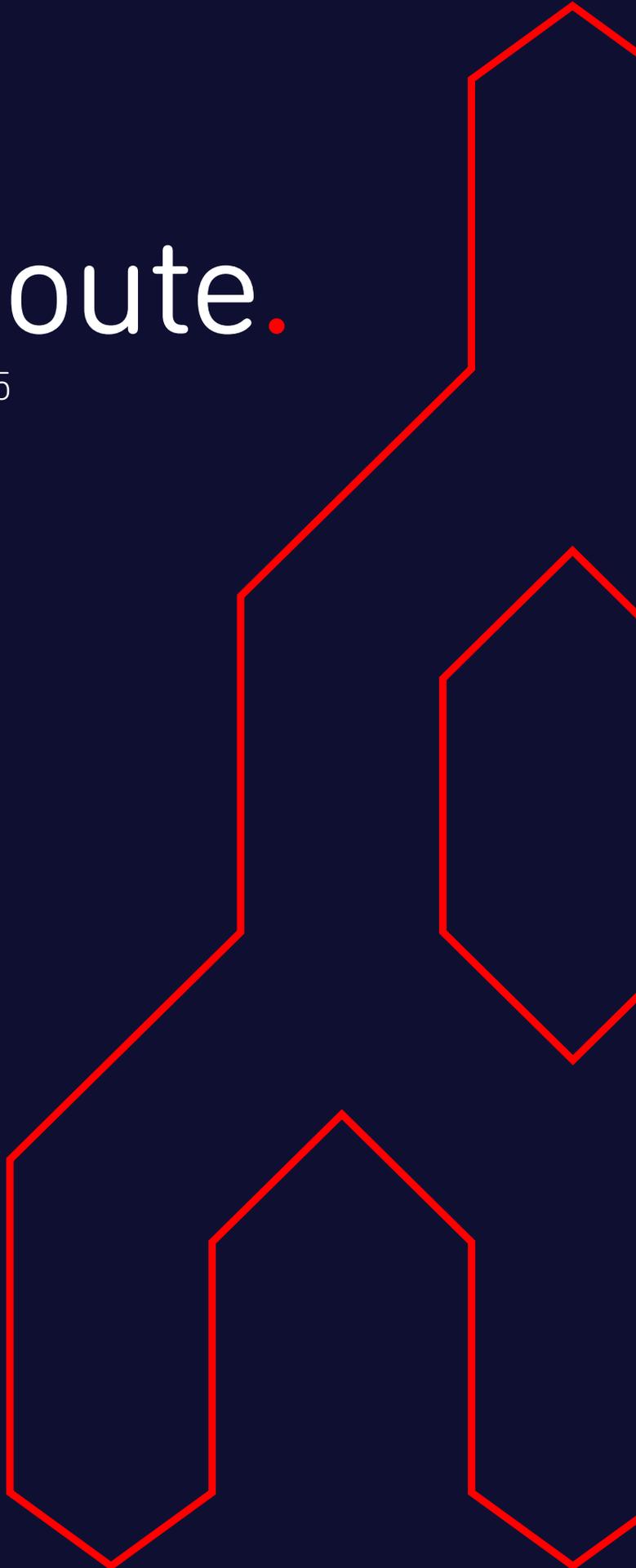




ExpressRoute.

for Microsoft Azure & Office 365

Provision fast, secure, and dedicated connectivity to Azure.





Connecting to Microsoft Azure with Megaport

We make it easy to provision fast, secure, and private connections between your data centre and Microsoft Azure. As a Microsoft Azure ExpressRoute Partner, we provide enterprises with dedicated access to Azure private and Microsoft public resources via a global Software Defined Network (SDN), from hundreds of locations worldwide, in just a few clicks.

