

Cisco Unified Branch



Transform every branch into a smart, secure, and scalable platform

Modernizing corporate branches is a strategic imperative that dramatically enhances both digital and in-person interactions, significantly boosting customer experience and driving operational efficiency. In today's AI era, the branch stands as the prime platform for delivering a business model to the customer, serving as the very place where secure, AI-ready digital experiences are delivered.

Cisco® Unified Branch is a foundational framework that unifies networking, security, cloud access, and management to simplify and secure branch operations for organizations of all sizes. It delivers AI-ready infrastructure built on custom Cisco silicon with a programmable OS for superior security, scalability, and performance. Hardware-based security and post-quantum cryptography protect against current and future threats.

Integrated secure access services (SD-WAN, secure service edge [SSE], hybrid mesh firewall, identity, zero-trust segmentation) enforce consistent policies across all users and applications, on-premises or remote. Automation toolkits with Cisco Validated Designs accelerate deployments and help IT teams scale faster and with confidence by

reducing risk and saving time. Centralized management with built-in assurance and AgenticOps offers unified visibility and AI analytics.

Unified Branch resonates across diverse industries. Financial institutions, for example, can use modernized branches with financial wellness pods to allow customers to use biometrics to securely connect with specialized advisors via video, making services like mortgages and wealth management more personal. In retail, updated branches enable seamless online-offline shopping. A customer can browse products on an app, then use a smart mirror in the fitting room to see their selections and receive personalized suggestions. Similarly, healthcare providers benefit from streamlined processes. Patients can check in at a self-service kiosk, and doctors can then use a tablet to access records and share information on a large screen. A modern, unified branch architecture can help optimize operations and improve customer or patient experiences regardless of the sector.



Key benefits of the Unified Branch solution

Cisco Unified Branch delivers AI-ready infrastructure with custom silicon, programmable OS, and hardware-based, post-quantum security. Integrated secure access and zero-trust segmentation enforce policies anywhere. Automation toolkits accelerate deployment, while centralized management, with built-in assurance, helps ensure visibility and analytics—backed by Cisco Validated Designs to help IT teams scale faster with confidence.

This unified approach provides key benefits:

- **Operational simplicity, powered by AgenticOps:** A single centralized management dashboard automates operational processes for faster scalability, end-to-end visibility, and AI-powered analytics—backed by decades of Cisco expertise to help IT teams scale with confidence.
- **Scalable, AI-ready infrastructure:** Deploy AI-ready secure routers, smart switches built on Cisco silicon, and Wi-Fi 7 devices—delivering superior security, scalability, and performance.
- **Security fused into the network:** Hardware-based security and post-quantum cryptography protect against current and future threats. Integrated secure access services (SD-WAN, SSE, hybrid mesh firewall, identity, zero-trust segmentation) help enforce consistent policies across all users and applications, on-premises or remote.
- **Guaranteed SLAs for network performance and application delivery:** A unified branch solution streamlines the process of defining, monitoring, and guaranteeing Service-Level Agreements (SLAs) for network performance and application delivery. With a single platform offering full visibility and control, IT teams can easily track key metrics, spot bottlenecks, and proactively resolve issues to meet required service levels.
- **Centralized configuration and simplified day-N operations:** Manage all branch network and security devices through a single interface—via GUI, infrastructure as code, or Command-Line Interface (CLI). The Cisco Meraki™ dashboard provides a cloud-hosted CLI terminal that connects to Cisco IOS® XE devices, enabling advanced troubleshooting and configuration without requiring VPN or jump hosts. Additionally, the Cisco AI Assistant allows you to deploy, manage, and troubleshoot the branch network using natural language commands, simplifying operations and reducing human error. This unified approach streamlines lifecycle monitoring, troubleshooting, and maintenance for greater operational efficiency.
- **AI and automation empowerment:** AI and automation help overcome IT resource and skill gaps, minimize manual errors, and streamline branch network deployment and management, enabling faster, more reliable operations with reduced operational complexity.
- **Lower Total Cost of Ownership (TCO):** Simplified licensing, reduced integration efforts, and a platform approach lower operational costs and make it easy to add and operate new technologies.
- **Comprehensive application visibility:** Gain end-to-end insight into application performance and behavior across the entire network, accelerating troubleshooting, enhancing security, and helping ensure consistent policy enforcement.

