CHAPTER 1
EVC Discovery through CLI

The content of this document describes EVC discovery through CLI.

Overview

Ethernet virtual circuit (EVC) is a logical connection between provider edge devices in the service provider network which communicates with the customer edge devices. The termination points of an EVC is called an EVCEndpoint. EVCs and EVCEndpoints are discovered for monitoring their status. EVCs are discovered by MPLS and EVCEndpoints are discovered by IP-AM. The discovered EVCEndpoints are imported from IP into MPLS which then creates the EVCEndpoint objects. The EVCEndpoint objects and their attributes can be viewed in the topology browser.

Discovery

EVCs are discovered through SNMP discovery and CLI discovery. SNMP and CLI discovery discover all devices on the network that are reacheable through IP protocol.

A device must be CLI enabled for it to be discovered through CLI. Devices that are discovered for EVCs through SNMP must support MIB. MIB contains information about EVCs configured on the device. Cisco ME3750 switches do not support MIB. So EVCs on Cisco ME3750 can be discovered only through CLI discovery.

During CLI discovery of EVCs, EVCEndpoints are automatically discovered and EVCEndpoint objects that contain EVC discovery information are created in the topology.

Table 1 on page 2 provides the list of attributes of EVEndpoint objects that are created through CLI discovery

Table 1 Attributes of EVCEndpoint objects

Attribute	Definition
CEVLANs	Provides the CE-VLAN id associated with the EVC.
EncapsulationType	Provides the type of encapsulation used by the user network interface.
EVCEndPointId	Provides the service instance id.
EVCId	Provides the name of the EVC.
EVCType	Provides the type of connection. For example, point-to-point, multipoint-to-multipoint.
ForwardBridgeDomain	Provides the bridge domain id.
NetworkAdapterName	Provides the name of the port or interface where the EVCEndpoint is configured.
NetworkAdapterNumber	Provdes the number of port or interface to which the EVCEndpoint is configured.
OuterSVlanTag	Provides the service VLAN id associated with the port.
RewriteAction	Provides the VLAN rewrite action specified on the interface. For example, POP1, PUSH1.
ServiceVLANTag	Provides the service VLAN id associated with the EVC.
SystemName	Provides the name of the host system.

Table 1 Attributes of EVCEndpoint objects

Attribute	Definition
UNIId	Provides the name of the user network interface.
EVCStatus	Provides the status of the EVC. For example, active, inactive.
OperStatus	Provides the status of the service instance. For example, up, down.

To view the CLI discovered EVC service information for Cisco devices run the following commands through CLI:

```
show ethernet service evc detail
```

Reference output from a CLI discovery,

```
EVC ID: EVC_EME_CISCO_ONLY_1002
 EVC Type: P-P
 UNI Count: Configured = 2, Active = 2
 EVC Status: Active
 Associated Local Interfaces:
 Interface                    CE-Vlans
 FastEthernet1/0/7            102
 Associated UNIs:
 UNI-Identifier               Status              Location
 VLAN_102                     Up                        Fa1/0/7
 VLAN_102                     Up                        Remote
```

To view the CLI discovered EVC service instance information for Cisco devices run the following commands through CLI:

```
show ethernet service instance detail
```

Reference output from a CLI discovery,

```
Service Instance ID: 102
 Associated Interface: FastEthernet1/0/7
 Associated EVC: EVC_EME_CISCO_ONLY_1002
 L2protocol drop
 CE-Vlans: 102
 Interface Dot1q Tunnel Ethertype: 0x8100
 State: Up
 EFP Statistics:
 Pkts In   Bytes In   Pkts Out  Bytes Out
 0           0          0          0
```