Configuring Voice or Data WLAN Connectivity

The Cisco Aironet 1815 Teleworker Access Point supports a maximum of 8 wireless LANs and remote LAN. Configure the SSIDs to separate voice and data traffic, which is essential in any good network design in order to ensure proper treatment of the respective IP traffic, regardless of the medium it is traversing. In this procedure, you add an interface that allows devices on the wireless data network to communicate with the rest of your organization.

Creating Wireless LAN Data Interface

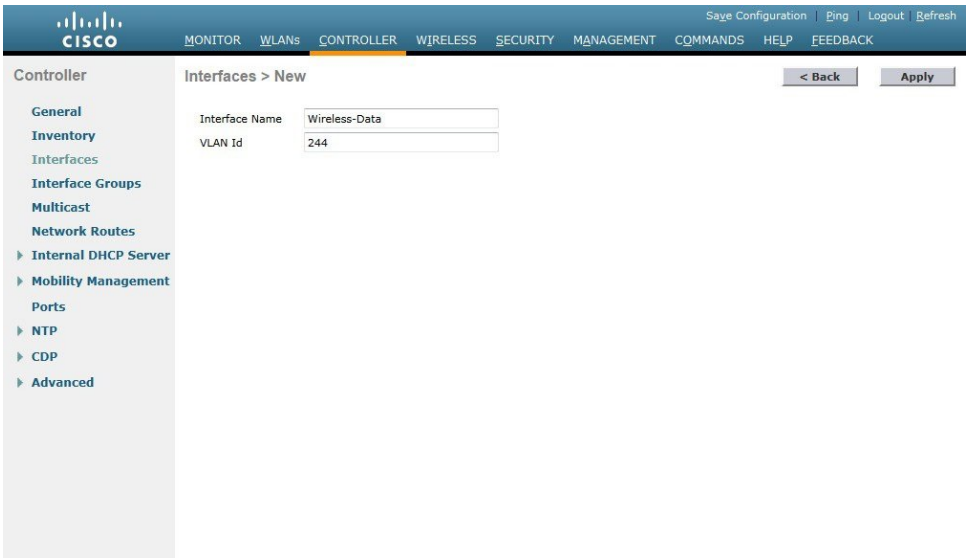
To create wireless LAN data interface, perform the following steps:

Procedure

Step 1 In **Controller** > **Interfaces**, click **New**.

Step 2 Enter the **Interface Name**. (Example: Wireless-Data)

Step 3 Enter the **VLAN Id**, and then click **Apply**. (Example: 244)



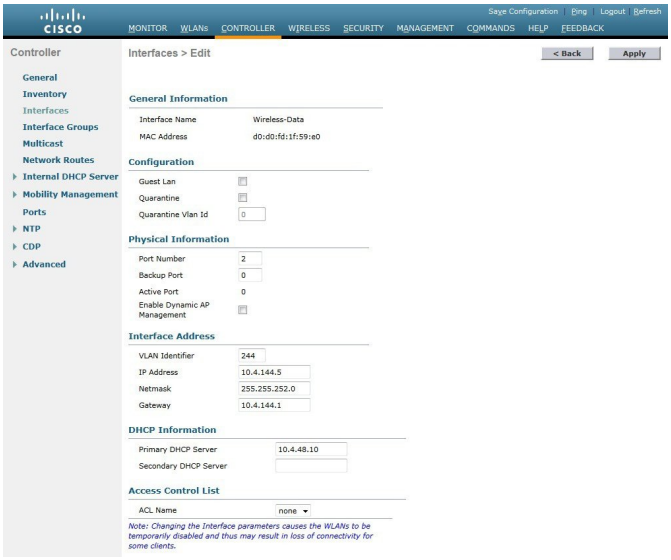
Step 4 In the **Port Number** box, enter the WLC interface that connects to the LAN distribution switch. (Example: 2)

Step 5 In the **IP Address** box, enter the IP address to assign to the WLC interface. (Example: 10.4.144.5)

Step 6 Enter the **Netmask**. (Example: 255.255.252.0)

Step 7 In the Gateway box, enter the IP address of the VLAN interface defined in Configuring LAN Distribution Switch, Procedure 1, "Configure the distribution switch," Step 2. (Example: 10.4.144.1)

Step 8 In the Primary DHCP Server box, enter the IP address of your organization's DHCP server, and then click Apply. (Example: 10.4.48.10)



Creating the Wireless LAN Voice Interface

You must add an interface that allows devices on the wireless voice network to communicate with the rest of the organization.

