization protocol:

MD5

Enable MD5 security protocol.

SHA

Enable SHA security protocol.

priv-protocol { AES | DES }

Specify the privacy protocol:

AES

Specify CFB128-AES-128 as the privacy protocol.

DES

Specify CBC-DES as the privacy protocol.

priv-key { **encrypted** *key* | **plain-text** *text* }

Specify the privacy key:

encrypted*key*

Specify encrypted privacy key.

plaintext*text*

Specify plain-text privacy key. The plain-text privacy key must be at least 8 characters.

Usage Guidelines

The **no** command option disables this option.

Examples

```
amnesiac (config) # snmp-server user testuser password plain-text testpass auth-protocol SHA
```

Related Commands

show snmp

snmp-server view

Configures changes to the View-based Access Control Model (VACM) configuration.

Syntax

[no] snmp-server view *name* [**excluded** | **included**] *oid*

Parameters

name

Specify the user name.

excluded | **included**

Specify the following view options:

excluded

Excludes an oid sub-tree from this view.

included

Includes an OID subtree into this view.

oid

Specify the object ID. For example:.**1.3.6.1.2.1.1** or **.iso.org.dod.internet.mgmt.mib-2.system**

Usage Guidelines

The **no** command option disables this option.

Examples

```
amnesiac (config) # snmp-server view joedoe included .1.3.6.1.2.1.1
```

Related Commands

show snmp

ssc access-profile add-perm-group

Adds a permission group to a specified access profile.

Syntax

ssc access-profile add-perm-group access-profile-name *access-profile-name* **perm-group-name** *permission-group-name*

Parameters

access-profile-name

Specify the name of an existing access profile.

permission-group-name

Specify the name of a single permission group to add to the access profile.

Usage Guidelines

This command only enables you to add one permission group at a time. To add additional permission groups to the same access profile, repeat this command for each permission group.

Examples

```
>> confirm access profile has no permission groups <<
amnesiac (config) # show ssc access-profile access-profile-name "RADIUS All"
+-------------------+-----------------------------------+
| Description       | Value                             |
+-------------------+-----------------------------------+
| Name              | RADIUS All                        |
| Unique ID         | Access-Profile-H4U5-3SIR-7VUV-2AG8 |
| Authenticator     | RADIUS Server                     |
| Permission Groups |                                   |
+-------------------+-----------------------------------+
>> add the "admin" permission group to access profile <<
amnesiac (config) # ssc access-profile add-perm-group access-profile-name "RADIUS All" perm-group-name
admin
+----------------------------------+
| Updated                          |
+----------------------------------+
| Access profile RADIUS All updated |
+----------------------------------+
>> confirm outcome <<
amnesiac (config) # show ssc access-profile access-profile-name "RADIUS All"
+-------------------+-----------------------------------+
| Description       | Value                             |
+-------------------+-----------------------------------+
| Name              | RADIUS All                        |
| Unique ID         | Access-Profile-H4U5-3SIR-7VUV-2AG8 |
| Authenticator     | RADIUS Server                     |
| Permission Groups | admin                             |
+-------------------+-----------------------------------+
>> add a second permission group to the same access profile <<
amnesiac (config) # ssc access-profile add-perm-group access-profile-name "RADIUS All" perm-group-name
Guest
+----------------------------------+
| Updated                          |
+----------------------------------+
| Access profile RADIUS All updated |
+----------------------------------+
>> confirm outcome <<
amnesiac (config) # show ssc access-profile access-profile-name "RADIUS All"
+-------------------+-----------------------------------+
| Description       | Value                             |
+-------------------+-----------------------------------+
| Name              | RADIUS All                        |
| Unique ID         | Access-Profile-H4U5-3SIR-7VUV-2AG8 |
| Authenticator     | RADIUS Server                     |
| Permission Groups | admin                             |
|                   | Guest                             |
+-------------------+-----------------------------------+
```

Related Commands

show ssc access-profile, ssc access-profile create access-profile-name, ssc access-profile list, ssc access-profile remove-perm-group, ssc access-profile update access-profile-name

ssc access-profile create access-profile-name

Creates an access profile and associates it with an authenticator.

Syntax

ssc access-profile create access-profile-name *access-profile-name* **auth-name** *authenticator-name*

Parameters

access-profile-name

Specify the name of the new access profile.

authenticator-name

Specify the name of an existing authenticator.

Usage Guidelines

This command does not support the addition of permission groups, see ssc access-profile add-perm-group on page 347.

Use the **no ssc access-profile access-profile-name** command to delete an access profile.

Examples

```
>> create an access profile <<
amnesiac (config) #  ssc access-profile create access-profile-name "RADIUS All" auth-name "RADIUS
Server"
+----------------------------------+
| Created                          |
+----------------------------------+
| Access profile RADIUS All created |
+----------------------------------+
>> delete an access profile <<

amnesiac (config) # no ssc access-profile access-profile-name "LDAP Read-Only"
+--------------------------------------+
| Deleted                              |
+--------------------------------------+
| Access profile LDAP Read-Only deleted |
+--------------------------------------+
```

Related Commands

show ssc access-profile, ssc access-profile add-perm-group, ssc access-profile list, ssc access-profile remove-perm-group, ssc access-profile update access-profile-name

ssc access-profile list

Displays a list of all defined access profiles.

Syntax

ssc access-profile list

Examples

```
amnesiac (config) # ssc access-profile list
+-----------------+-----------------------------------+
| Name            | Unique ID                         |
+-----------------+-----------------------------------+
| LDAP All        | Access-Profile-ZRVA-MXIE-MI92-U787 |
| LDAP Read-Only  | Access-Profile-DAUH-F3NU-XYYA-MISP |
| LDAP Monitoring | Access-Profile-YJ5M-HGIR-B8PZ-C0XU |
| RADIUS All      | Access-Profile-H4U5-3SIR-7VUV-2AG8 |
+-----------------+-----------------------------------+
```

Related Commands

show ssc access-profile, ssc access-profile add-perm-group, ssc access-profile create access-profile-name, ssc access-profile remove-perm-group, ssc access-profile update access-profile-name

ssc access-profile remove-perm-group

Removes a permission group from a specified access profile.

Syntax

ssc access-profile remove-perm-group access-profile-name *access-profile-name* **perm-group-name** *permission-group-name*

Parameters

access-profile-name

Specify the name of an existing access profile.

permission-group-name

Specify the name of a single permission group to be removed from the access profile.

Usage Guidelines

This command only enables you to remove one permission group at a time. To remove additional permission groups from the same access profile, repeat this command for each permission group.

Examples

```
>> show current permission groups in an access-profile <<
amnesiac (config) # show ssc access-profile access-profile-name "RADIUS All"
+------------------+-----------------------------------+
| Description      | Value                             |
+------------------+-----------------------------------+
| Name             | RADIUS All                        |
| Unique ID        | Access-Profile-H4U5-3SIR-7VUV-2AG8 |
| Authenticator    | RADIUS Server                     |
| Permission Groups | admin                            |
|                  | Guest                             |
+------------------+-----------------------------------+
>> remove one of those permission groups <<
amnesiac (config) #  ssc access-profile remove-perm-group access-profile-name "RADIUS All" perm-group-
name Guest
+----------------------------------+
| Updated                          |
+----------------------------------+
| Access profile RADIUS All updated |
+----------------------------------+
>> confirm the result <<
amnesiac (config) show ssc access-profile access-profile-name "RADIUS All"
+------------------+-----------------------------------+
| Description      | Value                             |
+------------------+-----------------------------------+
| Name             | RADIUS All                        |
| Unique ID        | Access-Profile-H4U5-3SIR-7VUV-2AG8 |
| Authenticator    | RADIUS Server                     |
| Permission Groups | admin                            |
+------------------+-----------------------------------+
```

Related Commands

show ssc access-profile, ssc access-profile add-perm-group, ssc access-profile create access-profile-name, ssc access-profile list, ssc access-profile update access-profile-name

ssc access-profile update access-profile-name

Updates the details of an access profile, including the authenticator with which it is associated.

Syntax

ssc access-profile create access-profile-name *access-profile-name* **auth-name** *authenticator-name*

Parameters

access-profile-name

Specify the name of the new access profile.

authenticator-name

Specify the name of an existing authenticator.

Usage Guidelines

This command does not support:

- The addition of permission groups from the profile. See ssc access-profile add-perm-group on page 347.
- The removal of permission groups from the profile. See ssc access-profile remove-perm-group on page 351.

Examples

```
>> show details for an access profile <<
amnesiac (config) # show ssc access-profile access-profile-name "LDAP Monitoring"
+------------------+-----------------------------------+
| Description      | Value                             |
+------------------+-----------------------------------+
| Name             | LDAP Monitoring                   |
| Unique ID        | Access-Profile-YJ5M-HGIR-B8PZ-C0XU |
| Authenticator    | LDAP Server                       |
| Permission Groups | Guest                            |
+------------------+-----------------------------------+
>> update the name of the access profile <<
amnesiac (config) # ssc access-profile update access-profile-name "LDAP Monitoring" new-access-profile-
name "LDAP Statistics"
+--------------------------------------+
| Updated                              |
+--------------------------------------+
| Access profile LDAP Monitoring updated |
+--------------------------------------+
>> confirm the change <<
amnesiac (config) # show ssc access-profile access-profile-name "LDAP Statistics"
+------------------+-----------------------------------+
| Description      | Value                             |
+------------------+-----------------------------------+
| Name             | LDAP Statistics                   |
| Unique ID        | Access-Profile-YJ5M-HGIR-B8PZ-C0XU |
| Authenticator    | LDAP Server                       |
| Permission Groups | Guest                            |
+------------------+-----------------------------------+
```

Related Commands

show ssc access-profile, ssc access-profile add-perm-group, ssc access-profile create access-profile-name, ssc access-profile list, ssc access-profile remove-perm-group

ssc action list

Lists Services Director actions.

Syntax

ssc action list

Usage Guidelines

The Services Director can carry out the following actions on Traffic Manager instances:

- deploy an instance with specified parameters
- start and stop an instance
- uninstall an instance
- upgrade an instance

Examples

```
amnesiac (config) # ssc action list
+--------+
| Action |
+--------+
| 1      |
+--------+
```

Related Commands

show ssc access-profile

ssc action update template-name

Updates a Services Director action based on the specified template.

Syntax

ssc action update template-name *name* | [**action-name** *name*] | [**action-args** *] | [**status** [**Waiting** | **Pending** | **Blocked**]]

Parameters

name

Specify the template name.

action-name *name*

Specify the action name.

[**Waiting** | **Pending** | **Blocked**]

Optionally, specify the action arguments to be modified in the new template.

status [**Waiting** | **Pending** | **Blocked**]

Specify the status:

Waiting

If the action fails and the underlying problems have been corrected change the status of the original action to **Waiting** to cause the action to be re-queued and re-tried.

Pending

If an instance is associated with a failed or blocked action.

Blocked

If an instance is associated with a blocked action.

Usage Guidelines

Update an action with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc action update action-template test status Waiting
```

Related Commands

show ssc access-profile

ssc action update action-name

Updates a Services Director action.

Syntax

ssc action update action-name *name* **status** [**Waiting** | **Pending** | **Blocked**] | [**Waiting** | **Pending** | **Blocked**]

Parameters

name

Specify the action name.

status [**Waiting** | **Pending** | **Blocked**]

Specify the status:

Pending

If an instance is associated with a failed or blocked action.

Blocked

If an instance is associated with a blocked action.

[**Waiting** | **Pending** | **Blocked**]

Optionally, specify the action arguments.

Usage Guidelines

When a life cycle action is unsuccessful, you might need to intervene to determine the cause of the problem. Each action is recorded in the inventory database. After any underlying problems have been rectified, the action can be re-tried in one of two ways:

- The original action can have its status changed to **Waiting** so that the action is re-queued and re-tried.
- The instance can have its status changed to a desired status and the system deletes the old action and queues an entirely new action based on the status.

Use the **no ssc action action-name <name>** command to delete an action.

Examples

```
amnesiac (config) # ssc action update action-name test status Waiting
```

Related Commands

show ssc access-profile

ssc backup config clear

Clears the backup service configuration for the Services Director. The configuration of the remote system is unaffected.

Syntax

ssc backup config clear

Examples

```
amnesiac (config) # ssc backup config clear
amnesiac (config) # ssc backup service status
Backup service is not configured
+------------------------------+-------------------------+- ...
| Config                       | Status                  |  ...
+------------------------------+-------------------------+  ...
| Backup Configuration         | Configuration failed    |  ...
| Restore Remote Configuration | Successfully configured |  ...
+------------------------------+-------------------------+- ...
    ... ----------------------------------------+
    ...  Message                                |
    ... ----------------------------------------+
    ...  Services Director is not configured yet |
    ...  None                                   |
    ... ----------------------------------------+
```

Related Commands

ssc backup config create, ssc backup config update, ssc backup service status, ssc backup service enable

ssc backup config create

Creates a backup service configuration for the Services Director. Files are backed up to a local location according to a defined backup frequency. These are then synchronized to a remote location using a separate frequency. After synchronizing, a specified number of local files are retained.

Syntax

ssc backup config create remote-sys *IP-address* **remote-sys-path** *path* **remote-sys-user** *user* **remote-sys-pass** *password* **backup-data-trans** *protocol* **backup-freq** *frequency* **backup-retain** *number* **remote-sync-freq** *frequency*

Parameters

remote-sys
IP address of the remote system.

remote-sys-path
Remote directory for backup files. For example, "/var/home/root".

remote-sys-user
Remote username.

remote-sys-pass
Password for the remote user.

backup-data-trans
The protocol to perform the remote transfer ("scp" or "ftp"). 2

backup-freq
The backup frequency (to local), expressed as a number of units. Units are days (d), hours (h) and minutes (m). For example, "6h" represents six hours.

backup-retain
The number of local backup files to be retained. For example, 3.

remote-sync-freq
The synchronization frequency (local to remote), expressed as a number of units. Units are days (d), hours (h) and minutes (m). For example, "2d" represents two days.

Examples

```
amnesiac (config) # ssc backup config create remote-sys 10.62.166.206 remote-sys-path /space/sd-
backup/sd-backup-test/gold-silver-backups remote-sys-user sd-backup remote-sys-pass password backup-
data-trans scp backup-freq 1m backup-retain 10 remote-sync-freq 5m

Succesfully configured backup configuration for Services Director.
Backup restore remote configuration will be created with the same parameters
+------------------+-------------------------------------------------------+
| Field            | Value                                                 |
+------------------+-------------------------------------------------------+
| remote-sys       | 10.62.166.206                                         |
| remote-sync-freq | 5m                                                    |
| backup-data-trans | scp                                                  |
| remote-sys-user  | sd-backup                                             |
| backup-retain    | 10                                                    |
| remote-sys-path  | /space/sd-backup/sd-backup-test/gold-silver-backups   |
| backup-freq      | 1m                                                    |
| remote-sys-pass  | ******                                                |
+------------------+-------------------------------------------------------+
```

Related Commands

ssc backup config clear, ssc backup config update, ssc backup service status, ssc backup service enable

ssc backup config update

Updates the backup service configuration for the Services Director.

Syntax

ssc backup config update [**remote-sys** *IP-address*] | [**remote-sys-path** *path*] | [**remote-sys-user** *user*] | [**remote-sys-pass** *password*] | [**backup-data-trans** *protocol*] | [**backup-freq** *frequency*] | [**backup-retain** *number*] | [**remote-sync-freq** *frequency*]

Parameters

remote-sys
IP address of the remote system.

remote-sys-path
Remote directory for backup files. For example, "/var/home/root".

remote-sys-user
Remote username.

remote-sys-pass
Password for the remote user.

backup-data-trans
The protocol to perform the transfer to the remote system ("scp" or "ftp"). 2

backup-freq
The backup frequency (to local), expressed as a number of units. Units are days (d), hours (h) and minutes (m). For example, "6h" represents six hours.

backup-retain
The number of local backup files to be retained. For example, 3.

remote-sync-freq
The synchronization frequency (local to remote), expressed as a number of units. Units are days (d), hours (h) and minutes (m). For example, "2d" represents two days.

Examples

```
amnesiac (config) # ssc backup config update backup-freq 2m
+------------------+-------------------------------------------------------+
| Field            | Value                                                 |
+------------------+-------------------------------------------------------+
| remote-sys       | 10.62.166.206                                         |
| remote-sync-freq | 5m                                                    |
| backup-data-trans | scp                                                  |
| remote-sys-user  | sd-backup                                             |
| backup-retain    | 10                                                    |
| remote-sys-path  | /space/sd-backup/sd-backup-test/gold-silver-backups   |
| backup-freq      | 2m                                                    |
| remote-sys-pass  | ******                                                |
+------------------+-------------------------------------------------------+
```

Related Commands

ssc backup config clear, ssc backup config create, ssc backup service status, ssc backup service enable

ssc backup restore local

Restores the Services Director using a local backup file (created by the Services Director backup service).

Syntax

ssc backup restore local backup-name *filename* **master-password** *password*

Parameters

backup-name *filename*

Specify a backup file from the local backup configuration.

master-password *password*

Specify the master password that was current when the backup was made.

Usage Guidelines

The response from the restore process lists any vTM image files that were referenced in the backup file. These images are *not* stored with the backup, so you must ensure that they are reloaded if they are no longer present on your system.

Examples

```
amnesiac (config) # ssc backup restore local backup-name
  backup_10.62.167.199_2015-09-08_18-42-01.zip master-password Bcd4531-22
Warning: Using a password on the command line interface can be insecure.

Services Director configuration successfully restored using backup file
  backup_10.62.167.199_2015-09-08_18-42-01.zip

Please restore following vTM images existing in the previous backup file:
ZeusTM_101_Linux-x86_64.tgz
```

Related Commands

ssc backup config create, ssc backup service enable, ssc backup restore remotecfg clear

ssc backup restore remote

Restores the Services Director from a remote backup file.

Syntax

ssc backup restore remote backup-name *filename* **master-password** *password*

Parameters

backup-name *filename*

A backup file from the remote backup configuration.

master-password *password*

Specify the master password that was current when the backup was made.

Usage Guidelines

The response from the restore process lists any vTM image files that were referenced in the backup file. These images are *not* stored with the backup, so you must ensure that they are reloaded if they are no longer present on your system.

Examples

```
amnesiac (config) # ssc backup restore remote backup-name
  backup_10.62.167.199_2015-12-12_06-06-02.zip master-password Bcd4531-22
Warning: Using a password on the command line interface can be insecure.

Services Director configuration successfully restored using backup file
  backup_10.62.167.199_2015-12-12_06-06-02.zip

Please restore following vTM images existing in the previous backup file:
ZeusTM_101_Linux-x86_64.tgz
```

Related Commands

ssc backup config create, ssc backup service enable, ssc backup restore remotecfg create

ssc backup restore remotecfg clear

Clears the remote system definition that is used to restore a Services Director.

Syntax

ssc backup restore remotecfg clear

Examples

```
>> list current remote config <<
amnesiac (config) # show ssc backup restore remotecfg
+-------------------+-------------------------------------------------------+
| Field             | Value                                                 |
+-------------------+-------------------------------------------------------+
| remote-sys-user   | sd-backup                                             |
| backup-data-trans | scp                                                   |
| remote-sys-path   | /space/sd-backup/sd-backup-test/gold-silver-backups |
| remote-sys-pass   | ******                                                |
| remote-sys        | 10.62.166.206                                         |
+-------------------+-------------------------------------------------------+

>> clear current config <<
amnesiac (config) #  ssc backup restore remotecfg clear

>> confirm config is clear <<
amnesiac (config) #  show ssc backup restore remotecfg
+-----------------+
| Message         |
+-----------------+
| No record found |
+-----------------+
```

Related Commands

ssc backup config create, ssc backup service enable, ssc backup restore remotecfg create, ssc backup restore remote

ssc backup restore remotecfg create

Specifies the remote system from which a restore of the Services Director is performed.

Syntax

ssc backup restore remotecfg create remote-sys *IP-address* **remote-sys-path** *path* **remote-sys-user** *user* **remote-sys-pass** *password* **backup-data-trans** *protocol*

Parameters

remote-sys
IP address of the remote system.

remote-sys-path
Remote directory for backup files. For example, "/var/home/root".

remote-sys-user
Remote username.

remote-sys-pass
Password for the remote user.

backup-data-trans
The protocol to perform the transfer from the remote system ("scp" or "ftp").

Usage Guidelines

The restore process itself is performed using the ssc backup restore remote on page 361 command.

Examples

```
amnesiac (config) # ssc backup restore remotecfg create remote-sys 10.62.166.206 remote-sys-path /
space/sd-backup/sd-backup-test/gold-silver-backups remote-sys-user sd-backup remote-sys-pass password
backup-data-trans scp

Successfully created backup restore remote configuration for Services Director
+------------------+-------------------------------------------------------+
| Field            | Value                                                 |
+------------------+-------------------------------------------------------+
| remote-sys-user  | sd-backup                                             |
| backup-data-trans | scp                                                  |
| remote-sys-path  | /space/sd-backup/sd-backup-test/gold-silver-backups   |
| remote-sys-pass  | ******                                                |
| remote-sys       | 10.62.166.206                                         |
+------------------+-------------------------------------------------------+
```

Related Commands

ssc backup config create, ssc backup service enable, ssc backup restore remotecfg update

ssc backup restore remotecfg update

Updates the remote system configuration from which a restore of the Services Director is performed.

Syntax

ssc backup restore remotecfg create [**remote-sys** *IP-address*] | [**remote-sys-path** *path*] | [**remote-sys-user** *user*] | [**remote-sys-pass** *password*] | [**backup-data-trans** *protocol*]

Parameters

remote-sys
IP address of the remote system.

remote-sys-path
Remote directory for backup files. For example, "/var/home/root".

remote-sys-user
Remote username.

remote-sys-pass
Password for the remote user.

backup-data-trans
The protocol to perform the transfer from the remote system ("scp" or "ftp").

Usage Guidelines

The restore process itself is performed using the ssc backup restore remote on page 361 command.

Examples

```
amnesiac (config) # ssc backup restore remotecfg update backup-data-trans ftp
+------------------+-------------------------------------------------------+
| Field            | Value                                                 |
+------------------+-------------------------------------------------------+
| remote-sys-user  | sd-backup                                             |
| backup-data-trans | ftp                                                  |
| remote-sys-path  | /space/sd-backup/sd-backup-test/gold-silver-backups   |
| remote-sys-pass  | ******                                                |
| remote-sys       | 10.62.166.206                                         |
+------------------+-------------------------------------------------------+
```

Related Commands

ssc backup config create, ssc backup service enable, ssc backup restore remotecfg create

ssc backup service status

Displays the status of the backup service for the Services Director.

Syntax

ssc backup service status

Examples

```
amnesiac (config) # ssc backup service status
Backup service is configured and running
+------------------------------+-------------------------+---------+
| Config                       | Status                  | Message |
+------------------------------+-------------------------+---------+
| Backup Configuration         | Successfully configured | None    |
| Restore Remote Configuration | Successfully configured | None    |
+------------------------------+-------------------------+---------+
```

Related Commands

ssc backup config clear, ssc backup config create, ssc backup config update, ssc backup service enable

ssc backup service enable

Enables the backup service for the Services Director.

Syntax

ssc backup service enable

Usage Guidelines

Use the **no ssc backup service** command to disable the backup service.

Examples

```
>> enable backup service <<
amnesiac (config) # ssc backup service enable
Backup service is enabled

>> disable backup service <<
amnesiac (config) # no ssc backup service
Backup service is disabled
```

Related Commands

ssc backup config clear, ssc backup config create, ssc backup config update, ssc backup service status

ssc backup-restore cluster cluster-name backup now

Performs an immediate backup for the specified cluster.

Syntax

ssc backup-restore cluster cluster-name *cluster-id* **backup now**

Parameters

cluster-id

Specify the name of the required cluster.

Usage Guidelines

The cluster must have a defined backup schedule for this command to succeed.

When this command is used, a task is created to perform the backup.

Use the **show ssc backup-restore cluster cluster-name <cluster-name> task <task-id>** command to check the status of the backup task.

Examples

```
amnesiac (config) # ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O backup now
Please check the status of the current task using "show ssc backup-restore cluster cluster-name
<cluster-name> task <task-id>"
+---------------+----------------------------------------+
| Task          | Details                                |
+---------------+----------------------------------------+
| status        | pending                                |
| backup_id     |                                        |
| creation_date | 2016-06-29 15:11:31.036461             |
| task_subtype  | backup now                             |
| manager       | 10.62.169.160                          |
| cluster_id    | Cluster-AQJE-R4HV-QYR1-9F4O            |
| error_info    | None                                   |
| task_type     | backup restore                         |
| task_id       | BackupRestoreTask-CY7G-X5AB-G0SK-NX5L  |
| instance_id   |                                        |
| cluster_tag   |                                        |
+---------------+----------------------------------------+
```

Related Commands

show ssc backup-restore cluster cluster-name backups

ssc backup-restore cluster cluster-name restore backup-name

For a specified cluster, restores an existing backup from that cluster.

Syntax

ssc backup-restore cluster cluster-name *source_cluster-id* **restore backup-name** *backup_id* **target-cluster** *target_cluster_id*

Parameters

source_cluster-id

Specify the name of the cluster from which the backup was taken.

backup_id

Specify the name of the required backup.

target_cluster-id

Specify the name of the cluster upon which the backup will be used.

Usage Guidelines

When this command is used, a task is created to perform the restore.

Use the **show ssc backup-restore cluster cluster-name <cluster-name> task <task-id>** command to check the status of the restore task.

Examples

```
amnesiac (config) # ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O backup now
Please check the status of the current task using "show ssc backup-restore cluster cluster-name
<cluster-name> task <task-id>"
+---------------+----------------------------------------+
| Task          | Details                                |
+---------------+----------------------------------------+
| status        | pending                                |
| backup_id     |                                        |
| creation_date | 2016-06-29 15:11:31.036461             |
| task_subtype  | backup now                             |
| manager       | 10.62.169.160                          |
| cluster_id    | Cluster-AQJE-R4HV-QYR1-9F4O            |
| error_info    | None                                   |
| task_type     | backup restore                         |
| task_id       | BackupRestoreTask-CY7G-X5AB-G0SK-NX5L  |
| instance_id   |                                        |
| cluster_tag   |                                        |
+---------------+----------------------------------------+
```

Related Commands

show ssc backup-restore cluster cluster-name backups

ssc backup-restore cluster cluster-name task retry

Re-attempt a failed backup task.

Syntax

ssc backup-restore cluster cluster-name *cluster-id* **task** *task_id* **retry**

Parameters

cluster-id

Specify the name of the cluster upon which the failed task was performed.

task_id

Specify the name of the failed task.

Usage Guidelines

Use the **show ssc backup-restore cluster cluster-name <cluster-name> task <task-id>** command to check the progress of the task.

Use the **no ssc backup-restore cluster cluster-name <cluster_id> task <task_id>** command to delete a failed task if required.

Examples

```
>> check task: failed <<
amnesiac (config) # show ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O task
BackupRestoreTask-PQ6B-H5PY-JHVM-ZTYI
+---------------+-----------------------------------------------------------------------------------
| Field         | Value
+---------------+-----------------------------------------------------------------------------------
| status        | failed
| backup_id     |
| creation_date | 2016-06-29 16:48:46
| task_subtype  | backup now
| manager       | 10.62.169.160
| cluster_id    | Cluster-AQJE-R4HV-QYR1-9F4O
| error_info    | Could not select a vTM for backup for cluster Cluster-AQJE-R4HV-QYR1-9F4O ...
| task_type     | backup restore
| task_id       | BackupRestoreTask-PQ6B-H5PY-JHVM-ZTYI
| instance_id   |
| cluster_tag   |
+---------------+-----------------------------------------------------------------------------------

>> retry after bringing REST API back up <<
amnesiac (config) # ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O task
BackupRestoreTask-PQ6B-H5PY-JHVM-ZTYI retry
+---------------+----------------------------------------+
| Field         | Value                                  |
+---------------+----------------------------------------+
| status        | pending                                |
| backup_id     |                                        |
| creation_date | 2016-06-29 16:48:46                    |
| task_subtype  | backup now                             |
| manager       | 10.62.169.160                          |
| cluster_id    | Cluster-AQJE-R4HV-QYR1-9F4O            |
| error_info    | None                                   |
| task_type     | backup restore                         |
| task_id       | BackupRestoreTask-PQ6B-H5PY-JHVM-ZTYI  |
| instance_id   |                                        |
| cluster_tag   |                                        |
+---------------+----------------------------------------+

>> check task: successful <<
amnesiac (config) # show ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O task
BackupRestoreTask-PQ6B-H5PY-JHVM-ZTYI
+---------------+----------------------------------------+
| Field         | Value                                  |
+---------------+----------------------------------------+
| status        | complete                               |
| backup_id     |                                        |
| creation_date | 2016-06-29 16:48:46                    |
| task_subtype  | backup now                             |
| manager       | 10.62.169.160                          |
| cluster_id    | Cluster-AQJE-R4HV-QYR1-9F4O            |
| error_info    | None                                   |
| task_type     | backup restore                         |
| task_id       | BackupRestoreTask-PQ6B-H5PY-JHVM-ZTYI  |
| instance_id   |                                        |
| cluster_tag   |                                        |
+---------------+----------------------------------------+
```

Related Commands

show ssc backup-restore cluster cluster-name tasks

ssc backup-restore cluster cluster-name upload backup-name

Transfers a backup file (in TAR format) to a specified Traffic Manager instance. This file is not used in any way.

Syntax

ssc backup-restore cluster cluster-name *source_cluster-id* **upload backup-name** *backup_id* **target-cluster** *target_cluster_id* **target-vTM** *instance_id*

Parameters

source_cluster-id
Specify the name of the cluster from which the backup was taken.

backup_id
Specify the name of the required backup.

target_cluster-id
Specify the name of the cluster upon which the backup will be used.

instance_id
Specify the name of the Traffic Manager instance to which the backup file (in TAR format) will be loaded.

Usage Guidelines

This command only transfers the TAR file to the specified Traffic Manager instance.

NOTE
No operations are performed on this backup file when it reaches the specified Traffic Manager instance.

When this command is used, a task is created to perform the restore.

Use the **show ssc backup-restore cluster cluster-name <cluster-name> task <task-id>** command to check the status of the restore task.

Examples

```
amnesiac (config) # ssc backup-restore cluster cluster-name Cluster-AQJE-R4HV-QYR1-9F4O upload backup-
name Backup-STD3-X1Q4-GTJ3-WX4T target-cluster Cluster-P2WL-IV2B-V8S6-COIY target-instance cerise-01
Please check the status of the current task using "show ssc backup-restore cluster cluster-name
<cluster-name> task <task-id>"
+---------------+---------------------------------------+
| Task          | Details                               |
+---------------+---------------------------------------+
| status        | pending                               |
| backup_id     | Backup-STD3-X1Q4-GTJ3-WX4T            |
| creation_date | 2016-06-29 15:24:07.015535            |
| task_subtype  | upload                                |
| manager       | 10.62.169.160                         |
| cluster_id    | Cluster-P2WL-IV2B-V8S6-COIY           |
| error_info    | None                                  |
| task_type     | backup restore                        |
| task_id       | BackupRestoreTask-DBGB-SI8U-TMM7-KPUE |
| instance_id   | Instance-2YEE-CLUF-NEA8-NWWB          |
| cluster_tag   |                                       |
+---------------+---------------------------------------+
```

Related Commands

show ssc backup-restore cluster cluster-name backups

ssc backup-restore cluster create schedule

Creates a backup schedule.

Syntax

ssc backup-restore cluster create schedule *schedule_id* **frequency** *frequency* [**offset** *offset*] [**backup_time** *time*] [**info** *description*]

Parameters

schedule_id

Specify a unique name for the required backup schedule.

frequency *frequency*

Specify the basic frequency of the backup.

daily

A daily frequency. This requires a **backup_time** but not an **offset**.

hourly

An hourly frequency. This requires an **offset** but not a **backup_time**.

monthly

A monthly frequency. This requires both an **offset** and a **backup_time**.

weekly

A weekly frequency. This requires both an **offset** and a **backup_time**.

user_defined

A customised frequency. This requires an **offset** but not a **backup_time**.

backup_time *time*

Specify the backup time (HH:MM) for the schedule. This is supported for daily, weekly and monthly schedules only.

offset

Specify an offset for the selected frequency type, which more closely specifies the point at which the backup will be taken:

- For daily schedules, no offset is supported.
- For an hourly schedule, the offsets represent every quarter of an hour, expressed as minutes. That is: **0**, **15**, **30** and **45**.
- For monthly schedules, the offset is the day number on which the backup should be taken. This is limited to between **1** and **28**.
- For weekly schedules, the offset is the day of the week on which the backup should be taken. That is: **Monday**, **Tuesday**, **Wednesday**, **Thursday**, **Friday**, **Saturday**, **Sunday**. These offset values are displayed as the numbers 0 to 6 when the details for a schedule are displayed.
- For user defined schedules, various offsets are available: **15min**, **hour**, **12hour**, **week**, **month**.

info *description*

Optionally, specify a description for the schedule.

Usage Guidelines

Use the **no ssc backup-restore cluster create schedule <schedule_id>** command to delete a specified schedule.

NOTE
You cannot delete a schedule that is in use.

Once the schedule is created, you can associate it with one or more clusters using the **ssc cluster create cluster-name <cluster_id> schedule <schedule_id>** command.

Examples

```
>> create a daily backup schedule <<
amnesiac (config) # ssc backup-restore cluster create schedule sched-daily-01 frequency daily
backup_time 10:10 info "Daily backup schedule"
+-------------+-------------------------------------+
| Field       | Value                               |
+-------------+-------------------------------------+
| info        | Daily backup schedule               |
| schedule_id | BackupSchedule-MF06-31XX-0JWF-55R1  |
| tag         | sched-daily-01                      |
| frequency   | daily                               |
| backup_time | 10:10                               |
| offset      | 100                                 |
+-------------+-------------------------------------+

>> create an hourly backup schedule <<
amnesiac (config) # ssc backup-restore cluster create schedule sched-hourly-01 frequency hourly offset
30 info "Hourly backup schedule"
+-------------+-------------------------------------+
| Field       | Value                               |
+-------------+-------------------------------------+
| info        | Hourly backup schedule              |
| schedule_id | BackupSchedule-60V4-PWWB-I6M7-OMVA  |
| tag         | sched-hourly-01                     |
| frequency   | hourly                              |
| backup_time | N/A                                 |
| offset      | 30                                  |
+-------------+-------------------------------------+
>> create a monthly backup schedule <<
amnesiac (config) # ssc backup-restore cluster create schedule sched-monthly-01 frequency monthly
offset 11 backup_time 11:30 info "Monthly (11th) backup schedule"
+-------------+-------------------------------------+
| Field       | Value                               |
+-------------+-------------------------------------+
| info        | Monthly (11th) backup schedule      |
| schedule_id | BackupSchedule-F7AP-X5GP-Y974-WWF7  |
| tag         | sched-monthly-01                    |
| frequency   | monthly                             |
| backup_time | 11:30                               |
| offset      | 11                                  |
+-------------+-------------------------------------+

>> create a weekly backup schedule <<
amnesiac (config) #  ssc backup-restore cluster create schedule sched-weekly-01 frequency weekly offset
Wednesday backup_time 17:50 info "Weekly backup schedule"
+-------------+-------------------------------------+
| Field       | Value                               |
+-------------+-------------------------------------+
| info        | Weekly backup schedule              |
| schedule_id | BackupSchedule-LOUK-W5ZF-IAHR-M8KM  |
| tag         | sched-weekly-01                     |
| frequency   | weekly                              |
| backup_time | 17:50                               |
| offset      | 2                                   |
+-------------+-------------------------------------+

>> create a custom backup schedule <<
amnesiac (config) # ssc backup-restore cluster create schedule sched-user-01 frequency user_defined
offset 12hour info "12-hourly backup schedule"
+-------------+-------------------------------------+
| Field       | Value                               |
+-------------+-------------------------------------+
| info        | 12-hourly backup schedule           |
| schedule_id | BackupSchedule-PSYD-B5VS-1RY6-2TLA  |
| tag         | sched-user-01                       |
| frequency   | userdefined                         |
| backup_time | 14:16                               |
| offset      | 720                                 |
+-------------+-------------------------------------+
```

```
>> delete a schedule: successful <<
amnesiac (config) # no ssc backup-restore cluster schedule sched-monthly-02
Schedule deleted sucessfully

