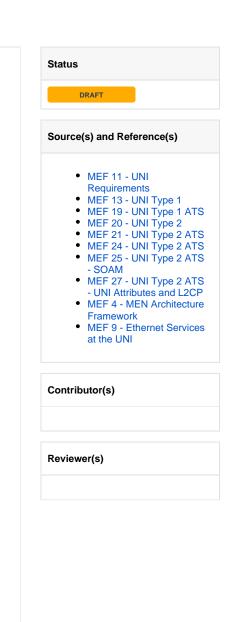
# **User Network Interface (UNI)**



The **User Network Interface** (UNI) is the physical demarcation point between the responsibility of the Subscriber (UNI-C, the Customer Edge or CE) and the responsibility of the Service Provider (UNI-N)

The network that provides the Ethernet services is called the Carrier Ethernet Network (CEN). The basic service model as described in MEF 10.3 is shown in the picture below.

# ? Unknown Attachment

#### **UNI-C**

The **UNI-C** provides the Customer Edge side functions which can be implemented on a switch or a router that connects to the CEN. The UNI-C is responsible for:

- · Formatting the frames in ETH format
- C-tagging the frames per the service definition
- Traffic management functions such as shaping
- OAM functions such as link OAM and the Subscriber MEG for service OAM

#### UNI-N

The **UNI-N** is the SP's side of the UNI. It can be implemented in a single network element or can be distributed between several network elements within the CEN. UNI-N is responsible for:

- Exchange of data frames with UNI-C
- Mapping service frames to and from the EVCs
- Enforcing ingress and bandwidth profiles and color marking
- OAM functions
- Optional CE-VLAN ID manipulation

## **UNI Type 1 and UNI Type 2**

The MEF defines two UNI types

### **UNI Type 1**

UNI Type 1 is defined by MEF 13. This is a basic UNI with manual configuration of UNI-N and UNI-C

UN I Type 1 is further divided into UNI Type 1.1 and UNI Type 1.2:

- Type 1.1: Non-multiplexed UNI for services such as EPL
- Type 1.2: Multiplexed UNI for services such as EVPL

#### **UNI Type 2**

UNI Type 2 is defined by MEF 20. It presents an automated implementation model allowing UNI-C to retrieve EVC status and configuration information from UNI-N. It supports enhanced UNI attributes and additional fault management and protection functionality.

UNI type 2 is further divided into UNI Type 2.1 and UNI Type 2.2.

	UNI Type 2.1	UNI Type 2.2
Mandatory	<ul> <li>Backward compatible with UNI Type 1</li> <li>Service OAM</li> <li>Enhanced UNI attributes</li> <li>L2CP handling</li> </ul>	Backward compatible with UNI Type 1 Service OAM Enhanced UNI attributes L2CP handling Link OAM Protection E-LMI
Optional	<ul><li>Link OAM</li><li>Protection</li><li>E-LMI</li></ul>	

# Frame Delay between UNIs The Service Provider measures a Frame Delay of 6 ms across its E-Line service. Related and Further Reading

# Categories

Example(s)

Attributes | Architecture |