

SECTION 2 - Service Description

SD-3.1.3 Ethernet Virtual Connections (EVC)

An EVC provides a logical connection to enable the flow of Ethernet traffic for point-to-point and multipoint Customer configurations. EVCs may be established between ports located in the same LATA or in different LATAs. Standard EVCs are not billed to the Customer as a separate rate element. Each EVC is assigned a CIR and CoS that must be equal to or lower than the CIR and CoS of the Port. (D)

- For port speeds of 100M, 1G, and 10G, EVCs can be ordered in any 1 Mbps increment up to the approved maximum EVC CIR. (N)
(D)
- For port speed of 100G, EVC CIR can be ordered in increments as follows: (D)(C)
 - 1 Mbps (from 1 Mbps to 100 Mbps) (N)
 - 10 Mbps (from 100 Mbps to 1,000 Mbps)
 - 25 Mbps (from 1,000 Mbps to 10,000 Mbps)
 - 250 Mbps (from 10,000 Mbps to 100,000 Mbps) (N)

The default maximum EVC CIR will be 1,000 Mbps (except for point-to-point EVCs between ports in the same LATA, which allow up to 2,000 Mbps), unless otherwise approved. Requests for EVC CIR above these limits will be evaluated on an Individual Case Basis, taking into consideration factors such as facility conditions and the impact of the requested configuration on network performance. (N)
(N)
(D)

The total assigned bandwidth (sum of the CIR for all EVCs) on a single port cannot exceed the selected CIR of that port. Point-to-point EVCs must be symmetrical; the EVC CIR at each port must be the same (except when one end of a point-to-point EVC terminates on a Broadband Port, in which case the end terminating on the Broadband Port will not have a subscribed CIR). For multipoint EVCs, the CIR for any EVC may be set according to the bandwidth needed at that port and does not need to be the same at all ports. Ports that do not meet SLA objectives due to overloading of traffic in a multipoint arrangement will not be eligible for the PDR SLA.

The following chart provides the maximum number of EVCs supported for point-to-point and multipoint configurations on each Customer Port Connection:

Per Customer Port Connection	EVCs
100 Mbps	Up to 8 EVCs
1 Gbps	Up to 64 EVCs
10 Gbps	Up to 508 EVCs
100 Gbps	Up to 4089 EVCs

Customers may configure EVCs as point-to-point (connecting two locations) or as multipoint (connecting three or more locations), as defined above. Point-to-point EVCs can be associated with an unlimited number of MAC addresses. Multipoint EVCs will be limited to 250 MAC addresses per EVC on each port, unless the Customer purchases the Additional MAC Addresses optional feature. For example, a port that is provisioned with 3 separate multipoint EVCs may have up to 250 MAC addresses associated with each of those EVCs, for a total of 750 MAC addresses in use on that port, but each EVC is still limited to a maximum of 250 MAC addresses.