Campus Fabric

broadcast-underlay

To configure the underlay in a LISP network to use a mutlicast group to send encapsulated broadcast packets and link local multicast packets, use the **broadcast-underlay** command in the service submode.

[**no**] **broadcast-underlay** *multicast-ip*

Syntax Description

multicast-ip	The IP address of the multicast group used to send the encapsulated broadcast packets

Command Default

None.

Command Modes

LISP Service Ethernet

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

Use this command to enable the broadcast functionality on the fabric edge node in a LISP network. Ensure that this command is used in the router-lisp-service-ethernet mode or router-lisp-instance-service-ethernet mode.

Use the **no** form of the command to remove the broadcast functionality.

The following example shows how to configure broadcast on a fabric edge node:

```
device(config)#router lisp
device(config-router-lisp)#instance-id 3
device(config-router-lisp-inst)#service ethernet
device(config-router-lisp-inst-serv-eth)#eid-table vlan 250
device(config-router-lisp-inst-serv-eth)#broadcast-underlay 225.1.1.1
device(config-router-lisp-inst-serv-eth)#database-mapping mac locator-set rloc2
device(config-router-lisp-inst-serv-eth)#exit-service-ethernet
```

database-mapping

To configure an IPv4 or IPv6 endpoint identifier-to-routing locator (EID-to-RLOC) mapping relationship and an associated traffic policy for Locator/ID Separation Protocol (LISP), use the **database-mapping** command in either the LISP instance service configuration mode or dynamic-eid configuration mode.

The Router-LISP-Instance-Service configuration mode supports the following syntax:

database-mapping *eid-prefix / prefix-length* { *locator* | **ipv4 interface** *interface* | **ipv6 interface** *interface* | **auto-discover-rlocs** } **priority** *priority* **weight** *weight*

The dynamic-eid configuration mode supports the following syntax:

database-mapping *eid-prefix / prefix-length* **locator-set** *RLOC-name*

Syntax Description

eid-prefix / prefix-length	The IPv4 or IPv6 endpoint identifier prefix and length that is advertised by the router.
locator	The routing locator (RLOC) associated with the value specified for the eid-prefix.
ipv4 interface *interface*	Specifies the IPv4 address and name of the interface to be used as the RLOC for the EID prefix.
ipv6 interface *interface*	Specifies the IPv6 address and name of the interface to be used as the RLOC for the EID prefix.
auto-discover-rlocs	Configures the Egress Tunnel Router (ETR) to discover the locators of all routers configured to function as both an ETR and an Ingress Tunnel Router (ITR)—such routers are referred to as xTRs—in the ETR LISP site when the site uses multiple xTRs and each xTR is configured to use DHCP-learned locators or configured with only its own locators.
priority *priority*	Specifies the priority assigned to the RLOC. Valid values are from 0 to 255.
weight *weight*	Specifies the weight assigned to the locator. Valid values are from 0 to 100.
locator-set *RLOC-name*	The routing locator that has to be associated with the specified EID.

Command Default

No LISP database entries are defined.

Command Modes

Router LISP Instance Service (router-lisp-instance-service)

Router LISP Instance Dynamic-EID (router-lisp-instance-dynamic-eid)

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

In the LISP-instance-service configuration mode, the **database-mapping** command configures LISP database parameters like locator, priority, and weight for a specified IPv4 or IPv6 eid-prefix block. The *locator* is the

IPv4 or IPv6 address of any interface used as the RLOC address for the eid-prefix assigned to the site but can also be the loopback address of the interface.

When a LISP site has multiple locators associated with the same eid-prefix block, multiple **database-mapping** commands are used to configure all of the locators for a given eid-prefix block. Each locator may be assigned the same or different priority value from 0 to 255. When multiple locators are assigned different priority values, the priority value alone is used to determine which locator to prefer. When mulitple locators have the same priority, they are used in a load-sharing manner.

