



# Cisco SBA February 2013 Series Release Notes

 SMART BUSINESS ARCHITECTURE

Updated November 18, 2013

# Table of Contents

|  |           |
|--|-----------|
| <b>Overview .....</b>                        | <b>3</b>  |
| About Smart Business Architecture.....       | 3         |
| In These Release Notes.....                  | 3         |
| Highlights of the February 2013 Series ..... | 3         |
| Continued Commitments .....                  | 4         |
| <b>Cisco SBA Borderless Networks .....</b>   | <b>5</b>  |
| Local Area Network Guides .....              | 5         |
| Wide Area Network Guides .....               | 7         |
| Internet Edge Guides .....                   | 8         |
| Additional Design Overviews .....            | 9         |
| Ecosystem Partner Solutions .....            | 9         |
| <b>Cisco SBA Data Center .....</b>           | <b>10</b> |
| Data Center Foundation Guides .....          | 10        |
| Additional Data Center Guides.....           | 10        |
| Ecosystem Partner Solutions .....            | 11        |

|  |           |
|--|-----------|
| <b>Cisco SBA Collaboration.....</b>                          | <b>12</b> |
| Collaboration Foundation Guides .....                        | 12        |
| Cisco Smart Business Configurator for<br>Collaboration ..... | 13        |
| Additional Collaboration Guides .....                        | 13        |
| Ecosystem Partner Solutions .....                            | 14        |
| <b>Cisco SBA Solutions.....</b>                              | <b>15</b> |
| BYOD Solutions.....  | 15        |
| Teleworking Solutions.....                                   | 16        |
| Virtual Desktop Infrastructure Solutions .....               | 16        |
| Discrete Manufacturing Solutions.....                        | 16        |

# Overview



## Reader Tip

Cisco Smart Business Architecture (SBA) has become an integral part of the Cisco Validated Design program. For up-to-date architectural guidance, please visit the [Cisco Validated Design Program](#) site.

You can find continued guidance for the following technologies at the sites listed:

- Local-area networks—[Design Zone for Campus](#) ([www.cisco.com/go/cvd/campus](http://www.cisco.com/go/cvd/campus))
- Wide-area networks—[Cisco Validated Designs for Enterprise WAN](#) ([www.cisco.com/go/cvd/wan](http://www.cisco.com/go/cvd/wan))
- Internet edge—[Design Zone for Edge](#) ([www.cisco.com/go/cvd/edge](http://www.cisco.com/go/cvd/edge))
- Collaboration—[Cisco Validated Designs for Collaboration](#) ([www.cisco.com/go/cvd/collaboration](http://www.cisco.com/go/cvd/collaboration))

Cisco SBA content will be available on [cisco.com](http://cisco.com) for a limited time. No further updates to the Cisco SBA guides are planned at this time.

## About Smart Business Architecture

Cisco® Smart Business Architecture (SBA) helps you design and quickly deploy a full-service business network. An SBA deployment is prescriptive, out-of-the-box, scalable, and flexible.

When we developed a series of guides, we tested them together, as a complete system. To ensure the mutual compatibility of designs in Cisco SBA guides, you should use guides that belong to the same series.

The February 2013 Series was the Cisco SBA release for the first half of the 2013 calendar year. The February 2013 Series release superseded the August 2012 Series.

## In These Release Notes

This document provides the following information about Cisco SBA guides:

- Changes to guides that were part of the previous release, including updates to software releases and other products in the SBA designs.
- Announcements of new guides that are included in the February 2013 Series, with a brief summary of each guide.
- Notices about guides that are delayed or that we have discontinued.
- Notices of changes to guide titles.

Cisco SBA provides designs for four categories of Cisco product architecture:

- Borderless Networks
- Data Center
- Collaboration
- Solutions

For each category, Cisco SBA provides a set of guides that describe the design and deployment of a foundation, as well as additional designs and deployments that build upon the foundation.

This document is organized by the categories and by the types of guides that make up the foundation and all the additional designs that you can implement after you have deployed the foundation.

You can access all the guides that are listed in this document by visiting <http://www.cisco.com/go/sba>. For your convenience, each guide heading in these release notes is a hyperlink to the guide online.

Cisco SBA guides are best viewed with [Adobe Acrobat Reader](#).

## Highlights of the February 2013 Series

### Borderless Networks

- We prepared the network foundation for expanding the role of Cisco Prime Infrastructure in future releases of Cisco SBA.
- We updated the Cisco Wireless LAN Controller software to Release 7.4.

- We updated the Cisco ASA software to Release 9.0.
- We revised guides to standardize on using Cisco ASDM for configuration and management of Cisco ASA 5500 Series Adaptive Security Appliances.
- We added a deployment guide for Cisco Cloud Web Security.

