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# Cisco Desktop Collaboration Experience DX600 Series: Bring HD Video to Your Business

## What You Will Learn

More than ever, IT must be in-tune with evolving end-user demands in order to unleash the collaborative creativity that will accelerate innovation, productivity, and growth (Figure 1). This user-directed environment is leading to an increased focus on desktop hardware and software that:

- Takes advantage of integrated voice, video, and web conferencing
- · Extends the group video experience to personal video endpoints
- Improves the quality of virtual meetings from the office, from home, and from "hot desks"<sup>1</sup>

The Cisco<sup>®</sup> Desktop Collaboration Experience DX600 Series was designed for these next-generation enterprise communications needs. This new Cisco Smart Desk Phone can help you use your human capital more fully.

Figure 1. Evolving Trends That Are Shaping a New Era in Enterprise Communications According to Frost & Sullivan<sup>2</sup>



## Challenge: The User-Centric Enterprise

Businesses today are focused on accelerating the interactions of their people in order to better enable:

- Innovation: Virtual meetings are now the norm. Companies need new ways to make virtual meetings, virtual teams, and virtual expertise more effective. As a result, there is a greater need to support real-time video collaboration across geographically dispersed teams<sup>3</sup>.
- Productivity: Business leaders want a 20-percent productivity improvement over the next 5 years<sup>4</sup>. To make it happen, they are looking for new ways to empower their employees and transform workflows.

<sup>&</sup>lt;sup>1</sup> Hot-desking is an office system where multiple workers use a single physical work station or surface during different time periods, Wikipedia <u>http://en.wikipedia.org/wiki/Hot\_desking</u>.

<sup>&</sup>lt;sup>2</sup> Global Enterprise Communications Platforms and Endpoints Market, May 2012. Frost and & Sullivan

<sup>&</sup>lt;sup>3</sup> Aberdeen, The ROI of Video Collaboration, October, 2011

<sup>&</sup>lt;sup>4</sup> Shape Your Future 2012 Study CEB

• Growth: Many companies are forming strategic alliances to extend their reach and offer new services. These companies require advanced collaboration among partners, customers, suppliers, and employees who must work together effectively, even though they are not in the same location.

IT, in support of strategic business goals, must fully respond to business leaders and new end-user needs (Figure 2). What do users need? They need:

- Video collaboration capabilities to spend less time traveling and more time being productive<sup>5</sup>
- Personalization capabilities to have the communication and collaboration experiences they prefer
- A consistent user experience that extends the same ease of use and quick access to apps and social media that they have on their **personal** devices to their **work** devices
- Reliable, high-quality collaboration capabilities, regardless of the device they are using and where they are using it

Figure 2. IT Plays a Strategic Role in Delivering the New Experiences Users Are Demanding



Consistent User Interactions
• Across platforms, devices, and applications

Security and Management

Mitigated security and compliance risks

Interoperability and Integration

Ensured interoperability with existing investments

Performance and Support

Proven reliability and high-quality communications

Major analysts such as Forrester, Gartner, and Frost & Sullivan have all cited increased enterprise focus on desktop collaboration endpoints (Figure 2). Their research shows that enterprises are looking for:

- A new class of desktop endpoints with functions beyond basic telephony<sup>6</sup>
- Desktop videoconferencing to improve the quality of virtual meetings<sup>7</sup>
- Appliance-based desktop endpoints to extend the group video experience<sup>8</sup>

According to Yankee Group, chief information officers (CIOs) want collaboration solutions that deliver "easy-touse, high quality enterprise voice, video and data to ensure broad user adoption<sup>9</sup>". They also want desktop collaboration solutions that can be:

- · Integrated within their unified communications environments
- Virtualized to improve management, security, and quality of experience (QoE)
- · Scaled rapidly across a global enterprise

- <sup>6</sup> Frost & Sullivan, Global Enterprise Communications Platforms and Endpoints Market, May 2012
- <sup>7</sup> The Forrester Wave: Room-based Videoconferencing, Q3 2012 Report
- <sup>8</sup> Gartner 2012 MarketScope for Telepresence and Group Video Systems

<sup>&</sup>lt;sup>5</sup> Aberdeen, The ROI of Video Collaboration, October, 2011

<sup>9</sup> Yankee Group, Leveraging Video Conferencing to Improve the Bottom Line, January, 2012

As a result, investment in hardware and software collaboration solutions is high on the list of enterprise executives this year. In fact, 90 percent of the enterprises surveyed by IDG said their companies will invest in collaboration-related hardware or software in 2013<sup>10</sup>.

