Creating MVE Connections to AWS Direct Connect With Fortinet SD-WAN
You can create a network connection from an MVE (a FortiGate) to AWS with virtual cross connects (VXCs) and AWS Direct Connect. You can create either a Hosted Connection or a Hosted VIF.

You initiate the AWS connection through the Megaport Portal, accept the connection in AWS, and create an interface for the Edge in FortiManager.

**Note**
FortiManager is an optional component and that FortiGate's can be deployed independently of FortiManager.

**Tip**
Fortinet provides documentation for their SD-WAN product, including FortiManager and cloud connections, at [Fortinet SD-WAN Documentation Library](https://docs.fortinet.com/sdwan).

### Before You Begin

Before you can create a connection to AWS, you need to satisfy these requirements:

- Create an MVE (FortiGate). For details, see [Creating an MVE](/mve/fortinet/creating-mve/).
- In AWS, ensure that you have configured the Direct Connect gateway, AWS gateway, VPCs, and related attachments and associations.

### Creating a Connection to AWS From the MVE

With an MVE already created, you can create a connection to AWS. The VXC connection can be one of two AWS models:

- **Hosted Connections** [mve-aws-hosted/] – A Hosted Connection with a capacity of 500 Mbps or less can support one private or public virtual interface. A Hosted Connection with a capacity of 1 Gbps or more can support one private, public, or transit virtual interface. Hosted Connections are dedicated connections and are recommended for production environments.

- **Hosted Virtual Interfaces (Hosted VIFs)** [mve-aws-hvif/] – Hosted VIFs can connect to public or private AWS cloud services: A Hosted VIF cannot connect to a transit virtual interface. Hosted VIF connections share bandwidth.

Click the link for your preferred connection type for detailed configuration steps.

**Note**
Creating a connection from the MVE instance to AWS is very similar to creating a connection from a Port or an MCR. The primary difference is the process with Fortinet SD-WAN does not include automatically configuring the MVE in Fortinet and you need to manually create a subinterface and define VLANs, IP addresses, MD5 values, and BGP peers in the FortiManager console.