### **Data Center**

- We updated many of the Cisco Unified Computing Systems products used.
- We added support for Cisco Virtual Machine Fabric Extender.

### **Collaboration**

- We upgraded the Cisco Unified Communication Manager to version 9.1.
- We enhanced the scalability of the Cisco SBA telephony architecture, to better support deployments up to 10,000 phones.
- We added a deployment guide for Cisco Jabber for Windows.

### **Solutions**

- We introduced Cisco SBA Discrete Manufacturing, with a design overview and two foundation deployment guides.

## **Continued Commitments**

For the February 2013 Series, we remained committed to the following goals.

- Providing prescriptive, validated designs for organizations with up to 10,000 connected users.
- Ensuring that our architectures are up to date with current Cisco products.
- Developing new designs and enhancements to existing designs, with a consistent focus on solving real-world problems with reliable, orderable Cisco products and services.
- Improving readability and usability of Cisco SBA guides.

## **Comments and Questions**

If you would like to comment on a guide or ask questions, please email [cisco-sba-feedback@cisco.com](mailto:cisco-sba-feedback@cisco.com).

### **Notes**



# Cisco SBA Borderless Networks

Cisco SBA Borderless Networks is a comprehensive network design targeted at organizations with up to 10,000 connected users. The SBA Borderless Network architecture incorporates wired and wireless local area network (LAN) access, wide-area network (WAN) connectivity, WAN application optimization, and Internet edge security infrastructure.

## Local Area Network Guides



### Reader Tip

Cisco SBA has become an integral part of the Cisco Validated Design program. For up-to-date architectural guidance for local-area networks, see the general campus Cisco Validated Design guides on [Design Zone for Campus](http://www.cisco.com/go/cvd/campus) ([www.cisco.com/go/cvd/campus](http://www.cisco.com/go/cvd/campus)).

Cisco SBA content will be available on [cisco.com](http://cisco.com) for a limited time. No further updates to the Cisco SBA guides are planned at this time.

## LAN and Wireless LAN Foundation Guides

### LAN Design Overview

- We provided additional details regarding medianet technology.
- We improved the description of wireless LAN design models.

### LAN Deployment Guide

- For the Cisco Catalyst 6500 Series Switch, we did the following:
  - We replaced the Quality of Service macro for 10-Gigabit Ethernet with `EgressQoS TenOrFortyGig`, and we also applied the macro to 40-Gigabit Ethernet interfaces.
  - We introduced the WS-X6904-40G-2T 40Gb/10Gb Ethernet module as an option for 40-Gigabit Ethernet connectivity between the Cisco Catalyst 6500 core and Cisco Catalyst 6500 VSS 4T distribution.

- For the Cisco Catalyst 4500 Series Switch, we updated the QoS policy to use the AutoQoS configuration available in newer Cisco IOS code versions.

### LAN Configuration Files Guide

- We updated the guide with the device configurations of the Cisco SBA lab devices used to validate the *LAN Deployment Guide*.

### Wireless LAN Deployment Guide

- We added the 7.4 release of firmware for all WLCs.
- We added the virtual Wireless LAN Controller (vWLC) for use with remote sites using Cisco FlexConnect.
- We added multicast support for sites with on-site controllers using the multicast-multicast method.
- We added Cisco Aironet1600 Series Access Points, replacing the Aironet 1040 Series APs.
- For Cisco 5500 and 7500 Series Wireless LAN Controller deployments, we added a new high availability feature called access point stateful switchover (AP SSO), which provides sub-second AP failover and automatic configuration synchronization between two wireless LAN controllers.
- We added link aggregation (LAG) support to the Cisco 2500 and 7500 Series Wireless LAN Controllers.
- We added guest anchor controller support for the Cisco 2500 Series Wireless LAN Controller by providing two choices of anchor controllers (2500 and 5500 Series wireless controllers).

## **Additional LAN and Wireless LAN Guides**

### **Compact Switch Deployment Guide**

- We upgraded the device software versions and hardware model.
- We updated the centralized user authentication template to the newer method that allows IPv4 and IPv6 TACACS+ server definition. The older method will be deprecated from Cisco IOS over time.
- We added information describing powering the Cisco Catalyst Compact Switch by using Cisco UPOE.

### **Device Management Using ACS Deployment Guide**

- We made no changes to the content of this guide.

### **LAN and Data Center Consolidated Core Using Cisco Nexus 7000 Deployment Guide**

- We changed the title to better reflect consolidation of LAN and data center cores and to better distinguish this guide from a vertical collapsing of a LAN core and distribution.
- We upgraded the Cisco NX-OS software version 5.0(7).

