



Configuration Guide For Spectralink 8440 Phone

Table of Contents

Table of Contents

1



Revision History	2
Spectralink 8440 Phone and Zoom Software Versions	3
1. Overview	3
2. Configuration Steps - Zoom Web Portal	3
1. Create Zoom Users	4
2. Add SIP Devices	9
3. Configuration Steps – Spectralink 8440 Phone	11
1. Deployment Topology Diagram	12
2. Network	12
3. Configure Spectralink 8440 Phone	12
4. Support Features and Limitations observed in device	15
1. Features Not Supported	15
2. Features Not Supported	16
3. Features Test Failed	16

Revision History

Version	Date	Author	Change
1.0	18/03/2022	Simon Du	Config guide created

1.1	19/04/2022	Simon Du	Update based on Zoom's Comments
-----	------------	----------	---------------------------------

Spectralink 8440 Phone and Zoom Software Versions

	Equipment	Software Version
Spectralink	Spectralink 8440 Phone	7.5.0.2257
Zoom	Zoom App Desktop	5.9.7 (3931)
	Zoom app Mobile	5.9.6 (2729)

1. Overview

This document outlines the configuration best practices for the Spectralink 8440 Phone as Zoom phone.

2. Configuration Steps - Zoom Web Portal

This section provides instructions on how to configure Spectralink 8440 phone in Zoom Web Portal

This section is mainly for adding phone devices (Spectralink 8440 Phone) and assign Zoom user to the devices

Prerequisites:

- Zoom Phone account: a valid Zoom Phone subscription is required in order to assign a Spectralink 8440 Phone endpoint.
- Zoom approval for provisioning of Spectralink 8440 phones as Generic SIP devices. Administrators should contact Zoom Account Executive to start an approval process

Login to Zoom Web portal at <https://zoom.us/>.

The following Zoom SIP Device configurations are included in this section

1. [Create Zoom Users](#)
2. [Add Device](#)

1. Create Zoom Users

Zoom Users are created in order to login to Zoom clients on desktop or mobile, it can also be assigned to SIP Device. The steps for creating a user are as follows:

