ConnectTo Case Study:
ConnectTo Increases Agility to Support New Services With XCloud Networks

OVERVIEW

Based in Los Angeles, ConnectTo is a CLEC (Competitive Local Exchange Carrier) ISP offering Phone, Internet, IPTV/VOD (new service), as well as Platform to produce Live and VOD content. It's constantly enhancing and expanding its network, adding new services to keep up with rising customer expectations and a fast-moving market. When it was about to introduce a new service - VOD, it was essential that users continued to see very high availability and top-notch performance. With XCloud Networks they improved the stability of their network and accelerated the delivery time while staying within budget.

> "XCloud Networks solution allowed us to refresh our core network into a highly scalable and fault tolerant foundation of our infrastructure, such that we can grow easily while maintaining agility".
>
> -Aram Ter-Martirosyan, CIO, ConnectTo Communications

Full Network refresh and upgrade comparison

	Conventional Solution	Open-Networking w/ XCloud
Hardware	Cisco, Arista	**Edge-Core**
Network CapEx	1x	**0.2x (80% savings)**
Network OpEx	1x	**0.6x (40% savings)**
Network Engineers	3	**1**
Network Change Duration	2-5 days	**2-5 minutes**
Load Balancer	No	**Yes**
Cloud-Native Control	No	**Yes**
Multi-Vendor support	No	**Yes**

CHALLENGES

- Have an agile network to offer a new VOD service requiring high throughput (bandwidth) exceeding the capacity of prior existing legacy gear infrastructure.

- Build fully redundant network infrastructure required by the nature of the provided critical services where downtime is not acceptable.

- Upgrade the existing critical infrastructure with future proof technologies to be ready to accept any scaling challenges in the future.

- Automate the management of the entire network to save time and grow the network without facing the hurdle of talent acquisition.

SOLUTIONS

- XCloud NFV providing virtualized Border Router functionality. Running on Supermicro X86 servers with a SmartNIC card, Ubuntu Linux, FRR routing daemon, and XCloud forwarding/management plane.

- Edge-Core switches running Cumulus Linux OS, managed by XCloud agent - for core network.

- Universal IP/BGP routing design built-in XCloud templates to support both data center and service provider networks.

- Network topology and a detailed migration plan developed through the intensive collaboration between the two engineering teams.

- XCloud Networks - as a single point of control and support of a multi-vendor network.

BENEFITS

- Single Dashboard for the operations and management of the entire network.

- Highly redundant, scalable and fault tolerant network.

- Automated network management that enables accelerated network operations, quick response to business demands and freedom to tackle more pressing issues.

- Advanced "hands free" monitoring and deep visibility.

- Freedom of mixing and matching hardware from multiple vendors.

Partners

XCloud Networks leverages Open Compute Project (OCP) networking technologies with Edgecore Networks.

Why Edgecore Networks?

Edgecore Networks is the leader in open networking, providing a full line of open WiFi access points, packet transponders, virtual PON OLTs, and 1G, 10G, 25G, 40G, and 100G OCP-AcceptedTM switches that offer choice of commercial and open source NOS and SDN software.

Why XCloud Networks?

XCloud is the most comprehensive networking software suite that makes private infrastructures time and cost efficient. It allows an organization of any size to build scalable, CapEx and OpEx efficient, and a fully functional network infrastructure based on commodity hardware.

Recap

With XCloud Networks ConnectTo upgraded its existing legacy network into more scalable, fault tolerant and vendor agnostic infrastructure which allowed them to grow easily while increasing agility.