## Revolutionize Desktops with the Cisco Desktop Collaboration Experience DX600 Series

The Cisco Desktop Collaboration Experience DX600 Series introduces the Cisco DX650, which is designed for people who must collaborate effectively with geographically dispersed individuals. A Cisco Smart Desk Phone, the DX650 blends mission-critical **business** communications with the intuitive touch-screen navigation and innovative personalization options of mobile **consumer** smartphones (Figure 3). The result is an **evolutionary** endpoint that builds on Cisco's expertise in enterprise communications and a **revolutionary** user experience that has the power to transform workflows and fuel innovation.

#### Figure 3. Defining the Next-Generation Smart Desk Experience with the Cisco DX650

#### **Reliable Business Collaboration**

- High-fidelity voice and comprehensive unified communications features
- High-definition video and interoperability with H.264 endpoints
- Multitasking with dual independent displays
- Support for USB and Bluetooth headset, mouse, and keyboard
- Wired and Wi-Fi connectivity
- · Cloud-ready for basic desktop virtualization
- Integrated browser for easy access to cloud services



#### Consumer-Like Experience

- Multicapacitive, touch-screen navigation for "tap to launch" and "pinch/zoom" capabilities
- Customizable unified communications widget apps for quickly reaching favorites/groups
- Instant access to social media (Facebook, YouTube, Twitter, etc.)
- Open Android Operating System
- Access to workflow-enhancing apps from commercial marketplaces such as Google Play and Amazon

Here are just a few of the many transformative capabilities this next-generation Cisco Smart Desk Phone delivers:

- High-quality enterprise voice and video: High-fidelity audio (G.722 wideband) and high-definition video (up to 1080p at 30 frames per second [fps]) provide a superior voice and video experience that is easy and intuitive. Video calls are as easy to make as phone calls.
- Integrated unified communications: Comprehensive unified communications capabilities deliver advanced tools that accelerate access to experts and enable more effective communications.
- "Out-of-the-box" collaboration: Real-time web collaboration, view shared documents, and integrated presence enable new ways of working productively with remote contacts.
- Multicapacitive, touch-screen navigation: "Tap-to-launch" capabilities enable intuitive navigation that makes access to applications quick and easy.
- Open Android Operating System (OS): Full compatibility-test-suite (CTS) Android compliance means that Cisco DX600 Series users have access to the same Android apps they use on their mobile devices (if permitted by IT). IT can also create or commission custom workflow applications to be deployed on both types of devices.
- Bring-your-own-device features: Enable sharing of contacts and call histories from personal smartphones with the DX650 through Bluetooth, and enable moving an active call in progress from the smartphone to the DX650 to gain added flexibility in how you communicate, while enjoying superior audio.

<sup>10</sup> 2013 Unified Communications & Collaboration Survey, IDG Enterprise, March 2012

The robust collaborative capabilities, easy navigation, and personalized experience of the Cisco DX650 will help ensure broad user adoption and propel productivity across the enterprise.

## Flexible Support for Different User Profiles, Requirements, and Deployment Options

The Cisco DX650 Smart Desk Phone is ideal for users who regularly interact with geographically dispersed colleagues, subject-matter experts, partners, suppliers, and customers. It is designed to meet the needs of people who work in an office, at a desk, either full or part time (Figure 4). Examples of user profiles include:

- · Senior and midlevel executives
- Information workers
- · Workers in shared workspaces, such as contact center agents, bank tellers, and nurses
- Home-based teleworkers

#### Figure 4. Cisco DX650 Can Flexibly Meet the Collaborative Needs of Many Users



These workers often need to multitask, and multitasking is easy with the dual independent display feature. With this unique capability, you can view content from a different application on an optional, customer-supplied LCD monitor (Figure 5). Resolution scales up to 1920 x 1200. You also have the option to work in "mirrored mode", which pushes the same content presented on the DX650 display out to an optional adjacent LCD monitor. Support for both USB wired and Bluetooth wireless desktop accessories - such as mouse, keyboards, and headsets - helps enrich the desktop experience.

The Cisco DX650 also supports flexible connectivity options, using **wired** Power over Ethernet (PoE) or **wireless** 802.11a/b/g/n for reduced infrastructure and costs. The wireless option may appeal to retail, healthcare, manufacturing, and other environments, where cable infrastructure may not be in place or may be difficult to drop.



Figure 5. Cisco DX650 Series Is the Only Android-Based IP-Desktop Endpoint That Supports Dual-Independent Display

## Move Beyond Basic Telephony

The Cisco DX650 delivers a combination of hardware and software that integrates the full suite of Cisco Unified Communications applications for a comprehensive communications experience (Figure 6).



