



SBA

# Cisco SBA August 2012 Series Release Notes

● ● ● SMART BUSINESS ARCHITECTURE

Updated December 3, 2012

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# Overview

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.

We update Cisco SBA guides on a regular basis. As we develop a new series of guides, we test 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.

## Introducing the August 2012 Series

The August 2012 Series is the Cisco SBA release for the second half of the 2012 calendar year. The August 2012 Series release supersedes the February 2012 Series.

### A Single, Scalable Architecture

The August 2012 Series removes the market segment labels found in earlier releases and transitions Cisco SBA to a single architecture that scales to support up to 10,000 connected users. By evolving beyond Midsize and Enterprise market segmentation, the August 2012 Series provides a modular network foundation that enables you to more easily adapt a Cisco SBA design for any particular implementation.

Each guide of the August 2012 Series presents one or more design models. A design model is a way to deploy Cisco hardware and software features and functionality, based on customer requirements and scalability. Design models are based on places in the network and can vary between Cisco product architectures. You can choose from the design models in each guide, with the assurance of the tested, validated compatibility of all guides in the Cisco SBA August 2012 Series.

In the move to a single, scalable architecture, we gave many guides new titles and reorganized the set of guides that make up the August 2012 Series. If you are familiar with a February 2012 Series guide and need assistance finding the August 2012 Series guides that include the content from the old guide, see “Appendix A: February 2012 Series Content Locator” on page 15.

### Cisco SBA Solutions

New in the August 2012 Series is the Cisco SBA Solutions category of design and deployment guides. Cisco SBA Solutions are designs that implement Borderless Networks, Data Center, and Collaboration products to resolve 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.

### Continued Commitments

For the August 2012 Series, we remained committed to the following goals.

- Providing prescriptive, validated designs for organizations with up to 10,000 connected users.
- Ensuring that our Borderless Networks, Data Center, and Collaboration 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.

## In These Release Notes

These release notes provide the following information about the 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 August 2012 Series, with a brief summary of each guide.
- Notices about guides that we have discontinued from the prior release, including where you can find similar information in the new current SBA release.

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.

## 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

### LAN and Wireless LAN Foundation Guides

#### LAN Design Overview

- We combined into this guide the wired and wireless LAN design information formerly published in the following guides:
  - Cisco SBA for Midsize Organizations—Borderless Networks Foundation Design Overview
  - Cisco SBA for Enterprise Organizations—Borderless Networks Design Overview

#### LAN Deployment Guide

- We combined into this guide the LAN deployment guidance formerly published in the following guides:
  - Cisco SBA for Midsize Organizations—Borderless Networks Foundation Deployment Guide
  - Cisco SBA for Enterprise Organizations—Borderless Networks LAN Deployment Guide
- We moved wireless LAN to a separate guide, the *Wireless LAN Deployment Guide*.
- For the Cisco Catalyst 6500 Series Switch, we did the following:
  - Updated QoS configurations for Catalyst 6500 to comply with newer IOS code versions.
  - Changed the QoS macro for Ten Gigabit Ethernet to EgressQoS TenGig.

- Changed the QoS macro for Gigabit Ethernet to EgressQoS.
- We tested the WS-X6904-40G-2T 40Gb/10Gb Ethernet module in the distribution layer for 10-Gb Ethernet access layer aggregation.
- For the Cisco Catalyst 4500 Series Switch, we updated QoS policy for access edge QoS policy to accommodate speeds from 10Mb, 100Mb, and Gigabit Ethernet connected devices.
- For the Cisco Catalyst 3750-X, 3560-X, and 2960-S Series Switches, we updated QoS policy for the Egress QoS macro to reference queue-set 1 to correct a configuration error.
- We updated centralized user authentication template to the newer method which allows IPv4 and IPv6 TACACS+ server definition. The older method will be deprecated from Cisco IOS overtime.
- In the distribution layer, we changed the **spanning-tree root primary** command to include all VLANs—for simplicity and reduced operational errors. You can do this because the design never passes Layer 2 VLANs beyond the distribution layer and the distribution layer should be the root for all connected access layer switches.
- We added more configuration examples and improved readability.