### **LAN and Wireless LAN 802.1X Authentication Deployment Guide**

- We upgraded the Cisco ISE appliances to software version 1.1.2.145.
- We upgraded the Cisco Wireless LAN Controllers to software version 7.4.1.52.
- We upgraded the Cisco Catalyst 2960-S Series, 3560-X Series, and 3750-X Series switches to Cisco IOS version 15.0(2)SE.
- We upgraded the Cisco ASA 5500 Series firewall to software version 9.0(1).
- We upgraded the Cisco AnyConnect Secure Mobility Client 3.1.00495.
- We added Security Group Access (SGA) support to our low-impact mode deployment of 802.1X, using Security Group Tags (SGT) and Security Group Firewall (SG-FW) to enforce our access policy.
- We added EAP Chaining support for Microsoft Windows endpoints using the Cisco AnyConnect Mobility Client, allowing them to authenticate using both a machine certificate and a user certificate.

### **Network Analysis Module Deployment Guide**

- We replaced Cisco NAM-2220 with the Cisco NAM-2320 appliance.
- We added Continuous Packet Capture and Pre- and Post- WAN Optimization to Day 1+ Scenarios.
- We made changes to improve the readability and technical accuracy of this guide.

### **Prime LMS Deployment Guide**

- We made no changes to this guide.

### **Wireless LAN Advanced Guest Access Deployment Guide**

- We upgraded Cisco ISE software to version 1.1.2.
- We added Guest Anchor support for the 2500 Series Wireless LAN Controller.

### **Wireless LAN CleanAir Deployment Guide**

- We added Cisco Prime Infrastructure to support wireless LAN controller version 7.4.
- We revised the configuration of Cisco CleanAir for APs and WLC to use Cisco Prime Infrastructure 1.3.
- We added deployment details for the installation of a Cisco Mobility Services Engine virtual appliance (MSE VA) version 7.4.
- Historical Cisco CleanAir information is now available through the addition of the Cisco Mobility Services Engine virtual appliance (MSE VA).
- Historical Cisco CleanAir information is now presented through Cisco Prime Infrastructure 1.3.

# Wide Area Network Guides



## Reader Tip

Cisco SBA has become an integral part of the Cisco Validated Design program. For up-to-date architectural guidance for wide-area networks, go to [Cisco Validated Designs for Enterprise WAN](http://www.cisco.com/go/cvd/wan) ([www.cisco.com/go/cvd/wan](http://www.cisco.com/go/cvd/wan)).

Cisco SBA content will be available on [cisco.com](http://cisco.com) for a limited time. No further updates to the Cisco SBA guides are planned at this time.

## WAN Foundation Guides

### WAN Design Overview

- We provided additional details regarding medianet technology.
- We made minor enhancements to improve the readability of the guide.

### MPLS WAN Deployment Guide

- We updated the code version for the Cisco ASR and ISR platforms.
- We made changes to improve the readability and technical accuracy of this guide.

### MPLS WAN Configuration Files Guide

- We updated the guide with the device configurations of the Cisco SBA lab devices used to validate the *MPLS WAN Deployment Guide*.

### Layer 2 WAN Deployment Guide

- We updated the code version for the Cisco ASR and ISR platforms.
- We made changes to improve the readability and technical accuracy of this guide.

### Layer 2 WAN Configuration Files Guide

- We updated the guide with the device configurations of the Cisco SBA lab devices used to validate the *Layer 2 WAN Deployment Guide*.

### VPN WAN Deployment Guide

- We updated the code version for the Cisco ASR and ISR platforms.
- We made changes to improve the readability and technical accuracy of this guide.

### VPN WAN Configuration Files Guide

- We updated the guide with the device configurations of the Cisco SBA lab devices used to validate the *VPN WAN Deployment Guide*.

## Additional WAN Guides

### Application Monitoring Using NetFlow Deployment Guide

- We made minor changes to the “NetFlow-Enabled Device Configuration” appendix.
- We updated the versions of the tested NetFlow collectors to the latest available.
- We updated the code version for the Cisco ASR and ISR platforms.

### Application Optimization Deployment Guide

- We modified the time zone settings in order to match the rest of Cisco SBA documentation.
- We made changes to improve the readability and technical accuracy of this guide.

### GET VPN Deployment Guide

- We updated the software release for the Cisco ISR-G2 Series routers used as GET VPN GM to IOS 15.1(4)M5.

