



Spectralink Configuration Management System

Release Notes

Spectralink CMS Software 2.6.3

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Introduction to Spectralink Configuration Management System

What is CMS?

The primary tool for administering a volume of devices is the CMS, the Configuration Management System. Spectralink 84-Series handsets and Spectralink PIVOT smartphones can be administered with CMS. CMS provides a GUI program that is opened in a browser and provides an easy and intuitive way to configure and manage the deployment of many devices.

An administrator can configure any handset or smartphone administrative setting in CMS, most of which are also available on the Admin menu of each device. In CMS, settings can be configured at the Device, Group or Enterprise level. These settings are picked up by the device when it heartbeats into CMS.

An administrator can “see” devices in the Device list. Each device provides information as part of its heartbeat and this information enables an administrator to check on vital activity and usage information.

CMS is designed to be the exclusive configuration method for Admin menu options. If phones are configured manually through their Admin menus, CMS will not “know” about these changes. Existing CMS configuration settings will overwrite any manual changes at the next heartbeat.

See *Spectralink CMS Administration Guide* for complete information.

CMS documents and software can be found at: <http://support.spectralink.com/products/wi-fi/cms>.

What is QNC?

This document will refer to “QNC”, a product developed by Spectralink for wireless provisioning.

Quick Network Connect utilizes a customized version of a commercially available Raspberry Pi to simplify the wireless provisioning of your Spectralink wireless handsets. CMS and QNC are designed to work together to provide a complete deployment solution.

When connected to a PC, QNC provides a browser-based GUI that provides you with the wireless configuration parameters you need to set in order for your Spectralink wireless handset to associate with the wireless LAN.

Once the configuration is completed, a connection between QNC and the handset loads the wireless parameters into the handset. See *Quick Network Connect Administration Guide* for complete information.

QNC documents and software can be found at: <http://support.spectralink.com/products/wi-fi/qnc>

Chapter 1: CMS Software 2.6.3

CMS Version: 2.6.3.1308

For use with the following 84-Series versions:

- 84-Series version 5.6.3.2192 (and above)
- QNC Version 2.1.0.49 (and above)



Caution: Upgrade from Ubuntu 14.x to 16.x

CMS R2.6.3 runs on Ubuntu version 16.x. If upgrading from CMS R2.5.1 or below, it is necessary to deploy a new appliance and export/import the database from the previous version to new one. Contact your Spectralink support representative for detailed steps to a successful transition.



Caution: CMS 2.6 and above compatibility

Spectralink 84-Series must use R5.4.4 and above to operate with CMS 2.6.x.



Caution: Capacity guidelines

The R2.6.3 OVF requires 4 processors and 4GB. This configuration will handle up to 5000 devices based on our testing. Start with 500 devices and test. As you add each 100 devices beyond 500, add 10 seconds to the heartbeat interval up to a 5-minute interval for 5000 devices. Never try to accept more than 250 devices at a time.



Admin Tip: Running both Spectralink 84-Series and PIVOT?

As of R2.6.1.x CMS no longer supports the PIVOT smartphone. This upgrade is mandatory for 84-Series but this upgrade does not support PIVOT smartphones. If both Spectralink 84-Series feature phones and PIVOT smartphones are deployed in your facility, you will need to set up two CMS servers and point the different phones to their specific server. These servers will support the two required versions of CMS software—R2.6.3 for 84-Series and R2.5 or below for PIVOT smartphones.

Fixed Issues

Key	Summary
E-1481	With R2.6.2 CMS may push the wrong IP address for the heartbeat URL to the phones resulting in a failure. Fix is to upgrade directly from 2.6.1 to 2.6.3. If already running 2.6.2, please use Config Manager to add the IP address or hostname whichever is in use in the Server Address field. And then upgrade to R2.6.3.

Chapter 2: CMS Software 2.6.2

CMS Version: 2.6.2.1306

For use with the following 84-Series versions:

- 84-Series version 5.6.3.2192 (and above)
- QNC Version 2.1.0.49 (and above)



Caution: Upgrade from Ubuntu 14.x to 16.x

CMS R2.6.2 runs on Ubuntu version 16.x. If upgrading from CMS R2.5.1 or below, it is necessary to deploy a new appliance and export/import the database from the previous version to new one. Contact your Spectralink support representative for detailed steps to a successful transition.



