

# **E Commands**

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# eid-notify

To create the a dynamic Endpoint Identifier (EID) configuration on a first-hop router for LISP multihop mobility, use the **eid-notify** command. To remove the configuration, use the **no** form of this command.

eid-prefix ip-address key authentication-key no eid-prefix ip-address key authentication-key

### **Syntax Description**

ip-address	IP address of the site gateway.
authentication-key	Shared key used to authenticate EID-Notify messages from first-hop routers.

### **Command Default**

The dynamic EID configuration is not created.

#### **Command Modes**

Dynamic-EID configuration mode

### **Command History**

Release	Modification
6.2(8)	This command was introduced.

### **Usage Guidelines**

Use this command on a first-hop router to specify the IP address of device that functions both as an ingress tunnel router (ITR) and egress tunnel router (ETR), also known as an xTR.

Whenever a dynamic source is discovered, a map-register with an EID-Notify flag is sent to the specified gateway IP address and is periodically reregistered with that same site-gateway xTR. An authentication key is used to authenticate the Map-Notifies with EID-Notify flag messages received and to attach an authentication digest to the Map-Notify messages with EID-Notify flag to be sent to the site-gateway with the designated IP address.

This command does not require a license.

### **Examples**

This example shows how to configure a first-hop router for LISP multihop mobility:

```
switch# configure terminal
switch(config)# ip lisp etr
switch(config)# lisp dynamic-eid site 1
switch(config-lisp-dynamic-eid)# database-mapping 10.1.1.0/24 100.1.1.1 pr 10 w 50
switch(config-lisp-dynamic-eid)# eid-notify 12.36.0.3 key 3 75095fe9112836e3
switch(config-lisp-dynamic-eid)# map-notify-group 225.1.1.1
```

# **Related Commands**

Command	Description
lisp dynamic-eid	Configures the LISP dynamic-EID roaming policy.

# eid-prefix

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

eid-prefix [instance-id id] EID-prefix [route-tag tag] [accept-more-specifics] no eid-prefix [instance-id id] EID-prefix [route-tag tag] [accept-more-specifics]

### **Syntax Description**

id	(Optional) EID Instance ID.
EID-prefix	IPv4 or IPv6 EID prefix associated with the LISP site.
route-tag tag	(Optional) Specifies the route tag associated with this EID prefix.
accept-more-specifics	(Optional) Specifies to accept more specifics.

#### **Command Default**

None

## **Command Modes**

LISP site configuration mode

### **Command History**

Release	Modification
5.0(1.13)	This command was introduced.
5.0(1.13) (August update)	Added the accept-more-specifics keyword.
5.0(3.lisp)	Added the instance-id keyword.

# **Usage Guidelines**

When a LISP ETR registers with a Map Server, it sends a Map-Register message that contains, one or more EID prefixes that the ETR is configured to be authoritative for. On the ETR, you can configure these EID prefixes by using the ip lisp database-mapping or ipv6 lisp database-mapping command. You must also configure these same EID prefixes on the Map Server in order for the ETR to properly register. On the Map Server, these EID prefixes are configured by using the eid-prefix command.

When you configure the registering xTR to enable a LISP instance ID by using the lisp instance-id command, you must also configure the Map Server to include this same instance ID within the EID prefix configurations for this LISP site by using the instance-id keyword and id value as part of the eid-prefix command.

The same EID prefix(es), and instance ID when applicable, must be configured on the Map Server and the ETR in order for the ETR to be registered, and for these EID prefixes to be advertised by LISP. After verifying the authentication data, the Map Server compares the EID prefixes within the Map Register message against those configured on the Map Server for the LISP site. If they agree, the Map Register is accepted and the ETR registration is completed. If the EID prefixes in the Map Register message do not match those configured on the Map Server, the Map-Register message is not accepted and the ETR is not registered.



A Map-Register message sent by an ETR contains all of the EID prefixes that the ETR is authoritative for. All of these EID prefixes must be listed on the Map Server within the lisp site configuration for the Map-Register message sent by the ETR to be accepted. 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.

When a LISP site successfully completes the Map-Registration process, you can display its attributes by using the show lisp site command. If the Map-Registration process is unsuccessful, the site does not display.

When you use the route-tag keyword, a tag value is associated with the EID prefix that is being configured. This tag value is useful for simplifying processes that populate the URIB or U6RIB alt-vrf. For example, you can define a route-map policy to match this tag for Border Gateway Protocol (BGP) redistribution of these EID prefixes into the virtual routing and forwarding (VRF) used by the LISP-ALT.

When you use the accept-more-specifics keyword, any EID prefix that is more specific then the EID prefix configured is accepted and tracked. The accept-more-specifics keyword is intended for LISP VM Mobility (dynamic-EID roaming). When a dynamic-EID moves from one LISP-VM switch to another, the registration of the dynamic-EID to a new locator is performed to the Map Server. Using this keyword avoids the need to configure an EID prefix for each dynamic-EID that is capable of roaming.

This command does not require a license.

### **Examples**

This example shows how to configure the IPv4 EID prefix 192.168.1.0/24 and the IPv6 EID prefix 2001:db8:aa::/48, each with the route-tag 123, for the LISP site Customer-1:

```
switch# configure terminal
switch(config)# lisp site Customer-1
switch(config-lisp-site)# eid-prefix 192.168.1.0/24 route-tag 123
switch(config-lisp-site)# eid-prefix 2001:db8:aa::/48 route-tag 123
```

This example shows how to configure the IPv4 EID prefix 192.168.2.0/24 for the LISP site Roamer-1 and adds the accept-more-specific keyword. In this case, the host-prefix 192.68.2.12/32, could register according to this configuration:

```
switch# configure terminal
switch(config)# lisp site Roamer-1
switch(config-lisp-site)# eid-prefix 192.168.2.0/24 accept-more-specifics
This example shows how to configure the IPv4 EID prefix 192.168.1.0/24 with the instance ID of 123 for the
LISP site Customer-2:
```

```
switch# configure terminal
switch(config)# lisp site Customer-2
switch(config-lisp-site)# eid-prefix instance-id 123 192.168.1.0/24 route-tag 123
```

# **Related Commands**

Command	Description
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.
lisp site	Configures a LISP site and enters site configuration mode on a Map Server.
lisp dynamic-eid	Configures the LISP dynamic-EID roaming policy.
lisp mobility	Associates a LISP dynamic-EID roaming policy to an interface.