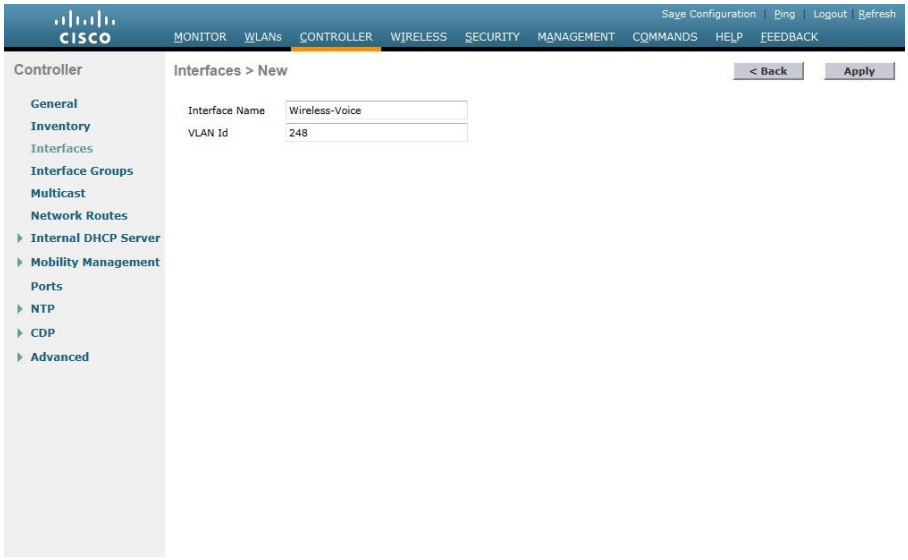
To create wireless LAN voice interface, perform the following steps:

Procedure

Step 1 In **Controller** > **Interfaces**, click **New**.

Step 2 Enter the **Interface Name**. (Example: Wireless-Voice)

Step 3 Enter the **VLAN Id**, and then click **Apply**. (Example: 248)



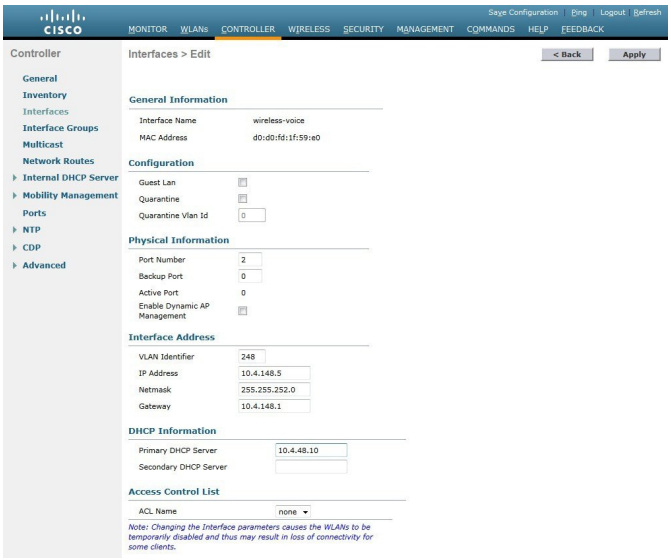
Step 4 In the **Port Number** box, enter the WLC interface that connects to the LAN distribution switch. (Example: 2)

Step 5 In the **IP Address** box, enter the IP address to assign to the WLC interface. (Example: 10.4.148.5)

Step 6 Enter the **Netmask**. (Example: 255.255.252.0)

Step 7 In the **Gateway** box, enter the IP address of the VLAN interface defined in Configuring LAN Distribution Switch, Procedure 1, “Configure the distribution switch,” Step 2. (Example: 10.4.148.1)

Step 8 In the **Primary DHCP Server** box, enter the IP address of your organization’s DHCP server, and then click Apply. (Example: 10.4.48.10)



Creating the Remote LAN Interface

Next, you add an interface that allows devices on the remote LAN network to communicate with the rest of the organization.

