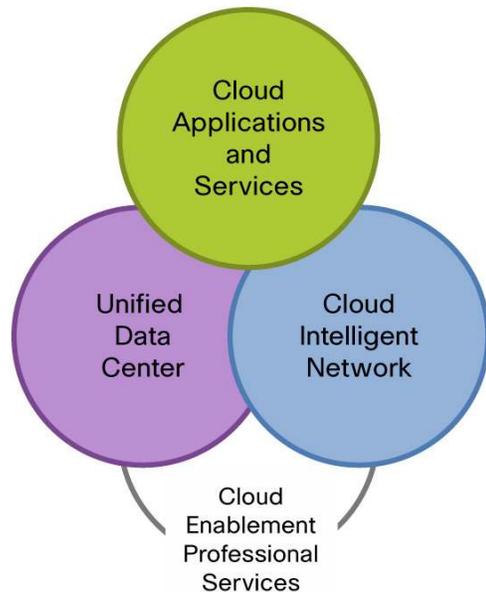


Applications and Services in the Cloud: Providing Flexibility to Enhance Business

What You Will Learn

Cisco® Cloud Applications and Services allow organizations to give users what they need to do business — when, where, and how they need it. With flexible deployment models that complement on-premises and hybrid options, Cisco Cloud Applications and Services include hosted applications and the tools service providers and others need to host applications (Figure 1).

Figure 1. Cisco Cloud Applications and Services



Challenge: Why Clouds for Service Delivery?

There is a lot of talk about “the cloud” and concepts of magic spaces that hold data and simplify your business. There also is a lot of talk about everything being new and different. In some ways it is — clouds provide a new level of flexibility in application and data delivery. Provisioning applications and services from a cloud provides operational benefits without the capital expenses of on-premises environments.

Cloud momentum is accelerating. The economic and agility benefits of clouds are creating significant change in the delivery and consumption of IT services, applications, and content. Cisco enables a world of many clouds — connecting people and organizations within a cloud, between clouds, and beyond the cloud — and unified across clouds. There are many variations: private clouds, public clouds, and hybrid clouds, as well as communities of clouds for healthcare, finance, or governments.

As direct consumers of cloud-hosted applications and services from Cisco and our partners, end users get access to high-performance, enterprise-class applications and services.

Benefits of Cloud Delivery

IT focus is shifting to service delivery as content and applications are increasingly being delivered on demand and to mobile users. Organizations can achieve significant benefits by taking advantage of applications and services offered through the cloud, which:

- Deliver consistency of service across devices
- Help ensure access to an always-current version
- Support easy service procurement and activation
- Enable rapid deployment at scale
- Are inherently “business-to-business-ready” for customers, partners, and suppliers
- Shift IT spend from capital expenditures (CapEx) to operating expenses (OpEx)
- Allow organizations to focus on “core” vs. “context” as appropriate

The critical factor is still about making sure it works and making sure your teams can work. Users do not want new and different for the sake of it, they want what works. For users, cloud is just another delivery model. It should be transparent, behind the scenes, back-end, and invisible. Whether it is an on-premises setup in a data center or a cloud from beyond the boundaries of the organization, the users' only concern is that they can complete their tasks and be assured of a consistent experience.

Collaboration Through the Clouds

Cisco focuses on delivering a compelling and consistent user experience for every service delivered from the cloud. These services can be delivered anywhere, on any device, at any time with the security, performance, and reliability previously possible only through traditional on-premises deployments.

- **Interoperability:** Cisco offerings help you protect your existing IT investments through interoperability with other premises- and standards-based solutions. If, like many companies, you rely on Microsoft desktop productivity applications, the Cisco WebEx cloud can provide user-availability information directly within Microsoft Office applications.
- **Integration:** The offerings enable you to continue using existing business applications with the added features of Cisco WebEx cloud services. It is not about “ripping and replacing” everything, it is about taking advantage of enhancements that make things easier and improve business processes.
- **Maintenance:** The growing portfolio of Cisco WebEx cloud services applications does not require updates to on-premises equipment, and you can minimize time and effort spent in deploying new and upgraded applications while reducing the risks of technology obsolescence.

You can get Cisco WebEx cloud services in two ways: from Cisco or from our partners that build, provide, and resell hosted services.

Cisco WebEx Cloud Services

As direct consumers of hosted applications, your users get business-critical, enterprise-class collaboration applications directly from the Cisco WebEx cloud. These services allow you to get what you need to collaborate — when, where, and how you need it.

The new collaboration experience is more mobile, social, visual, and virtual. In the post-PC era, Cisco solutions support flexible cloud delivery models and “bring-your-own-device” models for new levels of freedom and productivity. Whether from partners or the Cisco WebEx cloud, you can enjoy more effective meetings, in-person visual experiences, and secure document sharing anywhere, anytime, and on any device. The applications enable more natural collaboration, helping people hear and see one another, meet, share ideas and content, and improve their working relationships and productivity.

