

Cisco Cius: Collaborate with Confidence Everywhere

Get Ready for a New Way of Working

The growing number of mobile workers has made mobility business-critical. The Cisco Cius™ mobile collaboration device is built for business (Figure 1). Out of the box, Cisco Cius is ready to:

- Liberate you from the confines of geographic and organizational boundaries
- Foster a new way of working with comprehensive collaboration, unified communications, and computing capabilities anytime and anywhere
- Deliver the enterprise-grade mobility, security, manageability, and video interoperability required by IT organizations
- Provide a trusted source for a new class of mobile business applications with Cisco AppHQ, an innovative application ecosystem that facilitates secure access and centralized management

Cisco Cius changes the rules of engagement for users, IT, and developers. And it is part of a complete solution that only Cisco - with its network-powered collaboration - can deliver.

Figure 1. Cisco Cius Extends the Power of Participation to Everyone



The End of an Era

For two decades, work has centered on the desktop. This paradigm is changing rapidly, and this year represents a tipping point with more than 50 percent of computing purchases comprising smartphones and tablets instead of computers.¹ Some analysts have even proclaimed that, "The era of the PC is over."² This paradigm shift is a direct result of four important business trends:

¹ Deloitte, Smartphones and Tablets: More than half of all computers aren't computers anymore.

² <http://www.idc.com/about/viewpressrelease.jsp?containerId=prUS22593310§ionId=null&elementId=null&pageType=SYNOPSIS>

- The mobile majority: Most employees now believe they do not have to be in an office to be productive.³ This idea is not surprising when you consider the growing number of mobile workers. Experts predict that by 2012, mobile users will make up 73 percent of the enterprise workforce.⁴ By 2013, 80 percent of businesses will support a workforce using tablets.⁵
- The social enterprise: Companies are embracing the ability of social networks to enable easy access to expertise and proactive customer support. By 2014,⁶ companies will generate 50 percent of web sales through social presence and mobile applications.⁷
- The virtual workspace: The economics of cloud computing are incredibly appealing to the enterprise. As a result, we are evolving from virtualized applications to media-rich, virtualized experiences. By 2012, 70 percent of all enterprises will use enterprise-class cloud technologies.⁸
- The visual network: Communication across geographic and organizational boundaries has been transformed by high-quality voice and video interactions. Cisco predicts that by 2015, 90 percent of all content on the Internet will be video-based and a million video minutes will traverse the Internet every second.⁹

These converging business trends are significantly affecting the way we interact. The next wave of business growth and opportunity will come directly from an organization's ability to embrace the new technologies that exploit these trends (Figure 2).

Figure 2. Cisco Cius Is Designed for Today's More Mobile, Social, Visual, and Virtual Workforce

<p>No Connectivity Restrictions</p> <p>Wired, Wi-Fi and 4G data services provide anytime, anywhere access.</p>	<p>Flexible</p> <p>Mobile or desktop use. Push or Pull Apps Deployment with Cisco AppHQ. Local and Cloud Computing</p>	
<p>No-Compromise Collaboration</p> <ul style="list-style-type: none"> • Make a voice or high-definition video call • Video call with other video endpoints • Join or initiate an audio, Cisco WebEx, or Cisco TelePresence conference • Quickly access colleagues with Jabber IM & Presence • Email and Visual Voicemail • Blog and join discussions on social networking sites • Enterprise social software for virtual teaming with Quad • Browse the web 		<p>Portable</p> <p>At just over 1.177 lbs. (534g), the device is lightweight. The 7-inch, high-resolution, multi-touch color display strikes the perfect balance between portability and functionality. An on-screen keyboard and 8-hour battery support all-day communications.</p>
<p>Video On Demand</p> <p>Video interoperability, forward- and rear-facing HD video cameras, and a rear-facing 5-megapixel still frame camera makes taking pics and placing HD mobile video calls easy.</p>	<p>Virtual</p> <p>The device supports a variety of "thin" client applications and optimizes cloud computing with the Cisco® Virtualization Experience Infrastructure. (VXI)</p>	

³ http://www.youtube.com/watch?feature=player_embedded&v=Ct0KTSHhg8

⁴ Forrester <http://www.information-age.com/channels/comms-and-networking/perspectives-and-trends/1095262/three-quarters-of-enterprise-workers-will-be-mobile-by-2012.shtml>