#### 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 VLAN names to match the *LAN Deployment Guide*.
- We removed the spanning-tree root primary macro because the LAN guide has been updated to include this for all VLANs.
- We removed references to earlier procedures in the remote-site process because the SSID could be pre-existing (shared WLC) based on the new options.
- H-REAP has been rebranded Cisco FlexConnect.

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

### **Compact Switch Deployment Guide**

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

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

- We upgraded Cisco Secure ACS to version 5.3.
- We made minor changes to improve the readability of this guide.

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

- To the Configure LAN Switch Universal Settings process, we integrated an optional step to control SSH and SNMP access to the switch.
- We replaced all non-XL I/O modules with XL versions.

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

- We upgraded the Cisco ISE appliances to software version 1.1.1.268.
- We upgraded the Cisco Wireless LAN Controllers to software version 7.2.110.0.
- We upgraded the Cisco Catalyst 2960-S Series, 3560-X Series, and 3750-X Series switches to Cisco IOS version 15.0(1)SE2.
- We upgraded the Cisco Catalyst 4500 E-Series switches to Cisco IOS XE version 3.3.0.SG (15.1-1SG).
- We upgraded Cisco Prime LMS to software version 4.2.
- We upgraded the Cisco ASA 5500 Series firewall to software version 8.6(1).
- We moved from a monitor mode deployment of 802.1X to a low-impact mode deployment, to include authorization, which enables denying network access to devices that do not authenticate, with an exception made for Cisco IP Phones and access points.
- We modified the 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 deployed the Device Sensor feature on the switches and wireless LAN controllers, to simplify the profiling configuration and eliminate the need to send copies of DHCP requests to the Cisco ISE appliances.

## **Network Analysis Module Deployment Guide**

- We upgraded the NAM software to 5.1(2).
- We replaced the NAM-2 with the NAM-3.
- We made minor changes to improve the readability of this guide.

### **Prime LMS Deployment Guide**

- We changed the Cisco Prime LMS Deployment Guide to include a consolidated deployment guide, for 250 to 10,000 connected users.
- We changed the authentication method from either Cisco TACACS+ or Active Directory to using only Cisco TACACS+.

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

- We upgraded Cisco ISE software to 1.1.1
- We added procedures for applying guest wireless with Cisco ISE for a shared guest/internal user WLC deployment.

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

- We changed the management platform from Cisco WCS to Cisco NCS.
- We changed which access points are covered in this guide by removing the 3500 series access points and added the 2600 series access points.
- We made minor changes to improve the readability of this guide.

## **Wide Area Network Guides**

### **WAN Foundation Guides**

#### **WAN Design Overview**

- We combined into this guide the WAN design information formerly published in the following guides:
  - Cisco SBA for Midsize Organizations—Borderless Networks Foundation Design Overview
  - Cisco SBA for Enterprise Organizations—Borderless Networks Design Overview

## MPLS WAN Deployment Guide

- We adopted new names for the design models. The WAN100 and WAN500 were changed to MPLS Dynamic and Dual MPLS. Additional router platforms are supported for WAN aggregation.
- We added a new design model for MPLS Static and added the relevant procedures to enable the use of static routing with the MPLS carrier.
- We removed the “Deploying a DMVPN WAN” section. In the August 2012 Series, it can be found in the *VPN WAN Deployment Guide*.
- We removed the “Deploying Application Optimization with WAAS” section. In the August 2012 Series, it can be found in the *Application Optimization Deployment 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 adopted new names for design models. The Metro25 and Metro100 were changed to Layer 2 WAN Simple Demarcation and Layer 2 WAN Trunked Demarcation.
- We removed the “Deploying a DMVPN WAN” section. In the August 2012 Series, this section can be found in the *VPN WAN Deployment Guide*.
- We removed the “Deploying Application Optimization with WAAS” section. In the August 2012 Series, this can be found in the *Application Optimization Deployment 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 adopted new names for design models. DMVPN100 and DMVPN500 were changed to DMVPN Only and Dual DMVPN. Additional router platforms are supported for WAN aggregation.
- We introduced the design model for DMVPN Backup Dedicated. This design model uses DMVPN Only or Dual DMVPN when providing VPN backup to either the MPLS Dynamic design model in the *MPLS WAN Deployment Guide* or the Simple Demarcation and Trunked Demarcation design models in the *Layer 2 WAN Deployment Guide*.