>> delete a schedule: unsuccessful, as already in use <<
amnesiac (config) # no ssc backup-restore cluster schedule sched-daily-01
Failed to delete schedule (Cannot purge a resource that is in use)
```

Related Commands

show ssc backup-restore cluster schedules, ssc backup-restore cluster update schedule, ssc cluster update cluster-name

ssc backup-restore cluster update schedule

Updates a backup schedule.

Syntax

ssc backup-restore cluster update schedule *schedule_id* [**new_name** *new_schedule_id*] [**frequency** *frequency*] [**offset** *offset*] [**backup_time** *time*] [**info** *description*]

Parameters

schedule_id
Specify the required backup schedule.

new_name *new_schedule_id*
Optionally, specify a new name for the schedule. This is supported for all schedules.

frequency *frequency*
Optionally, specify a new frequency for the backup.

daily
A daily frequency. This requires a **backup_time** but not an **offset**.

hourly
An hourly frequency. This requires an **offset** but not a **backup_time**.

monthly
A monthly frequency. This requires both an **offset** and a **backup_time**.

weekly
A weekly frequency. This requires both an **offset** and a **backup_time**.

user_defined
A customised frequency. This requires an **offset** but not a **backup_time**.

backup_time *time*
Optionally, specify a new backup time (HH:MM) for the schedule. This is supported for daily, weekly and monthly schedules only.

offset
Optionally, specify a new offset for the selected frequency type, which more closely specifies the point at which the backup will be taken:

- For daily schedules, no offset is supported.
- For an hourly schedule, the offsets represent every quarter of an hour, expressed as minutes. That is: **0**, **15**, **30** and **45**.
- For monthly schedules, the offset is the day number on which the backup should be taken. This is limited to between **1** and **28**.
- For weekly schedules, the offset is the day of the week on which the backup should be taken. That is: **Monday**, **Tuesday**, **Wednesday**, **Thursday**, **Friday**, **Saturday**, **Sunday**. These offset values are displayed as the numbers 0 to 6 when the details for a schedule are displayed.
- For user defined schedules, various offsets are available: **15min**, **hour**, **12hour**, **week**, **month**.

info *description*
Optionally, specify a new description for the schedule.

Usage Guidelines

Use the **no ssc backup-restore cluster create schedule <schedule_id>** command to delete a specified schedule.

NOTE
You cannot delete a schedule that is in use.

You can associate a schedule with one or more clusters using the **ssc cluster create cluster-name <cluster_id> schedule <schedule_id>** command.

Examples

```
ssc backup-restore cluster update schedule sched-weekly-01 offset Wednesday backup_time 12:20
+-------------+-------------------------------------+
| Field       | Value                               |
+-------------+-------------------------------------+
| info        | Weekly backup schedule              |
| schedule_id | BackupSchedule-LOUK-W5ZF-IAHR-M8KM |
| tag         | sched-weekly-01                     |
| frequency   | weekly                              |
| backup_time | 12:20                               |
| offset      | 2                                   |
+-------------+-------------------------------------+
```

Related Commands

show ssc backup-restore cluster schedules, ssc backup-restore cluster create schedule, ssc cluster update cluster-name

ssh client generate identity user

Generates SSH client identity keys for the specified user. SSH provides secure log in for Windows and UNIX clients and servers.

Syntax

ssh client generate identity user *user*

Parameters

user

Specify the client user login.

Usage Guidelines

The **no ssh client identity user <user>** command disables SSH client identity keys for a specified user.

Examples

```
amnesiac (config) # ssh client generate identity user test
```

Related Commands

show ssh client

ssh client user authorized-key key sshv2

Sets the RSA encryption method by RSA Security and authorized-key for the SSH user.

Syntax

[no] ssh client user *user* **authorized-key key sshv2** *public-key*

Parameters

user

Specify the user name. Must be an existing local user.

public-key

Specify the public key for SSH version 2 for the specified SSH user.

Usage Guidelines

The **no** command option disables the authorized-key encryption method.

Examples

```
amnesiac (config) # ssh client user admin authorized-key key sshv2 MyPublicKey
```

Related Commands

show ssh client

ssc cloud-reg create

Creates a cloud registration resource on the Services Director. This is required during automated self-registration of vTMs.

Syntax

ssc cloud-reg create reg-policy *registration-policy* [**e-mail** *email-address*] [**owner** *owner*] [[**tag** *name*]

Parameters

reg-policy

Select a self-registration policy for the cloud registration resource. This is the self-registration policy that will be used during the evaluation of a cloud-based vTM's self-registration.

e-mail

Optionally, specify a valid e-mail address that will be used to contact an administrator if required.

owner

Specify an owner for the cloud registration resource.
This property is optional when the resource is created, but there is a mandatory validation of this property during the evaluation of a cloud-based vTM's self-registration.

tag

Optionally, enter a unique name for the cloud registration resource.

Usage Guidelines

Once you have created the cloud registration resource, you must use the **show ssc cloud-reg user-data command** to display the user data for the cloud registration resource. This text is required during the AWS instance creation wizard for the first cloud-based vTM in a cluster. See the *Brocade Services Director Getting Started Guide* for full details of this process.

You cannot update a cloud registration resource once it is created.

Examples

```
>> list cloud registration resources <<
amnesiac (config) # ssc cloud-reg list
+-----------------+
| Message         |
+-----------------+
| No record found |
+-----------------+

>> create a new cloud registration <<
amnesiac (config) # ssc cloud-reg create reg-policy self-reg-01 owner JK tag jk-cloud-reg-01
+---------------------+------------------------------+
| Field               | Value                        |
+---------------------+------------------------------+
| tag                 | jk-cloud-reg-01              |
| owner               | Owner-S5HZ-52G9-HZS2-KIAO    |
| email_address       |                              |
| registration_policy | Policy-SH1M-L5BD-5L9L-YFKK   |
| date_created        | 2016-09-07 13:34:32.404407   |
| user_data_id        | UserData-Z28S-AXW9-PAVA-3YE3 |
+---------------------+------------------------------+

>> list cloud registration resources again <<
amnesiac (config) # ssc cloud-reg list
+------------------------------+-----------------+
| ID                           | Tag             |
+------------------------------+-----------------+
| UserData-Z28S-AXW9-PAVA-3YE3 | jk-cloud-reg-01 |
+------------------------------+-----------------+
```

Related Commands

show ssc cloud-reg, show ssc cloud-reg user-data, ssc cloud-reg delete, ssc cloud-reg list

ssc cloud-reg delete

Deletes a cloud registration resource on the Services Director.

Syntax

ssc cloud-reg delete id *cloud-reg-id*

Parameters

id

Select a cloud-registration resource that you want to delete.

Examples

```
>> list all cloud registration resources <<
gold-01 (config) # ssc cloud-reg list
+------------------------------+-------------------+
| ID                           | Tag               |
+------------------------------+-------------------+
| UserData-ORI9-YXGU-37VY-3OPQ | jk-cloud-reg-01   |
| UserData-NVF1-TLGP-R7EY-RUUY | cloud-reg-demo-01 |
+------------------------------+-------------------+

>> delete a cloud registration resource
gold-01 (config) # ssc cloud-reg delete id jk-cloud-reg-01
+-----------------------------------------------------------+
| Deleted                                                   |
+-----------------------------------------------------------+
| Cloud Registration UserData-ORI9-YXGU-37VY-3OPQ deleted |
+-----------------------------------------------------------+

>> list all cloud registration resources again <<
gold-01 (config) # ssc cloud-reg list
+------------------------------+-------------------+
| ID                           | Tag               |
+------------------------------+-------------------+
| UserData-NVF1-TLGP-R7EY-RUUY | cloud-reg-demo-01 |
+------------------------------+-------------------+
```

Related Commands

show ssc cloud-reg, show ssc cloud-reg user-data, ssc cloud-reg create, ssc cloud-reg list

ssc cloud-reg list

Displays a list of cloud registration resources on the Services Director.

Syntax

ssc cloud-reg list

Examples

```
amnesiac (config) # ssc cloud-reg list
+------------------------------+-------------------+
| ID                           | Tag               |
+------------------------------+-------------------+
| UserData-ORI9-YXGU-37VY-3OPQ | jk-cloud-reg-01   |
| UserData-NVF1-TLGP-R7EY-RUUY | cloud-reg-demo-01 |
+------------------------------+-------------------+
```

Related Commands

show ssc cloud-reg, show ssc cloud-reg user-data, ssc cloud-reg create, ssc cloud-reg delete

ssc cluster create cluster-name

Creates a User Created Services Director cluster.

Syntax

[no] ssc cluster create cluster-name *name* [**schedule** *schedule_id*] [**owner** *cluster-owner*] [**cl-port-offset** *cluster-port-offset*]

Parameters

name

Specify a unique name for the cluster.

schedule *schedule_id*

Optionally, specify an existing backup schedule for the cluster.

owner *cluster-name*

Optionally, specify an owner of the cluster.

cl-port-offset *cluster-port-offset*

Optionally, specify a port offset for the cluster.

Usage Guidelines

This cluster is available for use by deployed Brocade vTMs only.

You cannot create a *Discovered* cluster using the CLI.

To delete an empty cluster, use the **no ssc cluster cluster-name** command.

Examples

```
amnesiac (config) # ssc cluster create cluster-name JK-Cluster-01 schedule sched-user-01
+----------------------------+-----------------------------------+
| Field                      | Value                             |
+----------------------------+-----------------------------------+
| backup_success_sequence_num | None                             |
| backup_failure_count       | None                              |
| schedule_id                | BackupSchedule-PSYD-B5VS-1RY6-2TLA |
| tag                        | JK-Cluster-01                     |
| owner                      |                                   |
| backup_next_sequence_num   | None                              |
| children                   | None                              |
| restore_backup_name        | None                              |
| cluster_port_offset        | None                              |
| last_success_backup        | None                              |
| cluster_type               | User Created                      |
| last_backup_time           | None                              |
| status                     | Active                            |
| in_use                     | False                             |
| number_backups             | 5                                 |
| members                    | []                                |
| last_failed_backup         | None                              |
| restore_backup_status      | None                              |
| next_backup_time           | 2016-06-29 14:52:00               |
| task                       | None                              |
| restore_backup_time        | None                              |
| last_backup_status         | None                              |
+----------------------------+-----------------------------------+
```

Related Commands

show ssc cluster cluster-name, show ssc backup-restore cluster schedules, ssc backup-restore cluster update schedule

ssc cluster create template-name

Creates a User Created Services Director cluster based on a template.

Syntax

ssc cluster create template-name *name* [**cluster-name** *name*] | [**owner** *name*]

Parameters

name

Specify a name for the template.

cluster-name *name*

Optionally, specify a unique name for the cluster.

owner *name*

Optionally, specify an owner of the cluster.

Usage Guidelines

Create clusters with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to create the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

This cluster is available for use by deployed Brocade vTMs only.

You cannot create a *Discovered* cluster using the CLI.

Examples

```
amnesiac (config) # ssc cluster create template-name clusttemp owner admin
```

Related Commands

show ssc backup-restore cluster schedules, show ssc cluster cluster-name, ssc backup-restore cluster create schedule

ssc cluster list

Lists current clusters. This includes both Discovered and User Created clusters.

Syntax

ssc cluster list

Examples

```
amnesiac (config) # ssc cluster list
+-----------------------------+
| Cluster                     |
+-----------------------------+
| TK-327                      |
| Violet-Cluster              |
| TK-421                      |
| Cluster-A1BQ-V577-V8NY-UIDZ |
+-----------------------------+
```

Related Commands

show ssc cluster cluster-name

ssc cluster update cluster-name

Updates a Services Director cluster.

Syntax

ssc cluster update cluster-name *name* [**schedule** *schedule_id*] [**new-cluster-name** *name*] [**status** [**Active** | **Inactive**]]

Parameters

name

Specify the cluster name.

schedule *schedule_id*

Specify the required backup schedule for the cluster. This attaches the specified schedule to the cluster.

new-cluster-name *name*

Specify a new unique name for the cluster.

status [**Active** | **Inactive**]

Specify the status:

Active

Activates a resource.

Inactive

Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated after **Inactive** status has been specified.

Usage Guidelines

Use the **ssc cluster update cluster-name <cluster_id> schedule null** command to detach delete the specified schedule.

Examples

```
>> attach a schedule to a cluster <<
amnesiac (config) # ssc cluster update cluster-name Cluster-AQJE-R4HV-QYR1-9F4O schedule sched-daily-01
+-----------------------------+-------------------------------------------------------------------------+
| Field                       | Value                                                                   |
+-----------------------------+-------------------------------------------------------------------------+
| backup_success_sequence_num | None                                                                    |
| backup_failure_count        | None                                                                    |
| schedule_id                 | BackupSchedule-MF06-31XX-0JWF-55R1                                      |
| tag                         |                                                                         |
| owner                       |                                                                         |
| backup_next_sequence_num    | None                                                                    |
| children                    | None                                                                    |
| restore_backup_name         | None                                                                    |
| cluster_port_offset         | None                                                                    |
| last_success_backup         | None                                                                    |
| cluster_type                | Discovered                                                              |
| last_backup_time            | None                                                                    |
| status                      | Active                                                                  |
| in_use                      | True                                                                    |
| number_backups              | 5                                                                       |
| members                     | [u'Instance-R1ZQ-NEEJ-L89P-8MUP', u'Instance-KFXR-XQVF-ADRA-ZKRD']      |
| last_failed_backup          | None                                                                    |
| restore_backup_status       | None                                                                    |
| next_backup_time            | 2016-06-30 10:10:00                                                     |
| task                        | None                                                                    |
| restore_backup_time         | None                                                                    |
| last_backup_status          | None                                                                    |
+-----------------------------+-------------------------------------------------------------------------+

>> detach a schedule from a cluster <<
amnesiac (config) # ssc cluster update cluster-name Cluster-AQJE-R4HV-QYR1-9F4O schedule null
+-----------------------------+-------------------------------------------------------------------------+
| Field                       | Value                                                                   |
+-----------------------------+-------------------------------------------------------------------------+
| backup_success_sequence_num | None                                                                    |
| backup_failure_count        | None                                                                    |
| schedule_id                 | None                                                                    |
| tag                         |                                                                         |
| owner                       |                                                                         |
| backup_next_sequence_num    | None                                                                    |
| children                    | None                                                                    |
| restore_backup_name         | None                                                                    |
| cluster_port_offset         | None                                                                    |
| last_success_backup         | None                                                                    |
| cluster_type                | Discovered                                                              |
| last_backup_time            | None                                                                    |
| status                      | Active                                                                  |
| in_use                      | True                                                                    |
| number_backups              | 5                                                                       |
| members                     | [u'Instance-R1ZQ-NEEJ-L89P-8MUP', u'Instance-KFXR-XQVF-ADRA-ZKRD']      |
| last_failed_backup          | None                                                                    |
| restore_backup_status       | None                                                                    |
| next_backup_time            | None                                                                    |
| task                        | None                                                                    |
| restore_backup_time         | None                                                                    |
| last_backup_status          | None                                                                    |
+-----------------------------+-------------------------------------------------------------------------+
```

Related Commands

show ssc backup-restore cluster schedules, show ssc cluster cluster-name, ssc backup-restore cluster create schedule

ssc cluster update template-name

Updates a Services Director cluster based on the specified template.

Syntax

ssc cluster update template-name *name* [**cluster-name** *name*] [**status** [**Active** | **Inactive**]

Parameters

name

Specify the template name.

cluster-name *name*

Specify the cluster name.

status [**Active** | **Inactive**]

Specify the status:

Active

Activates a resource.

Inactive

Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

Usage Guidelines

Update a cluster with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc cluster update template-name clsttemp status Active
```

Related Commands

show ssc cluster cluster-name

ssc database local bind-address

Sets the local MySQL database bind address.

Syntax

[no] ssc database local bind-address *ip-addr*

Parameters

ip-addr

Specify the IP address.

Usage Guidelines

Use the **no** command option to delete the bind address.

Examples

```
amnesiac (config) # ssc database local bind-address 10.0.0.1
```

Related Commands

show ssc database local

ssc database local db-file delete

Deletes saved Services Director database file.

Syntax

ssc database local db-file delete *filename*

Parameters

filename

Specify the file name for the database.

Examples

```
amnesiac (config) # ssc database local db-file delete dbtest
```

Related Commands

show ssc database local

ssc database local db-file export

Exports the Services Director database to a file.

Syntax

ssc database local db-file export

Usage Guidelines

The name of the exported file is calculated automatically using the following format:

```
sscdb_dump_<SSC VA version string>_<timestamp>.sql
```

Examples

```
amnesiac (config) # ssc database local db-file export
```

Related Commands

show ssc database local db-file

ssc database local db-file import

Imports the Services Director database from a file.

Syntax

ssc database local db-file import *filename*

Parameters

filename

Specify the file name for the database.

Examples

```
amnesiac (config) # ssc database local db-file import dbtest
```

Related Commands

show ssc database local db-file

ssc database local port

Sets the local MySQL database port.

Syntax

[no] ssc database local port *port*

Parameters

port

Specify the port for the database.

Usage Guidelines

Use the **no** command option to delete the port.

Examples

```
amnesiac (config) # ssc database local port 1234
```

Related Commands

show ssc database local db-file

ssc database local username

Sets the local MySQL database username and password.

Syntax

ssc database local username *name* **password** *password*

Parameters

name

Specify the username for the local database.

password

Specify the password for the local database.

Examples

```
amnesiac (config) # ssc database local username ssc password abcd1234
+-------------+-------------+
| DB Username | DB Password |
+-------------+-------------+
| ssc         | abcd1234    |
+-------------+-------------+
```

Related Commands

show ssc database local credentials

ssc database remote address

Sets the hostname or IP address of the remote database.

Syntax

[no] ssc database remote address *address*

Parameters

address

Specify the hostname or IP address of the remote database.

Usage Guidelines

Use the **no** command option to delete the remote database address.

Examples

```
>> specify a hostname <<
amnesiac (config) # ssc database remote address dmankievicz-03.cam.demo.com
>> specify an IP address <<
amnesiac (config) # ssc database remote address 10.11.12.13
```

ssc database remote db-user-name

Sets the user with privileges for the remote database.

Syntax

ssc database remote db-user-name *name*

Parameters

name

Specify the database user name.

Examples

```
amnesiac (config) # ssc database remote db-user-name dbadmin
```

Related Commands

show ssc database remote

ssc database remote db-user-pwd

Sets the password for the user with privileges for the remote database.

Syntax

ssc database remote db-user-pwd *password*

Parameters

password

Specify the user password.

Examples

```
amnesiac (config) # ssc database remote db-user-pwd db1234
```

ssc database remote port

Sets the remote database port.

Syntax

[no] ssc database remote port *port*

Parameters

port

Specify the port for the remote database.

Usage Guidelines

Use the **no** command option to delete the remote port.

Examples

```
amnesiac (config) # ssc database remote port 1234
```

Related Commands

show ssc database remote

ssc database use-local

Sets the Services Director to use the local MySQL database.

Syntax

[no] ssc database use-local

Usage Guidelines

Use the **no** command option to stop using the local MySQL database.

Examples

```
amnesiac (config) # ssc database use-local
```

Related Commands

show ssc database remote

ssc feature-pack create fpname

Creates a Services Director feature pack.

Syntax

ssc feature-pack create fpname *name* **stm-sku** *sku-name* | [**excluded** *comma-separated-list*] | [**info** *description*] | [**add-on-skus** *comma-separated-list*]

Parameters

name

Specify a unique name.

stm-sku *sku-name*

Specify the Traffic Manager SKU on which the feature pack is based. This is limited to SKUs compatible with your Services Director license.

excluded *list*

Optionally, specify a list of features from the parent SKU that are excluded. These features include:

ts

Excludes TrafficScript

comp

Excludes compression

cache

Excludes caching

glb

Excludes global load balancing

bwm

Excludes bandwidth management classes

rate

Excludes rate shaping classes

slm

Excludes service level monitoring

auto

Excludes autoscaling

afm

Excludes use of SAF

apt

Excludes use of Aptimizer

This list is a comma-separated list enclosed in double quote marks.

info *description*

Optionally, specify information about the feature pack.

add-on-skus *list*

Optionally, specify a list of feature SKUs to be associated with the parent SKU. These include:

ADD-FIPS
: Federal Information Processing Standards (FIPs)

ADD-WAF
: Brocade Virtual Web Application Firewall

ADD-WEBACCEL
: Brocade Web Content Accelerator.

This list is a comma-separated list enclosed in double quote marks. A complete list can be seen using the **show ssc sku sku-name** command for your SKU.

Usage Guidelines

A feature pack is a subset of a Traffic Manager SKU. A SKU contains a defined feature set for the Traffic Manager that you can apply to instances.

You can view a list of available features for your SKU using the **show ssc sku sku-name**. You can then specify any of these for exclusion.

Examples

```
>> list available Feature Packs <<
amnesiac (config) #  ssc feature-pack list
+--------------+
| FeaturePack  |
+--------------+
| STM-400_full |
| STM-400_LB   |
+--------------+

>> list available SKUs <<
amnesiac (config) # ssc sku list
+--------------+
| Sku          |
+--------------+
| STM-WAFPROXY |
| STM-400      |
| STM-200      |
| STM-300      |
| STM-100      |
+--------------+

>> show details for your SKU to see its list of available features <<
amnesiac (config) # show ssc sku sku-name STM-400
+----------------------
+-------------------------------------------------------------------------------------------------+
| Field               |
Value                                                                                             |
+----------------------
+-------------------------------------------------------------------------------------------------+
| status              |
Active                                                                                            |
| pricing_model       |
hourly                                                                                            |
| add_on_skus         | [u'ADD-FIPS', u'ADD-WAF', u'ADD-WEBACCEL']                                                      |
| feature_tier        |
STM-400                                                                                           |
| features            | anlyt : Enable Realtime
Analytics.                                                  |
|                     | auto  : Enable
Autoscaling.                                                          |
|                     | bwm   : Enable Bandwidth Management
classes.                                                |
|                     | cache : Enable Web
Caching                                                               |
|                     | comp  : Enable
Compression                                                           |
|                     | cr    : Do not limit the user to cut-down RuleBuilder content routing for
TrafficScript. |
|                     | evnts : Enable Events and
Actions                                                    |
|                     | glb   : Enable Global Load
Balancing                                                 |
|                     | java  : Enable
Java.                                                                 |
|                     | kcd   : Kerberos Constrained
Delegation                                              |
|                     | lbcel : Array of
cells.                                                                |
|                     | lbcon : Least connection
based.                                                  |
|                     | lbfail: Balance failure class (used only for testing & debugging
purposes).  |
|                     | lbone : Always choose first node in a pool (used only for testing & debugging
purposes). |
|                     | lbrnd :
Random.                                                                           |
|                     | lbrob : Round
robin.                                                                 |
|                     | lbrsp : Fastest response
```

```
times.                                                          |
|                     | lbwcon: Weighted least connection
based.                                                  |
|                     | lbwrob: Weighted round
robin.                                                    |
|                     | loca  : Enable Location
support.                                                 |
|                     | moni  : Enable Active
Monitors                                                   |
|                     | rate  : Enable Rate Shaping
classes.                                               |
|                     | rb    : Do not limit the user to RuleBuilder for
TrafficScript.                          |
|                     | rhi   : Route Health
Injection.                                                 |
|                     | slm   : Enable Service Level
Monitoring.                                            |
|                     | spasp : ASP session
persistence.                                                |
|                     | spip  : IP-based session
persistence.                                            |
|                     | spj2  : J2EE session
persistence.                                               |
|                     | spkip : Application cookie session
persistence.                                          |
|                     | spnam : Named node session
persistence.                                           |
|                     | spsar : Transparent session
affinity.                                              |
|                     | spssl : SSL session ID session
persistence.                                         |
|                     | spuni : Universal session
persistence.                                          |
|                     | spxze : X-Zeus-backend cookie session
persistence.                                     |
|                     | ssl   : Enable
SSL                                                                 |
|                     | svcprt: Enable Service Protection
classes                                          |
|                     | ts    : Enable
TrafficScript                                                       |
|                     | xml   : Enable XML functions in
TrafficScript.                                     |
| info
|                                                                                                  |
| stm_sku             |
STM-400                                                                                          |
| fixed_resource_usage |
None                                                                                             |
| ent                 |
True                                                                                             |
| resource_unit       |
None                                                                                             |
| csp                 |
True                                                                                             |
+----------------------
+------------------------------------------------------------------------------------------------+

>> create a Feature Pack, excluding some features<<
amnesiac (config) # ssc feature-pack create fpname STM-400_XX stm-sku STM-400 excluded "lbrob" info
"STM-400 without Round-Robin Load Balancing"
+-------------+---------------------------------------------+
| Field       | Value                                       |
+-------------+---------------------------------------------+
| info        | STM-400 without Round-Robin Load Balancing |
| status      | Active                                      |
| stm_sku     | STM-400                                     |
| add_on_skus | []                                          |
| excluded    | lbrob                                       |
+-------------+---------------------------------------------+

>> confirm addition of the Feature Pack <<
```

```
amnesiac (config) # ssc feature-pack list
+--------------+
| FeaturePack  |
+--------------+
| STM-400_XX   |
| STM-400_full |
| STM-400_LB   |
+--------------+
```

Related Commands

show ssc feature-pack fpname

ssc feature-pack create template-name

Creates a feature pack based on an existing template.

Syntax

ssc feature-pack create template-name *name* | [**fpname** *name*] | [**stm-sku** *sku-name*] | [**excluded** *comma-separated-list*] | [**info** *description*] | [**add-on-skus** *name*]

Parameters

name

Specify a unique name for the feature pack template.

fpname *name*

Specify a unique name for the feature pack.

stm-sku *sku-name*

Specify the SKU Traffic Manager on which the feature pack is based. This is limited to SKUs compatible with your Services Director license.

excluded *list*]

Optionally, specify a list of features from the parent SKU that are excluded. These features include:

afm

Excludes use of SAF.

apt

Excludes use of Aptimizer

auto

Excludes autoscaling

bwm

Excludes bandwidth management classes

comp

Excludes compression

cache

Excludes caching

glb

Excludes global load balancing

rate

Excludes rate shaping classes

slm

Excludes service level monitoring

ts

Excludes TrafficScript

This list is a comma-separated list enclosed in double quote marks. A complete list can be seen using the **show ssc sku sku-name** command for your SKU.

info *description*

Optionally, specify information about the feature pack.

add-on-skus *list*

Optionally, specify a list of feature SKUs to be associated with the parent SKU:

ADDFIPS

Federal Information Processing Standards (FIPs)

ADDWAF

Brocade Virtual Web Application Firewall

ADDWEBACCEL

Brocade Web Content Accelerator

This list is a comma-separated list enclosed in double quote marks.

Usage Guidelines

A feature pack is a subset of a Traffic Manager SKU. A SKU contains a defined feature set for the Traffic Manager that you can apply to instances.

You can view a list of available features for your SKU using the **show ssc sku sku-name**. You can then specify any of these for exclusion.

Create feature-packs with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to create the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc feature-pack create template-name fptemp-1 fpname fp-1
```

Related Commands

show ssc feature-pack fpname, ssc template create template-name

ssc feature-pack list

Lists Services Director feature packs.

Syntax

ssc feature-pack list

Examples

```
amnesiac (config) # ssc feature-pack list
+-------------+
| FeaturePack |
+-------------+
| default-fp  |
+-------------+
```

Related Commands

show ssc feature-pack fpname, ssc feature-pack create fpname

ssc feature-pack update fpname

Updates a Services Director feature pack.

Syntax

ssc feature-pack update fpname *name* | [**info** *description*] | [**status** [**Active** | **Inactive**]]

Parameters

name

Specify the feature-pack name.

info *description*

Specify a description of the feature pack.

status [**Active** | **Inactive**]

Specify the status:

Active

Activates a resource.

Inactive

Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

Usage Guidelines

Update a resource to add or change common input parameters.

Examples

```
amnesiac (config) # ssc feature-pack update fpname fp-1 status Inactive
```

Related Commands

show ssc feature-pack fpname, ssc feature-pack create fpname

ssc feature-pack update template-name

Updates a Services Director feature pack based on the specified template.

Syntax

ssc feature-pack update template-name *name* | [**fpname** *name*] | [**info** *description*] | [**status** *Active* | | *Inactive*]]

Parameters

name

Specify the template name.

name

Specify the feature pack name.

info *description*

Specify information about the feature pack.

status [**Active** | **Inactive**]

Specify the status:

Active

Activates a resource.

Inactive

Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

Usage Guidelines

Update a feature-pack with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc feature-pack update template-name fptemp fpname fp1 status Inactive
```

Related Commands

show ssc feature-pack fpname, ssc template create template-name

ssc high-avail certificate

Displays the high availability certificate for a high availability node.

Syntax

ssc high-avail certificate *host-or-ip-addr*

Parameters

host-or-ip-addr

Specify the host name or IP address of a high availability node.

Usage Guidelines

This command is identical to the show ssc high-avail certificate on page 282 command.

Examples

```
amnesiac (config) # show ssc high-avail certificate host-01.example.domain.com
+---------------------+-------------------------------------------------------
| Certificate Details | host-01.example.domain.com
+---------------------+-------------------------------------------------------
| Server IP/Name      | host-01.example.domain.com
| Fingerprint         | 25:99:36:10:4E:9A:FB:23:8E:8F:37:FD:17:3B:34:4A:6E:...
|                     |
| Issued To           |
| Common Name         | amnesiac
| Organization        | amnesiac
| Organization Unit   | Created Sat Aug 29 02:14:29 2015
| Country             | XX
|                     |
| Issued By           |
| Common Name         | amnesiac
| Organization        | amnesiac
| Organization Unit   | Created Sat Aug 29 02:14:29 2015
| Country             | XX
|                     |
| Validity            |
| Effective On        | Sat, 29 Aug 2015 01:59:30 GMT
| Expires On          | Tue, 26 Aug 2025 01:59:30 GMT
|                     |
| Key                 |
| Type                | sha1withRSAEncryption
| Size                | 2048
|                     |
| PEM                 | -----BEGIN CERTIFICATE-----
|                     | MIIDXTCCAkUCCEs9poyyQcRZMA0GCSqGSIb3DQEBBQUAMHExSDFGFJ
|                     | .
|                     | . (certificate)
|                     | .
|                     | f6vS3P/U3/sIH3aJMQwD11+zNeQ/FXC+CCdFPx2qLvZ2Kpk3La153
|                     | 7cbGLjCk+QaRhA==
|                     | -----END CERTIFICATE-----
+---------------------+-------------------------------------------------------
```

Related Commands

show ssc high-avail certificate

ssc high-avail file-replication reset

Resets the file replication service for the current HA pair.

Syntax

ssc high-avail file-replication reset

Parameters

No parameters.

Examples

```
amnesiac (config) # ssc high-avail file-replication reset
```

Related Commands

ssc high-avail list

ssc high-avail create

Creates a Primary standalone Services Director from the current node. This command is useful to change the role of a Services Director after an ejection or other failure.

Syntax

ssc high-avail create traffic-ip *IP-or-hostname*

Parameters

traffic-ip

The IP address or host name of the required Service Endpoint Address.

Usage Guidelines

This command will be destructive to an HA pair if the current node is in an HA pair.

NOTE

If you want to change the Standby node of an HA pair into an Active node, use the ssc high-avail failover on page 421 command.

This command completes in the background. Use ssc high-avail list on page 429 to check its progress.

Examples

```
>> current HA status of current node (was a Standby) after ejection <<
amnesiac (config) # ssc high-avail list
+---+-----------------+-----+----------+------+----------- ...
| # | Cluster IP/Name | TIP | Database | Role | DB Health ...
+---+-----------------+-----+----------+------+----------- ...
+---+-----------------+-----+----------+------+----------- ...
    ... -+------------------+----------------+--------+----------+--------+
    ...  | Gluster FS Health | SSC Web Health | System | Serial # | Status |
    ... -+------------------+----------------+--------+----------+--------+
    ... -+------------------+----------------+--------+----------+--------+

>> initiate the change to a standalone Primary for the current node <<
amnesiac (config) # ssc high-avail create traffic-ip 10.62.167.203
+---+-----------------+-----+----------+------+----------- ...
| # | Cluster IP/Name | TIP | Database | Role | DB Health ...
+---+-----------------+-----+----------+------+----------- ...
|   | 10.62.167.199   |     |          |      |            ...
+---+-----------------+-----+----------+------+----------- ...
    ... +------------------+----------------+--------+----------+----------+
    ... | Gluster FS Health | SSC Web Health | System | Serial # | Status   |
    ... +------------------+----------------+--------+----------+----------+
    ... |                  |                |        |          | Creating |
    ... +------------------+----------------+--------+----------+----------+

>> after completion, a standalone Primary is reported <<
amnesiac (config) # ssc high-avail list
+---+-----------------+---------------+-------------------- ...
| # | Cluster IP/Name | TIP           | Database            ...
+---+-----------------+---------------+-------------------- ...
| 1 | 10.62.167.199   | 10.62.167.195 | 10.62.167.194:3306  ...
+---+-----------------+---------------+-------------------- ...
    ... +---------+-----------+------------------+---------------- ...
    ... | Role    | DB Health | Gluster FS Health | SSC Web Health  ...
    ... +---------+-----------+------------------+---------------- ...
    ... | Active  | Healthy   | Healthy          | Healthy         ...
    ... +---------+-----------+------------------+---------------- ...
        ... +-------------------------------+--------------+--------+
        ... | System                        | Serial #     | Status |
        ... +-------------------------------+--------------+--------+
        ... | rbt_ssc 2.3.0-mainline #134   | 005056A652CD | Active |
        ... +-------------------------------+--------------+--------+
```

Related Commands

ssc high-avail failover, ssc high-avail join, ssc high-avail list

ssc high-avail diagnose

Diagnoses causes for HA pair errors on the current node, and proposes available solutions.

Syntax

ssc high-avail diagnose

Parameters

No parameters.

Usage Guidelines

This command can be run on either the Active or Standby nodes. The diagnostic inspects the states of the three modules:

- web service
- database
- filestore replication

Based on the health of each module, the diagnostic command returns an instruction set which the user can follow to troubleshoot the issues.

Examples

```
amnesiac (config) # ssc high-avail diagnose
>> When there are errors (example) <<
+-----------+------------+--------------------+
| DB Status | SSC Status | Traffic IP Status |
+-----------+------------+--------------------+
| ok        | failed     | failed             |
+-----------+------------+--------------------+
+-------------------------------+-----------------------------------------+
| Solutions                     | Steps                                   |
+-------------------------------+-----------------------------------------+
| Demote current node to backup | 1: Release traffic ip on current node;  |
|                               | 2: Demote db to backup on current node; |
+-------------------------------+-----------------------------------------+
>> When there are no errors <<
+-----------+------------+--------------------+
| DB Status | SSC Status | Traffic IP Status |
+-----------+------------+--------------------+
| ok        | ok         | ok                 |
+-----------+------------+--------------------+
+-----------+-------+
| Solutions | Steps |
+-----------+-------+
+-----------+-------+
```

Related Commands

ssc high-avail discover, ssc high-avail eject, ssc high-avail ejectall, ssc high-avail failover, ssc high-avail force-failover, ssc high-avail force-standby, ssc high-avail join, ssc high-avail list, ssc high-avail reset, ssc high-avail update

ssc high-avail discover

Displays Primary Services Director nodes in the current subnet that do not belong to an HA pair.

Syntax

ssc high-avail discover

Parameters

No parameters.

Examples

```
amnesiac (config) #  ssc high-avail disc
+------------------+---------------------+
| Primary Hostname | Primary Server's IP |
+------------------+---------------------+
| axon-08          | 10.62.98.88         |
| axon-0b          | 10.62.98.91         |
| dvenkman-0f      | 10.62.98.79         |
| jsorrentino-01   | 10.62.99.193        |
| jsorrentino-03   | 10.62.99.195        |
| tkumar-24        | 10.62.99.164        |
| jsorrentino-1f   | 10.62.101.255       |
| jwhitehouse-1a   | 10.62.101.42        |
+------------------+---------------------+
```

Related Commands

ssc high-avail join, ssc high-avail list

ssc high-avail eject

Ejects a specified Standby node from the current HA pair.

Syntax

ssc high-avail eject *IP-or-hostname*

Parameters

IP-or-hostname

The IP address or host name of the Standby node to be ejected.

Usage Guidelines

This command must be used from the Active node.

Services Director supports a single Standby node.

Examples

```
>> check current HA configuration from Active node <<
amnesiac (config) # ssc high-avail list
+---+-----------------+---------------+---------------------+-------- ...
| # | Cluster IP/Name | TIP           | Database            | Role    ...
+---+-----------------+---------------+---------------------+-------- ...
| 1 | 10.62.167.201   | 10.62.167.202 | 10.62.167.201:3306 | Active  ...
| 2 | 10.62.167.199   |               | 10.62.167.199:3306 | Standby ...
+---+-----------------+---------------+---------------------+-------- ...
>> eject the Standby node <<
amnesiac (config) # ssc high-avail eject 10.62.167.199
+---+-----------------+---------------+---------------------+-------- ...
| # | Cluster IP/Name | TIP           | Database            | Role    ...
+---+-----------------+---------------+---------------------+-------- ...
| 1 | 10.62.167.201   | 10.62.167.202 | 10.62.167.201:3306 | Active  ...
+---+-----------------+---------------+---------------------+-------- ...
```

Related Commands

ssc high-avail diagnose, ssc high-avail discover, ssc high-avail ejectall, ssc high-avail failover, ssc high-avail force-failover, ssc high-avail force-standby, ssc high-avail join, ssc high-avail list, ssc high-avail reset, ssc high-avail update

ssc high-avail ejectall

Ejects all Standby nodes, and tidies all the Standby node metadata/configurations from the Active node. This command can be run even when there is no Standby node.

Syntax

ssc high-avail ejectall

Parameters

No parameters.

Usage Guidelines

This command must be used from the Active node.

Services Director supports a single Standby node.