The dynamic-eid configuration mode supports only the **locator-set** option in the **database-mapping**command to configure the RLOCs and its associated policies. When a packet is received on an interface on which the **lisp mobility** command has been applied, the source address of the packet is compared against the EID configured in the database-mapping (LISP dynamic-eid) entry of the referenced LISP **dynamic-eid** *dynamic-eid-policy-name* that matches the **lisp mobility** *dynamic-eid-policy-name.*

When a dynamic-eid match is discovered, the dynamic-eid will be registered to the map server with a locator set. Only one database-mapping entry command is allowed per **dynamic-eid** *dynamic-eid-policy-name*.

The following example shows how to map the eid-prefix with the locator-set, SET1, in the dynamic-eid confgiuration mode:

Note Ensure that the locator-set SET1 is already configured.

```
device(config)# router lisp
device(config-router-lisp)# instance-id 3
device(config-router-lisp-inst)# dynamic-eid Eng.mod
device(config-router-lisp-inst-dynamic-eid)# database-mapping 10.1.1.1/8 locator-set SET1

device(config-router-lisp-inst-dynamic-eid)#exit-dynamic-eid
device(config-router-lisp-inst-dynamic-eid)#
```

dynamic-eid

To create a dynamic End Point Identifier (EID) policy and enter the dynamic-eid configuration mode on an xTR, use the **dynamic-eid** command.

dynamic-eid *eid-name*

Syntax Description

eid-name	If *eid-name* exists, it enters *eid-name* configuration mode. Else, a new dynamic-eid policy with name *eid-name* is created and it enters the dynamic-eid configuration mode.

Command Default

No LISP dynamic-eid policies are configured.

Command Modes

LISP EID-table sub mode (router-lisp-eid-table)

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

To configure LISP mobility, create a dynamic-EID roaming policy that can be referenced by the **lisp mobility** interface command. When the **dynamic-eid** command is entered, the referenced LISP dynamic-EID policy is created and you enter the dynamic-EID configuration mode. In this mode, all attributes associated with the referenced LISP dynamic-EID policy can be entered. When a dynamic-EID policy is configured, you must specify the dynamic-EID-to-RLOC mapping relationship and its associated traffic policy.

Related Commands

Command D	Description
lisp mobility	Configures an interface on an ITR to participate in LISP mobility (dynamic-EID roaming).

eid-record-provider

To define the extranet policy table for the provider instance use the **eid-record-provider** command in the lisp-extranet mode.

[**no**] **eid-record-provider instance-id** *instance id* { *ipv4 address prefix* | *ipv6 address prefix* } **bidirectional**

Syntax Description

instance-id *instance id*	The instance-id of the LISP instance for which the extranet provider policy applies.
ipv4 address prefix	Defines the IPv4 EID prefixes to be leaked, specified in a.b.c.d/nn form.
ipv6 address prefix	Defines the IPv6 EID prefixes to be leaked, prefix specified in X:X:X:X::X/<0-128> form.
bidirectional	Specifies that the extranet communication between the provider and subscriber EID prefixes are bidirectional.

Command Default

None.

Command Modes

router-lisp-extranet

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

Use the **no** form of the command to negate the eid-record-provider configuration.

```
device(config)#router lisp
device(config-router-lisp)#extranet ext1
device(config-router-lisp-extranet)#eid-record-provider instance-id 5000 10.0.0.0/8
bidirectional
device(config-router-lisp-extranet)#eid-record-subscriber instance-id 1000 3.0.0.0/24
bidirectional
```

eid-record-subscriber

To define the extranet policy table for the subscriber instance use the **eid-record-subscriber** command in the lisp-extranet mode.

[**no**] **eid-record-subscriber instance-id** *instance id* {*ipv4 address prefix* | *ipv6 address prefix*} **bidirectional**

Syntax Description

instance-id *instance id*	The instance-id of the LISP instance for which the extranet provider policy applies.
ipv4 address prefix	Defines the IPv4 EID prefixes to be leaked, specified in a.b.c.d/nn form.
ipv6 address prefix	Defines the IPv6 EID prefixes to be leaked, prefix specified in X:X:X:X::X/<0-128> form.
bidirectional	Specifies that the extranet communication between the provider and subscriber EID prefixes are bidirectional.

Command Default

None.