⁵ Gartner, Tablets in the Enterprise, March 2011

⁶ <http://www.gartner.com/it/page.jsp?id=1293114>

⁷ http://www.youtube.com/watch?feature=player_embedded&v=Ct0KTSHhg8

⁸ http://www.cisco.com/web/solutions/trends/intelligent_network/index.html

⁹ Cisco Visual Networking Index: Forecast and Methodology, 2010–2015

Cisco Cius: The First Mobile Collaboration Device Built for Business

When it comes to collaboration, the tighter the integration, the bigger the productivity gains. Cisco Cius delivers deep integration across a broad set of collaboration applications. It empowers people to collaborate effectively everywhere with the same Cisco® Collaboration capabilities used by more than 95 percent of Fortune 500 companies. A new contacts-directed interface streamlines collaboration. You simply select a contact and a collaboration option. Out of the box, you can:

Communicate with the Best

Cisco Cius comes equipped with Cisco Unified Communications, the market's number one enterprise voice solution. This fully integrated unified communications suite made Cisco a leader in Gartner's 2011 Magic Quadrant for Unified Communications. Capabilities include the ability to:

- Take advantage of corporate dialing plans
- Access email and visual voicemail from a single inbox
- View contacts and availability with presence
- Click to chat from the contacts directory and escalate the chat into a meeting
- Schedule conferences directly from the calendar
- Launch meetings from the calendar or contacts directory
- Click to record calls for compliance

Extending collaboration to your mobile workforce can improve individual productivity by as much as 2 hours per day.

— Chadwick, Martin and Bailey, Unified Communications Applications: Uses and Benefits

Deliver High-Quality Video Everywhere

With support for interoperable high-definition (HD; 720p) video on any standards-based video endpoint - including Cisco TelePresence® Systems and Cisco TelePresence System EX Series endpoints - enterprises can extend video, not just to IT and executive teams, but throughout the organization. Interoperable video also means you can enjoy videoconferencing with all your contacts - even if they use different devices (Figure 3). Video collaboration delivers businesswide value in several critical ways. It:

- Reduces travel: You spend less time traveling and more time being productive. Using its own collaboration solutions and standard audio- and videoconferencing, Cisco has virtually eliminated travel for internal meetings and training. As a result, our travel expenses are down by more than half (from approximately \$750 million per year to approximately \$350 million per year.) Increased productivity from senior and executive management and other experts is valued at \$42 million.
- Improves both the quantity and quality of sales opportunities: According to the Aberdeen Group, video-aided business-to-business sales people move an average of 20 percent of their contacts to a sales funnel where the average deal size is more than half a million dollars.¹⁰

¹⁰ Streamlining the Top of the Funnel, February 2011 Aberdeen Group

- Accelerates strategic projects: According to the Aberdeen Group, the typical video collaboration-enabled project reduces project times by 2 weeks. This optimized resource allocation saves an average of \$40,000 per project.¹¹

Figure 3. Making a Video Call Is as Easy as Making a Phone Call



Virtualize Workspaces

Cisco Cius is part of a new generation of endpoints designed specifically for collaborative virtual environments. Collaboration is optimized by the Cisco Virtualization Experience Infrastructure (VXI), a complete end-to-end, service-optimized system that combines the power of virtualized collaborative workspaces with a virtualization-aware network and virtualized data center. With Cisco VXI, enterprises can harness the full potential of collaboration and cloud technologies.

Historically, desktop virtualization has worked well for data. However, the real-time requirements of voice and video have resulted in a poor user experience. These performance problems are created by the “hairpin” effect, so named because voice and video are routed from the virtual desktop through the data center and then back again.

Cisco Cius mitigates the hairpin effect with point-to-point processing. Voice and video travel directly from one endpoint to another instead of through the data center. The result? No voice latency or video pixelation - even over WANs - and lower bandwidth and processing costs.

With uncompromised collaboration, Cisco Cius offers an alternative to today’s paradigm of a PC on every desktop. Companies can use Cisco Cius to replace IP phones, PCs, or both based on strategic IT objectives and user roles and preferences. Device consolidation can increase the productivity of users and reduce hardware and administration costs for IT because there are fewer devices to purchase and manage (Figure 4). Cisco Cius supports a variety of virtualization-optimized “thin-client” applications from Citrix, VMware, and Wyse.