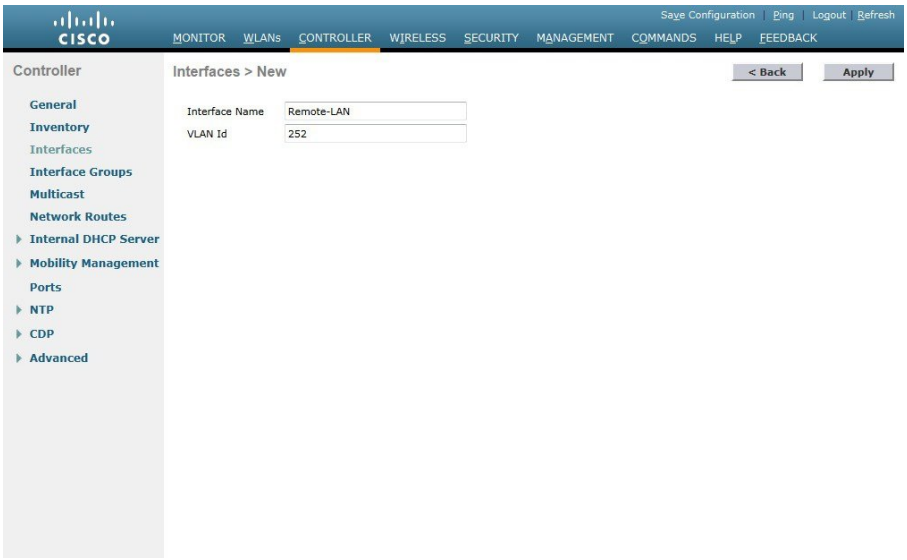
To create remote LAN interface, perform the following steps:

Procedure

Step 1 In **Controller** > **Interfaces**, click New.

Step 2 Enter the **Interface Name**. (Example: Remote-LAN)

Step 3 Enter the **VLAN Id**, and then click **Apply**. (Example: 252)



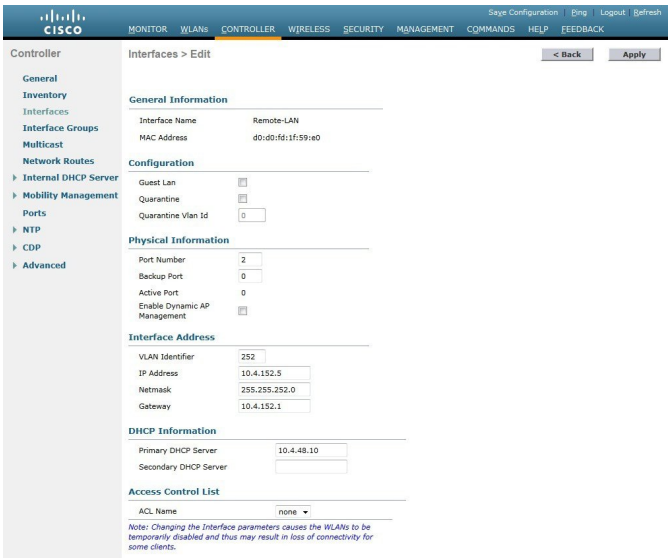
Step 4 In the **Port Number** box, enter the WLC interface that connects to the LAN distribution switch. (Example: 2)

Step 5 In the **IP Address** box, enter the IP address to assign to the WLC interface. (Example:10.4.152.5)

Step 6 Enter the **Netmask**. (Example: 255.255.252.0)

Step 7 In the **Gateway** box, enter the IP address of the VLAN interface defined in Configuring LAN Distribution Switch, Procedure 1, "Configure the distribution switch," Step 2. (Example: 10.4.152.1)

Step 8 In the **Primary DHCP Server** box, enter the IP address of your organization's DHCP server, and then click **Apply**. (Example: 10.4.48.10)



