CISCO HYPERFABRIC MENTORED POV PLUS

Service Overview:

At Netnology, we specialize in Cisco Hyperfabric enablement and implementation services to expedite the adoption of Hyperfabric solutions. As part of this Mentored Install service offer, our subject matter experts (SME) partner with your team to ensure smooth deployment and provide knowledge transfer to equip your staff with the necessary skills to configure and manage Cisco Hyperfabric effectively.

Solution Overview:

The Cisco Hyperfabric Mentored Install Service enables customers to deploy next-generation, cloud-managed data center fabrics using Cisco Nexus 6000 Series switches and the Cisco Hyperfabric Cloud Controller. The solution delivers an automated, intent-based underlay and overlay network design for modern data centers and HPC clusters.

Hyperfabric introduces a plug-and-play leaf-spine architecture where switches auto-discover via LLDP, authenticate through SUDI, and automatically configure BGP EVPN VXLAN underlays. Cloud connectivity via TLS enables centralized lifecycle management—design, deploy, monitor, validate, and upgrade—from a unified SaaS portal. This Mentored Install engagement combines hands-on implementation with expert-led knowledge transfer, ensuring the customer's operations team can manage fabrics "as-a-service" confidently

Service Benefits:

Netnology has a team of world class engineers who specialize in Data Center Solution. This Mentored Install engagement will provide information on how to deploy, configure and integrate Cisco Hyperfabric.

Service Scope:

As part of the 5-day (up to 40 hours) engagement, Netnology will provide the following services:

- Fabric Design and Blueprinting
  - Define the Fabric Blueprint (spine/leaf count, switch models, interface mapping, VRFs/VNIs, and logical networks).
  - Utilize auto-cabling for switch-to-switch connectivity planning and validation.
  - Define underlay and overlay design parameters (VRF, VNI, BGP EVPN, VLAN mapping).
- Onboarding and Cloud Integration
  - Establish secure TLS/SUDI cloud registration and binding of switches to the customer's Hyperfabric organization.
  - Validate nodes for cloud reachability and proxy configuration.
- Fabric Bring-Up and Edge Connectivity
  - Enable automatic underlay configuration via LLDP discovery and BGP VXLAN fabric formation.
  - Configure logical networks, VRFs, and SVIs for northbound and host connectivity.
  - Define port roles (fabric, host, routed) and apply traffic policies and VLAN mappings for edge integration.
- Telemetry and Assertion Validation
  - Enable switch and interface telemetry for real-time visibility into port status, traffic, and

environmental parameters.
    - Validate assertions at fabric, switch, and port levels to ensure design intent and operational health.
    - Configure alerting and export options for assertion monitoring.
- Knowledge Transfer and Mentoring

Target Audience:

This service is designed for Network Architects, Network Engineers and Administrators configuring, deploying, and managing the infrastructure.

Prerequisites:

- Basic knowledge of Cisco Nexus, Cisco UCS, VXLAN.
- Customers need to ensure that all equipment and devices are racked and stacked, cabled, and powered up prior to the kick-off.
- Customers also need to acquire the necessary software licenses for the deployment of the infrastructure.

Service Deliverables:

No	Deliverable	Service Details
1.	Project Kickoff	• Project Overview • Solution Overview • Gather Customer requirements
2.	Pre-Requisite Validation	• Review/Confirm Hardware Readiness • License Validation • Network Readiness (Bandwidth, latency and redundancy)
3.	High Level Design	• Develop High Level Design (HLD) Document
4.	Fabric Blueprint Design	• Define fabric topology (spine/leaf count, interface plan, switch roles). • Establish VRFs, VNIs, VLANs, and logical network mapping. • Document fabric intent and configuration parameters.
5.	Onboarding and Cloud Binding	• Connect switches to Hyperfabric Cloud Controller. • Perform secure TLS and SUDI-based registration. • Bind devices to customer organization and verify cloud communication.
6.	Logical Network Configuration	• Create and configure Logical Networks and VRFs. • Define VLANs, SVIs, and VNI mappings for workloads. • Configure routed and host ports as per design.
7.	Test and Validation	• Solution validation by running sample inputs.
8.	Knowledge Transfer	• Explain how to configure and manage the deployed solution in the respective customers' environment.