Command Modes

router-lisp-extranet

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

Use the **no** form of the command to negate the eid-record-subscriber configuration.

```
device(config)#router lisp
device(config-router-lisp)#extranet ext1
device(config-router-lisp-extranet)#eid-record-provider instance-id 5000 10.0.0.0/8
bidirectional
device(config-router-lisp-extranet)#eid-record-subscriber instance-id 1000 3.0.0.0/24
bidirectional
device(config-router-lisp-extranet)#eid-record-subscriber instance-id 2000 20.20.0.0/8
bidirectional
```

eid-table

The **eid-table** command associates the instance-service instantiation with a virtual routing and forwarding (VRF) table or default table through which the endpoint identifier address space is reachable.

[**no**] **eid-table** {*vrf-name* | **default** | **vrf** *vrf-name*}

Syntax Description

default	Selects the default (global) routing table for association with the configured instance-service.
vrf *vrf-name*	Selects the named VRF table for association with the configured instance.

Command Default

Default VRF is associated with instance-id 0.

Command Modes

router-lisp-instance-service

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

This command is used only in the instance-service mode.

For Layer 3 (serivce ipv4 / service ipv6), a VRF table is associated with the instance-service. For Layer 2 (service ethernet), a VLAN is associated with the instance-service.

```
device(config)#router lisp
device(config-router-lisp)#instance-id 3
device(config-router-lisp-inst)#service ipv4
device(config-router-lisp-inst-serv-ipv4)#eid-table vrf vrf-table
```

encapsulation

To configure the type of encapsulation of the data packets in the LISP network, use the **encapsulation** command in the service mode.

[**no**] **encapsulation** {**vxlan | lisp**}

Syntax Description

encapsulation vxlan	Specifies VXLAN-based encapsulation.
encapsulation lisp	Specifies LISP-based encapsulation

Command Default

None.

Command Modes

LISP Service IPv4

LISP Service IPv6

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

Use the **encapsulation vxlan** command in the service ethernet mode to encapuslate Layer 2 packets. Use the **encapsulation lisp** command in the service ipv4 or service ipv6 mode to encapsulate the Layer 3 packets.

Use the **no** form of the command to remove encapsulation on the packets.

The following example shows how to configure an xTR for data encapsulation

```
device(config)#router lisp
device(config-router-lisp)#service ethernet
device(config-router-lisp-serv-eth)#encapuslation vxlan
device(config-router-lisp-serv-eth)#map-cache-limit 200
device(config-router-lisp-serv-eth)#exit-service-ethernet

device(config-router-lisp)service ipv4
device(config-router-lisp-serv-ipv4)#encapuslation lisp
```

etr

To configure a device as an Egress Tunnel Router (ETR) use the **etr** command in the instance submode or instance-service submode.

[**no**] **etr**

Command Default

The device is not configured as ETR by default.

Command Modes

router-lisp-instance-service

router-lisp-instance

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

Use this command to enable a device to perform the ETR functionality.

Use the **no** form of the command to remove the ETR functionality.

A router configured as an ETR is also typically configured with database-mapping commands so that the ETR knows what endpoint identifier (EID)-prefix blocks and corresponding locators are used for the LISP site. In addition, the ETR should be configured to register with a map server with the **etr map-server** command, or to use static LISP EID-to-routing locator (EID-to-RLOC) mappings with the **map-cache** command to participate in LISP networking.

The following example shows how to configure a device as an ETR.

```
device(config)#router lisp
device(config-router-lisp)#instance-id 3
device(config-router-lisp-inst)#service ipv4
device(config-router-lisp-inst-serv-ipv4)#etr
```

etr map-server

To configure a map server to be used by the Egress Tunnel Router (ETR) when configuring the EIDs, use the **etr map-server** command in the instance submode or instance-service submode. To remove the configured locator address of the map-server, use the **no** form of this command.

etr map-server *map-server-address* { **key** [**0** | **6** | **7**] *authentication-key* | **proxy-reply** }

Syntax Description

map-server-address	The locator address of the map server.
key	Specifies the key type.
0	Indicates that password is entered as clear text.
6	Indicates that password is in the AES encrypted form.
7	Indicates that passowrd is a weak encrypted one.
authentication-key	The password used for computing the SHA-1 HMAC hash that is included in the header of the map-register message.
proxy-reply	Specifies that the map server answer the map-requests on behalf the ETR.

