WHITE PAPER

Why the Cloud for Collaboration?

Sponsored by: Cisco Systems Inc.

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EXECUTIVE SUMMARY

Cloud services have emerged as one of the prevailing IT trends as we move further into this decade. IDC sees cloud services as a key transformational technology for the business marketplace, providing greater levels of automation, orchestration, provisioning, and deployment. How important is the cloud? The trend of organizations leveraging technology in a way that optimizes the use of cloud services is gaining considerable traction. IDC research indicates that worldwide SaaS and cloud software revenue reached $29.4 billion in 2012, representing 28.1% year-over-year growth, and will grow to $67.2 billion in 2016.

Today, organizations are considering cloud services for a range of technology applications — from computing, email, storage, payroll, HR, and CRM to voice, unified communications (UC), Web conferencing, collaboration, and video. For collaboration in particular, IDC sees cloud services as an enabler and accelerator of collaboration and business benefits. IDC estimates that the collaborative applications segment of the U.S. SaaS applications market grew 10.6% year over year in 2012 to over $2.6 billion in revenue. Current market research indicates that Web conferencing/videoconferencing and UC are at or near the top of the list of applications most likely to move to the cloud. Cloud collaboration services can help organizations become more nimble, reduce operating costs, collaborate more efficiently internally and across global borders and regions, significantly improve worker productivity, and better allocate their internal resources, among other important benefits.

This IDC white paper discusses some of the strategic benefits and advantages associated with a migration to a cloud-based collaboration offering as well as the challenges that CIOs and decision makers face when making such a move. It describes key decision criteria and the thought process behind a move to the cloud for collaboration and provides an example of Cisco Hosted Collaboration Solution (HCS) as a market-leading solution.

SITUATION OVERVIEW

Cloud services have emerged as a viable option for IT organizations to reduce complexity in their environments and ensure quality of service (QoS) while reducing the burden on their IT environment, infrastructure, and resources. They can help IT departments more rapidly scale their resources while retaining the flexibility to adapt to changing business requirements. Cloud services can provide "elasticity" by enabling organizations to put the right amount of resources in the right place at the right time.

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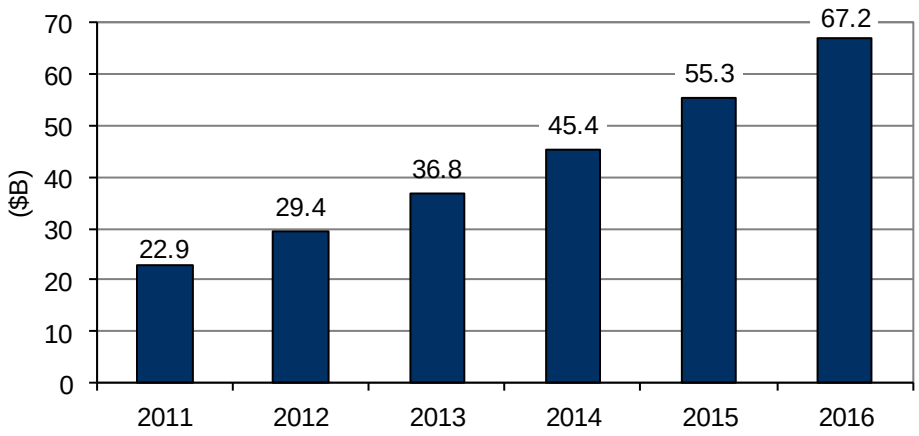
Cloud services also reduce operating costs. By shifting the management burden to an outsourced provider, organizations can reduce their physical footprint, building space, power, and overall liability. They can also reduce the labor hours required to manage and maintain their servers, equipment, and applications, whether physical or virtual, and can replace periodic large capital outlays with ongoing, manageable monthly fees.

