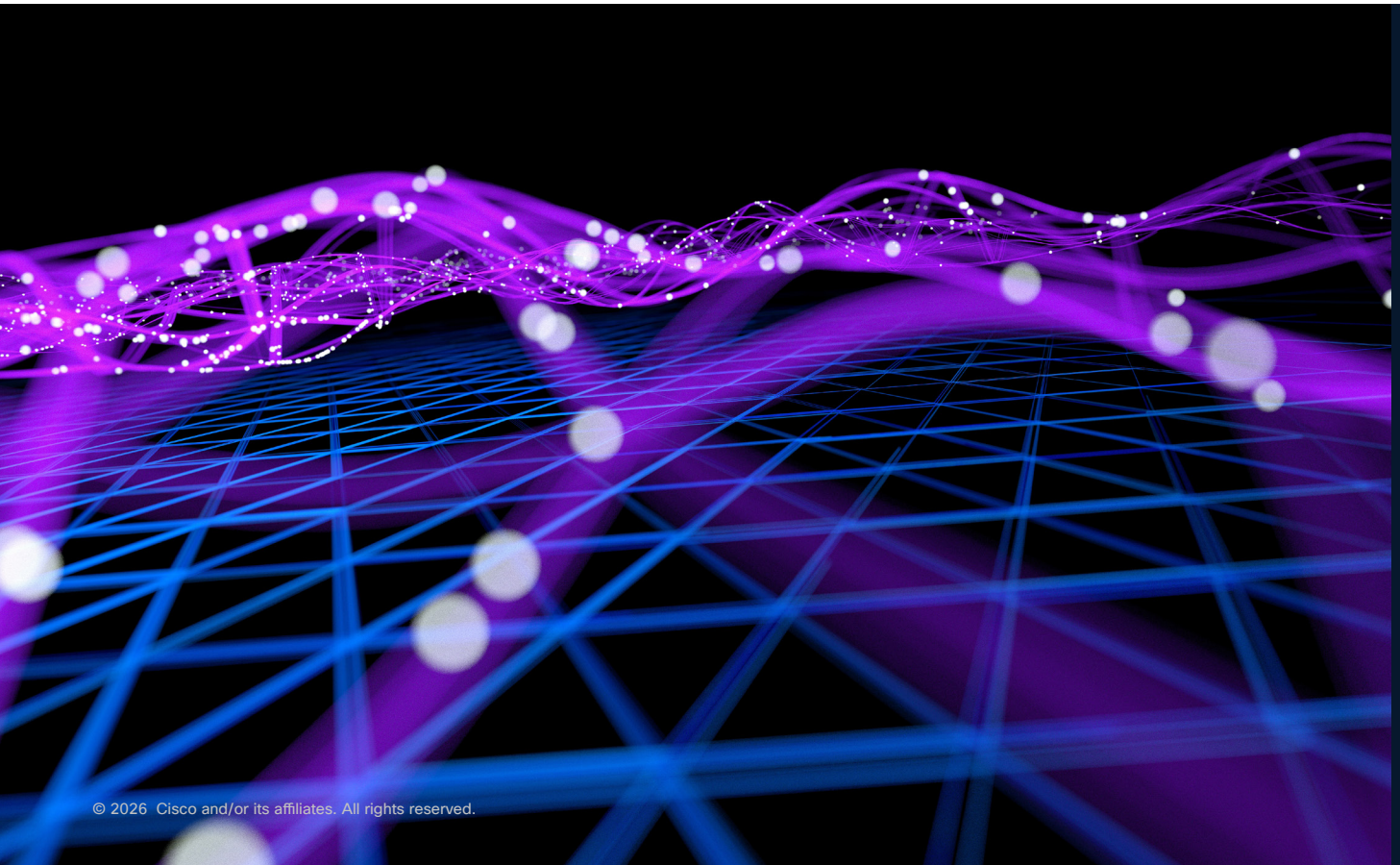
Accelerate AI adoption by simplifying multicloud networking



What if your network could evolve as fast as your AI initiatives? Cisco Multicloud Fabric gives you the unified control and automation you need to eliminate operational silos, reduce complexity, and scale your multicloud infrastructure with confidence.

Overview

Every IT leader is facing a new reality: the business no longer operates within four walls. Applications live across multiple clouds, users connect from anywhere—home, branch, or on the road—and increasingly, AI agents are joining as a new class of users. On top of that, data is spread globally but must comply with strict regional sovereignty requirements. The network now has to serve a business that is everywhere, all at once.

The rise of AI workloads and Agentic AI is the forcing function accelerating this shift. A single AI request triggers multi-hop workflows that span multiple models, data lakes, and clouds. Each hop across these fragmented environments compounds latency and creates visibility gaps. In this distributed reality, you need more than just connectivity, you need an adaptive fabric that eliminates friction and scales with intelligent workloads.