Workspace virtualization provides compelling benefits, including:

- Enhanced security because corporate intellectual property resides in the cloud instead of being stored on a physical device
- Enhanced productivity because rich, Windows-based business-process applications can be accessed “anywhere -as-a-service” (XaaS)

¹¹ The ROI of Video Collaboration, October 2011 Aberdeen Group

- Enhanced manageability and faster deployment because provisioning virtual workspaces and applications is simpler and faster

Figure 4. In the Office, Cisco Cius Can Provide a More Traditional Desktop Experience

<p>Opportunity to Consolidate Desktop Devices With the same rich collaboration experience in the office and on/off campus there are opportunities to consolidate user devices.</p> <hr/> <p>Full Desktop Experience Optional HD media station provides cost-effective wired connectivity. Support for USB 2.0 keyboards and mouse enable a more traditional desktop experience. Support for Bluetooth keyboards and mouse is planned. The device can be powered via 802.3 at Power over Ethernet (PoE) switches or locally powered via a power supply.</p> <hr/> <p>Video Output to Larger Display HDMI port enables users to push high-definition video and productivity applications to a larger LCD monitor.</p> <hr/> <p>Transformative Business Applications The device's expansive new capabilities will support a new class of applications that will change the way we work.</p>	<p>Hands-Free Communications High-definition (HD) acoustical speakers integrated in the media station, deliver HD audio for productive communications.</p> <hr/> <p>Seamless and Secure Mobility Wired to Wi-Fi retains active sessions without user intervention At your desk, the device rests in the wired media station for cost-effective campus connectivity. When you are ready to go, remove the device and take it with you. Cisco AnyConnect Secure Mobility Client encrypts and secures communications wherever you are</p> <hr/> <p>Cisco AppHQ An innovative user storefront provides a trusted source for Cisco Cius applications.</p>
--	---



Evolutionary and Revolutionary

Cisco Cius is **evolutionary** in that it brings together - in a single device - Cisco's industry-leading collaboration, virtualization, and video capabilities. Cisco Cius is **revolutionary** because it is the first mobile collaboration device designed specifically for business users and based on the open Android operating system.

In addition to workspace virtualization, Cisco Cius has the power required for local computing. Thus Android-based applications - including the basic version of Microsoft QuickOffice®, which comes standard with Cisco Cius - can be run locally. With the premium version of QuickOffice, you can view and edit Microsoft Office Word documents, PowerPoint, and Excel. Documents can be stored in the device flash memory or peripherals, which include micro USB flash drives and micro Secure Digital (SD) cards.

At your desk, Cisco Cius rests in an optional HD media station, which provides IEEE 10/100/1000 wired connectivity and HD audio for productive, hands-free communications. The HD media station can be powered locally through either AC power or Power over Ethernet (PoE) switches. When docked, the battery is charged by the HD media station.

Support for USB keyboards and mouse provides a more PC-like experience. You also have the option to push local and virtual applications to a larger, adjacent LCD monitor (Figure 5). When you leave your desk, you simply take Cisco Cius with you. It smoothly transitions from the wired network to the on-campus wireless network. This transparent mobility provides the best possible experience when moving from the office to the conference room.

Figure 5. Support for a Mirrored Display Allows You to View Video and Applications on a Larger Screen



The First IT-Friendly, Enterprise-Grade Mobile Collaboration Device

Cisco Cius is specifically designed to address the needs of today's global business with enterprise-grade capabilities that enable IT to support a more mobile, social, virtual, and visual workforce (Table 1).

- Enterprise-grade collaboration: There is no need for bolted-on applications with Cisco Cius. It is ready for collaboration the first time it is turned on. You can:
 - Communicate with Cisco Unified Communications, the enterprise voice solution used by 85 percent of Fortune 500 companies
 - View contacts and their availability with presence, and then click to use instant messaging (IM) or video chat with Cisco Jabber™ messaging
 - Conference with Cisco WebEx® meeting applications, the industry's leading on-demand collaboration tool
 - Join video calls on any Cisco video endpoint, including Cisco TelePresence Systems and Cisco TelePresence System EX Series endpoints
 - Enable many-to-many communications with Cisco Quad™ enterprise social software
 - Share ideas and expertise through the cloud with the Cisco Show and Share® social video system
- Enterprise-grade mobility: With wired, wireless, and fourth-generation (4G) data services, Cisco Cius enables ubiquitous connectivity. When deployed on an intelligent Cisco network, the network recognizes when the connectivity state changes - from wired to Wi-Fi or Wi-Fi to wired - and automatically transitions active voice or video sessions without any user intervention.

