IT INTERCONNECTION

State government agency leverages Equinix Professional Services and implements an optimized, scalable and cost-effective Microsoft Azure ExpressRoute solution and cloud connectivity strategy

Business challenge

Today, more enterprise-scale companies are moving their mission-critical applications to the cloud. Government agencies and departments also see increase in demand for cloud connectivity; however, they also see new security challenges, degraded performance, as well as uptime and throughput limitations because connectivity is often restricted to internet-based virtual private networks (VPNs).

Like many organizations, one state government agency was able to see the benefits of moving to the cloud, but needed help planning its strategy and creating a network architecture designed to support a wide range of demands. The journey to the cloud seemed daunting, with space and financial constraints as a roadblock.

The agency required regional private cloud connectivity in three geographically dispersed metropolitan areas to meet compliance regulations. It wanted to position itself as the IT services provider of choice for its state, local government and educational entities, by expanding its footprint quickly and seamlessly to deliver Infrastructure as a Service (IaaS) and Platform as a Service (PaaS).

Solution

The state agency selected Microsoft Azure for its enterprise cloud-computing platform. To help address the network architecture challenges, Equinix and Microsoft partnered to offer the agency a cost-effective method to meet the needs of the complex environment: Equinix Professional Services ExpressRoute Strategy and Connectivity Workshop. The workshop is a network-focused engagement to assist with cloud enablement and customized to the agency's specific requirements. The goal was to develop an optimized, scalable and cost-effective Microsoft ExpressRoute solution and cloud connectivity strategy.

The Equinix Professional Services and Microsoft team met with the agency's networking team to discuss its current infrastructure, estimate network growth, understand strategy, outline business requirements and architect ways to extend the existing network to the digital edge—closest to its users—for secured low-latency connectivity.

Business overview

Industry
State Government

Vertical
Cloud & IT Services

Business purpose
Partners with state and local government and educational entities to deliver digital services, develop innovative and responsive solutions for business needs, and provide quality assurance for state government IT projects and services.

Role, responsibility and authority
Guardian of public data, a leader in IT services and solutions. Has broad responsibility and authority over all aspects of technology in state government, including: policy formation, inter-agency coordination, IT project oversight, information security, technology service delivery and advocacy.

Customers
State and local government and educational entities

Headquarters and locations
A State government agency, located in the contiguous United States

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The team collaborated and created a detailed network design to extend the existing network to enable reliable cloud connectivity for its customers. This detailed network design empowered the agency to create the Layer 1 infrastructure that its customers will employ for connectivity to the cloud. In addition, the Equinix solution also addressed Layer 2 through 4 in the connectivity solution to ensure proper cloud connectivity and routing.

Following the workshop, the agency deployed on Platform Equinix™ in three geographically separate metropolitan locations, leveraging an interconnection-first approach. It engaged with Equinix for Equinix Cloud Exchange™ (ECX) Enablement, including end-to-end testing to verify Microsoft Azure connectivity operability. The solution also removed select high-bandwidth IP traffic from their existing internet connections, and moved it over to the Equinix Internet Exchange (IX) for cost and performance benefits.

Additionally, Equinix provided HyperCare support to the agency's networking team through testing, troubleshooting and training throughout the ECX Enablement process.

Benefits and business results

Through the workshop and ECX Enablement, the agency developed a comprehensive cloud and connectivity strategy to meet current and future cloud requirements, while benefiting from the following business results:

- Established private cloud connectivity, providing more control via Equinix Cloud Exchange

- Centrally managed a multicloud connection, improving agility and innovation

- Connected sub-agencies to cloud services through the agency, reducing latency

- Enabled monitoring for sub-agencies, establishing a true pay-for-what-you-consume model

- Provided a repeatable model, complete with documentation to onboard agencies independently, enabling massive connectivity potential throughout the state

The agency performed its first ECX Enablement turn-up, and successfully provisioned its Border Gateway Protocol (BGP) and routing to the cloud. It now has the skill set needed to understand how its connectivity could and should work.

Equinix will continue to support the agency while it performs ECX turn-ups for its sub-agencies. Each turn-up is done interactively with the agency performing hands-on configuration, while Equinix Professional Services provides remote guidance during the process.

About Equinix Professional Services

Equinix Professional Services (EPS) helps enterprises quickly and easily design, implement and optimize IT services and design network transformation for Microsoft Azure, including hybrid and multicloud deployments.

Equinix Professional Services

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Technology and services

- EPS ExpressRoute Strategy and Connectivity Workshop

- Performance Hub™

- Microsoft Azure Cloud via Equinix Cloud Exchange

- Equinix Internet Exchange

For more information, contact eps@equinix.com

Why Equinix

Microsoft's physical infrastructure for ExpressRoute resides in Equinix International Business Exchange™ (IBX®) 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 180 data centers that can save network and operating costs. With 99.9999% uptime performance worldwide, Equinix IBX data centers exceed most government 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 Microsoft Azure services and/or Microsoft Office 365 via Platform Equinix.

EPS ExpressRoute Workshops

Equinix is a Microsoft-recommended ExpressRoute connectivity provider, and Equinix Professional Services is a Microsoft-recommended ExpressRoute service provider and Gold Certified Cloud Platform Partner. Equinix is uniquely positioned to offer customers end-to-end infrastructure, connectivity and workload migration solutions.

Solutions to speed the way

Equinix Cloud Exchange™: Directly connects you to the world's largest ecosystem of cloud service providers in the most markets around the globe.

Interconnection Oriented Architecture™ (IOA™): Re-architects for a digital edge to bring applications and services closer to users, optimize multicloud connectivity and boost performance.