Provisioning ExpressRoute connectivity to Azure with Megaport enables:

- Improved security with private network access that bypasses the public internet
- Higher network performance, consistency, and predictability
- Savings on egress traffic costs from your VPC to your on-premise network
- API integration between Megaport and Microsoft Azure that simplifies the provisioning of connections for a fast and seamless user experience
- Simplified connectivity options without the use of Q-in-Q

How it Works

Physical fibre connections (NNIs) between Megaport and Microsoft Azure are established to dual Microsoft's Enterprise Edge (MSEEs) routers at each location. These physical connections are maintained between Azure and Megaport. Our Direct API integration with Azure simplifies the ordering, provisioning, and ongoing management of your ExpressRoute connection. ExpressRoute takes about a minute to be established.

VXCs can be ordered and provisioned in increments of 1 Mbps speeds and scaled in increments of 1 Mbps up to the port rate selected by you in Microsoft's portal, Azure Resource Manager. Using Q-in-Q, which is required by Azure, the VXC can be configured for both Azure Private Peering and Microsoft public peering.

This creates the Layer 2 ExpressRoute and then you peer directly with Azure at Layer 3 using BGP. If only a single Peering is required Megaport can facilitate this without the need for Q-in-Q. Azure also provides an SLA of 99.9% availability for redundant Express Route connections. The redundant peering connections can be established on one or two Megaports or MCRs.

How to Order

1. Log into the Azure Resource Manager
2. Select **'Create a Resource'** from your dashboard. Select **'Networking'** and then **'ExpressRoute'**.
3. Enter a name for the ExpressRoute and select **'Megaport'** as the provider. Fill in the rest of template as required and select create.
4. Several minutes later the ExpressRoute will be configured in the Azure Resource Manager and you will need to copy the Service Key to use within the Portal.
5. Log into the Megaport Portal: portal.megaport.com
6. Establish a Megaport Port or MCR if you are not already enabled on the Megaport Network.
7. Click on the Azure icon or select **'+connections'** and choose **'Cloud'** then **'Azure'**. Paste the Service Key as requested. Follow the steps to create the VXC which establishes the ExpressRoute to Azure. To create a secondary connection, select **'Azure'** again and use the same Service Key.



You have the control and ability to enable multiple Virtual Cross Connects to Azure from a single location which provides the scalability and agility required in response to evolving business needs.

— Matt Simpson | Head of Cloud, Megaport

FAQs

Are there any Azure port fees associated?

Yes, Azure will charge a month-to-month fee dependent on your port speed selected in the Azure Resource Manager (ARM). This is charged directly to you.

Are there still data egress charges by Azure when I provision a connection via ExpressRoute instead of the public internet?

Yes, but Azure will substantially reduce the egress charges when using an ExpressRoute connection.

How do I establish redundancy between my data centre and Azure?

Azure requires two BGP peering sessions to meet their requirements for 99.9% uptime SLA. These peering sessions can be over one or two Megaports and MCRs as shown in the diagram below.

Are my bandwidth speeds set?

No. You have the ability to scale between your private data centre and Azure in increments of 1 Mbps up to the speed of the port you choose in the Azure Resource Manager.

Does Azure support public or private ASNs?

Azure supports both private and public ASNs.

Are there special requirements for O365?

Using Q-in-Q, which is required by Azure, the VXC can be configured for both Azure Private Peering and Microsoft public peering. For information about using ExpressRoute to access Office 365, visit [Azure ExpressRoute for Office 365](#). O365 services require Microsoft approval and subscription white-listing before the routes will work within the route filters.

Does connecting to Azure require me to run Q-in-Q?

If both Private peering and Microsoft peering are required in a single Megaport VXC (Virtual Cross Connect) then Q-in-Q is required. If your equipment does not support Q-in-Q we have a number of options to help with that.

