# VIEW Certified Configuration Guide

## Siemens

### HiPath Wireless System with 2610, 2620 APs

January 2008 Edition
1725-36071-001
Version C

Download from Www.Somanuals.com. All Manuals Search And Download.

## Trademark Information

Polycom® and the logo designs
SpectraLink®
LinkPlus
Link
NetLink
SVP
Are trademarks and registered trademarks of Polycom, Inc. in the United States of America and various countries. All other trademarks used herein are the property of their respective owners.

## Patent Information

The accompanying product is protected by one or more US and foreign patents and/or pending patent applications held by Polycom, Inc.

## Copyright Notice

Copyright © 2006 to 2008 Polycom, Inc.

All rights reserved under the International and pan-American copyright Conventions.

No part of this manual, or the software described herein, may be reproduced or transmitted in any form or by any means, or translated into another language or format, in whole or in part, without the express written permission of Polycom, Inc.

Do not remove (or allow any third party to remove) any product identification, copyright or other notices.

Every effort has been made to ensure that the information in this document is accurate. Polycom, Inc. is not responsible for printing or clerical errors. Information in this document is subject to change without notice and does not represent a commitment on the part of Polycom, Inc.

## Notice

Polycom, Inc. has prepared this document for use by Polycom personnel and customers. The drawings and specifications contained herein are the property of Polycom and shall be neither reproduced in whole or in part without the prior written approval of Polycom, nor be implied to grant any license to make, use, or sell equipment manufactured in accordance herewith.

Polycom reserves the right to make changes in specifications and other information contained in this document without prior notice, and the reader should in all cases consult Polycom to determine whether any such changes have been made.

No representation or other affirmation of fact contained in this document including but not limited to statements regarding capacity, response-time performance, suitability for use, or performance of products described herein shall be deemed to be a warranty by Polycom for any purpose, or give rise to any liability of Polycom whatsoever.

## Contact Information

Please contact your Polycom Authorized Reseller for assistance.

Polycom, Inc.
4750 Willow Road,
Pleasanton, CA 94588
http://www.polycom.com



Download from Www.Somanuals.com. All Manuals Search And Download.

# Introduction

SpectraLink's Voice Interoperability for Enterprise Wireless (VIEW) Certification Program is designed to ensure interoperability and high performance between SpectraLink 8000 Wireless Telephones and WLAN infrastructure products. The products listed below have been thoroughly tested in SpectraLink's lab and have passed VIEW Certification. This document details how to configure Siemens HiPath C10, C100, C1000 Wireless Controllers and 2610 & 2620 access points (APs) with SpectraLink 8000 Wireless Telephones.

## Certified Product Summary

| | | |
|---|---|---|
| Manufacturer: | Siemens HiPath Wireless: http://enterprise.usa.siemens.com/products/solutions/hipathwireless.html | |
| Approved products: | Wireless Controllers | Access Points |
| | C10 †<br>C100<br>C1000 | 2610 †<br>2620 † |
| RF technology: | 802.11b/g | |
| Radio: | 2.4 – 2.484 GHz | |
| Security: | WPA-PSK, WPA2-PSK | |
| AP firmware version tested: | 3.1.4.03.03 | |
| SpectraLink handset models tested: | e340/h340/i640 | 8020/8030 |
| SpectraLink handset software tested: | 89.124 | 122.010 or greater |
| SpectraLink radio mode: | 802.11b | 802.11b |
| Maximum telephone calls per AP: | 10 | 10 |
| Recommended network topology: | Switched Ethernet (recommended) | |

† Denotes products directly used in VIEW Certification testing

## Known Limitations

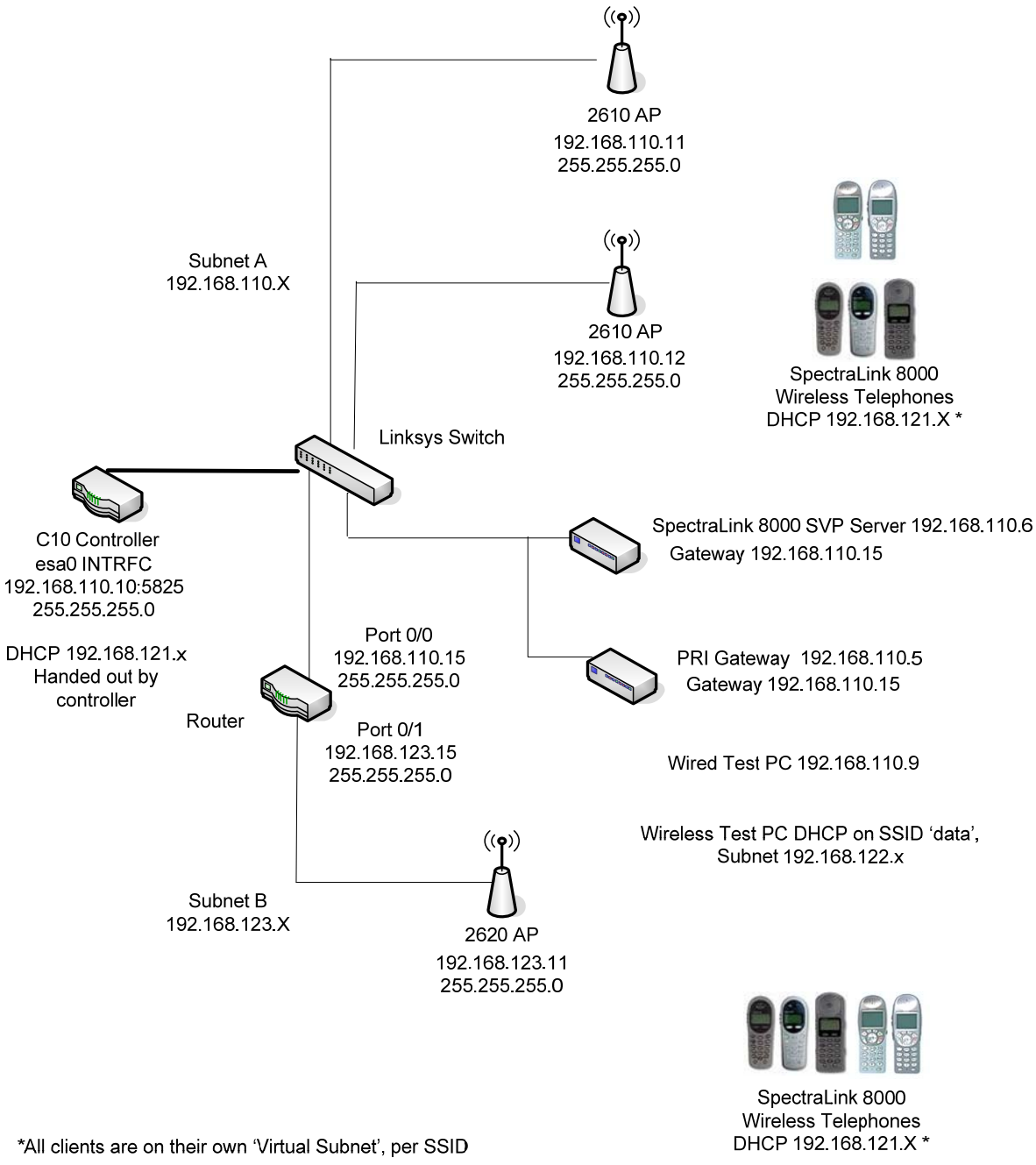
- Beacons are sent from the AP inconsistently; therefore you may see decreased battery life on the handsets.
- A hex-key is not supported with both WPA-PSK and WPA2-PSK. You must use a passphrase for each.
- Because the Controller configures a virtual subnet, broadcast data cannot be sent to the handsets.