- We added the design model for DMVPN Backup Shared. This new design model adds VPN backup to an existing MPLS CE router when providing VPN backup to the MPLS Static design model in the *MPLS WAN Deployment Guide*. We added the relevant procedures to support this design model.
- We removed the “Deploying Application Optimization with WAAS” section. In the August 2012 Series, this section can be found in the *Application Optimization Deployment 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 added the Cisco ASR1000 Series router as a WAN-aggregation router.
- We added additional NetFlow collector applications.

### Application Optimization Deployment Guide

- The deployment details have been restructured into three processes; deploying a central manager, deploying a WAVE appliance, and deploying WAAS on a SRE.
- In the deployment details, checklists have been added to make it easier to know what parameters you need before starting the processes.
- In the deployment details, propagation of local configuration changes to the central manager has been enabled.

### GET VPN Deployment Guide

- We updated the software release for the Cisco ASR 1000 Series routers used as GET VPN GM to Cisco IOS-XE 15.2(2)S2.
- We updated the software release for the Cisco ISR-G2 Series routers used as GET VPN GM to Cisco IOS 15.1(4)M4.

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

- We upgraded the Cisco Prime LMS software to 4.2.
- We made minor changes to improve the readability of this guide.

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

- To enable 4G/LTE interface support, we added the EHWIC-4G-LTE-V and the relevant procedures to support its usage.
- We added the “Implementing Automated Recovery for 4G/LTE Interface” section.

## Internet Edge Guides

### Internet Edge Foundation Guides

#### Internet Edge Design Overview

- We combined into this guide the Internet Edge design information formerly published in the following guides:
  - Cisco SBA for Midsize Organizations—Borderless Networks Foundation Design Overview
  - Cisco SBA for Enterprise Organizations—Borderless Networks Design Overview

#### Firewall and IPS Deployment Guide

- In The Firewall section, we added additional information about how to deploy the outside and DMZ switches. In the previous series, this information was not complete.
- In Intrusion Prevention, we added an IPS appliance in promiscuous mode for internal inspection. We also rewrote the technical overview to better explain the differences between IPS modules and appliances and between deploying a device in inline or promiscuous mode.

#### Remote Access VPN Deployment Guide

- We updated Cisco ASA 5500 Adaptive Secure Appliances to model 5525-X or 5545-X.
- We updated the Cisco ASA Software from version 8.4.2 to version 8.6.1.1.
- We added ability to use either Active Directory or Cisco Secure ACS for user authentication.

### Additional Internet Edge Guides

#### Email Security Using ESA Deployment Guide

- We upgraded Cisco IronPort ESA software to version 7.6.0.
- We made minor changes to improve the readability of this guide.

## IPv6 DMZ Web Service Deployment Guide

- Updated IP addressing to align with current Cisco SBA release.
- Updated screen shots to show current ASA GUI.

## Remote Mobile Access Deployment Guide

- We updated the guide to reflect the changes to products and software used in the *Firewall and IPS Deployment Guide*.
- We made minor changes to improve the readability of this guide.

## Web Security Using WSA Deployment Guide

- We upgraded Cisco IronPort WSA software to version 7.1.3.
- We made minor changes to improve the readability of this guide.

## Additional Design Overviews

### IPv4 Addressing Guide

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

### IPv6 Addressing Guide

- We heavily revised this guide, to provide greater depth and more considerations about IPv6 addressing.

### Physical Environmental Specifications Guide

- We updated the guide and its accompanying spreadsheet with physical specifications for devices in the August 2012 Series.