IDC's *Worldwide SaaS and Cloud Software 2012–2016 Forecast* (IDC #236184, August 2012) indicates that collaborative applications (including instant communications, enterprise social software, conferencing, team collaboration, and email) were expected to account for 14% of the total U.S. cloud applications market and 51% of the total U.S. collaborative applications segment revenue in 2012. An IDC evaluation of 203 United States–based SaaS providers found that a high percentage of cloud collaboration adopters polled across these collaborative segments either were "already migrating" to cloud services or were "likely to migrate within two years," with none of those polled under the collaborative applications segment indicating they were "unlikely to migrate."

Figure 1 shows IDC's 2011–2016 forecast for worldwide SaaS and cloud software revenue (IDC #236184, August 2012). SaaS and cloud software delivery models enable customers to access and consume system infrastructure software (SIS), applications-as-a-service, and application development and deployment (PaaS) functionality built specifically for network delivery and hosted, provisioned, and accessed by users over the Internet.

FIGURE 1

Worldwide SaaS and Cloud Software Revenue, 2011–2016



Source: IDC, August 2012

The previously mentioned IDC metrics highlight the worldwide SaaS and cloud software market and the U.S. cloud collaborative applications market segment because they are the fast-growing areas. But there is also a highly relevant and large market demand for the hardware that cloud collaboration and SaaS create (i.e., multiple devices plus other items). In addition to PCs and other general-purpose devices (such as tablets and smartphones), collaboration SaaS has a real hardware attach rate of purpose-built

devices and appliances that help deliver the experiences and workloads associated with collaboration. IP phones (especially new models such as the Cisco DX600), telepresence endpoints (personal and room), failover servers (such as Cisco SRST), and gateways (for SIP and PSTN connectivity) are all good examples of purpose-built hardware devices that are not only required but also desired by end users for a better user experience.

So this is not solely about SaaS, smartphones, and applications; increasingly, it's about the user experience and making that experience as rich as possible — with hardware devices that complement, improve, and preserve the collaboration environment. Obviously, this is to the benefit of unified communications and collaboration (UC&C) vendors such as Cisco and others, but it also benefits cloud providers, resellers, VARs, and, ultimately, end users.

Why Cloud Collaboration?

Impact on Stakeholders

Enterprise customers, including CEOs, IT decision makers, line-of-business (LOB) managers, and end users, all have a stake in the game when it comes to considering a move from a premise-based offering to a cloud-based offering.

For customers, the following factors have been frequently cited as most likely to encourage the use of a cloud collaboration offering:

- Provides the ability to pay in a usage-based model rather than having to overprovision — and possibly overpay (i.e., predictable costs)
- Increases the speed with which new collaboration tools, applications, or services can be deployed to workers
- Allows organizations to treat IT as a monthly cost rather than an up-front infrastructure cost, absorbing it as an operational expense (opex) rather than a capital expense (capex)
- Is based on cloud services, which are viewed as forward looking and can help ensure that companies are leveraging the latest technology and applications, including on-demand applications

For the CEO, cloud collaboration can have the following appeal:

- Boosts the speed of innovation — utilizes optimal work processes
- Enhances workforce productivity — helps companies attract and retain high-value employees (keeping them productive and happy)
- Increases operational effectiveness — delivers multifunctional collaboration at an effective cost

For the CIO, cloud collaboration can have the following appeal:

- Empowers the business — delivers multifunctional collaboration tools
- Improves organizational agility and enables greater worker productivity
- Increases operational efficiency — delivers good collaboration results at an effective cost (i.e., TCO and ROI)
- Demonstrates IT's value to the organization by initiating/supporting a successful cloud collaboration deployment project (i.e., shows IT's ability to align a modern fast-moving IT strategy with the business strategy)

Why Move Collaboration to the Cloud Now?