Download from Www.Somanuals.com. All Manuals Search And Download.

# Network Topology

The following topology was tested during VIEW Certification. It is important to note that these do not necessarily represent all "certified" configurations. The access points were powered through a mid-span POE adaptor.






Download from Www.Somanuals.com. All Manuals Search And Download.

# Installing Software & Configuration

1. If software upgrades are required, contact Siemens Customer Support for the latest version of software and instructions.
2. The current version of software installed can be found by opening a telnet session of the AP and typing the command **`version`**, or by looking at the configuration GUI under **Wireless APs** and selecting the general tab for the AP in the field **s/w version**.
3. If you encounter difficulties or have questions regarding the configuration process, please contact your Siemens representative or visit the web site http://enterprise.usa.siemens.com/products/solutions/hipathwireless.html



Download from Www.Somanuals.com. All Manuals Search And Download.

# Initial Setup

1. The following instructions are for configuring a wireless controller and a number of access points with no prior configuration.
2. All of the initial setup is done via a web interface. Connect a 'Cross-Over' Ethernet cable directly from the Management Port of the controller to a PC's Ethernet port.
3. Log onto the controller by opening a web browser and connect to https://192.168.10.1:5825/. The default username is **admin**; the default password is **abc123**.
4. Do this step only if it is necessary to reset the controller back to its factory default configuration:
   a. Click the **Wireless Controller** button to open the **Wireless Controller Configuration** screen.
   b. In the navigation pane, click **System Maintenance**.
   c. Click the **Reset database to factory default and reboot** button.
   d. Click the **Apply** button.
   This will reset the database and cause the controller to reboot. It will take three to four minutes before the controller is finished.



Download from Www.Somanuals.com. All Manuals Search And Download.

# Controller Setup

The setup steps described below refer to the network topology diagram shown in this document. Make sure all the access points are disconnected from the system if configuring the system for the first time.

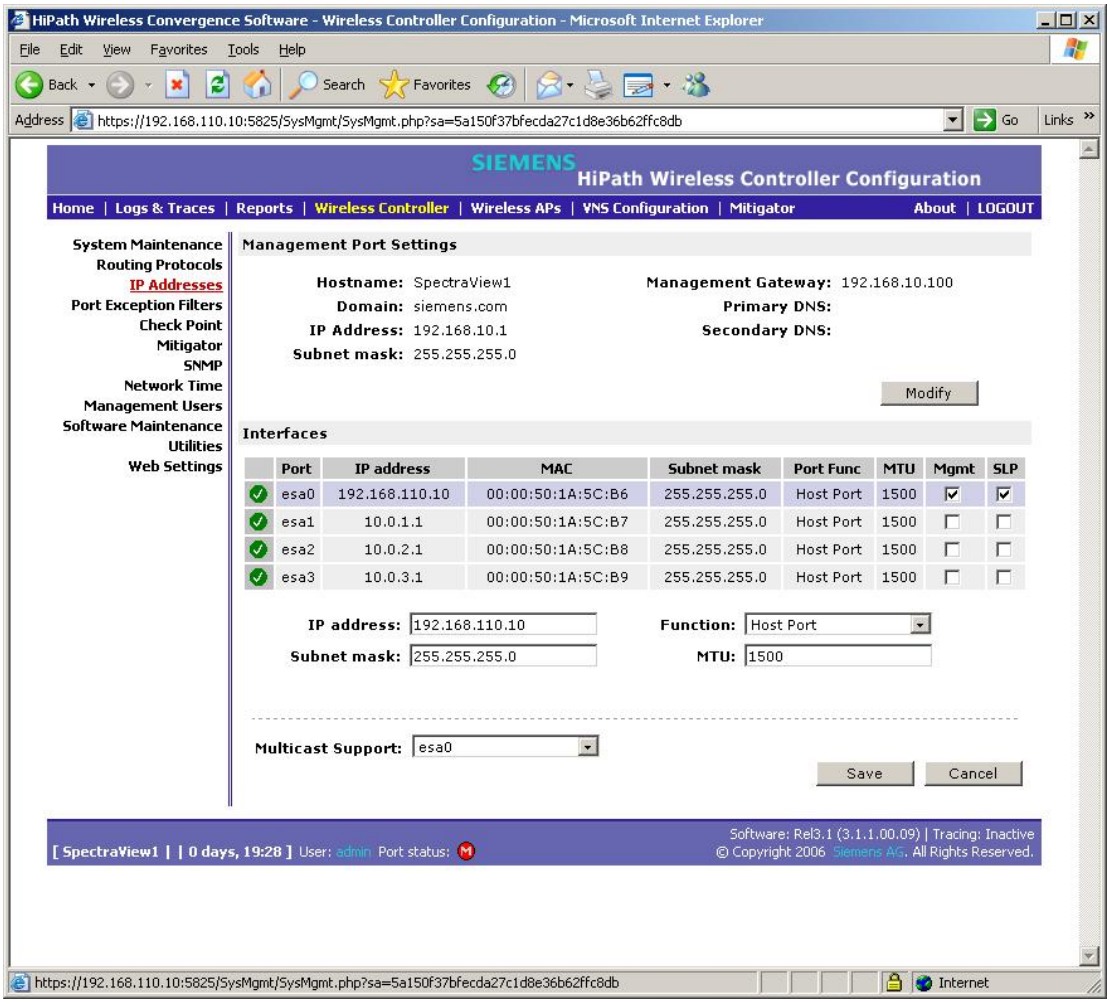
## Assigning an IP address to a wireless controller

1. Log onto the controller by opening a web browser and connect to https://192.168.10.1:5825/. The default username is **admin**; the default password is **abc123**.
2. Click the **Wireless Controller** button.
3. In the navigation pane, click **IP Addresses**.
4. Change the value of **esa0** to **192.168.110.10** for the **IP Address**, and to **255.255.255.0** for the **Subnet mask.**
5. Select the **Mgmt** and **SLP** check boxes for this port only (thus turning it on). Leave these unchecked (off) for the other ports.
6. For **Function**, select **Host Port** if static routing is used. Otherwise, select **Dynamic Port** if Open Shortest Path First (OSPF) is being used for routing and routing advertisements.
7. Enter **esa0** for **Multicast Support.** Refer to the screen shot shown below.
8. Click the **Save** button.

This is for topologies where the SpectraLink 8000 Telephony Gateway(s) and SVP Servers are located adjacent to the esa0 port, as was done in this VIEW Certification test. In topologies where the setup is different, this multicast setting should be configured to whichever port the SpectraLink servers are adjacent to. This setting permits proper wired replication of multicast data from the wireless subnet.



Download from Www.Somanuals.com. All Manuals Search And Download.



