Carrier Ethernet Service

A **Carrier Ethernet service** is a data communication service based on Carrier Ethernet which is delivered to a Subscriber by a Service Provider.

A Carrier Ethernet service:

- Delivers Ethernet frames between different locations in any part of the world at speeds between 1 Mbps and 100 Gbps
- Differentiates between traffic of multiple end-users running over a single network
- Runs over multiple types of infrastructure and transport technologies
- Coexists with existing Layer 2 and Layer 3 solutions while taking advantage of the huge worldwide Ethernet installed base

MEF-defined Carrier Ethernet services - E-Line, E-LAN, E-Tree and E-Access - are what users of Carrier Ethernet 'consume' and therefore are the most recognizable aspect of Carrier Ethernet and the work of the MEF. Carrier Ethernet services are defined in the MEF service definition specifications MEF 6.2, MEF 33 and MEF 51.

EVC-based Carrier Ethernet Services

There are three EVC-based (i.e. UNI-to-UNI) service types that describe the basic connectivity options of a Carrier Ethernet subscriber service:

E-Line	? Unknown Attachment	MEF 6.2
E-LAN	? Unknown Attachment	MEF 6.2
E-Tree	? Unknown Attachment	MEF 6.2

OVC-based Carrier Ethernet Services

There are two OVC-based (i.e. UNI-to-External Network to Network Interface (ENNI)) service types:

E-Access	? Unknown Attachment	MEF 33 and MEF 51
E-Transit	? Unknown Attachment	MEF 51

Contrasting E-LAN and E-Tree Services

E-LAN services are appropriate when all UNIs can generate traffic towards any other UNI and all UNIs belong to the same administrative domain - in other words when traffic separation between different organizations sharing the service is not required.

E-Tree services are appropriate when the service source is located at just one UNI, or a small number of UNIs, each of which is designated a root UNI. The end-users of the service are typically client organizations that require that their respective traffic will not be visible to other clients of the service.

Status

DRAFT

Source(s) and Reference(s)

Contributor(s)

Reviewer(s)

Example(s)

E-Line

E-LAN

E-Tree

E-Access

E-Transit

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