Cisco Multicloud Fabric accelerates AI adoption by simplifying multicloud networking. It delivers a unified, secure global fabric overlay that connects sites directly to clouds and cloud to cloud, providing the intelligent control plane needed to optimize complex AI workflows across different public cloud including AWS, Azure, GCP, and hybrid environments.

This consumption-based platform replaces centralized cloud connectivity architectures with a distributed connectivity layer—delivering Zero Trust routing, integrated firewall service chaining, and embedded ThousandEyes visibility to help ensure your infrastructure is as responsive and scalable as the users and AI agents it serves.

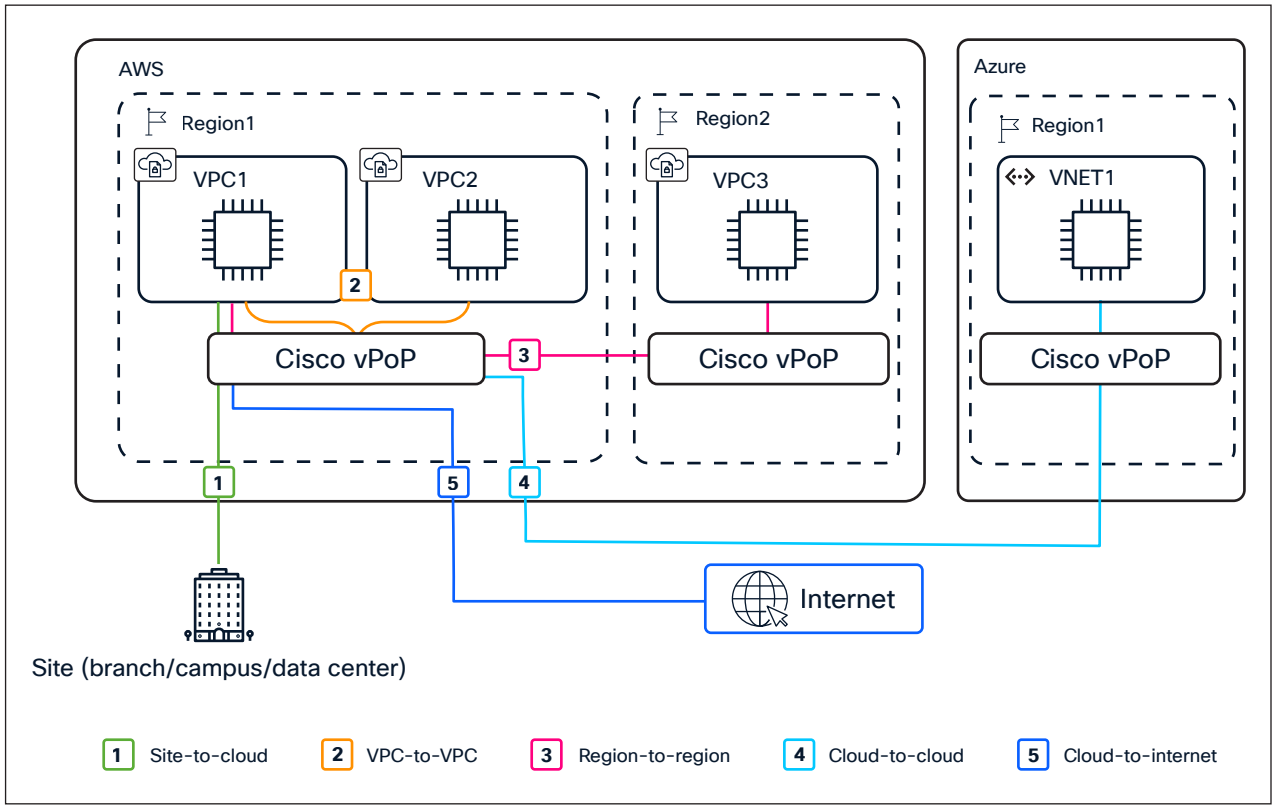


Figure 1. Cisco Multicloud Fabric: Accelerate AI adoption by simplifying multicloud networking

Benefits

Eliminate silos with unified multicloud operations

Break down operational IT silos with a single management platform that unifies multicloud operations across multiple cloud providers. By moving to a centralized control plane, you create an environment where security is “baked in” by default, and visibility is end-to-end.

This unified approach empowers your teams to move beyond fragmented operations, allowing them to focus on high-value tasks such as delivering applications and optimizing AI-driven performance. It also enables consistent security policies across every environment, reducing the risk of misconfiguration while providing the comprehensive visibility needed to scale your infrastructure with confidence.

Scale multicloud connectivity with an on-demand fabric

Accelerate your business and AI adoption by connecting sites and clouds in minutes with an instantly available, resilient, consumption-based global network.