### Network Monitoring Using IP SLA and Prime LMS Deployment Guide

- Postponed—look for an update to this guide in the August 2013 Series

### Video Quality Monitoring Using Medianet Deployment Guide

- We updated the guide to support up to 10,000 connected users.
- We added the Cisco ASR1000 Series router family.
- We updated the code version for the Cisco ISR platform.
- We added ActionPacked! LiveAction as a PerfMon collector and updated the software versions of other PerfMon collectors.
- We made changes to improve the readability and technical accuracy of this guide.

### VPN Remote Site over 3G/4G Deployment Guide

- We made changes to improve the readability and technical accuracy of this guide.
- We added the EHWIC-4G-LTE-A and the relevant procedures to support its usage.

- We added the “Upgrading the Cellular Modem Firmware” process that outlines the procedures needed in order to upgrade the cellular modem firmware.
- We removed the “Implementing Automated Recovery for 4G/LTE Interface” section, as it is no longer needed with the recommended IOS and cellular modem firmware versions.

## Internet Edge Guides



### Reader Tip

Cisco SBA has become an integral part of the Cisco Validated Design program. For up-to-date architectural guidance for Internet edge, go to [Design Zone for Edge](http://www.cisco.com/go/cvd/edge) ([www.cisco.com/go/cvd/edge](http://www.cisco.com/go/cvd/edge)).

Cisco SBA content will be available on cisco.com for a limited time. No further updates to the Cisco SBA guides are planned at this time.

### Internet Edge Foundation Guides

#### Internet Edge Design Overview

- We added information about Cisco Cloud Web Security.

#### Firewall and IPS Deployment Guide

- We updated the Cisco ASA firewall software to 9.0(1) with ASDM 7.0(2).
- We updated the Cisco IPS software to 7.1(6)E4.
- We updated various screenshots to reflect the new software versions.
- We made minor updates to improve the usability of the guide.

#### Remote Access VPN Deployment Guide

- We updated the Cisco ASA firewall software to 9.0(1) with ASDM 7.0(2).
- We updated various screenshots to reflect the new software versions.
- We made minor updates to improve the usability of the guide.

### Additional Internet Edge Guides

#### Email Security Using Cisco ESA Deployment Guide

- We upgraded the Cisco ESA software to version 7.6.1.
- We updated configuration procedures to support outbound email.
- We modified the firewall policies and revised the procedures for creating network objects and access rules.
- We included an optional procedure to enable message tracking.

#### IPv6 DMZ Web Service Deployment Guide

- We updated Cisco ASA software to align with current Cisco SBA release.
- We updated screen shots to show current Cisco ASA GUI.
- We added NAT64 option for IPv4-only servers.

#### Remote Mobile Access Deployment Guide

- We updated the Cisco ASA firewall software to 9.0(1) with ASDM 7.0(2).
- We updated the AnyConnect Secure Mobility Client software for Windows, Mac OS X, and Linux to 3.1.00495.
- We updated the AnyConnect Secure Mobility Client software for iOS to 3.0.09097.
- We updated the AnyConnect Secure Mobility Client software for Android to 3.0.09093.
- We updated various screenshots to reflect the new software versions.
- We replaced the Microsoft ISA server with the Microsoft Forefront Threat Management Gateway.
- We made minor updates to improve the usability of the guide.

#### Web Security Using Cisco WSA Deployment Guide

- We upgraded Cisco WSA software to version 7.5.0.
- We made minor changes to improve the readability of this guide.

#### Cloud Web Security Using Cisco ASA Deployment Guide

- **New Guide.** This guide describes how to implement Cisco Cloud Web Security (CWS), using the Internet edge Cisco ASA 5500 Series Adaptive Security Appliance to direct traffic to Cisco CWS.



## Additional Design Overviews

### [IPv4 Addressing Guide](#)

- We made minor changes to improve the readability of this guide.

### [IPv6 Addressing Guide](#)

- We made minor changes to improve the readability of this guide.

### [Physical Environmental Specifications Guide](#)

- We updated the guide and its [accompanying spreadsheet](#) with physical specifications for devices in the February 2013 Series.

## Ecosystem Partner Solutions

### [Panduit Facilities and LAN Access Layer Physical Infrastructure Reference Guide](#)

- We made minor enhancements to a few illustrations.

### [Panduit Network Core and Data Center Physical Infrastructure Reference Guide](#)

- We made minor enhancements to a few illustrations.

### [ScienceLogic EM7 Network Management Guide](#)

- ScienceLogic added support for managing collaboration environments.

### [SolarWinds Network Management Guide](#)

- We made minor changes to improve the readability of this guide.

