

# Sticky Properties Configuration Mode Commands

This section describes the commands in sticky properties configuration mode. The sticky properties configuration mode commands allow you to configure a GSS to support Domain Name System (DNS) stickiness to answer requests received from client D-proxies. The GSS supports DNS sticky both locally and globally between GSS network peers.

To access the sticky properties configuration mode, use the **sticky-properties** command in global server load-balancing configuration mode. The CLI prompt changes to the sticky properties configuration mode as follows:

```
gssm1.example.com(config)# gslb  
gssm1.example.com(config-gslb)# sticky-properties  
gssm1.example.com(config-gslb-stkyprop)#
```

The **sticky-properties** command has no arguments or keywords.

## (config-gslb-stkyprop) enable

To enable global or local global Domain Name System (DNS) sticky for each active GSS device, use the **enable** command in sticky properties configuration mode. To disable global or local stickiness, use the **no** form of this command.

```
enable {global | local}
```

```
no enable
```

### Syntax Description

<b>global</b>	Enables global DNS sticky for each active GSS device across the entire GSS mesh. With global DNS sticky, all local sticky features are in operation and each GSS device in your network shares answers between peer GSS devices in a peer mesh. The peer mesh attempts to ensure that if any of the GSS devices in the mesh receives the same question, then the same answer is returned to the requesting client D-proxy. The default is disabled.
<b>local</b>	Enables DNS sticky for each active GSS device on a local level only. Each GSS attempts to ensure that subsequent requests for the same domain name are “stuck” to the same location as the first request. Sticky database information is not shared between GSS devices in the GSS mesh. The default is disabled.

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### Examples

The following example shows how to enable global stickiness:

```
gssm1.example.com(config-gslb)# sticky-properties
gssm1.example.com(config-gslb-stkyprop)# enable global
gssm1.example.com(config-gslb-stkyprop)# exit
```

The following example shows how to disable global stickiness:

```
gssm1.example.com(config-gslb)# sticky-properties
gssm1.example.com(config-gslb-stkyprop)# no enable global
gssm1.example.com(config-gslb-stkyprop)# exit
```

**Related Commands**

(config-gslb-stkyprop) encryption  
(config-gslb-stkyprop) favored-peer  
(config-gslb-stkyprop) mask  
(config-gslb-stkyprop) timeout

## (config-gslb-stkyprop) encryption

To enable the encryption of data transmitted by GSS devices in the mesh, use the **encryption** command in sticky properties configuration mode. To disable encryption or delete a key, use the **no** form of this command.

```
encryption {enable} [key name]
```

```
no encryption {enable} [key name]
```

### Syntax Description

<b>enable</b>	Enables the encryption of data transferred between GSS peers in the mesh. Each GSS uses the Message Digest 5 (MD5)-based hashing method to encrypt the application data sent throughout the mesh.
<b>key name</b>	(Optional) Provides a key to the secret string for authentication between GSS devices and for encryption (if enabled). Enter a unique alphanumeric name with a maximum of 31 characters. Names that include spaces must be entered in quotes (for example, "name 1").

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### Usage Guidelines

This command is valid only if the **enable global** command is enabled.

The GSS support encryption of all inter-GSS communications to maintain the integrity of the sticky database information transferred among the mesh peers.

### Examples

The following example shows how to enable the encryption of data transmitted by GSS devices in the mesh:

```
gssm1.example.com(config-gslb)# sticky-properties
gssm1.example.com(config-gslb-stkyprop)# enable global
```

```
gssm1.example.com(config-gslb-stkyprop)# encryption enable key  
SECRETKEY_1  
gssm1.example.com(config-gslb-stkyprop)# exit
```

The following example shows how to delete a previously created key:

```
gssm1.example.com(config-gslb)# sticky-properties  
gssm1.example.com(config-gslb-stkyprop)# no encryption key SECRETKEY_1  
gssm1.example.com(config-gslb-stkyprop)# exit
```

**Related Commands**    [\(config-gslb-stkyprop\) enable](#)

## (config-gslb-stkyprop) favored-peer

To specify that a local GSS node attempt synchronization with a specific GSS peer upon reentry into the sticky mesh, use the **favored-peer** command. To remove a favored peer, use the **no** form of this command.

```
favored-peer {GSS GSS-peer}
```

```
no favored-peer {GSS GSS-peer}
```

Syntax Description		
	<i>GSS</i>	Name of the local GSS device that will be associated with a favored peer GSS device. The peer GSS device is the name of another GSS sticky mesh device that you specify in the <i>GSS-peer</i> argument.
	<i>GSS-peer</i>	Name of the favored GSS peer that is to be associated with the GSS device name specified in the <i>GSS</i> argument.

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**Usage Guidelines** This command requires that you enable the **enable global** command.

By specifying a favored GSS peer, you can also reduce network issues with peer synchronization, which typically generate a burst of network traffic. You can direct network traffic to a peer other than the GSS identified as being the closest (with the shortest round-trip time).