Cisco WebEx cloud offerings include the following products and features:

- **Cisco WebEx® Meetings**
 - Manages the entire web conferencing lifecycle, supporting prework, web meetings, follow-up, and related content
 - Increases productivity and accelerates results with the ability to meet anytime, anywhere — even on mobile devices
 - Delivers compelling and cost-effective training sessions, demos, sales presentations, and online events
 - Hosted by Cisco and our partners
- **Cisco WebEx Connect**
 - Allows you to use instant messaging and access presence information from any workspace on any device
 - Indicates who is available and how you can interact with them — message, mail, phone, or video
 - Delivers a rich, consistent experience across PCs, Macs, tablets, and mobile phones
 - Hosted by Cisco and our partners
- **Cisco WebEx Telepresence**
 - Offers a hosted subscription telepresence service for small and medium-sized businesses
 - Allows you to be operational in minutes with simple, ready-to-use service activation
 - Offers unlimited video calling to any standards-based telepresence or video system
 - Implemented and activated by partners; hosted by Cisco with live business-class customer support
- **Cisco WebEx Social**
 - Combines the power of enterprise social networking, content creation, and real-time communications
 - Instantly share information and knowledge across teams, departments and geographies
 - Enable employees anywhere to quickly find the people and resources they need to get work done
 - Create and capture intellectual capital in one secure, centralized location

Partner-Hosted Cisco Collaboration Services

Cisco enables providers to deliver collaboration services with integrated, pretested Cisco and partner infrastructure solutions. Building upon Cisco’s end-to-end collaboration architecture and Cisco Validated Designs, partners build cloud collaboration services that support your business priorities, based on:

- A continuously evolving and expanding portfolio of Cisco Collaboration solutions (on demand)
- Architectural blueprints and light-touch services that help ensure security and full management across the collaboration suite

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- A rich media and consistent user experience, anywhere, with any content, on any device, in any consumption model

Cisco partners take advantage of the following Cisco solution platforms to create and host collaboration services:

- **Cisco Hosted Collaboration Solution**
 - Unified communications and collaboration applications with a cloud-ready virtualization platform under a centralized management system
 - Scalable architecture based on Cisco Validated Designs
 - Provides access to the latest collaboration applications
 - Simplifies support and maintenance
- **Cisco Hosted Collaboration Solution for Contact Center**
 - Quickly and cost-effectively delivers contact-center solutions to end users
 - Lets you subscribe to the application you need as a service in the cloud
 - Includes 500- and 1000-agent deployment models
 - Allows you to benefit from fast deployments, flexibility, operational efficiency, and consistent end-user experiences
 - Includes Computer Telephony Integration Object Server (CTIOS) desktop, interactive-voice-response (IVR) support, and more
- **Cisco TelePresence Exchange System**
 - Is a flexible telepresence and video service-creation platform
 - Provides cloud-based managed and hosted Cisco TelePresence services
 - Supports telepresence, video interoperability, and advanced media services
 - Enables you to build partner communities for telepresence and standard video

Security Through the Clouds

Cloud computing introduces security risks and concerns around technology and business processes. To succeed with cloud computing, organizations must address these new concerns. The [Cisco SecureX Architecture™](#) framework enables organizations to establish and enforce consistent cloud-based security policies, receive up-to-date threat intelligence, and enable greater scalability and improved performance.

The Cisco SecureX Architecture framework provides context-aware policy and enforcement across the entire distributed network environment. In addition, it secures access to applications that reside in the cloud, data moving to and from applications, and application servers. It can also create and enforce security zones so users from different companies can access only their own applications and data. Cisco SecureX Architecture also controls access to software-as-a-service (SaaS) applications by authenticating users and managing access privileges and controls. [Cisco Cloud Security](#) solutions, supported by the Cisco SecureX Architecture framework, include:

- **Secure Cloud Infrastructure:** High-end firewall, VPN, and intrusion-prevention-system (IPS) solutions as well as the [Cisco Virtual Security Gateway for Nexus 1000V Series Switch](#) and Cisco ASA 1000V Cloud Firewall
- **Cloud Security Services:** Cisco Security Intelligence Operations (SIO), Cisco Cloud Email Security, and Cisco ScanSafe Cloud Web Security

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- **Secure Cloud Access and Communications:** Cisco AnyConnect™, Cisco TrustSec®, and Cisco SaaS Access Control technologies

As a critical component of Cisco Cloud Security Services, [Cisco SIO](#) has visibility into 35 percent of global email traffic, with daily visibility into more than 100 million email messages, 30 billion web requests, and feedback from more than 150 million endpoints and 700,000 security devices deployed at customer sites and Cisco data centers located throughout the world. Cisco SIO processes this data for threat analysis and correlation — translating into 1 terabyte of overall data inflow — and then converts it into actionable security updates that are pushed to Cisco security devices throughout the day to provide customer networks with critical, real-time security intelligence and threat protection.