Figure 6. The Cisco DX650 Delivers Outstanding Communications with Options to Personalize the Experience

Unified communications capabilities include click to call, call drag and drop, call history, speed dialing, multiuser login, and an integrated VPN client, so you can extend secure DX650 phones to teleworkers. Other features include:

- Single Number Reach: All inbound callers (including colleagues, customers, partners and suppliers) have one number to reach you, whether you are at your desk using a Cisco DX600 Series endpoint or away from your desk using a mobile device. All devices associated with your number ring simultaneously for comprehensive call coverage. Calls can be transitioned smoothly between devices as you require.
- Single voice mailbox: If you have multiple devices (that is, a smartphone, tablet, PCs, and DX600 Series endpoint), you can take advantage of a single voicemail box across these devices.
- Visual voicemail: You can view all voicemail messages at a glance to prioritize your communications for enhanced productivity.

- Tighter integration with mobile devices with Cisco Intelligent Proximity: With the worlds of personal Android
  mobile devices, such as smartphones, brought closer together with Cisco Smart Desk Phones, now you
  can synchronize contacts added to your mobile devices and share call histories with the Cisco DX650
  through Bluetooth at the touch of a button. In addition, you can move an active call in progress on a
  smartphone to the DX650 for a superior acoustical audio experience and greater flexibility (that is, choice
  of handset, types of headsets, or speakerphone) in how they wish to communicate.
- Contact badges: You can easily launch multimodal communications (voice, video, email, and instant messaging) with a simple touch (refer to Figure 8, later in this document).
- "Phone-only" mode: Phone-only mode enables deployment of the DX650 for voice, video, messaging, and contacts initially, with the option to advance to additional integrated collaborative capabilities, such as chat, conferencing, and calendaring, at a later time. This mode offers IT teams greater flexibility in deployment, while maximizing investment protection for future capabilities.

The Cisco DX650 is interoperable with standard H.264 Advanced Video Coding (AVC) endpoints, meaning you can videoconference with:

- Cisco TelePresence<sup>®</sup> personal desktop video endpoints and room systems
- Cisco Unified IP Phones that support video, such as Cisco Unified IP Phone 8900 and 9900 Series endpoints
- PCs or consumer mobile devices using Cisco WebEx<sup>®</sup> and Cisco Jabber<sup>™</sup> applications
- Other users on Cisco DX650 endpoints
- Third-party endpoints supporting the H.264 AVC video standard

This video interoperability will help you derive maximum value from your video collaboration investment and enable you to extend a consistently high-quality group video experience across your organization.

## Move Beyond "Bolted-On" Functions

Industry-leading Cisco Collaboration applications are fully integrated and functional right out of the box. You can conference with Cisco WebEx meeting applications, the industry's leading on-demand collaboration tool (Figure 7).

Figure 7. The Cisco DX650 Smart Desk Phone Is Designed for On-Demand Collaboration



In addition to on-demand web conferencing, Cisco WebEx meeting applications enable in-session chat to facilitate better interactions among individuals, teams, and virtual workgroups. Meeting participants can also access and share video and view shared documents in real time to promote faster decision making throughout your organization.

The Cisco Jabber platform gives employees the ability to reach out to subject-matter experts (SMEs) and see at a glance if colleagues are available (Figure 8). Secure instant messaging "cuts through" the clutter of email to increase your responsiveness and productivity.



Figure 8. Locating Subject-Matter Experts Is Easy with the Cisco Jabber Platform

The deep integration of collaboration delivered by the Cisco DX650 accelerates every collaborative experience and can transform workflows. Collaboration-enabled workflows can profoundly change the way work is done, giving your organization the ability to:

- · Accelerate sales, product, and decision cycles
- · Differentiate services and enhance customer satisfaction
- Achieve sustainable competitive advantage

"IT architects must proactively plan for the combination of unified communications (UC) and virtual desktop infrastructures (VDI) or risk finding themselves with disenfranchised users, wasted resources, and thwarted strategies."

- Considering Desktop Virtualization Plus Unified Communications: What IT Architects Need to Know, ©Nemertes Research 2011

#### Move to the Cloud

The Cisco DX650 comes standard with a web browser, enabling quick access to cloud services from Cisco, such as the Cisco Finesse<sup>®</sup> next-generation agent and supervisor desktop for customer care environments, as well as third-party cloud services. You also have access to the ecosystem of Android applications, available from cloud-based commercial marketplaces such as Google Play and Amazon. You can use these applications to customize workflows.

## Deliver Business Value with an Architectural Approach to Collaboration

The Cisco DX650 is part of the Comprehensive Cisco Collaboration Architecture (Figure 9). By implementing a Cisco Collaboration Architecture, you can:

- Extend video capabilities to users through a single, unified communications infrastructure
- · Simplify voice and video systems to streamline provisioning and maintenance
- Lower deployment and operations costs
- Benefit from flexible deployment options, including on-premises, hosted, or a combination of the two
- Take advantage of a wide range of platform services available from Cisco

Working together in a modular fashion, the range of capabilities of the Cisco Collaboration Architecture allows you to develop an investment plan that helps ensure interoperability with your existing assets.