Examples

```
>> check current HA configuration from Active node <<
amnesiac (config) # ssc high-avail list
+---+-----------------+---------------+---------------------+-------- ...
| # | Cluster IP/Name | TIP           | Database            | Role    ...
+---+-----------------+---------------+---------------------+-------- ...
| 1 | 10.62.167.201   | 10.62.167.202 | 10.62.167.201:3306 | Active  ...
| 2 | 10.62.167.199   |               | 10.62.167.199:3306 | Standby ...
+---+-----------------+---------------+---------------------+-------- ...>> eject the Standby node <<
amnesiac (config) # ssc high-avail ejectall
+---+-----------------+---------------+---------------------+-------- ...
| # | Cluster IP/Name | TIP           | Database            | Role    ...
+---+-----------------+---------------+---------------------+-------- ...
| 1 | 10.62.167.201   | 10.62.167.202 | 10.62.167.201:3306 | Active  ...
+---+-----------------+---------------+---------------------+-------- ...
```

Related Commands

ssc high-avail diagnose, ssc high-avail discover, ssc high-avail eject, ssc high-avail failover, ssc high-avail force-failover, ssc high-avail force-standby, ssc high-avail join, ssc high-avail list, ssc high-avail reset, ssc high-avail update

ssc high-avail failover

This command performs a failover from the Standby node of an HA pair.

Syntax

ssc high-avail failover backup-node *IP-or-hostname*

Parameters

backup-node *IP-or-hostname*

The IP address or host name of the Standby node. You must issue this command from this Standby node.

Usage Guidelines

Both Active and Standby nodes must be healthy to perform a failover.

As a result of the failover:

- The current Active and Standby nodes will exchange roles.
- The new Active node takes control of the HA pair for all purposes.
- The SEA/TIP points to the now-Active node.

This command completes in the background. Use ssc high-avail list on page 429 to check its progress.

Examples

```
>> current status of the HA pair <<
+---+-----------------+---------------+---------------------+- ...
| # | Cluster IP/Name | TIP           | Database            |  ...
+---+-----------------+---------------+---------------------+- ...
| 1 | 10.62.167.201   | 10.62.167.202 | 10.62.167.201:3306 |  ...
| 2 | 10.62.167.199   |               | 10.62.167.199:3306 |  ...
+---+-----------------+---------------+---------------------+- ...
    ... --------+-----------+-------------------+----------------+- ...
    ... Role    | DB Health | Gluster FS Health | SSC Web Health |  ...
    ... --------+-----------+-------------------+----------------+- ...
    ... Active  | Healthy   | Healthy           | Healthy        |  ...
    ... Standby | Healthy   | Healthy           | Healthy        |  ...
    ... --------+-----------+-------------------+----------------+- ...
        ... ----------------------------+--------------+--------+
        ... System                      | Serial #     | Status |
        ... ----------------------------+--------------+--------+
        ... rbt_ssc 2.3.0-mainline #134  | 005056A60F7D | Active |
        ... rbt_ssc 2.3.0-mainline #134  | 005056A677D3 | Active |
        ... ----------------------------+--------------+--------+

>> initiate failover from the Standby node <<
amnesiac (config) # ssc high-avail failover backup-node 10.62.167.199
Successfully initiated failover on Standby node(10.62.167.199).
Please check [ssc high-avail list] for status

>> check progress to confirm completion of the failover <<
amnesiac (config) # ssc high-avail list
+---+-----------------+---------------+---------------------+- ...
| # | Cluster IP/Name | TIP           | Database            |  ...
+---+-----------------+---------------+---------------------+- ...
| 1 | 10.62.167.201   |               | 10.62.167.201:3306 |  ...
| 2 | 10.62.167.199   | 10.62.167.202 | 10.62.167.199:3306 |  ...
+---+-----------------+---------------+---------------------+- ...
    ... --------+-----------+-------------------+----------------+- ...
    ... Role    | DB Health | Gluster FS Health | SSC Web Health |  ...
    ... --------+-----------+-------------------+----------------+- ...
    ... Standby | Healthy   | Healthy           | Healthy        |  ...
    ... Active  | Healthy   | Healthy           | Healthy        |  ...
    ... --------+-----------+-------------------+----------------+- ...
        ... ----------------------------+--------------+--------+
        ... System                      | Serial #     | Status |
        ... ----------------------------+--------------+--------+
        ... rbt_ssc 2.3.0-mainline #134  | 005056A60F7D | Active |
        ... rbt_ssc 2.3.0-mainline #134  | 005056A677D3 | Active |
        ... ----------------------------+--------------+--------+
>> Active and Standby have exchanged places, and SEA/TIP has moved <<
```

Related Commands

ssc high-avail diagnose, ssc high-avail discover, ssc high-avail eject, ssc high-avail ejectall, ssc high-avail force-failover, ssc high-avail force-standby, ssc high-avail join, ssc high-avail list, ssc high-avail reset, ssc high-avail update

ssc high-avail force-failover

This command enables you to perform a failover operation from a healthy Standby node after the Active node becomes unhealthy.

Syntax

ssc high-avail force-failover

Parameters

No parameters.

Usage Guidelines

This command is different from a regular failover, because the Active node is unhealthy in this case. A regular failover is only supported when both the Active and Standby nodes are healthy.

As a result of the forced failover:

- The current Standby nodes becomes the Active node.
- The SEA/TIP points to the now-Active node.
- The outcome on the unhealthy Active node depends on whether it can be contacted. If the unhealthy Active node can be contacted, it will become the Standby node. The Standby node remains unhealthy until repaired. If the unhealthy Active node cannot be contacted, it will remain as an Active node. When this node is repaired and returned to a healthy state, a "split brain" scenario will result. That is, two healthy nodes in an HA pair both believe themselves to be the Active node, and that the other node is the Standby.

  NOTE
  See ssc high-avail force-standby on page 425 for details of the "split brain" scenario, and for instructions on how to recover from it.

This command completes in the background. Use ssc high-avail list on page 429 to check its progress.

Examples

In this example:

- The unhealthy Active node is *amnesiac-01* (10.62.167.193).
- The healthy Standby node is *amnesiac-02* (10.62.167.194)
- The Service Endpoint Address (TIP) is 10.62.167.195.

```
>> View the status of the HA pair from the healthy Standby node <<
>> The Active node is unhealthy, the Standby node is healthy <<
amnesiac-02 (config) # ssc high-avail list
+---+-----------------+---------------+--------------------+--------- ...
| # | Cluster IP/Name | TIP           | Database           | Role     ...
+---+-----------------+---------------+--------------------+--------- ...
| 1 | 10.62.167.194   |               | 10.62.167.194:3306 | Standby  ...
| 2 | 10.62.167.193   | 10.62.167.195 | N/A                | Active   ...
+---+-----------------+---------------+--------------------+--------- ...
  ... +-----------+------------------+---------------- ...
  ... | DB Health | Gluster FS Health | SSC Web Health  ...
  ... +-----------+------------------+---------------- ...
  ... | Healthy   | Healthy           | Healthy         ...
  ... | Degraded  | Degraded          | Degraded        ...
  ... +-----------+------------------+---------------- ...
    ... +-------------------------------------------------------------------------+
    ... | Status                                                                  |
    ... +-------------------------------------------------------------------------+
    ... | Active                                                                  |
    ... | There was a problem communicating with machine 10.62.167.193:9080   |
    ... +-------------------------------------------------------------------------+

>> perform a force-failover to make the Standby node into the Active node <<
amnesiac-02 (config) # ssc high-avail force-failover 10.62.167.194

>> monitor progress of the forced failover until complete <<
amnesiac-02 (config) # ssc high-avail list
+---+-----------------+---------------+--------------------+--------- ...
| # | Cluster IP/Name | TIP           | Database           | Role     ...
+---+-----------------+---------------+--------------------+--------- ...
| 1 | 10.62.167.194   | 10.62.167.195 | 10.62.167.194:3306 | Active   ...
| 2 | 10.62.167.193   |               | N/A                | Active   ...
+---+-----------------+---------------+--------------------+--------- ...
  ... +-----------+------------------+---------------- ...
  ... | DB Health | Gluster FS Health | SSC Web Health  ...
  ... +-----------+------------------+---------------- ...
  ... | Healthy   | Healthy           | Healthy         ...
  ... | Degraded  | Degraded          | Degraded        ...
  ... +-----------+------------------+---------------- ...
    ... +-------------------------------------------------------------------------+
    ... | Status                                                                  |
    ... +-------------------------------------------------------------------------+
    ... | Active                                                                  |
    ... | There was a problem communicating with machine 10.62.167.193:9080   |
    ... +-------------------------------------------------------------------------+
```

Related Commands

ssc high-avail diagnose, ssc high-avail discover, ssc high-avail eject, ssc high-avail ejectall, ssc high-avail failover, ssc high-avail force-standby, ssc high-avail join, ssc high-avail list, ssc high-avail reset, ssc high-avail update

ssc high-avail force-standby

Performs a forced standby of an Active node.

Syntax

ssc high-avail force-standby

Parameters

No parameters.

Usage Guidelines

This command is intended as a way to recover from the "split brain" scenario. That is, two healthy nodes in an HA pair both believe themselves to be the Active node, and that the other node is the Standby.

This scenario is possible after a failed force-failover command (see ssc high-avail force-failover).

After this failure:

- The original Active node is unhealthy/uncontactable, and still configured as the Active node in an HA pair. Once repaired, it will show as healthy.
- The original Standby node is now the healthy current Active node.

To confirm this, log into both the Active and the Standby and check the list the high availability status of each. Each will show itself as Active and healthy. To resolve the "split brain", perform a force-standby on the original Active node. This performs the following actions:

- Switches the original Active node to be the new Standby.
- The HA pair reforms.

This command completes in the background. Use ssc high-avail list on page 429 to check its progress.

Examples

In this example:

- The original Active node (which failed by is now repaired) is *amnesiac-01* (10.62.167.193).
- The new Active node (the original Standby) is *amnesiac-02* (10.62.167.194)
- The Service Endpoint Address (TIP) is 10.62.167.195.

```
>> check the HA status of the original (repaired) Active node <<
amnesiac-01 (config) # ssc high-avail list
+---+-----------------+---------------+---------------------+--------- ...
| # | Cluster IP/Name | TIP           | Database            | Role     ...
+---+-----------------+---------------+---------------------+--------- ...
| 1 | 10.62.167.194   |               | 10.62.167.194:3306 | Standby  ...
| 2 | 10.62.167.193   | 10.62.167.195 | 10.62.167.193:3306 | Active   ...
+---+-----------------+---------------+---------------------+--------- ...

>> check the high availability status of the new Active node <<
amnesiac-02 (config) # ssc high-avail list
+---+-----------------+---------------+---------------------+--------- ...
| # | Cluster IP/Name | TIP           | Database            | Role     ...
+---+-----------------+---------------+---------------------+--------- ...
| 1 | 10.62.167.194   | 10.62.167.195 | 10.62.167.194:3306 | Active   ...
| 2 | 10.62.167.193   |               | N/A                 | N/A      ...
+---+-----------------+---------------+---------------------+--------- ...

>> initiate the force-standby from the original Active node <<
amnesiac-01 (config) # ssc high-avail force-standby

>> from the new Active node, check status - the HA pair dissolves <<
amnesiac-02 (config) # ssc high-avail list
+---+-----------------+----- ... -+------------------------+
| # | Cluster IP/Name | TIP  ...  | Status                 |
+---+-----------------+----- ... -+------------------------+
| 1 | 10.62.167.194   | 10.  ...  | Active                 |
| 1 | 10.62.167.193   |      ...  | File System detaching |
+---+-----------------+----- ... -+------------------------+
>> The HA pair begins to reform <<
amnesiac-02 (config) # ssc high-avail list
+---+-----------------+----- ... -+----------+
| # | Cluster IP/Name | TIP  ...  | Status   |
+---+-----------------+----- ... -+----------+
| 1 | 10.62.167.194   |      ...  | Creating |
| 1 | 10.62.167.193   |      ...  | Creating |
+---+-----------------+----- ... -+----------+
>> after a few minutes, the force-standby completes <<
amnesiac-02 (config) # ssc high-avail list
+---+-----------------+---------------+---------------------+--------- ...
| # | Cluster IP/Name | TIP           | Database            | Role     ...
+---+-----------------+---------------+---------------------+--------- ...
| 1 | 10.62.167.194   | 10.62.167.195 | 10.62.167.193:3306 | Active   ...
| 2 | 10.62.167.193   |               | 10.62.167.194:3306 | Standby  ...
+---+-----------------+---------------+---------------------+--------- ...
>> confirm this result from the new Standby node <<
amnesiac-01 (config) # ssc high-avail list
+---+-----------------+---------------+---------------------+--------- ...
| # | Cluster IP/Name | TIP           | Database            | Role     ...
+---+-----------------+---------------+---------------------+--------- ...
| 1 | 10.62.167.194   | 10.62.167.195 | 10.62.167.193:3306 | Active   ...
| 2 | 10.62.167.193   |               | 10.62.167.194:3306 | Standby  ...
+---+-----------------+---------------+---------------------+--------- ...
```

Related Commands

ssc high-avail diagnose, ssc high-avail discover, ssc high-avail eject, ssc high-avail ejectall, ssc high-avail failover, ssc high-avail force-failover, ssc high-avail join, ssc high-avail list, ssc high-avail reset, ssc high-avail update

ssc high-avail join

Joins the current unpaired Services Director node to a specified Primary Services Director node.

Syntax

ssc high-avail join *IP-or-hostname*

Parameters

IP-or-hostname

The IP address or host name of the Primary node.

Usage Guidelines

This command initially reports that an attempt to join is in progress, but completes in the background. Use ssc high-avail list on page 429 to check the progress of the join process.

Examples

```
>> confirm node is not in an HA pair <<
amnesiac (config) # ssc high-avail list
+---+-----------------+-----+----------+------+- ...
| # | Cluster IP/Name | TIP | Database | Role |
+---+-----------------+-----+----------+------+- ...
+---+-----------------+-----+----------+------+- ...
amnesiac (config) # ssc high-avail discover
+------------------+---------------------+
| Primary Hostname | Primary Server's IP |
+------------------+---------------------+
| jsorrentino-08   | 10.62.166.200       |
| jkumar-24        | 10.62.167.164       |
| jkelly-09        | 10.62.167.201       |
| jsorrentino-14   | 10.62.168.244       |
| jwhitehouse-1a   | 10.62.168.42        |
+------------------+---------------------+
amnesiac (config) # ssc high-avail join 10.62.167.201
+---+-----------------+-----+- ... -+--------------+
| # | Cluster IP/Name | TIP |  ...  | Status       |
+---+-----------------+-----+- ... -+--------------+
| 1 | 10.62.167.199   |     |  ...  | Node joining |
+---+-----------------+-----+- ... -+--------------+
amnesiac (config) # ssc high-avail list
+---+-----------------+-----+  ... -+----------------------+
| # | Cluster IP/Name | TIP |  ...  | Status               |
+---+-----------------+-----+- ... -+----------------------+
| 1 | 10.62.167.199   |     |  ...  | File System joining |
+---+-----------------+-----+- ... -+----------------------+
amnesiac (config) # ssc high-avail list
+---+-----------------+---------------+--------------------+- ...
| # | Cluster IP/Name | TIP           | Database           |  ...
+---+-----------------+---------------+--------------------+- ...
| 1 | 10.62.167.201   | 10.62.167.202 | 10.62.167.201:3306 |  ...
| 2 | 10.62.167.199   |               | 10.62.167.199:3306 |  ...
+---+-----------------+---------------+--------------------+- ...
    ... +---------+-----------+-------------------+---------------- ...
    ... | Role    | DB Health | Gluster FS Health | SSC Web Health  ...
    ... +---------+-----------+-------------------+---------------- ...
    ... | Active  | Healthy   | Healthy           + Healthy         ...
    ... | Standby | Healthy   | Healthy           + Healthy         ...
    ... +---------+-----------+-------------------+---------------- ...
        ... ----------------------------+--------------+--------+
        ... System                      | Serial #     | Status |
        ... ----------------------------+--------------+--------+
        ... rbt_ssc 2.3.0-mainline #134  | 005056A60F7D | Active |
        ... rbt_ssc 2.3.0-mainline #134  | 005056A677D3 | Active |
        ... ----------------------------+--------------+--------+
```

Related Commands

ssc high-avail diagnose, ssc high-avail discover, ssc high-avail eject, ssc high-avail ejectall, ssc high-avail list, ssc high-avail reset, ssc high-avail update

ssc high-avail list

Displays a list of nodes in the current HA pair.

Syntax

ssc high-avail list

Parameters

No parameters.

Usage Guidelines

For a standalone Services Director, only one node is listed.

This command is identical to the show ssc high-avail list on page 283 command.

Examples

```
>> for an HA pair <<
amnesiac (config) # ssc high-avail list
+---+-----------------+---------------+-------------------- ...
| # | Cluster IP/Name | TIP           | Database            ...
+---+-----------------+---------------+-------------------- ...
| 1 | jacaranda       | 10.62.167.195 | 10.62.167.194:3306  ...
| 2 | amnesiac        |               | 10.62.167.193:3306  ...
+---+-----------------+---------------+-------------------- ...
    ... +---------+-----------+-------------------+---------------- ...
    ... | Role    | DB Health | Gluster FS Health | SSC Web Health  ...
    ... +---------+-----------+-------------------+---------------- ...
    ... | Active  | Healthy   | Healthy           + Healthy         ...
    ... | Standby | Healthy   | Healthy           + Healthy         ...
    ... +---------+-----------+-------------------+---------------- ...
        ... +-------------------------------+--------------+--------+
        ... | System                        | Serial #     | Status |
        ... +-------------------------------+--------------+--------+
        ... | rbt_ssc 2.3.0-mainline #134   | 005056A652CD | Active |
        ... | rbt_ssc 2.3.0-mainline #134   | 005056A66723 | Active |
        ... +-------------------------------+--------------+--------+

>> for a standalone node <<
amnesiac (config) # ssc high-avail list
+---+-----------------+---------------+-------------------- ...
| # | Cluster IP/Name | TIP           | Database            ...
+---+-----------------+---------------+-------------------- ...
| 1 | jacaranda       | 10.62.167.195 | 10.62.167.194:3306  ...
+---+-----------------+---------------+-------------------- ...
    ... +---------+-----------+-------------------+---------------- ...
    ... | Role    | DB Health | Gluster FS Health | SSC Web Health  ...
    ... +---------+-----------+-------------------+---------------- ...
    ... | Active  | Healthy   | Healthy           + Healthy         ...
    ... +---------+-----------+-------------------+---------------- ...
        ... +-------------------------------+--------------+--------+
        ... | System                        | Serial #     | Status |
        ... +-------------------------------+--------------+--------+
        ... | rbt_ssc 2.3.0-mainline #134   | 005056A652CD | Active |
        ... +-------------------------------+--------------+--------+

>> for a node that is not in an HA pair <<
+---+-----------------+---------------+-------------------- ...
| # | Cluster IP/Name | TIP           | Database            ...
+---+-----------------+---------------+-------------------- ...
+---+-----------------+---------------+-------------------- ...
    ... +---------+-----------+-------------------+---------------- ...
    ... | Role    | DB Health | Gluster FS Health | SSC Web Health  ...
    ... +---------+-----------+-------------------+---------------- ...
    ... +---------+-----------+-------------------+---------------- ...
        ... +-------------------------------+--------------+--------+
        ... | System                        | Serial #     | Status |
        ... +-------------------------------+--------------+--------+
        ... +-------------------------------+--------------+--------+
```

Related Commands

ssc high-avail diagnose, ssc high-avail discover, ssc high-avail eject, ssc high-avail ejectall, ssc high-avail failover, ssc high-avail force-failover, ssc high-avail force-standby, ssc high-avail join, ssc high-avail reset, ssc high-avail update

ssc high-avail reset

Performs a factory reset on the current high availability node. This erases the entire HA configuration.

Syntax

ssc high-avail reset

Parameters

No parameters.

Usage Guidelines

After this command completes, the Services Director must be restarted.

After using this command, you can use:

- ssc high-avail create on page 415 to create a standalone node.
- ssc high-avail join on page 427 to join an HA pair.

Examples

```
>> logged in on Standby, display current state of HA pair <<
amnesiac (config) # ssc high-avail list
+---+-----------------+---------------+-------------------- ...
| # | Cluster IP/Name | TIP           | Database            ...
+---+-----------------+---------------+-------------------- ...
| 1 | jacaranda       | 10.62.167.195 | 10.62.167.194:3306  ...
| 2 | amnesiac        |               | 10.62.167.193:3306  ...
+---+-----------------+---------------+-------------------- ...
    ... +---------+-----------+------------------+---------------- ...
    ... | Role    | DB Health | Gluster FS Health | SSC Web Health  ...
    ... +---------+-----------+------------------+---------------- ...
    ... | Active  | Healthy   | Healthy           + Healthy         ...
    ... | Standby | Healthy   | Healthy           + Healthy         ...
    ... +---------+-----------+------------------+---------------- ...
        ... +------------------------------+--------------+--------+
        ... | System                       | Serial #     | Status |
        ... +------------------------------+--------------+--------+
        ... | rbt_ssc 2.3.0-mainline #134  | 005056A652CD | Active |
        ... | rbt_ssc 2.3.0-mainline #134  | 005056A66723 | Active |
        ... +------------------------------+--------------+--------+>> remove this node (Standby) from
its HA pair <<
amnesiac (config) # ssc high-avail reset
+---+-----------------+---------------+-------------------- ...
| # | Cluster IP/Name | TIP           | Database            ...
+---+-----------------+---------------+-------------------- ...
+---+-----------------+---------------+-------------------- ...
    ... +---------+-----------+------------------+---------------- ...
    ... | Role    | DB Health | Gluster FS Health | SSC Web Health  ...
    ... +---------+-----------+------------------+---------------- ...
    ... +---------+-----------+------------------+---------------- ...
        ... +------------------------------+--------------+--------+
        ... | System                       | Serial #     | Status |
        ... +------------------------------+--------------+--------+
        ... +------------------------------+--------------+--------+
```

Related Commands

ssc high-avail diagnose, ssc high-avail discover, ssc high-avail eject, ssc high-avail ejectall, ssc high-avail failover, ssc high-avail force-failover, ssc high-avail force-standby, ssc high-avail join, ssc high-avail list, ssc high-avail update

ssc high-avail token

Displays the current high availability access token. This is present on nodes within HA pairs, and on standalone nodes. Paired nodes must share a high availability access token, which is used to enable authenticated communication between the HA nodes.

Syntax

ssc high-avail token

Parameters

No parameters.

Usage Guidelines

This command is identical to the ssc high-avail token list on page 436 command.

Examples

```
amnesiac (config) # ssc high-avail token
+--------------------------------------+------------------------- ...
| Token ID                             | Access Token             ...
+--------------------------------------+------------------------- ...
| 3f4a1f71-665c-46e7-aa30-11f2abd6a06d | eyJhdWQiOiAiaHgJaTgRdPcA ...
|                                      | ZW4iLCAiaXNzIjHGwEFggTAf ...
|                                      | ZG1pbiIsICJqdGKjHgkkjGhj ...
|                                      | ZDZhMDZkIiwgImLjhFerwFGH ...
+--------------------------------------+------------------------- ...
    ... ----------------------+-------------+
    ...                       | Description |
    ... ----------------------+-------------+
    ... BpL2NvbW1vbi8xLjAvdG9r | cluster     |
    ... AxIiwgInBybiI6ICJsai1h |             |
    ... 00NmU3LWFhMzAtMTFmMmFi |             |
    ... IxNDQxMjYyMTc2In0=     |             |
    ... ----------------------+-------------+
```

Related Commands

ssc high-avail list, ssc high-avail token add, ssc high-avail token generate, ssc high-avail token remove

ssc high-avail token add

Adds a token to the current high availability access token. This can be either a node in an HA pair, or standalone node.

Syntax

ssc high-avail token add

Parameters

No parameters.

Usage Guidelines

This command can only be used when there is no assigned token. Use the ssc high-avail token remove on page 437 command to remove the current token.

Examples

```
>> confirm no token currently set <<
amnesiac (config) # ssc high-avail token
+----------+--------------+-------------+
| Token ID | Access Token | Description |
+----------+--------------+-------------+
+----------+--------------+-------------+

>> add different token <<
amnesiac (config) # ssc high-avail token add description cluster_token access-token
eyJhdWQiOiAiaH...QxMjc5MTczIn0=

Access token added successfully.

>>confirm addition of new token <<
amnesiac (config) # ssc high-avail token
+--------------------------------------+---------------- ...
| Token ID                             | Access Token   ...
+--------------------------------------+---------------- ...
| f134a204-6b89-46b5-b796-8ddd06377eb6 | eyJhdWQiOiAiaH ...
|                                      | ZW4iLCAiaXNzIj ...
|                                      | biIsICJqdGkiOi ...
|                                      | ZWI2IiwgImV4cC ...
+--------------------------------------+---------------- ...
    ... ----------------------+---------------+
    ...                       | Description   |
    ... ----------------------+---------------+
    ... pL2NvbW1vbi8xLjAvdG9r | cluster_token |
    ... xIiwgInBybiI6ICJhZG1p |               |
    ... 1LWI3OTYtOGRkZDA2Mzc3 |               |
    ... xMjc5MTczIn0=         |               |
    ... ----------------------+---------------+
```

Related Commands

ssc high-avail list, ssc high-avail token, ssc high-avail token generate, ssc high-avail token list, ssc high-avail token remove

ssc high-avail token generate

Generates a new high availability access token for the current node. This can be either a node in an HA pair, and on standalone node.

Syntax

ssc high-avail token

Parameters

No parameters.

Examples

```
amnesiac (config) # ssc high-avail token generate
+--------------------------------------+------------------------- ...
| Token ID                             | Access Token             ...
+--------------------------------------+------------------------- ...
| 3f4a1f71-665c-46e7-aa30-11f2abd6a06d | eyJhdWQiOiAiaHgJaTgRdPcA ...
|                                      | ZW4iLCAiaXNzIjHGwEFggTAf ...
|                                      | ZG1pbiIsICJqdGKjHgkkjGhj ...
|                                      | ZDZhMDZkIiwgImLjhFerwFGH ...
+--------------------------------------+------------------------- ...
    ... ----------------------+-------------+
    ...                       | Description |
    ... ----------------------+-------------+
    ... BpL2NvbW1vbi8xLjAvdG9r | cluster     |
    ... AxIiwgInBybiI6ICJsai1h |             |
    ... 00NmU3LWFhMzAtMTFmMmFi |             |
    ... IxNDQxMjYyMTc2In0=     |             |
    ... ----------------------+-------------+
```

Related Commands

ssc high-avail list, ssc high-avail token, ssc high-avail token add, ssc high-avail token list, ssc high-avail token remove

ssc high-avail token list

Displays the current high availability access token.

Usage Guidelines

This command is identical to the ssc high-avail token on page 433 command.

ssc high-avail token remove

Removes the high availability access token from the current node. This can be either a node in an HA pair, and on standalone node.

Syntax

ssc high-avail token *token-id*

Parameters

token-id

The token ID. Use ssc high-avail token on page 433 to display this for the current node.

Examples

```
>> list current token <<
amnesiac (config) # ssc high-avail token
+--------------------------------------+------------------------- ...
| Token ID                             | Access Token             ...
+--------------------------------------+------------------------- ...
| 3f4a1f71-665c-46e7-aa30-11f2abd6a06d | eyJhdWQiOiAiaHgJaTgRdPcA ...
|                                      | ZW4iLCAiaXNzIjHGwEFggTAf ...
|                                      | ZG1pbiIsICJqdGKjHgkkjGhj ...
|                                      | ZDZhMDZkIiwgImLjhFerwFGH ...
+--------------------------------------+------------------------- ...
    ... ----------------------+-------------+
    ...                       | Description |
    ... ----------------------+-------------+
    ... BpL2NvbW1vbi8xLjAvdG9r | cluster     |
    ... AxIiwgInBybiI6ICJsai1h |             |
    ... 00NmU3LWFhMzAtMTFmMmFi |             |
    ... IxNDQxMjYyMTc2In0=     |             |
    ... ----------------------+-------------+

>> remove current HA access token <<
amnesiac (config) # ssc high-avail token remove 3f4a1f71-665c-46e7-aa30-11f2abd6a06d
Token ID '3f4a1f71-665c-46e7-aa30-11f2abd6a06d' removed successfully.

>> confirm removal <<
amnesiac (config) # ssc high-avail token
+----------+--------------+-------------+
| Token ID | Access Token | Description |
+----------+--------------+-------------+
+----------+--------------+-------------+
```

Related Commands

ssc high-avail list, ssc high-avail token, ssc high-avail token add, ssc high-avail token generate, ssc high-avail token list

ssc high-avail update

Updates the Service Endpoint Address of an HA pair (or standalone Services Director).

Syntax

ssc high-avail update traffic-ip *IP-or-hostname*

Parameters

traffic-ip

The IP address or host name of the new Service Endpoint Address.

Usage Guidelines

This command can be issued from either the Active or the Standby node.

NOTE
Do not use this command from the Service Endpoint Address node. The command will fail.

This command affects FLA licensing for Brocade vTMs:

- Any Legacy FLA licenses that were created to service the current Service Endpoint Address will fail when the Service Endpoint Address changes. To fix this, generate a new Legacy FLA based on the new Service Endpoint Address.
- Any Universal FLA licenses that are tied to the current Service Endpoint Address will need to be relicensed (see ssc instance relicense instance-name).

NOTE
After this command completes, a restart of your Services Director service is required.

Examples

```
>> display the current Service Endpoint Address (TIP) <<
amnesiac (config) # ssc high-avail list
+---+-----------------+---------------+-------------------- ...
| # | Cluster IP/Name | TIP           | Database            ...
+---+-----------------+---------------+-------------------- ...
| 1 | 10.62.167.201   | 10.62.167.200 | 10.62.167.201:3306  ...
| 2 | 10.62.167.199   |               | 10.62.167.199:3306  ...
+---+-----------------+---------------+-------------------- ...
>> change the Service Endpoint Address (TIP) <<
amnesiac (config) # ssc high-avail update traffic-ip 10.62.167.202
+---+-----------------+---------------+-------------------- ...
| # | Cluster IP/Name | TIP           | Database            ...
+---+-----------------+---------------+-------------------- ...
| 1 | 10.62.167.201   | 10.62.167.202 | 10.62.167.201:3306  ...
| 2 | 10.62.167.199   |               | 10.62.167.199:3306  ...
+---+-----------------+---------------+-------------------- ...
>> restart the service <<
amnesiac (config) # ssc service restart
```

Related Commands

ssc high-avail list, ssc service restart

ssc host add host-name

Adds a Services Director instance host.

Syntax

ssc host add host-name *unique-name* **host-user** *admin-name* **host-pass** *admin-password* **username** *name* | [**usage-info** *description*] | [**retained-info-dir** *directory*] | [**max-instances** *number*] | [**cpu-cores** *string*] | [**info** *description*]

Parameters

host-name *name*
Specify a unique name for this resource.

host-user *name*
Specify the host administrator user name; you must specify **sscadmin**.

host-pass *password*
Specify the host administrator password; the default value is **password**.

username *user*
Specify the user for SSH access; this user must be root.

usage-info *description*
This property is not used.

retained-info-dir *directory*
This property is not used.

max-instances *size*
The number of instances that you can create on this host.

cpu-cores *string*
This property is not used.

info *description*
Optionally, specify descriptive information.

Usage Guidelines

Use the **no ssc host hostname <name>** to delete the host.

Examples

```
amnesiac (config) # ssc host add host-name test-demo1 host-user sscadmin host-pass password username
root
```

Related Commands

show ssc host host-name, ssc host update host-name

ssc host add template-name

Adds a Services Director host based on a template. Optionally, adds or changes the current values for the new host.

Syntax

ssc host add template-name *name* | [**host-name** *name*] | [**host-user** *admin-name*] | [**host-pass** *admin-password*] | [**username** *name*] | [**usage-info** *description*] | [**retained-info-dir** *number*] | [**max-instances** *number*] | [**cpu-cores** *string*] | [**info** *description*]

Parameters

name
Specify the unique name for the template.

host-name *name*
Optionally, specify the host name.

host-user *name*
Optionally, specify the administrator user name. The default value is **sscadmin**.

host-pass *admin-password*
Optionally, specify the administrator password; the default value is **password**.

username *user*
Optionally, specify the user for SSH access; this user must be **root**.

retained-info-dir *directory*
This property is not used.

usage-info *description*
This property is not used.

max-instances *size*
The number of instances that you can create on this host.

cpu-cores *string*
This property is not used.

info *description*
Optionally, specify descriptive information about the new host.

Usage Guidelines

Before you can use this command, you must first create a host template using the **ssc template create** command. Optionally, you can add or modify the current values the specified for the new host.

Examples

```
amnesiac (config) # ssc host add template-name htemp1 host-name test-demo username root
```

Related Commands

show ssc host host-name, ssc template create template-name

ssc host host-migrate

Migrate Brocade vTM instances between hosts within the same subnet.

Syntax

ssc host host-migrate from *name-from* **to** *name-or-ip-addr-from* [**force** *yes-or-no*]

Parameters

name-or-ip-addr-from

Specify the name of the instance host where the Traffic Manager is migrating from

ip-addr-to

Optionally, specify the IP address or the name of the instance host where the Traffic Manager is migrating to.

force *yes-or-no*

Forces migration of Traffic Managers regardless of the network topology.

Examples

```
amnesiac (config) # ssc host host-migrate from 10.0.0.1 to 10.0.05 force yes
```

Related Commands

show ssc host host-name

ssc host host-name <name> dns

Configures instance host DNS settings.

Syntax

ssc host host-name *name* **dns dns-nameservers** *dns-name-servers* | [**dns-search** *dns-subfixes*]

Parameters

name

Specify a unique name for the host.

dns-nameservers *dns-name-servers*

Specify the DNS name server.

dns-search *dns-subfixes*

Optionally, specify a comma separated list of searched domain subfixes.

Examples

```
amnesiac (config) # ssc host host-name test dns dns-nameservers dnstest
```

Related Commands

show ssc host host-name

ssc host host-name <name> interface <name> dhcp

Configures host instance DHCP on the specified interface.

Syntax

ssc host host host-name *name* **interface** *interface-name* **dhcp** | [**dns-nameservers** *dns-name-servers*] | [**dns-search** *dns-subfixes*] | [**auto**]

Parameters

name
Specify the host name.

interface *interface-name*
Specify the interface name

dhcp
Specify to enable DHCP on this interface.

dns-nameservers *dns-name-servers*
Optionally, specify the DNS name server.

dns-search *dns-subfixes*
Optionally, specify a comma separated list of searched domain subfixes.

auto
Optionally, specify this interface to automatically start up.

Examples

```
amnesiac (config) # ssc host host host-name host1 interface lxcbr0 dhcp
```

Related Commands

show ssc host host-name

ssc host host-name <name>< interface <name> ip

Configures the static IP address for the specified interface.

Syntax

ssc host host host-name *name* **interface** *interface-name* **ip** *ip-addr* **netmask** *netmask* | [**gateway** *ip-addr*] | [**dns-nameservers** *dns-name-servers*] | [**dns-search** *dns-subfixes*] | [**auto**]

Parameters

name
Specify a unique name for the host.

interface *interface-name*
Specify the interface name

ip *ip-addr*
Specify the IP address on this interface.

netmask *netmask-addr*
Specify the netmask address.

gateway *ip-addr*
Specify the IP address for the gateway.

dns-nameservers *dns-name-servers*
Specify the DNS name server.

dns-search *dns-subfixes*
Optionally, specify a comma separated list of searched domain subfixes.

auto
Optionally, specify this interface to automatically start up.

Examples

```
amnesiac (config) # ssc host host host-name host1 interface lxcbr0 ip 10.0.0.1 netmask 255.255.255.0
gateway 10.0.0.2
```

Related Commands

show ssc host host-name

ssc host host-name <name> user

Configures the log in username and password for the Services Director host.

Syntax

ssc host host-name *name* **user** *name* **password** *password*

Parameters

name

Specify the host name.

name

Specify the login username for the host.

password

Specify the login password for the host.

Examples

```
amnesiac (config) # ssc host host-name host1 user admin password test123
```

Related Commands

show ssc host host-name

ssc host list

Lists the Services Director hosts.

Syntax

ssc host list

Examples

```
amnesiac (config) # ssc host list
+---------------+
| Host          |
+---------------+
| tmainline68-h |
+---------------+
```

Related Commands

ssc host add host-name

ssc host provision

Provisions a host instance in the Services Director.

Syntax

ssc host provision name *unique-name* **flavor** [**small** | **large**] **esx-uri** *URI-or-path-to-esxi-host* **esx-user** *esxi-username* **esx-pass** *esxi-password* **storage** *esxi-datastore-name* **host-user** *host-username* | [**host-info** *ssc-host-info*] | [**net-mgmt** *mgmt-interface-mapping*] | [**net-lan** *lan-interface-mapping*] | [**net-wan** *wan-interface-mapping*]

Parameters

name *unique-name*

Specify a unique name for the instance host. This name is used to set the hostname of the provisioned VM. This is required for all instance hosts.

flavor [**small** | **large**]

Specify the flavor (the size) of the host:

small

specifies 2 CPU and 4 GB memory.

large

specifies 4 CPU and 8 GB memory.

esx-uri *URI-of-deployed-esxi-host*

Specify the URI to the ESXi host where this host is to be deployed.

esx-user *esxi-username*

Specify the ESXi host username used for the provisioned host instance.

esx-pass *esxi-password*

Specify the ESXi password used for the provisioned host instance.

storage *esxi-datastore-name*

Specify the ESXi host storage pool, for example **datastore1**

host-user *host-username*

Specify the name of the user that manages the host.

host-info *ssc-host-info*

Optionally, specify the information for the new Services Director host.

net_mgmt *mgmt-interface-mapping*

Optionally, specify the virtual network that the host management interface maps.

net_lan *lan-interface-mapping*

Optionally, specify the virtual network that the LAN interface maps.

net_wan *wan-interface-mapping*

Optionally, specify the virtual network that the WAN management interface maps.