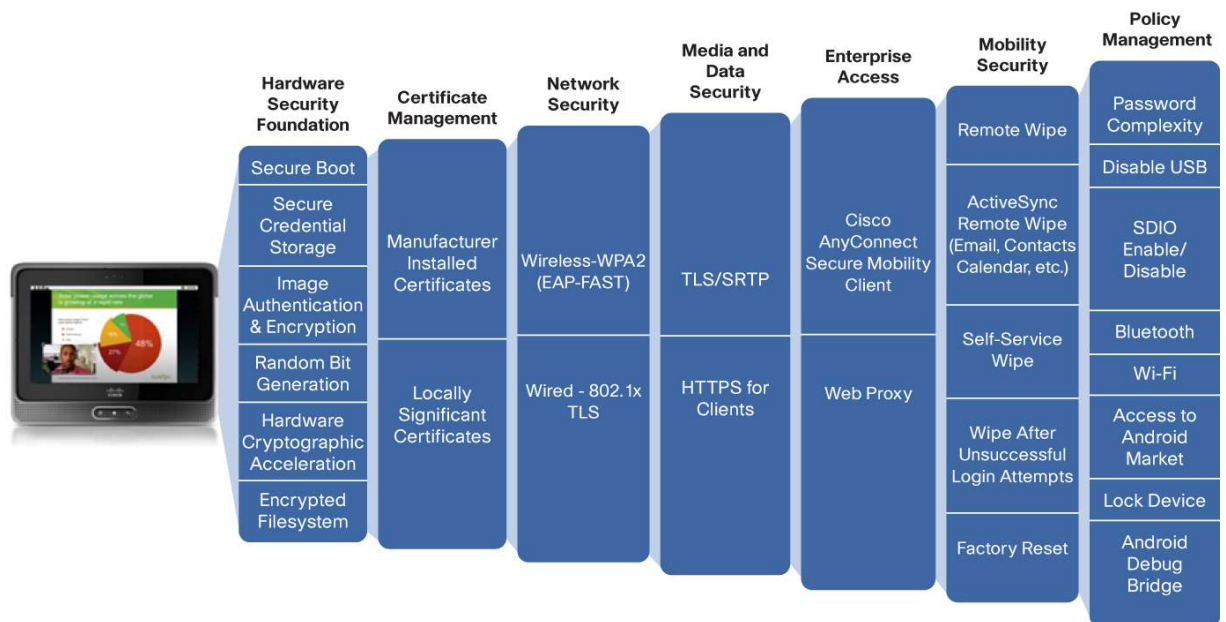
If the network supporting Cisco Cius is a Cisco Unified Wireless LAN “n” network, it will provide the highest quality and secure experience. This provision is made possible by Cisco Compatible Extensions v5.0 for multimedia quality of experience (QoE) and Cisco Clean Air Technology, which **detects** RF interference that other systems cannot see. Clean Air Technology then **identifies** the source of the interference and automatically **adjusts** the wireless network to reduce downtime due to “dirty air”.

Table 1. Cisco Cius Provides Enterprise-Grade Capabilities

Enterprise-Grade Collaboration	Enterprise-Grade Mobility	Enterprise-Grade Security	Enterprise-Grade Manageability	Enterprise-Grade Service and Support
<ul style="list-style-type: none">• Cisco Unified Communications• Cisco Jabber IM and Presence• Cisco WebEx meeting applications• Cisco Quad enterprise social software• Cisco Show and Share social video system (cloud)• Cisco TelePresence Systems• HD video interoperability	<ul style="list-style-type: none">• Power over Ethernet (PoE) wired - 10/100/1000 Ethernet• Wireless - 802.11a/b/g/n Wi-Fi everywhere• 4G services• Transparent roaming	<ul style="list-style-type: none">• VPN• Native encrypted signaling• Native data encryption• Native media encryption• Digital certificates• Remote wipe	<ul style="list-style-type: none">• Native central device management• Central application control• Network-optimized multimedia• Video interoperability• Open Android OS	<ul style="list-style-type: none">• Proven record for 25 years• Next-day replacement• Extended Protection Plan• Enterprise Help Desk• Enterprise services

