

Cisco ONE for Wide Area Networks Perpetual Suites

Cisco ONE™ Software helps customers purchase the right software capabilities to address their business needs. It helps deliver reduced complexity, simplified buying, and the peace of mind that today’s software investments will last into the future. These products offer a greater value to customers with more features at better together pricing.

Cisco ONE Software, combined with services for Cisco ONE, provides customers with four key benefits:

- Investment protection of software purchases through software services-enabled license portability
- Software suites that address typical customer use case scenarios at an attractive price
- Flexible licensing models to smoothly distribute customer’s software spending over time
- Access to new technology from Cisco

Table 1 outlines the common IT challenges and how Cisco ONE Software helps customers deal with these challenges.

Table 1. IT management challenges and Cisco ONE software benefits

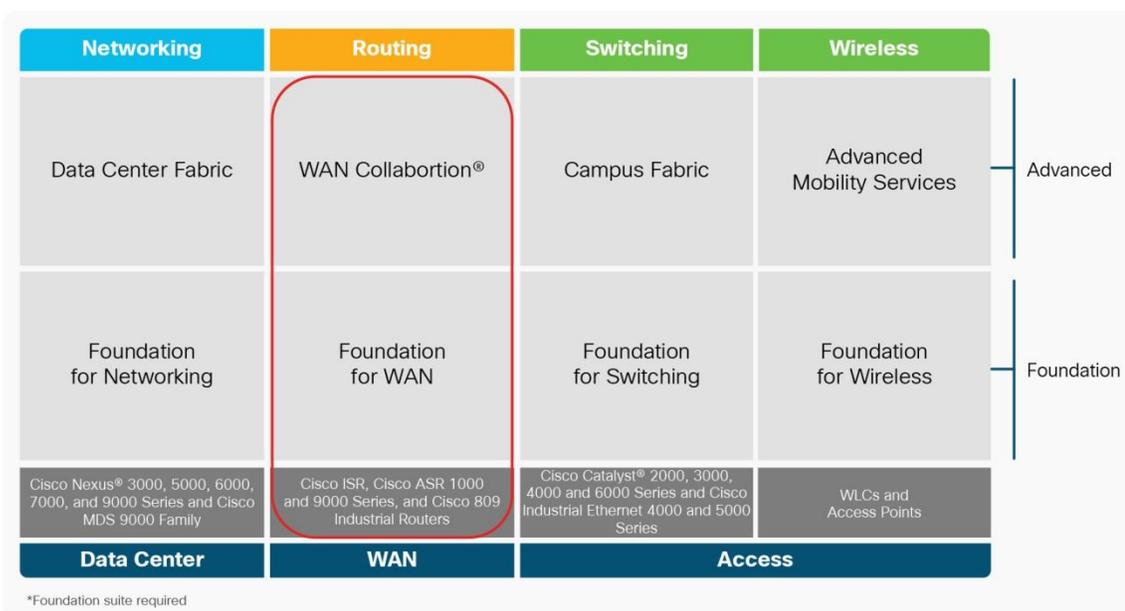
IT management challenges	Cisco ONE Software benefits
<p>Shrinking IT budgets Budgets are shrinking, while IT demands continue to accelerate. As the costs of IT and downtime skyrocket, companies need to balance shrinking budgets with easy-to-deploy networks that enhance operational efficiency.</p>	<p>Delivers more value for your money Cisco ONE Software is designed for typical customer use scenarios and offered at a better together price, making it easier and less expensive to deploy complete solutions.</p> <p>Increase investment protection Software services-enabled license portability lets your software licenses stay current through hardware upgrades and replacements at no additional cost.</p>
<p>Infrastructure inflexibility IT organizations lack an automated way to keep pace with changing business needs and demands for more resources. It often takes months or weeks to procure and provision a new network service.</p>	<p>Enhances business agility Cisco ONE Software delivers critical business solutions and provides you with the tools you need to deploy, maintain, and manage your software.</p>
<p>Lack of buying options Organizations need more options for buying software to improve their flexibility, reduce risk, and cut costs.</p>	<p>Supplies flexible licensing models Evenly distribute your software spending over time with subscription-based and other flexible purchasing models.</p>
<p>Implementation risk Deploying new software and implementing new use cases can cause major disruptions to current operations.</p>	<p>Reduces risk Cisco’s technical and professional services provide the expertise, smart tools, and proven processes that reduce risk and lower downtime.</p>
<p>Excessive time and costs for maintenance The majority of your IT budget and most of your workloads are focused on routine maintenance, limiting your ability to innovate and grow your business.</p>	<p>Accelerates ROI and time to value Optimize the performance of your networks to get the most out of your technology investments. Accelerate your business outcomes with expert guidance from Cisco® technical and professional services.</p>

Product overview

What is Cisco ONE for WAN?