Distributed points of presence eliminate single points of failure across your entire infrastructure, ensuring your network scales effortlessly with your AI and growth demands. Simply specify your requirements, and the system orchestrates the underlying complexities—eliminating manual provisioning of VMs or licenses. This as-a-service model removes traditional performance barriers, keeping infrastructure costs perfectly aligned with high-bandwidth AI initiatives.

Embed security and visibility into the network

Move beyond “bolted-on” tools with zero-trust routing, integrated firewall service chaining, and visibility baked directly into the network fabric. Gain deep insights and consistent protection across your entire footprint—from branch, campus, and data center to cloud and cloud-to-cloud.

By embedding security and visibility directly into the network, we ensure the consistent policy enforcement required to secure your distributed data and applications from your local sites to the deepest reaches of the public cloud.

Trends and challenges

Redefining multicloud networking in the AI era

We are entering a new era defined by the proliferation of intelligent agents and AI workloads. This shift fundamentally reshapes enterprise architecture, requiring a high-performance, global foundation like Cisco Multicloud Fabric to ensure AI scales without traditional networking limitations. Backhauling traffic through centralized data centers is no longer sustainable; to ensure low latency, you need a unified, automated fabric that provides direct, secure connectivity from the site to the cloud.

The reality of multicloud networking complexity

While the move to multicloud is a strategic necessity, it introduces critical challenges that hinder your ability to accelerate AI and unify operations:

- **Fragmented tools lead to operational complexity** Each cloud has its own networking constructs, forcing your IT team to navigate multiple dashboards without the benefit of unified visibility or policy control.
- **Centralized cloud connectivity models restrict your business agility** Routing cloud traffic through centralized data centers throttle speed, while managing fragmented environments burdens your team and prevents seamless scaling.
- **Bolted-on cloud security and limited visibility increase risk** Ad-hoc workarounds, bolted-on security, manual VPNs, and ungoverned connectivity, create significant blind spots, creating critical security gaps.

What you buy

Cisco Multicloud Fabric is a cloud-delivered service that provides a unified networking fabric. It bridges the gap between your on-premises campus, branch, and data center locations and your various public cloud environments.

Key capabilities

Cisco Cloud Control

Manage your entire multicloud fabric from a single, cross-domain platform designed to onboard VPCs and sites, manage global policies, and monitor performance. This unified command center eliminates the need to jump between different cloud provider consoles, ensuring consistent policy and streamlined operations. Accelerate troubleshooting and resolution with AI-powered operations while maintaining the flexibility to coexist with existing SD-WAN deployments.

Cisco-operated virtual Points of Presence (vPoPs)

Experience a fundamental change in how you scale by connecting instantly through virtual points of presence deployed across major cloud providers. This elastic routing fabric, operated entirely by Cisco, delivers the scale you need on-demand without the heavy lifting of managing underlying hardware or complex cloud routing tables. It allows you to scale your infrastructure effortlessly on a high-performance, global foundation.

Built-in cloud security and end-to-end visibility

Security is baked into the fabric, not bolted on, delivering a consistent security posture across every site and cloud. Enforce Zero Trust routing and identity-based segmentation from the moment a connection is made, with the ability to service-chain traffic through Cisco or third-party firewalls. With embedded ThousandEyes, you gain the deep, end-to-end visibility needed to troubleshoot issues and protect performance before they impact critical AI workloads.

Key use cases

Cisco Multicloud Fabric provides a versatile connectivity fabric that addresses the unique infrastructure demands of any industry, from retail and healthcare to manufacturing and finance, by standardizing how you securely connect your sites and your clouds.

Site to cloud: Enables secure, high-performance connectivity from any corporate location to cloud-hosted resources, so that critical data and AI-driven workloads are always accessible with minimal latency across your entire branch and campus footprint.

Cloud to cloud: Standardizes networking and security policies across diverse public cloud environments including Azure, AWS, and GCP, allowing enterprises to seamlessly integrate multivendor cloud stacks without the operational risks and performance bottlenecks typically caused by fragmented infrastructure.

Learn more

Streamline your multicloud operations today

Move beyond the complexity of fragmented cloud environments. Deploy a resilient, on-demand multicloud fabric that scales effortlessly with your business demands. Sign up for beta program and reach out to your Cisco account team for a custom demo.

Learn more at Cisco Multicloud Fabric solution.

The Cisco Advantage

As workloads shift across a dynamic, multicloud landscape, IT teams face increasing complexity and widening skills gaps. Unlike fragmented legacy solutions, Cisco Multicloud Fabric provides a unified, secure fabric overlay that integrates deep visibility, continuous assurance, and zero-trust security into a single consumption-based platform. By consolidating your control point through Cisco Cloud Control and leveraging an on-demand vPoP architecture, Cisco eliminates the need for multiple dashboards and manual provisioning. This empowers your team to manage global, agentic workloads with operational simplicity and the specific performance and security rigor required for today's distributed, AI-driven enterprise.

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