1. Navigate to **User Management > Users**. Click + **Add Users** to create new Zoom users.

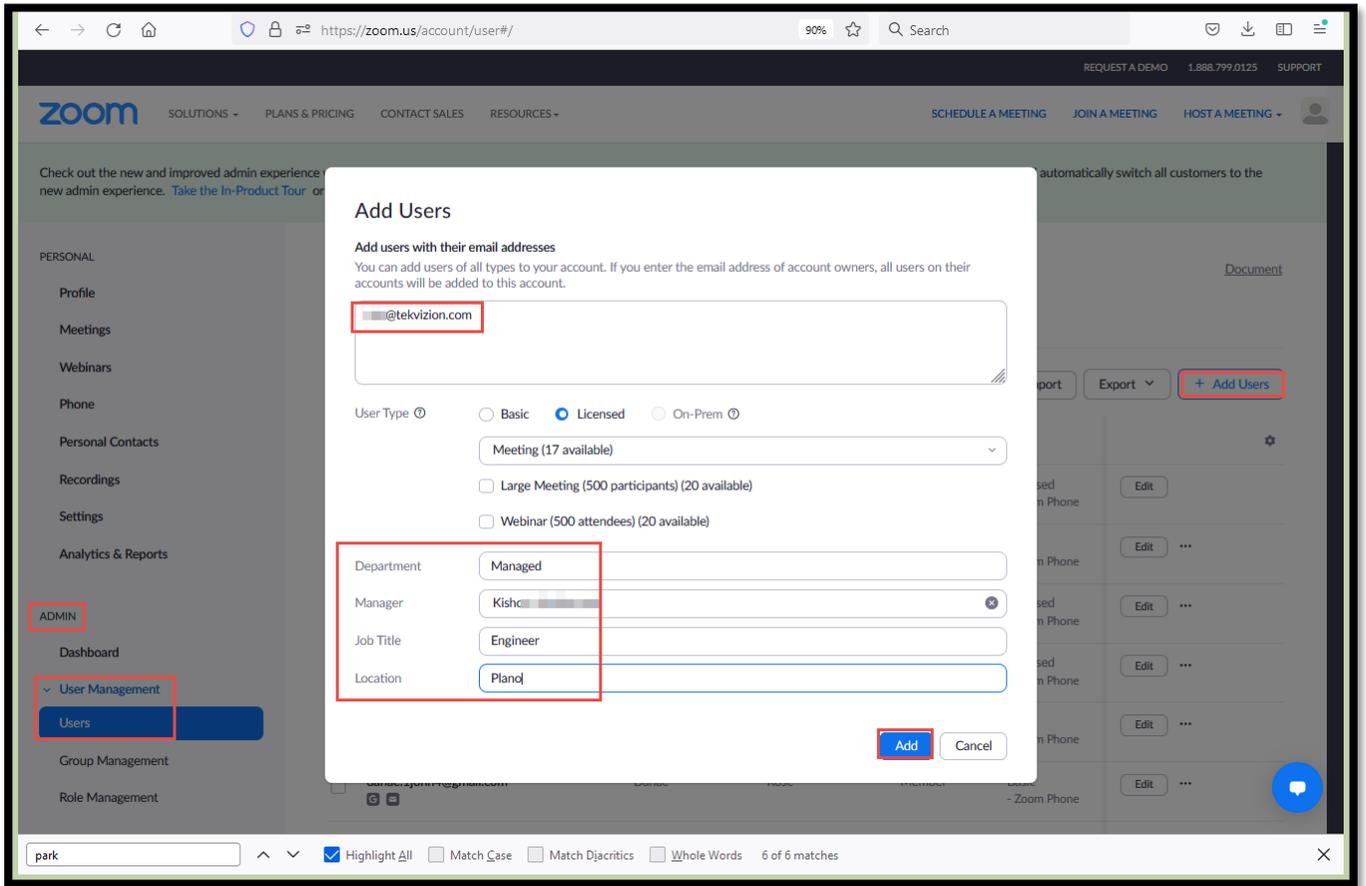


Figure 1 : Add Users

2. A Zoom activation email is sent to the email address used in creating the user, follow the instruction to activate the zoom account
3. Navigate to **Phone System Management > Users & Rooms**. Click **Add**

Zoom Admin console interface showing the 'Users & Rooms' page. The 'Add' button is highlighted in red. The table below shows a list of users with their details.

<input type="checkbox"/>	Name	Ext.	Package	Number(s)	Desk Phone(s)	User Status	Site	Group
<input type="checkbox"/>	Danae Rose [redacted]@gm	8025	US/CA Unlimited	--	Online	Active	Main Site	--
<input type="checkbox"/>	Danae Kirby [redacted]kvizion.c	8024	US/CA Unlimited	(719) 25 [redacted]	--	Active	Main Site	--
<input type="checkbox"/>	Amul Priya Ambrose [redacted]@tekviz	8023	US/CA Unlimited	(719) 2 [redacted] 1	Offline	Active	Main Site	--
<input type="checkbox"/>	Amul priya [redacted]2@gma	8022	US/CA Unlimited	(719) 2 [redacted]	Offline	Active	Main Site	--

Search: park | Highlight All | Match Case | Match Diacritics | Whole Words | 6 of 6 matches