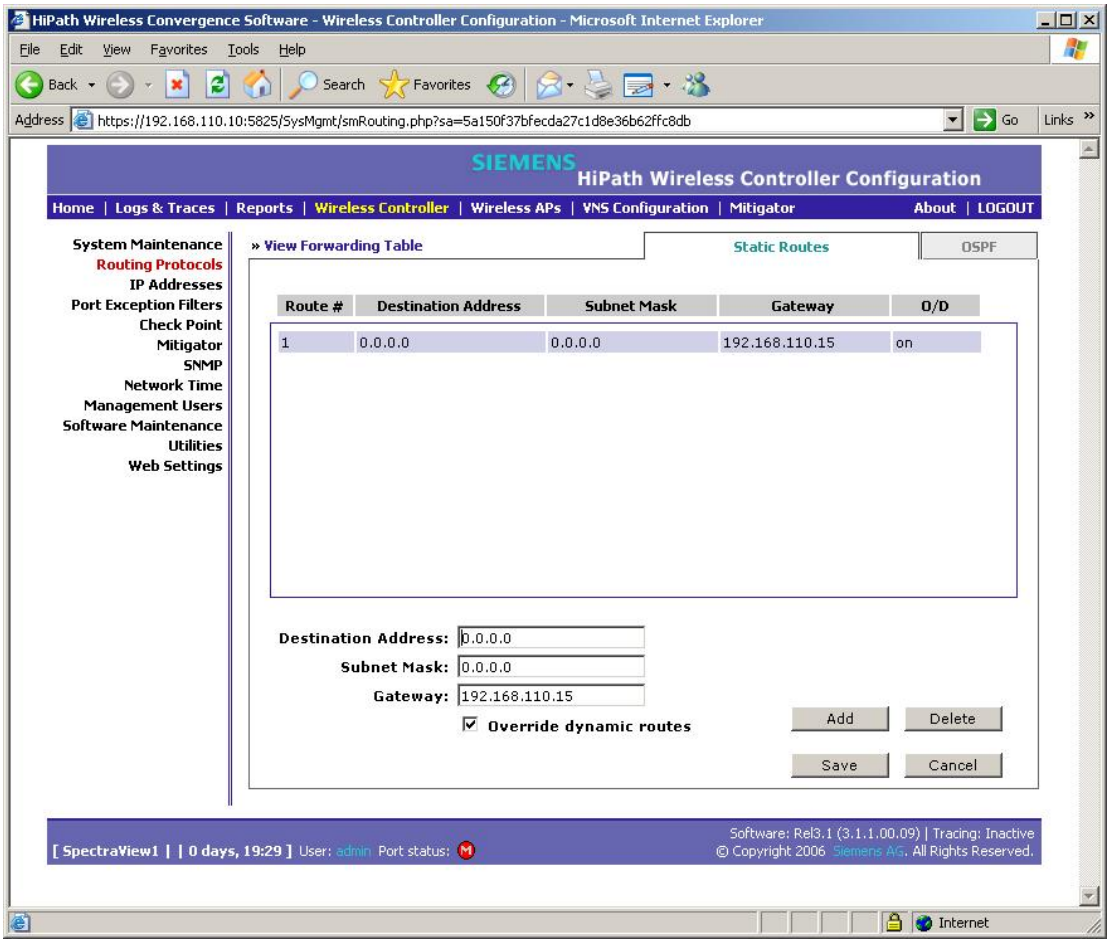



Download from Www.Somanuals.com. All Manuals Search And Download.

## Assigning routing protocols to a wireless controller

1. In the **Wireless Controller** screen, click **Routing Protocols** in the navigation pane.
2. Enter **0.0.0.0** for the **Destination Address** and **0.0.0.0** for the **Subnet Mask**. Add the appropriate address for the **Gateway**.
3. Click the **Save** button.

If dynamic routing (OSPF) is being used, then the default route should be set automatically. However, it is always recommended that you assign a temporary static route in dynamic environments to allow the device to operate immediately without having to wait for the initial updates. Be sure to clear the check box for **Override dynamic routes**. This will allow dynamic routes to be the default once they arrive.



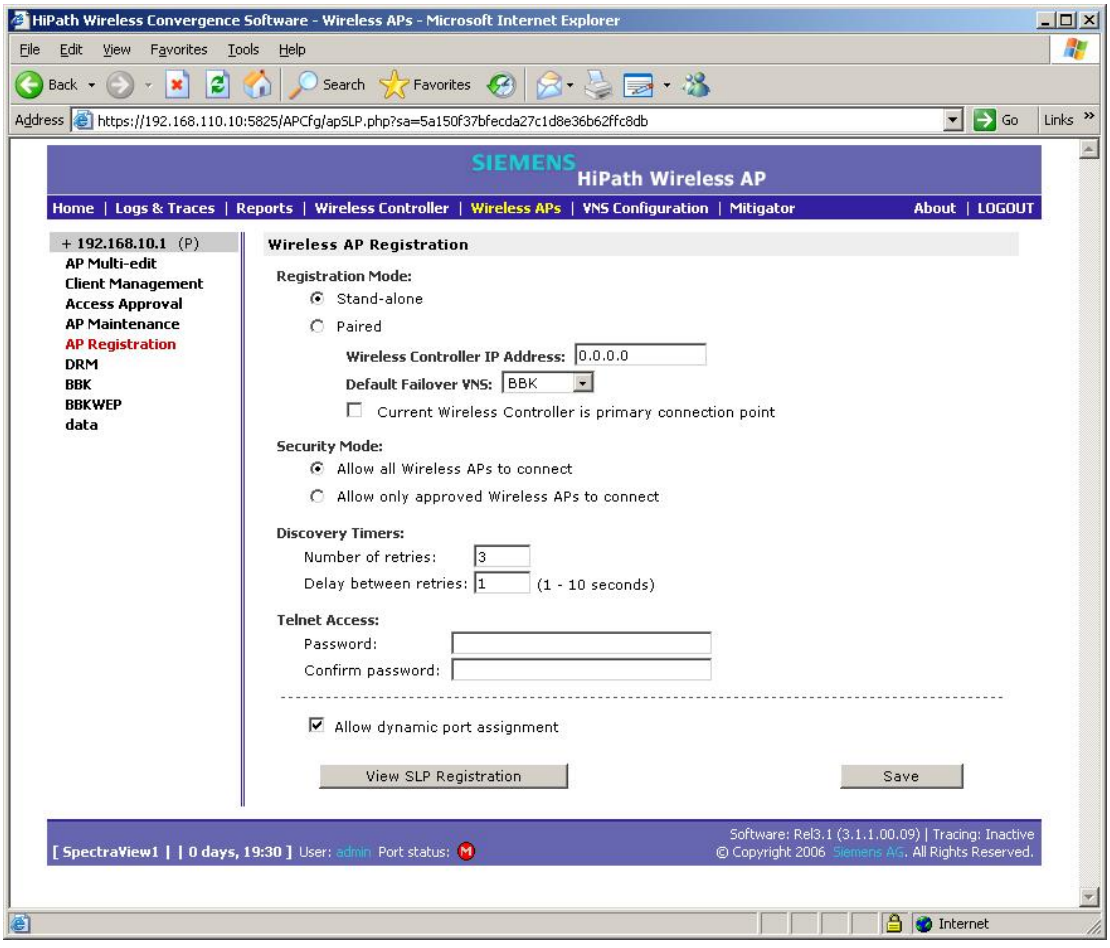



Download from Www.Somanuals.com. All Manuals Search And Download.

## AP registration

1. Click the **Wireless APs** button.
2. Click **AP registration** in the navigation pane.
3. Enter all information for your APs (see screen shot below). Make sure the setting for **Security Mode** is selected to **Allow all Wireless APs to Connect.**
4. Click the **Save** button.

This setting allows new APs to be added to the system automatically. Once the addition of APs is complete, it is recommended to switch this setting back to **Allow only approved Wireless APs to connect**.