Command Default

None.

Command Modes

router-lisp-instance-service

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

Use the **etr map-server** command to configure the locator of the map server to which the ETR will register for its EIDs. The authentication key argument in the command syntax is a password that is used for a SHA-1 HMAC hash (included in the header of the map-register message). The password used for the SHA-1 HMAC may be entered in unencrypted (cleartext) form or encrypted form. To enter an unencrypted password, specify 0. To enter an AES encrypted password, specify 6.

Use the **no** form of the command to remove the map server functionality.

The following example shows how to configure a map server located at 2.1.1.6 to act as a proxy in order to answer the map-requests on the ETR .

```
device(config)#router lisp
device(config-router-lisp)#instance-id 3
device(config-router-lisp-inst)#service ipv4
device(config-router-lisp-inst-serv-ipv4)#etr map-server 2.1.1.6 key foo
device(config-router-lisp-inst-serv-ipv4)#etr map-server 2.1.1.6 proxy-reply
```

extranet

To enable the inter-VRF communication in a LISP network, use the **extranet** command in the LISP configuration mode on the MSMR.

extranet *name-extranet*

Syntax Description

name-extranet	Specifies the name of the extranet created.

Command Default

None.

Command Modes

router-lisp

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

```
device(config)#router lisp
device(config-router-lisp)#extranet ext1
device(config-router-lisp-extranet)#
```

instance-id

To creae a LISP EID instance under the router-lisp configuration mode and encter the instance-id submode, use the **instance-id** command.

instance-id *iid*

Command Default

None.

Command Modes

router-lisp command

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

Use the instance-id command to create a LISP eid instance to group multiple services.

Configuration under this instance-id will apply to all services underneath it.

```
device(config)#router lisp
device(config-router-lisp)#instance-id 3
device(config-router-lisp-inst)#
```

itr

To configure a device as an Ingress Tunnel Router (ITR) use the **itr** command in the instance submode or instance-service submode.

[**no**] **itr**

Command Default

The device is not configured as ITR by default.

Command Modes

router-lisp-instance-service

router-lisp-instance

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

Use this command to enable a device to perform the ITR functionality.

Use the **no** form of the command to remove theITR functionality.

A device configured as an ITR helps find the EID-to-RLOC mapping for all traffic destined to LISP-capable sites.

The following example shows how to configure a device as an ITR.

```
device(config)#router lisp
device(config-router-lisp)#instance-id 3
device(config-router-lisp-inst)#service ipv4
device(config-router-lisp-inst-serv-ipv4)#itr
```

itr map-resolver

To configure a device as a map resolver to be used by an Ingress Tunnel Router (ITR) when sending map-requests, use the **itr map-resolver** command in the instance submode or instance-service submode.

itr [**map-resolver** *map-address*]

Syntax Description

map-resolver *map-address*	Configures map-resolver address for sending map requests, on the ITR.

Command Default

None.

Command Modes

router-lisp-instance-service

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

Use this command to enable a device to perform the ITR map-resolver unctionality.

Use the **no** form of the command to remove the map-resolver functionality.

A device configured as a Map Resolver accepts encapsulated Map-Request messages from ITRs, decapsulate those messages, and then forwards the messages to the Map Server responsible for the egress tunnel routers (ETRs) that are authoritative for the requested EIDs.

The following example shows how to configure an ITR to use the map-resolver located at 2.1.1.6 when sending map request messages.

```
device(config)#router lisp
device(config-router-lisp)#instance-id 3
device(config-router-lisp-inst)#service ipv4
device(config-router-lisp-inst-serv-ipv4)#itr map-resolver 2.1.1.6
device(config-router-lisp-inst-serv-ipv4)#itr
```

locator default-set

To mark a locator-set as default, use the **locator default-set** command at the router-lisp level.

[**no**] **locator default-set** *rloc-set-name*

Syntax Description

rloc-set-name	The name of locator-set that is set as default.

