

# Cox Business

## CloudPort for Microsoft Azure

### Quick Reference Guide

Cox CloudPort enables you to connect directly to the Microsoft Azure cloud computing platform (via Microsoft Azure ExpressRoute), thereby giving you the experience of being On-Net to your organization.

Microsoft Azure can be deployed quickly; and has the ability to provide scalable, integrated cloud services for critical areas such as analytics, computing, networking, database, mobile, storage, and web services. The traditional method of connecting to these vital services has been through an Internet connection or an Internet-based VPN; however, each option poses a risk.

An alternative solution is Cox CloudPort for Microsoft Azure. It offers you the same scalability and connectivity—with enterprise grade performance—that results in secure, low latency and consistent network performance, and a virtually transparent migration to the cloud.

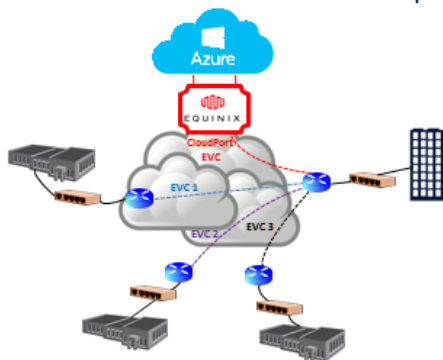
This guide instructs you on how to operate CloudPort for Azure.

### CloudPort Process Overview

The process of providing a functional private network connection to Microsoft Azure requires four major components including:

- Microsoft Azure Portal and Services
- Microsoft ExpressRoute
  - enables CloudPort usage from Microsoft's Azure
- Your local network
- Cox CloudPort Service

### CloudPort Details and Options



### Supported Regions and Facilities

- East US / Equinix Ashburn (DC6)
- South Central US / Equinix Dallas (DA2)

### Bandwidth Options

50 Mbps, 100Mbps, 200Mbps, 500Mbps, 1Gbps, 2Gbps, 5Gbps, 10Gbps (on an Individual Case Basis [ICB])

### ExpressRoute Prerequisites

#### Azure Account

You must have a valid and active Microsoft Azure account: This is required to set up the ExpressRoute circuit. ExpressRoute circuits are resources within Azure subscriptions. An Azure subscription is a requirement even if connectivity is limited to non-Azure Microsoft cloud services, such as CRM online. **Note:** Office 365 is **not** offered via ExpressRoute without special approval from Microsoft.

## Network Requirements

### Redundant Connectivity

There is no redundancy requirement on physical connectivity. Microsoft does require redundant BGP sessions to be set up between Microsoft's routers and the peering routers, even when you have a single physical connection using Cox CloudPort. **Note:** The end user must configure the BGP router.

### NAT

Microsoft only accepts public IP addresses through Microsoft peering. If you use private IP addresses in your on-premise network, you need to translate the private IP addresses to public IP addresses through NAT.

### QoS

Skype for Business has various services; e.g., voice, video, and text, that require different QoS treatment.

Cox CloudPort provides a single EVC that is marked "real-time" in the Cox network to ensure an optimal experience regardless of end-traffic markings.

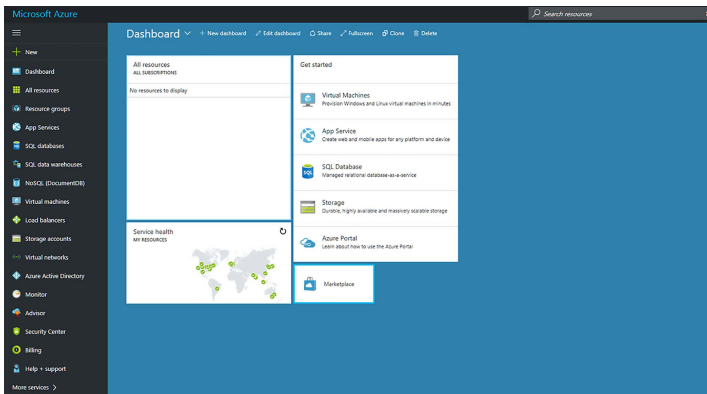
### Network Security

Consider network security when you connect to the Microsoft Cloud via ExpressRoute (<https://azure.microsoft.com/en-us/documentation/articles/expressroute-prerequisites/>)

## How to Connect to ExpressRoute

Use the following steps to connect to the Microsoft Azure management portal.

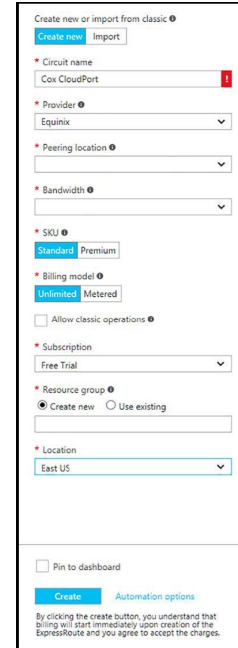
1. Open the portal and enter your login credentials.
2. Click Marketplace and search for ExpressRoute in the Search field.