Caution: CMS 2.6 and above compatibility

Spectralink 84-Series must use R5.4.4 and above to operate with CMS 2.6.x.



Caution: Capacity guidelines

The R2.6.2 OVF requires 4 processors and 4GB. This configuration will handle up to 5000 devices based on our testing. Start with 500 devices and test. As you add each 100 devices beyond 500, add 10 seconds to the heartbeat interval up to a 5 minute interval for 5000 devices. Never try to accept more than 250 devices at a time.



Admin Tip: Running both Spectralink 84-Series and PIVOT?

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CMS Certificate Renewal Process

The update supports the CMS certificate renewal process which must be done prior to certificate expiration.



Caution: Mandatory upgrade due to CMS certificate expiration

The self-signed certificate that is generated by the application_init.py script during initial configuration of the CMS server is a 3-year certificate measured from the initial installation of the CMS server. A new certificate must be created and pushed to the devices before this 3-year certificate expires.

Spectralink phones will lose contact with the CMS server if this software update and a new CMS certificate is not installed prior to certificate expiration. Please contact your Spectralink support representative for complete instructions.

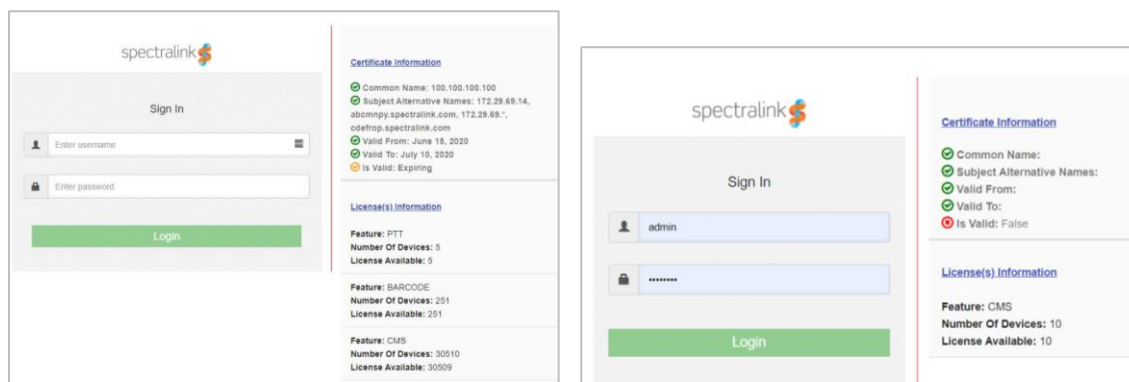
Please see Technical Bulletin CS-20-09 for information about migrating CMS data between CMS versions prior to updating to this version.

Enhancement

Login page notification

(E-1423)

The login window now provides a status on the CMS license and certificate.



Support for Subject Alternative Names (SAN)

(CMS-551)

A Wildcard SSL Certificate allows you to secure an unlimited number of first-level sub-domains on a single domain name. That means you can get an SSL Certificate with the common name as *.mydomain.com and you can use it on all of the following without receiving any errors:

Example:-

www.mydomain.com

mail.mydomain.com

intranet.mydomain.com

New config options

(CMS-549)

- 1 Switching between HTTP to HTTPS (Securing Heartbeat Server) - Default set by user selection at initial login. If user selects Secure then default to HTTPS
- 2 Switching between FTP to FTPS (Securing Provisioning Server)- Default set by user selection at initial login. If user selects Secure then default to FTPS
- 3 Switching to a new CMS Instance- Default is the current CMS IP address.
- 4 Changes to Config Manager (Logo, icon)

Changes to Device listing page

Add new columns to display CMS instance, communication protocols for heartbeat server, and the provisioning server.

Fixed Issues

<i>Key</i>	<i>Summary</i>
E-1434	Max file upload size was too small. Removed logs folder from an export script and removed file upload limit.
E-1415	Revised process to update 84-Series certificate.
CMS2-550	Fixed rare connection issues relating to heartbeat interval.
CMS2-545	Correct search function errors.

Chapter 3: CMS Software 2.6.1

CMS Version: 2.6.1.1261

For use with the following 84-Series versions:

- 84-Series version 5.6.3.2192 (and above)
- QNC Version 2.1.0.49 (and above)



Note: Support for PIVOT discontinued

As of R2.6.1.x CMS no longer supports the PIVOT smartphone. Please contact your Spectralink representative if you have questions or concerns.