At a time when the drive toward virtualization and cloud-based services is all but certain, the enterprise network is evolving from legacy infrastructures to a newer, efficient, and intelligent network. This "next-gen" network infrastructure will be the essential platform for accessing and delivering cloud-based collaboration services and applications, as well as a range of other workload applications, for the enterprise. This requires a new architecture and a vision that bring the corporate network and the datacenter network under one umbrella, where the IT organization can benefit from taking a holistic view of the converged network infrastructure, especially when it comes to the performance and security aspects of these deployments.

Today, the majority of UC&C customers have on-premise deployments that are multisite and multivendor with multifeature sets (with various versions of software). This multiplicity can present significant challenges and require heavy resources (people, time, investments) to support and maintain, slowly building the following barriers to collaboration success:

- Applications expand in isolated locations, increasing the level of disparity within the organization.
- Companywide collaboration is challenged — no end-user or management consistency across applications.
- The organization becomes limited functionally by the current on-premise solution.
- Support costs increase; agility decreases.
- New collaborative solutions and applications can be complicated (and costly) to integrate with existing equipment.

The cloud can provide a collaboration platform that requires a lot fewer IT resources to keep it running. Organizations can become more responsive and more easily deploy rich applications and communications where and when people need them. In addition to more flexibility, migrating collaboration applications and services out to a cloud model can provide the following network architectural benefits:

- Given the smaller corporate datacenter footprint, there is less to maintain.
- Organizations can connect to multiple third-party "clouds" that maintain, manage, and deliver a range of workloads.

- The "evergreen" benefit of the cloud allows the whole organization to benefit from the latest software releases and applications.
- A hybrid approach can be employed to maintain some sites on the legacy environment that can be cut over when appropriate (or to suit regulatory requirements).
- Workloads can be deployed in any order and in any density (i.e., not necessarily to every site or group of users).
- Flexibility exists to include additional third-party workloads in the model and other cloud services.

Challenges in Moving to Cloud Collaboration

Despite the benefits of cloud collaboration services, moving to the cloud can be difficult. Organizations need to be conscious of a number of issues, and the network architecture they put in place to accommodate their cloud infrastructure must address them. The issues include managing centralized data with decentralized users and devices, managing the growth of media-rich content, achieving reliability and low latency in the WAN, ensuring security, and reducing management complexity.

Cloud services do not come without challenges. Many CIOs may prefer to deploy collaboration applications on-premise where they have more control over the applications and the data they contain. But organizations with traditional infrastructures may find their networks are not set up to take full advantage of the cloud, and they may suffer from poor application performance or expose themselves to security risks when migrating to the cloud.

In IDC surveys of IT decision makers, security is often cited as the top obstacle (or one of the top obstacles) to cloud deployments, especially public cloud. To transition to the cloud effectively, organizations should architect their network with the appropriate routing, application performance, and security technologies.

What Does It Take to Move to the Cloud?

A Network Architecture Approach to Cloud Collaboration

The benefits of a network architecture approach to cloud collaboration services include the following:

- **Increased productivity through better, more predictable application performance.** Networks architected to take advantage of cloud collaboration can achieve lower latency, greater reliability, accelerated application access, and better application survivability. Application performance is improved and — even more important — more predictable, which means users get more reliable access to the applications they require, enabling them to be more productive. Performance monitoring, application visibility, and QoS for collaborative applications can be provided.

- **Network resiliency.** Organizations can reduce the risk of network downtime, as well as alleviate the responsibility and concern of supporting the network themselves, by working with a service provider partner to take advantage of cloud collaboration services. Once applications are migrated to the cloud, the robustness and resiliency of the service provider network infrastructure are in place to maintain application uptime.

- **Security.** As a new consumption paradigm, cloud collaboration services need to be as secure and compliant as on-premise solutions. Deploying an architectural, federated approach will ensure that all services — including private, public, and hybrid cloud — have consistent access policies and comply with all regulatory mandates. In some cases, cloud services will be more secure than an individual organization's network environment for a variety of reasons, including the fact that cloud service providers are under increasing pressure to make their offerings more secure, stable, and compliant in terms of regulatory requirements for enterprise customers. And cloud service providers are using security as a way to differentiate themselves and gain incremental revenue on top of basic application-as-a-service and infrastructure-as-as-service offerings.