Configuring the Data Wireless LAN

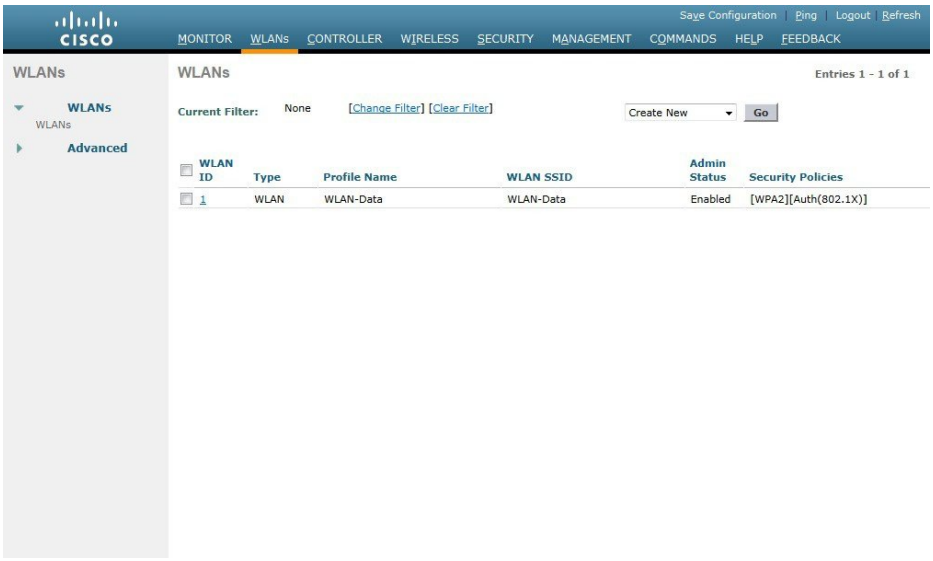
Wireless data traffic is different from voice traffic in that it can more efficiently handle delay and jitter as well as greater packet loss. For the data wireless LAN, keep the default QoS settings and segment the data traffic onto the data wired VLAN.

To configure the data wireless LAN, perform the following steps:

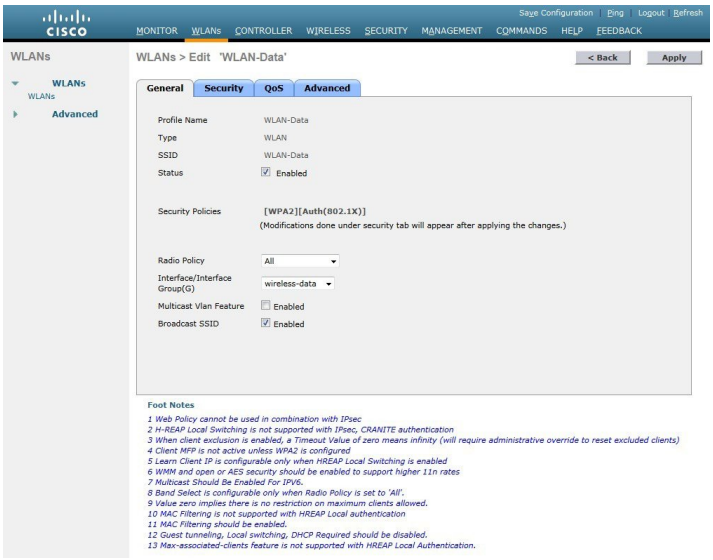
Procedure

Step 1 Navigate to **WLANs**.

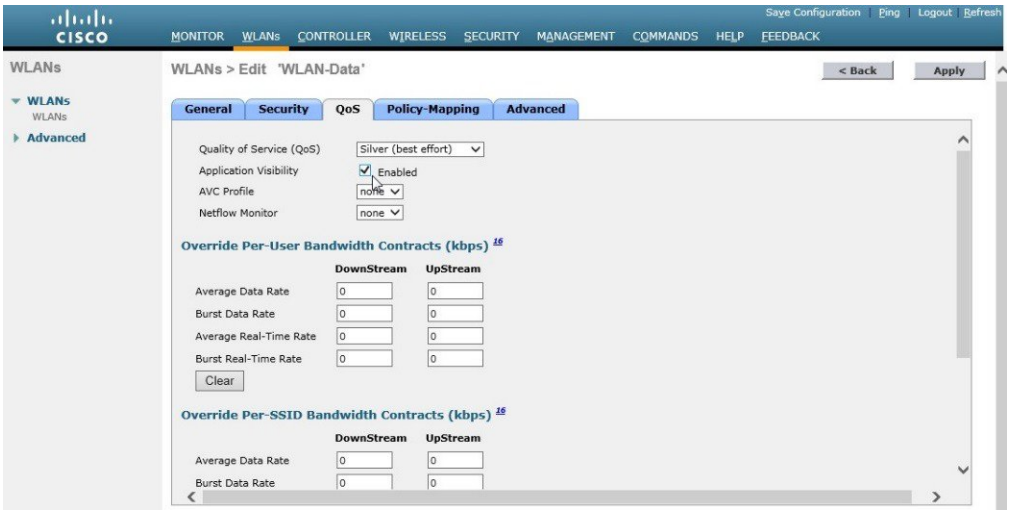
Step 2 Click the **WLAN ID** of the SSID created during platform setup.



