

User Network Interface (UNI)

Status

DRAFT

Source(s) and Reference(s)

- [MEF 11 - UNI Requirements](#)
- [MEF 13 - UNI Type 1](#)
- [MEF 19 - UNI Type 1 ATS](#)
- [MEF 20 - UNI Type 2](#)
- [MEF 21 - UNI Type 2 ATS](#)
- [MEF 24 - UNI Type 2 ATS](#)
- [MEF 25 - UNI Type 2 ATS - SOAM](#)
- [MEF 27 - UNI Type 2 ATS - UNI Attributes and L2CP](#)
- [MEF 4 - MEN Architecture Framework](#)
- [MEF 9 - Ethernet Services at the UNI](#)

Contributor(s)

Reviewer(s)

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.

UNI 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 style="list-style-type: none">• Backward compatible with UNI Type 1• Service OAM• Enhanced UNI attributes• L2CP handling	<ul style="list-style-type: none">• Backward compatible with UNI Type 1• Service OAM• Enhanced UNI attributes• L2CP handling• Link OAM• Protection• E-LMI
Optional	<ul style="list-style-type: none">• Link OAM• Protection• E-LMI	

Example(s)**Frame Delay between UNIs**

The Service Provider measures a Frame Delay of 6 ms across its E-Line service.

Related and Further Reading**Categories**

Attributes | Architecture |