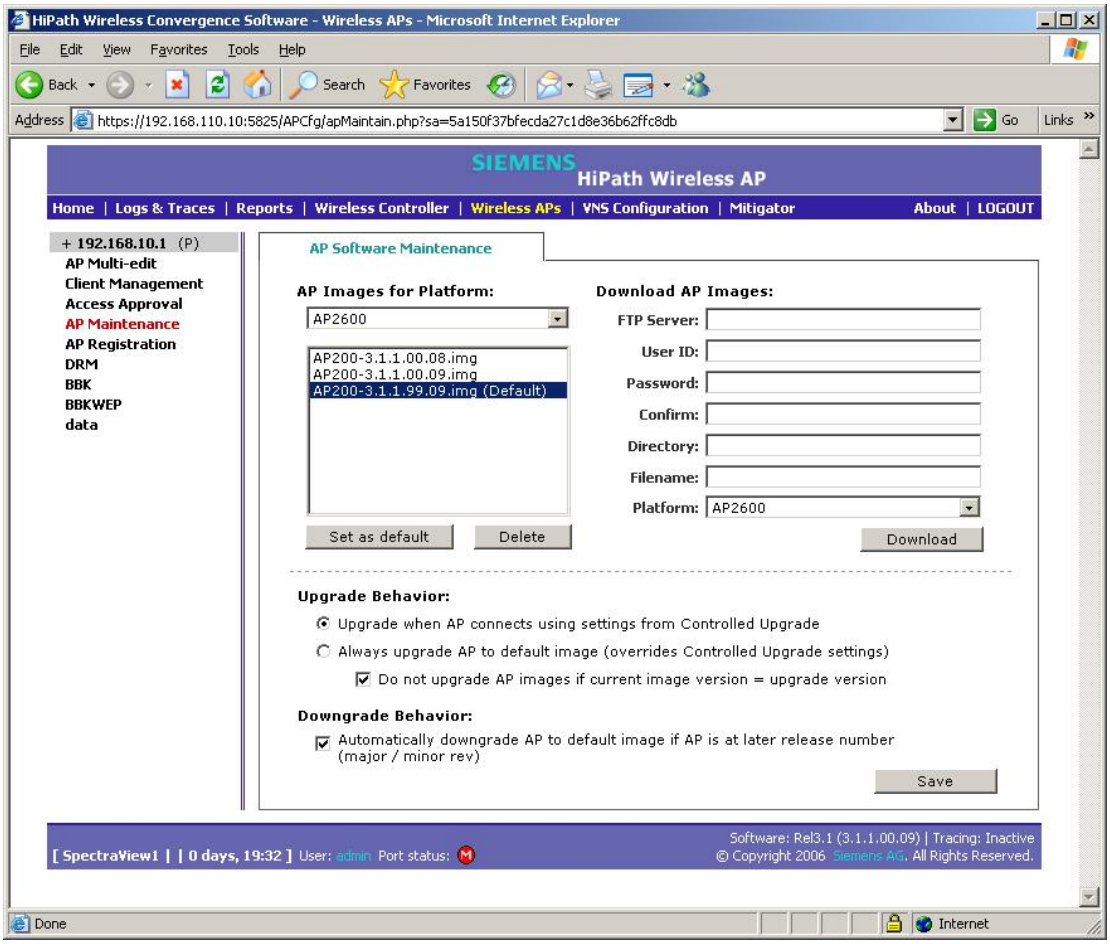





Download from Www.Somanuals.com. All Manuals Search And Download.

## AP maintenance

1. In the **Wireless APs** screen, click **AP Maintenance** in the navigation pane.
2. Select the proper image file in the **AP Images** box and click the **Set as default** button.
3. Under **Upgrade Behavior** select the **Upgrade when AP connects using settings from Controlled Upgrade** option.
4. Select the **Do not upgrade AP images if current image version = upgrade version** check box.
5. Under **Downgrade Behavior**, select the **Automatically downgrade AP to default image if AP is at later release number (major/minor rev)** check box.
6. Click the **Save** button.





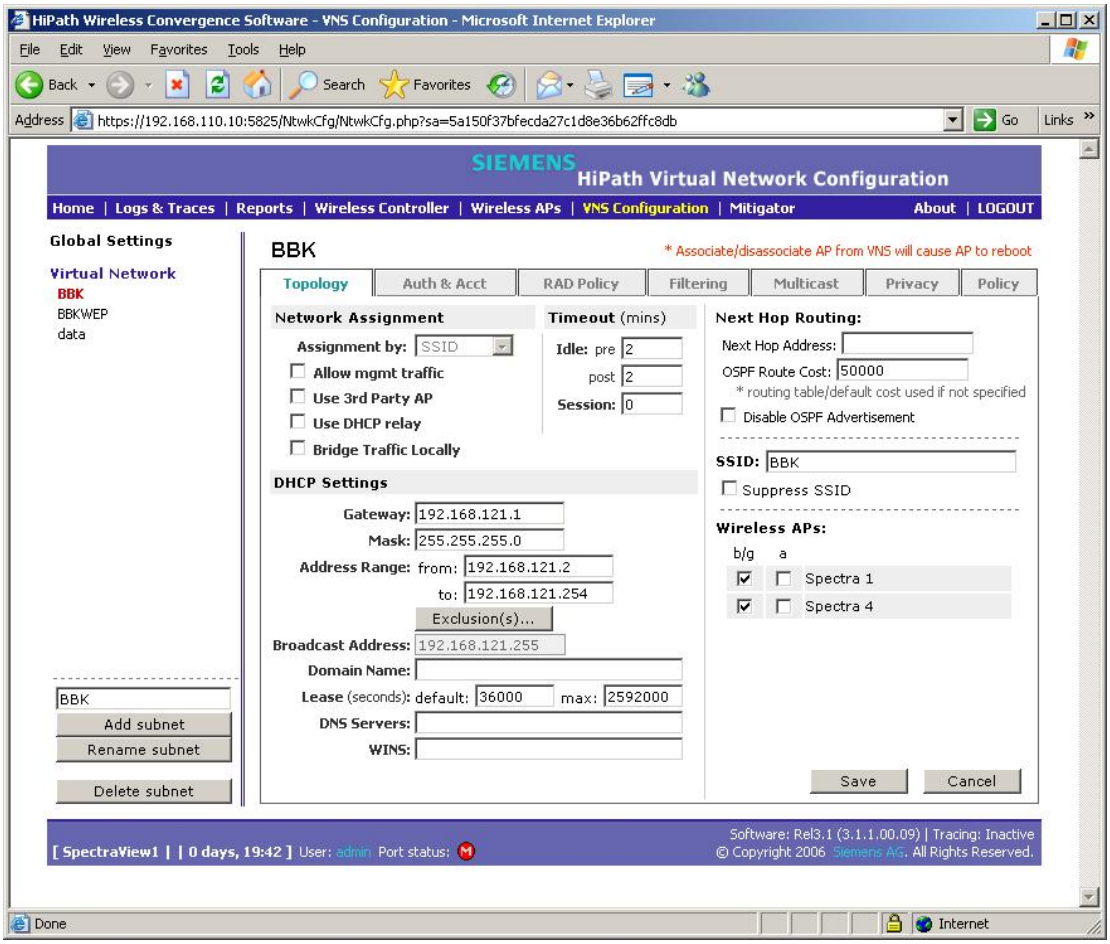

Download from Www.Somanuals.com. All Manuals Search And Download.

## Setting up SSID, Security and QOS

1. Click the **VNS Configuration** button.
2. Click the **Topology** tab.
3. Assign a subnet for clients for a specific **SSID**.
4. Under **DHCP Settings**:
   a. Enter the appropriate address for the **Gateway**
   b. For **Mask** enter **255.255.255.0.**
   c. The address range should default to **192.168.121.2 – 192.168.121.254**. Change this if you want a limited range of addresses assigned to this subnet.
   d. No DNS Servers or WINS is required.
5. Set the **Timeout Idle: pre** and **post** to **2.**
6. Under **Next Hop Routing**, set the **OSPF Route Cost** to **50000.**
7. Enter an **SSID** name.
8. Under **Wireless APs**, select the **b/g** check box for each AP.
9. Click the **Save** button.



Download from Www.Somanuals.com. All Manuals Search And Download.





