

Morphlabs Deploys Arista 7048 to Democratize the Enterprise Cloud

Key Achievement

Enterprises have been coming to Morphlabs for over 4 years looking for expertise in deploying turnkey cloud solutions. Partnering with Arista Networks has allowed Morphlabs to complete our vision of the mCloud Data Center Unit (DCU) – a marriage of leading-edge cloud building blocks, open source software and commodity hardware that democratizes the deployment of Enterprise-class private clouds.

Overview

Project Background

Morphlabs' turnkey cloud solution, the mCloud Data Center Unit (DCU), was further optimized by having Arista's 7048 switch best-in-class performance and Extensible Operating System (EOS) APIs.

Quote

"The search was on for the right switch," explains Yoram Heller, VP of Corporate Development at Morphlabs. "With our clients looking for us to provide revolutionary turnkey solutions, we needed to find an affordable 1U switch that was open, adaptive and extremely powerful. While cost, space and power consumption were important considerations, our primary concern was finding the best architectural solution. The Arista 7048 ticked all the boxes with non-blocking wire speed performance on all ports and extensibility built into the switch architecture."

The Arista Solution

Each mCloud DCU is made up of a number of compute Resource Nodes along with Network Attached Storage. As resources in the cloud are requested by users through a self-service portal, the Morphlabs mCloud Controller configures and allocates computing and storage resources. This requires a virtualized infrastructure that is able to isolate and abstract physical components and provide high performance non-blocking connectivity. Each mCloud DCU is networked through a top-of-rack Arista 7048 switch that can be configured with active-active redundancy using Arista's Multi-Chassis Link Aggregation technology. The mCloud Controller communicates with the Arista EOS software to automatically make configuration changes including VLAN assignments to create private virtualized resource pools. The integration of the mCloud Controller technology with Arista was extremely efficient using Arista's extensibility features.

The Arista 7050 and 7500 product families are used to build large-scale 10Gb spines for large cloud deployments using an MLAG active-active high-availability design.

Arista Key Benefits, Metrics and Differentiators

"We were keen to test the switch for ourselves before we decided to buy. The command line syntax proved simple and easy to learn – and a total game changer. As soon as we started testing, it was immediately clear that the Arista 7000 was going to be a key component of our infrastructure, delivering the kind of high performance and availability that our customers demand.

The 7000 series' flexible connectivity and extensible modular operating system open up new deployment possibilities for future projects."

Application: Show Diagram

