# Add an Ethernet virtual connection

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 if you've already ordered ports that you want to connect with the EVC.

**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 2 or more ports in your network. You can create 1 or more EVCs to create virtual network connections (VNCs) between your physical network ports. Each EVC must have a minimum of 2 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 3 segments, each configured for a different bandwidth.
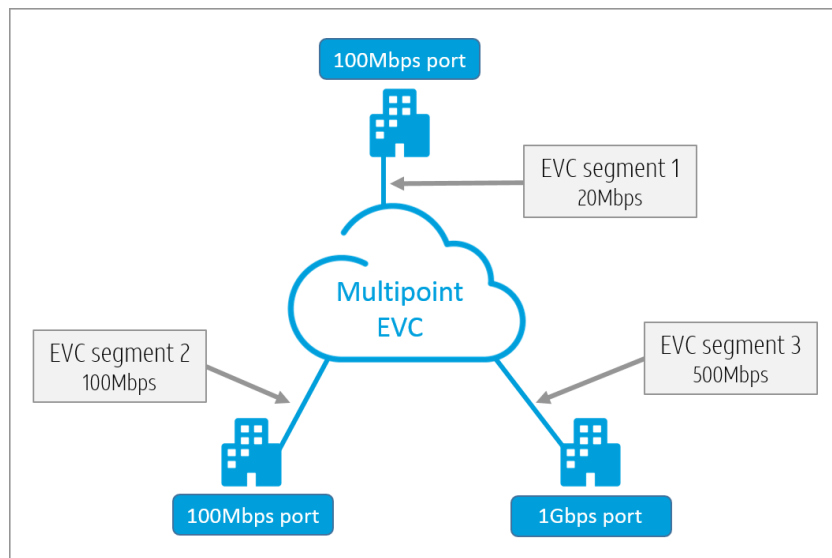
An EVC with 3 segments

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 bandwidth 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. At the top of the page, click **Manage** > **Network** > **View all inventory**. The **Network Inventory** page appears.
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. Do 1 of these things:
   - If you have multiple contracts, you see the **Select a service contract** window. Select the service contract you want to add this EVC to. Then click **Next**.
   - If you have only 1 service contract, you see the **Service contract details** window. Click **Continue**.
8. The **Add an Ethernet virtual connection (EVC)** 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.

- To decrease or increase your bandwidth options, under **Bandwidth/Committed Information Rate (CIR)**, move the slider to the left or the right. For more precise control, use the (**+**) and (**–**) buttons.

The bandwidth doesn't need 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.

| Class of Service | Latency (one way) | Jitter | Packet delivery rate | Network availability |
|---|---|---|---|---|
| Non-critical high | 50ms | N/A | 99.50% | 99.99 |
| Business-critical medium | 30ms | N/A | 99.90% | 99.99 |
| Business-critical high | 20ms | N/A | 99.90% | 99.99 |
| Interactive | 13ms | 10ms | 99.95% | 99.99 |
| Real-time | 5ms | 3ms | 99.995% | 99.99 |

Specifications for the different classes of service

Descriptions of the different classes of service are shown in this table.

| Class of service | Description |
|---|---|
| Non-critical high | Supports low-priority business applications that require more tolerance for delay and availability. |
| Business-critical medium | Supports business data applications that require moderate tolerance for delay and less sensitivity to jitter. |
| Business-critical high | Supports most business data applications that require moderate tolerance for delay and more sensitivity to jitter, needing a higher priority than business-critical medium. |
| Interactive | Supports high-priority business data applications or jitter-sensitive applications, such as voice and video. |

| Class of service | Description |
|---|---|
| Real-time | Supports high-priority business data applications that require minimal loss, are latency-sensitive, and require jitter, including voice and video. |

Descriptions of each Class of Service

## 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.

1.  In the **Virtual LAN ID** field, enter a VLAN ID, if applicable.
2.  Click **Next**. The **Add EVC segment** window opens.

## Specify settings for the second EVC segment

1.  From the **Street address** list, select the location of the second port.
2.  From the **Port circuit ID** list, select the second port.
3.  To decrease or increase your bandwidth, under **Bandwidth/Committed Information Rate (CIR)**, move the slider to the left or the right. For more precise control, use the (**+**) and (**–**) buttons.
4.  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.
5.  In the **Virtual LAN ID** field, enter the VLAN ID, if applicable.
6.  To add another segment to this EVC, click **Add another EVC segment** and repeat these steps for that segment (optional).
    **Note:** You can add as many EVC segments as you want to an EVC.
7.  Click **Next**. The **Add EVC** window opens.

# Complete order

In the following steps, you'll schedule an activation date for the EVC you just added.

The date you select is the scheduled activation date for your order. The selectable dates in the calendar represent the dates your EVC can be activated and ready for use. You can schedule activation dates up to 30 days out, but not earlier than the port activation date. If the ports being connected by the EVC have been installed, you can choose to activate the EVC as soon as possible.

1.  Under **Request an activation date**, do 1 of these things:

- 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.

2. Click **Schedule**.
3. In the success message that appears, click **Review order**. The **Review order** page appears.
4. 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.

1. Log in to Business Center. The **Business Center** homepage appears.
2. At the top of the page, click **Manage** > **Network** > **View all inventory**. The **Network Inventory** page appears.
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 Connection (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 EVC segment** window opens.
   **Note:** The **Add EVC segment** option is only available on multipoint EVCs. It's not available on a point-to-point EVC.

Now, you can specify 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. If a location has only 1 port, by default, it's automatically filled in.
3. To decrease or increase your bandwidth, under **Bandwidth/Committed Information Rate (CIR)**, move the slider to the left or the right. 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 **Virtual LAN ID** field, enter the VLAN ID, if applicable.
6. Click **Next**. The **Add EVC Segment** window refreshes.

You can now review and submit your order.

1. Under **Request an activation date**, do 1 of these things:
   - 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**.
3. In the success message that appears, click **Review order**. The **Review order** page appears.
4. Click **Submit order**. An order confirmation message appears.