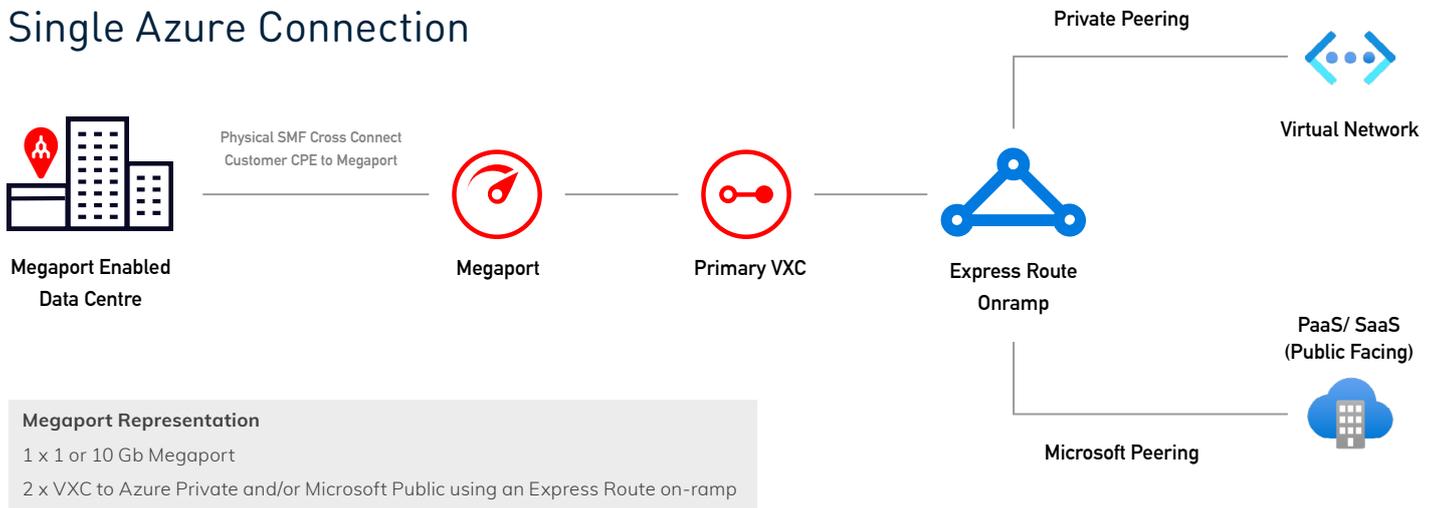
What are my options if I do not support Q-in-Q on my device?

If your equipment does not support Q-in-Q, you have these options:

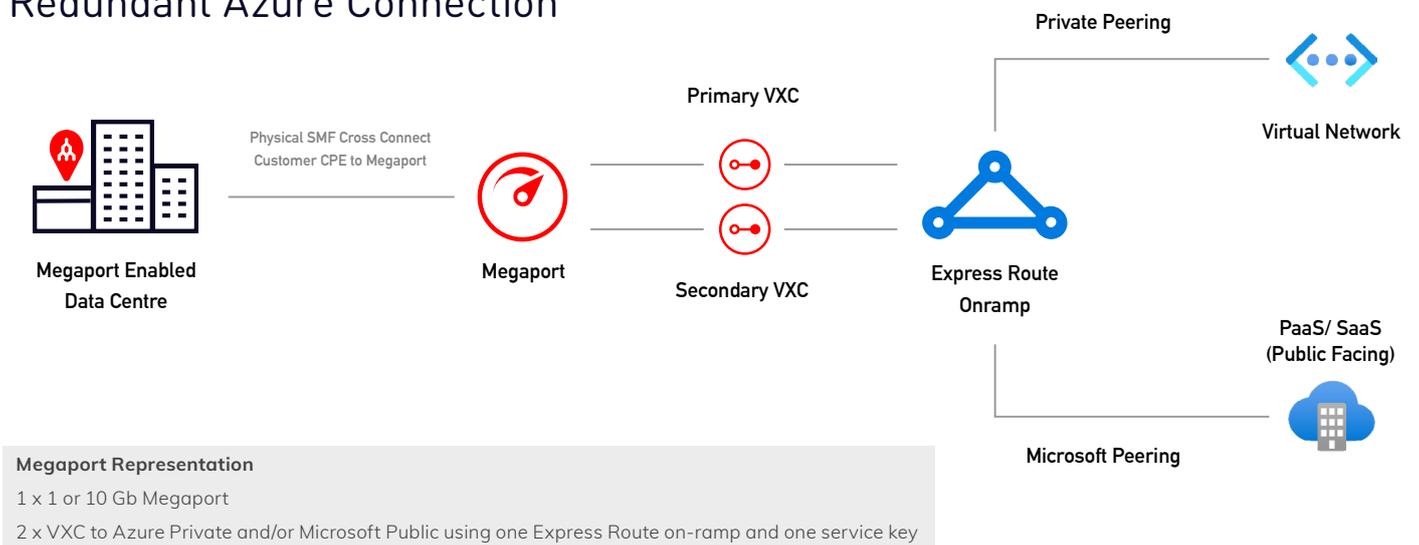
- If you only need a single peering (Private or Microsoft) you can configure the VXC so that Megaport removes the Q-in-Q requirement.
- Megaport Cloud Router (MCR), our virtual routing service for Layer 3 connectivity, can handle the Q-in-Q for you.

