



Metro Ethernet Use Cases

Key to provisioning Ethernet QoS, or Metro Ethernet QoS, in ISC QoS is a set of predefined policies that correspond to a variety of typical use cases.

This appendix provides a list of matching predefined policies and use and contains the following sections:

- [Metro Ethernet Service Type Definitions, page E-1](#)
 - [General Metro Ethernet Service Types, page E-1](#)
 - [Metro Ethernet QoS Service types, page E-2](#)
- [Use Cases, page E-2](#)
 - [Use Case 1 — 3750-ME UNI to E-NNI Service Flow, page E-2](#)
 - [Use Case 2 — 7600 with UNI Port, page E-3](#)
 - [Use Case 3 — 3550 UNI to E-NNI Service Flow, page E-3](#)

Metro Ethernet Service Type Definitions

In this section, general and QoS specific Metro Ethernet service types are defined.

General Metro Ethernet Service Types

In the Metro Ethernet 3.1 solution, the following service types apply:

- **Ethernet Relay Service (ERS)**—A point-to-point VLAN-based E-Line service, that is used primarily for establishing a point-point connection between customer routers.
- **Ethernet Wire Service (EWS)**—A point-to-point port-based E-Line service that is used primarily to connect geographically remote LANs over an SP network.
- **Ethernet Multipoint Service (EMS)**—A multipoint-to-multipoint port-based E-LAN service that is used for transparent LAN applications.
- **Ethernet Relay Multipoint Service (ERMS)**—A multipoint-to-multipoint VLAN-based E-LAN service that is used primarily for establishing a multipoint-to-multipoint connection between customer routers.
- **Ethernet Private Line (EPL)**—A port-based point-to-point E-Line service that maps Layer 2 traffic directly on to a TDM circuit.

Metro Ethernet QoS Service types

For Metro Ethernet QoS, the following service types are used:

- EVC—Best Effort, Business, and/or Real Time QoS on a per EVC Class of Service Identifier.
- <EVC + DSCP>—Best Effort, Business, and/or Real Time QoS on a per <EVC, DSCP> Class of Service Identifier.
- <EVC + CoS>—Best Effort, Business, and/or Real Time QoS on a per <EVC, CoS> Class of Service Identifier.

Use Cases

In the following tables, ERS and EWS represent ISC L2VPN service and ERMS, whereas EMS represents ISC VPLS service.

Use Case 1 — 3750-ME UNI to E-NNI Service Flow

This section describes the use case 3750-ME UNI to E-NNI Service Flow ([Table E-1](#)).

Table E-1 Use Case 1: 3750-ME UNI to E-NNI Service Flow

Service Type	Device	Class Type	Predefined Policy	Ethernet Link Policy
EMS, ERS, ERMS, EWS	3750-ME	EVC	3750-BE	Bandwidth: 100Mbps
EMS, ERS, ERMS, EWS	3750-ME	EVC	3750-BC	Bandwidth: 100Mbps
EMS, ERS, ERMS, EWS	3750-ME	EVC	3750-RT	Bandwidth: 100Mbps
EMS, ERS, ERMS, EWS	3750-ME	EVC + DSCP	3750-RT+BC+BE	Bandwidth: 100Mbps
ERS, ERMS	3750-ME	EVC + CoS	3750-RT+BC-BE	Bandwidth: 100Mbps
EWS, EMS	3750-ME	EVC + Inner VLAN	RT, BC, BE	Bandwidth: 100Mbps

Use Case 2 — 7600 with UNI Port

This section describes the use case 7600 with UNI port ([Table E-2](#)).

Table E-2 *Use Case 2: 7600 with UNI Port*

Service Type	Device	Class Type	Template	Link Template
EMS, ERS, ERMS, EWS	7600	EVC	7600-BE	Bandwidth: 100Mbps
EMS, ERS, ERMS, EWS	7600	EVC	7600-BC	Bandwidth: 100Mbps
EMS, ERS, ERMS, EWS	7600	EVC	7600-RT	Bandwidth: 100Mbps
EMS, ERS, ERMS, EWS	7600	EVC + CoS	7600-RT+BC + BE	Bandwidth: 100Mbps

Use Case 3 — 3550 UNI to E-NNI Service Flow

This section describes the use case 3550 UNI to E-NNI Service Flow ([Table E-3](#)).

Table E-3 *Use Case 3: 3550 UNI to E-NNI Service Flow*

Service Type	Device	Class Type	Template	Link Template
EMS, ERS, ERMS, EWS	3550	EVC + DSCP	3550-DSCP	N/A

