

# What is Cisco SD-WAN?

Cisco® SD-WAN is a cloud-delivered overlay WAN architecture that enables digital and cloud transformation for enterprises. It helps ensure a predictable user experience for applications and provides a seamless multicloud architecture while integrating robust best-in-class security, all with a hugely simplified operational experience and rich analytics.

## The SD-WAN architecture comprises major building blocks in overlay, cloud, and security

- **Overlay** encompasses all elements of building and managing an SD-WAN overlay for various business needs. This includes centralized management, analytics, application policies, routing and interface supportability, and more.
- **Cloud** comprises those elements that enable the enterprise to manage connectivity, workflows, and performance for multicloud connectivity. SD-WAN becomes critical to seamlessly extend enterprise workloads to public and private clouds and SaaS.
- **Security** comprises the comprehensive security framework needed for threat protection and compliance. This includes firewalls, IPS, URL filtering, and DNS-layer security, as well as networking components such as encryption, segmentation, and authentication.

## Major advantages:

- Predictable application experience using multiple hybrid links with real-time steering based on SLA policies
- Zero-trust network security and segmentation
- Integrated security comprising enterprise firewall, IPS, AMP, DNS-layer enforcement, URL filtering, and antivirus
- Seamless public cloud expansion and SaaS optimization
- Centralized management, zero-touch provisioning, and a high degree of automation
- Rich analytics for visibility, troubleshooting, and planning
- Highly scalable to 10,000+ locations

## Shared capabilities

- SD-WAN overlay across MPLS, broadband, and LTE
- Scalable to 10,000+ locations
- Zero-touch deployment with centralized management
- Layer 3 to 7 policy and performance-based routing
- Rich analytics for visibility, troubleshooting, and planning
- Seamless public cloud expansion to AWS and Azure
- Integrated security comprising enterprise firewall, IPS, AMP, DNS-layer enforcement, and URL filtering

For more information on Cisco SD-WAN powered by Meraki, refer <https://meraki.cisco.com/sd-wan>

For more information on Cisco SD-WAN powered by Viptela, refer <https://cisco.com/go/sdwan>

Cisco Services can speed the deployment and management of your SD-WAN solution. Learn more at <https://www.cisco.com/c/en/us/products/routers/service-listing.html>

## Choosing the right Cisco SD-WAN solution

To address the diverse requirements across industries, Cisco provides two leading solutions for SD-WAN.



Cisco SD-WAN powered by Meraki® is ideal for lean IT environments in which full stack management of WAN, LAN, and security is valued, along with simple management, orchestration, and automation, or where Meraki is the predominant architecture.

Consider Cisco SD-WAN powered by Viptela® for enterprises with sophisticated environments needing customization and advanced routing, for secure isolation of enterprise assets using segmentation, or for optimizing connectivity to multicloud or SaaS applications.

SD-WAN core features (Meraki and Viptela)	SD-WAN premium features (Viptela only)
<p><b>Overlay</b></p> <ul style="list-style-type: none"> <li>• Basic 2-link overlay with LTE backup</li> <li>• Links: Ethernet, LTE</li> <li>• Hub and spoke, full mesh, partial mesh</li> <li>• Cloud management</li> <li>• Basic BGP</li> <li>• Platforms for on-premises and cloud deployments</li> </ul>	<p><b>Overlay</b></p> <ul style="list-style-type: none"> <li>• Overlay with 3+ links and LTE active-active</li> <li>• Links: Ethernet, LTE active plus T1, E1, and DSL</li> <li>• Hub and spoke, full mesh, partial mesh with multiple VPNs</li> <li>• Cloud managed or on-premise managed</li> <li>• Full routing support: BGP, OSPF, VRRP, IPv6, and multicast</li> <li>• Platforms for on-premises, cloud, and virtual deployments</li> <li>• TCP optimization, WAN acceleration, and WAN optimization</li> </ul>
<p><b>Cloud</b></p> <ul style="list-style-type: none"> <li>• DIA plus security</li> <li>• Virtual platforms for AWS and Azure</li> </ul>	<p><b>Cloud</b></p> <ul style="list-style-type: none"> <li>• DIA plus security plus real-time SaaS optimizations</li> <li>• Virtual platforms for AWS, Azure, and GCP</li> <li>• Map VPCs and VNETs to SD-WAN segments</li> </ul>
<p><b>Security</b></p> <ul style="list-style-type: none"> <li>• Enterprise firewall (1400+ apps)</li> <li>• IPS, URL filtering, and cloud security</li> <li>• Talos™ powered threat intelligence</li> </ul>	<p><b>Security</b></p> <ul style="list-style-type: none"> <li>• Enterprise firewall (1400+ apps)</li> <li>• IPS, URL filtering, and cloud security</li> <li>• Talos powered threat intelligence</li> <li>• Segmentation for isolation of business partners, lines of business, and M&amp;A</li> </ul>