# Ethernet Virtual Connection (EVC)

Carrier Ethernet Services operate over Ethernet Virtual Connections or EVCs. An **EVC** is an association of two or more UNIs that limits the exchange of Service Frames to UNIs in the Ethernet Virtual Connection (EVC). A given UNI can support more than one EVC via the Service Multiplexing attribute.

There are three types of EVCs:-

**Point-to-point EVCs** contain exactly 2 UNIs. Each of the UNIs may or may not support multiple services depending on the type of Carrier Ethernet service(s) defined at the UNI. Point-to-point EVCs carry E-Line services.

? Unknown Attachment

**Multipoint EVCs** contain two or more UNIs. A Multipoint-to-Multipoint EVC with two UNIs is different from a Point-to- Point EVC because one or more additional UNIs can be added to it. Each of the UNIs may or may not support multiple services depending on the type of service(s) defined at the UNI. Multipoint-to-multipoint EVCs carry E-LAN services.

**Rooted Multipoint EVCs** – A multipoint EVC in which each UNI has either the Root Role or the Leaf Role. Ingress Service Frames at a Root Role UNI can be delivered to one or more of any of the other UNIs in the EVC. Ingress Service Frames at a Leaf Role UNI can be delivered to only one or more Root Role UNIs in the EVC. Each of the UNIs may or may not support multiple services depending on the type of service(s) defined at the UNI. Rooted Multipoint EVCs carry E-Tree services. An ingress Service Frame that is mapped to an EVC can be delivered to one or more of the UNIs in the EVC other than the ingress UNI. It MUST NOT be delivered back to the ingress UNI (note that this limitation is only for service frames and does not affect fault management frames like Loopback) It MUST NOT be delivered to a UNI not in the EVC. An EVC is always bi-directional in the sense that ingress Service Frames can originate at any UNI in an EVC.

**Example(s)**

**Related and Further Reading**

**Categories**

**Status**

DRAFT

**Source(s) and Reference(s)**

MEF 6.2

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