



CHAPTER 2

Configuring Resources

This chapter describes how to establish global server load-balancing resources on your GSS network.

This chapter contains the following major sections:

- [Organizing Your GSS Network](#)
- [Logging in to the CLI and Enabling Privileged EXEC Mode](#)
- [Configuring Locations and Regions](#)
- [Configuring Owners](#)
- [Grouping GSS Resources by Location, Region, and Owner](#)
- [Displaying Resource Information](#)
- [Where to Go Next](#)

Organizing Your GSS Network

The primary GSSM provides you with the following means to group and organize resources on your GSS network:

- **Locations**—Logical groupings for GSS resources that correspond to geographical entities such as a city, data center, or content site
- **Regions**—Higher-level geographical groupings that contain one or more locations
- **Owners**—Groupings that correspond to business or organizational relationships; for example, customers, internal departments, and IT personnel

Regions and locations do not have to correspond to actual geographical sites; they are simply organizing measures that allow you to group GSS resources and exist in a relationship of one (region) to many (locations).

In addition to providing an organizational scheme for your GSS network, locations can also be used for bulk management of GSS resources, such as answers. Answers can be grouped and managed according to an established GSS location. Using a location to manage your answers can simplify the process to suspend or activate answers in a particular area of your network (see [Chapter 6, Configuring Answers and Answer Groups](#)). For example, you can shut down one or more data centers to perform software upgrades or regular maintenance.

Before you can configure your GSS network resources, you must log in to the CLI and enable privileged EXEC mode. See the “[Logging in to the CLI and Enabling Privileged EXEC Mode](#)” section for details.

Logging in to the CLI and Enabling Privileged EXEC Mode



Note

To log in and enable privileged EXEC mode in the GSS, you must be a configured user with admin privileges. See the *Cisco Global Site Selector Administration Guide* for information on creating and managing user accounts.

To log in to the primary GSSM and enable privileged EXEC mode at the CLI, perform the following steps:

1. If you are remotely logging in to the primary GSSM through Telnet or SSH, enter the hostname or IP address of the GSSM to access the CLI.

If you are using a direct serial connection between your terminal and the GSSM, use a terminal emulation program to access the CLI. For details about making a direct connection to the GSS device using a dedicated terminal and about establishing a remote connection using SSH or Telnet, see the *Cisco Global Site Selector Getting Started Guide*.

2. Specify your GSS administrative username and password to log in to the GSSM. The CLI prompt appears.

```
gssm1.example.com>
```

3. At the CLI prompt, enable privileged EXEC mode as follows:

```
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*.

The prompt changes from the user-level EXEC right angle bracket (>) prompt to the privileged-level EXEC pound sign (#).

Configuring Locations and Regions

This section contains the following topics:

- [Configuring Regions](#)
- [Configuring Locations](#)



Note

We recommend that you create regions before you create locations because you associate a region with a location when creating the location.

Configuring Regions

You configure a region by using the **region** command in global server load-balancing configuration mode.

The syntax of this command is as follows:

```
region name [comments text]
```

The keywords and arguments for this command are as follows:

- *name*—A high-level geographical group name for the region assigned to the GSS network. Enter a unique alphanumeric name with a maximum of 80 characters. Enter names that include spaces in quotes (for example, “name 1”).

- **comments text**—(Optional) Specifies descriptive information or important notes about the region. Enter a maximum of 256 alphanumeric characters. Comments with spaces must be entered in quotes.

For example, to create a region named `Western_EU` and provide comments about its location and purpose, enter:

```
gssm1.example.com# config
gssm1.example.com(config)# gslb
gssm1.example.com(config-gslb)# region Western_EU comments "London and
future data centers"
```

If you need to delete a region, ensure that you know about the dependencies associated with it. For example, regions that have locations associated with them cannot be deleted. In this case, you must first delete any associated locations.



Caution

Deletions of any kind cannot be undone in the primary GSSM. Before deleting any data that you think you might want to use at a later point in time, perform a database backup of your GSSM. See the *Global Site Selector Administration Guide* for details.

If an error appears informing you that a GSS location is still linked to the region that you want to delete, change the region associated with the location, and then attempt to delete the region again.

To delete a region, enter:

```
gssm1.example.com(config-gslb)# no region Western_EU
```

Configuring Locations

You configure a location by using the **location** command in global server load-balancing configuration mode.

The syntax of this command is as follows:

```
location name [comments text | region name | zone name]
```

The keywords and arguments for this command are as follows:

- *name*—Geographical group name entities such as a city, data center, or content site for the location. Enter a unique alphanumeric name, with a maximum of 80 characters. Enter names that include spaces in quotes (for example, "name 1").

- **comments**—(Optional) Specifies descriptive information or important notes about the location. Enter a maximum of 256 alphanumeric characters. Comments with spaces must be entered in quotes.
- **region name**—(Optional) Specifies a region with which the location will be associated. There should be a logical connection between the region and location. Enter a unique alphanumeric name, with a maximum of 80 characters. Enter names that include spaces in quotes (for example, “name 1”).
- **zone name**—(Optional) Specifies the name of an existing zone to be associated with the location. Specify this option if you are performing network proximity (see [Chapter 9, Configuring Network Proximity](#)). There should be a logical connection between the zone and the location.

For example, to create a location named San_Francisco and associate it with the region Western_USA, enter:

```
gssm1.example.com# config
gssm1.example.com(config)# gslb
gssm1.example.com(config-gslb)# location SAN_FRANCISCO region
WESTERN_USA
gssm1.example.com(config-gslb)# location SAN_FRANCISCO comments "UNION
SQUARE"
```

If you need to delete a location, ensure that you know about the dependencies associated with a resource. For example, answers associated with locations that are deleted are automatically associated with the “Unspecified” location.

**Caution**

Deletions of any kind cannot be undone in the primary GSSM. Before deleting any data that you think you might want to use at a later point in time, perform a database backup of your GSSM. See the *Global Site Selector Administration Guide* for details.

Before you delete a location to which an answer is associated, first change the location that is associated with the answer (see the “[Modifying an Answer](#)” section in [Chapter 6, Configuring Answers and Answer Groups](#)).

To delete a location use the **no location** command. For example, enter:

```
gssm1.example.com(config-gslb)# no location SAN_FRANCISCO
```

Configuring Owners

An owner is a logical grouping for GSS network resources that corresponds to a business or organizational structure. For example, an owner might be a hosting customer, an internal department such as human resources, or an IT staff resource.

As with locations, owner designations are used for the bulk management of GSS resources. Using a GSS owner to manage your answer group simplifies the process to suspend or activate all related answers.

You configure an owner by using the **owner** command in global server load-balancing configuration mode.

The syntax of this command is as follows:

```
owner name [comments text]
```

The keywords and arguments for this command are as follows:

- **name**—Logical name such as a business or organizational structure for the owner. Enter a unique alphanumeric name with a maximum of 80 characters. Names that include spaces must be entered in quotes (for example, “name 1”).
- **comments text**—(Optional) Specifies descriptive information or important notes about the owner. Enter a maximum of 256 alphanumeric characters. Comments with spaces must be entered in quotes.

For example, enter:

```
gssm1.example.com# config
gssm1.example.com(config)# gslb
gssm1.example.com(config-gslb)# owner WEB-SERVICES comments "INCLUDES
MARKETING, ADVERTISING, AND ECOMMERCE CONTENT PROVIDERS"
```

If you need to delete an owner, be sure that you know the dependencies of that resource. For example, if you delete an owner, the answer groups, DNS rules, and domain lists associated with that owner will automatically be associated with the “System” owner account.



Caution

Deletions of any kind cannot be undone in the primary GSSM. Before deleting any data that you think you might want to use at a later point in time, perform a database backup of your GSSM. See the *Global Site Selector Administration Guide* for details.

To delete an owner, enter:

```
gssm1.example.com(config-gslb)# no owner WEB-SERVICES comments
"INCLUDES MARKETING, ADVERTISING, AND ECOMMERCE CONTENT PROVIDERS"
```

Grouping GSS Resources by Location, Region, and Owner

After you create your locations, regions, and owners, group your GSS resources (an answer group, for example) by associating a resource with a location, region, or owner. Make this association at the command level of the CLI by specifying a grouping option and name. For example, when you enter the **domain list** command at the (config-gslb) prompt, specify the **owner** option followed by the name of an existing owner to associate the domain list with that owner. [Table 2-1](#) indicates which GSS resources can be grouped by locations, regions, and owners.

Table 2-1 GSS Network Groupings

GSS Network Resource	Grouped By
Locations	Region
Region	—
Owner	—
DNS rules	Owner
Source address lists	Owner
Domain lists	Owner
Answer group	Owner
Answer	Location

Displaying Resource Information

You use the **show gslb-config** command to display information about the resources currently configured for the GSS.

The keywords that display resource information for the **show gslb-config** command are as follows:

- **location**—Displays information about previously created locations.
- **owner**—Displays information about previously created owners.
- **region**—Displays information about previously created regions.

For example, to display a list of previously created regions, enter:

```
gssm1.example.com(config-gslb)# show gslb-config region  
  
region Western_USA comments Denver, Portland, and Seattle  
region Central_USA comments Chicago and Cleveland  
region Eastern_USAcomments Boston, New York, and Atlanta  
gssm1.example.com(config-gslb)#
```

Where to Go Next

[Chapter 3, Configuring Source Address Lists](#), describes the creation of source address lists. Source address lists are collections of IP addresses or address blocks for known client DNS proxies (or D-proxies).