For more details and other options, please visit our [Documentation Portal](#) or our [Configuring Q-in-Q guide](#).

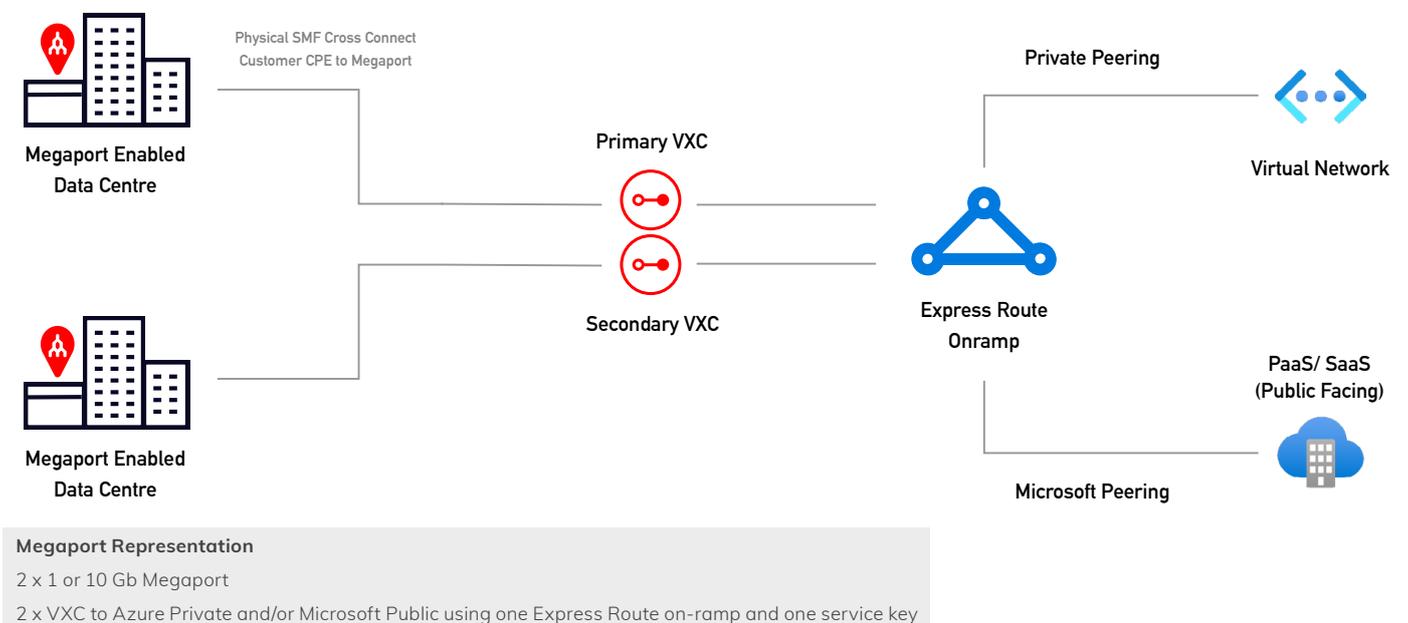
Single Azure Connection



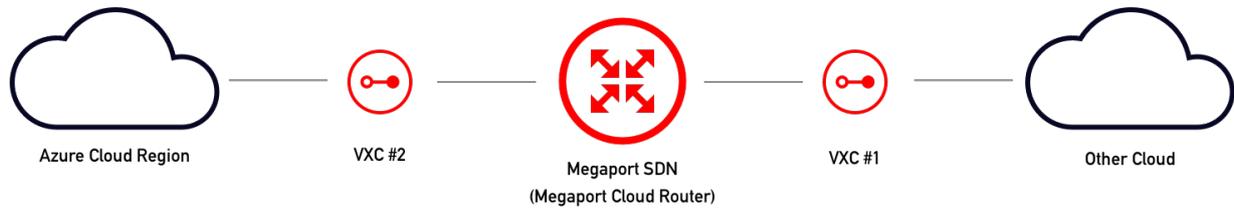
Redundant Azure Connection



Fully Redundant Azure Connection



MCR Solution: Azure Cloud to other Clouds



Megaport Representation

1x 10 Gps Megaport Cloud Router (MCR)
2x 10 Gps VXCs from Clouds to MCR

Availability

North America

Washington
Atlanta
Boston
Dallas
New York
Chicago
Houston
Los Angeles
Silicon Valley
Seattle
Las Vegas
Portland
Denver
Columbus
Miami
Minneapolis
San Antonio

Canada

Toronto
Montreal
Vancouver
Quebec City

Europe

London
Amsterdam
Frankfurt
Dublin
Stockholm
Paris
Geneva
Oslo
Zurich
Stavanger

Asia-Pacific

Auckland
Perth
Melbourne
Sydney
Canberra
Singapore
Hong Kong
Tokyo
Osaka

Middle East

Dubai

Enabled ExpressRoute Locations for National Clouds (GovCloud)

Chicago
Dallas
Seattle
Washington
San Antonio

Further Reading

Visit our [Documentation Portal](#) for more information on Azure connectivity.

Why Megaport?



Real-Time Provisioning

Provision connections in under 59 seconds once you're on the Megaport network.



Scalable Bandwidth

Select from 50Mbps, 100Mbps, 200Mbps, 500Mbps, 1Gbps, 2Gbps, 5Gbps, 10 Gbps



Multiple Cloud Regions