## Notes

# Cisco SBA Data Center

Cisco SBA Data Center is a comprehensive design that scales from a server room to a data center for networks with up to 10,000 connected users. This design incorporates compute resources, security, application resiliency, and virtualization.

## Data Center Foundation Guides

### Data Center Design Overview

- We updated information about Cisco Nexus 5000 Series Switches.
- We updated information about Cisco Unified Computing System products used in Cisco SBA Data Center.
- We provided additional information about Cisco Nexus 1000V Series Switches.
- We made minor enhancements to a few illustrations.

### Data Center Deployment Guide

- We added vPC peer-switch to the data-center core Ethernet as a spanning-tree option to reduce topology change impact when Layer-2 switches are connected to the data-center core.
- We added vPC object-tracking as an option to add resilience to the virtual port channel domain by tracking critical interfaces.
- We updated the Cisco NX-OS software version for the Cisco Nexus 5500 data center core switches.
- We updated the software for the Cisco ASA firewalls and IPS devices.
- We updated the firewall security policy procedures to use Cisco ASDM in order to create access control lists versus CLI for ease of use.
- We made minor changes and updates to improve the readability of this guide.

### Data Center Configuration Files Guide

- We updated the guide with the device configurations of the Cisco SBA lab devices used to validate the *Data Center Deployment Guide*.

### Server Room Deployment Guide

- We updated the software version on the server room switches, and for navigation benefits, we improved the server room procedures.
- We added remote-site server room IP addressing and utilized the remote-site IP addressing in the document while preserving the VLAN numbering and naming for clarity.
- The firewall software version was updated. For ease of use, the security policy procedures were updated to use Cisco ASDM to create access control lists versus CLI.
- The Cisco IPS software version was updated, and for navigation benefits, we improved the IPS procedures.

## Additional Data Center Guides

### Advanced Server-Load Balancing Deployment Guide

- We updated the Cisco ACE software to version A5(1.2).
- We added inband health checking for TCP and HTTP traffic.
- We added details on connectivity to Cisco Nexus 5500 Series switches.

### Unified Computing System Deployment Guide

- We improved process and step flow in the “Data Center Core Network Infrastructure” section.
- We upgraded the Cisco UCS Manager on the Cisco UCS Fabric Interconnects to release 2.1(1a), and we added Cisco UCS B200 M3 Blade Server with the modular LAN on Motherboard (mLOM) based on the new Cisco UCS VIC 1240 Virtual Interface Card.
- We added FCoE uplinks as an option in both the data center core and on the Cisco UCS Fabric Interconnects.
- We redesigned the Cisco UCS B-Series server process and procedures, to streamline address pool creation, profile creation, and template creation. We added Cisco UCS Manager domain identification, to address pool creation.

- We removed the Cisco UCS 6100 Series Fabric Interconnects and Cisco UCS 2100 Series Fabric Extenders.
- We added Cisco UCS C-Series C220 M3 and C240 M3 rack mount servers to the Cisco SBA data center along with the new Cisco UCS VIC 1225.
- We updated the Cisco UCS C-Series server LSI RAID controller configuration, to use the more recent LSI MegaRAID controller.
- We added Cisco UCS Manager single-wire-management to the process for Cisco C-Series server integration to the Cisco UCS Manager environment.

### Virtualization with Cisco UCS, Nexus 1000V and VMware Deployment Guide

- We upgraded the VMware environment to version 5.0U1 and updated processes to match the new procedures and steps required for deployment.
- We added Cisco UCS C-Series servers with Cisco FlexFlash as an option for VMware ESXi image boot.
- We updated the Cisco Nexus 1000V software to the 2.1 release and updated procedures and steps required for deployment.
- We added the “Cisco Virtual Machine Fabric Extender Configuration and Deployment” section, targeted at environments using Cisco UCS B-Series servers with Cisco virtual interface cards and VMware ESXi release 5.0U1.

## Ecosystem Partner Solutions

### NetApp Storage Deployment Guide

- We updated the NetApp storage system to a NetApp FAS3240 running Data ONTAP 8.0.3 operating in 7-Mode. The initial system setup reflects the changes required for the newer platform. Most of the GUI-based configuration in this guide remains the same, allowing an easy migration from the older NetApp FAS3140 to the NetApp FAS3240 storage system.
- We have added the SNMP, Network Time Protocol (NTP), and Cisco Discovery Protocol (CDP) options to the initial system setup.
- We made minor changes to improve the readability of this guide.

### ScienceLogic EM7 Network Management Guide

- ScienceLogic added support for managing collaboration environments.

## Notes

# Cisco SBA Collaboration

Cisco SBA Collaboration is a design incorporating unified communications, video collaboration, and web conferencing. By building upon the hierarchical model of network foundation, network services, and user services, Cisco SBA Collaboration provides dependable delivery of business applications and services.