Usage Guidelines

NOTE

This command works only on ESXi 5.0 and 5.1. It is not supported on ESXi 5.5.

When you execute this command, it untars the OVA, repackages the SSH public key created above and it is provisioned on ESXi. After the host is created in ESXi, the public key is assigned to the user defined in this command (for example, **root**). After this command is executed you can SSH to the host without a password.

You must import the host OVA and create a host resource before you can create an instance.

NOTE
This command works only on ESXi 5.0 and 5.1. It is not supported on ESXi 5.5.

Examples

```
amnesiac (config) # amnesiac (config) # ssc host provision name test flavor small esx-uri esx://
sf.test.com esx-user admin esx-pass brocade storage datastore1 host-user root
```

Related Commands

show ssc host host-name, ssc host list

ssc host ssh-clear-key

Clears known SSH host entries for a given host.

Syntax

ssc host ssh-clear-key host-name *name*

Parameters

name

Specify the host name.

Examples

```
amnesiac (config) # ssc host ssh-clear-key host-name host1
```

Related Commands

show ssc host host-name, ssc host list

ssc host update host-name

Updates values for a Services Director host.

Syntax

ssc host update host-name *host* | [**username** *user*] | [**status** [**Active** | **Inactive**]] | [**usage-info** *description*] | [**max-instances** *number*] | [**cpu-cores** *string*] | [**info** *description*]

Parameters

host
Specify the host name.

username *user*
Optionally, specify the user for SSH access; this user must be **root**.

status [**Active** | **Inactive**]
Specify the status:

Active
Activates a resource.

Inactive
Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

usage-info *description*
This property is not used.

max-instances *size*
The number of instances that you can create on this host.

cpu-cores *string*
This property is not used.

info *description*
Optionally, specify descriptive information about the new host.

Usage Guidelines

Update a host resources to add or change common parameters.

Examples

```
>>Parameter change<<
amnesiac (config) # ssc host update host-name host1 status Inactive
```

Related Commands

show ssc host host-name, ssc host list, ssc host add host-name

ssc host update template-name

Updates a Services Director host based on the specified template.

Syntax

ssc host update template-name *name* | [**host-name** *name*] | [**username** *name*] | [**status** [**Active** | **Inactive**]] | [**info** *description*]

Parameters

name
Specify the template name.

host-name *name*
Specify the host name.

username *name*
Optionally, specify the user for SSH access; this user must be **root**.

status *Active* | *Inactive*
Specify the status:

Active
Activates a resource.

Inactive
Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

info *description*
Optionally, specify descriptive information about the new host.

Usage Guidelines

Update an instance host with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc host update template-name hosttemp1 status Active
```

Related Commands

show ssc host host-name, ssc template create template-name

ssc import-cert

Imports an SSL certificate.

Syntax

ssc import-cert *cert-data* | [**import-key** *key-data*] | [**password** *password*]

Parameters

cert-data
Specify the certificate data in PEM format.

import-key *key-data*
Specify the key data in PEM format.

password *password*
Specify the private key password.

Usage Guidelines

You must import the SSL certificate and private key before you create instances.

Examples

```
amnesiac (config) # ssc import-cert "cert-data" import-key "<key-data>"
```

Related Commands

show ssc certificate

ssc import-cert-key

Imports an SSL certificate and private key.

Syntax

ssc import-cert-key *cert-data* **password** *password*

Parameters

cert-date

Specify the location of the SSL certificate and private key, for example, http, ftp, or scp URL (scp://username:password@host/path/filename).

password *password*

Optionally, specify the private key password.

Usage Guidelines

You must import the SSL certificate and private key before you create instances.

Examples

```
amnesiac (config) # ssc import-cert-key scp://username:pwd@sfhost.example.com/ssc_archive/cert_key.pem
Certificate and Private Key imported successfully
```

Related Commands

show ssc certificate

ssc import-host-ova file

Imports the Services Director host OVA.

Syntax

ssc import-host-ova file *host-ova-path*

Parameters

host-ova-path

Specify the host OVA path, for example, <http, ftp, or scp URL (e.g. scp://username:password@host/path)>

Usage Guidelines

You must locate the host OVA on an accessible server in your infrastructure. You can obtain the OVA package from the Brocade Support Web site at http://www.brocade.com/en/support.html.

Use the **no ssc host ova <filename>** to delete the host OVA.

Examples

```
amnesiac (config) # ssc import-host-ova file scp://root@sf.test.com/ssc/rvbd-ssc-host.ova
Host OVA imported sucessfully.
```

Related Commands

show ssc host-ova

ssc import-lic

Imports the Services Director license.

Syntax

ssc import-lic *filename* | **file** *remote-file-path*

Parameters

filename

Specify the Services Director license filename.

file *remote-file-path*

Optionally, specify the remote location of the license, for example <http, ftp, or scp URL (e.g. scp://username:password@host/path)>

Usage Guidelines

You must import the Services Director license before you create instances.

Examples

```
amnesiac (config) # ssc import-lic file scp://username:pwd@sfhost.example.com/ssc_archive/taranis-
license
License imported successfully
```

Related Commands

show ssc license enterprise

ssc instance add instance-name

Creates an externally-deployed Brocade vTM instance.

Syntax

ssc instance add instance-name *name* **bandwidth** *bandwidth* **owner** *instance-owner-name* **stm-fpname** *feature-pack-name* **mgmt-address** *host-or-ip-addr* | [**config-options** *string*] | [**admin-username** *username*] | [**admin-password** *password*] | [**rest-address** *uri-and-port*] | [**snmp-address** *ip-address*] | [**ui-address** *ip-addr*] | [**access-profile** *access-profile*]

Parameters

instance-name *name*

The name of the externally-deployed Traffic Manager instance.

bandwidth *bandwidth*

The maximum allowed bandwidth for the Traffic Manager instance (in Mbps).

owner *owner*

Specify who owns the instance.

stm-fpname *feature-pack-name*

The name of the **feature_pack** resource associated with the Traffic Manager instance. This represents the set of features that are available for the instance.

mgmt-address *host-or-ip-addr*

Specify the host name or IP address to reach the instance.

config-options *string*

A single configuration option is supported.

snmp!community

The SNMP v2 community setting for this externally-deployed Traffic Manager instance. This must be set to the same value as the equivalent **snmp!community** property on the **instance** resource (default: "public").

NOTE

Unlike Services Director-deployed instances, externally-deployed instances do not restart when **config_options** are changed.

admin-username *name*

The user name for the admin account for the externally-deployed instance.

admin-password *password*

The password for the admin account for the externally-deployed instance.

rest-address*host-or-ip-addr*

The address (host or IP address plus port number) of the Traffic Manager instance configuration REST API. If left blank, it defaults to :9070. The **rest-address** must match the instance hostname. If you use a hostname instead of an IP address, you must use a fully qualified domain name. You can modify this property only for a externally-deployed Traffic Manager instance (or in a database-only request).

snmp-address*host-or-ip-addr*

The address (host or IP address plus port number) of the Traffic Manager instance SNMP responder. This setting enables you to set the SNMP address used for metering. If you use a hostname instead of an IP address, you must

use a fully qualified domain name. You can modify this property only for a externally-deployed Traffic Manager instance (or in a database-only request).

ui-address*host-or-ip-addr*
: The address (host or IP address plus port number) of the Traffic Manager instance Administration UI. If you do not enter a value, the UI address defaults to :9090. If you use a hostname instead of an IP address, you must use a fully qualified domain name. You can modify this property only for a externally-deployed Traffic Manager instance (or in a database-only request).

access-profile
: The required access profile. The authenticator and permission groups in this access-profile are applied to the instance. See ssc access-profile list on page 350.

Usage Guidelines

Before you create a externally-deployed Traffic Manager instance, ensure that you have created a feature pack for the Traffic Manager.

You cannot create a externally-deployed Traffic Manager instance using containers.

Use the **no instance instance-name <name>** to delete an instance.

Examples

```
amnesiac (config) # ssc instance add instance-name stm-i1 bandwidth 1200 owner janet stm-fpname default-
fp mgmt-address test-demo
```

Related Commands

ssc instance create instance-name, show ssc instance instance-name, ssc instance list

ssc instance create instance-name

Creates a Brocade vTM instance.

Syntax

ssc instance create instance-name *name* **license-name** *name* **bandwidth** *bandwidth* **cpu-usage** *cpu* **owner** *instance-owner-name* **stm-fpname** *feature-pack-name* **stm-version** *stm-version-name* **host-name** *host* **mgmt-address** *host-or-ip-addr* | [**config-options** *string*] | [**cluster-id** *name*] | [**container-name** *name*] | [**container-cfg** *config-data*] | [**deploy** *none*] | [**managed** *yes-or-none*] | | [**status** [**Active** | **Inactive**]]

Parameters

instance-name *name*

Specify a unique name for the Traffic Manager instance.

license-name *name*

The name of the **license** resource you want to use for this instance. When you modify this property, the Services Director updates the license on the Traffic Manager instance.

bandwidth *bandwidth*

Specify the bandwidth allowed for this instance (in Mbps).

cpu-usage *cpu*

A string that describes which CPUs are used for this Traffic Manager instance. If used, you must either:

- Specify a value in a form that is used by the taskset command. For example, "0,3,57".
- Set this property to an empty string. This indicates that the host is not limited in its use of CPU cores (unless it is deployed within an LXC container). This is the default setting for the property if you do not specify a string.

NOTE

Any change to the **cpu_usage** settings will cause a restart of the instance.

owner *name*

Specify a string that describes an owner of the instance.

stm-fpname *feature-pack-name*

Specify the Traffic Manager feature-pack name associated with the instance.

stm-version *stm-version-name*

The name of the Traffic Manager **version** resource for the instance. If you modify this property, the Services Director upgrades the Traffic Manager instance to the new version. You can change this property only if the instance **status** is Idle.

host-name *host*

Specify the name of the Traffic Manager instance host on which the instance is running.

mgmt-address *host-or-ip-addr*

Specify the host name or IP address to reach the instance.

config-options *string*

A string containing configuration options for optional features. If specified, this is a space-delimited combination of one or more the following:

default

This option has no effect and is used to avoid an empty string. If this is option is used, no other options can be specified in the **config_options**.

admin_ui=yes/no

Start or bypass the Administration UI for the Traffic Manager instance (default: yes). You must set this to yes if you use the **cluster_id** property.

maxfds=*number*

The maximum number of file descriptors (default: 4096). This setting must be consistent between all instances in a cluster. (See **Notes**, below).

webcache!size=*number*

The size of RAM for the web cache (default: 0). This value can be specified in %, MB, GB by appending the corresponding unit symbol to the end of the value when not specifying a value in bytes. For example, 100%, 256MB, 1GB, and so on. This setting must be consistent between all instances in a cluster. (See **Notes**, below).

java!enabled=yes/no

Start or bypass the Java server (default: no). This setting must be consistent between all instances in a cluster. (See **Notes**, below).

statd!rsync_enabled=yes/no

Synchronize historical activity data within a cluster. If this data is unwanted, disable this setting to save CPU and bandwidth (default: yes). This setting must be consistent between all instances in a cluster. (See **Notes**, below).

snmp!community

The SNMP v2 community setting for this instance resource. For metering of externally-deployed instances, this must be set to the same value as the equivalent **snmp!community** property on the instance itself (default: "public").

num_children=*number*

The number of child processes (default: 1).

start_flipper=yes/no

Start or bypass the flipper process (default: yes). You must set this to yes if you use the **cluster_id** property.

afm_deciders=*number*

The number of application firewall decider processes. If 0 is specified, the application firewall is not installed (default: 0). **Note**: You cannot update this option after the instance has been deployed.

flipper!frontend_check_addrs=*host*

Check instance front-end connectivity with a specific host. When the Services Director deploys an instance, it checks connectivity to the default gateway of the instance host by sending ICMP requests to it. If the default gateway is protected by a firewall or blocks ICMP requests, instance deployment can fail. To disable deployment connectivity checks, use **flipper!frontend_check_addrs=""**. This setting must be consistent between all instances in a cluster. (See **Notes**, below).

flipper!monitor_interval=*number*

The interval, in milliseconds, between flipper monitoring actions. (default: 500 ms). For higher density Traffic Manager instance deployments, use a larger value such as 2000ms. This setting must be consistent between all instances in a cluster. (See **Notes**, below).

NOTE

Any change to the **config_options** settings will cause a restart of the instance.

NOTE

Some configuration options, if specified here, must be consistent between all Traffic Manager instances in a cluster:

- maxfds
- webcache!size
- java!enabled
- statd!rsync_enabled
- flipper!monitor_interval
- flipper!frontend_check_addrs

If you set or update the value in one **instance** resource, the Services Director replicates this update automatically to the other instance resources. The instance will restart whenever these are changed, but other instances in the cluster must be restarted manually.

NOTE

Whenever the **config_options** property is set, all currently modified options must be specified again in the REST call. Any options that are not specified will lose their current value and be reset to their default value.

cluster-id *ID-or-name*

Optionally, specify the name of a cluster resource to which the instance belongs.
If you do not specify a cluster name, a new cluster name is generated automatically and assigned to the instance.

container-name *name*

Specify the name of the LXC container in which the instance is running. If this is an empty string or **none**, the Traffic Manager is not run inside a container.

container-cfg *config-data*

Optionally, specify configuration data for the instance container. The string populates the container configuration file with the gateway IP, the management IP, the WAN IP, the LAN IP, the data plane gateway IP, and the flavor (also called size).
Use the following format:

```
  "{'gateway': '10.5.27.1', 'mgmtip':'10.10.10.1/24', 'wanip':'10.10.10.2/24',
'lanip':'10.10.10.3/24', 'dataplanegw':'10.5.5.2', 'flavor':'small'}"
```

Possible flavor values are: small= 256, 1 CPU, medium= 512 2 CPU, or large= 1024 4 CPU.

deploy *none*

The default value is **true**. Specify **none** to apply changes to the database but not cause deployment changes. This setting supports testing and database reconciliation. No actions are carried out and no intermediate status is set. If a new instance resource is set to **none** then the status is set to **Idle** upon creation.

managed *none*

Specify **yes**.

active [**Active** | **Inactive**]

Specify the status:

Active

Activates a resource.

Inactive

Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

Usage Guidelines

Before you create a Traffic Manager instance, make sure you have:

- Imported the SSL certificate and key, the Services Director license, the enterprise bandwidth license key, and the Traffic Manager FLA license.
- Created a resource entry for the Traffic Manager FLA license.
- Imported the Traffic Manager image and created a resource entry for it.
- Imported the host OVA and created the host resource.
- Created a feature pack for the Traffic Manager.
- Provisioned the host OVA. When you execute the **ssc host provision** command, it untars the OVA, repackages the SSH public key created above and it is provisioned on ESXi. After the host is created in ESXi, the public key is assigned to the user defined in the **ssc host provision** command. After this command is executed you can SSH to the host without a password.

You can create instances without using containers, but you must ensure a degree of network isolation.

Before you create a container using the CLI, make sure that you have a host entry that includes the IP address and host name for the container you are going to create and that you can ping it.

Use the **no instance instance-name <name>** to delete an instance.

Examples

```
>>no container<<
amnesiac (config) # ssc instance create instance-name stm-i1 license name fla-ssl-ssc bandwidth 1200
cpu-usage 0 owner tim stm-fpname default-fp stm-version stm97 host-name test-demo mgmt-address test-demo
>>container<<
amnesiac (config) # ssc instance create instance-name stm-cont-i2 license name fla-ssl-ssc bandwidth
1200 cpu-usage 0 owner tim stm-fpname default-fp stm-version stm97 host-name test-demo mgmt-address
10.10.10.1 container-name stm-cont-i1 container-cfg "{'gateway': '10.5.27.1', 'mgmtip':'10.10.10.1/24',
'wanip':'10.10.10.2/24', 'lanip':'10.10.10.3/24', 'dataplanegw':'10.5.5.2', 'flavor':'small'}"
```

Related Commands

ssc instance add instance-name, show ssc instance instance-name, ssc instance list

ssc instance force-start instance-name

Forces the status of the instance in the MySQL database to be Active.

Syntax

ssc instance force-start instance-name *instance*

Parameters

The instance name.

Usage Guidelines

This command is used where there is an inconsistency between the actual status of the instance and the status of the instance in the MySQL database.

Examples

```
amnesiac (config) # ssc instance force-start instance-name DMaxhill-05
amnesiac (config) # ssc instance force-start instance-name Instance-345879389713
```

Related Commands

ssc instance start instance-name, show ssc instance instance-name, ssc instance list, ssc instance force-stop instance-name

ssc instance force-stop instance-name

Forces the status of the instance in the MySQL database to be Idle.

Syntax

ssc instance force-stop instance-name *instance*

Parameters

The instance name.

Usage Guidelines

This command is used where there is an inconsistency between the actual status of the instance and the status of the instance in the MySQL database.

Examples

```
amnesiac (config) # ssc instance force-stop instance-name DMaxhill-05
amnesiac (config) # ssc instance force-stop instance-name Instance-345879389713
```

Related Commands

show ssc instance instance-name, ssc instance list, ssc instance force-start instance-name

ssc instance list

Displays a list of names for Brocade vTM instances that are registered on the Services Director.

Syntax

ssc instance list

Examples

```
amnesiac (config) # ssc instance list
+------------------------+
| Instance               |
+------------------------+
| Pendragon-00           |
| Pendragon-01           |
| DMaxhill-05            |
| Instance-345879389713  |
+------------------------+
```

Related Commands

ssc instance create instance-name, ssc instance start instance-name, ssc instance stop instance-name

ssc instance start instance-name

Starts a Brocade vTM instance.

Syntax

ssc instance start instance-name *instance*

Parameters

The instance name.

Examples

```
amnesiac (config) # ssc instance start instance-name DMaxhill-05
amnesiac (config) # ssc instance start instance-name Instance-345879389713
```

Related Commands

show ssc instance instance-name, ssc instance list, ssc instance stop instance-name

ssc instance stop instance-name

Stops a Brocade vTM instance.

Syntax

ssc instance stop instance-name *instance*

Parameters

The instance name.

Examples

```
amnesiac (config) # ssc instance start instance-name DMaxhill-05
amnesiac (config) # ssc instance start instance-name Instance-345879389713
```

Related Commands

show ssc instance instance-name, ssc instance list, ssc instance start instance-name

ssc instance relicense instance-name

Relicenses a Brocade vTM instance that uses Universal FLA licensing. The instance must have its rest_enabled set to True .

Syntax

ssc instance relicense instance-name *instance*

Parameters

The instance name.

Examples

```
amnesiac (config) # ssc instance relicense instance-name DMaxhill-05
```

Related Commands

show ssc instance instance-name, ssc instance list, ssc instance create instance-name

ssc instance update instance-name

Updates values in a Brocade vTM instance.

Syntax

ssc instance update instance-name *instance* [**new-inst-name** *instance*] | [**license-name** *name*] | [**bandwidth** *bandwidth*] | [**cpu-usage** *cpu*] | [**stm-fpname feature-pack** *name*] | [**stm-version stm version** *name*] | [**config-options** *options*] | [**container-cfg** *config-data*] | [**managed** *yes-or-none*] | [**deploy** *none*] | [**admin-username** *username*] | [**admin-password** *password*] | | [**rest-address** *uri-and-port*] | [**snmp-address** *ip-address*] | [**status** { **Active** | **Inactive**]] | [**ui-address** *ip-addr*] | [**access-profile** *access-profile*]

Parameters

instance-name *instance*

Specify the name of the Traffic Manager instance.

new-inst-name *instance*

Specify the new name for the instance.

license-name *name*

Specify name of the FLA license resource for the instance

bandwidth *bandwidth*

Specify the bandwidth allowed for this instance.

cpu-usage *cpu*

Specify a string that describes which CPUs that can be used for the instance. The format can be used by the **taskset** command and typically is a single CPU number, such as 0. This command might be unnecessary depending on the container configuration.

stm-fpname feature-pack *name*

Specify the Traffic Manager feature-pack name associated with the instance.

stm-version *stm-version-name*

Specify the name of the Traffic Manager version-resource for the instance. This is the Traffic Manager version name that is assigned when you imported the Traffic Manager into the Services Director.

host-name *host*

Specify the name of the Traffic Manager instance host on which the instance is running.

mgmt-address *host-or-ip-addr*

Specify the host name or IP address to reach the instance.

config-options *string*

Specify a string that defines the values for the instance container. The string populates the container configuration file with the gateway IP, the management IP, the WAN IP, the LAN IP, the data plane gateway IP, and the flavor or size: small= 256, 1 CPU, medium= 512 2 CPU, or large= 1024 4 CPU. Use the following format:

```
"{'gateway': '10.5.27.1', 'mgmtip':'10.10.10.1/24', 'wanip':'10.10.10.2/24',
'lanip':'10.10.10.3/24', 'dataplanegw':'10.5.5.2', 'flavor':'small'}"
```

container-cfg *config-data*

Optionally, specify configuration data for the instance container.

managed *yes-or-none*
Specify **yes** for Services Director-deployed instances or **none** for externally-deployed instances.

deploy *none*
The default value is **true**. Specify **none** to apply changes to the database but not cause deployment changes. This setting supports testing and database reconciliation. No actions are carried out and no intermediate status is set. If a new instance resource is set to **none** then the status is set to **Idle** upon creation.

admin-username *username*
Specify only for externally-deployed instances. Specify the user name of the Traffic Manager instance-administrator user.

admin-password *password*
Specify only for externally-deployed instances. Specify the password of the Traffic Manager instance-administrator user.

rest-address *uri-and-port*
Specify only for externally-deployed instances. Specify the IP address, including the port, for the instance REST API.

snmp-address *ip-address*
Specify only for externally-deployed instances. Specify the IP address, including the port, for the Traffic Manager instance SNMP server.

active [**Active** | **Inactive**]
Specify the status:

Active
Activates a resource.

Inactive
Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

ui-address *ip-addr*
Specify only for externally-deployed instances. Specify the IP address, including the port, for the Traffic Manager instance Admin UI.

access-profile
The required access profile. The authenticator and permission groups in this access-profile are applied to the instance. See ssc access-profile list on page 350.

Examples

```
amnesiac (config) # ssc instance update instance-name inst1 admin-user root admin-password 1234
```

Related Commands

show ssc instance instance-name, ssc instance list

ssc instance update template-name

Updates a Brocade vTM instance based on the specified template.

Syntax

ssc instance update template-name *name* **instance-name** *name* [**new-inst-name** *instance*] | [**license-name** *name*] | [**bandwidth** *bandwidth*] | [**cpu-usage** *cpu*] | [**stm-fpname feature-pack** *name*] | [**stm-version stm version** *name*] | [**config-options** *options*] | [**container-cfg** *config-data*] | [**managed** *yes-or-none*] | [**deploy** *none*] | [**admin-username** *username*] | [**admin-password** *password*] | | [**rest-address** *uri-and-port*] | [**snmp-address** *ip-address*] | [**status** { **Active** | **Inactive**]] | [**ui-address** *ip-addr*] | [**access-profile** *access-profile*]

Parameters

template-name *name*

Specify the template name.

instance-name *name*

Specify the Traffic Manager instance name.

new-inst-name *instance*

Specify the new name for the instance.

license-name *name*

Specify name of the FLA license resource for the instance

bandwidth *bandwidth*

Specify the bandwidth allowed for this instance.

cpu-usage *cpu*

Specify a string that describes which CPUs that can be used for the instance. The format can be used by the **taskset** command and typically is a single CPU number, such as 0. This command might be unnecessary depending on the container configuration.

stm-fpname feature-pack *name*

Specify the Traffic Manager feature-pack name associated with the instance.

stm-version *stm-version-name*

Specify the name of the Traffic Manager version-resource for the instance. This is the Traffic Manager version name that is assigned when you imported the Traffic Manager into the Services Director.

host-name *host*

Specify the name of the Traffic Manager instance host on which the instance is running.

mgmt-address *host-or-ip-addr*

Specify the host name or IP address to reach the instance.

config-options *string*

Specify a string that defines the values for the instance container. The string populates the container configuration file with the gateway IP, the management IP, the WAN IP, the LAN IP, the data plane gateway IP, and the flavor or size: small= 256, 1 CPU, medium= 512 2 CPU, or large= 1024 4 CPU. Use the following format:

```
  "{'gateway': '10.5.27.1', 'mgmtip':'10.10.10.1/24', 'wanip':'10.10.10.2/24',
'lanip':'10.10.10.3/24', 'dataplanegw':'10.5.5.2', 'flavor':'small'}"
```

container-cfg *config-data*
Optionally, specify configuration data for the instance container.

managed *yes-or-none*
Specify **yes** for Services Director-deployed instances or **none** for externally-deployed instances.

deploy *none*
The default value is **true**. Specify **none** to apply changes to the database but not cause deployment changes. This setting supports testing and database reconciliation. No actions are carried out and no intermediate status is set. If a new instance resource is set to **none** then the status is set to **Idle** upon creation.

admin-username *username*
Specify only for externally-deployed instances. Specify the user name of the Traffic Manager instance-administrator user.

admin-password *password*
Specify only for externally-deployed instances. Specify the password of the Traffic Manager instance-administrator user.

rest-address *uri-and-port*
Specify only for externally-deployed instances. Specify the IP address, including the port, for the instance REST API.

snmp-address *ip-address*
Specify only for externally-deployed instances. Specify the IP address, including the port, for the Traffic Manager instance SNMP server.

active [**Active** | **Inactive**]
Specify the status:

Active
Activates a resource.

Inactive
Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

ui-address *ip-addr*
Specify only for externally-deployed instances. Specify the IP address, including the port, for the Traffic Manager instance Admin UI.

access-profile
The required access profile. The authenticator and permission groups in this access-profile are applied to the instance. See ssc access-profile list on page 350.

Usage Guidelines

Update a Traffic Manager instance with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc instance update template-name tempinst1 instance-name inst1 admin-user root
admin-password 1234
```

Related Commands

show ssc instance instance-name, ssc template create template-name

ssc license enterprise add-on

Activates the enterprise add-on license.

Syntax

[no] ssc license enterprise add-on add *license-key*

Parameters

add *license-key*

Specify the add-on license key.

Usage Guidelines

For detailed information about add-on licenses, see *Brocade Services Director Advanced User Guide*. Use the **nossc license enterprise add-on <license key>** command option to deactivate the enterprise add-on license.

Examples

```
amnesiac (config) # ssc license enterprise add-on XXXXX-XXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

Related Commands

show ssc license enterprise, ssc license list

ssc license enterprise add-on list

Displays a list of add-on licenses installed.

Syntax

ssc license enterprise add-on list *license*

Parameters

license

(Optional) Specify an Enterprise add-on license.

Examples

```
amnesiac (config) # ssc license enterprise add-on list
+----------------------------------------+
| Enterprise Add-On Licenses             |
+----------------------------------------+
| 417928-23bbc2fb77767ac82db4df862658cabb |
+----------------------------------------+

amnesia (config) # show ssc license enterprise add-on 417928-23bbc2fb77767ac82db4df862658cabb
+---------------------------
+-------------------------------------------------------------------------------------+
| Field                    |
Value                                                                          |
+---------------------------
+-------------------------------------------------------------------------------------+
| valid_until              |
2016-10-07                                                                     |
| timestamp                |
2016-09-27T21:37:13.1475037433                                                 |
| controller_license       |
ERSSC381243-0000-42B9                                                          |
| bandwidth                |
5000.0                                                                         |
| serial                   |
417928                                                                         |
| license_key              | LK1-ERSSCAPADD_FIPS:5:417928:20160927T2137131475037433-0000-42B9-5-
C80C-4015-7DFE |
| controller_license_serial |
381243                                                                         |
| valid_from               |
Perpetual                                                                      |
| add_on_sku               | ADD-
FIPS                                                                  |
| valid                    |
True                                                                           |
+---------------------------
+-------------------------------------------------------------------------------------+
```

Related Commands

show ssc license enterprise, ssc license list

ssc license enterprise bandwidth activate

Activates an enterprise bandwidth license.

Syntax

ssc license enterprise bandwidth activate *license-key*

Parameters

license-key

Specify the enterprise bandwidth license key.

Usage Guidelines

You can have one or more bandwidth licenses depending on the needs of your enterprise. The bandwidth licenses are activated when you import the license key.

Use the **no ssc license enterprise bandwidth <license key>** command to delete an enterprise bandwidth license.

Examples

```
amnesiac (config) #  ssc license enterprise bandwidth activate 116415-0e60bc0fe6b16d652ce82b4c9b90d732
+---------------------------
+-------------------------------------------------------------------------------------+
| Field                     |
Value                                                                                 |
+---------------------------
+-------------------------------------------------------------------------------------+
| status                    |
Active                                                                                |
| valid_until               |
2016-10-07                                                                            |
| timestamp                 |
2016-09-27T21:37:13.1475037433                                                        |
| controller_license        |
ERSSC381243-0000-42B9                                                                 |
| bandwidth                 |
5000.0                                                                                |
| valid_from                |
Perpetual                                                                             |
| serial                    |
115415                                                                                |
| license_key               | LK1-
ERSSCTPSTM_B_400:5:116415:20160927T2137131475037433-0000-42B9-5-5363-460B-1F66 |
| controller_license_serial |
381243                                                                                |
| stm_sku                   |
STM-400                                                                               |
| valid                     |
True                                                                                  |
+---------------------------
+-------------------------------------------------------------------------------------+
```

Related Commands

show ssc license enterprise, ssc license list

ssc license enterprise bandwidth add

Adds an enterprise bandwidth license.

Syntax

ssc license enterprise bandwidth add *license-key*

Parameters

license-key

Specify the enterprise bandwidth license key.

Usage Guidelines

You can have one or more bandwidth licenses depending on the needs of your enterprise. The bandwidth licenses are activated when you import the license key.

Use the **no ssc license enterprise bandwidth <license key>** command to delete an enterprise bandwidth license.

Examples

```
amnesiac (config) # ssc license enterprise bandwidth add LK1-
ERSSCTPSTM_B_400:5:115415:20160927T2276475037433-0000-43B9-5-5263-460B-1E66
+---------------------------
+-------------------------------------------------------------------------------------+
| Field                     |
Value                                                                                 |
+---------------------------
+-------------------------------------------------------------------------------------+
| status                    |
Active                                                                                |
| valid_until               |
2016-10-07                                                                            |
| timestamp                 |
2016-09-27T21:37:13.1475037433                                                        |
| controller_license        |
ERSSC381243-0000-43B9                                                                 |
| bandwidth                 |
5000.0                                                                                |
| valid_from                |
Perpetual                                                                             |
| serial                    |
115415                                                                                |
| license_key               | LK1-
ERSSCTPSTM_B_400:5:115415:20160927T2276475037433-0000-43B9-5-5263-460B-1E66    |
| controller_license_serial |
381243                                                                                |
| stm_sku                   |
STM-400                                                                               |
| valid                     |
True                                                                                  |
+---------------------------
+-------------------------------------------------------------------------------------+
```

Related Commands

show ssc license enterprise, ssc license list

ssc license enterprise bandwidth list

Lists enterprise bandwidth license keys.

Syntax

ssc license enterprise bandwidth list

Usage Guidelines

You can have one or more bandwidth licenses depending on the needs of your enterprise. The bandwidth licenses are activated when you import the license key.

Examples

```
amnesiac (config) # ssc license enterprise bandwidth list
+----------------------------------------+
| Enterprise Bandwidth Licenses          |
+----------------------------------------+
| 342005-5e876d4bc34885e04f2c58867e21f1cf |
+----------------------------------------+
```

Related Commands

show ssc license enterprise, ssc license list

ssc license enterprise controller list

Lists enterprise controller license keys.

Syntax

ssc license enterprise controller list

Usage Guidelines

Use the **no license enterprise controller license <key>** to delete the enterprise controller license.

Examples

```
amnesiac (config) # ssc license enterprise controller list
+--------------------------------+
| Enterprise Controller Licenses |
+--------------------------------+
| ERSSC381244-0000-52A9          |
+--------------------------------+
```

Related Commands

show ssc license enterprise, ssc license list

ssc license list

Displays a list of FLA licenses that are present. Where no FLA license is present, this is indicated.

Syntax

ssc license list

Examples

```
amnesiac (config) # ssc license list
+--------------+
| License      |
+--------------+
| universal_v4 |
| legacy_9.3   |
+--------------+
```

Related Commands

show ssc license enterprise

ssc log metering clear

Deletes backup Services Director metering logs.

Syntax

ssc log metering clear

Examples

```
amnesiac (config) # ssc log metering clear
```

Related Commands

ssc log metering phone-home enable, ssc log metering generate

ssc log metering generate

Extracts metering logs.

Syntax

ssc log metering generate [**backup** [**yes** | **no**]]

Parameters

backup *yes/no*

Optional. Specify to indicate whether previously-generated logs are to be included. New logs are always included.

Examples

```
amnesiac (config) # ssc log metering generate backup no
```

In this example, the backup switch indicates that no previously-generated logs are required; only new log data (since the most recent log generation) is included. A maximum of ten metering logs can be generated by this process.

Related Commands

ssc log metering phone-home enable, ssc log metering clear

ssc log metering phone-home enable

Enables/disables the phone home service for Services Director metering logs.

Syntax

[no] ssc log metering phone-home enable

Usage Guidelines

The **no** command option disables the phone home feature.

Examples

```
amnesiac (config) # ssc log metering phone-home enable
```

Related Commands

ssc log metering clear, ssc log metering generate

ssc manager list

Lists Services Director managers.

Syntax

ssc manager list

Examples

```
amnesiac (config) # ssc manager list
+-----------+
| Manager   |
+-----------+
| amnesiac |
+-----------+
```

Related Commands

show ssc manager manager-name

ssc manager update manager-name

Updates Services Director manager settings.

Syntax

ssc manager update manager-name *name* **mgmt-mode** *enabled* | / | *disabled* **metering-mode** *all* | / | *none* **licensing-mode** *enabled* |disabled|enabledwithalerts

Parameters

name
Specify a unique name for the manager.

enabled | *disabled*
Specify the management mode for the manager: **enabled**, **disabled**.

all | *none*
Specify the metering mode for the manager: **all**, **none**.

enabled | *disabled* | *enabled-with-alerts*
Specify the licensing mode for the manager: **enabled**, **disabled**, **enabledwithalerts**.

Usage Guidelines

Use the **no ssc manager manager-name <name>** command to delete a manager that is flagged as failed.

Use the **no ssc manager manager-name <name> force-delete** command to delete a manager that is not flagged as failed.

Examples

```
amnesiac (config) # ssc manager update manager-name amnesiac mgmt-mode enabled metering-mode all
licensing-mode enabled
```

Related Commands

show ssc manager manager-name

ssc manager update template-name

Updates the Services Director manager based on the specified template.

Syntax

ssc manager update template-name *name* | [**manager-name** *name* **mgmt-mode** *enabled* | / | *disabled*] | [**metering-mode** *all* | / | *none*] | [**licensing-mode** *enabled* | / | *disabled* | / | *enabledwithalerts*]

Parameters

name
Specify the template name.

manager-name *name*
Specify the manager name.

mgmt-mode *enabled* | *disabled*
Specify the management mode for the manager: **enabled**, **disabled**.

metering-mode *all* | *none*
Specify the metering mode for the manager: **all**, **none**.

licensing-mode *enabled* | *disabled* | *enabled-with-alerts*
Specify the licensing mode for the manager: **enabled**, **disabled**, **enabledwithalerts**.

Usage Guidelines

Update a manager with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc manager update template-name mantemp1 manager-name amnesiac mgmt-mode disabled
```

Related Commands

show ssc manager manager-name, ssc template create template-name

ssc metering warning list

Displays a list of all Traffic Manager instances that have a metering warning raised against them.

Syntax

ssc metering warning list

Usage Guidelines

To display information for failed Traffic Manager instances, see show ssc metering warning instance-name on page 291.

Examples

```
amnesiac (config) # ssc metering warning list
+-----------+
| Instance  |
+-----------+
| cerise-02 |
| sienna-01 |
+-----------+
```

Related Commands

show ssc dashboard, show ssc metering warning instance-name, show ssc settings metering, ssc settings metering update

ssc owner create

Creates an owner on the Services Director. This is used to indicate ownership of registered vTMs and vTM clusters, and is required during automated self-registration of vTMs.

Syntax

ssc owner create [**e-mail** *email-address*] [**secret** *password*] [**timezone** *timezone*] [[**tag** *name*]

Parameters

e-mail

Optionally, specify a valid e-mail address that will be used to contact an administrator if required.

secret

Optionally, specify a password for this owner. This is required for automatic self-registration.

timezone

Optionally, specify a timezone for this owner. For example: "Europe/London", "America/Detroit", "GMT".

tag

Optionally, specify a unique name for this owner.

Usage Guidelines

No parameters are mandatory. If none are provided, an owner is created with only the UUID set.