Figure 2 : Add Users and Rooms

- From pop-up window, select the proper user and **Confirm**

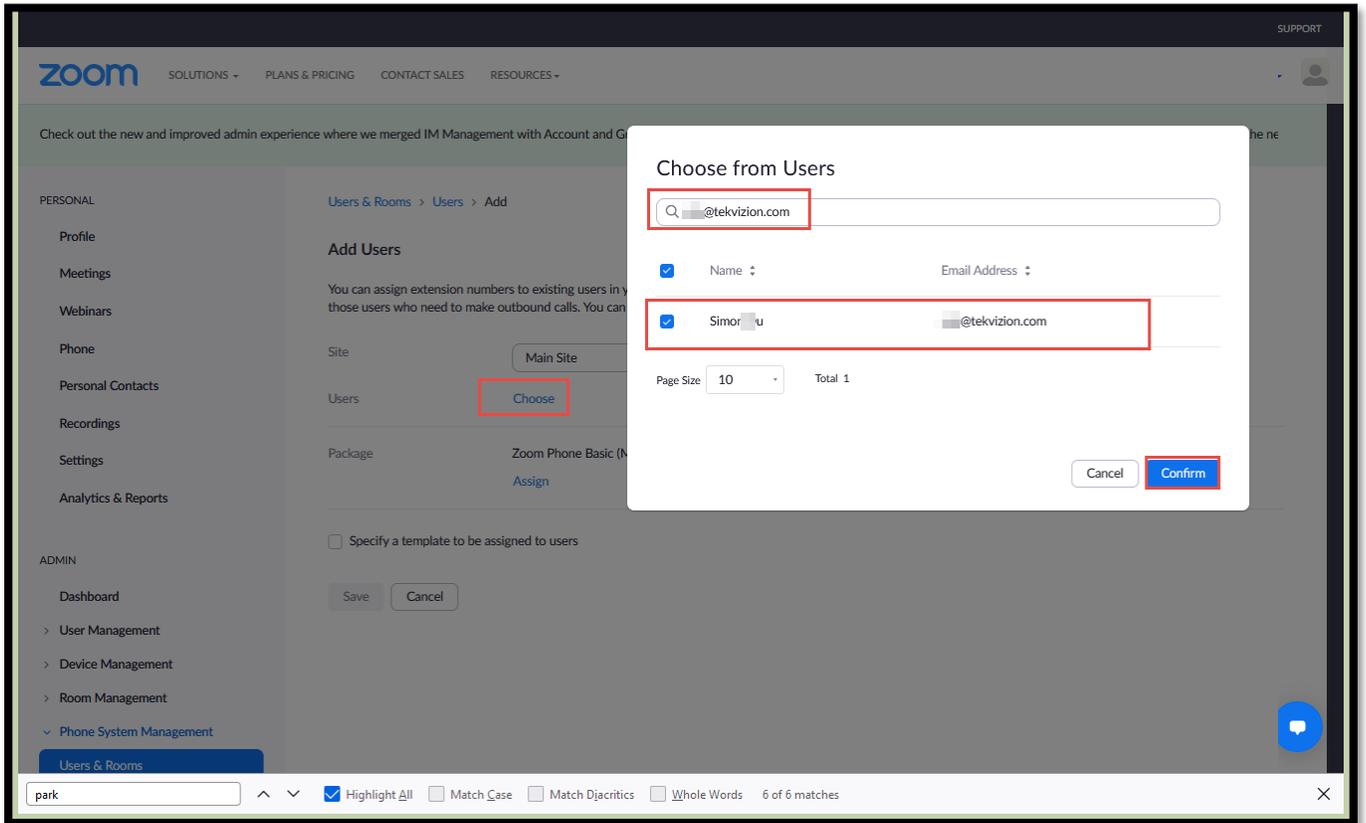


Figure 3 : Choose user

5. Click **Assign** beside **Package** and at new window, select proper Calling plan, **US/CA Unlimited Calling Plan** was picked up, click **Save** to complete adding users under phone system Management

Zoom Confidential

REQUEST A DEMO 1.888.799.0125 SUPPORT

SOLUTIONS - PLANS & PRICING CONTACT SALES RESOURCES - SCHEDULE A MEETING JOIN A MEETING HOST A MEETING -

PERSONAL

Profile

Meetings

Webinars

Phone

Personal Contacts

Recordings

Settings

Analytics & Reports

ADMIN

Dashboard

> User Management

> Device Management

> Room Management

> Phone System Management

Users & Rooms

Auto Receptionists

Call Queues

Shared Lines

Group Call Pickup

Users & Rooms > Users > Add

Add Users

You can assign extension numbers to existing users in your account. After that, you can assign calling plans to those users who need to make outbound calls. You can add up to 100 users each time.

Site: Main Site

Users: Chosen: 1
Sim...@tekvizion.com X
Choose

Package: **Assign**

US/CA Unlimited Calling Plan Pro Features · Unlimited Domestic X

Specify a template to be assigned to users

Save Cancel

Figure 4 : Assign Calling Plan

6. Select the newly added user, click **Assign** and select **Assign Numbers**

Zoom Confidential

REQUEST A DEMO 1.888.799.0125 SUPPORT

SOLUTIONS - PLANS & PRICING CONTACT SALES RESOURCES - SCHEDULE A MEETING JOIN A MEETING HOST A MEETING -

PERSONAL

Profile

Meetings

Webinars

Phone

Personal Contacts

Recordings

Settings

Analytics & Reports

ADMIN

Dashboard

> User Management

> Device Management

> Room Management

> Phone System Management

Users & Rooms

Users Zoom Rooms Common Area Phones Cisco/Polycom Rooms

Plan Details

Add Import Export

Search by Name, Ext. or Number Package (All) Status (All) Site (All)

<input type="checkbox"/>	Name	Ext.	Package	Number(s)	Desk Phone(s)	User Status	Site	Group	
<input type="checkbox"/>	Sim...@tekvizion.com	8008	US/CA Unlimited	--	--	Active	Main Site	--	Assign
<input type="checkbox"/>	Dar... Rose	8025	US/CA Unlimited	--	Online	Active	Main Site	--	Assign Packages Assign Numbers
<input type="checkbox"/>	Dan... Kirby	8024	US/CA Unlimited	(719) 2...	--	Active	Main Site	--	Assign
<input type="checkbox"/>	Am... Ambrose	8023	US/CA Unlimited	(719) 2...	Offline	Active	Main Site	--	Assign

