

PROFESSIONAL SERVICES

# EXPRESSROUTE STRATEGY & CONNECTIVITY WORKSHOP

FOR THE ENTERPRISE

"We needed help confirming our network could support O365 peering via ExpressRoute, as well as peering options, provisioning and configuration requirements. Equinix Professional Services' workshop, and subsequent deliverables, clarified all our connectivity questions and helped us develop a more flexible and scalable ExpressRoute deployment roadmap."

—Senior IT Manager, California-based municipality

# EXPRESSROUTE STRATEGY & CONNECTIVITY WORKSHOP

Today, more companies are moving their mission-critical applications to the cloud. While enterprises see increasing demand for cloud connectivity, they also see performance, security and uptime limitations because connectivity is often restricted to internet-based VPNs.

To help address these network issues, Equinix and Microsoft have partnered to offer a complete solution that meets the demands of your complex environment. This solution bypasses the public internet and integrates Equinix Cloud Exchange™ with Microsoft ExpressRoute.

The partnership offers software-defined private connections to Microsoft Azure, Microsoft Azure and Office 365, and gives you the flexibility to bring your applications and services closer to your users. This enables increased reliability, faster speeds and lower latencies. In some cases, using ExpressRoute connections to transfer data between on-premises or colocated premises and Azure can also yield significant cost benefits.

Depending on the scale of your network, enabling private connectivity to ExpressRoute can be challenging. In addition to the actual setup and deployment, you need to architect an Azure ExpressRoute edge—aligned with your business and technical needs—to provide cost-effective flexibility and scalability. To alleviate the burden, Equinix Professional Services, a **recommended Microsoft ExpressRoute integrator**, has developed a high impact, two day an ExpressRoute Strategy & Connectivity Workshop for enterprises interested in establishing high-speed connectivity to Microsoft's cloud services.

# About Equinix Professional Services (EPS)

Equinix Professional Services guides customers though complex IT infrastructure changes, network transformations, and hybrid and multicloud deployments to quickly deliver business results. Through the use of our unique blueprints developed by Equinix and based on best-practice implementations with hundreds of customers and internal projects—you gain the insight you need to make decisions on where and how to implement cloud and network strategies. Our customers value the agility, depth and breadth of expertise, and our ability to also help you execute recommendations in a timely manner.

For more information, contact eps@equinix.com



## Workshop goal & objectives

Our goal is to empower you to implement an ExpressRoute connectivity strategy tailored for your specific needs. The strategy ensures your mission-critical applications and services are closest to your users to optimize multicloud connectivity and boost performance.

#### **KEY OBJECTIVES**

- Provide a clear understanding of ExpressRoute best practices
- Outline the best ExpressRoute architecture and connectivity options available for you to reduce complexity and cost while improving performance
- Provide insight and guidance on contingent areas like security best practices, governance, business onboarding and more
- Define next steps to execute your ExpressRoute strategy
- Assist you with developing an optimized, scalable and costeffective ExpressRoute and cloud connectivity strategy
- Provide highly-customized recommendations, network architecture design and implementation roadmap

# Why this workshop?

Hosted by Equinix Professional Services Network and Cloud Architects, the workshop usually runs over a two-day period with a standardized agenda that is proven to yield optimal results. Additionally, we are prepared to customize any component based on your individual needs. With a focus on networking and connectivity, the workshop is facilitated in-person and structured to include representation from key stakeholders.

For best results, Equinix Professional Services requests participation from your network and infrastructure management teams for the full two days. We encourage executive participation (i.e. CIO, CTO, CSO) for the summary at the end day two..

# **Prerequisites**

The following are required from your team prior to the kick-off call:

- · Business and technology: Business and IT objectives, priorities and challenges
- · Current network topology: Site location list including network connectivity at each site, type of location, number of users per site and WAN/LAN diagrams
- Current cloud topology and usage: Cloud service providers (CSPs), workloads, regional deployment, connectivity methods and criticalities
- · Applications and data: Critical applications and location of critical data
- · Security and compliance: Regulatory bodies and security guidelines with which your organization must comply

### Workshop deliverables

The customized **ExpressRoute Strategy & Connectivity Report** is delivered within five to ten business days of workshop completion. The report includes the following items:

- Business requirements and current state: Summary of your objectives for change
  and drivers; categorization of your business strategies, objectives, priorities and
  timelines; understanding of your IT infrastructure's growth projections, performance
  limitations, operational requirements and critical interdependencies; and current state
  architecture diagram.
- Future state network and connectivity options: Proposed changes to provision
  an environment capable of handling the necessary cloud connectivity needs to meet
  objectives. Includes customized network architecture diagram for recommended
  ExpressRoute-enabled future state.
- Security and design best practices: Although the Azure cloud platform is extremely secure, you must do your part in securing your resources in the cloud, as well as access to your resources in the cloud. We provide guidance on best practices around peering options, VNet isolation, encapsulation, encryption, native Azure network security services and shared responsibility models.
- High-level pricing and cost comparison: Cost breakdown and guidelines for your
  connectivity scenario as it relates to VPN, generalized NSP circuit costs from your onpremises data center to colocation or cloud exchange, space and power and/or cloud
  exchange ports, as well as most appropriate ExpressRoute costing plans (metered,
  unlimited and premium add-on) to get your private connection to the cloud.
- Cloud governance: We provide information and guidelines on cloud governance
  to ensure resource-related vulnerabilities are minimized while efficiently meeting
  the demands of both internal and external customers. We can provide high-level
  recommendations and considerations around policies and audits, hierarchies, resource
  groups, resource-based access control, naming standards and much more.
- Reselling and business onboarding: Larger enterprises, comprised of multiple business units, and departments are often required to process and execute internal cloud connection requests. We offer advice on high-level workflows from request to virtual circuit provision to test and launch. We commonly cover redundancy options, traffic, peering, speed, data, billing and chargeback considerations.
- High-level ExpressRoute deployment recommendations: Based on findings and overall ExpressRoute connectivity recommendations, we provide high-level, step-bystep deployment recommendations to guide you through a logical deployment with minimal impact on operations.

## **WORKSHOP OVERVIEW**

	PRE- WORKSHOP KICK-OFF	DAY 1: NETWORK DISCOVERY: CURRENT STATE	DAY 2: NETWORK PLANNING: FUTURE STATE	DELIVERABLES
In Person or Remote	Remote	In person	In person	Remote
Purpose	Review prerequisites and confirm workshop objectives	Understand your existing environment, challenges, drivers and objectives	Start planning for your future network architecture, connectivity and requirements	Presentation of detailed deliverables and recommendations
Outline	One-hour call with your team to go through the prerequisite information, objectives and finalize the workshop agenda	Review of:  Current state infrastructure, pain points, business/IT drivers and objectives  Existing edgenode configuration, connection request process and ISPs  Routing domains, peering and ExpressRoute best practices  Critical cloud applications  ExpressRoute connectivity options leveraging proven blueprints from similar engagements (where appropriate)  Equinix Cloud Exchange infrastructure	<ul> <li>Day 1 recap</li> <li>Planning for growth and scalability</li> <li>Virtual vs. physical connectivity considerations</li> <li>Optimized performance strategies, multicloud options and cost considerations</li> <li>Azure Governance, VNet and security best practices</li> <li>Future edge connectivity roadmap and change management strategies</li> <li>Summary presentation of findings, considerations and recommendations</li> </ul>	Detailed report covering findings and recommendations for:  Business requirements and current state  Architecture for future state direct connectivity  Security and design best practices  High-level pricing and cost comparison  Cloud governance guidance  Reselling and business onboarding process  Deployment recommendations  See further details below.
Outcome	Workshop is structured to meet your requirements	Clear understanding of current state and challenges to enable effective future-state planning	Planning and consensus building around best options and optimal end- state. Confirm workshop objectives are met	Detailed deliverables and recommended next steps are clear, concise and aligned with workshop objectives



#### The solution

#### **ExpressRoute connectivity via Equinix Cloud Exchange**

Microsoft's physical infrastructure for ExpressRoute resides in Equinix International Business Exchange  $^{\text{TM}}$  (IBX $^{\text{S}}$ ) data centers worldwide and is available via the Equinix Cloud Exchange. The Cloud Exchange is an advanced virtual interconnection solution that offers real-time provisioning and provides on-demand, direct access to leading cloud providers through a single port.

Equinix Cloud Exchange deployment options:

#### 1. Colocate in an Equinix IBX data center

By leveraging Platform Equinix, you will have access to more than 175 data centers that can save network and operating costs. With 99.9999% uptime performance worldwide, Equinix IBX data centers exceed most on-premises data centers in reliability.

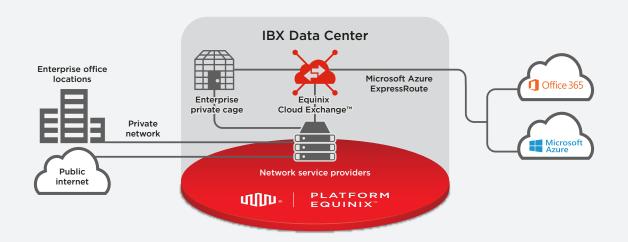
#### 2. Private connection via your network service provider (NSP)

If you want to leverage an existing on-premises data center, you have the option to establish a secure connection to Azure services and/or Office 365 via Platform Equinix.

#### Solutions to speed the way

Equinix Cloud Exchange™ offers software-defined direct connections to multiple cloud services from a single physical port, so you can access whatever service you need, when you need it.

An Interconnection Oriented
Architecture™ (IOA™) strategy
deployed on Platform Equinix™
re-architects for a digital edge to
bring applications and services
closer to users, optimize multicloud
connectivity and boost performance.





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#### **About Equinix**

Equinix, Inc. (Nasdaq: EQIX) connects the world's leading businesses to their customers, employees and partners inside the most interconnected data centers. In 44 markets across five continents, Equinix is where companies come together to realize new opportunities and accelerate their business, IT and cloud strategies.

In a digital economy where enterprise business models are increasingly interdependent, interconnection is essential to success. Equinix operates the only global interconnection platform, sparking new opportunities that are only possible when companies come together.