What's New 'Cliff Notes'
Network Edge 1.0

The Network Edge (NE) is a dynamic new offering that allows the selection, configuration and activation of virtual network devices and services into production in near real-time.

NE is an infrastructure platform optimized for virtualization and interconnection of network functions. It enables faster time to market, proximity to sources of major content and enterprise services, and minimizes touch points.

Features

Using NE, users can perform the following tasks quickly:

- Select an appropriate network service and vendor to match your immediate or long-term needs, e.g. a Cisco router or a Juniper firewall
- Choose the right licensing structure that works for your organization – either bring your own license or use Equinix's subscription service, depending on vendor availability
- Configure the device with basic settings in the ECX portal or via the NE API
- Deploy the device in the desired Equinix location globally
- Create connections to other devices, other Equinix services (such as Cloud Exchange Fabric), or access the device directly to implement additional configurations just as you would any other network equipment

NE offers an open-source x86 infrastructure for device and service deployment. The overall solution natively includes the necessary compute, storage, and other factors for the virtual service. NE is plug and play ready to interact with the other Equinix Interconnection products that are already included in the base package. All of this can be accomplished though the Equinix Cloud Exchange portal or via RESTful API web services available at the Developer Platform.

Benefits

1. Reduce capex spend
2. Scale and augment existing physical IT solutions
3. Improve performance with ultra-low latency
4. Gain multi-vendor flexibility
5. Simplify the network – enable automation

Instance Components

The platform features an Edge Instance that includes:

- Infrastructure resources that have already been tested with and optimized for your specific chosen device
- A pre-configured virtual port into the Equinix Cloud Exchange to connect with service providers and other members of the platform globally
- A small starting amount of dedicated internet access to connect to your devices from anywhere
- Pre-configured TACACS and user management to allow direct access
- A small block of publicly routable IP addresses

The following components are included in the Network Edge instance:

- Virtual Machine Instance
- Virtual ECX Fabric Port
- Dedicated public internet access at 15 Mbps throughput
- Public IP Address

Virtual Devices

The platform also has a Virtual Device that includes:

- A full image of the selected device with vetted and supported OS from the vendor
- A license management system that either accepts your existing license or allows you to use ours for a monthly fee
- VPN, SSH, and other portal-based services to ensure secure direct access to

your device

- Once your device is activated, you can use it as the A-end for any connections just like you would a physical port or network device

Routers

Available routers are:

- Cisco CSR1000v Router

Firewalls

Available firewalls include:

- Juniper vSRX Firewall
- Palo Alto Networks VM-Series Firewall

Licensing

The license options depend on vendor support by device; all available options are listed here. Possible license choices include:

- Subscription: Equinix handles the license on your behalf. The monthly charges will be reflected both on the portal and on your Equinix invoice.
- Bring Your Own License/File: The vendor will provide you with a license file and you will upload it directly to the platform. Once uploaded, the NE platform will validate the active license with the vendor. In some cases the file contains a code and key portions of the starting configuration. Charges will NOT apply for the device license on your Equinix invoice, but the vendor may charge for this license.
- Bring Your Own License/Unique ID: The vendor will provide you with a unique key, ID or code. The NE platform will validate the active license with the vendor.

Note: The BYO License option may ask you to apply license information at this stage or later in the device provisioning stage, depending on the vendor's license support model.

SD-WAN

The new Cisco CSR-SDWAN device is available with the Network Edge offering. This device allows NE users to select and launch a Cisco/Viptela CSR 1000v with IOS-XE. The functionality allows the use of key Viptela SD-WAN features.

Availability

Available locations include:

- Silicon Valley
- Washington, D.C.
- London
- Amsterdam
- Singapore

Access and Configuration

Network Edge provides flexible and secure options to access, configure, and route your Virtual Device. Capabilities include:

- Access your device directly with SSH user and whitelisting flexibility
- Open command line interface access
- Customize routing directly in command line interface with NAT and route filtering
- Private IP and public peering announcement
- BGP with 2-byte and 4-byte ASNs

Security

Network Edge security features include:

- VPN termination
- Multisite VPN tunnels
- 256-bit IPSec encryption

Connection

Network Edge enables you to seamlessly add your ECX Fabric local and remote connections. It enables:

- Zero-touch provisioning

- Ability to connect your virtual and physical environments together

- Full access to the ECX ecosystem

High Availability

High Availability (HA) features and options are available per device. Chosen at the start of the device deployment process, HA allows users to diversify within the compute, between metros or between regions. Selecting HA creates 2 devices – Primary & Secondary – simultaneously, this is aimed at redundancy and HA. When devices, along with licenses, are created in HA mode, the Connections & Services will also have HA. HA connections are purely Service Profile driven, this release extends existing Service profiles for HA. In addition, users can add redundant connections to HA-paired devices.

High Availability options are offered to all users who create a virtual device on the EVE. This provides a choice of different and increasingly resilient/redundant design and deployment choices that allows a customer to survive outages, downtime, errors, or other conditions that would otherwise result in loss of traffic flow and data.

Scalability

Additional internet bandwidth can be added to any device. Any user who has a current Equinix Network Edge device can add increase or decrease the amount of Equinix Connect bandwidth associated with the device so that they gain access to more throughput while connecting to the device from a remote location – for backhauling or other needs where large bandwidth is needed.