Figure 5 : Assign Number

7. Select the desire DID and click **confirm** to assign the DID to the user

Assign Numbers

Country/Region
United States

Q Search Site (All) Number Type (All) Get Numbers

<input checked="" type="checkbox"/>	Number	Area	Number Type	Capability	Site
<input checked="" type="checkbox"/>	(719) [REDACTED] 45	Canon City, Colorado, United States	Toll Number	Incoming & Outgoing	Main Site
<input type="checkbox"/>	(71) [REDACTED] 35	Canon City, Colorado, United States	Toll Number	Incoming & Outgoing	Main Site
<input type="checkbox"/>	(719) [REDACTED] 40 (E)	United States	Toll Number	Incoming & Outgoing	Main Site
<input type="checkbox"/>	(719) 9[REDACTED] 5 (E)	United States	Toll Number	Incoming & Outgoing	Main Site

Page 1 of 2 < > Page Size 10 Total 16

Cancel Confirm

Figure 6 : Select DID Number

2. Add SIP Devices

- Navigate to **ADMIN -> Phone System Management -> Phones & Devices**. Click **Add**
 - Set **Display Name: Spectralink 01** is set as an example
 - Set **MAC Address:** add the Spectralink 8440 MAC Address here

- Set **Device Type**: select **Other** as the phone type is not certified yet
- Click **Assign** under **Assigned To** and select the newly created user in previous steps
- Click **Save**