## Ecosystem Partner Solutions

### Panduit Facilities and LAN Access Layer Physical Infrastructure Reference Guide

- Coming soon—we expect to publish this guide shortly.

### Panduit Network Core and Data Center Physical Infrastructure Reference Guide

- We updated the Cisco products to reflect the products in the August 2012 Series.

### ScienceLogic EM7 Network Management Guide

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

### SolarWinds Network Management Guide

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



# 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 made minor changes to improve the readability of this guide.

### Data Center Deployment Guide

- We updated the “Ethernet Infrastructure” chapter with a QoS procedure to protect multimedia, control, and storage transport traffic. It also now includes configuration guidance on using enhanced VPC for Cisco Nexus FEX connectivity.
- The Computing Resources chapter is now named “Compute Connectivity” and we updated it to explain various methods for connecting servers to the data center network.
- The “Application Resiliency” chapter has an Inband Health check procedure to create a more robust server status check to detect failures faster.

### 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

- This guide focuses solely on server room deployment. Previously, server room deployment details were included in the *Cisco SBA for Midsized Organizations—Borderless Networks Foundation Deployment Guide*.
- The “Server Room Ethernet LAN” chapter includes all requirements for configuring the server room Cisco Catalyst LAN switches. The “Server Room Security” chapter focuses solely on the firewall and IPS configuration for the server room deployment.
- The Server Load Balancing chapter has been moved to a standalone deployment guide, *Cisco SBA—Data Center Advanced Server-Load Balancing Deployment Guide*.

## 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 added procedures for configuring the new Cisco UCS 6200 Fabric Interconnect and Cisco UCS 2200 Fabric Extender.
- We added 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 improved process and step flow in the “VMware vSphere Installation and Setup” section.
- We changed the Cisco Nexus 1000V configuration to use the Layer 3 mode of operation which is now the recommended mode. We updated the “Cisco Nexus 1000V Series Switch Installation and Deployment” to reflect new installation and configuration procedures for Layer 3 mode operation.
- We updated the Cisco Nexus 1000V software to a later image.

## Ecosystem Partner Solutions

### NetApp Storage Deployment Guide

- We updated the NetApp storage system to a NetApp FAS3240 running Data ONTAP 8.0.2 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 remain the same, allowing an easy migration from the older NetApp FAS3140 to the NetApp FAS3240 storage system.
- We configured and documented FCoE and iSCSI access to the NetApp FAS3240 using a virtual interface (VIF) on the NetApp FAS3240. The VIF allows transport of iSCSI and FCoE over two 10-Gbs Ethernet links from the controller to the data-center core Cisco Nexus 5500UP switches configured as an EtherChannel for load balancing and resilience.
- We made minor changes to improve the readability of this guide.

### ScienceLogic EM7 Network Management Guide

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

#### 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.

## Collaboration Foundation Guides

### Collaboration Design Overview

- We updated the guide to reflect the increase the number of connected users supported to 10,000.

### Telephony Using Cisco UCM Deployment Guide

- We added server scaling and Cisco Unified CM redundancy options for customers with up to 5000 and 10,000 users.
- We added support for dual SIP gateways at each site.
- We added support for dual IOS conference bridges at each site.
- We added support for Phone NTP Reference and Time Zone.
- We added support for site codes in Cisco SBCC and SRST.
- We added support for importing site information from a .csv file.
- We added support for Location audio bandwidth per site.
- We added support for Dial Plan templates.
- We added support for saving all entries in the Cisco SBCC tool.
- We added a feedback option in the Cisco SBCC tool.
- We added support for standalone voice gateways at each site.
- We added support for blocking voice traffic on backup WAN interfaces.
- 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 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 added VCS clustering for customers who need redundancy and the ability to scale beyond the capabilities of a single VCS.
- We added detailed instructions for configuring the switch ports where the VCS, MCU and video endpoints are connected to the Nexus or Catalyst switches.
- We added an optional procedure to block video traffic on a backup link to a remote site.
- 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.

## Smart Business Collaboration Configurator

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.