## Reader Tip

Cisco SBA has become an integral part of the Cisco Validated Design program. For up-to-date architectural guidance for collaboration, go to [Cisco Validated Designs for Collaboration](http://www.cisco.com/go/cvd/collaboration) ([www.cisco.com/go/cvd/collaboration](http://www.cisco.com/go/cvd/collaboration))

Cisco SBA content will be available on [cisco.com](http://cisco.com) for a limited time. No further updates to the Cisco SBA guides are planned at this time.

## Collaboration Foundation Guides

### Collaboration Design Overview

- We added scaling options for Unified CM.
- We added design models for video endpoints.
- We added information on Cisco Unified CM IM and Presence.
- We added information on Cisco Jabber.
- We provided additional details regarding medianet technology.

### Telephony Using Cisco UCM Deployment Guide

- We added Cisco Unified Communications Manager design models.
- We added unified communications hardware scaling options.
- We added voice gateway scaling options.
- We updated the Cisco Medianet section.
- We added Cisco Unified CM virtual machine scaling options.

- We added Cisco Unified CM standalone server scaling options.
- We added Cisco Unity Connection virtual machine scaling options.
- We added Cisco Unity Connection standalone server scaling options.
- We added instructions for configuring option 150 on a Microsoft DHCP server.
- We added configuration instructions Cisco Enterprise License Manager.
- We added support for Date/Time Group and Time Zone per location.
- We added an option in Cisco SBCC to create gateway templates for each site.
- We added instructions for using the gateway templates when configuring the routers.
- We added daily log files to record activity in each area of Cisco SBCC.
- We added a directory and filenames table for Cisco SBCC.
- We added support for Mac OS X with Cisco SBCC.
- We tested 10,000 users with Cisco SBCC.
- We tested 10,000 phones with Cisco SBCC.
- We tested 500 remote sites and 1000 SIP gateways with Cisco SBCC.
- We changed the dial plan information in order to align it with new telephony integration guides. This change ensures the voice guides use a common set of extension numbers and dialing rules.
- We updated the software to version 9.1 on the voice infrastructure equipment and the endpoints to the latest shipping versions.

### Telephony Using Cisco UCM Configuration Files Guide

- We updated the guide with the device configurations of the Cisco SBA lab devices used to validate the *Telephony Using Cisco UCM Deployment Guide*.

## Room-System Video Deployment Guide

- We renamed this guide to *SIP Video Using VCS Deployment Guide*.

## SIP Video Using VCS Deployment Guide

- We added multipurpose endpoint design models.
- We added MCU scaling options.
- We provided additional details regarding medianet technology.
- We changed the dial plan information in order to align it with new video integration guides. This change ensures the video guides use a common set of extension numbers and dialing rules.
- We updated the software on the video infrastructure equipment and the endpoints to the latest shipping versions.
- To better reflect the solution presented in the guide, we updated the title of the guide from Room-System Video Deployment Guide to SIP Video Using VCS Deployment Guide.

## Cisco Smart Business Configurator for Collaboration

Cisco Smart Business Collaboration Configurator (SBCC) uses the AXL/Soap API for Unified CM and CUPI API for Unity Connection to quickly install, configure, and deploy basic telephony and simple voice messaging. By using a simple, repeatable process, it helps you avoid common configuration mistakes. It also provides a solid foundation for further configuration and deployment of advanced unified communications features, without the need to redesign or reengineer when a new element or service is added.

For instructions on using Cisco SBCC, see the [Telephony Using Cisco UCM Deployment Guide](#).

New in the February 2013 Series, Cisco SBCC supports Macintosh in addition to Windows.

**April 7, 2013:** A new version of Cisco SBCC for the February 2013 Series is available. The new version, Build 2013-04-07, removes the expiration date, to fix an issue where Cisco SBCC incorrectly states that it has expired.

## Cisco SBCC Downloads

- [Cisco SBCC for Windows, Build 2013-04-07](#)
- [Cisco SBCC for Macintosh, Build 2013-04-07](#)

## Additional Collaboration Guides

### [H.323 Video Interworking Using VCS Deployment Guide](#)

- We changed the dial plan information, to align it with new video integration guides. This change ensures the video guides use a common set of extension numbers and dialing rules.
- We updated the software on the video infrastructure equipment and the endpoints to the latest shipping versions.
- To better reflect the solution presented in the guide, we updated the title of the guide from *H.323 Video Integration Deployment Guide* to *H.323 Video Interworking Using VCS Deployment Guide*.