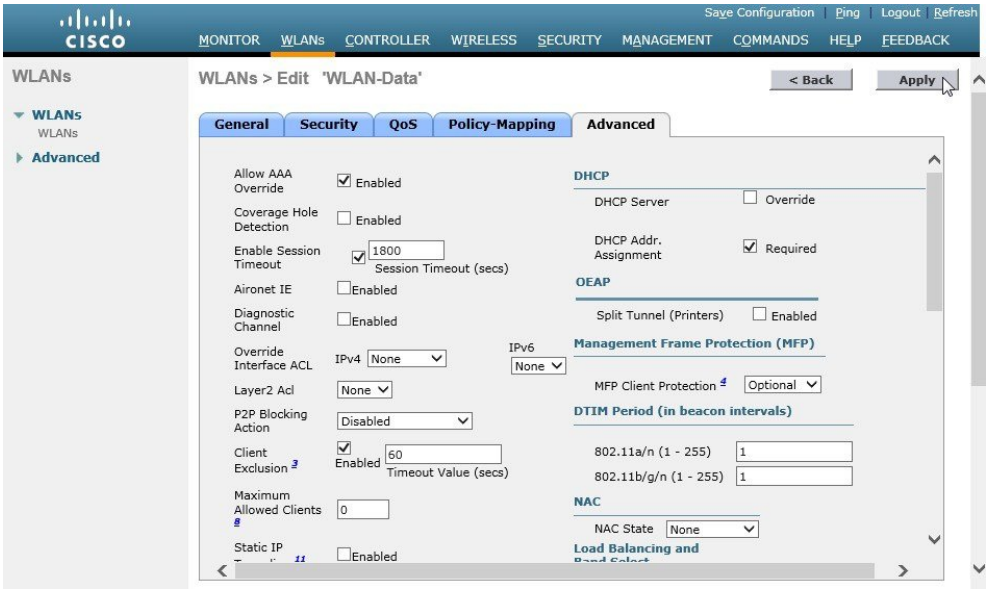
Step 3 On the General tab, in the Interface list, choose the interface created in Procedure 1.(Example: Wireless-Data) Next, enable Application Visibility and Control (AVC).



Step 4 Navigate to the **QoS** tab, select **Application Visibility**, click **Apply**, and then click **Save Configuration**, and agree to confirmation questions.



Step 5 On the Advanced tab, clear Coverage Hole Detection, enable DHCP Addr. Assignment Required, clear Aironet IE , enable Allow AAA Override, and then click **Apply**.



Configure Voice Wireless LAN

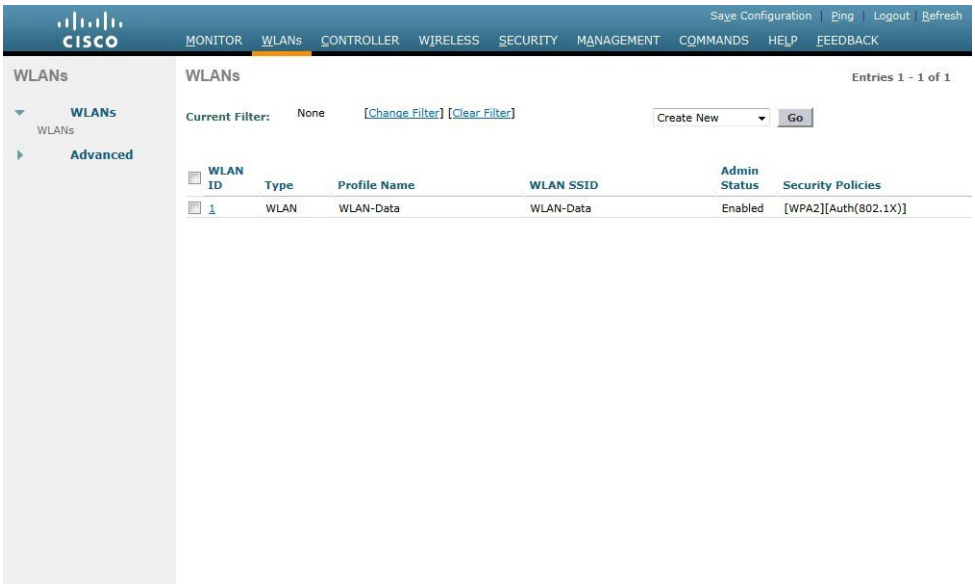
Wireless voice traffic is different from data traffic in that it cannot effectively handle delay and jitter as well as packet loss. To configure the voice wireless LAN, change the default QoS settings to Platinum and segment the voice traffic onto the voice wired VLAN.

