



Configuration Guide

Avaya

AP-6, AP-7, AP-8 Access Points

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Contact Information

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Introduction

Customers have reported that the WLAN products described in this document operate adequately with SpectraLink Wireless Telephones at their location using the software version listed below. For Field Verified WLAN products, Polycom has not conducted any testing and therefore cannot guarantee interoperability or performance. Polycom technical support of interoperability issues for WLAN products running versions of software not listed in the table may be subject to time and materials charges.

This document describes the configuration of the Avaya AP-6, AP-7, and AP-8 access points (APs) for best known operation with SpectraLink Wireless Telephones.

Product Summary

Manufacturer:	Avaya: www.avaya.com	
Approved product(s):	AP-6, AP-7, AP-8	
RF technology:	Direct-sequence spread spectrum, (DS)	
Radio:	2.4 – 2.484 GHz (802.11b/g)	
AP software version:	Firmware version 2.5.5/3.1.0 †	
SpectraLink handset models: **	e340/h340/i640	8020/8030
SpectraLink radio mode:	802.11b	802.11b
Maximum telephone calls per AP:	12 *	12 *
AP configuration parameters:	See <i>Access Point Configuration</i> below	
Indoor range (typical):	See vendor specifications for AP	
Required network topology:	Switched Ethernet	
Network constraints:	Dedicated segment for wireless, single subnet	
WEP capability:	Yes *	
Auto-learn function:	Yes *	

† Earlier and later software versions have not been validated except as noted.

* Telephone calls per AP must be configured in the system per documentation provided by Polycom.

** SpectraLink handset models 8020/8030, e340/h340/i640 and their OEM derivatives are known interoperable at one or more customer sites with the WLAN hardware and software identified in the table. Throughout the remainder of this document they will be referred to collectively as “SpectraLink Wireless Telephones”.

Access Point Capacity and Positioning

Please refer to the Polycom [Deploying Enterprise-Grade Wi-Fi Telephony](#) white paper. This document covers the security, coverage, capacity and QoS considerations necessary for ensuring excellent voice quality with enterprise Wi-Fi networks. For more detailed information on wireless LAN layout, network infrastructure, QoS, security and subnets, please see the [Best Practices Guide for Deploying SpectraLink 8020/8030 Wireless Telephones](#). This document identifies issues and solutions based on Polycom's extensive experience in enterprise-class Wi-Fi telephony, and provides recommendations for ensuring that a network environment is adequately optimized for use with SpectraLink 8020/8030 Wireless Telephones.

VLAN Support

The Avaya AP-6, AP-7, and AP-8 access points have the ability to manage different VLANs, each with a unique ESSID. Many times customers will choose to place voice devices on a separate VLAN from data devices or they may choose to segment their network based on security policies.

When VLANs are enabled, the AP uses 802.1Q tags on traffic entering the wired network. These tags must be removed by a VLAN-capable switch before the packets reach the SpectraLink 8000 Telephony Gateway or SpectraLink 8000 SVP Server. On Cisco switches, the switch port to which the SpectraLink 8000 Telephony Gateway or SpectraLink 8000 SVP Server is connected must be configured as a non-trunked, or access port dedicated to the voice VLAN. If the port is set to trunked, the SpectraLink 8000 System equipment will not recognize the packet.

If you are using a switch that is not capable of removing these 802.1Q tags, the SpectraLink Wireless Telephones must reside on the native (or management) VLAN.

Notes on Configuration



The AP must support SpectraLink Voice Priority (SVP). Contact your AP vendor if you need to upgrade the AP software.

If you encounter difficulties or have questions regarding the configuration process, please contact the Customer Support Hotline at (800) 775-5330. The hotline is open Monday through Friday, 6 a.m. to 6 p.m. Mountain time.

Access Point Configuration

(Up to Version 2.4.11)

1. Connect to the AP via Netscape or Internet Explorer by navigating to the URL `http://<IP_Addr>` (where `<IP_Addr>` is the IP address of the AP).
2. Note: these configuration steps can also be accomplished using the SNMP-based Avaya ScanTool program.
3. From the main page, click on the **Configure** link.
4. To configure WEP settings, obtain the key values from the local network administrator and use the Avaya AP-6, AP-7, or AP-8 *User Guide* for guidance in programming the encryption settings. The WEP configuration screen is reached from the main menu by clicking on **Configure**, followed by **Security**, followed by **Encryption & Auth**.

Note that the handsets must each be configured manually with the identical WEP settings.

5. Click **Configure**, then click the **Interfaces** link and choose the appropriate radio (**Slot A** or **Slot B**) to configure.
6. From the **Interfaces** tab, confirm that the **RTS/CTS Medium Reservation Threshold** is greater than 600 or disabled.
7. Set the **Transmit Rate** field to **11Mb/s**.
8. From the **Filtering** tab, select the **Advanced** tab. Enable the **Proxy ARP** function and disable **IP/ARP Filtering**.
9. The SpectraLink 8000 SVP Server is disabled by default in the ORiNOCO AP-600/AP-4000 access point and must be enabled through the command line interface (CLI). The CLI is available through both the serial port interface and over the Ethernet interface using a Telnet session.
10. Once in the CLI, the following commands are used to enable SVP:
 - a. To check to see if SVP is enabled:
Type **show spectralink**, then press Enter; it will display **enabled** or **disabled**.
 - b. To enable SVP:
Type **set speclinkstatus enable**, then press Enter.

- c. Conditional: If you are not using a SpectraLink 8000 SVP Server and intend to use 802.11b/g mode, you must also enter the command:
Type **set spectlinklegacysupport**, then press Enter.

11. Restart the AP.

The AP is now ready for use with SpectraLink Wireless Telephones.

Access Point Configuration

(Version 2.52)

1. Connect to the AP via Netscape or Internet Explorer by navigating to the URL `http://<IP_Addr>` (where `<IP_Addr>` is the IP address of the AP).
2. From the main page, click on the **Configure** link.
3. To configure WEP settings, obtain the key values from the local network administrator and use the Avaya AP-6, AP-7, or AP-8 *User Guide* for guidance in programming the encryption settings. The WEP configuration screen is reached from the main menu by clicking on **Configure**, followed by **SSID/VLAN/Security**, followed by **Security Profile**

Note that the handsets must each be configured manually with the identical WEP settings.

4. Click **Configure**, then click the **Interfaces** link and choose the appropriate radio (**Slot A** or **Slot B**) to configure.
5. From the **Interfaces** tab, confirm that the **RTS/CTS Medium Reservation Threshold** is greater than 600 or disabled.
6. Set the **Transmit Rate** field to **11Mb/s**.
7. From the **Filtering** tab, select the **Advanced** tab. Enable the **Proxy ARP** function and disable **IP/ARP Filtering**.
8. The SpectraLink 8000 SVP Server is disabled by default in the Avaya AP-6, AP-7, and AP-8 access points. To enable SVP, select the **QoS** tab. Select the **Enable Quality of Service** check box to enable SVP.
9. Conditional: If you are not using a SpectraLink 8000 SVP Server and intend to use 802.11b/g mode, it is necessary to use the command line interface (CLI). The CLI is available through both the serial port interface and over the Ethernet interface using a Telnet session.
 - a. Once in the CLI, enter:
set specLinkLegacySupport enable
 - b. To ensure that SpectraLink legacy support is enabled, enter:
show specLinkLegacySupport

- c. A line should come back indicating:
`specLinkLegacySupport`
`enable`

10. Restart the AP.

The AP is now ready for use with SpectraLink Wireless Telephones.