



Cisco NDFC Success Story

Customer

The customer is a United States health care provider with multi-specialty care centers, a cancer center, women's health center, two ambulatory surgery center locations, and a specialized sleep center. It has annual revenue of more than \$200M.

Goal

The customer needed help with creating a multi-site VXLAN topology between two data centers and integrating with their legacy topology as soon as possible. There had been an ongoing effort by the customer to deploy this solution manually, but they did not have working knowledge of the Nexus Dashboard Fabric Controller (NDFC) solution. The project included deploying Nexus Dashboard (ND) and NDFC. The customer needed two Leaf Spine VXLAN BGP EVPN fabrics, 2 external Data Center Interconnect (DCI) fabrics and a classic LAN fabric to complete their topology. The fabrics were deployed to integrate with a classic 3 tier topology and allow workloads to be migrated to the new topology before cutting over the default gateway SVIs to Anycast gateways in the fabric.

Proposed Solution

- Design and implement Underlay/Overlay Fabric with Nexus 9K devices using BGP, OSPF, etc.
- Deploy Nexus Dashboard (ND) and Nexus Dashboard Fabric Controller (NDFC) to orchestrate and automate the customer environments.
- Implement POAP across both data centers to automate the bootstrapping, VXLAN fabric deployments, support RMA and easy future fabric scaling.
- Design and deploy external fabrics for DCI at both data center locations. These were used for Multi-Site Domain fabric and VRF Lite implementation.
- Create custom templates to support the unique customer requirements.

Some of the hardware used in the solution included:

Role	Hardware
Spine	4x N9K-C9336C-FX2-B2
Leaf	16x Cisco N9K-C93180-FX-B24C
Core / DCI	4x Cisco N9K-C93180-FX-B24C
Classic LAN	Various models of Cisco switches



Result

The project was completed successfully. The underlay environment was created between two data centers using NDFC automation. External fabrics and classic LAN fabrics were integrated in monitor only mode.