AWS Cloud: Direct Connect

This step by step guide shows how easy it is to connect to AWS using Megaport. In this video, we cover: 1. Provisioning an AWS Direct Connect Port in your chosen Data Centre 2. Selecting your AWS region. 3. Finding your ASN and AWS Account ID in the AWS Management Console. 4. Specifying your VLANs. 5. Attaching the Virtual Gateway for you VPC.

Amazon’s Private Interconnect service is called Direct Connect.

When connecting to AWS via a Direct Connect with Megaport, the VXC forms the Layer 2 component of the connection and Layer 3 BGP connectivity is established directly between the customer and AWS. Here are some key acronyms to understand:

- **VPC - Virtual Private Cloud**
  The base building block for many AWS services, a VPC contains EC2 instances.

- **VGW - Virtual Gateway**
  The virtual gateway is a virtual router inside a VPC. This virtual router is where external connectivity to the VPC terminates – both Direct Connect and VPN.

- **Public Virtual Interface**
  Once a Direct Connect is established, a Public Virtual Interface allows you to connect to services like S3, DynamoDB, CloudFront and more.

- **Private Virtual Interface**
  A Private Virtual Interface connects to a Virtual Gateway and provides access into a VPC.
When provisioning a Direct Connect it’s important to remember that you can deploy multiple VXCs to the same VPC (for redundancy), however it is not possible to deploy a single VXC to multiple VPCs directly.

Megaport supports Direct Connect access to both Private and Public spaces within AWS, however a separate connection is required for each. You simply select private or public when deploying the connection.

To deploy a Direct Connect, you’ll first need your AWS Account ID (found in the Management section of the AWS Console), as well as the details of the VPC environment you want to connect to. When ready, choose the Port you want to connect from, and go to add a Connection. Select Cloud and choose AWS:

On the right section you select your desired target location to connect to AWS.
You’ll be asked to fill in the Name, Rate Limit, A-End VLAN ID (if you prefer to manually assign one), and any Invoice Reference.
Name your connection – The name of your VXC as shown in the Megaport Portal. (Pro Tip – Match this to the VXC name on the next screen for easy mapping)

Rate Limit – This is the speed of your connection in Mbps.

A-End VLAN – The VLAN for this connection that you will receive via the Megaport. This must be a unique VLAN ID on this port. You can also select the toggle to “untag” this VXC. This will remove the VLAN tagging for this connection but will also mean only one VXC can be deployed on this Port.

You’ll then be presented with the options screen for configuring your Direct Connect VXC, and also whether you want to connect to a Public or Private space.
**AWS Connection Name** - This is a free text field and will be the name of your virtual interface that appears in the AWS console. *(Pro Tip – Match this to the VXC name on the previous screen for easy mapping).*

**AWS Account ID** – Found in the management section of your AWS console. This is the ID of the account you want to connect to.

**Customer ASN** – Your network’s Autonomous System Number. For Private Direct Connects, this must be a private ASN. For public Direct Connects, this can be either a Private or Public ASN.

**BGP Auth Key** – Optional field allowing you to specify the BGP Auth Key. If you leave this blank, we will negotiate a key automatically for you with AWS which will be displayed in the Megaport Portal. NOTE: The key is not displayed in the AWS console.

**Customer IP Address** – The IP Address space you will use on your network to peer with. This field is optional and if left blank, a Private /30 will be auto assigned by Megaport.

**Amazon IP Address** – The IP Address space assigned in the AWS VPC network to peer with. This field is optional and if left blank, a Private /30 will be auto assigned by Megaport.

NOTE: When deploying a Public Direct Connect the IP Address information used must be Public IP’s for both sides. In this scenario, these fields are mandatory and will require input to complete the order. We will also need you to specify the prefixes you will advertise when deploying a Public Direct Connect.
Once you have finished this configuration you are ready to add the VXC to your cart and configure further VXCs, or proceed through the checkout process. For a full video of this process, check this out.

Note that additional documentation around AWS Direct Connects can be found here.