Caution: Upgrade from Ubuntu 14.x to 16.x

CMS R2.6.1 runs on Ubuntu version 16.x. If upgrading from CMS R2.5.1 or below, it is necessary to deploy a new appliance and export/import the database from the previous version to new one. Contact your Spectralink support representative for detailed steps to a successful transition.



Caution: CMS 2.6 and above compatibility

Spectralink 84-Series must use R5.4.4 and above to operate with CMS 2.6.



Caution: Capacity guidelines

The R2.6.1 OVF requires 4 processors and 4GB. This configuration will handle up to 5000 devices based on our testing. Start with 500 devices and test. As you add each 100 devices beyond 500, add 10 seconds to the heartbeat interval up to a 5 minute interval for 5000 devices. Never try to accept more than 250 devices at a time.

Enhancement

Upgrade VM

CMS requires a data migration from the 2.5.1 or below appliance running Ubuntu 14.x to the 2.6.1 appliance running Ubuntu 16.x. Upgrades to the CMS 2.6.0 release version follow the standard upgrade procedure.



Admin Tip: Import/Export function explained

To facilitate the upgrade and support administrative management of the CMS server, the import/export feature is clarified in the CMS Administration Guide.

Custom XML configuration feature

Custom attribute files can now be applied and removed from any of the three levels---Device, Group and Enterprise.

Device—Navigate to Device List. Select the device from the Device List, select the “Apply Custom Config” action, select the Config file to apply. View the applied custom config files by clicking the View Config Files item in the Custom Config Files column. Remove the custom config file from the device by clicking the “x” by the file name when the Custom Config Files display.

Group—Navigate to the Groups tab. Select the Group from the Group list, select the “Apply Custom Config” action, select the Config file to apply. View the applied custom config files by clicking the View Config Files item in the Custom Config Files column. Remove the custom config file by clicking the “x” by the file name when the Custom Config Files display.

Enterprise—Navigate to the Xml Config tab. Select the Config file to be applied. Select the “Apply to Enterprise” action. View the Applied to ENTERPRISE column to see that the applied file now displays True. Remove the custom config file from the Enterprise level by selecting the file and selecting “Disassociate from Enterprise” action.

Fixed Issues

Key	Summary
E-1401	When adding web application names and URL's under Web App configuration, special characters are encoded and not passed through to the application
E-1390	CMS experiences CPU spikes when disassociating custom XML files from single devices
E-1368	Add assigned custom XML config files to Device List as an available column
E-1300	Disassociate single device or group from custom XML config
E-1299	Number of devices displayed in the Device List and Group areas should be configurable via drop menu in the Preferences area
E-1192	Modify the way devices are disassociated from custom configurations

Chapter 4: CMS Software 2.5

CMS Version: 2.5.0.1151

For use with the following PIVOT versions:

- PIVOT 2.5
- QNC Version 2.1.0.49

For use with the following 84-Series versions:

- 84-Series version 5.6.3.2192
- QNC Version 2.1.0.49



Caution: CMS 2.5 and above compatibility

Spectralink 84-Series must use R5.4.4 and above to operate with CMS 2.5.

CMS 2.5 was tested with PIVOT R2.5. However, CMS 2.5 should work with any PIVOT smartphone software version.



Caution: Capacity guidelines

The R2.5 OVF requires 4 processors and 4GB. This configuration will handle up to 5000 devices based on our testing. Start with 500 devices and test. As you add each 100 devices beyond 500, add 10 seconds to the heartbeat interval up to a 5 minute interval for 5000 devices. Never try to accept more than 250 devices at a time.

Enhancement

A column for the Secondary SIP Extension has been added to enable searching for the SIP extension in the Device List.

