Add an Ethernet virtual connection for AT&T Switched Ethernet with Network on Demand

We'll walk you through how you order an Ethernet virtual connection (EVC) for AT&T Switched Ethernet℠ with Network on Demand. Use this information to add an EVC to an active port.

**Note:** If you've already added a multipoint EVC and want to add another EVC segment to it, see Add another segment to a multipoint EVC.

**EVC overview**

An EVC provides direct connectivity between two or more ports in your network. You can create one or more EVCs to create virtual network connections (VNCs) between your physical network ports. Each EVC must have a minimum of two segments and can have as many segments as you need. You need to configure the following things on each segment of the EVC.

- Address where the physical port is located
- Port circuit ID you want to connect to
- Bandwidth, also called the committed information rate (CIR)
- Class of Service (CoS)
- Virtual local area network (VLAN) ID (if the port is a VLAN-based port)

The following image shows an EVC with three segments, each configured for a different bandwidth.
You can configure an EVC to use some or all of the available bandwidth of a physical port. For example, if you have a 100 megabits per second (Mbps) port and another EVC is using 50Mbps of that port's bandwidth, the available bandwidth is 50Mbps. If you know that you won't connect any other EVCs to the port, then you should either configure the EVC to use all the available bandwidth or lower the bandwidth of the port.

**Note:** You're billed for the bandwidth of the port. You're not billed for the bandwidth consumed by an EVC. If you know you're not going to use all of a port's bandwidth, you should consider lowering the port bandwidth.

### Get started

1. Log in to Business Center. The **Business Center** homepage appears.
2. Go to the Network inventory page:
   - **Business Center > Manage > Network > View all inventory > Network inventory**
3. Expand the location where the port is located.
4. Expand **AT&T Switched Ethernet**. The port details appear.
5. To the right of the port you want to add the EVC to, in the **Actions** menu, click **Create order**. The **Manage AT&T Switched Ethernet** page appears.
6. To the right of the port circuit ID, in the **Actions** menu, click **Add EVC**.
7. The **Add EVC segment** window opens.

To order your EVC, complete the steps in the following sections, in the order shown.
Specify service details

In the following sections, add your service details, such as the EVC connection type, and the bandwidth you want for the EVC.

Select the bandwidth for the first EVC segment

The bandwidth you select determines how much data can flow across the EVC segment.

- Under Bandwidth/Committed Information Rate (CIR), decrease or increase the bandwidth. For more precise control, use the (+) and (−) buttons.

The bandwidth of a multipoint EVC doesn’t need to match across ports. The bandwidth of a point-to-point EVC has to match across ports. The bandwidth you select for an individual EVC segment should be based on the expected data requirements of the applications that will transmit data over the segment.

Note: You can only select a bandwidth that’s available at the port. For questions, contact your AT&T representative.

Select Class of Service (CoS) for the EVC segment

- From the Class of service list, select the CoS that meets your network performance needs.

The CoS you select establishes the thresholds for latency, jitter, and packet delivery rate across your EVC segment, as shown in this table. Generally, the CoS for the EVC segment should match the one you ordered for the port. For more information about the service-level agreement, see Section 3 - Service Level Agreement in the AT&T Switched Ethernet Service Guide.

<table>
<thead>
<tr>
<th>Class of Service</th>
<th>Latency (one way)</th>
<th>Jitter</th>
<th>Packet delivery rate</th>
<th>Network availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-critical high</td>
<td>37ms</td>
<td>N/A</td>
<td>99.50%</td>
<td>99.99</td>
</tr>
<tr>
<td>Business-critical medium</td>
<td>30ms</td>
<td>N/A</td>
<td>99.90%</td>
<td>99.99</td>
</tr>
<tr>
<td>Business-critical high</td>
<td>20ms</td>
<td>N/A</td>
<td>99.90%</td>
<td>99.99</td>
</tr>
<tr>
<td>Interactive</td>
<td>13ms</td>
<td>10ms</td>
<td>99.95%</td>
<td>99.99</td>
</tr>
<tr>
<td>Real-time</td>
<td>5ms</td>
<td>3ms</td>
<td>99.995%</td>
<td>99.99</td>
</tr>
</tbody>
</table>

Table 1: Specifications for the different Classes of Service
### Table 2: Descriptions of each Class of Service

<table>
<thead>
<tr>
<th>Class of service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-critical high</td>
<td>Supports low-priority business applications that require more tolerance for delay and availability.</td>
</tr>
<tr>
<td>Business-critical medium</td>
<td>Supports business data applications that require moderate tolerance for delay and less sensitivity to jitter.</td>
</tr>
<tr>
<td>Business-critical high</td>
<td>Supports most business data applications that require moderate tolerance for delay and more sensitivity to jitter, needing a higher priority than business-critical medium.</td>
</tr>
<tr>
<td>Interactive</td>
<td>Supports high-priority business data applications or jitter-sensitive applications, such as voice and video.</td>
</tr>
<tr>
<td>Real-time</td>
<td>Supports high-priority business data applications that require minimal loss, are latency-sensitive, and require jitter, including voice and video.</td>
</tr>
</tbody>
</table>

#### Virtual local area network ID

The virtual local area network ID (VLAN ID) identifies the connection made between ports. The AT&T network uses the VLAN ID you assign to the EVC to partition traffic between VLAN-based ports. VLAN IDs can range from 2 to 4089. The **Virtual LAN ID** field appears only if you’re adding an EVC to a VLAN-based port.

