



## Monitoring GSS Operation

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The GSS software includes a number of tools that allow you to monitor the operating status of the GSS devices on your GSS network. These tools include CLI-based commands and the primary GSSM GUI pages that display the status of your GSSs, GSSMs (primary and standby), and the GSSM database.

This chapter contains the following major sections:

- [Monitoring GSS and GSSM Status](#)
- [Monitoring the GSSM Database Status](#)
- [Viewing the GSS Operating Configuration for Technical Support](#)
- [Configuring the Support Password for Technical Support](#)

**Note**

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You can use the **show statistics** CLI command to display content routing and load-balancing statistics for each component of your GSS global server load-balancing operation: Boomerang (CRAs), DNS, DNS sticky, network proximity, and keepalives. See the *Cisco Global Server Load-Balancing Configuration Guide* (GUI-based or CLI-based version) for details about displaying statistics using the **show statistics** command.

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# Monitoring GSS and GSSM Status

From the CLI of each GSS device, you can monitor the following:

- Online status and resource usage of the individual GSS subsystems (servers) by using the **gss status** command
- Current operating status of your GSS device, including online status, current software version, and start date or time for the individual GSS subsystems by using the **show system-status** command

From the primary GSSM GUI, you can monitor the status of the GSS devices in your GSS network, including online status, software version, current device role network address, hostname, and MAC address of each device.

This section contains the following topics:

- [Monitoring the GSS Device Online Status from the CLI](#)
- [Monitoring the GSS Device System Status from the CLI](#)
- [Monitoring the GSS Device Status from the Primary GSSM GUI](#)

## Monitoring the GSS Device Online Status from the CLI

To monitor the status and resource usage of a GSS device from the CLI, perform the following steps:

1. Log in to the CLI of a GSS device and enable privileged EXEC mode.

```
gssm1.example.com> enable
gssm1.example.com#
```

If you are accessing the GSS remotely using Telnet or SSH, the CLI prompts you for the enable password. The default password is default. For more information about the enable password and configuring a new password, see the *Cisco Global Site Selector Getting Started Guide*.

2. Display the current running status of the GSS device by using the following command:

```
gssm1.example.com# gss status
Cisco GSS - 1.3(1) GSS [Wed Feb 15 21:09:09 UTC 2006]

Registered to primary GSSM: 10.86.209.167

Normal Operation [runmode = 5]
```

```

START  SERVER
Jul09  Boomerang
Jul09  Config Agent (crdirector)
Jul09  Config Server (crm)
Jul09  DNS Server
Jul09  Database
Jul09  GUI Server (tomcat)
Jul09  Keepalive Engine
Jul09  Node Manager
Jul09  Proximity
Jul09  Sticky
Jul09  Web Server (apache)

```

The status of the License Manager (LM) and the Distributed Denial of Service (DDoS) prevention module do not appear in the output of the **gss status** command. To obtain DDoS status, enter the **show ddos status** command and to obtain LM status, enter **show processes | grep license\_manager**. For example, enter:

```

gssm1.example.com# show processes | grep license_manager
license_manager 1705 0.0 00:00:00 Nov02

```



#### Note

When the DNS server is ready to serve DNS requests, it generates the following subsystem log message and saves it in the system.log file:

```

Mar 25 10:45:26 gssm1.example.com DNS-5-SELREADYINFO[2073] Selector
ready to start serving DNS requests

```

3. Include statistics about the CPU utilization when displaying information on the current GSS operating state by entering the following command:

```

gssm1.example.com# gss status verbose
Cisco GSS - 1.3(1) GSS [Wed Feb 31 21:09:09 UTC 2006]

Registered to primary GSSM: 10.86.209.167

Normal Operation [runmode = 5]

```

```

%CPU START  SERVER
0.0  11:55  Boomerang
0.0  11:55  Config Agent (crdirector)
0.0  11:55  Config Server (crm)
0.0  11:55  DNS Server
0.0  11:55  Database
0.0  11:55  GUI Server (tomcat)
0.0  11:55  Keepalive Engine
0.0  02:58  Node Manager
0.0  02:58  Proximity
0.0  02:58  Sticky
0.0  11:55  Web Server (apache)

```

## Monitoring the GSS Device System Status from the CLI

To monitor the current operating status of a GSS device from the CLI, perform the following steps:

1. Log in to the CLI of a GSS device and enable privileged EXEC mode.

```

gss1.example.com> enable
gss1.example.com#

```

If you are accessing the GSS remotely using Telnet or SSH, the CLI prompts you for the enable password. The default password is default. For more information about the enable password and configuring a new password, see the *Cisco Global Site Selector Getting Started Guide*.