### [Help Desk Using Cisco UCCX Deployment Guide](#)

- We added the procedures and steps for connecting the platform to the LAN.
- We added the procedures and steps for downloading, installing, and opening the supervisor and agent desktop software.
- We updated the prompts and script to match the configuration in the guide.
- We added instructions for enabling the reason codes and the default home page in the work flow configuration.
- We added the steps for configuring the agent phones using extension mobility.
- We added the scaling options for virtual and standalone servers.
- We changed the dial plan information, to align it with new telephony integration guides. This change ensures the voice guides use a common set of extension numbers and dialing rules.
- We updated the software on the voice infrastructure equipment and the endpoints to the latest shipping versions.

### [On-Premises IM Using Cisco Jabber Deployment Guide](#)

- **New Guide.** This guide describes how to deploy instant messaging and related functionality, using Cisco Jabber for Windows, iPad, and iPhone, in a Cisco Unified Communications environment.



## VCS and UCM Video Integration Deployment Guide

- We added instructions for installing TelePresence Room licenses in Cisco Enterprise License Manager.
- We added instructions for updating the immersive video bandwidth in the locations-based call admission control for Unified CM.
- We deleted instructions for the room configuration option of the TelePresence Server because the feature was removed from the latest release of software.
- We changed the dial plan information, to align it with new video integration guides. This change ensures the video guides use a common set of extension numbers and dialing rules.
- We updated the software on the video infrastructure equipment and the endpoints to the latest shipping versions

## Ecosystem Partner Solutions

### ScienceLogic EM7 Network Management Guide

- ScienceLogic added support for managing collaboration environments.

## Notes

# Cisco SBA Solutions

Cisco SBA Solutions are designs for specific problems found within the most common technology trends. Often, Cisco SBA addresses more than one use case per solution because customers adopt new trends differently and deploy new technology based upon their needs.

## BYOD Solutions

### BYOD Design Overview

- We made minor changes to improve the readability of this guide.

### BYOD—Advanced Guest Wireless Access Deployment Guide

- We upgraded Cisco ISE software to version 1.1.2.
- We added Guest Anchor support for the 2500 Series Wireless LAN Controller.

### BYOD—Identity and Authentication Deployment Guide

- We upgraded the Cisco ISE appliances to software version 1.1.2.145.
- We upgraded the Cisco Wireless LAN Controllers to software version 7.4.1.52.
- We upgraded the Cisco Catalyst 2960-S Series, 3560-X Series, and 3750-X Series switches to Cisco IOS version 15.0(2)SE.
- We upgraded the Cisco ASA 5500 Series firewall to software version 9.0(1).
- We upgraded the Cisco AnyConnect Secure Mobility Client 3.1.00495.
- We added Security Group Access (SGA) support to our low-impact mode deployment of 802.1X, using Security Group Tags (SGT) and Security Group Firewall (SG-FW) to enforce our access policy.
- We added EAP Chaining support for Microsoft Windows endpoints using the Cisco AnyConnect Mobility Client, allowing them to authenticate using both a machine certificate and a user certificate.

### BYOD—Internal Corporate Access Deployment Guide

- We upgraded the Cisco ISE appliances to software version 1.1.2.145.
- We upgraded the Cisco Wireless LAN Controllers to software version 7.4.1.52.
- We modified the Cisco ISE deployment such that it now consists of four appliances—a primary and secondary policy service and administration node, and a primary and secondary monitoring node.
- We added BYOD support for wired devices.
- We deployed the DHCP Profiling feature on the wireless LAN controllers to simplify the profiling configuration and eliminate the need to send copies of DHCP requests to the Cisco ISE appliances.
- We added support for the provisioning of Microsoft Windows and Apple Mac OS X devices on both wired and wireless networks using the selfprovisioning portal feature in Cisco ISE. Provisioning includes configuring the 802.1X supplicant and deploying digital certificates.
- We added Security Group Access (SGA) support to our deployment, using Security Group Tags (SGT), Security Group Tag Exchange Protocol (SXP), and Security Group Firewall (SG-FW) to enforce our access policy.

### BYOD—Remote Mobile Access Deployment Guide

- We updated the Cisco ASA firewall software to 9.0(1) with ASDM 7.0(2).
- We updated the AnyConnect Secure Mobility Client software for Windows, Mac OS X, and Linux to 3.1.00495.
- We updated the AnyConnect Secure Mobility Client software for iOS to 3.0.09097.
- We updated the AnyConnect Secure Mobility Client software for Android to 3.0.09093.
- We updated various screenshots to reflect the new software versions. We replaced the Microsoft ISA server with Microsoft Forefront Threat Management Gateway.
- We made minor updates to improve the usability of the guide.