- Enterprise-grade security: Cisco provides integrated and layered security (Figure 6) for Cisco Cius, which is based on Cisco's proven experience in providing security for IP communications to enterprises around the world. Security for Cisco Cius consists of:
 - Device security: Cisco builds security into the hardware to deliver credential storage, image authentication, encryption of data-at-rest, and an encrypted file system. Cisco Cius ships with a manufacturer-installed certificate and supports locally significant certificates to authenticate access to applications in the network.
 - Network security: For network access control, Cisco uses both wired 802.1X Transport Layer Security (TLS)-based authentication and Wi-Fi Protected Access Version 2 (WPA2) Extensible Authentication Protocol-Flexible Authentication via Secure Tunneling (EAP-FAST). When inside the network, signaling and media are secured with TLS/Secure Real-Time Transport Protocol (SRTP) and Secure HTTP (HTTPS) Secure Socket Layer (SSL) for clients. SSL lets applications connect to secure servers by providing an application programming interface (API) for those clients.
 - Enterprise access: When users are external to the network, enterprise access is protected with Cisco AnyConnect™ Secure Mobility Client, which comes standard on Cisco Cius and provides VPN connectivity. There is also support for Web Proxy services, so IT can govern how and what type of traffic can enter and leave the enterprise.
 - Mobile security: Cisco Cius has multiple remote wipe options and a device lock upon 10 invalid login attempts, in case the device is lost or stolen.
 - Policy management: Password complexity, Disable USB (unique to Cisco Cius), Secure Digital I/O (SDIO) Enable/Disable, Bluetooth, Wi-Fi, Lock Device, and Android Debug Bridge can all be established based on the capabilities of Cisco Unified Communications administration.

Figure 6. Security for Cisco Cius Is Integrated, Layered, and Foundational



- Enterprise-grade application management and security: To manage and secure applications, Cisco has created Cisco AppHQ, an innovative application ecosystem that consists of:
 - A secure, Cisco hosted storefront for purchasing and downloading Cisco validated applications developed by Cisco and third-party Android developers
 - Cisco AppHQ Manager, a comprehensive application management IT suite that includes tools for creating your own custom applications center hosted by Cisco
 - A Cisco Cius developer community, which provides the resources Android developers need to create and market a new class of applications that will transform business processes by deeply integrating Cisco Collaboration capabilities
- Enterprise-grade manageability: Cisco Cius takes advantage of the network as a service platform for collaboration. Network-powered collaboration enables centralized management through Cisco Unified Communications Manager, which:
 - Streamlines deployment through bulk provisioning
 - Makes it possible to retain a common dialing plan
 - Allows IT to enable or disable services by user profile
 - Helps ensure consistent quality of service (QoS) because real-time voice and video communications can be prioritized through network policy controls
- Enterprise-grade service and support: Cisco has a proven, 25-year record of enterprise service and support, so companies can count on a world-class enterprise help desk as well as worry-free product replacement with the optional Cisco Accidental Product Protection service, which covers unintentional spills, drops, falls, and collisions. One-, 2-, and 3-year options are available. Cisco also provides advanced services to help enterprises plan, design, implement, and operate their networks.

Almost Anyone Can Benefit from Cisco Cius

Because Cisco Cius delivers the same uncompromised collaboration in the office, around campus, and off-campus (Figure 7), it can improve the productivity of virtually any worker.

Figure 7. Cisco Cius Makes It Possible to Extend Unencumbered Collaboration Across the Enterprise



With comprehensive collaborative capabilities, **busy executives** - whether they are in or out of the office - can make audio or video calls; create, edit, and share video; attend telepresence sessions; conference; IM; send email messages; and use social software to quickly locate experts and proactively respond to customer feedback.

With constant connectivity and real-time, interoperable HD video, **sales representatives** can be responsive to customers and give impromptu presentations to prospects everywhere.

With transparent mobility and virtual workspaces, **knowledge workers** (based on their roles and preferences) can stop lugging around heavy laptops, and still be able to compute, communicate, and collaborate in conference rooms, corridors, and cafeterias.

With rich video collaboration, office-based **administrative assistants** can make communications more personal and more effective with the people they support.