Examples

```
>> list owners to confirm which are available <<
amnesiac (config) # ssc owner list
+---------------------------+------+
| Owner ID                  | Tag  |
+---------------------------+------+
| Owner-HSC1-T4QV-BXPB-Z4CZ | HC   |
| Owner-NS3F-FHQ4-RO11-5Y0A | JK   |
| Owner-JJM6-0UII-JUAH-R979 | JRRT |
+---------------------------+------+

>> create new owner 'TK' <<
amnesiac (config) # ssc owner create tag TK timezone Europe/London
+---------------+---------------------------+
| Field         | Value                     |
+---------------+---------------------------+
| instances     | []                        |
| tag           | TK                        |
| timezone      | Europe/London             |
| email_address |                           |
| secret        | QUK5qKRPy2mt              |
| clusters      | []                        |
| owner_id      | Owner-58I2-2N4F-IXG0-8084 |
+---------------+---------------------------+

>> list owners again <<
amnesiac (config) # ssc owner list
+---------------------------+------+
| Owner ID                  | Tag  |
+---------------------------+------+
| Owner-HSC1-T4QV-BXPB-Z4CZ | HC   |
| Owner-NS3F-FHQ4-RO11-5Y0A | JK   |
| Owner-58I2-2N4F-IXG0-8084 | TK   |
| Owner-JJM6-0UII-JUAH-R979 | JRRT |
+---------------------------+------+
```

Related Commands

show ssc owner, ssc owner delete, ssc owner list, ssc owner update

ssc owner delete

Deletes an owner on the Services Director.

Syntax

ssc owner delete owner-id *owner*

Parameters

owner-id

Specify the owner you want to delete, using either its tag or UUID.

Examples

```
>> list owners <<
amnesiac (config) # ssc owner list
+---------------------------+------+
| Owner ID                  | Tag  |
+---------------------------+------+
| Owner-HSC1-T4QV-BXPB-Z4CZ | HC   |
| Owner-NS3F-FHQ4-RO11-5Y0A | JK   |
| Owner-58I2-2N4F-IXG0-8084 | TK   |
| Owner-JJM6-0UII-JUAH-R979 | JRRT |
+---------------------------+------+

>> delete owner <<
amnesiac (config) # ssc owner delete owner-id JK
+---------------------------------------+
| Deleted                               |
+---------------------------------------+
| Owner Owner-NS3F-FHQ4-RO11-5Y0A deleted |
+---------------------------------------+

>> list owners to confirm deletion<<
amnesiac (config) # ssc owner list
+---------------------------+------+
| Owner ID                  | Tag  |
+---------------------------+------+
| Owner-HSC1-T4QV-BXPB-Z4CZ | HC   |
| Owner-58I2-2N4F-IXG0-8084 | TK   |
| Owner-JJM6-0UII-JUAH-R979 | JRRT |
+---------------------------+------+
```

Related Commands

show ssc owner, ssc owner create, ssc owner list, ssc owner update

ssc owner list

Displays a list of all owners on the Services Director.

Syntax

ssc owner list

Examples

```
amnesiac (config) # ssc owner list
+---------------------------+------+
| Owner ID                  | Tag  |
+---------------------------+------+
| Owner-HSC1-T4QV-BXPB-Z4CZ | HC   |
| Owner-NS3F-FHQ4-RO11-5Y0A | JK   |
| Owner-58I2-2N4F-IXG0-8084 | TK   |
| Owner-JJM6-0UII-JUAH-R979 | JRRT |
+---------------------------+------+
```

Related Commands

show ssc owner, ssc owner create, ssc owner delete, ssc owner update

ssc owner update

Updates an owner on the Services Director.

Syntax

ssc owner update owner-id *owner* [**e-mail** *email-address*] [**secret** *password*] [**timezone** *timezone*] [[**tag** *name*]

Parameters

owner-id

Identify the owner that you want to update, using either its tag or UUID.

e-mail

Optionally, specify a valid e-mail address that will be used to contact an administrator if required.

secret

Optionally, specify a password for this owner. This is required for automatic self-registration.

timezone

Optionally, specify a timezone for this owner. For example: "Europe/London", "America/Detroit", "GMT".

tag

Optionally, specify a unique name for this owner.

Examples

```
>> list owners <<
amnesiac (config) # ssc owner list
+---------------------------+------+
| Owner ID                  | Tag  |
+---------------------------+------+
| Owner-HSC1-T4QV-BXPB-Z4CZ | HC   |
| Owner-NS3F-FHQ4-RO11-5Y0A | JK   |
| Owner-58I2-2N4F-IXG0-8084 | TK   |
| Owner-JJM6-0UII-JUAH-R979 | Demo |
+---------------------------+------+

>> rename 'Demo' to 'JRRT' <<
amnesiac (config) # ssc owner update owner-id Demo tag JRRT
+---------------+-----------------------------------+
| Field         | Value                             |
+---------------+-----------------------------------+
| instances     | [u'Instance-097D-W8HI-XR4K-GYUF'] |
| tag           | JRRT                              |
| timezone      | Europe/Lisbon                          |
| email_address |                                   |
| secret        |                                   |
| clusters      | [u'Cluster-3FRI-XJST-S2UY-CCMD']  |
| owner_id      | Owner-JJM6-0UII-JUAH-R979         |
+---------------+-----------------------------------+

>> list owners <<
amnesiac (config) # ssc owner list
+---------------------------+------+
| Owner ID                  | Tag  |
+---------------------------+------+
| Owner-HSC1-T4QV-BXPB-Z4CZ | HC   |
| Owner-NS3F-FHQ4-RO11-5Y0A | JK   |
| Owner-58I2-2N4F-IXG0-8084 | TK   |
| Owner-JJM6-0UII-JUAH-R979 | JRRT |
+---------------------------+------+
```

Related Commands

show ssc owner, ssc owner create, ssc owner delete, ssc owner list

ssc registration delete

Deletes a specified self-registration request.

Syntax

ssc registration delete *registration-id*

Parameters

registration-id

Specify the ID for the self-registration request.

Examples

```
amnesiac (config) # ssc registration delete registration-id Reg-NF8H-W5UT-ECL3-HFMH
Successfully deleted registration Reg-NF8H-W5UT-ECL3-HFMH
```

Related Commands

show ssc registration, ssc registration list, ssc registration update

ssc registration list

Lists all self-registration requests received by Services Director. This list includes all Approved, Pending, Declined and Blacklisted requests.

Syntax

ssc registration list

Examples

```
amnesiac (config) # ssc registration list
+-------------------------+--------------------+-------------+
| ID                      | REST Address       | Status      |
+-------------------------+--------------------+-------------+
| Reg-NF8H-W5UT-ECL3-HFMH | 10.62.169.167:9070 | Accepted    |
| Reg-RUE7-NV0B-TXE7-RQO6 | 10.62.169.168:9070 | Blacklisted |
| Reg-1K8R-1C1Z-JM3S-W12R | 10.62.169.167:9070 | Pending     |
+-------------------------+--------------------+-------------+
```

Related Commands

show ssc registration, ssc registration update, ssc registration delete

ssc registration update

Updates the state of a specified self-registration request. This is the standard method for approving a request.

Syntax

ssc registration update registration-id *registration-id* **state** *blacklist* | / | *pending* | / | *decline* [*reason declined-reason*] | **accept** [**instance-name** *name* **owner** *owner* **feature-pack** *feature_pack* **bandwidth** *bandwidth* **access_profile** *access_profile*]

Parameters

registration-id

Specify the ID for the self-registration request.

new-state

Specify a new state for the self-registration request. Supported transitions are:

- Pending -> Accepted
- Pending -> Declined
- Pending -> Blacklisted
- Declined -> Pending
- Blacklisted -> Pending

declined-reason

Optionally, specify a reason (as a string) for the transition from Pending ? Declined. This is not used for any other state transition.

Usage Guidelines

The following commands represent the four supported state transitions:

- Pending to Declined:

ssc registration update registration-id <reg-id> state decline reason <reason>

- Pending to Blacklisted:

ssc registration update registration-id <reg-id> state blacklist

- Declined/Blacklisted back to Pending:

ssc registration update registration-id <reg-id> state pending

- Pending to Accepted:

ssc registration update registration-id <reg-id> state accept instance-name <name> owner <owner> feature-pack <feature_pack> bandwidth <bandwidth> access_profile <access_profile>

When this this transition is performed, the state of the request changes to Accepted. The authenticator and permission groups in the access profile are applied to the vTM. Existing authenticators and permission groups may be overwritten, but none will be deleted. All members of a cluster are affected.

Examples

```
amnesiac (config) # ssc registration update registration-id Reg-RUE7-NV0B-TXE7-RQO6 state decline
reason "Unexpected submission"
+----------------------+--------------------------------------+
| Field                | Value                                |
+----------------------+--------------------------------------+
| snmp_address         | 10.62.169.168:161                    |
| registration_message | Cerise-02 10.4 registration (Tekton) |
| bandwidth            | None                                 |
| owner                | None                                 |
| email_address        | admin@tekton.com                     |
| instance_name        | None                                 |
| uuid                 | 06711d65-b1c6-3301-96d6-005056a63342 |
| hostname             | 10.62.169.168                        |
| declined_reason      | Unexpected submission                |
| instance_version     | 10.4                                 |
| status               | Declined                             |
| snmp_community       | public                               |
| admin_address        | 10.62.169.168:9090                   |
| rest_address         | 10.62.169.168:9070                   |
| feature_pack         | None                                 |
| cluster_identifier   |                                      |
| registration_time    | 2016-03-07 16:44:24                  |
| instance_id          | None                                 |
| management_ip        | 10.62.169.168                        |
| pending_time         | 2016-03-07 16:44:24                  |
| access_profile       | None                                 |
+----------------------+--------------------------------------+
```

Related Commands

show ssc registration, ssc registration list, ssc registration delete

ssc reg-policy create

Creates a registration policy on the Services Director. This is used during the automatic self-registration of externally-deployed vTMs and cloud-based vTMs.

Syntax

ssc reg-policy create feature-pack *feature-pack* **bandwidth** *bandwidth* **mgmt-ip-subnet** *subnet* [**inst-version-low** *version*] [**inst-version-high** *version*] [**access-profile** *frequency*] [**tag** *number*]

Parameters

feature-pack

Specify the name of a feature pack.
This is the feature pack that will be assigned to a vTM that is successfully evaluated using this policy.
This is not an acceptance condition, but the evaluation of the **bandwidth** property refers to this property.

bandwidth

This is the required bandwidth (in Mbps) for a vTM that is evaluated using this policy.
If there is insufficient bandwidth in the specified Feature Pack for a vTM, the auto-acceptance of the vTM is rejected by the self-registration policy.

mgmt-ip-subnet

Specify the IP address and netmask of a subnetwork in CIDR format. For example, 10.122.12.13/18.
This identifies the subnet to which a vTM must belong to be accepted by this policy.
If a vTM that is evaluated by this policy is from outside the specified subnetwork, the auto-acceptance of the vTM is rejected by the self-registration policy.

inst-version-low

Optionally, select a Minimum Version for the vTM software. This takes the form X.Y. Examples: 10.0, 10.3.
R1 releases are included automatically for any base version. For example, 10.0 includes 10.0r1.
If a vTM that is evaluated by this policy does not meet this condition, the auto-acceptance of the vTM is rejected by the self-registration policy.

inst-version-high

Optionally, select a Maximum Version for the vTM software. This takes the form X.Y. Examples: 10.4, 11.0.
R1 releases are included automatically for any base version. For example, 10.3 includes 10.3r1.
If a vTM that is evaluated by this policy does not meet this condition, the auto-acceptance of the vTM is rejected by the self-registration policy.

access-profile

Optionally, select an Access Profile. This access profile identifies the authenticator and permission groups required for the user authentication on this vTM.
If selected, these will be applied to the vTM once it is accepted. All cluster members are affected by this change.

tag

Optionally, enter a unique name for the self-registration policy.

Examples

```
>> list existing self-reg policies <<
amnesiac (config) # ssc reg-policy list
+---------------------------+----------------+
| Policy ID                 | Tag            |
+---------------------------+----------------+
| Policy-MHM8-AB62-SI2J-DNUX | jk-self-reg-01 |
| Policy-8QU3-ZERY-8IW6-3W6J | self-reg-01    |
+---------------------------+----------------+

>> create a new sel-reg policy 'jk-self-reg-02' <<
amnesiac (config) # ssc reg-policy create feature-pack STM-400_full bandwidth 80 mgmt-ip-subnet
10.20.128.0/18 inst-version-low 10.2 tag jk-self-reg-02
+---------------------------+---------------------------+
| Field                     | Value                     |
+---------------------------+---------------------------+
| instance_version_range_low  | 10.2                    |
| bandwidth                 | 80                        |
| tag                       | jk-self-reg-02            |
| management_ip_subnet      | 10.20.128.0/18            |
| feature_pack              | STM-400_full              |
| instance_version_range_high |                         |
| policy_id                 | Policy-I7A7-3DN2-6IEB-QF96 |
+---------------------------+---------------------------+

amnesiac (config) # ssc reg-policy list
+---------------------------+----------------+
| Policy ID                 | Tag            |
+---------------------------+----------------+
| Policy-MHM8-AB62-SI2J-DNUX | jk-self-reg-01 |
| Policy-I7A7-3DN2-6IEB-QF96 | jk-self-reg-02 |
| Policy-8QU3-ZERY-8IW6-3W6J | self-reg-01    |
+---------------------------+----------------+
```

Related Commands

show ssc reg-policy, ssc reg-policy delete, ssc reg-policy list, ssc reg-policy update

ssc reg-policy delete

Deletes a registration policy from the Services Director.

Syntax

ssc reg-policy delete policy-id *registration-policy*

Parameters

registration-policy

Specify the name of the registration policy that you want to delete.

Examples

```
>> list self-reg policies <<
amnesiac (config) # ssc reg-policy list
+---------------------------+----------------+
| Policy ID                 | Tag            |
+---------------------------+----------------+
| Policy-MHM8-AB62-SI2J-DNUX | jk-self-reg-01 |
| Policy-I7A7-3DN2-6IEB-QF96 | jk-self-reg-02 |
| Policy-8QU3-ZERY-8IW6-3W6J | self-reg-01    |
+---------------------------+----------------+

>> delete self-reg policy 'jk-self-reg-02' <<
amnesiac (config) # ssc reg-policy delete policy-id jk-self-reg-02
+-----------------------------------------------------------+
| Deleted                                                   |
+-----------------------------------------------------------+
| Registration policy Policy-I7A7-3DN2-6IEB-QF96 deleted |
+-----------------------------------------------------------+

>> list self-reg policies to confirm deletion <<
amnesiac (config) # ssc reg-policy list
+---------------------------+----------------+
| Policy ID                 | Tag            |
+---------------------------+----------------+
| Policy-MHM8-AB62-SI2J-DNUX | jk-self-reg-01 |
| Policy-8QU3-ZERY-8IW6-3W6J | self-reg-01    |
+---------------------------+----------------+
```

Related Commands

show ssc reg-policy, ssc reg-policy create, ssc reg-policy list, ssc reg-policy update

ssc reg-policy list

Displays a list of all a registration policies on the Services Director.

Syntax

ssc reg-policy list

Examples

```
amnesiac (config) # ssc reg-policy list
+---------------------------+----------------+
| Policy ID                 | Tag            |
+---------------------------+----------------+
| Policy-MHM8-AB62-SI2J-DNUX | jk-self-reg-01 |
| Policy-I7A7-3DN2-6IEB-QF96 | jk-self-reg-02 |
| Policy-8QU3-ZERY-8IW6-3W6J | self-reg-01    |
+---------------------------+----------------+
```

Related Commands

show ssc reg-policy, ssc reg-policy create, ssc reg-policy delete, ssc reg-policy update

ssc reg-policy update

Updates a registration policy on the Services Director.

Syntax

ssc reg-policy update policy-id *registration-policy* [**feature-pack**] *feature-pack* [**bandwidth** *bandwidth*] [**mgmt-ip-subnet** *subnet*] [**inst-version-low** *version*] [**inst-version-high** *version*] [**access-profile** *frequency*] [**tag** *number*]

Parameters

registration-policy

Specify the name of the registration policy that you want to update.

feature-pack

Optionally, specify the name of a feature pack.
This is the feature pack that will be assigned to a vTM that is successfully evaluated using this policy.
This is not an acceptance condition, but the evaluation of the **bandwidth** property refers to this property.

bandwidth

Optionally, specify the required bandwidth (in Mbps) for a vTM that is evaluated using this policy.
If there is insufficient bandwidth in the specified Feature Pack for a vTM, the auto-acceptance of the vTM is rejected by the self-registration policy.

mgmt-ip-subnet

Optionally, specify the IP address and netmask of a subnetwork in CIDR format. For example, 10.122.12.13/18.
This identifies the subnet to which a vTM must belong to be accepted by this policy.
If a vTM that is evaluated by this policy is from outside the specified subnetwork, the auto-acceptance of the vTM is rejected by the self-registration policy.

inst-version-low

Optionally, select a minimum version for the vTM software. This takes the form X.Y. Examples: 10.0, 10.3.
R1 releases are included automatically for any base version. For example, 10.0 includes 10.0r1.
If a vTM that is evaluated by this policy does not meet this condition, the auto-acceptance of the vTM is rejected by the self-registration policy.

inst-version-high

Optionally, select a maximum version for the vTM software. This takes the form X.Y. Examples: 10.4, 11.0.
R1 releases are included automatically for any base version. For example, 10.3 includes 10.3r1.
If a vTM that is evaluated by this policy does not meet this condition, the auto-acceptance of the vTM is rejected by the self-registration policy.

access-profile

Optionally, select an access profile. This access profile identifies the authenticator and permission groups required for the user authentication on this vTM.
If selected, these will be applied to the vTM once it is accepted. All cluster members are affected by this change.

tag

Optionally, enter a unique name for the self-registration policy.

Examples

```
>> show details for a self-reg policy <<
amnesiac (config) # show ssc reg-policy policy-id self-reg-01
+----------------------------+----------------------------+
| Field                      | Value                      |
+----------------------------+----------------------------+
| instance_version_range_low |                            |
| bandwidth                  | 100                        |
| tag                        | self-reg-01                |
| children                   | None                       |
| management_ip_subnet       | 10.62.128.0/18             |
| feature_pack               | STM-400_full               |
| access_profile             | None                       |
| instance_version_range_high |                           |
| policy_id                  | Policy-8QU3-ZERY-8IW6-3W6J |
+----------------------------+----------------------------+

>> change bandwidth from 100 to 120 <<
amnesiac (config) # ssc reg-policy update policy-id self-reg-01 bandwidth 120
+----------------------------+----------------------------+
| Field                      | Value                      |
+----------------------------+----------------------------+
| instance_version_range_low |                            |
| bandwidth                  | 120                        |
| tag                        | self-reg-01                |
| management_ip_subnet       | 10.62.128.0/18             |
| feature_pack               | STM-400_full               |
| instance_version_range_high |                           |
| policy_id                  | Policy-8QU3-ZERY-8IW6-3W6J |
+----------------------------+----------------------------+
```

Related Commands

show ssc reg-policy, ssc reg-policy create, ssc reg-policy delete, ssc reg-policy list

ssc sd-authenticator add ldap auth-name

Adds an LDAP-based Services Director authenticator.

Syntax

ssc sd-authenticator add ldap auth-name *authenticator-name* **auth-status** [**enable** | **disable**] *server* **server** *server* **dn-method** *method* **filter** *filter* **base-dn** *base-DN* **fallback-group** *fallback-group* **port** *port* **timeout** *timeout-period* **group-attribute** *group-attribute* **group-field** *group-field* **bind-dn** *bind-DN* **group-filter** *group-filter* [**search-dn** *search-DN* **search-password** *password*]

Parameters

authenticator-name

Specify a name for the LDAP Services Director authenticator.

auth-status

Specify whether the authenticator is either enabled or disabled.

server

Specify the IP address or hostname of the LDAP server.

method

Specify how the bind DN for a user will be derived. Either:

construct

the bind DN for a user can be constructed from a known string, (see <bind-DN>) or

search

the bind DN for a user can be searched for in the directory. This is necessary if you have users under different directory paths.

filter

Specify a filter that uniquely identifies a user located under the Base DN.
The string "%u" will be substituted with the username. For example:

"sAMAccountName=%u"

Active Directory

"uid=%u"

Unix LDAP

base-DN

Specify the base DN (Distinguished Name) for directory searches.

fallback-group

Specify a permission group. For example, "admin". If <group-attribute> is not defined, or is not set for the user, this permission group will be used. If not specified, users with no attribute matching group-attribute will be denied access.

port

Specify the port used to connect to the LDAP server.

timeout-period

Specify the timeout period (in seconds) for a connection to the LDAP server.

group-attribute

Specify the LDAP attribute that gives a user's group. For example: "memberOf". If multiple values are returned by the LDAP server, the first valid one will be used.

group-field

Specify the sub-field of the group-attribute that gives a user's group. For example: if <group-attribute> is "memberOf" which delivers "CN=mygroup, OU=groups, OU=users, DC=mycompany, DC=local", set group-field to "CN". The first matching field will be used.

bind-DN

Specify a template to construct the bind DN from the username. This is only used when <method> is "construct". The string "%u" is replaced by the username. For example:

"%u@mycompany.local"

"cn=%u,dn=mycompany,dn=local"

group-filter

Specify an alternative group search filter. This is only used when the user record returned by the LDAP filter does not contain the required group information.

This will typically be required if you have Unix/POSIX-style user records. If multiple records are returned the list of group names will be extracted from all of them.

The string "%u" will be replaced by the username. For example:

"(&(memberUid=%u)(objectClass=posixGroup))"

search-DN

Specify a DN to use when searching the directory for a user's bind DN. These are only used when the DN Method is Search. You can leave these blank if it is possible to perform the bind DN search using an anonymous bind.

search-password

Specify the password for the search-DN.

Usage Guidelines

Use the **no ssc sd-authenticator auth-name** command to delete an authenticator.

You cannot delete a Services Director authenticator that is associated with an access profile.

Examples

```
>> create an LDAP Services Director authenticator <<
amnesiac (config) # ssc sd-authenticator add ldap auth-name "LDAP Server" auth-status enabled server
10.62.169.170 dn-method "construct" filter "sAMAccountName=%u" base-dn "OU=users, DC=tekton, DC=local"
fallback-group admin port 389 timeout 30 group-attribute "memberOf" group-field "CN" bind-dn
"%u@takton.local" group-filter "(&(memberUid=%u)(objectClass=posixGroup))"
+--------------------------------------+
| Created                              |
+--------------------------------------+
| SD Authenticator LDAP Server created |
+--------------------------------------+

>> delete an LDAP Services Director <<
amnesiac (config) # no ssc sd-authenticator auth-name "LDAP Server"
+----------------------------------+
| Deleted                          |
+----------------------------------+
| Authenticator LDAP Server deleted |
+----------------------------------+
```

Related Commands

show ssc sd-authenticator, ssc sd-authenticator add radius auth-name, ssc sd-authenticator add tacacs_plus auth-name, ssc sd-authenticator list, ssc sd-authenticator test auth-name, ssc sd-authenticator update ldap auth-name, ssc sd-authenticator update radius auth-name, ssc sd-authenticator update tacacs_plus auth-name

ssc sd-authenticator add radius auth-name

Adds a RADIUS-based Services Director authenticator.

Syntax

ssc sd-authenticator add radius auth-name *authenticator-name* **auth-status** [**enable** | **disable**] **server** *server* **fallback-group** *fallback-group* **port** *port* **timeout** *timeout-period* **group-attribute** *group-attribute* **group-vendor** *group-vendor* **secret** *secret* **nas-identifier** *NAS-identifier* **nas-ip-address** *NAS-ip-address*

Parameters

authenticator-name
Specify a name for the RADIUS Services Director authenticator.

auth-status
Specify whether the authenticator is either enabled or disabled.

server
Specify the IP address or hostname of the RADIUS server.

fallback-group
Specify a permission group. For example, "admin". If no group is found using the vendor and group identifiers, or the group found is not valid, the permission group specified here will be used.

port
Specify the port used to connect to the RADIUS server.

timeout-period
Specify the timeout period (in seconds) for a connection to the RADIUS server.

group-attribute
Specify the RADIUS identifier for the attribute that specifies an account's group. May be left blank if <fallback-group> is specified.

group-vendor
Specify the RADIUS identifier for the vendor of the RADIUS attribute that specifies an account's group. Leave blank if using a standard attribute such as Filter-Id.

secret
Specify the secret key shared with the RADIUS server.

NAS-identifier
Specify a string identifying the Network Access Server (NAS) which is requesting authentication of the user. This value is sent to the RADIUS server. If left blank the address of the interface used to connect to the server will be used.

NAS-ip-address
Specify the identifying IP Address of the NAS which is requesting authentication of the user. This value is sent to the RADIUS server.

Usage Guidelines

Use the **no ssc sd-authenticator auth-name** command to delete an authenticator.

You cannot delete a Services Director authenticator that is associated with an access profile.

Examples

```
>> create a RADIUS authenticator <<
amnesiac (config) # ssc sd-authenticator add radius auth-name "RADIUS Server" server 10.62.167.193
fallback-group admin port 1812 timeout 30 group-attribute 1 group-vendor 1476 secret * nas-identifier
"Internal RADIUS" nas-ip-address 127.0.0.1
+-------------------------------------+
| Created                             |
+-------------------------------------+
| Authenticator RADIUS Server created |
+-------------------------------------+

>> delete an authenticator <<
amnesiac (config) # no ssc sd-authenticator auth-name "RADIUS Server"
+-------------------------------------+
| Deleted                             |
+-------------------------------------+
| Authenticator RADIUS Server deleted |
+-------------------------------------+
```

Related Commands

show ssc sd-authenticator, ssc sd-authenticator add ldap auth-name, ssc sd-authenticator add tacacs_plus auth-name, ssc sd-authenticator list, ssc sd-authenticator test auth-name, ssc sd-authenticator update ldap auth-name, ssc sd-authenticator update radius auth-name, ssc sd-authenticator update tacacs_plus auth-name

ssc sd-authenticator add tacacs_plus auth-name

Adds a TACACS+-based Services Director authenticator.

Syntax

ssc sd-authenticator add tacacs-plus auth-name *authenticator-name* **auth-status** [**enable** | **disable**] **server** *server* **auth-type** *pap* | *ascii* **fallback-group** *fallback-group* **port** *port* **timeout** *timeout-period* **group-field** *group-field* **group-service** *group-service* **secret** *secret*

Parameters

authenticator-name
: Specify a name for the TACACS+ Services Director authenticator.

auth-status
: Specify whether the authenticator is either enabled or disabled.

server
: Specify the IP address or hostname of the TACACS+ server.

auth-type
: Specify the TACACS+ authentication type, either PAP or ACSII.

fallback-group
: Specify a permission group. If <group-service> is not defined, or no group value is provided for the user by the TACACS+ server, the group specified here will be used. If this is not specified, users with no TACACS+ defined group will be denied access.

port
: Specify the port used to connect to the TACACS+ server.

timeout-period
: Specify the timeout period (in seconds) for a connection to the TACACS+ server.

group-field
: Specify the TACACS+ "service" field that provides each user's group.

group-service
: Specify the TACACS+ "service" that identifies a user's group field.

secret
: Specify the secret key shared with the TACACS+ server.

Usage Guidelines

Use the **no ssc sd-authenticator auth-name** command to delete an authenticator.

You cannot delete a Services Director authenticator that is associated with an access profile.

Examples

```
>> create a TACACS+ authenticator <<
amnesiac (config) # ssc sd-authenticator add tacacs-plus auth-name "TACACS+ Server" auth-status enabled
server 10.62.167.198 auth-type pap fallback-group admin port 49 timeout 30 group-field permission-group
group-service "Hoobland" secret "tacacs_plus_secret"
+----------------------------------------+
| Created                                |
+----------------------------------------+
| SD Authenticator TACACS+ Server created |
+----------------------------------------+

>> delete an authenticator <<
amnesiac (config) # no ssc sd-authenticator auth-name "TACACS+ Server"
+----------------------------------------+
| Deleted                                |
+----------------------------------------+
| SD Authenticator TACACS+ Server deleted |
+----------------------------------------+
```

Related Commands

show ssc sd-authenticator, ssc sd-authenticator add ldap auth-name, ssc sd-authenticator add radius auth-name, ssc sd-authenticator list, ssc sd-authenticator test auth-name, ssc sd-authenticator update ldap auth-name, ssc sd-authenticator update radius auth-name, ssc sd-authenticator update tacacs_plus auth-name

ssc sd-authenticator list

Lists all defined Services Director authenticators.

Syntax

ssc sd-authenticator list

Examples

```
amnesiac (config) # ssc sd-authenticator list
+----------------+----------------------------------+
| Name           | Unique ID                        |
+----------------+----------------------------------+
| LDAP Server    | Authenticator-D83I-9095-TT8R-CUAT |
| RADIUS Server  | Authenticator-808G-LJWJ-MT3B-WMDZ |
| TACACS+ Server | Authenticator-7F1D-A1K3-1PO4-VSEF |
+----------------+----------------------------------+
```

Related Commands

show ssc sd-authenticator, ssc sd-authenticator add ldap auth-name, ssc sd-authenticator add radius auth-name, ssc sd-authenticator add tacacs_plus auth-name, ssc sd-authenticator test auth-name, ssc sd-authenticator update ldap auth-name, ssc sd-authenticator update radius auth-name, ssc sd-authenticator update tacacs_plus auth-name

ssc sd-authenticator test auth-name

Tests a Services Director authenticator using a remote user name and password.

Syntax

ssc sd-authenticator test auth-name *authenticator-name* **username** *user-name* **password** *password*

Examples

```
amnesiac (config) #  ssc sd-authenticator test auth-name bbotservices username tacadmin password
tacpassword
+--------+---------+
| Result | Message |
+--------+---------+
| True   |         |
+--------+---------+
```

Related Commands

show ssc sd-authenticator, ssc sd-authenticator add ldap auth-name, ssc sd-authenticator add radius auth-name, ssc sd-authenticator add tacacs_plus auth-name, ssc sd-authenticator list, ssc sd-authenticator update ldap auth-name, ssc sd-authenticator update radius auth-name, ssc sd-authenticator update tacacs_plus auth-name

ssc sd-authenticator update ldap auth-name

Updates an LDAP-based Services Director authenticator.

Syntax

ssc sd-authenticator update ldap auth-name *authenticator-name* **auth-status** [**enable** | **disable**] [**server** *server* | **dn-method** *method* | **filter** *filter* | **base-dn** *base-DN* | **fallback-group** *fallback-group* | **port** *port* | **timeout** *timeout-period* | **group-attribute** *group-attribute* | **group-field** *group-field* | **bind-dn** *bind-DN* | **group-filter** *group-filter* | **search-dn** *search-DN* | **search-password** *password*]

Parameters

authenticator-name

Specify the name of the LDAP Services Director authenticator.

auth-status

Specify whether the authenticator is either enabled or disabled.

server

Specify the IP address or hostname of the LDAP server.

method

Specify how the bind DN for a user will be derived. Either:

construct

the bind DN for a user can be constructed from a known string, (see <bind-DN>) or

search

the bind DN for a user can be searched for in the directory. This is necessary if you have users under different directory paths.

filter

Specify a filter that uniquely identifies a user located under the Base DN.
The string "%u" will be substituted with the username. For example:

"sAMAccountName=%u"

Active Directory

"uid=%u"

Unix LDAP

base-DN

Specify the base DN (Distinguished Name) for directory searches.

fallback-group

Specify a permission group. For example, "admin". If <group-attribute> is not defined, or is not set for the user, this permission group will be used. If not specified, users with no attribute matching group-attribute will be denied access.

port

Specify the port used to connect to the LDAP server.

timeout-period

Specify the timeout period (in seconds) for a connection to the LDAP server.

group-attribute

Specify the LDAP attribute that gives a user's group. For example: "memberOf". If multiple values are returned by the LDAP server, the first valid one will be used.

group-field

Specify the sub-field of the group-attribute that gives a user's group. For example: if <group-attribute> is "memberOf" which delivers "CN=mygroup, OU=groups, OU=users, DC=mycompany, DC=local", set group-field to "CN". The first matching field will be used.

bind-DN

Specify a template to construct the bind DN from the username. This is only used when <method> is "construct". The string "%u" is replaced by the username. For example:

"%u@mycompany.local"

"cn=%u,dn=mycompany,dn=local"

group-filter

Specify an alternative group search filter. This is only used when the user record returned by the LDAP filter does not contain the required group information.

This will typically be required if you have Unix/POSIX-style user records. If multiple records are returned the list of group names will be extracted from all of them.

The string "%u" will be replaced by the username. For example:

"(&(memberUid=%u)(objectClass=posixGroup))"

search-DN

Specify a DN to use when searching the directory for a user's bind DN. These are only used when the DN Method is Search. You can leave these blank if it is possible to perform the bind DN search using an anonymous bind.

search-password

Specify the password for the search-DN.

Examples

```
amnesiac (config) # ssc sd-authenticator update ldap auth-name "LDAP Server" server 10.62.169.170 dn-
method construct filter "sAMAccountName=%u" base-dn "OU=users, DC=tekton, DC=local" fallback-group
admin port 389 timeout 20 group-attribute "memberOf" group-field "CN" bind-dn "%u@takton.local" group-
filter "(&(memberUid=%u)(objectClass=posixGroup))"
+--------------------------------------+
| Modified                             |
+--------------------------------------+
| SD Authenticator LDAP Server modified |
+--------------------------------------+
```

Related Commands

show ssc sd-authenticator, ssc sd-authenticator add ldap auth-name, ssc sd-authenticator add radius auth-name, ssc sd-authenticator add tacacs_plus auth-name, ssc sd-authenticator list, ssc sd-authenticator update radius auth-name, ssc sd-authenticator update tacacs_plus auth-name

ssc sd-authenticator update radius auth-name

Updates a RADIUS-based Services Director authenticator.

Syntax

ssc sd-authenticator create radius auth-name *authenticator-name* **auth-status** [**enable** | **disable**] [**server** *server* | **fallback-group** *fallback-group* | **port** *port* | **timeout** *timeout-period* | **group-attribute** *group-attribute* | **group-vendor** *group-vendor* | **secret** *secret* | **nas-identifier** *NAS-identifier* | **nas-ip-address** *NAS-ip-address*]

Parameters

authenticator-name
: Specify the name of the RADIUS Services Director authenticator.

auth-status
: Specify whether the authenticator is either enabled or disabled.

server
: Specify the IP address or hostname of the RADIUS server.

fallback-group
: Specify a permission group. For example, "admin". If no group is found using the vendor and group identifiers, or the group found is not valid, the permission group specified here will be used.

port
: Specify the port used to connect to the RADIUS server.

timeout-period
: Specify the timeout period (in seconds) for a connection to the RADIUS server.

group-attribute
: Specify the RADIUS identifier for the attribute that specifies an account's group. May be left blank if <fallback-group> is specified.

group-vendor
: Specify the RADIUS identifier for the vendor of the RADIUS attribute that specifies an account's group. Leave blank if using a standard attribute such as Filter-Id.

secret
: Specify the secret key shared with the RADIUS server.

NAS-identifier
: Specify a string identifying the Network Access Server (NAS) which is requesting authentication of the user. This value is sent to the RADIUS server. If left blank the address of the interface used to connect to the server will be used.

NAS-ip-address
: Specify the identifying IP Address of the NAS which is requesting authentication of the user. This value is sent to the RADIUS server.

Examples

```
amnesiac (config) # ssc sd-authenticator update radius auth-name "RADIUS Server" server 10.62.167.193
fallback-group admin port 1812 timeout 30 group-attribute 1 group-vendor 1476 secret "radius_secret"
nas-identifier "Internal RADIUS" nas-ip-address 127.0.0.1
+---------------------------------------+
| Modified                              |
+---------------------------------------+
| SD Authenticator RADIUS Server modified |
+---------------------------------------+
```

Related Commands

show ssc sd-authenticator, ssc sd-authenticator add ldap auth-name, ssc sd-authenticator add radius auth-name, ssc sd-authenticator add tacacs_plus auth-name, ssc sd-authenticator list, ssc sd-authenticator update ldap auth-name, ssc sd-authenticator update tacacs_plus auth-name

ssc sd-authenticator update tacacs_plus auth-name

Updates a TACACS+-based Services Director authenticator.

Syntax

ssc sd-authenticator update tacacs-plus auth-name *authenticator-name* **auth-status** [**enable** | **disable**] [**server** *server* | **auth-type** [*pap* | *ascii*] | **fallback-group** *fallback-group* | **port** *port* | **timeout** *timeout-period* | **group-field** *group-field* | **group-service** *group-service* | **secret** *secret*]

Parameters

authenticator-name
: Specify the name of the TACACS+ Services Director authenticator.

auth-status
: Specify whether the authenticator is either enabled or disabled.

server
: Specify the IP address or hostname of the TACACS+ server.

auth-type
: Specify the TACACS+ authentication type, either PAP or ACSII.

fallback-group
: Specify a permission group. If <group-service> is not defined, or no group value is provided for the user by the TACACS+ server, the group specified here will be used. If this is not specified, users with no TACACS+ defined group will be denied access.

port
: Specify the port used to connect to the TACACS+ server.

timeout-period
: Specify the timeout period (in seconds) for a connection to the TACACS+ server.

group-field
: Specify the TACACS+ "service" field that provides each user's group.

group-service
: Specify the TACACS+ "service" that identifies a user's group field.

secret
: Specify the secret key shared with the TACACS+ server.