- We added server scaling and Cisco Unified CM redundancy options for customers with up to 5000 and 10,000 users.
- We added support for dual SIP gateways at each site.
- We added support for dual IOS conference bridges at each site.
- We added support for Phone NTP Reference and Time Zone.
- We added support for site codes.

- We added support for importing site information from a .csv file.
- We added support for Location audio bandwidth per site.
- We added support for Dial Plan templates.
- We added support for saving all entries.
- We added a feedback option.

## Additional Collaboration Guides

### H.323 Video Integration Deployment Guide

- We added VCS clustering for customers who need redundancy and the ability to scale beyond the capabilities of a single Cisco VCS server.
- We added detailed instructions for configuring the switch ports where the video endpoints are connect to the Catalyst switches
- 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.

### Help Desk Using Cisco UCCX Deployment Guide

- We added server scaling information for customers who need to support up to 400 agents, 42 supervisors, 150 agent groups and skill groups.
- 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.

### VCS and UCM Video Integration Deployment Guide

- We added a Cisco TelePresence Server conferencing section to describe how to configure the MCU with a SIP trunk to Unified CM. We also discuss how to create and manage reservationless and scheduled conferences with the MCU.
- We created a VCS-specific standard SIP profile and a non-secure SIP trunk security profile in Unified CM to align with the recommended configuration of the VCS SIP trunk.
- We added resiliency to the zones, search rules and transforms in VCS to take into account the redundant VCS and Unified CM cluster configurations.

- We added the steps for updating the CTS endpoint software and the associated phone application software to the Unified CM TFTP servers.
- 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.

# 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 the guide.

### BYOD—Advanced Guest Wireless Access Deployment Guide

- We upgraded Cisco ISE software to 1.1.1
- We added procedures for applying guest wireless with Cisco ISE for a shared guest/internal user WLC deployment.

### BYOD—Identity and Authentication Deployment Guide

- We upgraded the Cisco ISE appliances to software version 1.1.1.268.
- We upgraded the Cisco Wireless LAN Controllers to software version 7.2.110.0.
- We upgraded the Cisco Catalyst 2960-S Series, 3560-X Series, and 3750-X Series switches to Cisco IOS version 15.0(1)SE2.
- We upgraded the Cisco Catalyst 4500 E-Series switches to Cisco IOS XE version 3.3.0.SG (15.1-1SG).
- We upgraded Cisco Prime LMS to software version 4.2.
- We upgraded the Cisco ASA 5500 Series firewall to software version 8.6(1).
- We moved from a monitor mode deployment of 802.1X to a low-impact mode deployment, to include authorization, which enables denying network access to devices that do not authenticate, with an exception made for Cisco IP Phones and access points.
- We modified the 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 deployed the Device Sensor feature on the switches and wireless LAN controllers, to simplify the profiling configuration and eliminate the need to send copies of DHCP requests to the Cisco ISE appliances.

### BYOD—Internal Corporate Access Deployment Guide

- We upgraded the Cisco ISE appliances to software version 1.1.1.268.
- We upgraded the Cisco Wireless LAN Controllers to software version 7.2.110.0.
- We modified the 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 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 Apple iOS and Google Android devices using the self-provisioning portal feature in ISE. Provisioning includes configuring the 802.1X supplicant and deploying digital certificates.

### BYOD—Remote Mobile Access Deployment Guide

- We updated the guide to reflect the changes to products and software used in the *Firewall and IPS Deployment Guide*.
- We made minor changes to improve the readability of this guide.

### BYOD—Virtual Desktop Access Deployment Guide

- **New Guide.** This guide addresses the need to allow user-owned devices to access a virtual desktop infrastructure provided by your organization.



## Teleworking Solutions

### [Teleworking Design Overview](#)

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

### [Teleworking—ASA 5505 Deployment Guide](#)

- We upgraded the Cisco ASA software to 8.6(1).
- We made minor changes to improve the readability of this guide.

