



# A Commands

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# allowed-locator

To configure a list of locators that are allowed in a Map-Register message sent by an egress tunnel router (ETR) when registering to the Map Server, use the **allowed-locator** command. To remove the locators, use the **no** form of this command.

**allowed-locator rloc1 [rloc2 [rloc3 [rloc4]]]**

## Syntax Description

<b>rloc1</b>	IPv4 or IPv6 Routing Locator (RLOC) allowed within the Map-Registration message.
<b>rloc2,rloc3,rloc14</b>	Additional IPv4 or IPv6 RLOCs allowed within the Map-Registration message.

## Command Default

None

## Command Modes

LISP site configuration mode

## Command History

Release	Modification
5.0(1.13)	This command was introduced.

## Usage Guidelines

When a LISP ETR registers with a Map Server, it sends a Map-Register message that contains, one or more EID-prefixes and routing locators that the ETR is configured to use. After verifying the authentication data, the Map Server checks the EID-prefixes against those configured on the Map-Server. If they agree, the Map Register is accepted and the ETR registration is completed.

You can constraint the Map Server default behavior so that the ETR can only register using specific routing locators. To enable this functionality, enter the allowed-locator command in LISP site configuration mode. The Map-Register message from the ETR must contain the same locators that are listed in the Map-Server LISP site configuration. If the list in the Map Register does not match the one configured on the Map Server, the Map-Register message is not accepted and the ETR is not registered. You can configure up to four IPv4 or IPv6 routing locators.



### Note

When you configure allowed locators, an exact match for all locators or a subset of all locators listed on the Map Server within the LISP site configuration must also appear in the Map-Register message sent by the ETR for it to be accepted.

This command does not require a license.

## Examples

This example shows how to configure the LISP site named Customer-1 and enter the site command mode. This example also shows the IPv4 address 172.16.1.1 and the IPv6 address 2001:db8:bb::1 are configured as allowable locators for the LISP site Customer-1. When Customer-1 registers with this Map Server, at least one or both of the configured locators must be included in the Map Registration for the site to register.

```
switch# configuration terminal
switch(config)# lisp site Customer-1
switch(config-lisp-site)# allowed-locator 172.16.1.1 2001:db8:bb::1
```

## Related Commands

Command	Description
<b>lisp site</b>	Configures a LISP site and enters site configuration mode on a Map Server.
show lisp site	Displays registered LISP sites on a Map Server.

# authentication-key

To configure the password used to create the SHA-1 HMAC hash for authenticating the Map-Register message sent by an egress tunnel router (ETR) when registering to the Map-Server, use the authentication-key command. To remove the password, use the no form of this command.

**authentication-key key-type password**

**no authentication-key key-type password**

## Syntax Description

key-type	Key type that the following SHA-1 password is encoded using. Type (0) indicates that a cleartext password follows. Type (3) indicates that a 3DES encrypted key follows, and Type (7) indicates that a Cisco Type 7 encrypted password follows.
password	Password used to create the SHA-1 HMAC hash when authenticating the Map-Register message sent by the ETR.

## Command Default

None

## Command Modes

LISP site configuration mode

## Command History

Release	Modification
5.0(1.13)	This command was introduced.

## Usage Guidelines

When a Locator/ID Separation Protocol (LISP) ETR registers with a Map-Server, the Map Server must already have been configured with certain LISP site attributes that match the ETR attributes. These attributes include a shared password that is used to create the SHA-1 HMAC hash that the Map Server uses to validate the authentication data in the Map-Register message. On the ETR, this password is configured by using the `ip lisp etr map-server` and `ipv6 lisp etr map-server` command.

On the Map Server, the password is configured as part of the lisp site configuration process. To enter the LISP site password, enter the authentication-key command in LISP site configuration mode. You can enter the SHA-1 HMAC password in unencrypted (cleartext) form or encrypted form. To enter an unencrypted password, specify a key-type value of 0. To enter a 3DES-encrypted password, specify a key-type value of 3. To enter a Cisco-encrypted password, specify a key-type value of 7.

**Caution**

Map-Server authentication keys entered in cleartext form automatically are converted to Type 3 (encrypted) form.

**Note**

You must configure the Map Server and ETR with matching passwords for the Map-Registration process to successfully complete. When a LISP site successfully completes the Map-Registration process, its attributes are displayed by using the show lisp site command. If the Map-Registration process is unsuccessful, the site does not be display.

This command does not require a license.


**Examples**

This example shows how to configure the LISP site named Customer-1, enter the site command mode, and enter the shared password:

```
switch# configuration terminal
switch(config)# lisp site Customer-1
switch(config-lisp-site)# authentication-key 0 s0m3-s3cr3t-k3y
```

**Related Commands**

Command	Description
lisp site	Configures a LISP site and enters site configuration mode on a Map Server.
ip lisp etr map-server	Configures the IPv4 or IPv6 locator address of the LISP Map Server to which an ETR should register for its IPv4 EID prefixes.
ipv6 lisp etr map-server	Configures the IPv4 or IPv6 locator address of the LISP Map Server to which an ETR should register for its IPv6 EID prefixes.
show lisp site	Displays registered LISP sites on a Map Server.

 authentication-key