## BYOD—Virtual Desktop Access Deployment Guide

- We upgraded the Cisco ISE appliances to software version 1.1.2.145.
- We upgraded the Cisco Wireless LAN Controllers to software version 7.4.100.1.
- We modified the Cisco ISE deployment such that it now consists of four appliances—a primary and secondary policy service and administration node, and a primary and secondary monitoring node.
- We added BYOD support for wired devices.
- We deployed the DHCP Profiling feature on the wireless LAN controllers to simplify the profiling configuration and eliminate the need to send copies of DHCP requests to the Cisco ISE appliances.
- We added support for the provisioning of Microsoft Windows and Apple Mac OS X devices on both wired and wireless networks using the selfprovisioning portal feature in Cisco ISE. Provisioning includes configuring the 802.1X supplicant and deploying digital certificates.
- We added Security Group Access (SGA) support to our deployment, using Security Group Tags (SGT), Security Group Tag Exchange Protocol (SXP), and Security Group Firewall (SG-FW) to enforce our access policy.
- We added Cisco Nexus 1000v to the architecture in order to support using SGA with virtualized desktops.

## Teleworking Solutions

### Teleworking Design Overview

- We updated the discussion of Cisco OfficeExtend. For more information, see the notes for the *Teleworking—OfficeExtend Deployment Guide*.

### Teleworking—ASA 5505 Deployment Guide

- We upgraded the Cisco ASA software to 9.0(1).
- We made minor changes to improve the readability of this guide.

### Teleworking—CVO Deployment Guide

- We made minor changes to improve the technical accuracy and readability of this guide.
- We added a section describing the addition of voice protocols into the ACLs provisioned on teleworker routers.
- We updated the code version of the Cisco ISR G2 aggregation and teleworker routers.

## Teleworking—OfficeExtend Deployment Guide

- In previous releases of this document, we presented a second design model where both internal and Cisco OfficeExtend access points were joined on the same controller pair. Because Cisco OfficeExtend and high availability using AP SSO is not supported concurrently on a controller, we have removed that option in this release.
- We upgraded the Cisco ASA software to 9.0(1).
- We upgraded the Cisco Wireless Controller software to 7.4.
- We made minor changes to improve the readability of this guide.

## Teleworking—VPN Phone Deployment Guide

- We made minor changes to improve the readability of this guide.

## Virtual Desktop Infrastructure Solutions

### VDI—Cisco UCS with VMware Hypervisors and Citrix XenDesktop Deployment Guide

- **New Guide.** This guide describes how to deploy a scalable virtual desktop infrastructure.

### VDI—Basic Implementation with Cisco UCS and Citrix Deployment Guide

- We have discontinued this guide.

## Discrete Manufacturing Solutions

### Discrete Manufacturing Design Overview

- **New Guide.** This guide provides an introduction to Cisco SBA Discrete Manufacturing, including a discussion of converged industrial Ethernet networks, network services, and user services.

### Discrete Manufacturing LAN Deployment Guide

- **New Guide.** This guide describes how to deploy wired network access for connectivity requirements that range from a small plant to up to 2,500 connected devices at a single plant location.

### Discrete Manufacturing Security Deployment Guide

- **New Guide.** This guide describes how to deploy firewalls, intrusion prevention systems, remote-access VPN, and AAA in the Cisco SBA Discrete Manufacturing LAN.

## Feedback

Please use the [feedback form](#) to send comments and suggestions about this guide.



## SMART BUSINESS ARCHITECTURE



**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](http://www.cisco.com/go/offices).

ALL DESIGNS, SPECIFICATIONS, STATEMENTS, INFORMATION, AND RECOMMENDATIONS (COLLECTIVELY, "DESIGNS") IN THIS MANUAL ARE PRESENTED "AS IS," WITH ALL FAULTS. CISCO AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE. IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THE DESIGNS, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE DESIGNS ARE SUBJECT TO CHANGE WITHOUT NOTICE. USERS ARE SOLELY RESPONSIBLE FOR THEIR APPLICATION OF THE DESIGNS. THE DESIGNS DO NOT CONSTITUTE THE TECHNICAL OR OTHER PROFESSIONAL ADVICE OF CISCO, ITS SUPPLIERS OR PARTNERS. USERS SHOULD CONSULT THEIR OWN TECHNICAL ADVISORS BEFORE IMPLEMENTING THE DESIGNS. RESULTS MAY VARY DEPENDING ON FACTORS NOT TESTED BY CISCO.

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

© 2013 Cisco Systems, Inc. All rights reserved.

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](http://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)