2. Display the current running status of the GSS device by entering the following command:

```

gssm1.example.com# show system-status
Cisco GSS - 1.3(1) GSS Manager - primary [Wed Feb 15 16:37:37 UTC
2006]

```

```

Normal Operation [runmode = 5]

```

```

START  SERVER
Jul09  Boomerang
Jul09  Config Agent (crdirector)
Jul09  Config Server (crm)
Jul09  DNS Server
Jul09  Database
Jul09  GUI Server (tomcat)
Jul09  Keepalive Engine
Jul09  Node Manager

```

```
Jul09 Proximity
Jul09 Sticky
Jul09 Web Server (apache)
```

**Note**

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The equivalent CLI command is `gss status`.

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## Monitoring the GSS Device Status from the Primary GSSM GUI

To monitor the status of GSS devices from the primary GSSM GUI, perform the following steps:

1. From the primary GSSM GUI, click the **Resources** tab.
2. Click the **Global Site Selectors** navigation link. The Global Site Selector list page appears displaying the status, role, and IP address of each GSS in the network.
3. Click the **Modify GSS** icon for the GSS or GSSM to monitor. The Global Site Selectors details page appears, displaying configuration and status information about the device at the bottom of the page. The device type (GSS or GSSM) appears in the Node Services column.

Displayed information is as follows:

- Status—Online or offline
  - Version—Software version currently loaded on the device
  - Node services—Current role of the device (GSS, primary or standby GSSM, or both)
  - IP address—Network address of the device
  - Hostname—Network hostname of the device
  - MAC—Machine address of the device
4. Click **Cancel** to return to the Global Site Selectors list page.

# Monitoring the GSSM Database Status

The GSS software includes a number of CLI commands to monitor the status of the GSSM database and its contents. This section contains the following topics:

- [Monitoring the Database Status](#)
- [Validating Database Records](#)
- [Creating a Database Validation Report](#)

## Monitoring the Database Status

To verify that the database running on the primary GSSM is functioning properly, perform the following steps:

1. Log in to the CLI of the primary GSSM and enable privileged EXEC mode.

```
gssm1.example.com> enable
gssm1.example.com#
```

If you are accessing the GSS remotely using Telnet or SSH, the CLI prompts you for the enable password. The default password is default. For more information about the enable password and configuring a new password, see the *Cisco Global Site Selector Getting Started Guide*.

2. Display the operating status of the GSSM database by entering the following command:

```
gssm1.example.com# gssm database status
GSSM database is running.
```

## Validating Database Records

To validate the records in your GSSM database, perform the following steps:

1. Log in to the CLI of the primary GSSM and enable privileged EXEC mode.

```
gssm1.example.com> enable
gssm1.example.com#
```

If you are accessing the GSS remotely using Telnet or SSH, the CLI prompts you for the enable password. The default password is default. For more information about the enable password and configuring a new password, see the *Cisco Global Site Selector Getting Started Guide*.

2. Validate the content of your GSSM database by entering the following command:

```
gssm1.example.com# gssm database validate  
GSSM database passed validation.
```

## Creating a Database Validation Report

If you encounter problems while validating your GSSM database, you can generate a report, called validation.log, that details which database records failed validation. The **gssm database report** command constructs a list of invalid records in the GSSM database and writes the results to validation.log in the /home directory.

To generate a database validation report, perform the following steps:

1. Log in to the CLI of the primary GSSM and enable privileged EXEC mode.

```
gssm1.example.com> enable  
gssm1.example.com#
```

If you are accessing the GSS remotely using Telnet or SSH, the CLI prompts you for the enable password. The default password is default. For more information about the enable password and configuring a new password, see the *Cisco Global Site Selector Getting Started Guide*.

2. Generate a validation report on the content of your GSSM database by entering the following command:

```
gss1.example.com# gssm database report  
GSSM database validation report written to validation.log.
```

3. View the contents of your validation report by entering the following command:

```
gss1.example.com# type validation.log  
validation.log  
Start logging at Wed Feb 15 19:17:21 GMT+00:00 2006  
- storeAdmin Validating ... Wed Feb 15 19:17:23 GMT+00:00 2006 -  
- ObjectId Object_Name.Field_Name Description -  
Validating FactoryInfo
```

```
Validating answerElement
Validating answerGroup
  70 answerGroup.OwnerId Many-To-One List
Validating CachingConfig
Validating ClusterConfig
Validating CmdControl
Validating CmdPurgeRD
Validating CmdUpdate
Validating ConfigProperty
Validating Customer
Validating DistTree
Validating DnsRule
Validating DomainElement
Validating DomainGroup
Validating ENodeConfig
Validating ENodeStatus
Validating KeepAliveConfig
Validating KeepAlive
Validating Location
Validating OrderedanswerGroup
Validating Owner
Validating Region
Validating RequestHandler
Validating RoutedDomain
Validating RoutingConfig
Validating RrConfig
Validating RrStatus
Validating SNodeConfig
Validating SourceAddressElement
Validating SourceAddressGroup
Validating SpInfo
Validating SystemConfig
Validating UpdateInfo
Validating UserConfig
Validating VirtualCDN
Validating WlpanswerElement
Validating User Validations
End of file validation.log
```