Figure 9. The Cisco DX650 Is Part of the Cisco Comprehensive Collaboration Architecture



## End-to-End Security and Centralized Management

The Cisco DX650 is provisioned, configured, and deployed in the same fashion as other Cisco Unified IP Phones. You can centrally manage services such as:

- Session management
- Voice
- Video
- Messaging
- Mobility
- Web conferencing

Cisco also provides an enterprise-class security foundation for the DX650 (Figure 10). This foundation is based on Cisco's experience in providing secure IP communications to more than 85 percent of Fortune 500 companies. Regardless of where you deploy the DX600 Series - in a corporate, virtual, or home office - you can count on end-to-end security, which includes:

- Embedded hardware security: Cisco builds security into the hardware to help ensure secure boot, credential storage, image authentication and encryption of data at rest, and encrypted file systems. The Cisco DX600 Series ships with a manufacturer-installed certificate and supports locally significant certificates to authenticate access to applications in the network.
- Secure communications inside and outside the enterprise: When inside the network, signaling and media
  are secured with Transport Layer Security/Secure Real-Time Transport Protocol (TLS/SRTP) and Secure
  HTTP (HTTPS) Secure Sockets Layer (SSL) for clients. SSL lets applications connect to secure servers by
  providing an API for those clients.

When users are external to the network, enterprise access is simple, yet protected with Cisco AnyConnect<sup>®</sup> Secure Mobility Client, which comes standard and is built into the software on the DX650. Integrated VPN connectivity enables greater ready-to-use capability for remote-office and home teleworkers with the ability for IT to remotely configure and deploy these endpoints. There is also support for Web Proxy services so IT can govern how and what type of traffic can enter and leave the enterprise.

 Secure network layer: For network access control, Cisco uses both wired 802.1X TLS-based authentication and Wi-Fi Protected Access Version 2 (WPA2) Extensible Authentication Protocol-Flexible Authentication via Secure Tunneling (EAP-FAST).

Figure 10. End-to-End Enterprise Security Is a Commitment at Cisco



## Flexible Applications Deployment, Management, and Security

Cisco provides several options that allow IT to deploy and manage collaboration-enabled applications effectively and securely (Figure 11). Applications can be developed in-house or sourced from:

- Public application stores such as Google Play or other third-party aggregation sites such as Amazon
- <u>Cisco Developer Network partners</u>
- Third-party application developers

To assure security of third-party Android applications, customers have the option to malware-test Android applications for the Cisco DX650 by contacting <u>MobileDefense</u> or other vendors that offer a cloud-based app testing solution designed to find and fix security flaws.

IT also has several options for deploying applications to Cisco DX650 users:

- You can use Cisco Unified Communications Manager Version 8.6.2 or later to manage and deploy applications to a particular user or groups of users within a cluster.
- For a per-user fee, you can take advantage of a private app store, as a service through <u>Cisco Mobile</u> <u>Collaboration Management Service (MCMS)</u>, a Cisco Advanced Services offer.
- The Cisco DX650 is supported by many leading third-party mobile device management solutions. Contact your mobile device management/mobile application management (MDM/MAM) provider to inquire about the features it supports.



Figure 11. Application Management Options for the Cisco DX650

### Collaborate With a Leader

The new era in enterprise communications requires best-in-class capabilities in many areas, including unified communications, collaboration, video, and IP endpoints. Cisco delivers in all areas:

- Cisco Unified Communications Manager is the most widely deployed unified communications platform with more than 100 million connected devices deployed worldwide. Cisco has been named a leader in Gartner's 2012 Magic Quadrant for Unified Communications.
- Ninety-five percent of the Fortune 500 use Cisco Collaboration Solutions.
- "Cisco is by far the most dominant vendor in the video space", according to ZK Research<sup>11</sup>.
- To date, more than 70 million Cisco endpoints have been shipped globally<sup>12</sup>.

Cisco solutions are interoperable for investment protection - and they are proven. More than 200,000 enterprises around the world rely on Cisco for their business-critical communications every day.

## Update Your Desktop Environments Today

Equipping users with the collaborative tools needed to enable innovation, productivity, and growth is critical to success in today's global economy. The Cisco DX650 can make a significant contribution to these goals. With this next-generation Cisco Smart Desk Phone, the business has a new tool to unlock the potential of its people. IT has a new way to meet user demands with lower risk, improved return on investment (ROI), and investment protection. And users have the integrated collaborative capabilities they need to propel productivity and accelerate business results.

<sup>11</sup> The When, Where and How of Cisco vs. Microsoft for UC, June

<sup>12</sup> http://www.cisco.com/en/US/prod/collateral/voicesw/ps6789/ps7290/ps11678/cisco-collab-at-a-glance.pdf



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