Building a branch network for the AI era and beyond

Cisco Unified Branch offers a comprehensive, full-stack platform for organizations that want advanced capabilities and simplified management at the branch. It includes a curated set of products, tested and verified together, that integrate routing with next-generation firewall capabilities, Wi-Fi, and switching into a robust suite of services. All these components are centrally managed through a common dashboard.

This platform represents a fundamental shift from managing individual network and security devices to orchestrating all branch services as a cohesive whole. Organizations can define their operational “intent”—specifying desired capabilities, performance, and security—which is then automatically deployed by the solution across all underlying technologies. This platform-centric approach delivers significant benefits, including operational and integration simplification, consistent configurations, accelerated deployments, and a dramatically improved security posture.

By treating the entire branch as a single, centrally managed entity, Cisco Unified Branch also enables organizations to detect and resolve problems more quickly. The platform is further enhanced by the inclusion of Cisco ThousandEyes®, which provides full visibility, smarter troubleshooting, and the ability to quickly pinpoint issues, helping business networks run smoothly.

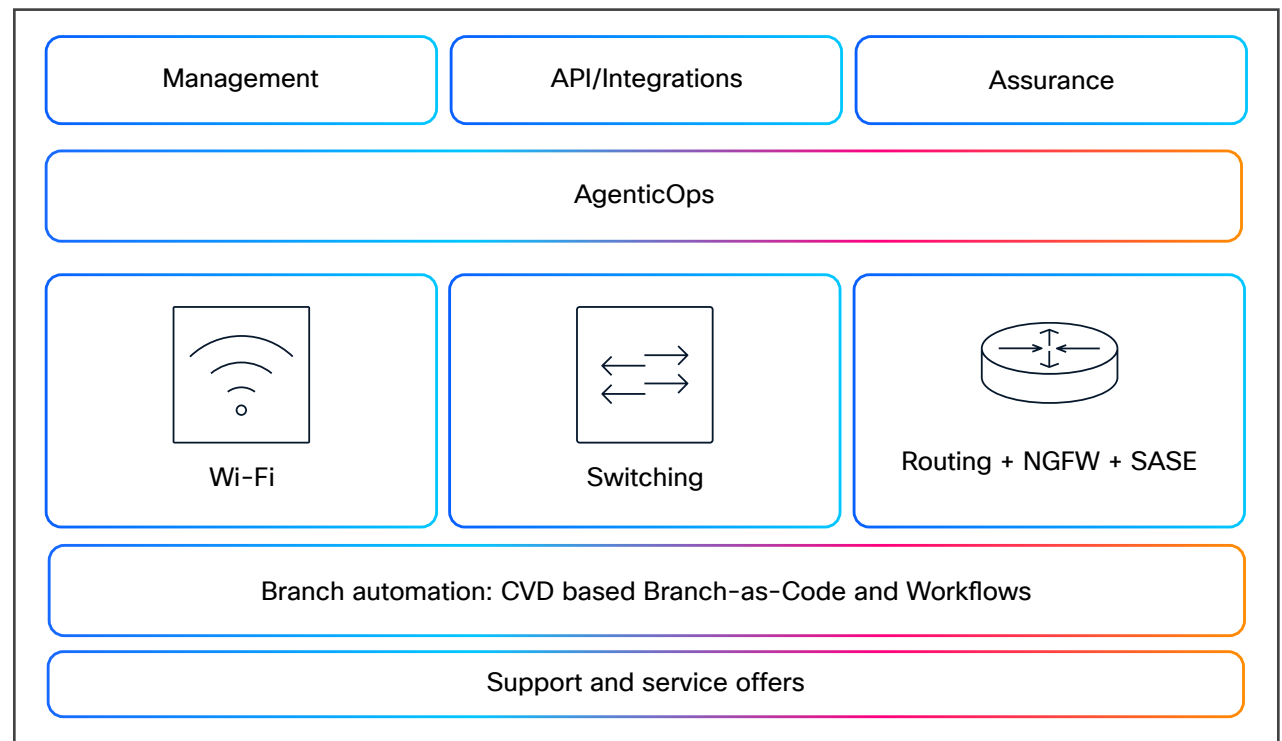


Figure 1. Cisco Unified Branch platform overview

Cisco Meraki dashboard

At the heart of the Unified Branch platform, a cloud-delivered dashboard functions as the network conductor, providing a single, intuitive interface where all critical data is processed, analyzed, and acted upon. Using this dashboard, IT teams gain complete, real-time visibility into the health, performance, and security posture of every aspect of the branch network—from Wi-Fi and LAN switching to WAN routing and integrated security services. It is the command center for device configurations, defining and enforcing policies, monitoring user experience, detecting anomalies, and orchestrating automated responses, translating complex operational data into actionable intelligence that enables proactive management and rapid issue resolution. This includes AI-powered management with AgenticOps, offering unified visibility and AI analytics.

Unified Branch use cases