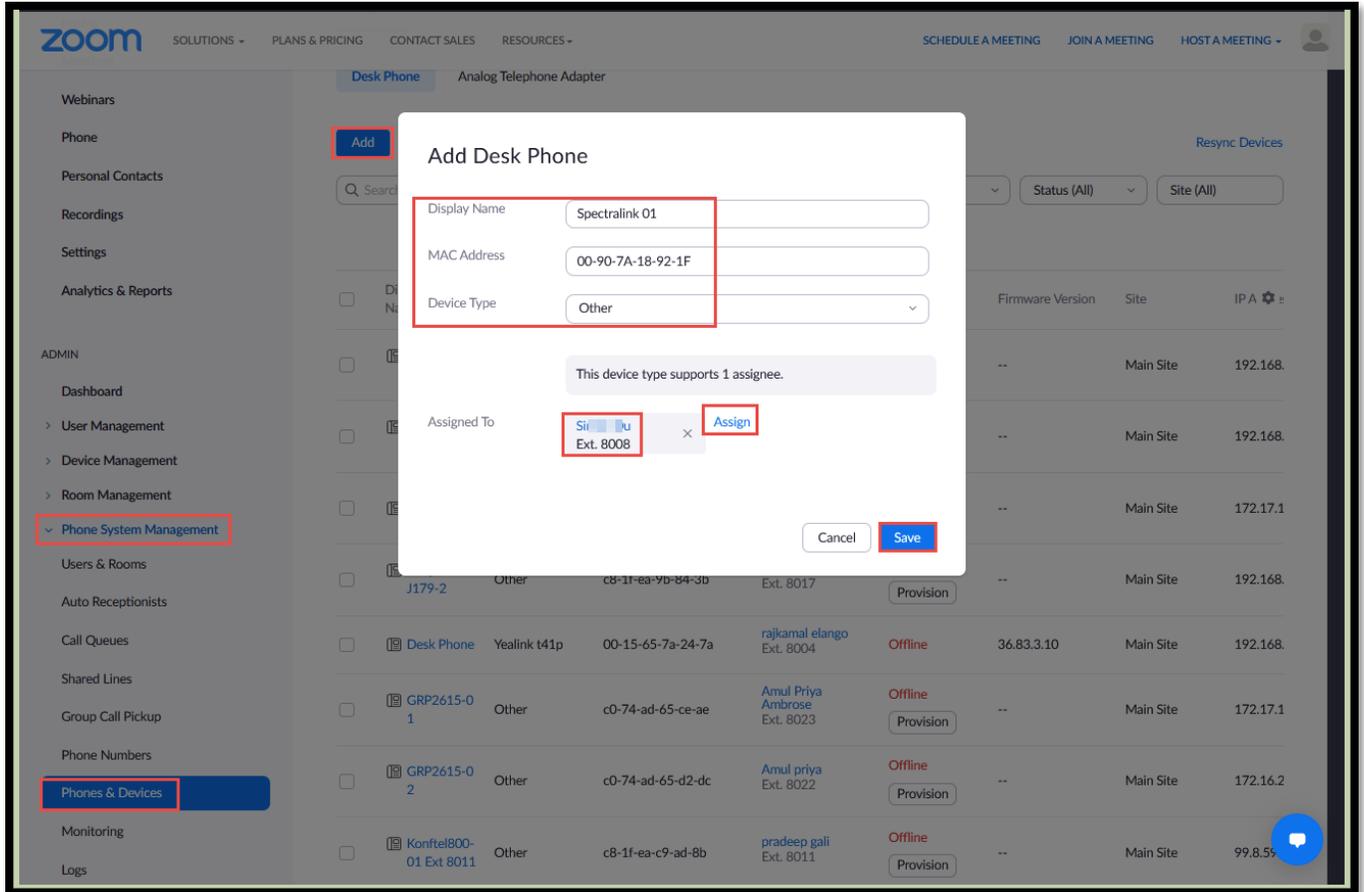


Figure 7 : Add Desk Phone

2. Click **Provision** button for the newly created device. The SIP Account detail is displayed which will be used in Spectralink 8440 configuration in later step

The screenshot shows the Zoom Admin console interface. On the left, a navigation menu includes 'PERSONAL' (Profile, Meetings, Webinars, Phone, Personal Contacts, Recordings, Settings, Analytics & Reports) and 'ADMIN' (Dashboard, User Management, Device Management, Room Management, Phone System Management, Users & Rooms, Auto Receptionists, Call Queues, Shared Lines). The main content area shows the 'Phones & Devices > Assigned > Spectralink 01' page. The 'Spectralink 01' device profile is highlighted with a red box. Below the profile name are 'Provision' and 'Remove' buttons. A 'Provisioning' modal is open on the right, displaying the following information:

Provisioning

MAC Address: 00-90-7a-18-92-1f
Device Type: Other

You will need to enable TLS1.2 for SIP registration and enable SRTP for secure calling on your IP phone. Please refer to your manufacturer's instructions for these processes.

You'll need following information for manual provisioning.

SIP Account 1:

1. SIP Domain: 7000766863.zoom.us
2. Outbound Proxy: us01sip0h.sc.zoom.us:5091
3. User Name: 5751[redacted].550
4. Authorization ID: 817[redacted]385
5. Password: nV[redacted]NU

Please download *DigiCert Global Root CA*, *DigiCert Global Root G2*, *DigiCert Global Root G3* and import to your IP phone if they are not in the trust list of the device.

Note: Please note that Zoom support team will not be able to troubleshoot or configure IP phones that are provisioned in this manner. Some Zoom Phone features may not work on manually provisioned phones. It may vary depending on your desk phone model.

Close

Figure 8 : Provisioning

3. Configuration Steps – Spectralink 8440 Phone

This section provides instructions on how to configure Spectralink 8440 phone to register to Zoom Phone Services.

The following Spectralink 8440 Phone configuration steps are included in this section:

1. [Topology Diagram](#)
2. [Network.](#)
3. [Configure Spectralink 8440 Phone.](#)