Command Default

None

Command Modes

Router-LISP

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

The locator-set configured as default with the **locator default-set** command applies to all services and instances.

locator-set

To specify a locator-set and enter the locator-set configuration mode, use the **locator-set** command at the router-lisp level.

[**no**] **locator-set** *loc-set-name*

Syntax Description

loc-set-name	The name of locator-set.

Command Default

Name

Command Modes

Router-LISP

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

You must first define the locator-set before referring to it.

map-cache

To confgiure a static endpoint identifier (EID) to routing locator (RLOC) (EID-to-RLOC) mapping relationship, use the **map-cache** command in the service ipv4 or service ipv6 mode.

[**no**] **map-cache** *destination-eid-prefix/prefix-len* { *ipv4-address* { **priority** *priority* **weight** *weight* } | *ipv6-address* | **map-request** | **native-forward** }

Syntax Description

destination-eid-prefix/prefix-len	Destination IPv4 or IPv6 EID-prefix/prefix-length. The slash is required in the syntax.
ipv4-address **priority** *priority* **weight** *weight*	IPv4 Address of loopback interface. Associated with this locator address is a priority and weight that are used to define traffic policies when multiple RLOCs are defined for the same EID-prefix block. **Note** Lower priority locator takes preference.
ipv6-address	IPv6 Address of loopback interface.
map-request	Send map-request for LISP destination EID
native-forward	Natively forward packets that match this map-request.

Command Default

None.

Command Modes

router-lisp-instance-service

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

The first use of this command is to configure an Ingress Tunnel Router (ITR) with a static IPv4 or IPv6 EID-to-RLOC mapping relationship and its associated traffic policy. For each entry, a destination EID-prefix block and its associated locator, priority, and weight are entered. The value in the EID-prefix/prefix-length argument is the LISP EID-prefix block at the destination site. The locator is an IPv4 or IPv6 address of the remote site where the IPv4 or IPv6 EID-prefix can be reached. Associated with the locator address is a priority and weight that are used to define traffic policies when multiple RLOCs are defined for the same EID-prefix block.

```
device(config)#router lisp
device(config-router-lisp)#instance-id 3
device(config-router-lisp-inst)#service ipv4
device(config-router-lisp-inst-serv-ipv4)#map-cache 1.1.1.1/24 map-request
```

map-cache extranet

To install all configurated extranet prefixes into map-cache, use the **map-cache extranet** command in the service ipv4 or service ipv6 mode.

map-cache extranet-registration

Command Default

None.

Command Modes

router-lisp-instance-service

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

To support inter-VRF communication, use the **map-cache extranet** command on the Map Server Map Resolver (MSMR). This command generates map requests for all fabric destinations. Use this command in the service ipv4 or service ipv6 mode under the extranet instance.

```
device(config)#router lisp
device(config-router-lisp)#instance-id 3
device(config-router-lisp-inst)#service ipv4
device(config-router-lisp-inst-serv-ipv4)#map-cache extranet-registration
```

service

The **service** command creates a configuration template for all instance-service instantiations of that particular service.

[**no**] **service** {**ipv4** | **ipv6** | **ethernet**}

Syntax Description

service ipv4	Enables Layer 3 network services for the IPv4 Address family.
service ipv6	Enables Layer 3 network services for the IPv6 Address family.
service ethernet	Enables Layer 2 network services.

Command Default

None.

Command Modes

router-lisp-instance submode

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

The **service** command creates a service instance under the instance-id and enters the instance-service mode. You cannot confgure **service ethernet** for the same instance where **service ipv4** or **service ipv6** is configured.

Use the **no** form of the command to exit the service submode.

```
device(config)#router lisp
device(config-router-lisp)#instance-id 3
device(config-router-lisp-inst)#service ipv4
device(config-router-lisp-inst-serv-ipv4)#
```

```
device(config)#router lisp
device(config-router-lisp)#instance-id 5
device(config-router-lisp-inst)#service ethernet
device(config-router-lisp-inst-serv-ethernet)#
```

use-petr

To configure a router to use an IPv4 or IPv6 Locator/ID Separation Protocol (LISP) Proxy Egress Tunnel Router (PETR), use the **use-petr** command in LISP Instance configuration mode or LISP Instance Service configuration mode. To remove the use of a LISP PETR, use the **no** form of this command.