To configures voice wireless LAN, perform the follwoing steps:

Procedure

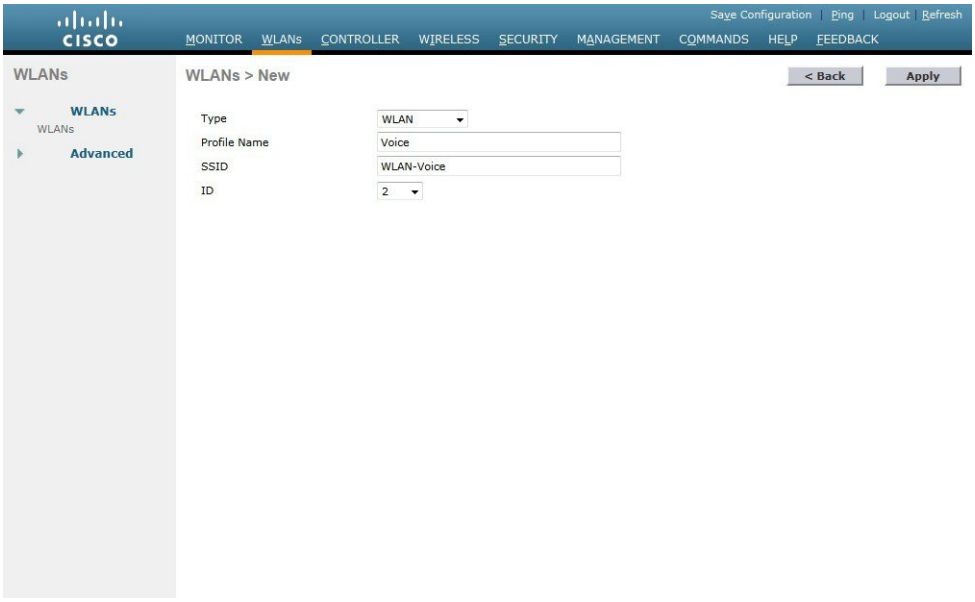
Step 1 Navigate to WLANs.

Step 2 In the drop-down list, choose **Create New**, and then click **Go**.