### [Teleworking—CVO Deployment Guide](#)

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

### [Teleworking—Office Extend Deployment Guide](#)

- We incorporated a shared OfficeExtend and internal wireless design model into the guide.
- 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—Basic Implementation with Cisco UCS and Citrix Deployment Guide](#)

- **New Guide.** This guide describes how to deploy a basic virtual desktop infrastructure, using Cisco UCS and Citrix VDI-in-a-Box.

## Notes

# Appendix A: February 2012 Series Content Locator

If you are familiar with a February 2012 Series guide and need assistance finding the August 2012 Series guides that include the content, use the tables below.

*Table 1 - February 2012 Series for Enterprise Organizations—Borderless Networks Content Locations*

<b>For the content in the February 2012 version of the Cisco SBA for Enterprise Organizations—Borderless Networks. . .</b>	<b>See the August 2012 version of Cisco SBA. . .</b>
Design Overview	<a href="#">BN LAN Design Overview</a> <a href="#">BN Internet Edge Design Overview</a> <a href="#">BN WAN Design Overview</a>
Internet Edge Deployment Guide	<a href="#">BN Firewall and IPS Deployment Guide</a> <a href="#">BN Remote Access VPN Deployment Guide</a> <a href="#">BN Email Security Using ESA Deployment Guide</a> <a href="#">BN Web Security Using WSA Deployment Guide</a> <a href="#">DC Advanced Server-Load Balancing Deployment Guide</a>
LAN Deployment Guide	<a href="#">BN LAN Deployment Guide</a> <a href="#">BN Wireless LAN Deployment Guide</a>
Layer 2 WAN Deployment Guide	<a href="#">BN Layer 2 WAN Deployment Guide</a> <a href="#">BN Application Optimization Deployment Guide</a>
VPN Remote Site Deployment Guide	<a href="#">BN VPN WAN Deployment Guide</a> <a href="#">BN Application Optimization Deployment Guide</a>
WAN Deployment Guide	<a href="#">BN MPLS WAN Deployment Guide</a> <a href="#">BN Application Optimization Deployment Guide</a>
Internet Edge Configuration Files Guide	<a href="#">BN Firewall and IPS Deployment Guide</a> <a href="#">BN Remote Access VPN Deployment Guide</a>
LAN Configuration Guide	<a href="#">BN LAN Configuration Files Guide</a>
Layer 2 WAN Configuration Files Guide	<a href="#">BN Layer 2 WAN Configuration Files Guide</a>
VPN Remote Site Configuration Files Guide	<a href="#">BN VPN WAN Configuration Files Guide</a>
WAN Configuration Files Guide	<a href="#">BN MPLS WAN Configuration Files Guide</a>

<b>For the content in the February 2012 version of the Cisco SBA for Enterprise Organizations—Borderless Networks. . .</b>	<b>See the August 2012 version of Cisco SBA. . .</b>
IPv6 Addressing Guide	<a href="#">BN IPv6 Addressing Guide</a>
3G/4G Wireless Remote Site Deployment Guide	<a href="#">BN VPN Remote Site over 3G/4G Deployment Guide</a>
Access Layer Compact Switch Deployment Guide	<a href="#">BN Compact Switch Deployment Guide</a>
Advanced Guest Wireless Deployment Guide	<a href="#">BN Wireless LAN Advanced Guest Access Deployment Guide</a>
ArcSight SIEM Partner Guide	Discontinued
BYOD—Internal Corporate Access Deployment Guide	<a href="#">SLN BYOD—Internal Corporate Access Deployment Guide</a>
BYOD—Identity and Authentication Deployment Guide	<a href="#">SLN BYOD—Identity and Authentication Deployment Guide</a>
BYOD—Guest Wireless Access Deployment Guide	<a href="#">SLN BYOD—Advanced Guest Wireless Access Deployment Guide</a>
BYOD—Remote Mobile Device Access Deployment Guide	<a href="#">SLN BYOD—Remote Mobile Access Deployment Guide</a>
Cisco Data Security Deployment Guide	Discontinued
Cisco SIEM Deployment Guide	Discontinued
Collapsed Data Center and Campus Core Supplemental Deployment Guide	<a href="#">BN LAN and Data Center Collapsed Core Using Cisco Nexus 7000 Deployment Guide</a>
CREDANT Data Security Partner Guide	Discontinued
GET VPN Deployment Guide	<a href="#">BN GET VPN Deployment Guide</a>
IPv6 Internet Edge Deployment Guide	<a href="#">BN IPv6 DMZ Web Service Deployment Guide</a>
LAN and WLAN 802.1X Deployment Guide	<a href="#">BN LAN and Wireless LAN 802.1X Authentication Deployment Guide</a>
LAN Management Solution Deployment Guide	<a href="#">BN Prime LMS Deployment Guide</a>
LogLogic SIEM Partner Guide	Discontinued
Lumension Data Security Partner Guide	Discontinued
Network Analysis and Reporting Deployment Guide	<a href="#">BN Network Analysis Module Deployment Guide</a>
Network Device Authentication and Authorization Deployment Guide	<a href="#">BN Device Management Using ACS Deployment Guide</a>
nFx SIEM Partner Guide	Discontinued
RSA SIEM Partner Guide	Discontinued
Secure Remote Mobile Access Deployment Guide	<a href="#">BN Remote Mobile Access Deployment Guide</a>
Sensage SIEM Partner Guide	Discontinued
Service and Availability Monitoring Deployment Guide with Cisco LAN Management System	<a href="#">BN Network Monitoring Using IP SLA and Prime LMS Deployment Guide</a>
SolarWinds Network Management Guide	<a href="#">BN SolarWinds Network Management Guide</a>
Splunk SIEM Partner Guide	Discontinued