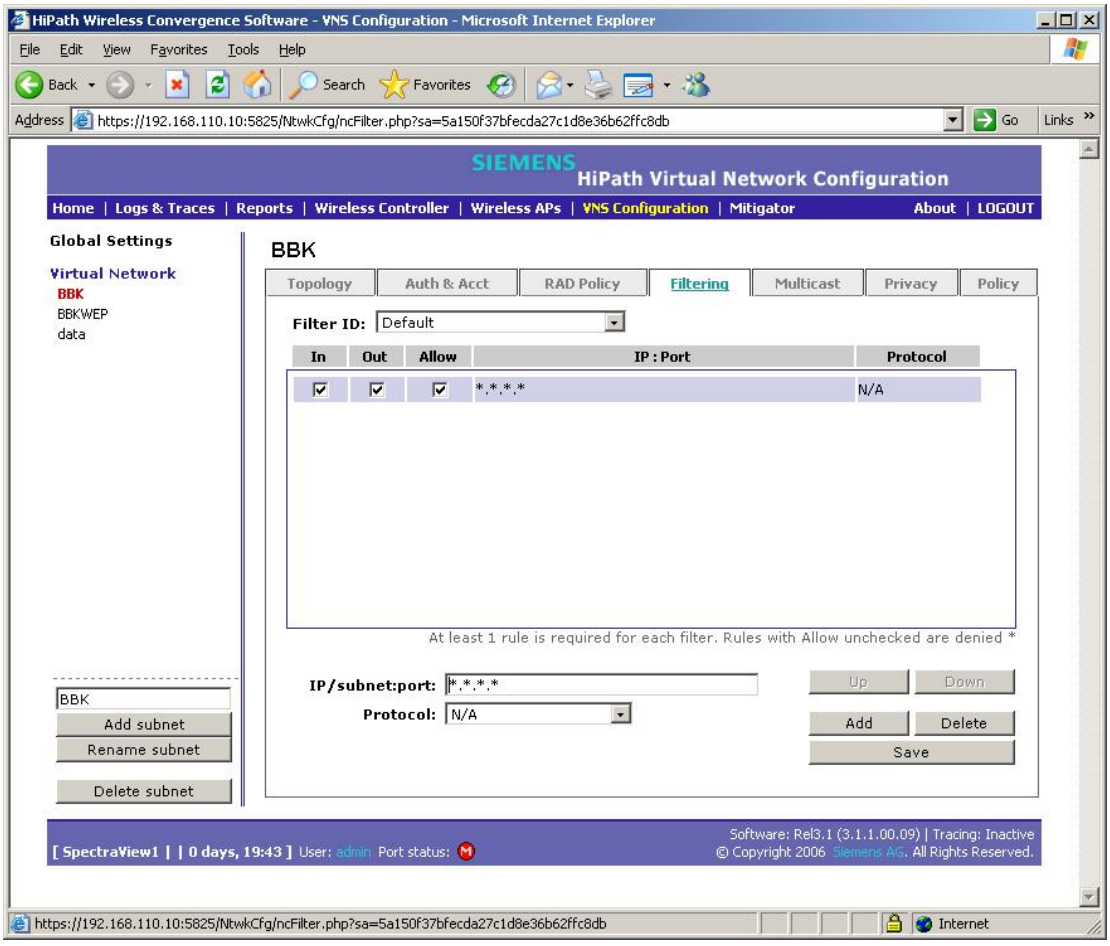

Download from Www.Somanuals.com. All Manuals Search And Download.

## Filtering

1. In the **VNS Configuration** screen, click the **Filtering** tab.
2. Select **Default** from the **Filter ID** drop-down list.
   a. Select all three options - **In, Out** and **Allow.**
   b. Leave the **IP:Port** as ***.*.*.***.
3. Select **Non-Authenticated** in the **Filter ID** drop-down list.
   a. Select all 3 options - **In, Out** and **Allow**.
   b. Leave the **IP:Port** as ***.*.*.***.
4. Click the **Save** button.

A more secure setup for this topology might be:

Allow 192.168.121.* UDP
Allow 192.168.110.* UDP
Allow 192.168.123.* UDP
Disallow*.*.*.* N/A T

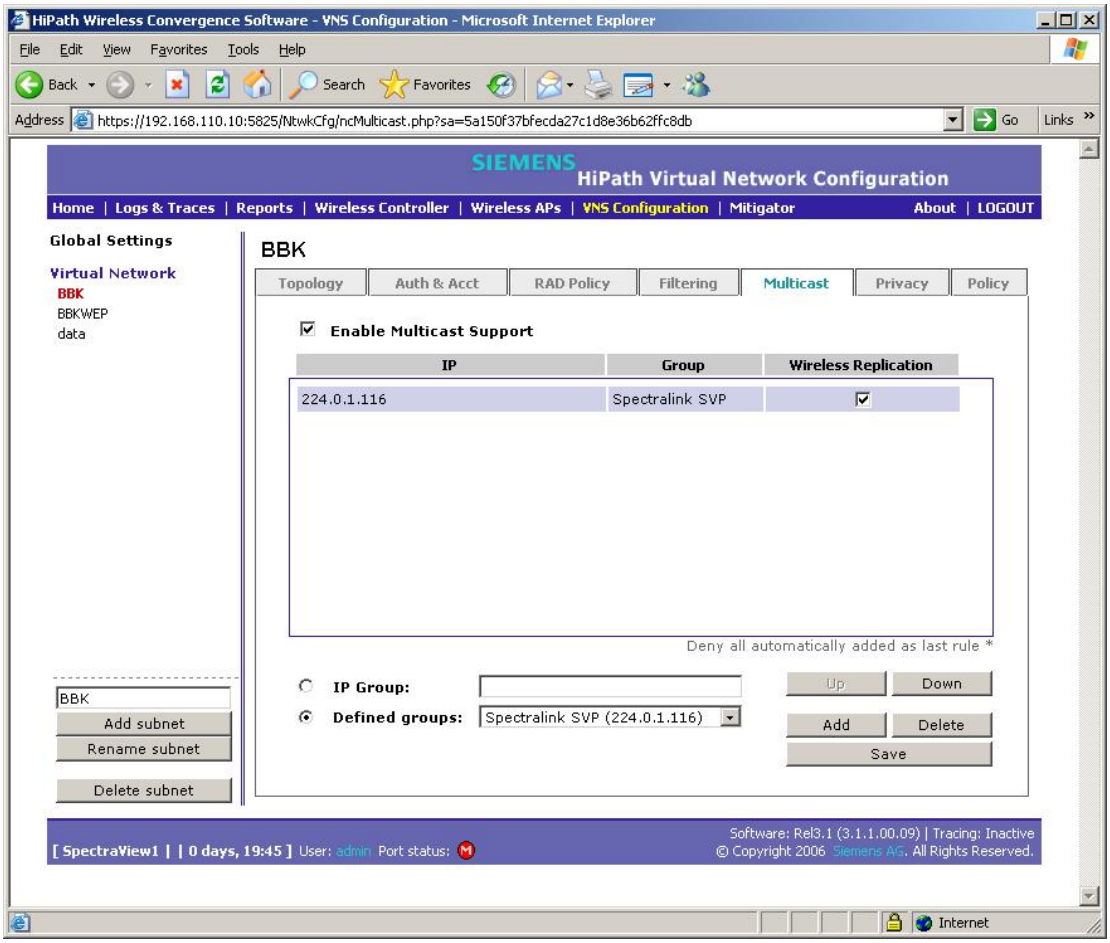





Download from Www.Somanuals.com. All Manuals Search And Download.