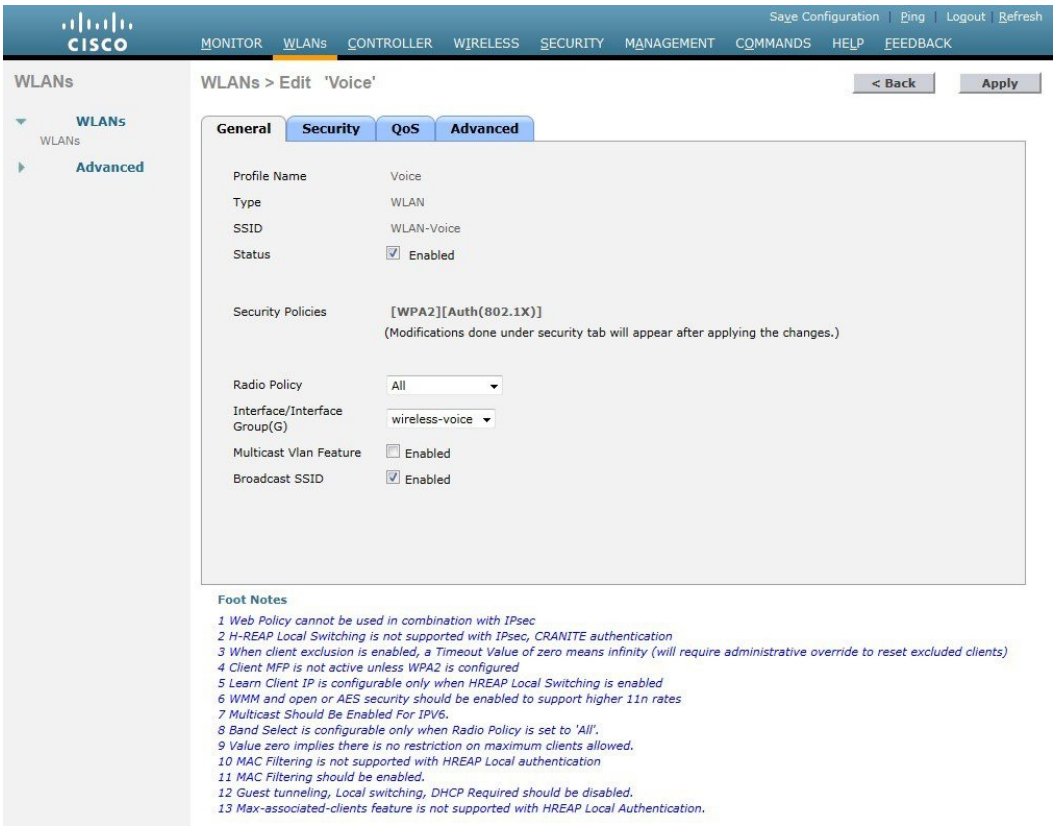
Step 3 Enter the **Profile Name**. (Example: Voice)

Step 4 In the **SSID** box, enter the voice WLAN name, and then click **Apply**. (Example: WLAN-Voice).

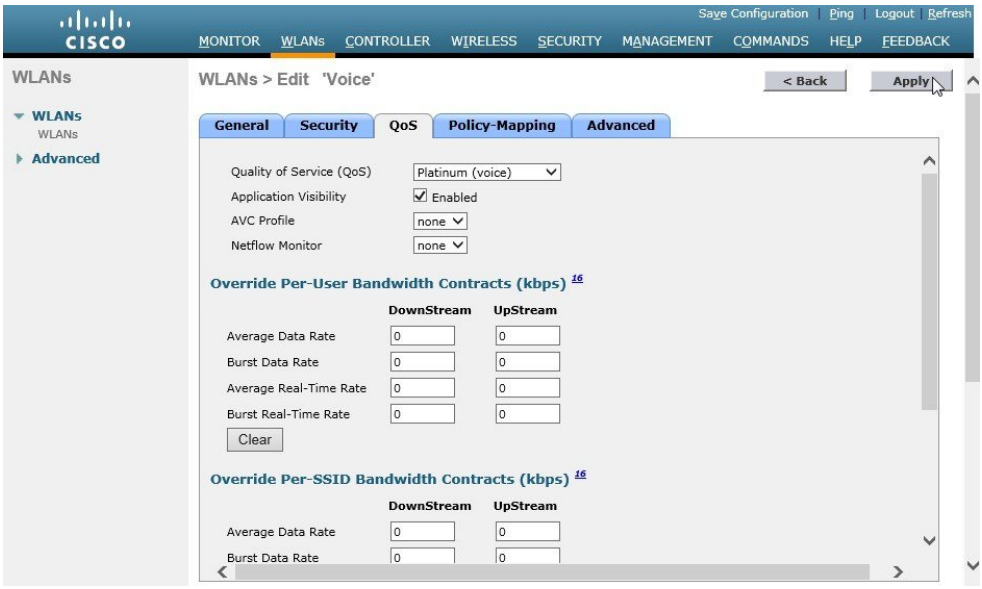


Step 5 On the **General** tab, to the right of Status, select **Enabled**.