Cloud Delivery of Video

The Cisco Videoscape™ Mobile Solution is an open platform that uses clouds, the network, and client devices to deliver new video experiences over the Internet. [Cisco Videoscape Cloud Solutions](#) help service providers deliver new cloud content and applications with optimal flexibility, velocity, and scalability.

Cisco Videoscape Cloud Solutions provide the platform for service providers to converge content, applications, and communications from any source such as live TV, on-demand content, online video, social media, third-party applications, video communications, and advertising. Using advanced transcoding and streaming tools, these solutions can efficiently deliver experiences to any screen, with the best possible video quality for the available bandwidth. They can then bundle, monetize, and deliver those unified experiences to any screen, on any network or device.

Advanced virtualization and energy-efficiency technologies allow companies to reduce operating costs, even as they reduce the effect on the environment.

Cisco Videoscape Cloud Solutions include the [Cisco Videoscape Media Suite](#), which uses an intelligent cloud-based platform with full lifecycle content management to allow service providers to efficiently and cost-effectively manage and publish content over multiple networks to multiple screens.

Third-Party Service Delivery

The Cisco strategy is to enable customers and partners to deliver cloud applications and services. Part of that strategy includes support for third-party cloud services with a broad ecosystem of technology partners and a portfolio of certified enterprise applications and services.

Because Cisco's cloud portfolio is based on the [Cisco Unified Computing System™](#) (Cisco UCS™), Cisco has developed a third-party ecosystem of Cisco UCS Certified Cloud Applications and Services, enabled in part through the [Cisco Developer Community](#) IVT Program. This ecosystem addresses a broad range of operating systems and includes industry-leading applications and tools for:

- Systems management
- Service orchestration
- Monitoring and analysis
- Deployment and configuration
- Subscriber data management, policy control, and service control (Policy and Charging Rules Function [PCRF])

Cisco works to provide fully tested, integrated solutions with industry-leading partners including EMC, NetApp, VMware, BMC, CA, RedHat, and others. This integration offers organizations a choice of complete solutions that can dramatically reduce time and complexity of cloud services deployment, further supporting:

- Rapid time to value
- Delivery of new capabilities
- Flexible deployment and scalability models
- Mitigation of technology obsolescence through access to up-to-date applications

This comprehensive set of integrated solutions is designed to help companies accelerate cloud success and realize the full value of their cloud implementation. Examples include:

- FlexPod with NetApp
- Vblock with VCE
- Virtualization with VMware, Microsoft, Citrix, RedHat, and BMC

Together we offer a choice of complete solutions that dramatically reduce the time for an enterprise or service provider to deploy cloud services. Cisco simplifies and accelerates the use of cloud services by providing service-delivery solutions including WebEx Cloud, Video Delivery, Infrastructure as a Service, Virtualization Experience Infrastructure (VXI), Security-as-a-Service, and others. Cisco complements these solutions and services with a comprehensive portfolio of cloud enablement services to rapidly design, set up, and manage cloud solutions.

Why Cisco?

The network is the platform for clouds. We live in a world of many clouds, in which IT becomes IT as a Service (ITaaS), and in which people can collaborate dynamically and consume content on demand.

Cisco enables IT to provide services and connect people to collaborate, while providing a consistent and desired user experience regardless of delivery method (cloud, on-premises, or hybrid). The key to getting the most out of cloud services is to take advantage of flexible deployment options that give you the highest usage of your resources, supporting high productivity, cost-effectiveness, and user satisfaction. Whether delivered directly by Cisco or through partners, Cisco provides industry-leading solutions that unify and simplify cloud resources, integrating the data center and the network and improving the delivery of cloud services.

Cisco's cloud portfolio is a powerful set of capabilities enabling organizations to build public, private, and hybrid clouds and offer new cloud services and applications dynamically, and on demand. Cisco uniquely combines the three pillars of cloud computing — Innovative Cloud Applications and Services, Unified Data Center, and Cloud Intelligent Network — into an integrated architecture that helps organizations realize the promise of the world of many clouds. Only Cisco uniquely enables this world of many clouds — connecting people and organizations with an assured cloud experience.

Cisco and our partners provide a spectrum of industry-leading capabilities, with professional service and technical support expertise across data center, network, and collaboration application environments. We can help you realize the full value of your collaboration solution across the deployment that is right for your organization, whether it is in the cloud, on-premises, or a hybrid.

For More Information

- Learn more about Cisco Cloud Applications and Services at <http://www.cisco.com/go/cloudapps>.
- Watch a video about the benefits of the Cisco Hosted Collaboration Solution at <http://www.cisco.com/go/hcs>.
- Learn more about Cisco Cloud Security at <http://www.cisco.com/go/cloudsecurity>.
- The [Cisco Collaboration portfolio](#) includes products in four major areas, all designed to improve your organization's ability to work more effectively with employees, partners, and customers.



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