For the content in the February 2012 version of the Cisco SBA for Enterprise Organizations—Borderless Networks. . .	See the August 2012 version of Cisco SBA. . .
Teleworking Deployment Guide	<a href="#">SLN Teleworking—Design Overview</a> <a href="#">SLN Teleworking—ASA 5505 Deployment Guide</a> <a href="#">SLN Teleworking—CVO Deployment Guide</a> <a href="#">SLN Teleworking—Office Extend Deployment Guide</a> <a href="#">SLN Teleworking—VPN Phone Deployment Guide</a>
Wireless CleanAir Deployment Guide	<a href="#">BN Wireless LAN CleanAir Deployment Guide</a>
Zero Touch Remote-Site Switch Installation and Replacement Guide	Postponed—look for an update to this guide in the February 2013 Series

Table 2 - February 2012 Series for Midsize Organizations—Borderless Networks Content Locations

For the content in the February 2012 version of the Cisco SBA for Midsize Organizations—Borderless Networks. . .	See the August 2012 version of Cisco SBA. . .
Foundation Design Overview	<a href="#">BN LAN Design Overview</a> <a href="#">BN Internet Edge Design Overview</a> <a href="#">BN WAN Design Overview</a>
Foundation Deployment Guide	<a href="#">BN LAN Deployment Guide</a> <a href="#">BN Wireless LAN Deployment Guide</a> <a href="#">BN Firewall and IPS Deployment Guide</a> <a href="#">BN Remote Access VPN Deployment Guide</a> <a href="#">BN MPLS WAN Deployment Guide</a> <a href="#">BN Application Optimization Deployment Guide</a> <a href="#">DC Server Room Deployment Guide</a> <a href="#">DC Advanced Server-Load Balancing Deployment Guide</a>