Examples

```
amnesiac (config) #  ssc sd-authenticator update tacacs-plus auth-name "TACACS+ Server" server
10.62.167.198 auth-type pap fallback-group admin port 49 timeout 30 group-field permission-group group-
service "Hoobland" secret "tacacs_plus_secret"
+----------------------------------------+
| Modified                               |
+----------------------------------------+
| SD Authenticator TACACS+ Server modified |
+----------------------------------------+
```

Related Commands

show ssc sd-authenticator, ssc sd-authenticator add ldap auth-name, ssc sd-authenticator add radius auth-name, ssc sd-authenticator add tacacs_plus auth-name, ssc sd-authenticator list, ssc sd-authenticator update ldap auth-name, ssc sd-authenticator update radius auth-name

ssc sd-permission-group create pg-name

Creates a Services Director permission group for user authentication.

Syntax

ssc sd-permission-group create pg-name *pg-name* [**description** *description*]

Parameters

pg-name

Specify a name for the Services Director permission group.

description

Optionally, specify a description of the permission group.

Usage Guidelines

Typically, there is a single Services Director permission group, with full access. The name of this permission group must match the group returned by the authenticator.

Use the **no ssc sd-permission-group pg-name** command to delete a permission group.

Examples

```
amnesiac (config) # ssc sd-permission-group create pg-name admin2 description "administration group"
+--------------------------------+
| Created                        |
+--------------------------------+
| permission group admin created |
+--------------------------------+

>> delete the admin permission group <<
amnesiac (config) # no ssc sd-permission-group pg-name admin
+--------------------------------+
| Deleted                        |
+--------------------------------+
| permission group admin deleted |
+--------------------------------+
```

Related Commands

show ssc sd-permission-group, ssc sd-permission-group list, ssc sd-permission-group update pg-name

ssc sd-permission-group list

Lists all defined Services Director permission groups.

Syntax

ssc sd-permission-group list

Usage Guidelines

Typically, there is a single Services Director permission group, with full access. The name of this permission group matches the group returned by the authenticator.

Examples

```
amnesiac (config) # ssc sd-permission-group list
+-------+--------------------------------------+
| Name  | Unique ID                            |
+-------+--------------------------------------+
| admin | Permission-Group-XG8K-FUYG-WKKV-9IKP |
+-------+--------------------------------------+
```

Related Commands

show ssc sd-permission-group, ssc sd-permission-group create pg-name, ssc sd-permission-group update pg-name

ssc sd-permission-group update pg-name

Updates a Services Director permission group.

Syntax

ssc sd-permission-group update permission-group-name *pg-name* [**new-pg-name** *new-pg-name*] [**description** *description*]

Parameters

pg-name

Specify a name for the Services Director permission group.

description

Optionally, specify a description of the permission group.

new-pg-name

Optionally, specify a new name for the Services Director permission group.

Usage Guidelines

Typically, there is a single Services Director permission group, with full access. The name of this permission group matches the group returned by the authenticator.

Only the description and name can be changed.

Examples

```
>> list the Services Director permission groups (there is only one)
amnesiac (config) # ssc sd-permission-group list
+-------+---------------------------------------+
| Name  | Unique ID                             |
+-------+---------------------------------------+
| admin | Permission-Group-IPI9-J91T-B5J7-D63F |
+-------+---------------------------------------+

>> show details of the only permission group <<
amnesiac (config) # show ssc sd-permission-group pg-name admin
+--------------------+-------------------------------------------------------+
| Field              | Value                                                 |
+--------------------+-------------------------------------------------------+
| description        | Single permission group for SD user authentication. |
| permission_group_id | Permission-Group-IPI9-J91T-B5J7-D63F                |
| tag                | admin                                                 |
| children           | None                                                  |
+--------------------+-------------------------------------------------------+

>> update the permission group <<
amnesiac (config) # ssc sd-permission-group update pg-name admin new-pg-name charcoal
+--------------------------------+
| Updated                        |
+--------------------------------+
| permission group admin updated |
+--------------------------------+

>> display changes <<
amnesiac (config) # show ssc sd-permission-group pg-name charcoal
+--------------------+-------------------------------------------------------+
| Field              | Value                                                 |
+--------------------+-------------------------------------------------------+
| description        | Single permission group for SD user authentication. |
| permission_group_id | Permission-Group-IPI9-J91T-B5J7-D63F                |
| tag                | charcoal                                              |
| children           | None                                                  |
+--------------------+-------------------------------------------------------+
```

Related Commands

show ssc sd-permission-group, ssc sd-permission-group create pg-name, ssc sd-permission-group list

ssc server rest-port-num

Configures the Services Director REST API port number.

Syntax

[no] ssc server rest-port-num *port-number*

Parameters

port-number

Specify the REST API port number.

Usage Guidelines

Use the **no** command option to delete the REST API port number.

Examples

```
amnesiac (config) # ssc server rest-port-num 1234
```

Related Commands

show ssc server

ssc service enable

Starts the Services Director service.

Syntax

[no] ssc service enable

Usage Guidelines

Use the **no** command option disable the service.

Examples

```
amnesiac (config) # ssc service enable
```

ssc service restart

Restarts the Services Director service.

Syntax

ssc service restart

Examples

```
amnesiac (config) # ssc service restart
```

ssc settings con-lic update exp-warningdays

Sets expiration days for a warning to be sent for the Services Director license.

Syntax

ssc settings con-lic update exp-warningdays *number-of-days*

Parameters

number-of-days

Specify the number of days in advance to warn before Services Director license expires.

Examples

```
amnesiac (config) # ssc settings con-lic update exp-warningdays 30
```

Related Commands

show ssc settings con-lic

ssc settings con-lic update template-name

Updates Services Director license expiration settings based on the specified template.

Syntax

ssc settings con-lic update template-name *name* | **exp-warningdays** *number-of-days*

Parameters

name

Specify the template name.

number-of-days

Specify the number of days in advance to warn before Services Director license expires.

Usage Guidelines

Update a Services Director license expiration settings with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc settings con-lic update template-name con-lic-temp1 exp-warningdays 30
```

Related Commands

show ssc settings licensing

ssc settings deployment update max-instances

Sets the maximum number of deployable instances.

Syntax

ssc settings deployment update max-instances *integer*

Parameters

integer

Specify maximum number of deployable instances, 0 equals no limit.

Usage Guidelines

Typically, zero is the correct value for most deployments. Instances that have been deleted do not count towards the limit. Instances that have been deployed but are not active (that is, have not been started) do count towards the limit. If you create a new instance in excess of this number, the instance is rejected with an error message. If this property is set to a lower number than the number of currently deployed instances then there is no immediate effect but subsequent deployment requests are rejected.

Examples

```
amnesiac (config) # ssc settings deployment update max-instances 0
```

Related Commands

ssc settings list

ssc settings deployment update template-name

Updates a Services Director deployment based on the specified template.

Syntax

ssc settings deployment update template-name *name* | **max-instances** *integer*

Parameters

name

Specify the template name.

integer

Specify the maximum number of Traffic Manager instances that can be deployed. The default value zero (0) equals no limit. The value must be a positive integer.

Usage Guidelines

Update a deployment settings with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc settings deployment update template-name deploytemp1 max-instances 0
```

Related Commands

ssc settings list, ssc template create template-name

ssc settings external-ip

Sets the external IP corresponding to the Services Endpoint Address when Services Director is running in a private network behind a NAT.

Syntax

[no] ssc settings external-ip

Usage Guidelines

The **no** command option clears the set external IP address.

Examples

```
amnesiac (config) # ssc settings external-ip 10.62.150.30
+-------------+--------------+
| Field       | Value        |
+-------------+--------------+
| external_ip | 10.62.150.30 |
+-------------+--------------+
amnesiac (config) # no ssc settings external-ip
+-------------+--------+
| Field       | Value |
+-------------+--------+
| external_ip | None  |
+-------------+--------+
```

Related Commands

show ssc settings external-ip

ssc settings fla-check enable

Enables the FLA checker for the Services Director.

Syntax

[no] ssc settings fla-check enable

Usage Guidelines

The **no** command option disables the FLA checker.

Examples

```
amnesiac (config) # ssc settings fla-check enable
+-------------------+-------+
| Field             | Value |
+-------------------+-------+
| fla_check_enabled | True  |
+-------------------+-------+
amnesiac (config) # no ssc settings fla-check enable
+-------------------+-------+
| Field             | Value |
+-------------------+-------+
| fla_check_enabled | False |
+-------------------+-------+
```

Related Commands

show ssc settings fla-check

ssc settings licensing update alert-threshold

Updates Services Director licensing settings.

Syntax

ssc settings licensing update alert-threshold *integer* **alert-thld-itvl** *seconds*

Parameters

integer

Specify the number of alerts that can be sent. The range is 1-3600, inclusive; the value must be a positive integer.

alert-thld-itvl *seconds*

Specify the period of time, in seconds, between alerts. The default value is 3600 seconds (1 hour). The range is 1-3600, inclusive; the value must be a positive integer.

Usage Guidelines

The threshold and interval settings enable you to specify the time interval before an alert email is sent to the configured alert email addresses. The threshold and interval is reached then an alert message is sent. At most one message is sent per hour, to protect against a flood of messages being sent in the case of complete failure of the primary license server on a busy system.

Examples

```
amnesiac (config) # ssc settings licensing update alert-threshold 10 alert-thld-itvl 3600
```

Related Commands

ssc settings list

ssc settings licensing update template-name

Updates Services Director licensing settings based on the specified template.

Syntax

ssc settings licensing update template-name *name* **alert-threshold** *integer* **alert-thld-itvl** *seconds*

Parameters

name

Specify the template name.

alert-threshold *integer*

Specify the number of alerts that can be sent. The range is 1-3600, inclusive; the value must be a positive integer.

alert-thld-itvl *seconds*

Specify the period of time, in seconds, between alerts. The default value is 3600 seconds (1 hour). The range is 1-3600, inclusive; the value must be a positive integer.

Usage Guidelines

Update a licensing settings with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

The threshold and interval settings enable you to specify the time interval before an alert email is sent to the configured alert email addresses. The threshold and interval is reached then an alert message is sent. At most one message is sent per hour, to protect against a flood of messages being sent in the case of complete failure of the primary license server on a busy system.

Examples

```
amnesiac (config) # ssc settings licensing update template-name lictemp1 alert-threshold 5 alert-thld-itvl 1600
```

Related Commands

ssc settings list, ssc template create template-name

ssc settings list

Lists Services Director settings.

Syntax

ssc settings list

Examples

```
amnesiac (config) # ssc settings list
+-------------------------+
| Settings                |
+-------------------------+
| master_password         |
| logging                 |
| fla_check               |
| controller_licensing    |
| metering                |
| phone_home              |
| licensing               |
| deployment              |
| monitoring              |
| bandwidthpack_licensing |
+-------------------------+
```

Related Commands

ssc settings deployment update max-instances, ssc settings licensing update alert-threshold, ssc settings licensing update alert-threshold, ssc settings logging update, ssc settings metering update, ssc settings master-password update

ssc settings logging update

Updates Services Director logging settings.

Syntax

ssc settings logging update | [**license-log** *integer*] | [**metering-log** *integer*] | [**inventory-log** *integer*]

Parameters

license-log *integer*

Specify the license value. The range is 0-10. The default value is 0, which equals no logging. A log level of 3+ causes responses to license server requests to be logged in full, including the feature values set by the feature pack and bandwidth associated with the instance making the request. The value must be a positive integer; there is no upper limit.

metering-log *integer*

Specify the metering logging value. The range is 0-10. The default value is 0 which equals no logging. A log level of 5+ gives a summary of the activities of the metering thread (that is, starting metering, stopping metering, and so forth), while a log level of 9+ provides a detailed logging of each instance being metered. The value must be a positive integer; there is no upper limit.

inventory-log *integer*

Specify the metering logging value. The range is 0-10. The default value is 0, which equals no logging. A log level of 1+ causes inventory changes to be logged (the equivalent of the audit records). A log level of 3+ causes logging of all deployment and action commands. A log level of 8+ causes logging of the output from all deployment and actions. The value must be a positive integer; there is no upper limit.

Examples

```
amnesiac (config) # ssc settings logging update license-log 5
```

Related Commands

ssc settings list

ssc settings logging update template-name

Updates Services Director logging settings based on the specified template.

Syntax

ssc settings logging update template-name *name* | [**license-log** *integer*] | [**metering-log** *integer*] | [**inventory-log** *integer*]

Parameters

name

Specify the template name.

license-log *integer*

Specify the license value. The range is 0-10. The default value is 0, which equals no logging. A log level of 3+ causes responses to license server requests to be logged in full, including the feature values set by the feature pack and bandwidth associated with the instance making the request. The value must be a positive integer; there is no upper limit.

metering-log *integer*

Specify the metering logging value. The range is 0-10. The default value is 0 which equals no logging. A log level of 5+ gives a summary of the activities of the metering thread (that is, starting metering, stopping metering, and so forth), while a log level of 9+ provides a detailed logging of each instance being metered. The value must be a positive integer; there is no upper limit.

inventory-log *integer*

Specify the metering logging value. The range is 0-10. The default value is 0, which equals no logging. A log level of 1+ causes inventory changes to be logged (the equivalent of the audit records). A log level of 3+ causes logging of all deployment and action commands. A log level of 8+ causes logging of the output from all deployment and actions. The value must be a positive integer; there is no upper limit.

Usage Guidelines

Update logging with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc settings logging update template-name tempset1 settemp1 license-log 7
```

Related Commands

ssc settings list, ssc template create template-name

ssc settings master-password reset

This command resets the master password for a Services Director if it in unknown or lost. This command should only be used as a final resort to re-establish a master password.

Syntax

ssc settings master-password reset password *new-password* [**force** [**true** | **false**]]

Parameters

new-password

Specify the new master password. This must be at least 8 characters long, and must have at least:

- One lower case character.
- One upper case character.
- One digit.
- One nonalphanumeric symbol.

force [**true** | **false**]

Specify **true** or **false**. If set to **true**, you can reset the password when there are Traffic Manager instances on the Services Director.

Usage Guidelines

This command is invisible from the command line, but is available.

If you wish to change the master password (that is, you know what the current master password is), use the "ssc settings master-password update" on page 227.

If you have just upgraded from Services Director v2.2r1 or earlier, a default master password has been assigned automatically to the Services Director. The default master password is `master1M@`. See the *Brocade Services Director Advanced User Guide* for details.

The master password is used to encrypt the passwords of all connected Traffic Manager instances. If you reset the master password, these Traffic Manager passwords are lost, and you must be re-enter the passwords manually. See ssc instance update instance-name on page 468.

Where Traffic Manager instances are present on the Services Director, you must include the optional **force true** parameter in the command. This enables the reset to complete. An information message about updating passwords for registered instances is also displayed.

NOTE

After resetting the master password on the Active Services Director, you must repeat the process for the Standby Services Director.

Examples

```
>> attempt to reset <<
amnesiac (config) #  ssc settings master-password reset password Banj-axed27
Not resetting master password
Ensure that "force true" is passed, to confirm that you wish to reset the master password

>> attempt to reset, including the force true parameter <<
amnesiac (config) # ssc settings master-password reset password Banj-axed27 force true
Successfully reset master password
You must manually update all passwords for registered instances
```

NOTE

After resetting the master password on the Active Services Director, you must repeat the process for the Standby Services Director.

Related Commands

ssc settings list, show ssc settings master-password, ssc settings master-password update, ssc instance update instance-name

ssc settings master-password update

Updates the Services Director master password on a Services Director.

Syntax

ssc settings master-password update current-password *current-password* **new-password** *new-password*

Parameters

current-password *current-password*

Specify the current password.

new-password *new-password*

Specify the new password. This must be at least 8 characters long, and must have at least:

- One lower case character.
- One upper case character.
- One digit.
- One nonalphanumeric symbol.

Usage Guidelines

NOTE

If you wish to reset the master password (that is, you do not know what the current master password is), use the "ssc settings master-password reset" on page 226.

This command should be used on the *Active* node in an HA pair.

While the password change completes, the status displayed by the show ssc settings master-password on page 307 command is Changing. Once complete, it becomes Active.

After you have updated the password on the *Active*Services Director node, repeat the command on the *Standby* node.

Examples

```
>> Change the password <<
amnesiac (config) # ssc settings master-password update current-password P0s1-t1ve99 new-password Banj-
axed27
+------------------+----------+
| Field            | Value    |
+------------------+----------+
| status           | Changing |
| new_password     | None     |
| current_password | None     |
+------------------+----------+

>> Monitor the password change while it completes <<
>> (status of "Changing" becomes "Active") <<
amnesiac (config) # show ssc settings master-password
+------------------+----------+
| Field            | Value    |
+------------------+----------+
| status           | Active   |
| new_password     | None     |
| current_password | None     |
+------------------+----------+
```

Related Commands

ssc settings list, show ssc settings master-password

ssc settings metering update

Updates Services Director metering settings.

Syntax

ssc settings metering update | [**meter-interval** *integer*] | [**log-check-itvl** *seconds*] | [**snmp-enabled** [**true** | **false**]] | [**alerts-and-notifications** [**true** | **false**]]

Parameters

meter-interval *integer*

Specify the period of time, in seconds, between metering actions. The default value is 3600 seconds (1 hour). It cannot be set to more than 3600. The range is 1-3600, inclusive; the value must be a positive integer.

log-check-itvl *seconds*

Specify the period of time, in seconds, between checks for log-space. The default value is 3600 seconds (1 hour). The range is 1-3600, inclusive; the value must be a positive integer.

snmp-enabled [**true** | **false**]

Specify **true** or **false** to enable SNMP. By default, this is enabled.

alerts-and-notifications [**true** | **false**]

Specify **true** or **false** to enable alerts and notifications. By default, this is enabled.

Examples

```
amnesiac (config) # ssc settings metering update meter-interval 1500 log-check-itvl 1500 snmp-enabled
False alerts-and-notifications False
+--------------------------+-------+
| Field                    | Value |
+--------------------------+-------+
| alerts_and_notifications | False |
| snmp_enabled             | False |
| log_check_interval       | 1500  |
| meter_interval           | 1500  |
+--------------------------+-------+
```

Related Commands

show ssc dashboard, show ssc metering warning instance-name, ssc metering warning list, ssc settings list

ssc settings metering update template-name

Updates Services Director metering settings based on the specified template.

Syntax

ssc settings metering update template-name *name* | [**meter-interval** *integer*] | [**log-check-itvl** *seconds*]

Parameters

name

Specify the template name.

meter-interval *integer*

Specify the period of time, in seconds, between metering actions. The default value is 3600 seconds (1 hour). It cannot be set to more than 3600. The range is 1-3600, inclusive; the value must be a positive integer.

log-check-itvl *seconds*

Specify the period of time, in seconds, between checks for log-space. The default value is 3600 seconds (1 hour). The range is 1-3600, inclusive; the value must be a positive integer.

Usage Guidelines

Update metering with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc settings metering update template-name mettemp1 meter-interval 3600
```

Related Commands

ssc settings list

ssc settings monitoring update

Updates Services Director monitoring settings.

Syntax

ssc settings monitoring update | [**cont-fail-perid** *seconds*] | [**ins-fail-perid** *seconds*] | [**host-fail-perid** *seconds*] | [**ovd-mon-warn-pd** *seconds*] | [**ins-mon-itvl** *seconds*] | [**cont-mon-itvl** *seconds*] | [**mon-email-itvl** *seconds*] | [**host-mon-itvl** *seconds*]

Parameters

cont-fail-perid *seconds*
Specify the umber of seconds after which a Services Director is considered failed. The default value is 180 seconds.

ins-fail-perid *seconds*
Specify the number of seconds after which an instance is considered failed. The default value is 180 seconds.

host-fail-perid *seconds*
Specify the number of seconds after which a host is considered failed. The default value is 180 seconds.

ovd-mon-warn-pd *seconds*
Specify the number of seconds to consider monitoring overdue. The default value is 300 seconds.

ins-mon-itvl *seconds*
Specify the number of seconds between monitoring instances. The default value is 60 seconds.

cont-mon-itvl *seconds*
Specify the number of seconds between monitoring Services Directors. The default value is 60 seconds.

mon-email-itvl *seconds*
Specify the number of seconds between monitoring alert emails. The default value is 60 seconds.

host-mon-itvl *seconds*
Specify the number of seconds between monitoring hosts. The default value is 60 seconds.

Examples

```
amnesiac (config) # ssc settings monitoring update host-mon-itvl 360 mon-email-itvl 3600
```

Related Commands

show ssc settings monitoring

ssc settings monitoring update template-name

Updates Services Director monitoring settings based on a specified template.

Syntax

ssc settings monitoring update template-name *name* | [**cont-fail-perid** *seconds*] | [**ins-fail-perid** *seconds*] | [**host-fail-perid** *seconds*] | [**ovd-mon-warn-pd** *seconds*] | [**ins-mon-itvl** *seconds*] | [**cont-mon-itvl** *seconds*] | [**mon-email-itvl** *seconds*] | [**host-mon-itvl** *seconds*]

Parameters

name
Specify the template name.

cont-fail-perid *seconds*
Specify the umber of seconds after which a Services Director is considered failed. The default value is 180 seconds.

ins-fail-perid *seconds*
Specify the number of seconds after which an instance is considered failed. The default value is 180 seconds.

host-fail-perid *seconds*
Specify the number of seconds after which a host is considered failed. The default value is 180 seconds.

ovd-mon-warn-pd *seconds*
Specify the number of seconds to consider monitoring overdue. The default value is 300 seconds.

ins-mon-itvl *seconds*
Specify the number of seconds between monitoring instances. The default value is 60 seconds.

cont-mon-itvl *seconds*
Specify the number of seconds between monitoring Services Directors. The default value is 60 seconds.

mon-email-itvl *seconds*
Specify the number of seconds between monitoring alert emails. The default value is 60 seconds.

host-mon-itvl *seconds*
Specify the number of seconds between monitoring hosts. The default value is 60 seconds.

Usage Guidelines

Update metering with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc settings monitoring update template-name monitortemp1 host-mon-itvl 360 mon-email-itvl 360
```

Related Commands

show ssc settings monitoring

ssc settings security update

Updates Services Director security settings.

Syntax

ssc settings monitoring update [**user_lockout_duration_minutes** *minutes*] | [**max_login_attempts** *max_login_attempts*]

Parameters

user_lockout_duration_minutes *seconds*

Specify a suspension lockout duration (in minutes). If the **max_login_attempts** threshold limit is reached, the suspension duration lockout is applied. This has a default of 1 minute, and a maximum of 1440 minutes (equal to one day).

max_login_attempts *seconds*

Specify the maximum number of failed Services Director login attempts for a user. This has a default of zero, which indicates that there is no maximum.

Examples

```
amnesiac (config) # ssc settings security update max-login-attempts 3 user-lockout-duration 15
+------------------------------+-------+
| Field                        | Value |
+------------------------------+-------+
| user_lockout_duration_minutes | 15    |
| max_login_attempts           | 3     |
+------------------------------+-------+
```

Related Commands

show ssc settings security

ssc settings throughput update exp-warningdays

Sets expiration days for a warning to be sent for the Services Director about of bandwidth pack licenses.

Syntax

ssc settings throughput update exp-warningdays *number-of-days*

Parameters

number-of-days

Specify the number of days in advance to warn before Services Director license expires.

Examples

```
amnesiac (config) # ssc settings throughput update exp-warningdays 30
```

Related Commands

show ssc settings throughput

ssc settings throughput update template-name

Updates Services Director throughput expiration settings based on the specified template.

Syntax

ssc settings throughput update template-name *name* | **exp-warningdays** *number-of-days*

Parameters

name

Specify the template name.

number-of-days

Specify the number of days in advance to warn for throughput expiration.

Usage Guidelines

Update a Services Director license expiration settings with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc settings throughput update template-name thrutemp1 exp-warningdays 30
```

Related Commands

show ssc settings throughput

ssc sku list

Lists Services Director SKUs.

Syntax

ssc sku list [**show-all** [**true** | **false**]

Usage Guidelines

By default, the list only includes SKUs that are compatible with your license.

If **show-all** is set to true, the list includes all SKUS, and not just those that are compatible with your license.

Examples

```
>> show SKUs compatible with your license (default) <<
amnesiac (config) # ssc sku list
+-------------+
| Sku         |
+-------------+
| STM-200     |
| STM-SAF-400 |
| STM-100     |
| STM-400     |
| STM-SAF-300 |
| STM-300     |
+-------------+

>> show all SKUs, not just those that are compatible with your license <<
amnesiac (config) #  ssc sku list show-all true
+----------------------------+
| Sku                        |
+----------------------------+
| BR-ADC-UTILM-WAFP1G-U-01   |
| BR-ADC-UTILM-WAFP3G-U-01   |
| BR-ADC-UTILM-WAFP400M-U-01 |
| BR-ADC-UTILM-WAFP50M-U-01  |
| BR-ADC-UTILM-WAFP5G-U-01   |
   .
   . (truncated list)
   .
| ENT-ADVANCED               |
| ENT-ENTERPRISE             |
| ENT-WAFPROXY               |
| STM-100                    |
| STM-200                    |
| STM-300                    |
| STM-400                    |
| STM-WAFPROXY               |
+----------------------------+
```

Related Commands

ssc feature-pack create fpname, show ssc stm images

ssc stm import-image file

Imports a Brocade vTM image.

Syntax

ssc stm import-image file *filename-or-remote-location*

Parameters

filename-or-remote-location

Specify the filename or the remote location of the Traffic Manager image, for example, http, ftp, or scp URL (scp://username:password@host/path/filename).

Examples

```
amnesiac (config) # ssc stm import-image file scp://root@sf.test.com/ssc_archive/ZeusTM_97_Linux-x86_64.tgz
```

Related Commands

show ssc stm images

ssc stm import-lic

Imports the Brocade vTM Flexible Licensing Architecture (FLA) license.

Syntax

ssc stm import-lic *local-license* | [**file** *remote-location* **license-name** *remote-license*]

Parameters

local-license

Specify the filename of a locally-accessible license.

remote-location

Specify the remote location of the license, for example for example, http, ftp, or scp URL (scp://username:password@host/path/filename).

remote-license

Specify the filename of a remotely-accessible license.

Usage Guidelines

This command can be used to import a license either from a locally-accessible license file, or a remotely-accessible license file.

NOTE

You must import the following files into the Services Director before you can create instances: SSL certificate and key, Services Director license, enterprise bandwidth license key, FLA license, and Traffic Manager image. If you have not received your license files, contact Brocade Licensing for assistance.

Examples

```
<local file import>
amnesiac (config) # ssc stm import-lic license.txt

<remote file import>
amnesiac (config) # ssc stm import-lic file http://remote.example.com
   license-name license.txt
```

Related Commands

show ssc stm images

ssc template copy source

Creates a copy of a template.

Syntax

ssc template copy source *template-name* **destination** *new-name*

Parameters

template-name
Specify the template source name.

new-name
Specify the new template name.

Examples

```
amnesiac (config) # ssc template copy source hosttemp1 destination hosttemp2
```

Related Commands

ssc template list

ssc template create template-name

Creates a template for Services Director resources. You use templates to save resource values for reuse later.

Syntax

ssc template create template-name *name* [**arguments**]

Usage Guidelines

This command must be used in conjunction with a Services Director CLI command (see below).

Create templates for resources with the predefined parameters for use later. The predefined parameters in the template are passed to the resource. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments) using the resource create and update commands.

To create a feature pack **fp-1** without using the template:

```
ssc feature-pack create fpname fp-1 stm-sku STM-200 excluded 'ts comp'
```

To create a feature-pack template **fptemp-1** :

```
ssc template create template-name fptemp-1 stm-sku STM-200 excluded 'ts comp'
```

To create a feature pack **fp-2** by using template **fptemp-1** :

```
ssc feature-pack create template-name fptemp-1 fpname fp-2  info test
```

Update the template **fptemp-1** with new values:

```
ssc template update template-name fptemp-1 stm-sku STM-300
```

To show the updated template **fptemp-1** :

```
show ssc template template-name fptemp-1
+---------------+----------+
| Field         | Value    |
+---------------+----------+
| stm-sku       | STM-300  |
| excluded      | ts comp  |
| template-name | fptemp-1 |
+---------------+----------+
```

Use the **no template template-name <name>** command option to disable the template.

Examples

```
amnesiac (config) # ssc template create template-name fptemp-1 stm-sku STM-200 excluded 'ts comp'
```

Related Commands

ssc template list

ssc template list

Lists Services Director templates.

Syntax

ssc template list

Examples

```
amnesiac (config) # ssc template list
+-----------------+
| Template        |
+-----------------+
| fptemp1         |
| hosttemp1       |
+-----------------+
```

Related Commands

ssc user create template-name, ssc template update template-name

ssc template update template-name

Updates an existing Services Director template.

Syntax

ssc template update template-name [**arguments**]

Usage Guidelines

Update templates to add or change common input parameters for specific resources, for example to up date the existing template **fptemp-1** with new values:

```
ssc template update template-name fptemp-1 stm-sku STM-300
+---------------+----------+
| Field         | Value    |
+---------------+----------+
| stm-sku       | STM-300  |
| excluded      | ts comp  |
| template-name | fptemp-1 |
+---------------+----------+
```

Examples

```
amnesiac (config) # ssc template update template-name fptemp-1 stm-sku STM-300
```

Related Commands

ssc template list

ssc user list

Lists the Services Director user accounts.

Syntax

ssc user list

Examples

```
amnesiac (config) # ssc user list
+-------+
| User  |
+-------+
| admin |
+-------+
```

Related Commands

ssc user create user-name, ssc user create template-name

ssc user create template-name

Creates a Services Director user account based on a template.

Syntax

ssc user create template-name *name* **user-name** *name* **password** *password*

Parameters

name

Specify a unique name for the template.

name

Specify the user name. The default name is **sscadmin**.

password

Specify the password for the user.

Usage Guidelines

Create users with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to create the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc user create template-name usertemp1 user-name test password test123
```

Related Commands

ssc user list

ssc user create user-name

Creates a Services Director user account.

Syntax

ssc user create user-name *name* **password** *password*

Parameters

name

Specify the user name. The default name is **sscadmin**.

password

Specify the password for the user.

Examples

```
amnesiac (config) # ssc user create user-name test password test123
```

Related Commands

ssc user list

ssc user update template-name

Updates user settings based on the specified template.

Syntax

ssc user update template-name *name* | [**user-name** *name*] | [**active** [**Active** | **Inactive**]] | [**password** *password*]

Parameters

name

Specify the template name.

name

Specify the user name. The default name is **sscadmin**.

active [**Active** | **Inactive**]

Specify the status:

Active

Activates a resource.

Inactive

Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

password *password*

Specify the password for the user.

Usage Guidelines

Update user settings with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc user update template-name usertemp1 user-name admin1
```

Related Commands

ssc user list

ssc user update user-name

Updates user template.

Syntax

ssc user update user-name *name* | [**active** [**Active** | **Inactive**]] | [**password** *password*]

Parameters

name

Specify the user name. The default name is **sscadmin**.

active [**Active** | **Inactive**]

Specify the status:

Active

Activates a resource.

Inactive

Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

password *password*

Specify the password for the user.

Examples

```
amnesiac (config) # ssc user update user-name admin1 status Inactive
```

Related Commands

ssc user list

ssc version create template-name

Creates a Brocade vTM version based on a template.

Syntax

ssc version create template-name *unique-name* **vfilename** *name-of-version-tarball-file* **vdirectory** *name-of-directory-to-which-tarball-extracts;-if-none,-specify-the-tarball-name* | [**info** *description*]

Parameters

name
Specify a unique name for the template.

name-of-version-tarball-file
Specify the name of the Traffic Manager image.

name-of-directory-to-which-tarball-extracts
Specify the name of directory to which Traffic Manager image extracts; if none, specify the tarball name.

info *description*
Optionally, specify information about the template.

Usage Guidelines

Create versions with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to create the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc version create template-name vtemp1 vfilename stm97 vdirectory ZeusTM_97_Linux-x86_64.tgz
```

Related Commands

show ssc version version-name, ssc version list

ssc version create

Creates an version name for the Brocade vTM image or tarball .

Syntax

ssc version create version-name *unique-name* **vfilename** *name-of-version-tarball-file* **vdirectory** *directory-or-tarball-name* | [**info** *description*]

Parameters

unique-name
Specify a unique name for the Traffic Manager image.

name-of-version-tarball-file
Specify the name of the Traffic Manager image.

directory-or-tarball-name
Specify the name of directory to which tarball extracts; if none, specify the tarball name.

info *description*
Optionally, specify a description of the image.

Usage Guidelines

Creates a version name for the Traffic Manager image or *tarball*.

Examples

```
amnesiac (config) # ssc version create version-name stm97 vfilename ZeusTM_97_Linux-x86_64.tgz
```

Related Commands

show ssc version version-name, ssc version list

ssc version list

Lists the Brocade vTM images.

Syntax

ssc version list

Examples

```
amnesiac (config) # ssc version list
+---------+
| Version |
+---------+
| stm97   |
+---------+
```

Related Commands

ssc version create, ssc version create template-name

ssc version update template-name

Updates the version settings based on the specified template.

Syntax

ssc version update template-name *name* | [**version-name** *name*] | [**vfilename** *image-filename*] | | [**status** [**Active** | **Inactive**]] | [**info** *description*]

Parameters

name
Specify the template name.

name-of-version-tarball-file
Specify the name of the Traffic Manager image.

vdirectory *name-of-directory-to-which-tarball-extracts*
Specify the name of directory to which Traffic Manager image extracts; if none, specify the tarball name.

status [**Active** | **Inactive**]
Specify the status:

Active
Activates a resource.

Inactive
Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

info *description*
Optionally, specify a description of the template.

Usage Guidelines

Update version settings with the parameters predefined in an existing template. The existing template is created by the **ssc template create** command. The predefined parameters in the existing template are passed to the resource to update the command. You have the option to replace or add extra parameters that exist in the specified template (that is, add extra arguments).

Examples

```
amnesiac (config) # ssc version update template-name vtemp1 status Inactive
```

Related Commands

show ssc version version-name, ssc version list

ssc version update version-name

Updates the version.

Syntax

ssc version update version-name *name* | [**vfilename** *image-filename*] | | [**status** [**Active** | **Inactive**]] | [**info** *description*]

Parameters

name

Specify the version name.

name-of-version-tarball-file

Specify the name of the Traffic Manager image.

status [**Active** | **Inactive**]

Specify the status:

Active

Activates a resource.

Inactive

Deactivates a resource. A resource cannot be marked as **Inactive** if it is in use. The resource cannot be reactivated **Inactive** status has been specified.

info *description*

Optionally, specify a description of the template.

Examples

```
amnesiac (config) # ssc version update version-name stm97 status Inactive
```

Related Commands

show ssc version version-name, ssc version list

ssc vtm-authenticator add ldap auth-name

Adds an LDAP-based vTM authenticator.

Syntax

ssc vtm-authenticator add ldap auth-name *authenticator-name* **server** *server* **dn-method** *method* **filter** *filter* **base-dn** *base-DN* **fallback-group** *fallback-group* **port** *port* **timeout** *timeout-period* **group-attribute** *group-attribute* **group-field** *group-field* **bind-dn** *bind-DN* **group-filter** *group-filter* [**search-dn** *search-DN* **search-password** *password*]

Parameters

authenticator-name

Specify a name for the LDAP vTM authenticator.

server

Specify the IP address or hostname of the LDAP server.

method

Specify how the bind DN for a user will be derived. Either:

construct

the bind DN for a user can be constructed from a known string, (see <bind-DN>) or

search

the bind DN for a user can be searched for in the directory. This is necessary if you have users under different directory paths.

filter

Specify a filter that uniquely identifies a user located under the Base DN.
The string "%u" will be substituted with the username. For example:

"sAMAccountName=%u"

Active Directory

"uid=%u"

Unix LDAP

base-DN

Specify the base DN (Distinguished Name) for directory searches.

fallback-group

Specify a permission group. For example, "admin". If <group-attribute> is not defined, or is not set for the user, this permission group will be used. If not specified, users with no attribute matching group-attribute will be denied access.

port

Specify the port used to connect to the LDAP server.

timeout-period

Specify the timeout period (in seconds) for a connection to the LDAP server.

group-attribute

Specify the LDAP attribute that gives a user's group. For example: "memberOf". If multiple values are returned by the LDAP server, the first valid one will be used.

group-field

Specify the sub-field of the group-attribute that gives a user's group. For example: if <group-attribute> is "memberOf" which delivers "CN=mygroup, OU=groups, OU=users, DC=mycompany, DC=local", set group-field to "CN". The first matching field will be used.

bind-DN

Specify a template to construct the bind DN from the username. This is only used when <method> is "construct". The string "%u" is replaced by the username. For example:

"%u@mycompany.local"

"cn=%u,dn=mycompany,dn=local"

group-filter

Specify an alternative group search filter. This is only used when the user record returned by the LDAP filter does not contain the required group information.

This will typically be required if you have Unix/POSIX-style user records. If multiple records are returned the list of group names will be extracted from all of them.

The string "%u" will be replaced by the username. For example:

"(&(memberUid=%u)(objectClass=posixGroup))"

search-DN

Specify a DN to use when searching the directory for a user's bind DN. These are only used when the DN Method is Search. You can leave these blank if it is possible to perform the bind DN search using an anonymous bind.

search-password

Specify the password for the search-DN.

Usage Guidelines

Use the **no ssc vtm-authenticator auth-name** command to delete an authenticator.

You cannot delete a vTM authenticator that is associated with an access profile.

Examples