The foundation of the Unified Branch is built on core services designed to support a wide range of use cases—from seamless connectivity and secure access to advanced automation and AI-driven operations. These foundational services deliver robust, secure, and reliable connectivity for all users and devices. Unified Branch provides AI-ready infrastructure built on custom Cisco silicon and a programmable OS, helping ensure superior security, scalability, and performance. With hardware-based security and post-quantum cryptography, your network is protected against both current and future threats.

Provide secure branch connectivity with Cisco secure routing

Unified Branch's secure routing integrates Next-Generation Firewall (NGFW) functions directly into Cisco secure routers, combining advanced routing and firewall protection in one device. This integration enables robust, secure data flow within the branch and to external networks, while helping ensure that your infrastructure is ready for both current and future threats.

- NGFW integration into Cisco secure routers
- Segmentation and SLA-driven policies for prioritizing critical applications
- Secure tunnels (SD-WAN) for encrypted, multipath WAN connectivity
- Direct Internet Access (DIA) with comprehensive threat protection
- Secure routing powered by network security processors and post-quantum cryptography

Enable secure wired access with Cisco LAN switching

Secure wired access is essential for branches to protect sensitive data and limit access to trusted devices. Cisco LAN switches use robust authentication and segmentation, permitting only authorized devices to join the network, to safeguard your core business operations.

- Network segmentation with VLANs
- Port security to prevent unauthorized access
- 802.1X authentication for device trust
- Permits only approved devices to connect via Ethernet

Deliver secure wireless access with Cisco wireless

Cisco delivers high-performance, secure wireless access throughout the branch, helping ensure both data protection and excellent user experiences. With enterprise-grade Wi-Fi 7, strong authentication, and customizable wireless networks, every user and device benefits from connectivity that is both fast and safe.

- Enterprise-grade Wi-Fi 7 technology
- Strong authentication (e.g., 802.1X, individual credentials)
- Multiple SSIDs with tailored policies and profiles
- Optimized performance and security for every wireless network

Transform physical environments with Cisco Spaces

Cisco Spaces transforms branches into intelligent, optimized environments by leveraging IoT devices and existing network infrastructure. Managed through the Cisco Spaces cloud platform, this solution enhances operational efficiency, user experience, and security while providing actionable insights.