For the content in the February 2012 version of the Cisco SBA for Midsize Organizations—Borderless Networks. . .	See the August 2012 version of Cisco SBA. . .
Foundation Configuration Files Guide	<a href="#">BN LAN Configuration Files Guide</a> <a href="#">BN Firewall and IPS Deployment Guide</a> <a href="#">BN Remote Access VPN Deployment Guide</a> <a href="#">BN MPLS WAN Configuration Files Guide</a> <a href="#">BN Application Optimization Deployment Guide</a> <a href="#">DC Server Room Deployment Guide</a>
IPv4 Addressing Guide	<a href="#">BN IPv4 Addressing Guide</a>
IPv6 Addressing Guide	<a href="#">BN IPv6 Addressing Guide</a>
Physical Environmental Specifications Guide	<a href="#">BN Physical Environmental Specifications Guide</a>
3G Wireless Remote Site Deployment Guide	<a href="#">BN VPN Remote Site over 3G/4G Deployment Guide</a>
Access Layer Compact Switch Deployment Guide	<a href="#">BN Compact Switch Deployment Guide</a>
Application Performance Monitoring Using Netflow Deployment Guide	<a href="#">BN Application Monitoring Using NetFlow Deployment Guide</a>
Business Continuance Guide	Discontinued
Email Security Deployment Guide	<a href="#">BN Email Security Using ESA Deployment Guide</a>
IPv6 Internet Edge Deployment Guide	<a href="#">BN IPv6 DMZ Web Service Deployment Guide</a>
Prime LMS Deployment Guide	<a href="#">BN Prime LMS Deployment Guide</a>
ScienceLogic Network Management Guide	<a href="#">BN ScienceLogic Network Management Guide</a>
SolarWinds Network Management Guide	<a href="#">BN SolarWinds Network Management Guide</a>
Teleworking Deployment Guide	<a href="#">SLN Teleworking—Design Overview</a> <a href="#">SLN Teleworking—ASA 5505 Deployment Guide</a> <a href="#">SLN Teleworking—CVO Deployment Guide</a> <a href="#">SLN Teleworking—Office Extend Deployment Guide</a>
Web Security Deployment Guide	<a href="#">BN Web Security Using WSA Deployment Guide</a>
Wireless CleanAir Deployment Guide	<a href="#">BN Wireless LAN CleanAir Deployment Guide</a>
Zero Touch Remote-Site Switch Installation and Replacement Guide	Postponed—look for an update to this guide in the February 2013 Series



Table 3 - February 2012 Series for Midsize Organizations—Collaboration Content Locations

To find updates to the February 2012 version of the Cisco SBA for Midsize Organizations—Collaboration. . .	See the August 2012 version of Cisco SBA. . .
Collaboration Foundation Design Overview	<a href="#">COL Collaboration Design Overview</a>
Room-System Video Foundation Deployment Guide	<a href="#">COL Room-System Video Deployment Guide</a>
Unified Communications Manager Foundation Deployment Guide	<a href="#">COL Telephony Using Cisco UCM Deployment Guide</a>
Unified Communications Manager Configuration Files Guide	<a href="#">COL Telephony Using Cisco UCM Configuration Files Guide</a>
H.323 Video Integration Deployment Guide	<a href="#">COL H.323 Video Integration Deployment Guide</a>
Help Desk Deployment Guide	<a href="#">COL Help Desk Using Cisco UCCX Deployment Guide</a>
VCS and UCM Video Integration Guide	<a href="#">COL VCS and UCM Video Integration Deployment Guide</a>
Video Quality Monitoring Using Medianet Deployment Guide	Postponed—look for an update to this guide in the February 2013 Series

Table 4 - February 2012 Series for Midsize Organizations—Data Center Content Locations

To find updates to the February 2012 version of the Cisco SBA for Midsize Organizations—Data Center. . .	See the August 2012 version of Cisco SBA. . .
Data Center Design Overview	<a href="#">DC Data Center Design Overview</a>
Data Center Deployment Guide	<a href="#">DC Data Center Deployment Guide</a> <a href="#">DC Advanced Server-Load Balancing Deployment Guide</a>
Data Center Configuration Files Guide	<a href="#">DC Data Center Configuration Files Guide</a>
NetApp Storage Deployment Guide	<a href="#">DC NetApp Storage Deployment Guide</a>
Panduit Physical Infrastructure Deployment Guide	<a href="#">BN Panduit Network Core and Data Center Physical Infrastructure Reference Guide</a>
Unified Computing System Deployment Guide	<a href="#">DC Unified Computing System Deployment Guide</a>
Virtualization with UCS, Nexus 1000V and VMware Deployment Guide	<a href="#">DC Virtualization with Cisco UCS, Nexus 1000V and VMware Deployment Guide</a>

## Feedback

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