As new services proliferate in your network, the demand for bandwidth on your WAN increases dramatically. Businesses must transform the WAN to keep pace with these new requirements and do it with sustainable costs. Evolving to an Intelligent WAN architecture allows you to accelerate deployment of services to all remote sites and helps ensure a high-quality user experience by prioritizing and optimizing critical latency-sensitive applications. Cisco offers a complete solution that delivers an optimal experience over any connection while getting the most from your WAN investment with secure, fault-tolerant connectivity. It also extends the Cisco unified communications infrastructure to your branch and edge networks. With Cisco ONE Software, Cisco makes it easy to purchase and deploy complete solutions (Figure 1).

Figure 1. Cisco ONE Software perpetual suites



Cisco ONE for WAN gives organizations broad capabilities for branch offices and the enterprise edge. Cisco ONE Foundation for WAN connects and secures your branch office while optimizing for cost. Cisco ONE WAN Collaboration integrates voice and video into your branch and network edge. WAN Collaboration can be purchased independently of Foundation for WAN.

Benefits of Cisco ONE for WAN

Cisco ONE Foundation for WAN

Connect your branches and campus securely at an optimal cost:

- Reduce WAN bandwidth expenses and optimize bandwidth usage by choosing the best path (such as Internet or Multiprotocol Label Switching [MPLS]) for critical applications. Deploy an Intelligent WAN that can deliver up to five-nines reliability.
- Get the most from your investment with efficient WAN utilization. Improve application performance through application protocol acceleration and optimization techniques that offload the WAN.

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- Improve network security with access control and data encryption. Scale secure connectivity across all remote sites.
 - Save IT time with zero-touch deployment and quickly automate and secure your branch offices with audit tracking. Automate WAN deployment with centralized policy and distributed enforcement.

Cisco ONE WAN Collaboration

Integrate voice and video across your branches and campus to increase productivity:

- Simplify transition to IP collaboration at your own pace and budget.
- Improve the reliability of branch and cloud telephony.
- Extend rich media capabilities with secure video.
- Easily migrate from Time-Division Multiplexing (TDM) to Session Initiation Protocol (SIP) trunking.
- Encrypt and authenticate media.
- Centrally manage all collaboration sessions.

Software components of Cisco ONE for WAN

Whether you want to implement new branch initiatives, optimize existing WAN investments, add head-end innovations, or secure WAN connectivity, Cisco ONE for WAN gives you the software tools to accomplish your goals.

Cisco ONE Foundation for WAN

Complete application view of the network with granular control over each application

- [Cisco Application Visibility and Control \(AVC\)](#) provides application-level classification, monitoring, and traffic control to improve the performance of business-critical applications. The Cisco AVC solution helps to identify and classify over 1000 on-premises and cloud applications; monitor application response time, latency, jitter, and other performance metrics; export application performance metrics with the Cisco IOS® NetFlow v9 feature or IP Information Flow Export (IPFIX); and set different priorities and dynamically choose network paths based on application and business needs.
- [Flexible NetFlow](#) is the next-generation in flow technology allowing optimization of the network infrastructure, reduced operation costs, improved capacity planning, and security incident detection with increased flexibility and scalability. Flexible NetFlow has many benefits above the Cisco traditional NetFlow functionality that has been available for years in Cisco hardware and software.
- [Network-Based Application Recognition Version 2 \(or Next Generation NBAR\)](#) enhances the application recognition engine to support more than 1000 applications and subclassifications. NBAR2 also provides additional capabilities, such as application attributes, which provide grouping of applications with similar properties into category, subcategory, application group, etc. NBAR2's categorization of protocols into meaningful terms simplifies report aggregation and control configuration. NBAR2 also provides field extraction capability, such as HTTP URL, SIP domain, mail server, etc., which allows you to extract information from the application for classification or exporting.
- [Performance Routing Version 3 \(PfRv3\)](#) is the evolution of Performance Routing (PfR). PfRv3 is an intelligent-path control mechanism for improving application delivery and WAN efficiency. It protects critical applications, increases bandwidth utilization, and serves as an integral part of the Cisco Intelligent WAN (IWAN) solution. PfRv3 uses Differentiated Services Code Points (DSCPs) and an application-based policy framework to provide multisite-aware bandwidth and path-control optimization.