```
>> create an LDAP authenticator <<
amnesiac (config) # ssc vtm-authenticator add ldap auth-name "LDAP Server 2" server 10.62.169.170 dn-
method "construct" filter "sAMAccountName=%u" base-dn "OU=users, DC=tekton, DC=local" fallback-group
admin port 389 timeout 30 group-attribute "memberOf" group-field "CN" bind-dn "%u@takton.local" group-
filter "(&(memberUid=%u)(objectClass=posixGroup))"
+----------------------------------------+
| Created                                |
+----------------------------------------+
| vTM Authenticator LDAP Server 2 created |
+----------------------------------------+

>> delete an authenticator <<
amnesiac (config) # no ssc vtm-authenticator auth-name "LDAP Server 2"
+----------------------------------------+
| Deleted                                |
+----------------------------------------+
| vTM Authenticator LDAP Server 2 deleted |
+----------------------------------------+
```

Related Commands

show ssc vtm-authenticator, ssc vtm-authenticator list, ssc vtm-authenticator add radius auth-name, ssc vtm-authenticator add tacacs_plus auth-name, ssc vtm-authenticator update ldap auth-name, ssc vtm-authenticator update radius auth-name, ssc vtm-authenticator update tacacs_plus auth-name

ssc vtm-authenticator add radius auth-name

Adds a RADIUS-based vTM authenticator.

Syntax

ssc vtm-authenticator add radius auth-name *authenticator-name* **server** *server* **fallback-group** *fallback-group* **port** *port* **timeout** *timeout-period* **group-attribute** *group-attribute* **group-vendor** *group-vendor* **secret** *secret* **nas-identifier** *NAS-identifier* **nas-ip-address** *NAS-ip-address*

Parameters

authenticator-name
: Specify a name for the RADIUS vTM authenticator.

server
: Specify the IP address or hostname of the RADIUS server.

fallback-group
: Specify a permission group. For example, "admin". If no group is found using the vendor and group identifiers, or the group found is not valid, the permission group specified here will be used.

port
: Specify the port used to connect to the RADIUS server.

timeout-period
: Specify the timeout period (in seconds) for a connection to the RADIUS server.

group-attribute
: Specify the RADIUS identifier for the attribute that specifies an account's group. May be left blank if <fallback-group> is specified.

group-vendor
: Specify the RADIUS identifier for the vendor of the RADIUS attribute that specifies an account's group. Leave blank if using a standard attribute such as Filter-Id.

secret
: Specify the secret key shared with the RADIUS server.

NAS-identifier
: Specify a string identifying the Network Access Server (NAS) which is requesting authentication of the user. This value is sent to the RADIUS server. If left blank the address of the interface used to connect to the server will be used.

NAS-ip-address
: Specify the identifying IP Address of the NAS which is requesting authentication of the user. This value is sent to the RADIUS server.

Usage Guidelines

Use the **no ssc vtm-authenticator auth-name** command to delete an authenticator.

You cannot delete a vTM authenticator that is associated with an access profile.

Examples

```
>> create a RADIUS authenticator <<
amnesiac (config) # ssc vtm-authenticator add radius auth-name "RADIUS Server 2" server 10.62.167.193
fallback-group admin port 1812 timeout 30 group-attribute 1 group-vendor 1476 secret * nas-identifier
"Internal RADIUS" nas-ip-address 127.0.0.1
+-----------------------------------------+
| Created                                 |
+-----------------------------------------+
| vTM Authenticator RADIUS Server 2 created |
+-----------------------------------------+

>> delete an authenticator <<
amnesiac (config) # no ssc vtm-authenticator auth-name "RADIUS Server 2"
+-----------------------------------------+
| Deleted                                 |
+-----------------------------------------+
| vTM Authenticator RADIUS Server 2 deleted |
+-----------------------------------------+
```

Related Commands

show ssc vtm-authenticator, ssc vtm-authenticator list, ssc vtm-authenticator add ldap auth-name, ssc vtm-authenticator add tacacs_plus auth-name, ssc vtm-authenticator update ldap auth-name, ssc vtm-authenticator update radius auth-name, ssc vtm-authenticator update tacacs_plus auth-name

ssc vtm-authenticator add tacacs_plus auth-name

Adds a TACACS+-based vTM authenticator.

Syntax

ssc vtm-authenticator add tacacs-plus auth-name *authenticator-name* **server** *server* **auth-type** *pap* | *ascii* **fallback-group** *fallback-group* **port** *port* **timeout** *timeout-period* **group-field** *group-field* **group-service** *group-service* **secret** *secret*

Parameters

authenticator-name
: Specify a name for the TACACS+ vTM authenticator on the Services Director.

server
: Specify the IP address or hostname of the TACACS+ server.

auth-type
: Specify the TACACS+ authentication type, either PAP or ACSII.

fallback-group
: Specify a permission group. If <group-service> is not defined, or no group value is provided for the user by the TACACS+ server, the group specified here will be used. If this is not specified, users with no TACACS+ defined group will be denied access.

port
: Specify the port used to connect to the TACACS+ server.

timeout-period
: Specify the timeout period (in seconds) for a connection to the TACACS+ server.

group-field
: Specify the TACACS+ "service" field that provides each user's group.

group-service
: Specify the TACACS+ "service" that identifies a user's group field.

secret
: Specify the secret key shared with the TACACS+ server.

Usage Guidelines

Use the **no ssc vtm-authenticator auth-name** command to delete an authenticator.

You cannot delete a vTM authenticator that is associated with an access profile.

Examples

```
>> create a TACACS+ authenticator <<
amnesiac (config) # ssc vtm-authenticator add tacacs-plus auth-name "TACACS+ Server 2" server
10.62.167.198 auth-type pap fallback-group admin port 49 timeout 30 group-field permission-group group-
service "Hoobland" secret "tacacs_plus_secret"
+-----------------------------------------+
| Created                                 |
+-----------------------------------------+
| vTM Authenticator TACACS+ Server 2 created |
+-----------------------------------------+

>> delete an authenticator <<
amnesiac (config) # no ssc vtm-authenticator auth-name "TACACS+ Server 2"
+-----------------------------------------+
| Deleted                                 |
+-----------------------------------------+
| vTM Authenticator TACACS+ Server 2 deleted |
+-----------------------------------------+
```

Related Commands

show ssc vtm-authenticator, ssc vtm-authenticator list, ssc vtm-authenticator add ldap auth-name, ssc vtm-authenticator add radius auth-name, ssc vtm-authenticator update ldap auth-name, ssc vtm-authenticator update radius auth-name, ssc vtm-authenticator update tacacs_plus auth-name

ssc vtm-authenticator list

Lists all defined vTM authenticators.

Syntax

ssc vtm-authenticator list

Examples

```
amnesiac (config) # ssc vtm-authenticator list
+----------------+-----------------------------------+
| Name           | Unique ID                         |
+----------------+-----------------------------------+
| LDAP Server    | Authenticator-D83I-9095-TT8R-CUAT |
| RADIUS Server  | Authenticator-808G-LJWJ-MT3B-WMDZ |
| TACACS+ Server | Authenticator-7F1D-A1K3-1PO4-VSEF |
+----------------+-----------------------------------+
```

Related Commands

show ssc vtm-authenticator, ssc vtm-authenticator add ldap auth-name, ssc vtm-authenticator add radius auth-name, ssc vtm-authenticator add tacacs_plus auth-name, ssc vtm-authenticator update ldap auth-name, ssc vtm-authenticator update radius auth-name, ssc vtm-authenticator update tacacs_plus auth-name

ssc vtm-authenticator update ldap auth-name

Updates an LDAP-based vTM authenticator.

Syntax

ssc vtm-authenticator update ldap auth-name *authenticator-name* [**server** *server* | **dn-method** *method* | **filter** *filter* | **base-dn** *base-DN* | **fallback-group** *fallback-group* | **port** *port* | **timeout** *timeout-period* | **group-attribute** *group-attribute* | **group-field** *group-field* | **bind-dn** *bind-DN* | **group-filter** *group-filter* | **search-dn** *search-DN* | **search-password** *password*]

Parameters

authenticator-name

Specify the name of the LDAP vTM authenticator.

server

Specify the IP address or hostname of the LDAP server.

method

Specify how the bind DN for a user will be derived. Either:

construct

the bind DN for a user can be constructed from a known string, (see <bind-DN>) or

search

the bind DN for a user can be searched for in the directory. This is necessary if you have users under different directory paths.

filter

Specify a filter that uniquely identifies a user located under the Base DN.
The string "%u" will be substituted with the username. For example:

"sAMAccountName=%u"

Active Directory

"uid=%u"

Unix LDAP

base-DN

Specify the base DN (Distinguished Name) for directory searches.

fallback-group

Specify a permission group. For example, "admin". If <group-attribute> is not defined, or is not set for the user, this permission group will be used. If not specified, users with no attribute matching group-attribute will be denied access.

port

Specify the port used to connect to the LDAP server.

timeout-period

Specify the timeout period (in seconds) for a connection to the LDAP server.

group-attribute

Specify the LDAP attribute that gives a user's group. For example: "memberOf". If multiple values are returned by the LDAP server, the first valid one will be used.

group-field

Specify the sub-field of the group-attribute that gives a user's group. For example: if <group-attribute> is "memberOf" which delivers "CN=mygroup, OU=groups, OU=users, DC=mycompany, DC=local", set group-field to "CN". The first matching field will be used.

bind-DN

Specify a template to construct the bind DN from the username. This is only used when <method> is "construct". The string "%u" is replaced by the username. For example:

"%u@mycompany.local"

"cn=%u,dn=mycompany,dn=local"

group-filter

Specify an alternative group search filter. This is only used when the user record returned by the LDAP filter does not contain the required group information.
This will typically be required if you have Unix/POSIX-style user records. If multiple records are returned the list of group names will be extracted from all of them.
The string "%u" will be replaced by the username. For example:

"(&(memberUid=%u)(objectClass=posixGroup))"

search-DN

Specify a DN to use when searching the directory for a user's bind DN. These are only used when the DN Method is Search. You can leave these blank if it is possible to perform the bind DN search using an anonymous bind.

search-password

Specify the password for the search-DN.

Examples

```
amnesiac (config) # ssc vtm-authenticator update ldap auth-name "LDAP Server" server 10.62.169.170 dn-
method construct filter "sAMAccountName=%u" base-dn "OU=users, DC=tekton, DC=local" fallback-group
admin port 389 timeout 20 group-attribute "memberOf" group-field "CN" bind-dn "%u@takton.local" group-
filter "(&(memberUid=%u)(objectClass=posixGroup))"
+-----------------------------------------+
| Modified                                |
+-----------------------------------------+
| vTM Authenticator LDAP Server modified  |
+-----------------------------------------+
```

Related Commands

show ssc vtm-authenticator, ssc vtm-authenticator list, ssc vtm-authenticator add ldap auth-name, ssc vtm-authenticator add radius auth-name, ssc vtm-authenticator add tacacs_plus auth-name, ssc vtm-authenticator update radius auth-name, ssc vtm-authenticator update tacacs_plus auth-name

ssc vtm-authenticator update radius auth-name

Updates a RADIUS-based vTM authenticator.

Syntax

ssc vtm-authenticator create radius auth-name *authenticator-name* [**server** *server* | **fallback-group** *fallback-group* | **port** *port* | **timeout** *timeout-period* | **group-attribute** *group-attribute* | **group-vendor** *group-vendor* | **secret** *secret* | **nas-identifier** *NAS-identifier* | **nas-ip-address** *NAS-ip-address*]

Parameters

authenticator-name
: Specify the name of the RADIUS vTM authenticator.

server
: Specify the IP address or hostname of the RADIUS server.

fallback-group
: Specify a permission group. For example, "admin". If no group is found using the vendor and group identifiers, or the group found is not valid, the permission group specified here will be used.

port
: Specify the port used to connect to the RADIUS server.

timeout-period
: Specify the timeout period (in seconds) for a connection to the RADIUS server.

group-attribute
: Specify the RADIUS identifier for the attribute that specifies an account's group. May be left blank if <fallback-group> is specified.

group-vendor
: Specify the RADIUS identifier for the vendor of the RADIUS attribute that specifies an account's group. Leave blank if using a standard attribute such as Filter-Id.

secret
: Specify the secret key shared with the RADIUS server.

NAS-identifier
: Specify a string identifying the Network Access Server (NAS) which is requesting authentication of the user. This value is sent to the RADIUS server. If left blank the address of the interface used to connect to the server will be used.

NAS-ip-address
: Specify the identifying IP Address of the NAS which is requesting authentication of the user. This value is sent to the RADIUS server.

Examples

```
amnesiac (config) # ssc vtm-authenticator update radius auth-name "RADIUS Server" server 10.62.167.193
fallback-group admin port 1812 timeout 30 group-attribute 1 group-vendor 1476 secret "radius_secret"
nas-identifier "Internal RADIUS" nas-ip-address 127.0.0.1
+-----------------------------------------+
| Modified                                |
+-----------------------------------------+
| vTM Authenticator RADIUS Server modified  |
+-----------------------------------------+
```

Related Commands

show ssc vtm-authenticator, ssc vtm-authenticator list, ssc vtm-authenticator add ldap auth-name, ssc vtm-authenticator add radius auth-name, ssc vtm-authenticator add tacacs_plus auth-name, ssc vtm-authenticator update ldap auth-name, ssc vtm-authenticator update tacacs_plus auth-name

ssc vtm-authenticator update tacacs_plus auth-name

Updates a TACACS+-based vTM authenticator.

Syntax

ssc vtm-authenticator update tacacs-plus auth-name *authenticator-name* [**server** *server* | **auth-type** [*pap* | *ascii*] | **fallback-group** *fallback-group* | **port** *port* | **timeout** *timeout-period* | **group-field** *group-field* | **group-service** *group-service* | **secret** *secret*]

Parameters

authenticator-name
: Specify the name of the TACACS+ vTM authenticator.

server
: Specify the IP address or hostname of the TACACS+ server.

auth-type
: Specify the TACACS+ authentication type, either PAP or ACSII.

fallback-group
: Specify a permission group. If <group-service> is not defined, or no group value is provided for the user by the TACACS+ server, the group specified here will be used. If this is not specified, users with no TACACS+ defined group will be denied access.

port
: Specify the port used to connect to the TACACS+ server.

timeout-period
: Specify the timeout period (in seconds) for a connection to the TACACS+ server.

group-field
: Specify the TACACS+ "service" field that provides each user's group.

group-service
: Specify the TACACS+ "service" that identifies a user's group field.

secret
: Specify the secret key shared with the TACACS+ server.

Examples

```
amnesiac (config) # ssc vtm-authenticator update tacacs-plus auth-name "TACACS+ Server" server
10.62.167.198 auth-type pap fallback-group admin port 49 timeout 30 group-field permission-group group-
service "Hoobland" secret "tacacs_plus_secret"
+-------------------------------------------+
| Modified                                  |
+-------------------------------------------+
| vTM Authenticator TACACS+ Server 2 modified |
+-------------------------------------------+
```

Related Commands

show ssc vtm-authenticator, ssc vtm-authenticator list, ssc vtm-authenticator add ldap auth-name, ssc vtm-authenticator add radius auth-name, ssc vtm-authenticator add tacacs_plus auth-name, ssc vtm-authenticator update ldap auth-name, ssc vtm-authenticator update radius auth-name

ssc vtm-permission-group create pg-name

Creates a vTM permission group for user authentication.

Syntax

ssc vtm-permission-group create pg-name *pg-name* [**description** *description*] [**timeout** *timeout-period*]

Parameters

pg-name

Specify a name for the vTM permission group.

description

Optionally, specify a description of the permission group.

timeout-period

Optionally, specify a timeout period (in minutes).

If this is not specified, it defaults to 30.

Usage Guidelines

This command creates the group, but does not support the setting of permissions. To set access levels for activities, see ssc vtm-permission-group update pg-name on page 580.

Use the **no ssc vtm-permission-group pg-name** command to delete a permission group.

You cannot delete a permission group that is associated with an access profile.

Examples

```
amnesiac (config) # ssc vtm-permission-group create pg-name Statistics description "RO subset of
monitoring" timeout 30
+-------------------------------------+
| Created                             |
+-------------------------------------+
| permission group Statistics created |
+-------------------------------------+

>> delete the Statistics permission group <<
amnesiac (config) # no ssc vtm-permission-group pg-name Statistics
+-------------------------------------+
| Deleted                             |
+-------------------------------------+
| permission group Statistics deleted |
+-------------------------------------+
```

Related Commands

show ssc vtm-permission-group, ssc vtm-permission-group list, ssc vtm-permission-group update pg-name

ssc vtm-permission-group list

Lists all defined vTM permission groups.

Syntax

ssc vtm-permission-group list

Examples

```
amnesiac (config) # ssc vtm-permission-group list
+------------+--------------------------------------+
| Name       | Unique ID                            |
+------------+--------------------------------------+
| admin      | admin                                |
| Demo       | Demo                                 |
| Statistics | Permission-Group-E5O9-N28C-13OC-AT0I |
| Monitoring | Monitoring                           |
| Guest      | Guest                                |
+------------+--------------------------------------+
```

Related Commands

show ssc vtm-permission-group, ssc vtm-permission-group create pg-name, ssc vtm-permission-group update pg-name

ssc vtm-permission-group update pg-name

Updates a vTM permission group for user authentication.

Syntax

ssc vtm-permission-group update permission-group-name *pg-name* [**new-pg-name** *new-gp-name*] [**description** *description*] [**timeout** *timeout-period*] [[**remove**] **permission** *permission* **access** *access*]

Parameters

pg-name
Specify a name for the vTM permission group.

new-pg-name
Optionally, specify a new name for the permission group.

description
Optionally, specify a description of the permission group.

timeout-period
Optionally, specify a timeout period (in minutes).
If this is not specified, it defaults to 30.

remove
Include this to remove the specified **permission** instead of adding it.

permission
The permission for which the access is to be set.

access
The required access (none, ro, full) for the permission.

Usage Guidelines

This command includes support for setting access levels for specific activities.

There are four default permission groups (**admin**, **Demo**, **Monitoring** and **Guest**), and you can create additional permission groups, see ssc vtm-permission-group create pg-name on page 578.

Each permission supports the following access levels: none, ro (read-only), full.

Where a permission branch node is specified as the permission, all of its leaf nodes will share the specified access level.

Where all permissions require the same access level, the permission "all" can be used. The admin permission group has this setting by default.

The following permissions are supported:

```
Connections
Connections!Details
Web_Cache
Web_Cache!Clear
Monitoring
Monitoring!Edit
Request_Logs
Draining
Statd
Map
```

```
Log_Viewer
Log_Viewer!View
Appliance_Console
Custom
SOAP_API
Authenticators
Authenticators!Edit
Bandwidth
Bandwidth!Edit
Bandwidth!Edit!CopyClass
Cloud_Credentials
Cloud_Credentials!Edit
DNS_Server
DNS_Server!Zone_Files
DNS_Server!Zones
DNS_Server!Zones!Edit
Extra_Files
Extra_Files!Action_Programs
Extra_Files!Miscellaneous_Files
Extra_Files!ExternProgMonitors
GLB_Services
GLB_Services!Edit
GLB_Services!Edit!DNS_Settings
GLB_Services!Edit!DNSSEC
GLB_Services!Edit!Load_Balancing
GLB_Services!Edit!Locations
GLB_Services!Edit!Request_Logging
GLB_Services!Edit!Rules
Java
Java!Edit
Kerberos
Kerberos!krb5confs
Kerberos!Kerberos_Keytabs
Kerberos!Kerberos_Principals
Kerberos!Kerberos_Principals!Edit
Locations
Locations!Edit
Monitors
Monitors!Edit
Monitors!Edit!CopyMonitor
Catalog
Persistence
Persistence!Edit
Persistence!Edit!CopyClass
Service_Protection
Service_Protection!Edit
Service_Protection!Edit!CopyClass
Rate
Rate!Edit
Rules
Rules!GEdit
Rules!GEdit!AddAction
Rules!GEdit!AddCondition
Rules!GEdit!Convert
Rules!Edit
Rules!Edit!CheckSyntax
Rules!Edit!SaveAs
SLM
SLM!Edit
SLM!Edit!CopyClass
SSL
SSL!CAs
SSL!CAs!Edit
SSL!CAs!Import
SSL!Client_Certs
SSL!Client_Certs!Edit
SSL!Client_Certs!Edit!Chain
SSL!Client_Certs!Edit!CopyCert
SSL!Client_Certs!Edit!Sign
SSL!Client_Certs!Import
SSL!Client_Certs!New
SSL!DNSSEC_Keys
```

```
SSL!SSL_Certs
SSL!SSL_Certs!Edit
SSL!SSL_Certs!Edit!Chain
SSL!SSL_Certs!Edit!CopyCert
SSL!SSL_Certs!Edit!Sign
SSL!SSL_Certs!Import
SSL!SSL_Certs!New
Aptimizer
Aptimizer!URL Sets
Aptimizer!URL Sets!Edit
Aptimizer!Aptimizer_Profiles
Aptimizer!Aptimizer_Profiles!Edit
Config_Summary
Pools
Pools!Edit
Pools!Edit!Autoscaling
Pools!Edit!Bandwidth
Pools!Edit!Connection_Management
Pools!Edit!DNSAutoscaling
Pools!Edit!Kerberos_Protocol_Transition
Pools!Edit!Load_Balancing
Pools!Edit!Monitors
Pools!Edit!Persistence
Pools!Edit!SSL
Traffic_IP_Groups
Traffic_IP_Groups!Edit
Traffic_IP_Groups!Networking
Virtual_Servers
Virtual_Servers!Edit
Virtual_Servers!Edit!Classes
Virtual_Servers!Edit!Request_Tracing
Virtual_Servers!Edit!Connection_Management
Virtual_Servers!Edit!Content_Caching
Virtual_Servers!Edit!Content_Compression
Virtual_Servers!Edit!DNS_Server
Virtual_Servers!Edit!Kerberos_Protocol_Transition
Virtual_Servers!Edit!Request_Logging
Virtual_Servers!Edit!Rules
Virtual_Servers!Edit!Rules!EnableDisable
Virtual_Servers!Edit!Rules!Move
Virtual_Servers!Edit!Rules!OnceEvery
Virtual_Servers!Edit!Rules!Remove
Virtual_Servers!Edit!GLB_Services
Virtual_Servers!Edit!SSL_Decryption
Virtual_Servers!Edit!Aptimizer_Settings
Audit_Log
Audit_Log!Audit_Archive
Diagnose
Diagnose!Replicate
Event_Log
Event_Log!Clear
Event_Log!Event_Archive
Routing
Support_Files
Support
Support!TSR
Help
MainIndex
Reboot
Restart
Shutdown
Alerting
Alerting!Actions
Alerting!Actions!Edit
Alerting!Event_Types
Alerting!Event_Types!Edit
AFM
AFM!Administration
Backup
Backup!Compare
Backup!Edit
Backup!Partial
```

```
Fault_Tolerance
Fault_Tolerance!BGP_Neighbors
Fault_Tolerance!BGP_Neighbors!Edit
Global_Settings
Global_Settings!Restore_Defaults
License_Keys
License_Keys!Install_New
License_Keys!Remove
License_Keys!Register
Steelhead
Networking
Networking!NAT
Security
SNMP
Sysctl
DateTime
Traffic_Managers
Traffic_Managers!AddRemove
Traffic_Managers!Upgrade
Rollback
Access_Management
Access_Management!AuthenticationMethods
Access_Management!AuthenticationMethods!Edit
Access_Management!Groups
Access_Management!Groups!Edit
Access_Management!LocalUsers
Access_Management!LocalUsers!Edit
Access_Management!LocalUsers!EditOtherUsers
Access_Management!LocalUsers!PasswordPolicy
Access_Management!Suspended_Users
Wizard
Wizard!Backup
Wizard!DisableNode
Wizard!DrainNode
Wizard!EnableRule
Wizard!FreeDiskSpace
Wizard!ClusterJoin
Wizard!NewService
Wizard!AptimizeService
Wizard!ReactivateNode
Wizard!RemoveNode
Wizard!Restore
Wizard!SSLDecryptService
```

Examples

```
>> update the permission group <<
amnesiac (config) # ssc vtm-permission-group update pg-name my_pg permission Pools access full
+--------------------------------+
| Updated                        |
+--------------------------------+
| permission group my_pg updated |
+--------------------------------+

>> display changes <<
amnesiac (config) # show ssc vtm-permission-group pg-name my_pg
+--------------+-------------------------------------------------+--------+
| Parameter    | Value                                           |        |
+--------------+-------------------------------------------------+--------+
| Name         | my_pg                                           |        |
| Unique Name  | Permission-Group-XIG4-FUQT-YAWN-H2JF            |        |
| Description  |                                                 |        |
| Timeout      | 30                                              |        |
| Permissions: | ----------------------------------------------- | ------ |
|              | Permission String                               | Access |
|              | ----------------------------------------------- | ------ |
|              | Connections                                     | full   |
|              | Connections!Details                             | full   |
|              | Draining                                        | none   |
|              | Log_Viewer                                      | none   |
|              | Log_Viewer!View                                 | none   |
|              | Map                                             | none   |
|              | Monitoring                                      | none   |
|              | Monitoring!Edit                                 | none   |
|              | Pools                                           | full   |
|              | Pools!Edit                                      | full   |
|              | Pools!Edit!Autoscaling                          | full   |
|              | Pools!Edit!Bandwidth                            | full   |
|              | Pools!Edit!Connection_Management                | full   |
|              | Pools!Edit!DNSAutoscaling                       | full   |
|              | Pools!Edit!Kerberos_Protocol_Transition         | full   |
|              | Pools!Edit!Load_Balancing                       | full   |
|              | Pools!Edit!Monitors                             | full   |
|              | Pools!Edit!Persistence                          | full   |
|              | Pools!Edit!SSL                                  | full   |
|              | Request_Logs                                    | none   |
|              | Statd                                           | none   |
|              | Web_Cache                                       | none   |
|              | Web_Cache!Clear                                 | none   |
+--------------+-------------------------------------------------+--------+
```

Related Commands

show ssc vtm-permission-group, ssc vtm-permission-group create pg-name, ssc vtm-permission-group list

ssh server allowed-ciphers

Sets the list of allowed ciphers for ssh server.

Syntax

[no] ssh server allowed-ciphers *ciphers*

Parameters

ciphers

Specify cipher or comma separated list of ciphers, in quotation marks. Default ciphers configured are aes128-ctr, aes192-ctr, and aes256-ctr.
Supported ciphers are:

aes128cbc

3descbc

blowfishcbc

cast128cbc

arcfour

aes192cbc

aes256cbc

aes128ctr

aes192ctr

aes256ctr

Usage Guidelines

The **no** command option resets the SSH server allowed ciphers.

Examples

```
amnesiac (config) # ssh server allowed-ciphers "aes128-ctr,aes192-ctr,aes256-ctr"
```

Related Commands

show ssh server

ssh server enable

Enables SSH access to the system.

Syntax

[no] ssh server enable

Usage Guidelines

The **no** command option disables SSH access.

Examples

```
amnesiac (config) # ssh server enable
```

Related Commands

show ssh server

ssh server listen enable

Enables SSH interface restriction access to the system (that is, it enables access control and blocks requests on all the interfaces).

Syntax

[no] ssh server listen enable

Usage Guidelines

If the list of interfaces is empty, none of the interfaces respond to the queries.

The **no** command option disables SSH interface restrictions which causes SSH to accept connections from all interfaces.

SSH interface restrictions are not available through the Management Console.

Examples

```
amnesiac (config) # ssh server listen enable
```

Related Commands

show ssh server

ssh server listen interface

Adds one or more interfaces to the SSH server access restriction list (thus, it unblocks requests on the specified interface).

Syntax

[no] ssh server listen interface *interface*

Parameters

interface

Specify the interface: **primary**, **aux**, **inpath0_0**, **inpath0_1**, **rios_lan0_0**, **rios_wan0_0**

Usage Guidelines

If the list of interfaces is empty, none of the interfaces respond to the queries. If the list of interfaces has at least one entry, then the server listens on that subset of interfaces.

Examples

```
amnesiac (config) # ssh server listen interface primary
```

Related Commands

show ssh server

ssh server port

Sets a port for SSH access.

Syntax

[no] ssh server port *port*

Parameters

port

Specify a port for SSH access.

Usage Guidelines

The **no** command option resets the SSH port to its default.

Examples

```
amnesiac (config) # ssh server port 8080
```

Related Commands

show ssh server

ssh server v2-only enable

Enables SSH server to accept only v2 connections, which are more secure.

Syntax

[no] ssh server v2-only enable

Usage Guidelines

This command restricts the server to accept only v2 protocol connections, which are more secure.

The **no** command option removes the restriction.

Examples

```
amnesiac (config) # ssh server v2-only enable
```

Related Commands

show ssh server

tcpdump stop-trigger delay

Configures the time to wait before stopping a TCP dump.

Syntax

[no] tcpdump stop-trigger delay *duration*

Parameters

duration

Specify the amount of time to wait before stopping all running TCP dumps when RiOS finds a match. The default delay is 30 seconds.

Usage Guidelines

You might not want to stop your TCP dump immediately. By configuring a delay, the system has time to log more data without abruptly cutting off the dumps. The default delay is 30 seconds.

Examples

```
amnesiac (config) # tcpdump stop-trigger delay 10
```

Related Commands

tcpdump stop-trigger enable, tcpdump stop-trigger regex, tcpdump stop-trigger restart, show tcpdump stop-trigger

tcpdump stop-trigger enable

Enables the TCP dump to stop running, triggered by a match against a configured regular expression and the system log file.

Syntax

[no] tcpdump stop-trigger enable

Usage Guidelines

There is a limit to the amount of TCP dump data the system can collect. After a problem has occurred, the TCP dump buffer could have rotated, overwriting the information about the problem. This command enables a trigger that stops a continuous TCP dump after a specific log event occurs. This enables you to troubleshoot issues and isolate the TCP dump data specific to a problem.

The **no** version of the command disables the TCP dump stop-trigger process.

Examples

```
amnesiac (config) # tcpdump stop-trigger regex ntp
amnesiac (config) # tcpdump stop-trigger delay 20
amnesiac (config) # tcpdump stop-trigger enable
```

Related Commands

tcpdump stop-trigger regex, tcpdump stop-trigger restart, show tcpdump stop-trigger

tcpdump stop-trigger regex

Sets the regular expression that triggers the stopping of TCP dumps.

Syntax

tcpdump stop-trigger regex *regex*

Parameters

regex

Specify a PERL regular expression to match. RiOS compares the PERL regular expression against each entry made to the system logs. The system matches on a per-line basis.

Usage Guidelines

Use the **tcpdump stop-trigger regex** command to configure a regular expression that represents a condition that, when matched, stops all running TCP dumps. After this match is found, all TCP dump sessions are stopped after the delay configured by the **tcpdump stop-trigger delay** command.

Examples

In the following example, RiOS searches for the pattern *ntp* in the system logs. The system waits 20 seconds after there is a match and then stops all TCP dumps that are still running.

```
amnesiac (config) # tcpdump stop-trigger regex ntp
amnesiac (config) # tcpdump stop-trigger delay 20
amnesiac (config) # tcpdump stop-trigger enable
```

Related Commands

tcpdump stop-trigger enable, tcpdump stop-trigger restart, show tcpdump stop-trigger

tcpdump stop-trigger restart

Restarts the TCP dump stop-trigger process.

Syntax

tcpdump stop-trigger restart

Usage Guidelines

If you change the regular expression or delay, use the **tcpdump stop-trigger restart** command to restart the stop-trigger process.

Examples

```
amnesiac (config) # tcpdump stop-trigger regex ntp
amnesiac (config) # tcpdump stop-trigger delay 50
amnesiac (config) # tcpdump stop-trigger enable
amnesiac (config) # tcpdump stop-trigger restart
```

Related Commands

tcpdump stop-trigger enable, tcpdump stop-trigger regex, show tcpdump stop-trigger

tcpdump-x all-interfaces

Configures a list of all interfaces for a TCP dump capture.

Syntax

[no] tcpdump-x all-interfaces [**capture-name** *capture-name*] **continuous** | | **buffer-size** *size-in-KB* | **duration** *seconds* [**schedule-time** *HH:MM:SS* [**schedule-date** *YYYY/MM/DD*]] | [**rotate-count** *#-files*] | [**snaplength** *snaplength*] | [**sip** *src-addr*] | [**dip** *dst-addr*] | [**sport** *src-port*] | [**dport** *dst-port*] | [**dot1q** { **tagged** | **untagged** | **both** }] | [**ip6**] | [**custom** *custom-param*] | [**file-size** *megabytes*]

Parameters

capture-name *capture-name*

Specify a capture name to help you identify the TCP Dump. The default filename uses the following format:

```
<hostname>_<interface>_<timestamp>.cap
```

Where hostname is the hostname of the appliance, interface is the name of the interface selected for the trace (for example, **lan0_0**, **wan0_0**), and timestamp is in the YYYY-MM-DD-HH-MM-SS format.

NOTE

The cap file extension is not included with the filename when it appears in the capture queue.

continuous

Start a continuous capture.

buffer-size *size-in-KB*

Specify the size in KB for all packets.

duration *seconds*

Specify the run time for the capture in seconds. The default is 30 seconds.

schedule-time *HH:MM:SS*

Specify a time to initiate the trace dump in the following format: HH:MM:SS.

schedule-date *YYYY/MM/DD*

Specify a date to initiate the trace dump in the following format: YYYY/MM/DD

rotate-count *#-files*

Specify the number of files to rotate.

snaplength *snaplength*

Specify the snap length value for the trace dump. The default value is 1518. Specify **0** for a full packet capture (recommended for CIFS, MAPI, and SSL traces).

sip *src-addr*

Specify a comma-separated list of source IP addresses. The default setting is all IP addresses.

dip *dst-addr*

Specify a comma-separated list of destination IP addresses. The default setting is all IP addresses.

sport *src-port*

Specify a comma-separated list of source ports. The default setting is all ports.

dport *dst-port*
Specify a comma-separated list of destination ports. The default setting is all ports.

dot1q { **tagged** | **untagged** | **both** }
Specify one of the following to filter dot1q packets:

tagged
Capture only tagged traffic.

untagged
Capture only untagged traffic.

both
Capture all traffic.

NOTE
Do not use the **sip**, **dip**, **sport**, **dport** and **custom** parameters together when using the **dot1q both** option. Use the **tcpdump** command instead to capture this information.

For detailed information about dot1q VLAN tunneling, see your networking equipment documentation.

ip6
Specify IPv6 packets for packet capture.

custom *custom-param*
Specify custom parameters (flags) for packet capture. You need to enclose the customer parameter in quotes if it contains more than one word.

file-size *megabytes*
Specify the file size of the capture in megabytes.

Usage Guidelines

You can capture and retrieve multiple TCP trace dumps. You can generate trace dumps from multiple interfaces at the same time and you can schedule a specific date and time to generate a trace dump.

Examples

The following example starts a continuous capture for a file named *tcpdumpexample* with a duration of 120 seconds:

```
amnesiac (config) # tcpdump-x all-interfaces capture-name tcpdumpexample continuous duration 120
```

The following example captures untagged traffic on destination port 7850 and ARP packets:

```
amnesiac (config) # tcpdump-x all-interfaces dot1q untagged dport 7850 custom "and arp"
```

The following example captures VLAN tagged traffic for host 10.11.0.6 and ARP packets:

```
amnesiac (config) # tcpdump-x all-interfaces dot1q tagged sip 10.11.0.6 custom "or arp"
```

The following example captures tagged ARP packets only:

```
amnesiac (config) # tcpdump-x all-interfaces dot1q tagged custom "and arp"
```

The following example captures untagged ARP packets only:

```
amnesiac (config) # tcpdump-x all-interfaces dot1q untagged custom "and arp"
```

Related Commands

show tcpdump-x, tcpdump

tcpdump-x capture-name stop

Stops the specified TCP dump capture.

Syntax

[no] tcpdump-x capture-name *capture-name* **stop**

Parameters

capture-name

Specify the capture name to stop.

Examples

```
amnesiac (config) # tcpdump-x capture-name example stop
```

Related Commands

show tcpdump-x, tcpdump

tcpdump-x interfaces

Configures a comma-separated list of interfaces to capture in the background.

Syntax

[no] tcpdump-x interfaces *interface-name* **continuous** | **duration** *seconds* [**schedule-time** *HH:MM:SS* [**schedule-date** *YYYY/MM/DD*]] | [**rotate-count** *#-files*] | [**snaplength** *snaplength*] | [**sip** *src-addr*] | [**dip** *dst-addr*] | [**sport** *src-port*] [**dport** *dst-port*] | [**dot1q** { **tagged** | **untagged** | **both** }] [**ip6**] | [**custom** *custom-param*] | [**file-size** *megabytes*]

Parameters

interface-name
Specify a comma-separated list of interfaces: **primary**, **aux**, **lan0_0**, **wan0_0**

continuous
Start a continuous capture.

duration *seconds*
Specify the run time for the capture in seconds.

schedule-time *HH:MM:SS*
Specify a time to initiate the trace dump in the following format: HH:MM:SS

schedule-date *YYYY/MM/DD*
Specify a date to initiate the trace dump in the following format: YYYY/MM/DD

rotate-count *#files*
Specify the number of files to rotate.

snaplength *snaplength*
Specify the snap length value for the trace dump. The default value is 1518. Specify **0** for a full packet capture (recommended for CIFS, MAPI, and SSL traces).

sip *src-addr*
Specify the source IP addresses. The default setting is all IP addresses.

dip *dst-addr*
Specify a comma-separated list of destination IP addresses. The default setting is all IP addresses.

sport *src-port*
Specify a comma-separated list of source ports. The default setting is all ports.

dport *dst-port*
Specify a comma-separated list of destination ports. The default setting is all ports.

dot1q { **tagged** | **untagged** | **both** }
Specify one of the following to filter dot1q packets:

tagged
Capture only tagged traffic.

untagged
Capture only untagged traffic.

both
Capture all traffic.

NOTE
Do not use the **sip**, **dip**, **sport**, **dport** and **custom** parameters together when using the **dot1q both** option. Use the **tcpdump** command to capture this information.

For detailed information about dot1q VLAN tunneling, see your networking equipment documentation.

ip6
Specify IPv6 packets for packet capture.

custom *custom-param*
Specify custom parameters (flags) for packet capture.

file-size *megabytes*
Specify the file size of the capture in megabytes.

Examples