A GSS leaves and rejoins the global sticky mesh when you perform one of the following actions:

- Enter the **gss restart** command to restart the GSS software on the local GSS node.
- Enter the **sticky stop** and **sticky start** command sequence on the local GSS node.

- Enter the **reload** command to perform a cold restart of the local GSS node.
- Enter the **enable global** command in sticky properties configuration mode.

Upon reentry into the mesh, the local GSS node attempts to synchronize its sticky database entries with the favored GSS peer. If the favored peer is unavailable, the GSS queries the remaining mesh peers to find the closest up-to-date sticky database (with the shortest round-trip time).

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### Examples

The following example shows how to specify GSS-2 as the favored peer for GSS-1:

```
gssm1.example.com(config-gslb)# sticky-properties
gssm1.example.com(config-gslb-stkyprop)# enable global
gssm1.example.com(config-gslb-stkyprop)# favored-peer GSS-1 GSS-2
gssm1.example.com(config-gslb-stkyprop)# exit
gssm1.example.com(config-gslb)#
```

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### Related Commands

[\(config-gslb-stkyprop\) enable](#)

## (config-gslb-stkyprop) mask

To specify a global subnet mask that the GSS uses to uniformly group contiguous D-proxy addresses as an attempt to increase the number of clients that the sticky database can support, use the **mask** command in sticky properties configuration mode. To reset the global subnet mask to the default value, use the **no** form of this command.

**mask** *netmask*

**no mask** *netmask*

<b>Syntax Description</b>	<i>netmask</i>	Global subnet mask. Enter the subnet mask in dotted-decimal notation (for example, 255.255.255.0). The default global mask is 255.255.255.255.
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<b>Usage Guidelines</b>	<p>The global subnet mask is applied to the client source IP address before accessing the sticky database.</p>
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When you define a DNS sticky group for incoming D-proxy addresses and the incoming D-proxy address does not match any of the entries in a defined DNS sticky group, the GSS uses this global netmask value to calculate a grouped D-proxy network address.

<b>Examples</b>	<p>The following example shows how to specify a global subnet mask that the GSS uses to uniformly group contiguous D-proxy addresses as an attempt to increase the number of clients that the sticky database can support:</p>
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```
gssm1.example.com(config-gslb)# sticky-properties
gssm1.example.com(config-stkyprop)# enable global
gssm1.example.com(config-stkyprop)# mask 255.255.255.0
gssm1.example.com(config-stkyprop)# exit
gssm1.example.com(config-gslb)#
```

**Related Commands** [\(config-gslb-stkyprop\) enable](#)

## (config-gslb-stkyprop) no

To negate a CLI command or set it to its default settings, use the **no** command. Some GSS CLI commands do not have a **no** form.

**no** *command*

Syntax Description	enable	Disables global or local stickiness.
	<b>encryption</b>	Disables encryption or deletes a key.
	<b>favored-peer</b>	Removes a favored peer.
	<b>mask</b>	Resets the global subnet mask to the default value.
	<b>timeout</b>	Resets the timeout value to the default.

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**Usage Guidelines** Use the **no** command to disable functions or negate a command. If you need to negate a specific command, such as the default gateway IP address, you must include the specific string in your command, such as **no ip default-gateway *ip-address***.

**Examples** The following example shows how to negate a CLI command or set it to its default settings:

```
gss1.example.com(config)# no ip name-server 10.11.12.14
gss1.example.com(config)# no ntp-server 172.16.22.44
```

## (config-gslb-stkyprop) timeout

To specify the maximum time period that an unused answer remains valid in the sticky database, use the **timeout** command in sticky properties configuration mode. To reset the timeout value to the default, use the **no** form of this command.

**timeout** *number*

**no timeout** *number*

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### Syntax Description

*number*

Maximum time interval that an unused answer remains valid in the sticky database. Enter a value from 15–10080 minutes (168 hours), specified in 5 minute intervals (15, 20, 25, 30, and up to 10080). The default value is 60 minutes.

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### Usage Guidelines

The timeout value defines the sticky database entry age-out process.

Each time that the GSS returns an answer to the requesting client D-proxy, the GSS resets the expiration time of the answer to this value. When the sticky timeout value elapses without the client again requesting the answer, the GSS identifies the answer as invalid and purges it from the sticky database.

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### Examples

The following example shows how to specify the maximum time period that an unused answer remains valid in the sticky database:

```
gssm1.example.com(config-gslb)# sticky-properties
gssm1.example.com(config-stkyprop)# enable global
gssm1.example.com(config-stkyprop)# timeout 240
gssm1.example.com(config-stkyprop)# exit
gssm1.example.com(config-gslb)#
```

**Sticky Properties Configuration Mode Commands**

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**Related Commands** [\(config-gslb-stkyprop\) enable](#)