Complete network threat identification, mitigation, and elimination

- [IP Security \(IPsec\) VPN](#) is a robust, standards-based encryption technology that enables your organization to securely connect branch offices and remote users and provides significant cost savings compared to traditional WAN access such as Frame Relay or ATM. One of the most widely deployed network security technologies today, IPsec VPNs provide high levels of security through encryption and authentication, protecting data from unauthorized access.
- [Cisco TrustSec](#) security simplifies the provisioning and management of secure access to network services applications. Unlike access control mechanisms that are based on network topology, Cisco TrustSec policies use logical groupings, so access is consistently maintained even as resources are moved in mobile and virtualized networks. Decoupling access entitlements from IP addresses and VLANs simplifies security-policy maintenance tasks, lowers operational costs, and allows common access policies to be consistently applied to wired, wireless, and VPN access.
- Router-based [SSL VPN](#) an industry first, offers "anywhere" connectivity not only from company-managed resources but also from employee-owned PCs, contractor or business partner desktops, and Internet kiosks. Cisco Secure Desktop, a component of SSL VPN, provides data theft prevention even on noncorporate devices.
- [MAC Security \(MACsec\)](#) provides secure communication on wired LANs. When MACsec is used to secure the communication between endpoints on a LAN, each packet on the wire is encrypted using symmetric key cryptography so that communication cannot be monitored or altered on the wire.
- [Zone-based firewall](#) offers intuitive policies for multiple-interface routers, increased granularity of firewall policy application, and a default deny-all policy that prohibits traffic between firewall security zones until an explicit policy is applied to allow desirable traffic.

WAN acceleration and MPLS

- [Cisco Wide Area Application Services \(WAAS\) and virtual WAAS \(vWAAS\)](#) are the first cloud-ready WAN-optimization solutions to accelerate applications delivered from private and virtual private cloud infrastructure, using policy-based on-demand orchestration.
- Cisco AppNav-XE is integrated into Cisco IOS XE software to enable on-demand elastic provisioning and pooling of Cisco WAAS and vWAAS resources. It provides robust virtualization, control, and management capabilities and enables a more natural migration to the cloud.
- [Multiprotocol Label Switching \(MPLS\)](#) enables enterprises and service providers to build next-generation intelligent networks that deliver a wide variety of advanced, value-added services over a single infrastructure. This economical solution can be integrated transparently into any existing infrastructure, such as IP, Frame Relay, ATM, or Ethernet. Subscribers with differing access links can be aggregated on an MPLS edge without changing their current environments, as MPLS is independent of access technologies.

Network management

- [Cisco Prime® Infrastructure](#) is network management that connects the network to the device to the user to the application: end to end and all in one. Its capabilities permit simplified deployment of Cisco value-added features and single pane of glass management. It increases application visibility and serves as the core management solution for wireless and wired lifecycle management and assurance.

Cisco ONE WAN Collaboration

Unified communication and IP telephony for the network

- [Cisco Unified Communications Manager Express](#) unifies all your voice, video, data, and mobile applications for collaboration for your independent branch offices.
- [Cisco Unified Survivable Remote Site Telephony \(SRST\)](#) extends your centralized unified communications deployment to a resilient branch office that continues to operate during a WAN or central office failure.
- [Cisco Unified Border Element \(CUBE\)](#), Cisco's session border controller, allows control of SIP services with registered external entities, most commonly service providers that offer Voice over IP (VoIP) services based on the SIP or H.323 protocol.
- [Cisco TDM gateways](#) offer a variety of different voice network modules to deliver IP connectivity to the public switched telephone network, Private Branch Exchange (PBX), or an analog device. They also provide toll-bypass services within an enterprise network.