- **Manageability.** By deploying a holistic, end-to-end architecture, an organization can reduce the number of elements to manage in the network, which can lead to significantly simpler network management and faster application deployment. Also, the organization can rise above the complexity of managing all these elements and manage through more of a dashboard (e.g., passing MACs to the service provider).

- **Flexibility.** An architectural approach can lead to better agility. It can provide more survivability for branch locations and more flexibility for the IT organization to respond to changing business demands. It can also allow organizations to take advantage of new technology integrated into the network.

- **Wider variety of devices supported.** Architecting the network to support cloud collaboration can enable remote access and ensure compatibility with a range of endpoint devices such as room devices, smartphones, tablets, laptops, and PCs.

- **Reduced cost.** By architecting the network to proactively streamline and reduce unnecessary network traffic, organizations can achieve bandwidth cost and operations management savings.

Reducing the datacenter footprint (e.g., storage/computing/networking), decoupling applications from the enterprise network, and provisioning an integrated collaborative environment are other key considerations for decision makers. Cloud helps ensure better availability and adoption of services across an organization and provides a consistent user experience across an organization, helping drive collaboration (accelerating user adoption and usage and, therefore, better ROI).

What to Look for in a Cloud Collaboration Provider

IDC provides guidance around some of the more pertinent requirements when choosing a cloud collaboration partner/offering. In particular, we advocate looking for a partner and a solution that can:

- Offer and support the same broad range of solutions as on-premise solutions (i.e., the whole UC&C stack — cloud collaboration, video, telephony, messaging, conferencing)
- Enable organizations to take advantage of market transitions (mobility and FMC, video, BYOD, and multiple devices)
- Scale up and down and be evergreen (latest version and app available and supported)
- Allow organizations to consolidate infrastructure and operations (not add more work, more to worry about) and provide full visibility, confidence, and control
- Be open and interoperable (There will be a world of many clouds. Organizations need to be able to take advantage of all cloud options today and not be left on an island.)

Cisco Hosted Collaboration Solution (HCS) is one example of a cloud offering that can satisfy all of the previously mentioned considerations. Cloud collaboration with Cisco HCS delivers the advantages of Cisco's market-leading on-premise collaboration solutions with the financial, operational, and strategic benefits associated with cloud services. HCS shifts the majority of the costs from capex to opex for customers by using a pay-as-you-go model rather than supporting on-premise infrastructure. HCS helps Cisco partners deliver more applications faster on a Cisco Powered virtualized architecture that is designed to support cloud-based and hybrid collaboration services (CaaS) with security and application functionality equal to that found in on-premise solutions. Cisco HCS offers applications across the entire Cisco collaboration portfolio, including:

- Voice and Video (Unified Communications Manager, Unified IP Phones, Jabber, TelePresence[1])
- Voice Mail and Integrated Messaging (Unity Connection)
- Instant Messaging and Presence (Unified Presence, Jabber)
- Mobility Services (Unified Mobility, Mobile Clients, IMS Integration to enable FMC capabilities)
- Web Conferencing (WebEx Meetings[2])
- Customer Collaboration (Unified Contact Center Enterprise)

[1] Via integration with Cisco TelePresence Exchange
[2] Via Cisco WebEx

Cisco HCS provides support for video solutions across a broad range of applications. TelePresence is a key element of Cisco HCS, with partners able to offer telepresence as a service (TPaaS) fully supported within the Cisco HCS architecture. HCS for Large Enterprise is a carrier-grade cloud solution, on a dedicated basis, simply packaged for an enterprise to consume. But beyond providing cloud collaboration as just another deployment option, HCS can actually deliver extended UC&C capabilities.