## Multicast configuration

1. In the **VNS Configuration** screen, click the **Multicast** tab.
2. Select the **Enable Multicast Support** check box.
3. From the **Defined groups** drop-down list, select or enter **Spectralink SVP (224.0.1.116)** and click the **Add** button.
4. Enable **Wireless Replication** for the multicast selection by selecting the check box beside the entry.
5. Click the **Save** button.



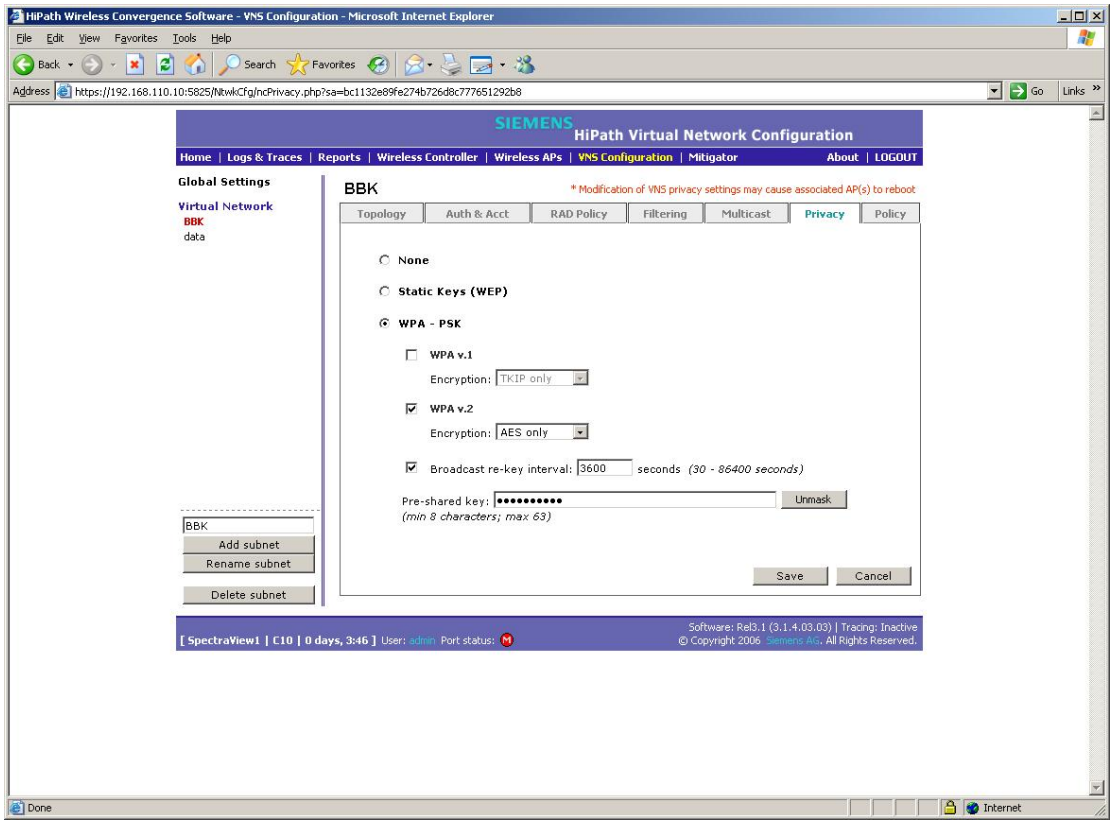



Download from Www.Somanuals.com. All Manuals Search And Download.

## Security

1. In the **VNS Configuration** screen, click the **Privacy** tab.
2. For WPA2 AES-CCKM, click the **WPA-PSK** option, clear the **WPA v.1** check box, then select the **WPA v.2** check box.
3. For WPA TKIP, click the **WPA-PSK** option, clear the **WPA v.2** check box, then select the **WPA v.1** check box.
4. Enter the appropriate pass phrase in the **Pre-shared key** field.
5. Click the **Save** button.

There is no hex key available at this time.

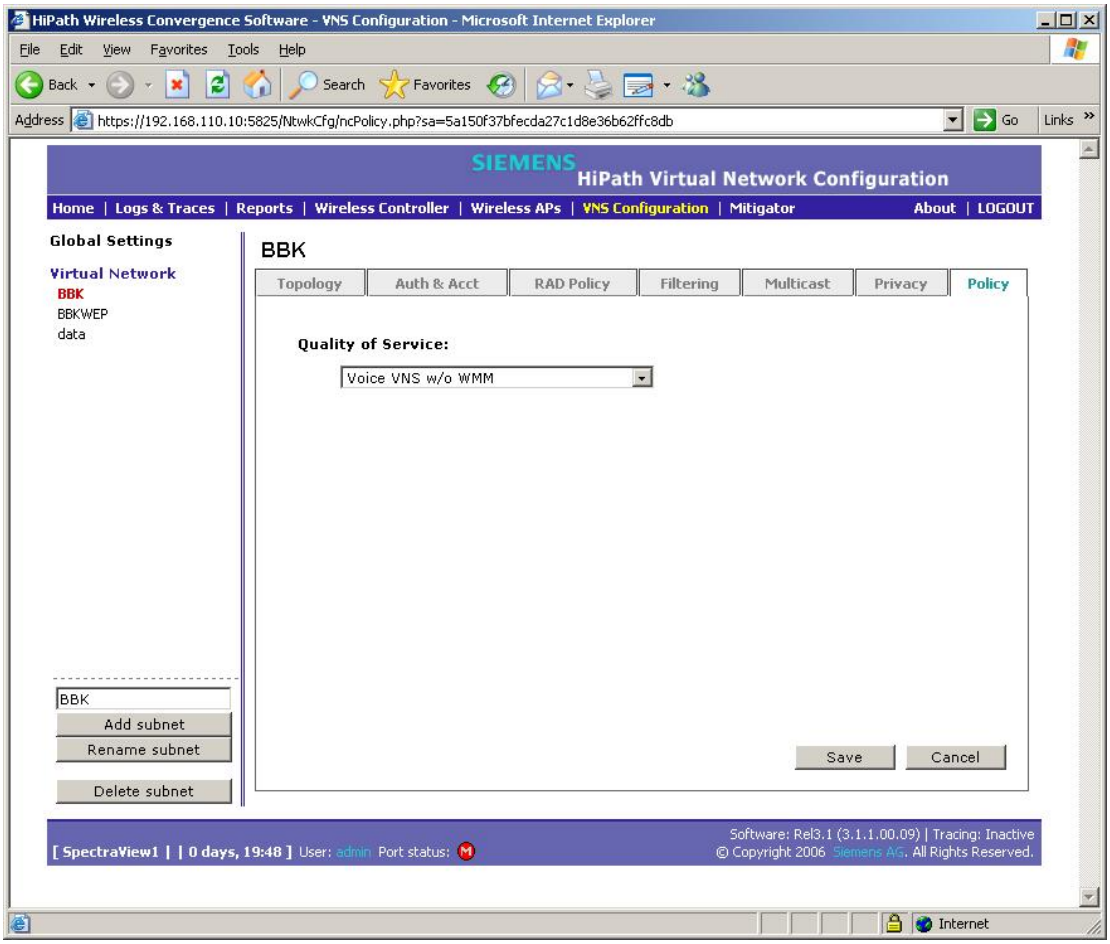





Download from Www.Somanuals.com. All Manuals Search And Download.

## Quality of service

1. In the **VNS Configuration** screen, click the **Policy** tab.
2. From the **Quality of Service** drop-down list, select **Voice VNS w/o WMM**; this is required for SpectraLink phones.
3. Click the **Save** button.




## Setting up other SSIDs

1. Repeat the above steps, starting at step 1.
2. Create a new SSID and DHCP pool as before. Each SSID has its own sub-net.
3. Use the same filtering settings as before.
4. Set up privacy as required.
5. If creating a sub-net for data, select **Best Effort** in the **Policy** page.