Cisco platforms supported by Cisco ONE for WAN perpetual offers

The following WAN platforms are supported:

- [Cisco 800 Series Routers](#) (890, 880)
- [Cisco 1000 Series Integrated Services Routers](#) (ISRs) (1100, 1900)
- [Cisco 4000 Series ISRs](#) (4221, 4300, 4400)
- [Cisco ASR 1000 Series Aggregation Services Routers](#) (ASRs) ([ASR 1001-X](#), [ASR 1002-X](#), [ASR 1001-HX](#), [ASR 1002-HX](#), [ASR 1004](#), [ASR 1006](#), [ASR 1006-X](#), [ASR 1009-X](#), [ASR 1013](#))
- [Cisco ASR 9000 Series ASRs](#) ([A99-8X100GE](#), [A9K-4X100GE](#), [A9K-MOD200](#), [ASR 9001](#))
- [Cisco 809 Industrial Integrated Service Routers](#) (IR 8x9)
- [Cisco 5000 Series Enterprise Network Compute System](#) (ENCS)

Cisco ONE for WAN capabilities by platform

Table 2 lists the features and capabilities of Cisco ONE for WAN. The top part of the table lists the features for Cisco ONE Foundation for WAN across the different platforms. The bottom part of the table lists features for Cisco ONE WAN Collaboration.

Table 2. Features and capabilities of Cisco ONE for WAN

Cisco ONE for WAN capabilities by platform										
Features and capabilities	IR 8x9	Cisco Integrated Service Routers							ASR 1000	ASR 9000
		880 Series (881, 886, 887, 888)	890 Series (891, 892, 897)	1100 Series	1900 Series	4221 Series	4300 Series (4321, 4331, 4351)	4400 Series (4431, 4451)	ASR1001-X/HX, ASR1002-X/HX, ASR1004, ASR1006/X, ASR1009X, ASR1013	A99-8X100GE, A9K-4X100GE, A9K-MOD200, ASR 9001
Cisco ONE Foundation for WAN										
Complete application view of the network with granular control over each application										
Cisco Application Visibility and Control (AVC)		✓	✓	✓	✓	✓	✓	✓	✓	
Flexible NetFlow (FnF)		✓	✓	✓	✓	✓	✓	✓	✓	
Network-Based Application Recognition Version 2 (NBAR2)		✓	✓	✓	✓	✓	✓	✓	✓	
Per-flow Routing (PFR3)		✓	✓	✓	✓	✓	✓	✓	✓	
Complete network threat identification, mitigation and elimination										
IP Security (IPsec) VPN	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Cisco TrustSec					✓	✓	✓	✓	✓	
Secure Sockets Layer (SSL) VPN		✓	✓		✓				✓	
MACsec							✓	✓	✓	✓
Zone-based Firewall (ZBFW)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
WAN acceleration and MPLS										
Cisco WAN Optimization (WAAS)						✓ ISR 4331 and 4351 – 750 sessions; ISR4321 – 200 sessions	✓ ISR 4451 – 2500 sessions; ISR4431 - 1300 sessions			
AppNav XE						✓	✓	✓		
Multiprotocol Label Switching (MPLS)			✓		✓	✓	✓	✓	✓	✓
Network management										
Cisco Prime Infrastructure - Lifecycle License	✓	✓	✓		✓	✓	✓	✓	✓	

Cisco ONE for WAN capabilities by platform										
Features and capabilities	IR 8x9	Cisco Integrated Service Routers							ASR 1000	ASR 9000
		880 Series (881, 886, 887, 888)	890 Series (891, 892, 897)	1100 Series	1900 Series	4221 Series	4300 Series (4321, 4331, 4351)	4400 Series (4431, 4451)		
Prime Infrastructure - Assurance License	✓	✓	✓		✓	✓	✓	✓	✓	
IWAN App on APIC-EM			✓		✓	✓	✓	✓	✓	
Cisco ONE for WAN Collaboration										
Unified communication and IP telephony for the network										
*Cisco Unified Border Element (CUBE) Enterprise Edition						10 sessions	10 sessions	4321/4331 –10 sessions, 4351 – 25 sessions	25 sessions	
Cisco Call Manager Express – UC apps						25 seats	25 seats	25 seats	25 seats	
*Survivable Telephony (SRST) – UC apps						25 seats	25 seats	25 seats	25 seats	
UC License (TDM voice gateway)						✓	✓	✓	✓	

* Additional sessions and seats licenses can be purchased individually.

