



WINS™: Wireless Interoperability & Network Solutions Polycom 8020/8030 Deployment for System Director 5.1 Cheat Sheet

The Polycom SpectraLink Wireless Telephone provides effective mobile communications within an enterprise by extending advanced voice and unified communication capabilities through a SIP server of choice. When these phones are deployed with the Meru Networks Virtualized Wireless LAN, it enables users to stay in touch while roaming seamlessly throughout their facility.

Device Requirements

The following devices are supported:

- Polycom SpectraLink 8020/8030 (SIP version 131.028)
The difference between the 8020 and 8030 is that the 8030 supports Push To Talk (PTT). The radio type and features are same.

Configure the following for the phones:

- Lock each phone to a band of use: 2.4 GHz or 5 GHz (5 GHz is recommended).
- Select the "Wi-Fi Standard" mode from the following menu:
Admin > Network Config > WLAN Settings > Custom > QoS
- To use the 5 GHz (802.11a) band on the 8020/8030, you must change the RF band to the 802.11a band, as the default band is 2.4 GHz (802.11b/g).
- Configure the phone's user account on the SIP server.
- Configure the phone's user account on the TFTP server as a provisioning server for the 8020 or 8030.

Meru Hardware and Software Requirements

Verify that you are using the following hardware and software requirements before starting configuration.

Hardware Requirements

Verify that you are using Meru AP300 Series devices.

Software Requirements

Verify that you are using System Director Release 5.1-90.

VLAN Recommendations

Configure a separate VLAN for the Polycom phones.

Radio and Band Requirements

Configure the radio and band requirements in System Director:

- Deployment (RF) band: 2.4 GHz or 5 GHz (Make sure that the band configured in System Director matches the band set on the Polycom phone.)

Security Requirements

Configure the security profile to use an appropriate security mode for your network, such as WPA2 or WPA2-PSK. Most customers use WPA2-PSK for its simplicity of deployment and operational support.

ESS Profile Requirements

Configure the ESSID by creating an ESS profile. The ESS profile must use the configuration settings listed in the following table.

ESS Profile Setting (GUI)	ESS Configuration Value
Virtual Cell	On (default)
Virtual Port	On (default)
Beacon Interval	100 ms (default)
DTIM Period	2
SSID Broadcast	On
APSD Support	On
Allow Multicast Flag	On (for Push to Talk)
Expedited Forward Override	On
SSID Broadcast for Vport	Till-Association
BGN Supported Transmit Rates	11 Mbps and higher (depends on site RF environment) (Make sure that check boxes for rates 9 Mbps and lower are cleared.)
BGN Base Transmit Rates	11 Mbps
AN Supported Transmit Rates	12 Mbps and higher (depends on site RF environment) (Make sure that check boxes for rates 9 Mbps and lower are cleared.)
AN Base Transmit Rates	12 Mbps, 24 Mbps

*** BGN and AN Base HT Transmit Rates (MCS) are disabled.

QoS Requirements

The default #3 and #5 QoS rules in the Meru controller are used for SIP. Generally, the 8020/8030 phones use SIP for registering with the SIP server, so there is no need to define additional QoS rules.

Boot Script Requirements

You must create a boot script that contains the following commands:

```
radio tsfresync radio0 1
radio tsfresync radio1 1
radio parentbeacon radio0 always
radio parentbeacon radio0 reduction 2
radio parentbeacon radio1 always
radio parentbeacon radio1 reduction 2
dev cmd radio0 sc silent 2000
dev cmd radio1 sc silent 2000
```