- In the **VLAN ID** field, enter a VLAN ID, if applicable.

#### Add additional service options (optional)

1. Under **Additional service options**, do one or more of the following:
   - To enable enhanced multicast on this EVC, make sure that the **Enhanced multicast** box is checked.
     **Note:** This option is available only if enhanced multicast is enabled on the port.
   - To enable additional MAC addresses on this EVC, make sure that the **Additional media access control (MAC) addresses** box is checked.
     **Note:** This option is available only if Additional media access control (MAC) addresses is enabled on the port.

2. Click **Continue**. The **Add an Ethernet virtual connection (EVC)** window opens.
Specify settings for the next EVC segment

1. From the **Street address** list, select the location of the next port.
2. From the **Port circuit ID** list, select the next port.
   
   **Note:** Active port circuit IDs have forward slashes. Ports circuit IDs that are only numbers represent a port order in the cart or pending port orders.
3. If the port circuit you selected is already connected to an EVC, then you’ll see the **Select your EVC configuration** section in the Add an Ethernet virtual connection (EVC) window. If you see this section, then select **New EVC**. The Add an Ethernet virtual connection (EVC) refreshes.
4. Under **Bandwidth/Committed Information Rate (CIR)**, decrease or increase the bandwidth. For more precise control, use the (+) and (–) buttons.
5. From the **Class of service** list, select the CoS.
   **Note:** If you select a different CoS for the first and second EVC segment, the lower CoS value is used.
6. In the **VLAN ID** field, enter the VLAN ID, if applicable.
7. Under **Additional service options**, do one or more of the following:
   - To enable enhanced multicast on this EVC, make sure that the **Enhanced multicast** box is checked.
     **Note:** This option is available only if enhanced multicast is enabled on the port.
   - To enable additional MAC addresses on this EVC, make sure that the **Additional media access control (MAC) addresses** box is checked.
     **Note:** This option is available only if Additional media access control (MAC) addresses is enabled on the port.
8. If you want to add another segment to this EVC, click **Add additional endpoint** and repeat these steps for that segment.
   **Note:** You can add as many EVC segments as you want to an EVC.
9. Click **Save**. The Add EVC window opens.
10. Under **Request an activation date**, do one of the following:
    - To schedule as soon as possible, choose **Schedule on the first available date**.
    - To schedule for a later time, choose **Select a date and time up to 30 days from the date of your order**, and then select the date and time you want.
11. Click **Schedule**. A message appears indicating that the schedule is saved.
13. Click **Submit order**. An order confirmation page appears.

Add another segment to a multipoint EVC

Use these steps if you need to add another segment to an active multipoint EVC.
Get started

1. Log in to Business Center. The Business Center homepage appears.
2. Go to the Network inventory page: Business Center > Manage > Network > View all inventory > Network inventory
3. Expand the location, and then expand AT&T Switched Ethernet. The port details appear.
4. Expand the port that has the EVC you want to add a segment to. Then under Ethernet Virtual Circuit (EVC), click View All. The Manage AT&T Switched Ethernet page appears.
   Note: The View All link doesn't appear if no EVCs are associated with the port.
5. To the right of the EVC you want to add a segment to, from the Actions menu, click Add EVC segment. The Add an Ethernet virtual connection (EVC) window opens.
   Note: The Add EVC segment option is only available on multipoint EVCs. It’s not available on a point-to-point EVC.

Specify settings for the EVC segment

1. From the Street address list, select the location of the physical port you want the EVC segment to connect to.
2. From the Port circuit ID list, select the port.
   Note: The list contains all the ports available at the location you selected. Active port circuit IDs have forward slashes. Ports circuit IDs that are only numbers represent a port order in the cart or pending port orders. If a location has only one port, by default, it’s automatically filled in.
3. Under Bandwidth/Committed Information Rate (CIR), decrease or increase the bandwidth. For more precise control, use the (+) and (–) buttons.
4. Under Class of service, select the class of service (CoS).
   Note: The CoS you select establishes the threshold for latency and jitter. It determines the minimum packet delivery rate across your EVC segment. Generally, the CoS for the EVC segment should match the one you ordered for the port. If you select a different CoS than the other segments on the EVC, your network performance is at the lower of the segments.
5. In the VLAN ID field, enter the VLAN ID, if applicable.
6. Under Additional service options, do one or more of the following:
   • To enable enhanced multicast on this EVC, make sure that the Enhanced multicast box is checked.
     Note: This option is available only if enhanced multicast is enabled on the port.
   • To enable additional MAC addresses on this EVC, make sure that the Additional media access control (MAC) addresses box is checked.
     Note: This option is available only if Additional media access control (MAC) addresses is enabled on the port.
7. Click **Continue**. The **Add EVC Segment** window opens.

**Schedule and submit your order**

1. Under **Request an activation date**, do one of the following:
   - To schedule as soon as possible, select **Schedule on the first available date**.
   - To schedule for a later time, choose **Select a date and time up to 30 days from the date of your order**, and then select the date and time you want.
2. Click **Schedule**. A message appears indicating that the schedule is saved.
3. Click **Review order**. The **Review order** page appears.
4. Click **Submit order**. An order confirmation page appears.