

Cloud EVPN Fabric for Campus Networks

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Transform campus networks with EVPN fabric

Cisco's cloud-managed fabric simplifies campus network management by orchestrating EVPN-Virtual Extensible LAN (VXLAN) fabrics through a unified cloud dashboard. This approach replaces manual, device-by-device configuration with simple, centralized management that abstracts low-level complexities, so you can treat your campus as a single, logical entity.

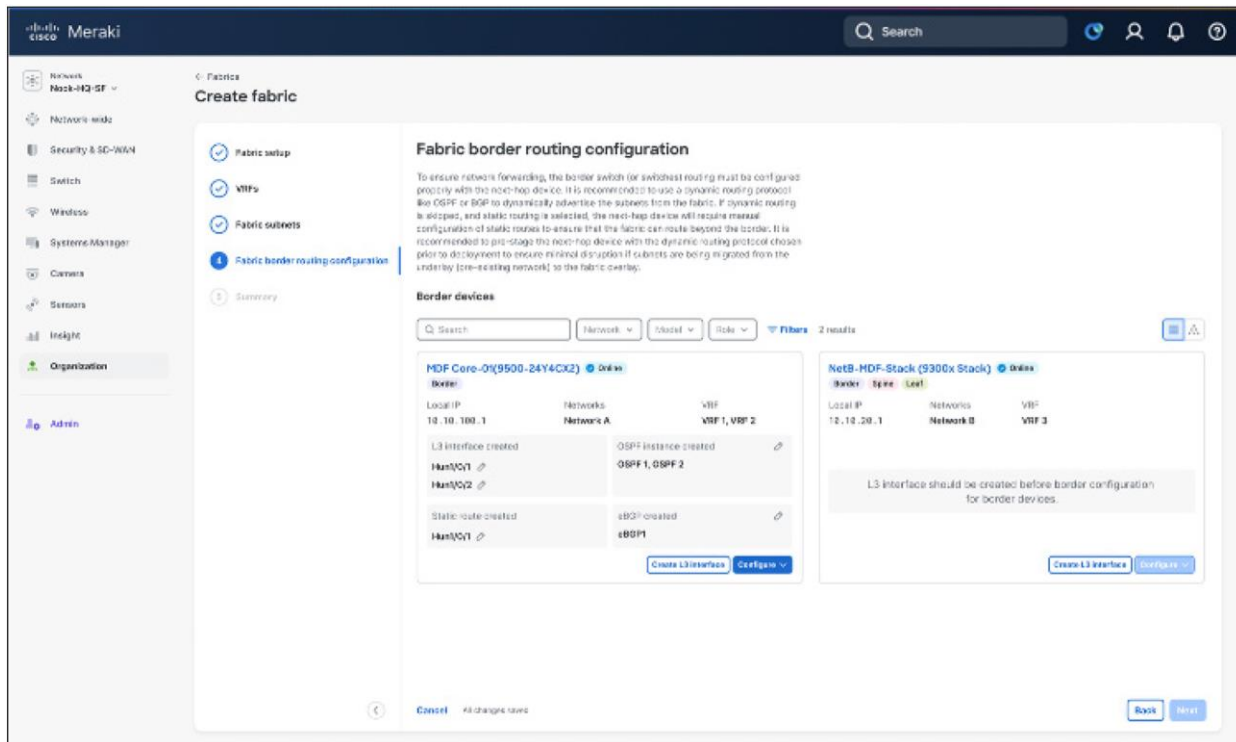


Figure 1.
EVPN fabric in Meraki dashboard

This solution leverages EVPN as the control plane and VXLAN as the data plane to create a unified, highly scalable, and resilient network fabric. It simplifies network operations, enhances security, and provides the flexibility needed to support a growing number of users, devices, and cloud-connected applications. Designed for large enterprises, it delivers the performance and control essential for critical business operations, helping ensure that your network is ready for the future.

Cisco's cloud EVPN fabric solution streamlines Layer 2/Layer 3 topology management by reducing broadcast and Spanning Tree Protocol (STP) domains while enabling scalable Layer 2 stretching to support seamless wireless client mobility.

This solution is designed to support flexible cloud migration initiatives to let users modernize their existing network at their own pace, without having to replace existing wired devices.

Benefits

- **Simplify campus network operations** with a unified, automated fabric architecture.
- **Leverage your existing Cisco IOS® XE infrastructure** and easily deploy fabric on top of current topology.
- **Orchestrate entire networks based on intent**, rather than box by box.
- **Gain a centralized, real-time view of the entire network** fabric to better understand network performance, trends, and health.
- **Improve security posture** through integrated segmentation and policy enforcement.
- **Minimize misconfigurations and human error** with automation and artificial intelligence.

Unlock cloud fabric with existing hardware

Our approach to building logical fabrics for cloud-managed networks leverages multiple interoperable elements from our portfolio to deliver a unified management experience. Key components include:

- **Unified cloud dashboard:** Leverage the power of the Cisco Meraki® dashboard to define network intent, build configurations, and automate topology provisioning to reduce errors and significantly shorten the time required to deploy large sites.
- **Enterprise wired and wireless:** In the initial release of cloud fabric, Cisco Catalyst™ 9500H Series Switches managed from the cloud will serve as fabric borders, while Catalyst 9300 switches will function as fabric leaves, enabling you to maximize existing investments.
- **Secure network access control:** Direct integrations with solutions like Cisco® Access Manager or Identity Services Engine (ISE) provide secure enforcement for network access control policies.
- **Assurance and digital experience monitoring:** Gain proactive monitoring and comprehensive operational insights from the cloud, improving troubleshooting and network health, all from the Meraki dashboard.

This standards-based architecture accelerates service delivery and provides unmatched operational agility, empowering your organization to do more with your current infrastructure investments.

Learn more

Modernize your campus network today

Ready to build a highly scalable, agile, and secure campus network for your enterprise? Explore the Cisco cloud EVPN fabric solution and unlock the full potential of your infrastructure.

Learn more about cloud management with IOS XE:

<https://www.cisco.com/site/us/en/products/networking/meraki-cloud-management-dashboard/index.html>.

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