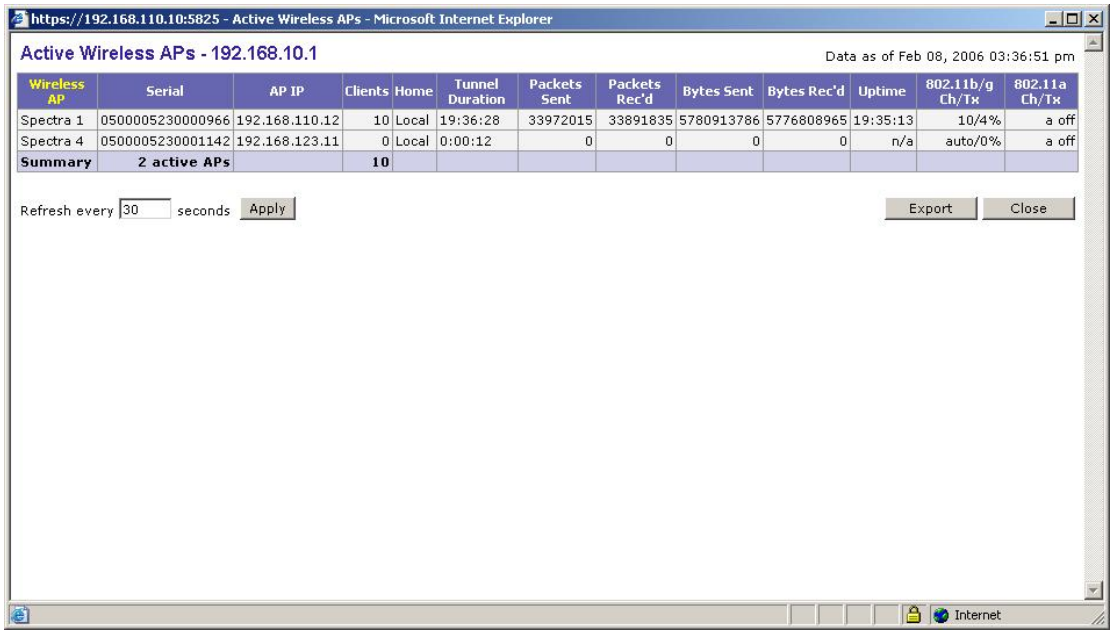
Make sure the proper SSID is selected on each page as it is being configured.



Download from Www.Somanuals.com. All Manuals Search And Download.

## Connecting access points to the controller

1. Click the **Reports** button.
2. Make sure the controller is configured to accept new APs (this is selected by default).
3. Physically connect the access points to the system one at a time. Once an AP is connected to the system, it will show up in the **Active Wireless APs** screen of the **Reports** menu.
4. Press F5 to refresh the screen.



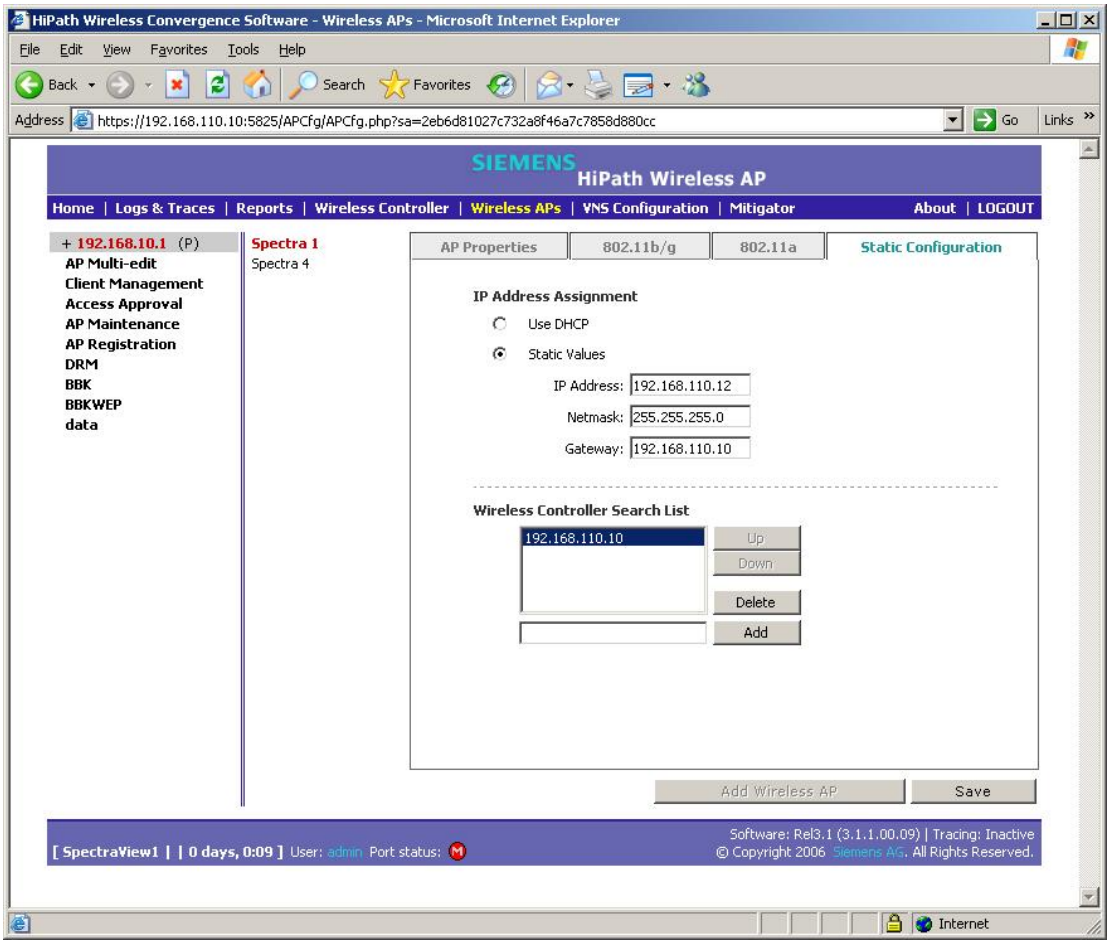

| Wireless AP | Serial | AP IP | Clients | Home | Tunnel Duration | Packets Sent | Packets Rec'd | Bytes Sent | Bytes Rec'd | Uptime | 802.11b/g Ch/Tx | 802.11a Ch/Tx |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spectra 1 | 0500005230000966 | 192.168.110.12 | 10 | Local | 19:36:28 | 33972015 | 33891835 | 5780913786 | 5776808965 | 19:35:13 | 10/4% | a off |
| Spectra 4 | 0500005230001142 | 192.168.123.11 | 0 | Local | 0:00:12 | 0 | 0 | 0 | 0 | n/a | auto/0% | a off |
| **Summary** | **2 active APs** | | **10** | | | | | | | | | |



Download from Www.Somanuals.com. All Manuals Search And Download.

## Wireless APs address assignment

1. After all the APs have been connected and discovered by the controller, click **Wireless APs** tab.
2. Click the **Static Configuration** tab.
3. Select an AP to configure. The AP's name will default to their MAC address.
4. Under **IP Address Assignment** click either the **Use DHCP** or the **Static Values** option. If selecting **Static Values**, assign the proper values.
5. Under **Wireless Controller Search List** add the IP address of the controller port.
6. Repeat steps 4 and 5 for each access point.
7. Click the **Save** button.