Connect to multiple regions from a single interconnection point. This means you can leverage multi-region redundancy at a fraction of the cost.



Private Connectivity

Access secure, private connectivity throughout our redundant network infrastructure. Your traffic will not transit the public internet.



Rich Ecosystem

Access an ecosystem of global service providers on our neutral, inclusive marketplace using a single interface.

Reimagine Connectivity.

Megaport is the highly scaled Network as a Service (NaaS) organisation utilising 100 Gbps technology to deliver dedicated access to cloud services. Megaport's Software Defined Network (SDN) enables the interconnection of enterprises and service providers across hundreds of data centre locations around the globe. Fast, flexible, and dynamic, Megaport's connectivity solution is transforming the way businesses reach leading cloud services from Microsoft, Google, Oracle, Amazon Web Services, Nutanix, IBM, Salesforce, Rackspace, Cloudflare, OVHcloud and Alibaba.



megaport.com
info@megaport.com

Phone: +61 7 3088 5999
Fax: +61 7 3088 5998

Level 3, 825 Ann St,
Fortitude Valley, 4006, AU.

ABN: 46 607 301 959

[megaportnetworks](https://www.facebook.com/megaportnetworks)

[@megaport](https://www.linkedin.com/company/megaport)

[@megaportnetwork](https://twitter.com/megaportnetwork)