1. Deployment Topology Diagram

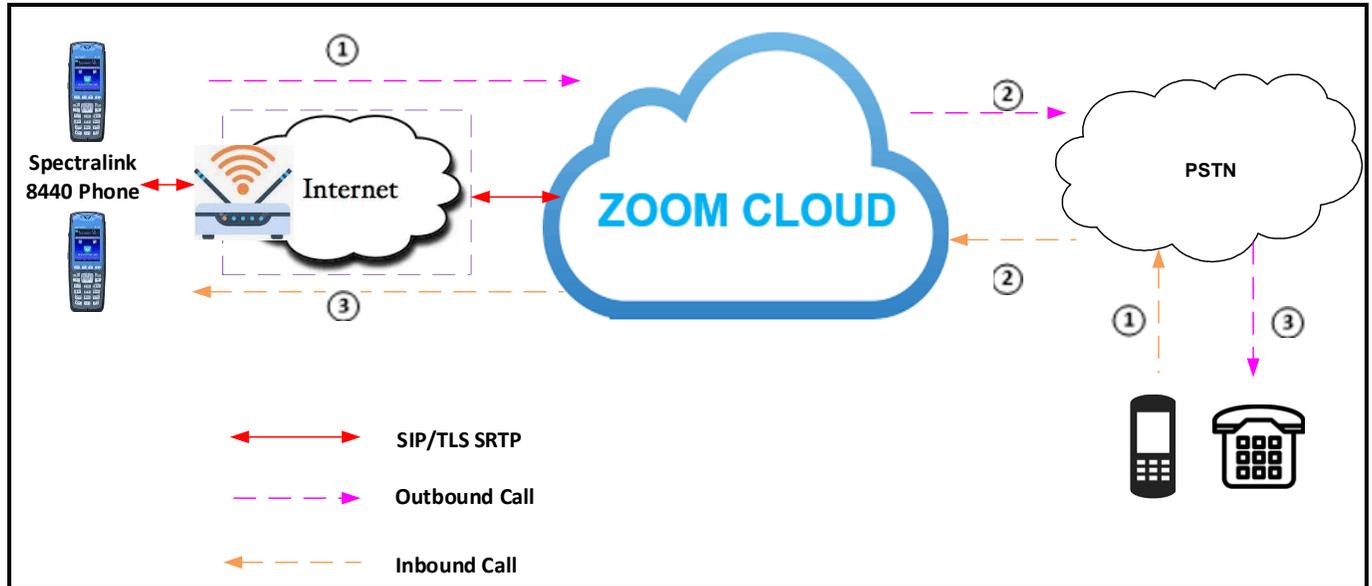


Figure 9 : Network Diagram

2. Network

By default, Spectralink 8440 phones have DHCP enabled, if the wireless router to which Spectralink 8440 connect does not support DHCP, static IP can be configured. Please follow ***Spectralink 84-Series Wireless Telephone Administration Guide*** to connect your phone to network. Here is the link to the guide: https://support.spectralink.com/sites/default/files/resource_files/1725-86984-000.pdf

You can find the IP address of Spectralink 8440 phones by navigating the physical phone: **Settings -> 4 Status -> 2 Network -> 1 TCP/IP Parameters.**

3. Configure Spectralink 8440 Phone

Spectralink 8440 Phone configuration can be done via physical phone Settings or through Spectralink 8440 Web Configuration Utility. We used Spectralink 8440 Web Configuration Utility to setup the phone.

Access the Spectralink 8440 Web Configuration Utility by using URL <http://ip-address> in an Internet browser window, where the ip-address is the IP address of the Spectralink 8440 phone. Select **Admin** and input proper **password** (the default password is 456, same password apply to configure the phone via physical phone Settings -> Advanced Settings), then click **Submit**