- Integrates IoT devices with Wi-Fi, switches, and cameras
- Uses network as a sensor and control fabric

- Provides centralized management via the Cisco Spaces cloud
- Enables automation, operational efficiency, and data-driven insights

Gain deep network insight with Cisco ThousandEyes

Cisco ThousandEyes, natively embedded into Cisco routing platforms, provides immediate, hop-by-hop visibility into network performance and reliability. It enables organizations to proactively monitor WAN links, overlay networks, and Software-as-a-Service (SaaS) applications to help ensure consistent, optimal performance. Key features include:

- Enterprise Agents embedded into Cisco routing platforms
- Detailed path and performance metrics across network infrastructure
- Visibility into overlay networks and critical SaaS applications
- Rapid agent activation for immediate insight

Automate network troubleshooting and operations with Cisco AgenticOps

Building on the telemetry foundation provided by ThousandEyes, Cisco AgenticOps leverages AI and extensive telemetry to automate network operations, troubleshooting, and root-cause analysis across distributed IT environments. By correlating data from network, application, and security systems, AgenticOps delivers actionable insights and guided diagnostics for NetOps and SecOps teams. Key capabilities include:

- AI-driven analytics that reduce noise, detect anomalies, and forecast potential issues
- Guided troubleshooting and root-cause analysis with Cisco AI Canvas and AI Assistant
- Automation of routine tasks and execution of validated workflows to accelerate issue resolution and reduce Mean Time To Repair (MTTR)

Enforce consistent policies across devices and users

Branches must support a mix of users, devices, and applications, requiring consistent security enforcement everywhere. Cisco provides Secure Access Service Edge (SASE)-driven, unified policy management, integrating SD-WAN, SSE, firewalls, and zero-trust segmentation—all centrally managed for effective and compliant protection.

- Integrated secure access (SD-WAN, SSE, hybrid mesh firewall, zero trust)
- Unified platform for centralized management
- Consistent policy enforcement, on-premises and remote
- Branch-as-Code automation for streamlined policy deployment and workflows

Optimize application performance across SaaS, cloud, and data center

To meet the demands of distributed applications and AI workloads, Cisco dynamically identifies and prioritizes business-critical traffic. This helps ensure optimal performance for AI, video, and IoT, preventing application sprawl from impacting user productivity and network efficiency.

- Application-aware networking with dynamic prioritization
- Granular control over business-critical traffic
- High-bandwidth, low-latency connectivity for AI and mission-critical apps
- Optimal performance that is not affected by application sprawl

Accelerate branch deployment and scaling

Cisco Unified Branch accelerates deployment by combining zero-touch provisioning with infrastructure as code and automated workflows, reducing deployment times from hours to minutes. Embedded Cisco Validated Design (CVD) best practices help

ensure consistent configurations, while drag-and-drop customization and AI-driven automation enable multidomain orchestration across Cisco and third-party applications. This approach allows enterprises to deploy and scale branch networks with consistency, reliability, and agility aligned with modern DevOps practices.

- Zero-touch deployment for rapid branch rollout
- Infrastructure as code for scalable, repeatable deployments
- Cisco Workflows with drag-and-drop customization
- Automated compliance and routine task management

The journey to a unified branch

The path to a truly unified branch starts with seamless integration. Cisco Unified Branch is designed for broad compatibility, uniting a wide array of Cisco networking and security products into a single, cloud-managed platform. By leveraging the intuitive Meraki dashboard and supporting next-generation Cisco product lines, organizations gain a flexible, full-stack solution built to support both current and future innovations.

CVDs provide tested, prescriptive blueprints for branch configurations, but the Cisco Unified Branch journey goes further. It empowers IT teams with a comprehensive framework that orchestrates diverse Cisco technologies for consistent policy enforcement, unified management, and rapid adaptation to changing branch needs. Here are the essential steps on the path to the unified branch:

- 1. Deploy AI-ready hardware for high performance:** Maximize branch performance and efficiency with Cisco's AI-ready infrastructure, designed to optimize routing, switching, wireless, and security in a unified platform. Achieve higher throughput, lower power consumption, and centralized operations across all branch elements to support demanding AI applications and help ensure seamless cloud connectivity.