Select Device List Columns	
<input type="checkbox"/> Actions	<input type="checkbox"/> Battery Cycles
<input type="checkbox"/> Battery Level	<input type="checkbox"/> Battery Manufacture Date
<input type="checkbox"/> Battery Serial	<input type="checkbox"/> Device Created
<input checked="" type="checkbox"/> Device MAC Address	<input type="checkbox"/> Device Model
<input checked="" type="checkbox"/> Device Serial	<input type="checkbox"/> Group
<input type="checkbox"/> Last Heartbeat	<input type="checkbox"/> Network IP
<input type="checkbox"/> Network RSSI	<input type="checkbox"/> Phone Type
<input checked="" type="checkbox"/> Secondary SIP Extension	<input checked="" type="checkbox"/> SIP Extension
<input type="checkbox"/> Spectralink Firmware Version	<input checked="" type="checkbox"/> Status
<input type="checkbox"/> User Profile Name	

OK

Fixed Issues

<i>Key</i>	<i>Summary</i>
ESCWIRE-1189	Added ability to utilize special characters with Postgres password
CMS2-527	Bug fix in batch configuration of MAC addresses of 84xx phones
CMS2-505	Bug fix in batch configuration of MAC addresses of 84xx phones

Chapter 5: CMS Software 2.4

CMS Version: 2.4.0.1143

For use with the following PIVOT versions:

- PIVOT 2.5
- QNC Version 2.1.0.18

For use with the following 84-Series versions:

- 84-Series version 5.4.4.2156
- QNC Version 2.1.0.18



Caution: CMS 2.4 and above compatibility

Spectralink 84-Series must use R5.4.4 and above to operate with CMS 2.4.

CMS 2.4 was tested with PIVOT R2.5. However, CMS 2.4 should work with any PIVOT smartphone software version.



Caution: Capacity guidelines

The R2.4 OVF requires 4 processors and 4GB. This configuration will handle up to 5000 devices based on our testing. Start with 500 devices and test. As you add each 100 devices beyond 500, add 10 seconds to the heartbeat interval up to a 5 minute interval for 5000 devices. Never try to accept more than 250 devices at a time.

New Features

CMS 2.4 is the first release to support the 84-Series handsets. After extensive testing and use in beta environments, Spectralink is pleased to release CMS R2.4 to general availability.

Aside from some UI changes, there are no significant edits to how CMS operates with PIVOT smartphones.

Chapter 6: CMS Software 2.1

CMS Version: 2.1.0.609

For use with the following versions:

- PIVOT 2.2
- PIVOT 2.0.0
- PIVOT 1.8.0
- QNC Version 1.0



Caution: CMS 2.0 and above compatibility

CMS 2.0 and above will operate only with PIVOT R1.8, R2.0 or R2.1 and above. CMS 2.0 is not compatible with SLIC. Use QNC to gain wireless access.

New Features

- Enhancements to provide default values in CMS for some fields
- Ability to import features licenses
- Support for Barcode Camera Scanner functionality on PIVOTs
- Refinement of device level configuration
- Ability to clear values set at a given level

Fixed Issues

<i>Issue</i>	<i>Description</i>
IM-577	Submenus not always minimized after selecting a page
IM-601	Change password error is not accurate
IM-643	Server address and port number are on the same line, they should be on two different lines
IM-664	Tone choices should be included on cms
IM-673	I cannot remove the "Serial Number" field from the Device List display
IM-721	Show banner that we do not support IE/ Firefox
IM-754	Manage Group- Associate devices drop down list not handy.
IM-768	Battery temperature doesn't need to be displayed to 18 significant digits.
IM-781	Certificate, Can't able to download certificate in firefox browser.
IM-808	Error loading page displayed rather than session timeout
IM-860	Device list, found 2 entries of single device.

<i>Issue</i>	<i>Description</i>
IM-867	Configuration, Found duplicate tone entries in Safe/Panic warning & Alarm tone list.
IM-873	Configuration> SIP, Configuration level related icon not showing some check boxes.
IM-875	Force in-band DTMF tones is misspelled in the CMS
IM-876	Force inband DTMF setting requires SIP restart when sent from CMS
IM-879	Allow contact header updates setting requires SIP restart when sent from CMS
IM-906	Configuration>Config Manager, Device heartbeat interval field not showing more than 2 digits
IM-914	Wireless profile>WPA2-PSK, able to save wireless profile using invalid Hex key.
IM-919	Error that group name is in use not clearing properly
IM-928	I can save "." decimal values on port no. fields.
IM-949	Device list, Can't search last heartbeat in days.
IM-954	"Last Heartbeat" column in Device List influenced by client's time zone
IM-984	Misalignment of edit button & text.
IM-996	Change password instructions don't mention numeric requirement
IM-1003	Change specified dropdown/ lists to radio buttons
IM-1009	Periodically Trim Heartbeat Archive
IM-1010	Improve Reset Password UI
IM-1014	Configuration>QBC, Not showing validation error on timeout fields.
IM-1022	can't Change password consistently.
IM-1029	Config changes Pending Indicator
IM-1036	Remove battery serial number validation from CMS heartbeat
IM-1042	We can apply a non-camera OTA update to a camera phone.
IM-1043	web-api push ringtone enable unresponsive
IM-1054	Column reorder is not persistent
IM-1061	Lock Screen after does not contain 5 seconds
IM-1065	CSV imports not applying user settings
IM-1071	1.8 Enterprise settings not applying correctly for 1.8 phone
IM-1072	Use SIP Standard Hold Signaling Can't be Set to DEFAULT for reg 1
IM-1080	CMS UI shows http:// but only sends the address to the phone

