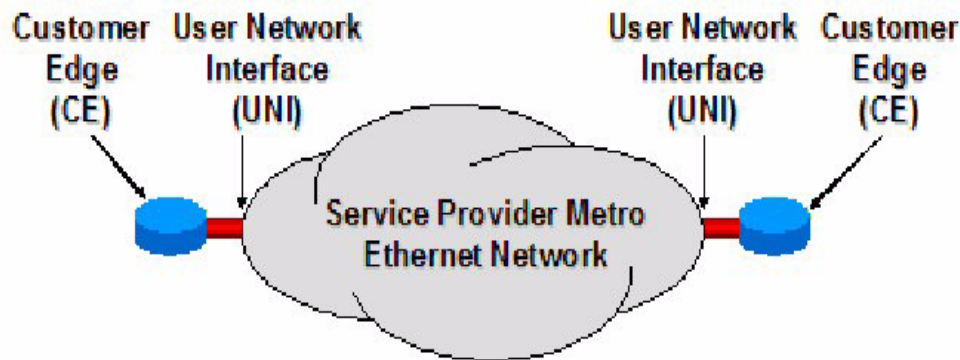


ZebOS®
Advanced Routing Suite

Metro Ethernet Modules

Overview

A Metro Ethernet is a computer network based on the Ethernet standard which covers a metropolitan area. It is commonly used as a metropolitan access network to connect subscribers and businesses to a Wide Area Network (WAN) such as the Internet. Large businesses can also use Metro Ethernet to connect branch offices to their internal networks. The figure contains a simplified model of Ethernet services from a Service Provider, through the User Network Interface (UNI) to the Customer Edge (CE).



Metro Ethernet Services Model

IP Infusion's ZebOS® Advanced Routing Suite (ARS) provides a complete implementation for provider bridging (802.1ad) and supports provisioning and configuring VLAN registration tables for mapping Customer VLANs (C-VLAN) to Service VLANs (S-VLAN). ZebOS also supports configuration of VLAN translation tables. An enhanced version of the Rapid Spanning Tree Protocol (RSTP) for Provider Edge (PE) bridges to handle customer spanning tree packets has been implemented. The handling of customer Layer 2 control packets (either tunnel, peer or discard) can be configured on a per-port/per-protocol basis.

In addition, IP Infusion has implemented the Metropolitan Ethernet Forum's requirements for a User-to-Network Interface (MEF-UNI). This specification defines a generic service construct, called Ethernet Service Types—equivalent to a service VLAN as defined in 802.1ad—that are used to create and manage Ethernet services over a Metro Ethernet Network (MEN). The MEF also defines the Ethernet Service Attributes and valid parameters for use with Ethernet Service Types.

Features

- Reach feature set with great flexibility in addressing Metropolitan Ethernet Forum's (MEF) requirements for User to Network Interface (UNI)

- Enables a provider organization to provide Ethernet Virtual Circuit (EVC) services to their customers with minimal interaction with any customer
- Complete solution for rapid integration of Metro Ethernet functions into Provider Edge (PE) and aggregation devices

Benefits

- Proven technologies in Layer 2, Layer 3 or combination L2/L3 networks
- Guaranteed return on investment and speedy time-to-market for ODMs, OEMs, and Service Providers
- Facilitates provisioning of point-to-point and multipoint-to-multipoint EVCs

Metro Ethernet Modules

802.1ad Provider Bridging – Provider bridging enables a service provider to use the architecture and protocols of IEEE standard 802.1Q to offer the equivalent of separate Local Area Networks (LANs), Bridged LANs, or Virtual Bridged LANs to multiple customers, while requiring no active cooperation between the customers, and only minimal cooperation between individual customers and the service provider.

MEF User-to-Network Interface (UNI) – The MEF UNI supports the Metro Ethernet Forum's requirements, framework, and functional model for how a UNI reference point operates in a Metro Ethernet Network (MEN).

Requirements

ZebOS Network Services Manager

ZebOS Rapid Spanning Tree Module

Standards Supported

- IEEE 802.1ad/D6.0 — Provider Bridging
- MEF 10.1 — Ethernet Services Attributes Phase 2

Standard Deliverables

- Source Code (written in ANSI-compliant C)
- Installation and Configuration Guides
- Command References
- Developer Guides