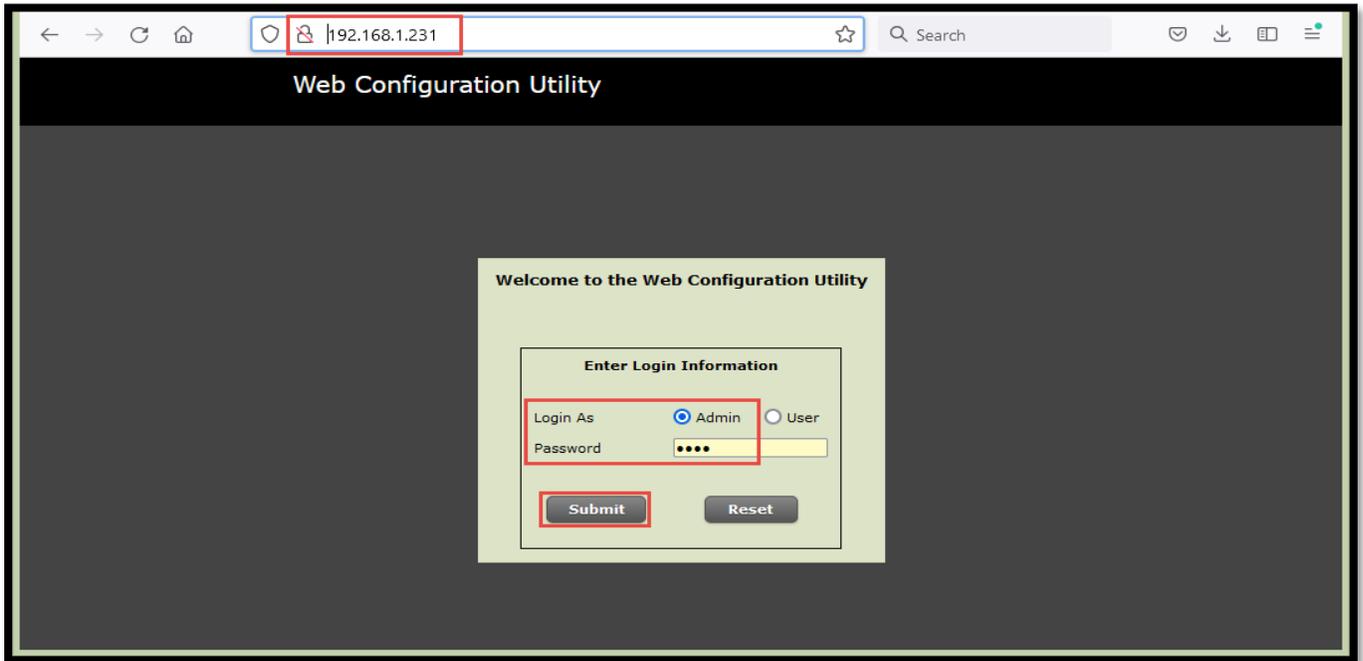


Figure 10 : Web Configuration Utility

You can find the device **MAC Address** and software **version** at home page after login

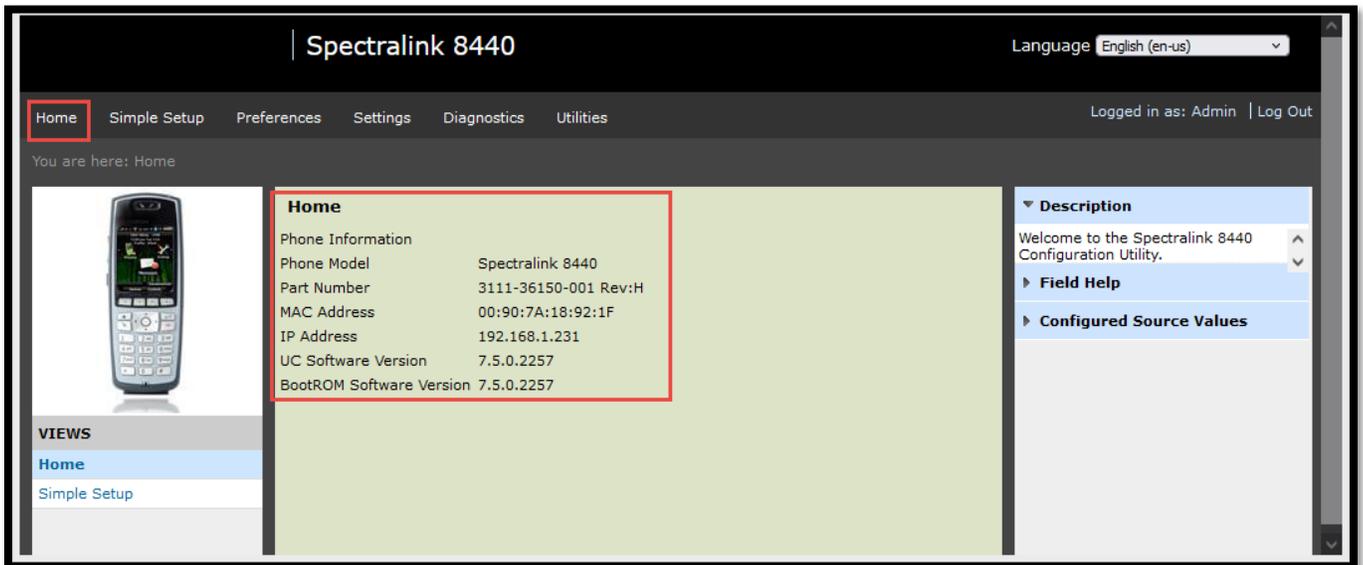


Figure 11 : Home

Navigate to **Simple Setup**

Under **Time Synchronization**

- Set **SNTP Server**: select the proper NTP server, **pool.ntp.org** is select for the test
- Set **Time Zone**: please select proper time zone for your deployment, **(GMT-6:00) Central Time...** is selected

Under **SIP Server**

- Set **Address**: in put the **SIP Domain** detail from Zoom phone Provisioning in previous step
- Set **Port**: **5091** is given to match the Zoom Portal configuration

Under **SIP Outbound Proxy**

- Set **Address**: This is the **Outbound Proxy** from Zoom Phone Provisioning

- Set Port: **5091** is given to match the Zoom Portal configuration

Under SIP Line Identification

- Set **Display Name: Spectralink 01** is given for the test
- Set **Address:** this is the **User Name** in Zoom Phone Provisioning
- Set **Authentication User ID:** this is the **Authorization ID** in Zoom Phone Provisioning
- Set **Authentication Password:** this is the **Password** in Zoom Phone Provisioning
- Set **Label:** Zoom Extension number **8008** is given here

Click **Save** to apply the configuration

Spectralink 8440 Language English (en-us)

Home **Simple Setup** Preferences Settings Diagnostics Utilities Logged in as: Admin | Log Out

You are here: Simple Setup

Simple Setup

Language

Time Synchronization

SNTP Server pool.ntp.org

Time Zone (GMT -6:00) Central Time (US & Canada), Mexico City

SIP Server

Address 7000766863.zoom.us

Port 5091

SIP Outbound Proxy

Address us01sip0h.sc.zoom.us

Port 5091

SIP Line Identification

Display Name Spectralink 01

Address 57517438367453091550

Authentication User ID 817630661885

Authentication Password ••••

Label 8008

Base Profile

Note:
* Fields require a phone reboot/restart.