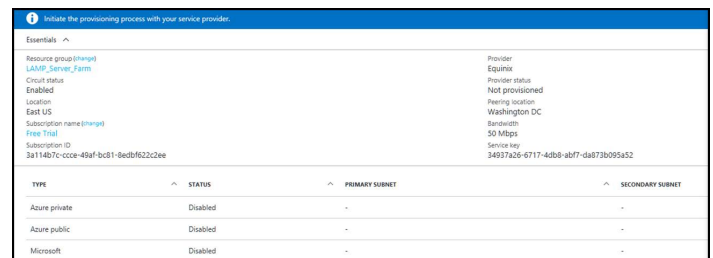
3. Click Create. When the ExpressRoute order is created, the ExpressRoute product must be configured with values that are supported by your Cox CloudPort service. Populate other fields with values based on your business' requirements.

4. Select Equinix as your Microsoft Azure partner to establish a network connection with Cox for CloudPort. Select either Washington DC - Ashburn DC6 or Dallas - DA2 in the Peering location. Select East US or South Central as the Location.

**Result:** Cox Business will send you separate notifications regarding the delivery of the CloudPort service.

A screenshot of the 'Create new or import from classic' form in the Microsoft Azure portal. The form includes fields for 'Circuit name' (Cox CloudPort), 'Provider' (Equinix), 'Peering location' (Washington DC), 'Bandwidth' (50 Mbps), 'SKU' (Standard Premium), 'Billing model' (Unlimited), 'Subscription' (Free Trial), and 'Resource group' (Create new). There is a 'Pin to dashboard' checkbox and a 'Create' button at the bottom.

5. Microsoft will generate a service key that must be sent to your Cox account representative for Cox to configure CloudPort to work with ExpressRoute.

A screenshot of the Microsoft Azure portal showing the provisioning process for ExpressRoute. The page title is 'Finalize the provisioning process with your service provider.' The 'Essentials' section shows details for the resource group 'LAMP\_Server\_Farm', including 'Resource group (Name)', 'LAMP\_Server\_Farm', 'Provider: Equinix', 'Circuit status: Enabled', 'Provider status: Not provisioned', 'Location: East US', 'Peering location: Washington DC', 'Bandwidth: 50 Mbps', 'Subscription name (Name): Free Trial', 'Subscription ID: 3a11467c-0c0e-49af-bcd1-8edbf622c2ee', and 'Service key: 34937a26-6717-4d08-9db7-da873b095452'. Below this is a table with columns 'TYPE', 'STATUS', 'PRIMARY SUBNET', and 'SECONDARY SUBNET'.

TYPE	STATUS	PRIMARY SUBNET	SECONDARY SUBNET
Azure private	Disabled	-	-
Azure public	Disabled	-	-
Microsoft	Disabled	-	-

Congratulations! You have completed the order for ExpressRoute and will receive a confirmation that your circuit is complete.



**Note:** Work with Microsoft or a Microsoft VAR to ensure your applications are configured properly. The following Microsoft link may be of assistance <https://docs.microsoft.com/en-us/azure/expressroute/expressroute-introduction>.

## Roles and Responsibilities

When each party understands its roles and responsibilities in a project, the project is more likely to go smoothly and finish by the deadline. The table below outlines the tasks that both the customer and Cox Business should complete.

Customer	Cox Business
<b>Establish</b>	
Order ExpressRoute port	Provisions the Layer 2 connection from your site to the Microsoft Azure port
Order Microsoft ExpressRoute product	
Establish a Layer 3 BGP connection, public or private interface, and assign IP addresses using the Microsoft Azure portal	
For more information, refer to <a href="https://docs.microsoft.com/en-us/azure/expressroute/expressroute-introduction">https://docs.microsoft.com/en-us/azure/expressroute/expressroute-introduction</a>	
<b>Fault Finding</b>	
ExpressRoute: Check the port status in your Microsoft Azure portal and eliminate any other potential causes of the fault.	Confirm connectivity from your site up to, but not including, the Microsoft port represented in the Microsoft Azure portal.
Connectivity issues: Check your Cox Ethernet Performance Management Reporting (EPMR) portal	Ensure that the CloudPort circuit performs in accordance with the SLA.
<b>Billing</b>	
Monthly payment to Microsoft for port hours and data transfer.	Monthly invoice to you for the Cox CloudPort.



**Note:** Billing for CloudPort starts when the Cox CloudPort circuit is available in the portal and functioning within Service Level Agreement (SLA) guidelines.

## Frequently Asked Questions

### Is Office 365 accessible via CloudPort?

Microsoft does not recommend using ExpressRoute to access O365 applications. This is a Microsoft recommendation, and not a limitation of the Cox CloudPort product. Microsoft is willing to configure O365 access via ExpressRoute on an individual case basis. For more information, [click here](https://support.office.com/en-us/article/Azure-ExpressRoute-for-Office-365-6d2534a2-c19c-4a99-be5e-33a0cee5d3bd) (https://support.office.com/en-us/article/Azure-ExpressRoute-for-Office-365-6d2534a2-c19c-4a99-be5e-33a0cee5d3bd)

### Is there an SLA with this Service?

Cox Business provides an SLA only for the CloudPort service (refer to the standard contract) which takes effect once the CloudPort service has been verified as functional.

The Microsoft ExpressRoute SLA <https://azure.microsoft.com/en-us/support/legal/sla/> is an agreement between you and Microsoft

### Can I see if my CloudPort service is active?

1. Open your MyAccount portal.
2. Enter your User ID and Password.
3. From the My Services - Networking section on the splash page, click the "Ethernet Performance" link.

**Result:** The Ethernet Performance Management Reporting portal will provide status and network performance statistics for your CloudPort service.

[www.coxbusiness.com/starthere](http://www.coxbusiness.com/starthere)

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