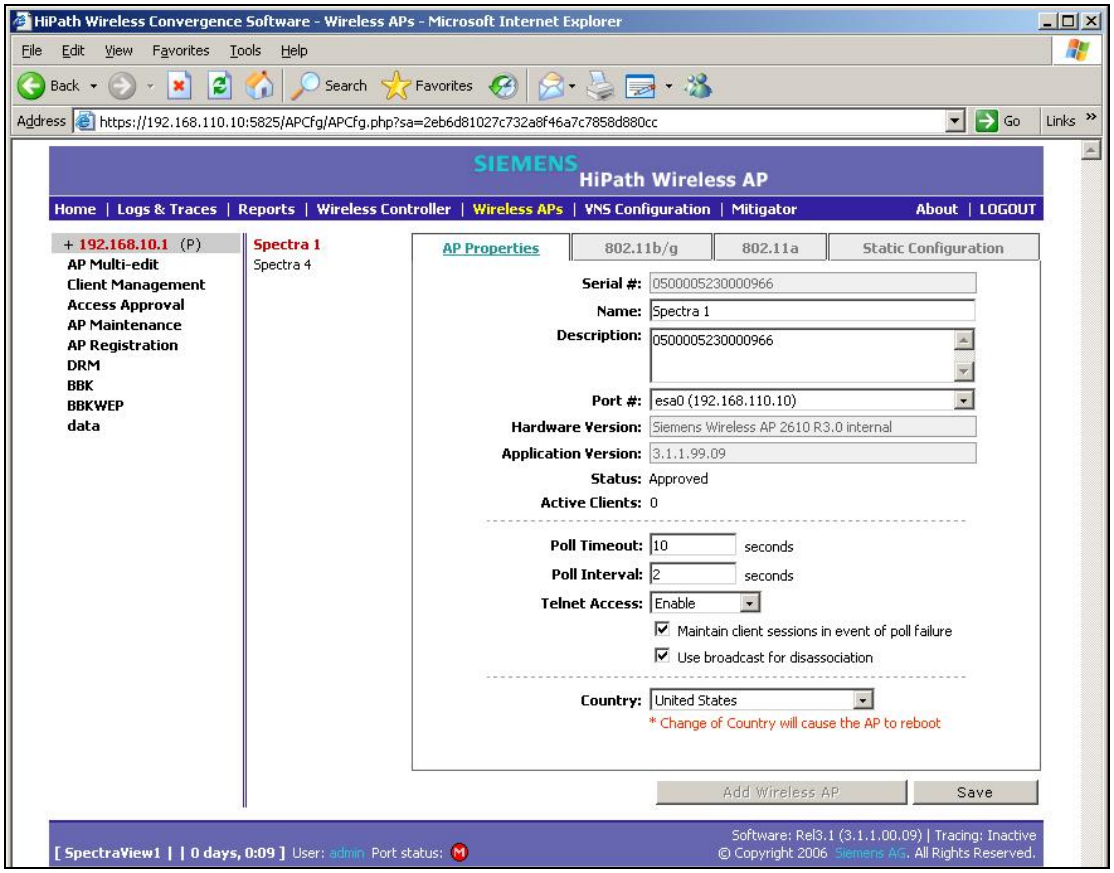



Download from Www.Somanuals.com. All Manuals Search And Download.

# For each AP, follow the steps in the following sections:

## AP properties

1. In the **Wireless APs** screen, click the **AP Properties** tab. Select an AP to configure. Here you can assign a meaningful name to each AP.
2. Enable **Telnet Access**. This is useful for troubleshooting the setup and configuring security settings.



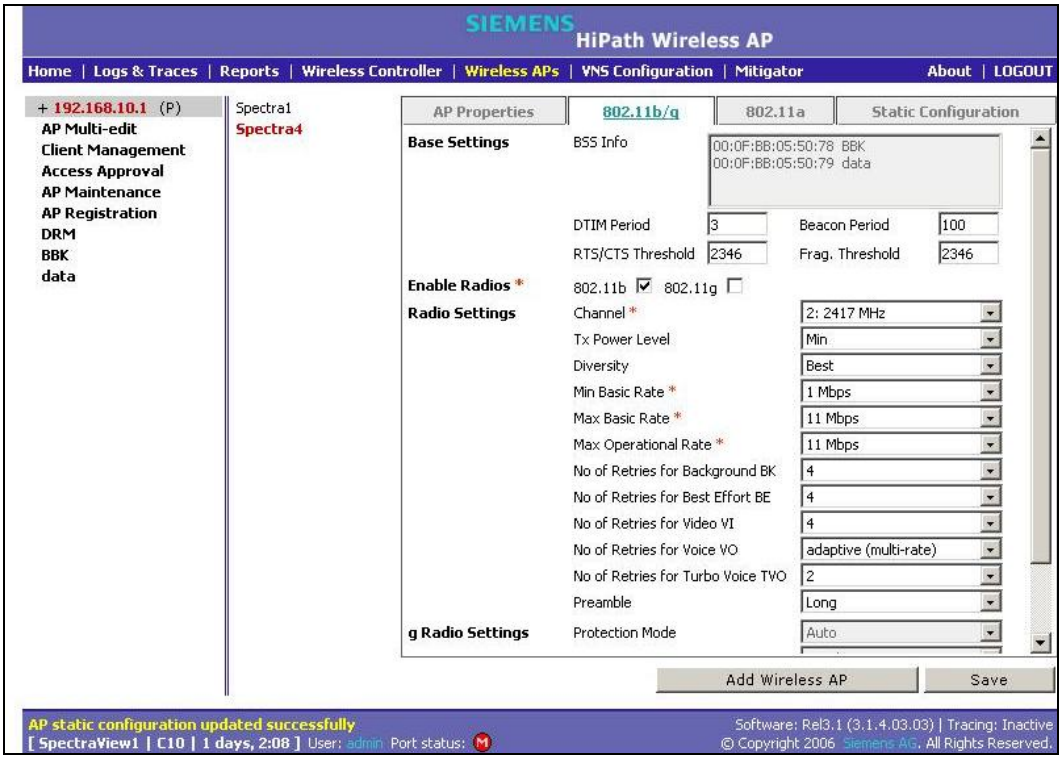

## 802.11b/g settings

1. In the **Wireless APs** screen, select the **802.11 b/g** tab.
2. Select an AP to configure.
3. Under **Base Settings**:
   a. Set the **DTIM Period** to **3**.
   b. Set the **Beacon Period** to **100.**
   c. Set the **RTS/CTS Threshold** to **2346**.
   d. Set the **Frag. Threshold** to **2346**.



Download from Www.Somanuals.com. All Manuals Search And Download.

4. For **Enable Radios**, select the **802.11b** check box.
5. Under **Radio Settings**:
   a. Select the appropriate **Channel** and **Tx Power Level.** (Note: DRM values will override this setting, if enabled).
   b. Set the **Diversity** to **Best.**
   c. Set the **Min Basic Rate** to **1 Mbps**.
   d. Set the **Max Basic Rate** to **11Mbps**.
   e. Set the **Max Operational Rate** to **11Mbps**.
   f. Set the **Preamble** to **Short** (note that the value **Long** works as well).
6. Click the **Save** button.






Download from Www.Somanuals.com. All Manuals Search And Download.

## Enable the radio

1. Click the **VNS Configuration** button.
2. Click the **Topology** tab.
3. Enable each AP's b/g radio for each SSID.
4. Set **No. of Retries for Voice VO** to **adaptive (multi-rate)** and **No. of Retries for Turbo Voice TVO** to **2**.
5. Click the **Save** button.

After the controller and access points are set up, the Management port is no longer required. The Controller can now be managed through the Host Port, or the esa0 port in this configuration. Open a browser and connect to https://<ip address>:5825.



Download from Www.Somanuals.com. All Manuals Search And Download.

Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com