Cancel Reset to Default View Modifications **Save**

Description

The Simple Setup menu provides access to the minimum configuration options you need to set to configure your phone to function properly. When you click the Simple Setup menu on the main navigation menu bar, the Language, Time Synchronization, SIP Server, SIP Outbound Proxy, and SIP Line Identification options are displayed.

Field Help

SNTP Server (device.snntp.serverName)

Choose an SNTP server that the phone obtains the time from. Note: This option can be set at Simple Setup > Time Synchronization, or at Preferences > Date and Time > Time Synchronization. Changes applied to settings in one place are applied in both places.

Configured Source Values

Figure 12 : Spectralink 8440 configuration

Navigate to **Settings -> Lines -> Line 1**

Under Identification

- Set **Enable SRTP: Yes** is checked
- Set **Offer SRTP: Yes** is checked for the test

Under Outbound Proxy

- Set **Transport: TLS** is set as required by ZOOM

Under Server 1

- Set **Transport: TLS** is set as required by ZOOM

Click **Save**

Spectralink 8440 Language English (en-us)

Home Simple Setup Preferences Settings Diagnostics Utilities Logged in as: Admin | Log Out

You are here: Settings > Lines > Line 1

Line 1

Identification

Display Name: Spectralink 01
 Address: 57517438367453091550
 Label: 8008
 Type: Private Shared
 Third Party Name:
 Number of Line Keys: 1
 Calls Per Line: 24
 Enable SRTP: Yes No
 Offer SRTP: Yes No
 Server Auto Discovery: Enable Disable

Authentication

Outbound Proxy

Address: us01sip0h.sc.zoom.us
 Port: 5091
 Transport: TLS

Server 1

Special Interop: Standard
 Address: 7000766863.zoom.us
 Port: 5091
 Transport: TLS
 Expires (s): 3600
 Register: Yes No
 Retry Timeout (ms): 0
 Retry Maximum Count: 3
 Line Seize Timeout (s): 30

Server 2

Call Diversion

Message Center

Cancel Reset to Default View Modifications Save

Description

You can configure the details of phone lines. Select a line to configure from the list on the far left window, and configure the details available in the main window.

Field Help

Transport (reg.1.outboundProxy.transport)
 Choose a transport method that the phone uses to communicate with the SIP server. There are four transport methods:

- **DNSnaptr:** If the outbound proxy address is a hostname and the port is '0', the phone performs NAPTR and SRV look-ups that discover the transport, ports, and servers. If the outbound proxy address is an IP address, or a port is specified, the phone uses UDP. DNSnaptr is the default transport method.
- **UDPOnly:** Only UDP is used.
- **TCPpreferred:** TCP is the preferred transport, and UDP is used if TCP fails.
- **TCPOnly:** Only TCP is used.
- **TLS:** If TLS is used, leave the port field empty, and the phone will use 5061 by default or you can set the port to 5061. If TLS fails, transport fails.

Configured Source Values

The parameter values from different sources are listed here. If a parameter value is configured from multiple sources, the phone will use the value from the highest-priority source.

Local:Not Applicable
 Web:Not Applicable
 Config:TLS
 SIP:Not Applicable

Figure 13 : Configure SRTP

4. Support Features and Limitations observed in device

The following features are supported by Device

1. Features Supported

- Basic Call with Codec G722 and G711
- Call Hold/Resume
- Call Waiting
- Call Forward (All, Busy and No Answer)
- Call Transfer (Blind and Consultative)

- 3-Party Conference
- Zoom Voice Mail and Message Indication
- Call Logs
- Call Park
- AES 128 CM HMAC SHA1 80 Algorithm for SRTP

Features are not supported

2. Features Not Supported

- Opus Codec
- Call Flip
- Share Line - Call Delegation
- AEAD AES 256 GCM Algorithm for SRTP
- AES 256 CM HMAC Algorithm for SRTP

Features failed during the test

3. Features Test Failed

- None