[**no**] **use-petr** *locator-address*[**priority** *priority* **weight** *weight*]

Syntax Description

locator-address	The name of locator-set that is set as default.
priority *priority*	(Optional) Specifies the priority (value between 0 and 255) assigned to this PETR. A lower value indicates a higher priority.
weight *weight*	(Optional) Specifies the percentage of traffic to be load-shared (value between 0 and 100).

Command Default

The router does not use PETR services.

Command Modes

LISP Instance (config-router-lisp-instance)

LISP Instance-Service (config-router-lisp-instance-service)

Command History

Command History

Release	Modification
Cisco IOS XE Everest 16.6.1	This command was introduced.

Usage Guidelines

Use the **use-petr** command to enable an Ingress Tunnel Router (ITR) or Proxy Ingress Tunnel Router (PITR) to use IPv4 Proxy Egress Tunnel Router (PETR) services. When the use of PETR services is enabled, instead of natively forwarding LISP endpoint identifier (EID) (source) packets destined to non-LISP sites, these packets are LISP-encapsulated and forwarded to the PETR. Upon receiving these packets, the PETR decapsulates them and then forwards them natively toward the non-LISP destination.

Do not use **use-petr** command in Service-Ethernet configuration mode.

PETR services may be necessary in several cases:

1. By default when a LISP site forwards packets to a non-LISP site natively (not LISP encapsulated), the source IP address of the packet is that of an EID. When the provider side of the access network is configured with strict unicast reverse path forwarding (uRPF) or an anti-spoofing access list, it may consider these packets to be spoofed and drop them since EIDs are not advertised in the provider core network. In this case, instead of natively forwarding packets destined to non-LISP sites, the ITR encapsulates these packets using its site locator(s) as the source address and the PETR as the destination address.

Note The use of the **use-petr** command does not change LISP-to-LISP or non-LISP-to-non-LISP forwarding behavior. LISP EID packets destined for LISP sites will follow normal LISP forwarding processes and be sent directly to the destination ETR as normal. Non-LISP-to-non-LISP packets are never candidates for LISP encapsulation and are always forwarded natively according to normal processes.

2. When a LISP IPv6 (EID) site needs to connect to a non-LISP IPv6 site and the ITR locators or some portion of the intermediate network does not support IPv6 (it is IPv4 only), the PETR can be used to traverse (hop over) the address family incompatibility, assuming that the PETR has both IPv4 and IPv6 connectivity. The ITR in this case can LISP-encapsulate the IPv6 EIDs with IPv4 locators destined for the PETR, which de-encapsulates the packets and forwards them natively to the non-LISP IPv6 site over its IPv6 connection. In this case, the use of the PETR effectively allows the LISP site packets to traverse the IPv4 portion of network using the LISP mixed protocol encapsulation support.

Examples

The following example shows how to configure an ITR to use the PETR with the IPv4 locator of 10.1.1.1. In this case, LISP site IPv4 EIDs destined to non-LISP IPv4 sites are encapsulated in an IPv4 LISP header destined to the PETR located at 10.1.1.1:

```
device(config)# router lisp
device(config-router-lisp)# use-petr 10.1.1.1
```

The following example configures an ITR to use two PETRs: one has an IPv4 locator of 10.1.1.1 and is configured as the primary PETR (priority 1 weight 100), and the other has an IPv4 locator of 10.1.2.1 and is configured as the secondary PETR (priority 2 weight 100). In this case, LISP site IPv4 EIDs destined to non-LISP IPv4 sites will be encapsulated in an IPv4 LISP header to the primary PETR located at 10.1.1.1 unless it fails, in which case the secondary will be used.

```
Router(config-router-lisp)# use-petr 10.1.1.1 priority 1 weight 100
Router(config-router-lisp)# use-petr 10.1.2.1 priority 2 weight 100
```