Known issues

<i>Issue</i>	<i>Description</i>
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Chapter 7: CMS Software 2.0.1

CMS Version: 2.0.1522.1704

For use with the following versions:

- PIVOT 2.1.0
- PIVOT 2.0.0
- PIVOT 1.8.0
- QNC Version 1.0.81



Caution: CMS 2.0 and above compatibility

CMS 2.0 and above will operate only with PIVOT R1.8, R2.0 or R2.1 and above. CMS 2.0 is not compatible with SLIC. Use QNC to gain wireless access.

New Features

- None

Fixed Issues

<i>Issue</i>	<i>Description</i>
IM-894	Rotate/delete logs on timely basis
IM-938	The number of devices deleted message has the count wrong
IM-956	upgrade.sh only works if run without path

Known issues

<i>Issue</i>	<i>Description</i>
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Chapter 8: CMS Software 2.0

CMS Version: 2.0.1496.1665

For use with the following versions:

- PIVOT 2.1.0
- PIVOT 2.0.0
- PIVOT 1.8.0
- QNC Version 1.0.81



Caution: CMS 2.0 and above compatibility

CMS 2.0 and above will operate only with PIVOT R1.8, R2.0 or R2.1 and above. CMS 2.0 is not compatible with SLIC. Use QNC to gain wireless access.

New Features

CMS 2.0 is a complete redesign of the CMS product. Features of the new version include

- An enhanced, more responsive and intuitive user interface
- Ability to service a greater number of devices
- A robust and simplified database structure
- Full control of the PIVOT phone administration

Fixed Issues

CMS 2.0 is a complete redesign of the CMS product. Refer to the Known Issues section below for a list of issues that exist in CMS 2.0 that are targeted for the next release.

Known issues

<i>Issue</i>	<i>Description</i>
IM-656	Values configured through CMS cannot be cleared The work around is to set the parameter to the desired value. Any setting in CMS can be set to the desired value, but cannot be 'cleared' such that CMS no longer tracks or controls that setting.
IM-667	After restore defaults and reconnection to CMS 2.0, phones do not automatically get Settings To do a restore defaults, first move the phone to Rejected in CMS and then delete the phone from the system. After doing the Restore Defaults on the device, it can be re-connected to CMS.

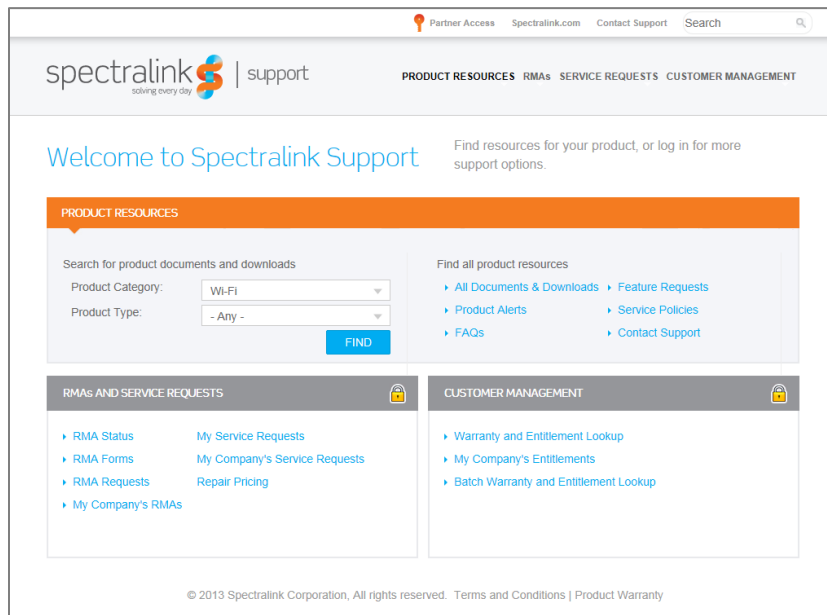
<i>Issue</i>	<i>Description</i>
IM-708	In process of uploading OTA file, it cancels. In process of OTA uploading, if the user navigates to another page of CMS, then OTA file uploading may be canceled without showing cancellation error. To avoid this, do not navigate away from the OTA upload page until the upload is complete.
IM-739	Can no longer upload CA certs unless they have a .crt extension. Use a crt extension on CA certs.
IM-847	Properties do not show up in the device list until the phone heartbeats in If a value, such as Owner Info, is changed on CMS, it will not show up in the device list until the value is sent to the device and the device heartbeats in that the change has taken effect
IM-913	Column reorder is not persistent When re-ordering columns, the new order will not be persistent across logouts