```
amnesiac (config) # tcpdump-x interfaces inpath0_0 continuous
amnesiac (config) # tcpdump-x interfaces aux ip6 sip 2003::5
```

Related Commands

show tcpdump-x, tcpdump

telnet-server enable

Enables you to access the CLI using telnet. This feature is disabled by default.

Syntax

[no] telnet-server enable

Usage Guidelines

You can use telnet to troubleshoot your system. It enables you to access the CLI from another system.

Examples

```
amnesiac (config) # telnet-server enable
```

Related Commands

show telnet-server

username disable

Disables the account so that no one can log in.

Syntax

[no] username *userid* **disable**

Parameters

userid

Specify the user login: **admin** or **monitor**.

Usage Guidelines

The **no** command option re-enables the specified user account.

Examples

```
amnesiac (config) # username monitor disable
```

Related Commands

ssh client generate identity user

username nopassword

Disables password protection for a user.

Syntax

username *userid* **nopassword**

Parameters

userid

Specify the user login: **admin** or **monitor**.

Examples

```
amnesiac (config) # username monitor nopassword
```

Related Commands

ssh client generate identity user

username password

Sets the password for the specified user.

Syntax

username *userid* **password** *cleartext* [**old-password** *cleartext*]

Parameters

userid

Specify the user login: **admin** or **monitor**.

cleartext

Specify the password. The password must be at least 6 characters.

old-password

Specify the old password.

Usage Guidelines

The password is entered in cleartext format on the command line.

The **old-password** option allows you to check the minimum character difference between the old and new passwords under account control management.

Examples

```
amnesiac (config) # username admin password xyzzzZ
```

Related Commands

ssh client generate identity user

username password 0

Sets the password for the specified user.

Syntax

username *userid* **password 0** *cleartext-password*

Parameters

userid

Specify the user login: **admin** or **monitor**.

cleartext-password

Specify the password. The password must be at least 6 characters.

Usage Guidelines

The password is entered in cleartext format on the command line.

Examples

```
amnesiac (config) # username admin password 0 xyzzzZ
```

Related Commands

ssh client generate identity user

username password 7

Sets the password for the specified user using the encrypted format of the password. Use this command if it becomes necessary to restore your appliance configuration, including the password.

Syntax

username *userid* **password 7** *encrypted-password*

Parameters

userid

Specify the user login: **admin** or **monitor**.

encrypted-password

Specify the encrypted password. The password must be at least 6 characters.

Usage Guidelines

Use this command to restore your password using an encrypted version of the password. You can display the encrypted version of the password using the **show running configuration** command.

For example, executing **username monitor password awesomepass** results in the following line being added to the running configuration file:

```
username monitor password 7 $1$f2Azp8N8$n0oy6Y1KhCfuMo93f24ku/
```

If you need to restore your password in the future, you would paste:

```
username monitor password 7 $1$f2Azp8N8$n0oy6Y1KhCfuMo93f24ku/
```

in the CLI, to restore your monitor password to **awesomepass**.

Examples

```
amnesiac (config) # username admin password 7 $1$f2Azp8N8$n0oy6Y1KhCfuMo93f24ku/
```

Related Commands

ssh client generate identity user

web auto-logout

Sets the number of minutes before the Management Console automatically logs out the user.

Syntax

[no] web auto-logout *minutes*

Parameters

minutes

Specify the number of minutes before the system automatically logs out the user. The default value is 15 minutes.

Usage Guidelines

The **no** command option disables the automatic log out feature.

Examples

```
amnesiac (config) # web auto-logout 20
```

Related Commands

show web

web auto-refresh timeout

Enables session timeouts on auto-refreshing report pages.

Syntax

[no] web auto-refresh timeout

Usage Guidelines

Disabling this feature keeps you logged in indefinitely on a report page that is auto-refreshing. This can be a security risk.

The **no** command option disables time-out.

Examples

```
amnesiac (config) # web auto-refresh timeout
```

Related Commands

show web

web enable

Enables the Management Console.

Syntax

[no] web enable

Usage Guidelines

The Management Console is enabled by default.

The **no** command option disables the Management Console.

Examples

```
amnesiac (config) # web enable
```

Related Commands

show web

web http enable

Enables HTTP access to the Management Console.

Syntax

[no] web http enable

Usage Guidelines

The Management Console is enabled by default.

The **no** command option disables the Management Console.

Examples

```
amnesiac (config) # web http enable
```

Related Commands

show web

web http port

Sets the Web port for HTTP access.

Syntax

[no] web http port *port*

Parameters

port

Specify the port number. The default value is 80.

Usage Guidelines

The **no** command option resets the Web port to the default value.

Examples

```
amnesiac (config) # web http port 8080
```

Related Commands

show web

web httpd listen enable

Restricts Web interface access to this system (that is, it enables access control and blocks requests on all the interfaces).

Syntax

[no] web httpd listen enable

Usage Guidelines

The **no** command option disables Web interface restrictions.

Web interface restrictions are not available through the Management Console.

Examples

```
amnesiac (config) # web httpd listen enable
```

Related Commands

show web

web httpd listen enable

Restricts Web interface access to this system (that is, it enables access control and blocks requests on all the interfaces).

Syntax

[no] web httpd listen enable

Usage Guidelines

The **no** command option disables Web interface restrictions.

Web interface restrictions are not available through the Management Console.

Examples

```
amnesiac (config) # web httpd listen enable
```

Related Commands

show web

web httpd listen interface

Adds an interface to the Web server access restriction list.

Syntax

[no] web httpd listen interface *interface*

Parameters

interface

Specify the interface: **primary**, **aux**, **inpath0_0**, **rios_lan0_0**, **rios_wan0_0**

Usage Guidelines

If the list of interfaces is empty, none of the interfaces respond to the queries. If the list of interfaces has at least one entry, then the server listens on that subset of interfaces.

Examples

```
amnesiac (config) # web httpd listen interface aux
```

Related Commands

show web

web httpd log-format

Changes the Web server log format (Apache httpd LogFormat).

Syntax

[no] web httpd log-format *log-format-for-Apache-httpd*

Parameters

log-format-for-Apache-httpd

Specify the log format arguments for Apache LogFormat. For detailed information about the Apache LogFormat arguments, see http://httpd.apache.org/docs.

Usage Guidelines

The **no** command option disables Web log-format.

Examples

```
amnesiac (config) # web httpd log-format "%h %l %u %t \"%r\" %>s %b"
```

Related Commands

show web

web httpd server-header

Changes the Apache Server header line. (Apache httpd LogFormat).

Syntax

[no] web httpd server-header *"Server:"-header-line*

Parameters

"Server:"-header-line

Specify the log format arguments for Apache LogFormat. For detailed information about the Apache Server header line, see http://httpd.apache.org/docs.

Usage Guidelines

The **no** command option disables Web log-format.

Examples

```
amnesiac (config) # web httpd server-header "Server:Example HTTPD Server"
```

Related Commands

show web

web httpd timeout

Configures the Web server timeout period.

Syntax

[no] web httpd timeout *number-of-seconds*

Parameters

number-of-seconds

Specify the Web server timeout period in seconds.

Usage Guidelines

The **no** command option disables Web log-format.

Examples

```
amnesiac (config) # web httpd log-format "%h %l %u %t \"%r\" %>s %b"
```

Related Commands

show web

web https enable

Enables HTTPS access to the Web-based management console.

Syntax

[no] web https enable

Usage Guidelines

The **no** command option disables access to the Web-based management console.

Examples

```
amnesiac (config) # web https enable
```

Related Commands

show web

web https port

Sets the HTTPS secure Web port.

Syntax

[no] web https port *port*

Parameters

port

Specify the port number. The default value is **80**.

Usage Guidelines

The **no** command option disables support on a secure port.

Examples

```
amnesiac (config) # web https port 8080
```

Related Commands

show web

web prefs log lines

Sets the number of lines for the system log page.

Syntax

[no] web prefs log lines *number*

Parameters

number

Specify the number of lines per log page.

Usage Guidelines

The **no** command option disables the number of log lines.

Examples

```
amnesiac (config) # web prefs logs lines 10
```

Related Commands

show web

web proxy host

Sets the HTTP, HTTPS, and FTP proxy.

Syntax

[no] web proxy host *ip-addr* [**port** *port*] [**user-cred username** *username* **password** *password* [**authtype** *authentication-type*]]

Parameters

ip-addr
Specify the IP address for the host.

port *port*
Specify the port for the host.

user-cred username *username* **password** *password*
Optionally, specify the user credentials for the autolicensing feature:

username*username*
Specify the user name.

password*password*
Specify the password, in cleartext format.

authtype *authentication-type*
Optionally, specify the authentication type:

basic
Authenticates user credentials by requesting a valid user name and password. This is the default setting.

digest
Provides the same functionality as basic authentication; however, digest authentication improves security because the system sends the user credentials across the network as a Message Digest 5 (MD5) hash.

ntlm
Authenticates user credentials based on an authentication challenge and response.

Usage Guidelines

Use this command to enable the appliance to use a Web proxy to contact the Brocade licensing portal and fetch licenses in a secure environment. You can optionally require user credentials to communicate with the Web proxy for use with the autolicensing feature. You can specify the method used to authenticate and negotiate these user credentials.

The **no** command option resets the Web proxy settings to the default behavior. Web proxy access is disabled by default.

RiOS supports the following proxies: Squid, Blue Coat Proxy SG, Microsoft WebSense, and McAfee Web Gateway.

Examples

```
amnesiac (config) # web proxy host 10.1.2.1 port 1220
```

Related Commands

show web

web rest-server enable

Enables the REST (REpresentational State Transfer) server.

Syntax

[no] web rest-server enable

Usage Guidelines

The **no** command disables the REST server.

Examples

```
amnesiac (config) # web rest-server enable
```

Related Commands

show web

web session renewal

Sets the session renewal time. This is the time before the Web session time-out. If a Web request comes in, it automatically renews the session.

Syntax

[no] web session renewal *minutes*

Parameters

minutes

Specify the number of minutes. The default value is **10** minutes.

Usage Guidelines

The **no** command option resets the session renewal time to the default value.

Examples

```
amnesiac (config) # web session renewal 5
```

Related Commands

show web

web session timeout

Sets the session time-out value. This is the amount of time the cookie is active.

Syntax

[no] web session timeout *minutes*

Parameters

minutes

Specify the number of minutes. The default value is **60** minutes.

Usage Guidelines

The **no** command option resets the session time-out to the default value.

Examples

```
amnesiac (config) # web session timeout 120
```

Related Commands

show web

web snmp-trap conf-mode enable

Enables SNMP traps in Web configure mode.

Syntax

[no] web snmp-trap conf-mode enable

Usage Guidelines

The **no** command option disables this setting.

Examples

```
amnesiac (config) # web snmp-trap conf-mode enable
```

Related Commands

show web

web soap-server enable

Enables the Simple Object Access Protocol (SOAP) server.

Syntax

[no] web soap-server enable

Usage Guidelines

The **no** command option disables this setting.

Examples

```
amnesiac (config) # web soap-server enable
```

Related Commands

show web

web soap-server port

Enables the Simple Object Access Protocol (SOAP) server port.

Syntax

[no] web soap-server port *port*

Parameters

port

Specify the port.

Usage Guidelines

The **no** command option disables this setting.

Examples

```
amnesiac (config) # web soap-server port 1234
```

Related Commands

show web

web ssl cert generate

Generates a new SSL key and self-signed certificate.

Syntax

web ssl cert generate | [**key-size** *512* | | *1024* | | *2048*] | [**country** *string*] | [**email** *email-address*] | [**locality** *string*] | [**org** *string*] | [**org-unit** *string*] | [**state** *string*] | [**valid-days** *int*]

Parameters

key-size *512* | *1024* | *2048*
Specify the key size.

country *string*
Specify the certificate two-letter country code. The country code can be any two-letter code, such as the ISO 3166 Country Codes, as long as the appropriate Certificate Authority can verify the code.

email *email-address*
Specify the email address of the contact person.

locality *string*
Specify the city.

org *string*
Specify the organization.

org-unit *string*
Specify the organization unit (for example, the company).

state *string*
Specify the state. You cannot use abbreviations.

valid-days *int*
Specify how many days the certificate is valid. If you omit **valid-days**, the default is 2 years.

Examples

```
amnesiac (config) # web ssl cert generate
```

web ssl cert generate-csr

Generates a certificate signing request with current private key.

Syntax

web ssl cert generate-csr [**common-name** *name*] [**country** *string*] [**email** *email-address*] [**locality** *string*] [**org** *string*] [**org-unit** *string*] [**state** *string*]

Parameters

common-name *name*
Specify the common name of the certificate authority.

country *string*
Specify the certificate two-letter country code. The country code can be any two-letter code, such as the ISO 3166 Country Codes, as long as the appropriate Certificate Authority can verify the code.

email *email-address*
Specify the email address of the contact person.

locality *string*
Specify the city.

org *string*
Specify the organization.

org-unit *string*
Specify the organization unit (for example, the company).

state *string*
Specify the state. You cannot use abbreviations.

valid-days *int*
Specify how many days the certificate is valid. If you omit **valid-days**, the default is 2 years.

Usage Guidelines

This command is available on the Interceptor appliance starting in version 4.0.

Examples

```
amnesiac (config) # web ssl cert generate-csr
```

Related Commands

show web ssl cert

web ssl cert import-cert

Imports a certificate, optionally with current private key, in PEM format, and optionally a password.

Syntax

web ssl cert import-cert *cert-data* **import-key** *key* [**password** *password*]

Parameters

import-cert *cert-data*
Specify a certificate file in PEM format.

import-key *key*
Specify a private key in PEM format.

password *password*
Optionally, specify a password.

Usage Guidelines

If no key is specified the incoming certificate is matched with the existing private key, and accepted if the two match. A password is required if imported certificate data is encrypted.

Examples

```
amnesiac (config) # web ssl cert import-cert mydata.pem import-key mykey
```

Related Commands

show web ssl cert

web ssl cert import-cert-key

Imports a certificate with current private key in PEM format.

Syntax

web ssl cert import-cert-key *cert-key-data* [**password** *password*]

Parameters

import-cert-key *cert-key-data*

Specify a private key and certificate file in PEM format.

[**password** *password*]

Optionally, specify a password.

Examples

```
amnesiac (config) # web ssl cert import-cert-key mykey
```

Related Commands

show web ssl cert

web ssl protocol sslv2

Sets the SSL v2 protocols for Apache to use.

Syntax

[no] web ssl protocol sslv2

Usage Guidelines

The **no** command option disables this setting.

Examples

```
amnesiac (config) # web ssl protocol sslv2
```

Related Commands

show web ssl cert

web ssl protocol sslv3

Sets the SSL v3 protocols for Apache to use.

Syntax

[no] web ssl protocol sslv3

Usage Guidelines

The **no** command option disables this setting.

Examples

```
amnesiac (config) # web ssl protocol sslv3
```

Related Commands

show web ssl cert

web ssl protocol tlsv1

Sets the SSL v1 protocols for Apache to use.

Syntax

[no] web ssl protocol tlsv1

Usage Guidelines

The **no** command option disables this setting.

Examples

```
amnesiac (config) # web ssl protocol tlsv1
```

Related Commands

show web ssl cert

web ssl protocol tlsv1.1

Sets the SSL v1.1 protocols for Apache to use.

Syntax

[no] web ssl protocol tlsv1.1

Usage Guidelines

The **no** command option disables this setting.

Examples

```
amnesiac (config) # web ssl protocol tlsv1.1
```

Related Commands

show web ssl cert

web ssl protocol tlsv1.2

Sets the SSL v1.2 protocols for Apache to use.

Syntax

[no] web ssl protocol tlsv1.2

Usage Guidelines

The **no** command option disables this setting.

Examples

```
amnesiac (config) # web ssl protocol tlsv1.2
```

Related Commands

show web ssl cert

write memory

Saves the current configuration settings to memory.

Syntax

write memory

Examples

```
amnesiac (config) # write memory
```

Related Commands

show info

write terminal

Displays commands to recreate current running configuration.

Syntax

write terminal

Examples

```
amnesiac (config) # write terminal
```

Related Commands

show info

Instance Host Commands

This chapter is a reference for command-line interface commands that are supported by instance hosts.

Starting an Instance Host's CLI

You can perform tasks on an instance host from its CLI. Only administrator users can perform instance host tasks. Monitor users cannot perform instance host tasks.

To start a CLI session

1. Connect to the CLI using the sscadmin user:

```
Using username "sscadmin".
Brocade Services Director Host
Last login: Fri Oct 23 12:49:08 2015 from 10.62.135.13

$
```

   You are now ready to enter CLI commands.

2. To log out, enter **exit**. For information about the **exit** command, see exit on page 25.

   For an alphabetical list of commands, see the Index at the end of this book.

Instance Host CLI Commands

The following section contains the Instance Host CLI commands.

host dns

Create DNS settings for the Instance Host.

Syntax

host dns dns-nameservers *nameserver-list* [**dns-search** *search-domain*]

Parameters

nameserver-list

A comma-separated list of DNS name servers.

search-domain

An optional search domain.

Examples

```
>> Check DNS (unset) <<
$ show host dns
+------------------+-------+
| Field            | Value |
+------------------+-------+
| nameservers      |       |
| dhcp_nameservers |       |
| dns_search       |       |
+------------------+-------+

>> create the required DNS settings <<
$ host dns dns-nameservers  10.62.128.30,10.62.128.32 dns-search demo.zeus.com
Updated dns

>> Check results <<
$ show host dns
+------------------+---------------------------+
| Field            | Value                     |
+------------------+---------------------------+
| nameservers      | 10.62.128.30,10.62.128.32 |
| dhcp_nameservers |                           |
| dns_search       | demo.zeus.com             |
+------------------+---------------------------+
```

Related Commands

show host dns

host hostname

Sets the hostname and (optionally) the domain name for the Instance Host.

Syntax

host hostname *hostname* [**domain-name** *domain*]

Parameters

hostname

Specify a hostname

domain

Optionally, specify a domain. If this in not set, the domain is unchanged.

Examples

```
>> set host details <<
$ host hostname axiom-08 domain-name demo.cam.com
Updated host_info

>> confirm results <<
$ show host info
+-------------+--------------+
| Field       | Value        |
+-------------+--------------+
| hostname    | axiom-08     |
| domain_name | demo.cam.com |
+-------------+--------------+
```

Related Commands

show host info

host interface

Creates settings for a specified Instance Host interface.

Syntax

host interface *name* [**dhcp** | **ip** *ip-address* **netmask** *mask* [**gateway** *gateway*]] [**auto**]

Parameters

name

Specify the name of the interface. This can be **eth0**, **eth1**, **eth2**, or any other defined interface name.

ip-address

The IP address of the specified interface.

mask

The netmask applicable to the specified interface.

gateway

The gateway IP address for the specified interface.

Usage Guidelines

Adding **auto** to the end of the **host interface** command makes the specified interface start automatically whenever the Instant Host starts.

If you redefine **eth0**, the terminal connection will be lost. In this case, start a new terminal session with the new details for **eth0**.

Examples

```
>> define the Instance Host interface using DHCP, starting automatically <<
$ host interface eth0 dhcp auto

>> define the Instance Host interface using IP, no auto-start <<
$ host interface eth0 ip 10.62.167.20 netmask 255.255.192.0 gateway 10.62.128.1
```

Related Commands

show host dns

host reload

Restarts (or halts) the Instance Host.

Syntax

host reload [**halt**]

Usage Guidelines

Adding **halt** to the end of the **host reload** command stops the Instance Host instead of restart it. You can then use the **host reload** command to restart the Instance Host.

Examples

```
>> Restart the Instance Host <<
$ show reload

>> Alternatively, stop the Instance Host <<
$ show reload halt
```

Related Commands

show host dns

host route add

Adds routing information to the Instance Host.

Syntax

host route add dest-subnet *subnet* **gateway** *ip-address*

Parameters

subnet

Specify the IP address and netmask in CIDR format. For example, **10.122.12.13/18**

ip-address

Specify the IP address for the subnet's gateway.

Usage Guidelines

To remove a route, use the **no host route** command, using the same parameters.

Examples

```
$ host route add dest-subnet 10.60.167.12/18 gateway 10.60.128.1
```

Related Commands

show host route

image install

Installs a software image onto a system partition.

Syntax

image install *image-filename partition*

Parameters

image-filename

Specify the software image filename to install.

partition

Specify the partition number: **1**, **2**.

Examples

```
amnesiac # image install version10 2
```

logrotate oomprofiling

Creates a log rotation profile.

Syntax

logrotate oomprofiling [**file-size** *size*] [**rotate-count** *count*] [**rotate-period** [**daily** | **weekly** | **monthly** | **default**]]

Parameters

size

Specify a log file size in Mb.

count

Specify the number of times that log files will be rotated before deletion.

daily

The log files are rotated on every day.

weekly

The log files are rotated on first day of week.

monthly

The log files are rotated on first day of month.

default

The log files are rotated on the default interval.

Examples

```
$ logrotate oomprofiling file-size 10 rotate-count 3 rotate-period daily
Updated logrotate
```

Related Commands

show logrotate oomprofiling

lxc container create

Creates an LXC container.

Syntax

lxc container create name *name* **fqdn** *fqdn* **flavor** [**small** | **medium** | **large**] **mgmtip** *mgmt-ip* **lanip** *lan-ip* **wanip** *wan-ip* **install-path** *path* **mgmtgw** *mgmt-gtwy-ip*

Parameters

name
: Specify a name for the container

fqdn
: Specify a fully-qualified domain name for the container.

flavor
: The specification for the container: **small**, **medium** or **large**.

path
: Specify the installation path for the container.

mgmt-ip
: Specify the IP address and netmask of the management interface for the container in CIDR format. For example, **10.62.12.13/18**

mgmt-gtwy-ip
: Specify the IP address for the container's management interface gateway.

lan-ip
: Specify the IP address and netmask of the LAN for the container in CIDR format. For example, **10.63.12.13/18**

wan-ip
: Specify the IP address and netmask of the WAN for the container in CIDR format. For example, **10.64.12.13/18**

Examples

```
$ lxc container create name Violet-01 fqdn jmanhill-07.demo.zeus.com flavor small mgmtip
10.62.167.192/18 lanip 10.63.167.192/18 wanip 10.64.167.192/18 install-path /install/container/demo
mgmtgw 10.62.128.1
```

Related Commands

show lxc route, lxc container update

lxc container update

Updates an LXC container. Can be used to change address details or to add a route.

Syntax

lxc container update name *name* [[**fqdn** *fqdn* **flavor** [**small** | **medium** | **large**] **mgmtip** *mgmt-ip* **lanip** *lan-ip* **wanip** *wan-ip* **install-path** *path* **mgmtgw** *mgmt-gtwy-ip*] | [**route add dest-subnet** *subnet-ip* **gateway** *subnet-gateway*]]

Parameters

name
: Specify a name for the container

fqdn
: Specify a fully-qualified domain name for the container.

flavor
: The specification for the container: **small**, **medium** or **large**.

path
: Specify the installation path for the container.

mgmt-ip
: Specify the IP address and netmask of the management interface for the container in CIDR format. For example, **10.62.12.13/18**

mgmt-gtwy-ip
: Specify the IP address for the container's management interface gateway.

lan-ip
: Specify the IP address and netmask of the LAN for the container in CIDR format. For example, **10.63.12.13/18**

wan-ip
: Specify the IP address and netmask of the WAN for the container in CIDR format. For example, **10.64.12.13/18**

subnet-ip
: Specify the IP address and netmask of the subnet in CIDR format. For example, **10.62.1.1/18**

subnet-gateway
: Specify the IP address of the subnet's gateway in CIDR format.

Usage Guidelines

To disable the configuration of an LXC container, use the **no lxc container <container-name>** command.

To remove a specific route from an LXC container, use the **no lxc container name <container-name> route dest-subnet <subnet-iup> gateway <subnet-gateway>** command.

Examples

```
>> Change general details <<
$ lxc container update name Violet-01 fqdn jmanhill-07.demo.zeus.com flavor medium mgmtip
10.62.167.192/18 lanip 10.63.167.192/18 wanip 10.64.167.192/18 install-path /install/container/demo2
mgmtgw 10.62.128.1

>> Change route information <<
$ lxc container update name Violet-01 route add dest-subnet 10.65.12.13/18 gateway 10.65.128.1
```

Related Commands

show lxc route, lxc container create

process

Restarts the specified service.

Syntax

process *service* **restart**

Parameters

service

Specify the process you want to restart.

Examples

```
>> show state of required service (for example, "networking") <<
$ show process networking
+--------+---------------+
| Field  | Value         |
+--------+---------------+
| status | start/running |
| name   | networking    |
+--------+---------------+

>> Restart the required service <<
$ process networking restart
Updated service (networking)
```

Related Commands

show process

show host backup-version

Displays software version information for the backup (non-boot) partition.

Syntax

show host backup-version

Examples

```
$ show host backup-version
+----------------+------------------------------------------+
| Field          | Value                                    |
+----------------+------------------------------------------+
| build_id       | 298                                      |
| version_number | 2.3.0-r1                                 |
| version_name   | Falstaff                                 |
| revision       | d877afb7f20fc9bfc2520105bc6657603ad60fea |
+----------------+------------------------------------------+
```

Related Commands

show host version

show host dns

Displays Instance Host DNS settings.

Syntax

show host dns

Examples

```
$ show host dns
+------------------+-----------------------------+
| Field            | Value                       |
+------------------+-----------------------------+
| nameservers      | 10.122.128.30,10.122.128.32 |
| dhcp_nameservers |                             |
| dns_search       | demo.zeus.com               |
+------------------+-----------------------------+
```

Related Commands

host dns

show host info

Displays host information for the Instance Host.

Syntax

show host info

Examples

```
$ show host info
+-------------+---------------+
| Field       | Value         |
+-------------+---------------+
| hostname    | jmanhill-02   |
| domain_name | demo.zeus.com |
+-------------+---------------+
```

Related Commands

host hostname

show host interface

Displays information a specified Instance Host interface.

Syntax

show host interface *name*

Parameters

name

Specify the name of the interface. This can be **eth0**, **eth1**, **eth2**, or any other defined interface name.

Examples

```
$ show host interface eth0
+-------------+-------------------+
| Field       | Value             |
+-------------+-------------------+
| name        | eth0              |
| auto        | True              |
| configured  | True              |
| mac         | 00:52:76:46:12:04 |
| error_info  | None              |
| broadcast   | 10.62.191.255     |
| netmask     | 255.255.192.0     |
| address     | 10.62.167.194     |
| type        | static            |
| gateway     | 10.62.128.1       |
| bridge_with | None              |
+-------------+-------------------+
```

Related Commands

show host dns

show host interfaces

Displays all Services Director Host network interfaces.

Syntax

show host interfaces

Examples

```
$ show host interfaces
+-------------+--------------------+
| Field       | Value              |
+-------------+--------------------+
| name        | eth2               |
| auto        | True               |
| configured  | True               |
| mac         | 00:50:56:a6:07:55  |
| error_info  | None               |
| broadcast   | None               |
| netmask     | None               |
| address     | None               |
| type        | manual             |
| gateway     | None               |
| bridge_with | None               |
|             |                    |
| name        | eth1               |
| auto        | True               |
| configured  | True               |
| mac         | 00:50:56:a6:05:d9  |
| error_info  | None               |
| broadcast   | 10.63.191.255      |
| netmask     | 255.255.192.0      |
| address     | 10.63.167.194      |
| type        | static             |
| gateway     | 10.63.128.1        |
| bridge_with | None               |
|             |                    |
| name        | eth0               |
| auto        | True               |
| configured  | True               |
| mac         | 00:50:56:a6:12:04  |
| error_info  | None               |
| broadcast   | 10.62.191.255      |
| netmask     | 255.255.192.0      |
| address     | 10.62.167.194      |
| type        | static             |
| gateway     | 10.62.128.1        |
| bridge_with | None               |
+-------------+--------------------+
```

Related Commands

show host dns

show host route

Displays Instance Host route information.

Syntax

show host route

Usage Guidelines

The entries map IP addresses (management, data plane, and eth2) to their respective gateways.

Examples

```
$ show host route
default via 10.62.128.1 dev eth0
10.62.128.0/18 dev eth0  proto kernel  scope link  src 10.62.167.194
10.63.128.0/18 dev eth1  proto kernel  scope link  src 10.63.167.194
```

Related Commands

show host dns

show host version

Displays software version information for the Instance Host.

Syntax

show host backup version

Examples

```
$ show host version
+----------------+------------------------------------------+
| Field          | Value                                    |
+----------------+------------------------------------------+
| build_id       | 298                                      |
| version_number | 2.3.0-r1                                 |
| version_name   | Falstaff                                 |
| revision       | d877afb7f20fc9bfc2520105bc6657603ad60fea |
+----------------+------------------------------------------+
```

Related Commands

show host backup-version

show logrotate oomprofiling

Displays the log rotation configuration.

Syntax

show logrotate oomprofiling

Examples

```
$ show logrotate oomprofiling
+----------------+--------+
| Field          | Value  |
+----------------+--------+
| rotate         | 3      |
| rotate_periods | weekly |
| compress       | yes    |
| missingok      | yes    |
| nocreate       | yes    |
| size           | 10M    |
| notifempty     | yes    |
+----------------+--------+
```

These settings are described below:

rotate	The number of times that log files are rotated before deletion.
rotate_periods	The frequency of log rotation. This can be set to: • daily - The log files are rotated on every day. • weekly - The log files are rotated on first day of week. • monthly - The log files are rotated on first day of month. • default - The log files are rotated on the default interval.
compress	A Boolean setting. If yes, then old versions of log files are compressed by default. This cannot be set from the CLI.
missingok	A Boolean setting. If yes, then if the log file is missing, the system will go on to the next one without issuing an error message. This cannot be set from the CLI.
nocreate	A Boolean setting. If yes, then new log files are not created. This cannot be set from the CLI.
size	Specify a log file size in Mb.
notifempty	A Boolean setting. If yes, then empty logs are not rotated. This cannot be set from the CLI.

Related Commands

logrotate oomprofiling

show lxc container

Displays details for a specified LXC container.

Syntax

show lxc container *name*

Parameters

name

Specify a name for the container

Examples

```
$ show lxc container jmanhill-07.demo.zeus.com
+----------------+------------------------------------------------- ...
| Field          | Value
+----------------+------------------------------------------------- ...
| mgmtip         | 10.62.167.196/18
| ifaces         | {"iface_mode": "", "iface_ip": "10.63.167.196/18", ...
| mem            | 256
| mgmtgw         | 10.62.128.1
| install_path   | /root/install
| default_gw     | 10.63.128.1
| fqdn           |
| cpus_set       | 0
| mgmtport       | mgmt0
| container_name | jmanhill-07.demo.zeus.com
| flavor         | small
+----------------+------------------------------------------------- ...
```

Related Commands

show lxc containers, lxc container create, lxc container create

show lxc containers

Displays details for all defined LXC containers.

Syntax

show lxc containers

Examples

```
$ show lxc containers
+----------------+------------------------------------------------- ...
| Field          | Value
+----------------+------------------------------------------------- ...
| mgmtip         | 10.62.167.196/18
| ifaces         | {"iface_mode": "", "iface_ip": "10.63.167.196/18", ...
| mem            | 256
| mgmtgw         | 10.62.128.1
| install_path   | /root/install
| default_gw     | 10.63.128.1
| fqdn           |
| cpus_set       | 0
| mgmtport       | mgmt0
| container_name | jmanhill-07.demo.zeus.com
| flavor         | small
+----------------+------------------------------------------------- ...
```

Related Commands

show lxc container, lxc container create, lxc container update

show lxc route

Shows routes assigned to an lxc container.

Syntax

show lxc route container name *name*

Parameters

name

Specify the name of a container.

Examples

```
$ show lxc route container name jmanhill-04.demo.zeus.com
```

Related Commands

lxc container create, lxc container update

show process

Displays the status for a specified service.

Syntax

show process *service*

Parameters

service

Specify the required service.

Examples

```
>> show status for specified process (for example, "mnetworking")
$ show process networking
+--------+---------------+
| Field  | Value         |
+--------+---------------+
| status | start/running |
| name   | networking    |
+--------+---------------+
```

Related Commands

process

show user

Displays group, name and SSH key information for a specified user.

Syntax

show user *user* [**sshkey**]

Parameters

user

Specify the required user.

sshkey

Lists SSH keys assigned to the user.

Examples

```
>> show status for the sscadmin user <<
$ show user sscadmin
+-------+----------+
| Field | Value    |
+-------+----------+
| group | sscadmin |
| name  | sscadmin |
+-------+----------+

>> show SSH keys for the sscadmin user <<
$ show user sscadmin sshkeys
+-------+-------------------------------------------------------------------------
| Field | Value
+-------+-------------------------------------------------------------------------
| user  | sscadmin
| keys  | AAAAB3NzaC1yc2EAAAADAQABAAABAQCqnMMxJf03td30Ypm31RsUWlqj7PXqorgsEgfqz
|       | VwnJKbzjTLedufwcEVG27QiJVYoqS6vcC+lUy8yAq/Kv1HbQcejAmOZEZzsMAcpTcaRqZ
|       | qQyiS/eje8OX30c10ObcLWEIbOYS4f/1B/r3pE1OJAW7CareS1bFkqDdlH2EVD7KP/+J9
|       | 0KBGEu5hZ2VUnYhnJnDnp/9FFP9/B6lqSTYMIVKL5dhp2blyftKTv8A/SAl3HrKzJIFba
|       | 3UB5bl6Anzww83ndgH3Q7rs8jDOZRTw+Gv5ZNd+MiB9a275CwfmL
+-------+-------------------------------------------------------------------------
```

Related Commands

show users, user password, user sshkey

show users

Displays group and name information for all users.

Syntax

show users

Examples

```
$ show users
+-------+----------+
| Field | Value    |
+-------+----------+
| group | sscadmin |
| name  | sscadmin |
|       |          |
+-------+----------+
```

Related Commands

show user, user password, user sshkey

sysdump

Generates a system dump on the Instance Host.

Syntax

sysdump generate

Usage Guidelines

To delete a system dump, use the **no sysdump <dump-tarball>** command. For example:

```
$ no sysdump ssc-host-sysdump-jkilby-02-20151117-141908.tar.gz
Deleted sysdump (ssc-host-sysdump-jkilby-02-20151117-141908.tar.gz)
```

Examples

```
$ sysdump generate
Succesfully generated sysdump (found at https://jmanhill-04)
```

Related Commands

show logrotate oomprofiling

system boot

Sets which boot partition will be used on the next reboot.

Syntax

system boot *partition*

Parameters

partition

Specify the partition to boot: **1** or **2**

Examples

```
$ system boot 1
System will boot in 1 partition on next boot.
```

Related Commands

host reload, system current-partition

system current-partition

Displays the number of the boot partition for the next reboot.

Syntax

system current-partition

Examples

```
$ system current-partition
Currently booted into partition: 2
```

Related Commands

host reload, system boot

user password

Changes the password for the specified Instance Host user.

Syntax

user *user* **password** *password*

Parameters

user

Specify the user name. For example, **sscadmin**.

password

Specify the new password. There is no confirmation.

Examples

```
>> Set password for sscadmin to "Varn-1sh" <<
$ user sscadmin password Varn-1sh
Updated user (sscadmin)
```

Related Commands

user sshkey, show user, show users

user sshkey

Adds a public SSH key to the specified user.

Syntax

user *user* **sshkey** *key*

Parameters

user

Specify the required user.

key

Specify a PEM encoded public certificate.

Usage Guidelines

To remove an SSH key from a user, use the **no user <user> sshkey <key>** command.

Examples

```
$ user sscadmin sshkey AAAAB3NzaC1...
Added public SSH key for user (sscadmin)
```

Related Commands

user password, show user, show users

Accessing the Operating System Shell

This chapter described how to access the operating system shell so that you can issue commands.

NOTE

Once you have accessed the operating system shell, the **OS Shell** function is automatically enabled in the Services Director VA GUI. This cannot be disabled once enabled.

Accessing the OS Shell

Administrator users can access the operating system shell to issue commands. The admin password is required on the first login only.

To access the OS shell

1. Connect to the CLI:

```
login as: admin
Brocade Services Director
admin@10.62.167.199's password:
Last login: Tue Sep 11 09:43:12 2016 from 10.62.134.242
amnesia > enable
amnesia # configure terminal
amnesia (config) #
```

2. Start the OS shell:

```
amnesia (config) # _shell
[admin@amnesia ~]#
```

   You are now in the operating system shell.

3. To exit the OS shell, type **ctrl + D**.