** Features supported only on 880 3G/4G and dual-WLAN radio-capable models.

Cisco and partner services

Cisco ONE Software services

Services from Cisco and our certified partners enable the primary features of Cisco ONE Software to help you maximize business outcomes and protect your investment. Pairing support for software and hardware provides the best set of benefits to reduce costs and keep your business on track.

Cisco ONE Software Foundation and Advanced Applications suites both use Cisco Software Support Service (SWSS) for ongoing support and maintenance. SWSS provides the technical support expertise you need to successfully navigate the rich features and functionality of Cisco ONE Software, and is required for a minimum of 12 months. SWSS protects your investments through access to ongoing innovation, license portability, major software upgrades, minor software updates and maintenance, access to the award-winning Cisco Technical Assistance Center (TAC), and instant access to online resources. By providing integrated and comprehensive services, we help you quickly resolve issues while seeing cost savings and productivity gains.

Your SWSS contract provides:

- Access to the TAC for software issues 24 hours a day, 7 days a week
- Major upgrades, minor updates, and maintenance for licensed software applications
- Software license portability entitlement
- Access to ongoing innovation
- Access to online resources
- Investment protection

To help ensure coverage for your Cisco base OS software and hardware, Cisco Smart Net Total Care (SNTC) is highly recommended. SNTC provides 24-hour global support for the underlying hardware platforms where Cisco ONE Software is deployed.

Cisco Smart Net Total Care includes access to TAC for hardware and entitlement to smart capabilities to reduce your operating expenses and free your IT staff to focus on business innovation. Entitlement provides self-service access to the SNTC portal, free download of the Cisco collector software, and community support for the portal and collector. SNTC includes:

- Access to the TAC for hardware and base OS software issues 24 hours a day, 7 days a week
- Software updates for base OS software
- Access to online resources
- Advance hardware replacement
- Entitlement to smart capabilities

By providing integrated and comprehensive services, we help you quickly resolve issues while seeing cost savings and productivity gains.

Professional services for Cisco ONE Software

Professional services for Cisco ONE Software include optional Quick Start enablement services customized to domain-specific Cisco ONE software bundles and use cases. These enablement services help you to unlock and rapidly absorb software feature capabilities.

With expert guidance, processes, and tools, Cisco and our partner professional services organizations help you fully realize the technology benefits of Cisco ONE Software, reduce implementation risk, and achieve faster time to value. These fixed-scope, fixed-price services can be ordered with Cisco ONE Software products with a single click, greatly simplifying the ordering process.

Quick Start services include basic end-to-end turn-up of new capabilities, which, depending on the specific software, may include one or more of the following:

- Technology transformation and strategy workshop
- Readiness assessment of software environment
- Logical changes to underlying network, computing, or storage architecture
- Software installation, configuration, and customization
- Task automation and orchestration
- Migration and onboarding

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- Feature and functionality test
 - Development of operational run books
 - Knowledge transfer

Cisco also offers an optional set of day-2 services for adoption, change management, and optimization for Cisco ONE Software, including ongoing support for:

- Change governance
- Continuous assessment, monitoring, and optimization of software features and capabilities
- Basic enablement and design for additional capabilities
- Basic enablement and design for system integration
- Planning for technology optimization and transformation
- Proactive bug scrubs, metrics measurement, and software reviews

The combination of day-1 (planning and deployment) and day-2 (managing, operating, and optimizing) professional services delivers optimal support for Cisco ONE Software and enhances your ability to continuously achieve your desired business outcomes.

Cisco ONE for WAN ordering information

View the [list of Cisco ONE for WAN product and service part numbers](#).

Cisco Capital Financing to help you achieve your objectives

Cisco Capital[®] financing can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce CapEx, accelerate your growth, and optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital financing is available in more than 100 countries. [Learn more](#).

For more information

To learn about how Cisco ONE Software can help your organization, visit the Cisco ONE website: <https://www.cisco.com/go/one>. If you are interested in having a conversation about Cisco ONE Software, please contact your account manager or authorized reseller



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

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