2. Secure users, data, and applications

everywhere: Safeguard your branch with advanced security that delivers high-throughput protection, robust extended detection and response, and post-quantum cryptography for users, devices, and data everywhere. Cisco's integrated security stack—combining next-generation firewalls, SASE, and enhanced security efficacy—protects against evolving threats, simplifies operations, and helps ensure resilient access for all applications.

3. Simplify AI-driven configuration and

troubleshooting: Enhance operational efficiency with intelligent automation and unified management that accelerate troubleshooting, scale deployments, reduce errors, and minimize downtime through validated design templates (CVDs), making branch operations easier and more reliable.

Design and deployment services

Specialized services and automated workflows streamline the process of designing and deploying a Cisco Unified Branch, driving success from blueprint to operations. Organizations achieve faster deployment, simplified management, and consistent operational excellence throughout the branch lifecycle.

Key design and deployment services include:

Cisco Validated Designs (CVDs): CVDs provide customers with thoroughly tested, prescriptive blueprints that simplify the design of Cisco solutions across diverse technologies and network environments. While CVDs reduce design time and help ensure best practices for performance, reliability, and security, automation toolkits are essential to streamline implementation and eliminate manual configuration—helping organizations accelerate deployment and reduce risks throughout the process.

Automation toolkit: Cisco offers two flexible approaches for automating branch networking operations:

- **Branch as Code:** Manage branch networks as code while leveraging DevOps principles of automated testing and validation, version control, and rollback to enable fast, reliable deployments.
- **Cisco Workflows:** Workflows automates manual, time-consuming tasks across Cisco and third-party applications with a simple drag-and-drop user interface natively located within the Meraki dashboard. Workflows integration with Cisco AI Assistant uses AgenticOps to automate IT tasks, enabling real-time workflow automation, faster issue resolution, and actionable insights for more efficient network management.

Partner managed services: For organizations looking to establish or optimize a unified branch architecture, working with a specialized Cisco partner brings significant advantages. These managed services providers offer deep expertise in designing, deploying, and operating complex branch networks, helping ensure that best practices are followed for security, performance, and scalability while delivering ongoing operational excellence.

Conclusion

Modernizing corporate branches is vital for enhancing customer experience and driving operational efficiency. The Cisco Unified Branch architecture delivers these benefits by shifting from individual device management to orchestrating full-stack branch services as a cohesive whole. This platform-centric approach allows organizations to define their operational “intent” and automatically apply it, leading to profound simplification, consistent configurations, accelerated deployments, and faster problem resolution.

Through centralized cloud management with built-in assurance, integrated SASE, AI-driven automation, intelligent workflows, and multilayered security—including post-quantum readiness—the Cisco Unified Branch architecture delivers pervasive protection and a seamless user experience across routing, switching, wireless, and security. Enhanced visibility through AIOps and ThousandEyes empowers organizations to consolidate infrastructure, streamline operations, and respond rapidly to business needs, creating a secure, high-performing foundation for hybrid work and digital innovation in the AI era.

Partner managed services offer:

- Specialized design, deployment, and operations services
- Expert guidance for security, performance, and scalability
- Partner-driven best practices and ongoing support
- Partner collaboration capability that is built into the Cisco Unified Branch platform

Cisco Support: Cisco Support offers resources and services to help users adopt, configure, install, and troubleshoot Cisco products. It includes documentation, software downloads, security advisories, licensing help, and case management through the Cisco Technical Assistance Center (TAC), requiring a valid service contract. Cisco Support helps IT teams reduce risk, resolve issues quickly, and maintain reliable branch environments with simplified operations and enhanced knowledge.

With Cisco Support, you gain:

- Comprehensive asset and license management
- Expert guidance and personalized learning
- Greater uptime, performance, and resiliency
- Faster response and prioritized case handling
- Simplified management with AI-powered Cisco IQ

Learn more

Ready to simplify and secure your branch operations for the AI era? Explore how Cisco Unified Branch can reduce complexity, lower risk, and empower your organization to scale confidently.

Visit <https://go2.cisco.com/CiscoUnifiedBranch>.