# Viewing the GSS Operating Configuration for Technical Support

The GSS software includes two CLI commands to assist a Cisco Technical Assistance Center (TAC) representative in troubleshooting potential problems on your GSS network. Use the following CLI commands:

- **show tech-support [config | core-files]**—Displays a report on the current operating configuration of your GSS device that can be used by a Cisco TAC representative in troubleshooting problems on your GSS network. The **config** option exports the output of all configured fields from the primary GSSM GUI.
- **gss tech-report filename**—Generates a detailed report for use by a Cisco TAC representative in troubleshooting persistent GSS problems. The file generated is a compressed tar- format archive file with a .tgz extension. The *filename* argument identifies a user-assigned name for the report generated by the **gss tech-report** command.

For example, to display an operating configuration report for your GSS device, enter:

```
gssm1.example.com(config)# show tech-support
Cisco GSS - 1.3(1.0.0) - host-gss GSS software GSSM - standby [[Wed
Feb 15 16:39:09 UTC 2006]
```

```
Registered to primary GSSM: 10.86.209.252
```

```
Normal Operation [runmode = 5]
START SERVER
Sep15 Boomerang
Sep15 Config Agent (crdirector)
Sep15 Config Server (crm)
Sep15 DNS Server
Sep15 Database
Sep15 GUI Server (tomcat)
Sep15 Keepalive Engine
Sep15 Node Manager
Sep15 Web Server (apache)
*** clock ***
System time: Wed Feb 15 16:41:24 UTC 2006
*** uptime ***
Uptime: 22 Hours 41 Minutes and 48 seconds
*** running-config ***
interface ethernet 0
```

## Viewing the GSS Operating Configuration for Technical Support

```

    ip address 10.86.209.220 255.255.254.0
    gss-communications
interface ethernet 1
    ip address 192.168.1.25 255.255.255.0
    gss-tcp-keepalives
...

```

To export the output of all configured fields from the primary GSSM GUI, enter:

```

gssm1.example.com(config)# show tech-support config
GUI Configuration Export:
Wed Feb 15 16:46:24 GMT+00:00 2006
Global Site Selectors:
  GSS1:
    Global Site Selector: charon.cisco.com
    Status: Online
    Node Services: GSS
    IP Address: 192.168.209.224
    Location:
    Region:
  GSS2:
    Global Site Selector: geryon.cisco.com
    Status: Online
    Node Services: GSS
    IP Address: 192.168.209.225
    Location:
    Region:
  GSS3:
    Global Site Selector: ladon.cisco.com
    Status: Online
    Node Services: GSS; Standby GSSM
    IP Address: 192.168.209.222
    Location:
    Region:
  GSS4:
    Global Site Selector: icarus.cisco.com
    Status: Online
    Node Services: GSS
    IP Address: 192.168.209.221
    Location:
    Region:
DNS Rules:
  Rule1:
    Name: ECommerce
    Source Address List: Anywhere
    Domain List: ECommerce
    Owner: ECommerce-Database
    Status: Active
    Match DNS Query Type: A record

```

```
Answer Group 1: Database-Services
Balance Method 1: Hashed
Balance Clause Options 1: DNS TTL: 20; Return Record Count: 1;
Answer Group 2:
Balance Method 2:
Balance Clause Options 2:
Answer Group 3:
Balance Method 3:
```

## Configuring the Support Password for Technical Support

For debugging purposes, a Cisco Technical Assistance Center (TAC) representative may ask you to set the GSS support password using the **supportpass** command and then communicate that password to the support engineer. The support engineer can then access the engineering mode using the support password that you provide.

The syntax of this command is as follows:

### **supportpass**

After you enter the command, the CLI prompts you for the Admin password, which is required to set the support password. The CLI then prompts you for the support password. Enter an alphanumeric string that can contain spaces and special characters. Though the password can be an unlimited number of characters, we recommend that you limit the number of characters to 10 or less.

For example, to set the GSS support password, enter:

```
gss1.example.com# supportpass
Admin Password: <admin_password>
Set GSS support Password: <support_password>
Confirm GSS support Password: <support_password>
```

You can use the **show supportpass-status** command to see if the GSS support password has been set. For example, enter:

```
gss1.example.com# show supportpass-status
GSS support password is set.
```

To delete the support password, enter a null value for the password by pressing **Enter** without entering a support password.

To change the support password, enter the command again and define the new password.