HCS Differentiation Points

Key differentiation points of the Cisco HCS cloud collaboration solution include the following:

- Open and interoperable (standards based)
- Multiplatform client support (supports a range of desktop, mobile, and room devices)
- Cloud deployment flexibility (private, public, hybrid)
- Integrated collaboration experiences (including a unified management capability)
- Enterprise-grade offering (from end users to customer support)
- One architecture to support on-premise and cloud deployment models

In addition, Cisco HCS helps organizations:

- Deliver a unified user experience — the same user experience across a wide variety of devices and environments
- Optimize resources and shift the IT spend from a capex model to an opex model
- Improve IT and business agility to focus more resources on core competencies and business priorities
- Reliably maintain control and manage service levels

Why Move Collaboration to the Cloud Now?

In discussions with IDC, executives and decision makers often highlight the following compelling reasons and considerations — specifically around connectivity, empowerment, and business value — for moving to cloud collaboration services now:

- **Connect with Consistency**
  - Platform flexibility, openness, and interoperability are required to keep up with the market transitions now occurring (cloud, collaboration, video, BYOD, and mobility). The gap between what organizations have and what is possible has expanded to a point that is not sustainable. As a result, organizations are missing out on the latest collaborative solutions and applications.

- The status of legacy PBX/infrastructure service contracts should be evaluated (i.e., let existing service contracts expire or continue justifying the cost of existing service contracts, plus the cost of future service increases).
- Creating a consistent and global communications platform is a prerequisite, not an afterthought, to leverage and benefit from the current IT dynamics.

Empower Power

- Because people are the biggest asset in most organizations, give them better tools to work more effectively without boundaries.
- Concentrate resources on adding strategic value to the business for impact.

Generate Business Value

- Drive growth, productivity, innovation, and business transformation.
- Enhance and accelerate business processes.

CHALLENGES/OPPORTUNITIES

IDC sees a number of opportunities and challenges for enterprises as they consider taking advantage of cloud collaboration offerings.

Opportunities include:

For CEOs: gaining the full benefits of a cloud collaboration strategy. CEOs can enable their organizations to take full advantage of cloud collaboration features to drive innovation, growth, and competitive advantage.

For CIOs: achieving key strategic benefits associated with cloud collaboration services. CIOs can ensure they are deploying the latest applications, driving innovation and productivity, mitigating technology investment risk, and satisfying business transformation goals, among other benefits.

For senior IT decision makers: demonstrating value to the organization. This is an opportunity for IT to chalk up a real "win" and to demonstrate its value to the business. A cloud strategy can also free up more skilled IT resources to concentrate on business-related development and customer-focused applications rather than traditional day-to-day support issues.

Challenges include:

For IT decision makers: redesigning the network for cloud. Despite the benefits of cloud collaboration services, moving to the cloud can be difficult. Organizations need to be conscious of a number of issues, and the network architecture they put in place to accommodate their cloud infrastructure must address them. The issues include managing centralized data with decentralized users and devices, managing the growth of media-rich content, achieving reliability and low latency in the WAN, ensuring security, and reducing management complexity.

- **For cloud collaboration suppliers (service providers, systems integrators, resellers): scalability.** Scalability is important for organizations that are moving to the cloud. Applications need to be able to scale as the needs of the business evolve, particularly if the core of the network is not all on the same campus. Partners will need to demonstrate that their networks and offerings can scale appropriately to meet the increasing demand for more bandwidth, more users, more devices, and more locations in order to enable enterprise organizations to fully leverage collaboration from the cloud.

CONCLUSION

Call to Action

Cloud collaboration is a growing trend that will change the face of IT organizations in the coming decade. By shifting the burden of IT infrastructure management to cloud services, organizations can achieve greater levels of automation, orchestration, provisioning, and deployment and can become more agile, reduce operating costs, and improve collaborative application performance as well as the performance of other network workload applications.