With the ability to send and receive data and video anywhere, **case workers** can enter information when mobile, interact with colleagues all the time, and never have to return to their desks to access, update, or send files.






Organizations that have deployed collaboration technologies experienced a whopping 400-plus percent return on their investment.

— Frost and Sullivan, Shattering the Barriers to Rich Collaboration

Transforming Business Processes

In addition to being an open Android-based mobile device, which provides access to more than 300,000 third-party applications from Android marketplaces, Cisco Cius is designed for a new class of applications that will transform business processes. Cisco is partnering with hundreds of Android developers to create these applications, which will take advantage of the expansive capabilities of Cisco Cius by deeply integrating Cisco Collaboration capabilities within the user experience. Already, there are many enterprise-validated use cases (Figure 8).

Figure 8. A New Class of Collaborative Applications for Cisco Cius Will Help Redefine Workflows

	<p>Rethink Time to Resolution for Insurance Claims</p> <p>When claims agents are equipped with Cisco Cius, they can capture both still pictures and HD video of damaged property. They can also have HD video calls with claims adjusters to resolve problems, and then fill out and securely file claims - all without leaving the customer's side. These collaborative capabilities increase customer satisfaction and differentiate the company from its competition.</p>
	<p>Reinvent Physician Consults</p> <p>When healthcare teams have Cisco Cius, they can access patient files from any location. They can also click to launch virtual consults with specialists - no matter where the specialists reside - and view pertinent medical data at the same time. These rich interactions improve patient care while reducing healthcare costs.</p>
	<p>Reimagine In-Store Experiences</p> <p>With Cisco Cius placed in kiosks on store aisles, shoppers can view interactive product catalogs and request assistance. An alert is sent wirelessly to an in-store associate who can answer questions, show product videos, check inventory, and place an order if an item is not currently in stock. The net gain is improved close rates and increased revenue.</p>
	<p>Reengineer Field-Agent Effectiveness</p> <p>When field agents have access to product diagrams, video training, and expert assistance on demand, they can quickly resolve complex problems, increasing customer satisfaction and making it possible for agents to work more efficiently, so they can accomplish more in less time.</p>
	<p>Replace Textbooks</p> <p>Cut costs and enhance reading and learning for student populations by replacing textbooks with Cisco Cius. Based on IT objectives and user roles and preferences, schools can also replace desktop phones and PCs with Cisco Cius. Faculty and staff will have more collaborative capabilities both in and out of the classroom, and IT will have fewer devices to manage.</p>

These applications redefine workflows and profoundly change the way work is done across businesses and industries, building sales and profitability by providing:

- Differentiated services and enhanced customer satisfaction
- Accelerated sales, product, and decision cycles
- Sustainable competitive advantage

The potential business value of a collaborative application is significant. Here is one estimate: by enabling virtual access to remote experts, enterprises can expect a 4- to 6-week reduction in a typical product development lifecycle, valued at \$2-3 million for a major product. Incremental margins from this reduced time to market are valued at \$35-50 million.¹²

Why Cisco?

Cisco is the worldwide leader in networking solutions that transform how people connect, communicate, and collaborate. Network-powered solutions break down geographic and organizational barriers, linking people, devices, and applications in a way that no other technology can. Cisco offers comprehensive, market-leading solutions for communications, collaboration, Borderless Networks, and virtualization.

Like many of Cisco's business transformation solutions, Cisco Cius is part of a complete solution, which includes the:

- Cisco Cius mobile collaboration device
- Cisco Developer Network Marketplace for services and solutions
- Cisco AppHQ storefront for secure, business applications from Cisco and third-party Android developers
- Optional Cisco AppHQ Manager for additional software application management, which includes the ability to create your own custom applications center that is hosted by Cisco

Harness the Power of Participation

Cisco Cius removes the barriers to mobile productivity, enabling you to collaborate everywhere - transparently, securely, and reliably. With enterprise-grade security, manageability, and interoperable HD video, Cisco Cius can be safely introduced into your organization and efficiently managed by IT because it is a natural extension of your network. With the Cisco AppHQ applications ecosystem, Cisco Cius is part of a complete solution that will provide an unparalleled opportunity to redefine workflows and fundamentally change the way people work.

Cisco Cius: Participate in the next wave of business transformation.

¹² Cisco Cius: The Business Case for Tablets (Slide no. 5)




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

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

 Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)