SD-WAN Security

Right security, right place

Protect users, connected devices, and all traffic across the WAN

To help with the ever-increasing adoption of multicloud environments, SD-WAN offers total transport flexibility to connect directly with the cloud using the internet. The network efficiency that comes with SD-WAN creates a better user application experience and reduces cost for organizations. Unfortunately, all these benefits have a tradeoff – rearchitecting the enterprise WAN and branch networks into SD-WAN creates exposure to threats and additional security complexity.

How do you protect your newly implemented SD-WAN against internal and external threats? If you plan to deploy additional security devices or services on-premises, in the cloud, or both, could you scale easily for future traffic growth? How do you reduce the complexity of deploying and managing security solutions from multiple vendors? How about your visibility into traffic to or across branches and data centers?

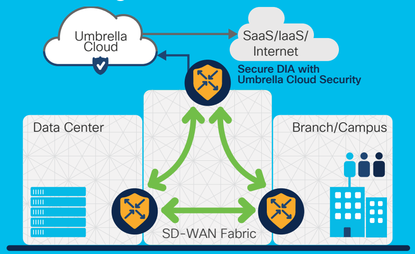
Cisco® SD-WAN offer engineering leadership in both networking and security to include full-stack multilayer security capabilities on the platform and in the cloud. Its integrated on-premises and cloud security arms IT with advanced threat defense wherever it is needed – for branches connecting to multiple SaaS or IaaS clouds, to data centers, or everything on the internet.

Built-in Full Edge Security Stack

Cisco SD-WAN offers a fulls security stack to protect against major forms of attacks arising due to opening branches to the internet.

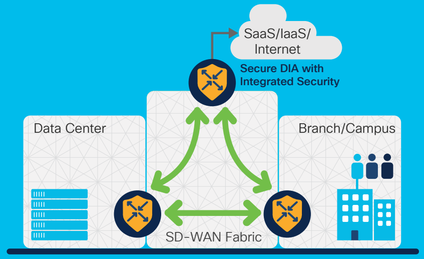
Cloud Security

Integrated connectivity and cloud-delivered security provides secure access to the internet and SaaS applications and scales for future traffic growth. Umbrella Cloud security is fully automated with Cisco SD-WAN and can be auto-configured from within the vManage dashboard.



On-Premises Security

Embedded enterprise firewall and intrusion prevention in addition to URL filtering, SSL inspection and malware sandboxing provide secure WAN access and meet compliance demands onsite.



Security benefits of Cisco SD-WAN

- Constant protection against all internal and external threats from branches to SaaS
- Improved user experience via secure direct internet and cloud access
- Centralized visibility and control for all internal, inbound and outbound traffic
- Reduced cost and complexity using a single product for networking, security, and cloud

Cisco's open, integrated SD-WAN security architecture

Cisco SD-WAN offers a full range of integrated security functionality that can be enabled on-premises and using the cloud security solution spanning major security categories: network segmentation, enterprise firewall, secure web gateway, and DNS-layer security. Each security category itself spans a different combination of security features. These security features are:

Network Segmentation: Secure isolation of different portions of the enterprise to protect critical assets

Enterprise Firewalls: Granular policy and control of thousands of applications

Secure Web Gateway: Full protection of all kinds of web-based attacks including SSL inspection

DNS Layer Security: Significantly reduce incidences by stopping threats at the earliest point

IPsec encryption: An underlying WAN fabric for securing on-premises WAN access and direct internet access

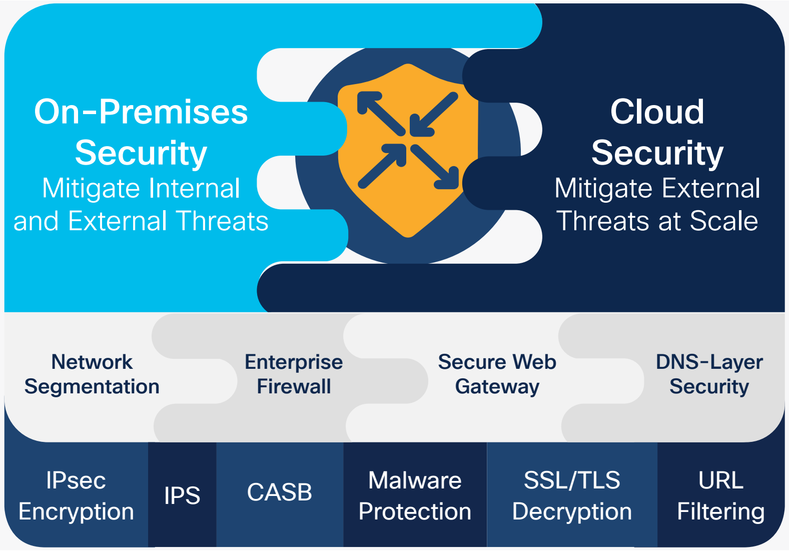
IPS: A built-in intrusion prevention system within an on-premises enterprise firewall based on Snort® and powered by Talos®

CASB: Protects against account compromises, breaches, and other major risks in the cloud app ecosystem.

Malware protection: An extended security feature across both on-premises and cloud security using Cisco AMP and Threat Grid to prevent/detect malicious files with sandboxing

SSL/TLS decryption: A security feature with unlimited scale for either cloud security or on-premises security with sufficient resources

URL filtering: An extended security feature across both on-premises and cloud platforms with 80+ web categories covering millions of domains and billions of web pages



Learn more

To learn more, please visit cisco.com/go/sdwan-security or contact your account representative.

Key SD-WAN security use cases

Secure direct internet access

The Cisco SD-WAN security delivers full protection and control against all major web attacks arising from SaaS and Internet access. The integrated security solutions provide the best balance of security and user experience for direct internet access.

Secure end-to-end segmentation, at scale

In addition to extending branch segmentation into the data center and the cloud, Cisco SD-WAN protects users and devices within a specific segment from any internal and external threats. With Cisco SD-WAN you are able to manage segmentation policies across the entire network from a single pane of glass and to adapt automatically to any network's changes.

Enforce regulatory compliance

Cisco SD-WAN addresses compliance in a holistic way by offering a comprehensive set of security controls.

Components	Security controls
Control plane	Zero trust security model
Data plane	Integrated on-premises and cloud security layers
Management plane	Role-based access control and ACLs
Platform	Trustworthy hardware, software, and solution