Chapter 9: Reference Documents

Please consult your support representative for all questions and issues about this product.

Spectralink References

All Spectralink documents are available at <http://support.spectralink.com>.



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Select the Product Category and Product Type from the dropdown lists and then select the product from the next page. All resources for that particular product are displayed by default under the All tab. Documents, downloads and other resources are sorted by the date they were created so the most recently created resource is at the top of the list. You can further sort the list by the tabs across the top of the list to find exactly what you are looking for. Click the title to open the link. PIVOT documents are available at <http://support.spectralink.com/pivot>.

Specific Documents—Spectralink 84-Series handsets

The *Spectralink 84-Series Wireless Telephone Administration Guide* provides a comprehensive list of every parameter available on Spectralink 84-Series Wireless Telephones.

Spectralink 84 Series Wireless Telephone Deployment Guide Using Spectralink CMS This document introduces deployment concepts and the methods of provisioning the 84-Series handsets when using CMS as your provisioning server.

Spectralink Configuration Management System Administration Guide The CMS Administration Guide provides information about every setting and option available to the administrator on Spectralink 84-Series handsets and CMS. Time-saving shortcuts, troubleshooting tips and other important maintenance instructions are also found in this document. CMS software and documents are available on the Spectralink support site at <http://support.spectralink.com/cms>.

Spectralink 84-Series Wireless Telephone Deployment Guide This document introduces deployment concepts and the methods of provisioning the 84-Series handsets in any type of facility when not using CMS as a provisioning server.

Barcode Administration Guide Provides information about barcode symbologies and how to configure and implement the barcode feature on the handset. The *Spectralink 84-Series User Guide* also contains information about using the barcode feature.

Quick Barcode Connector Administration Guide Provides instruction for implementation of the barcode application. The *Spectralink 84-Series User Guide* contains information about using the barcode feature.

The *Spectralink 84-Series User Guide* offers comprehensive instructions on using each of the features deployed on the handsets.

The *Web Configuration Utility User Guide* is used for troubleshooting in certain isolated cases as explained in the text.

For information on IP PBX and softswitch vendors, see the *Spectralink 84-Series Call Server Interoperability Guide*.

For information about combining Polycom desksets and Spectralink 84-Series handsets in the same facility, see the *Interoperability Guide: Spectralink 84-Series Wireless Telephones and Polycom Desksets*.

AP Configuration Guides explain how to correctly configure access points and WLAN controllers (if applicable) and identify the optimal settings that support Spectralink 84-Series handsets.

Technical Bulletins and Feature Descriptions explain workarounds to existing issues and provides expanded descriptions and examples.

Release Notes describe the new and changed features, and resolved issues in the latest version of the software. Find them in the Downloads section of the support site.

White Papers

Spectralink White Papers are available at <http://www.spectralink.com/resources/white-papers>.

For the Spectralink 84-Series Wireless Telephones, please refer to *Best Practices Guide for Deploying Spectralink 84-Series Handsets* for detailed information on wireless LAN layout, network infrastructure, QoS, security and subnets.

For additional details on RF deployment please see *The challenges of ensuring excellent voice quality in a Wi-Fi workplace* and *Deploying Enterprise-Grade Wi-Fi Telephony*.

These White Papers identify issues and solutions based on Spectralink's extensive experience in enterprise-class Wi-Fi telephony. It provides recommendations for ensuring that a network environment is adequately optimized for use with Spectralink Wireless Telephones.

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