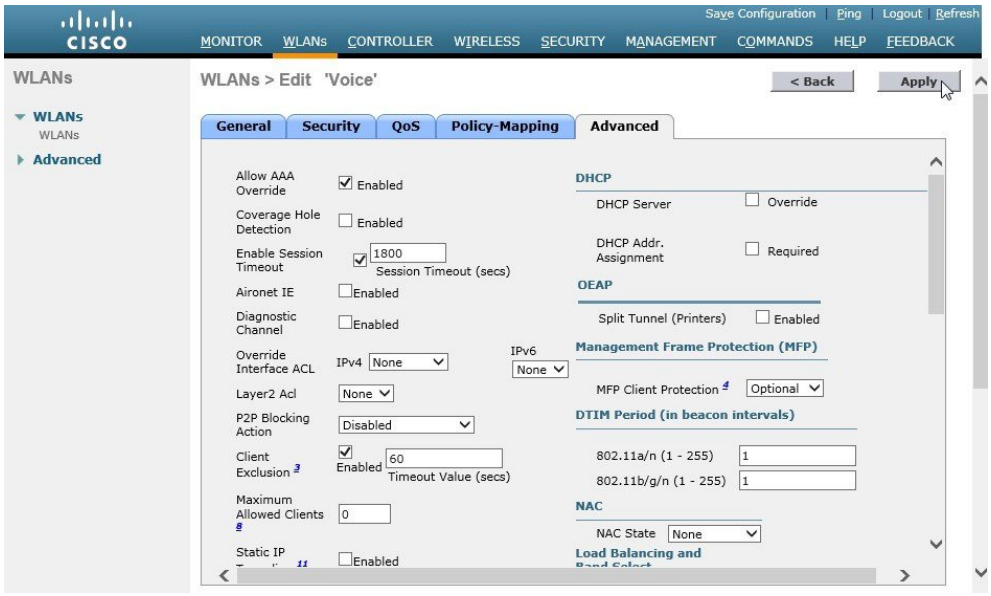
Step 6 In the **Interface** list, choose the interface created in Procedure 2. (Example: Wireless-Voice)



Step 7 Click the **QoS** tab, and in the **Quality of Service** (QoS) list, choose Platinum and enable **AVC**.



Step 8 Click the **Advanced** tab, and then clear **Coverage Hole Detection**, clear **Aironet IE**, enable **Allow AAA Override**, and then click **Apply**.



Configure the Remote LAN

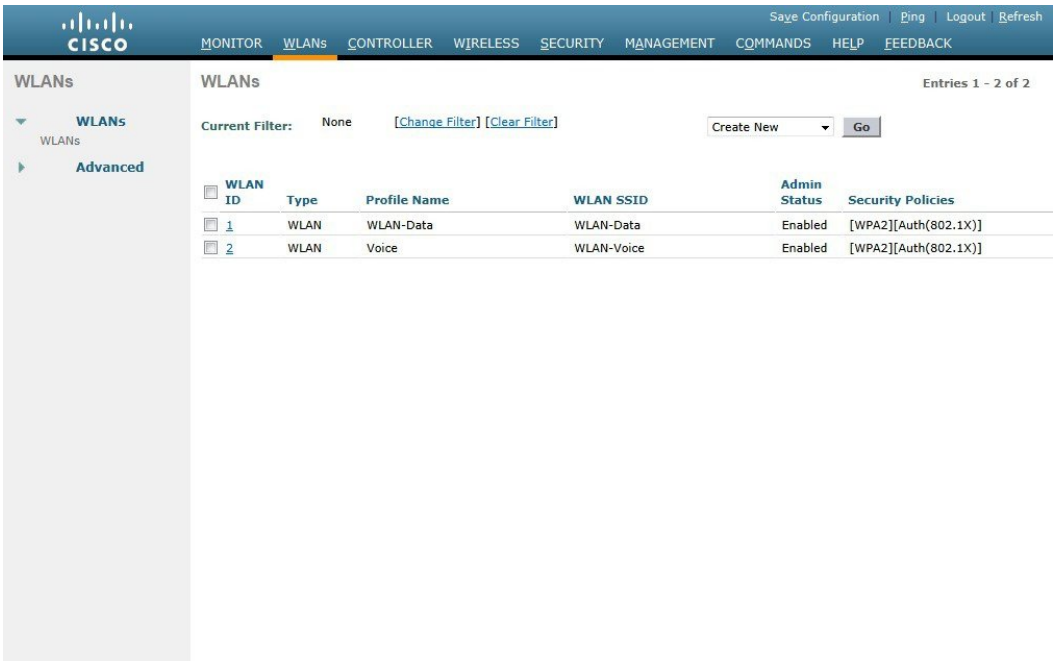
A remote LAN is similar to a WLAN except it is mapped to one of the Ethernet ports on the back of the Cisco Aironet 1815 Teleworker Access Point.

To configure the remote LAN, perform the following steps:

Procedure

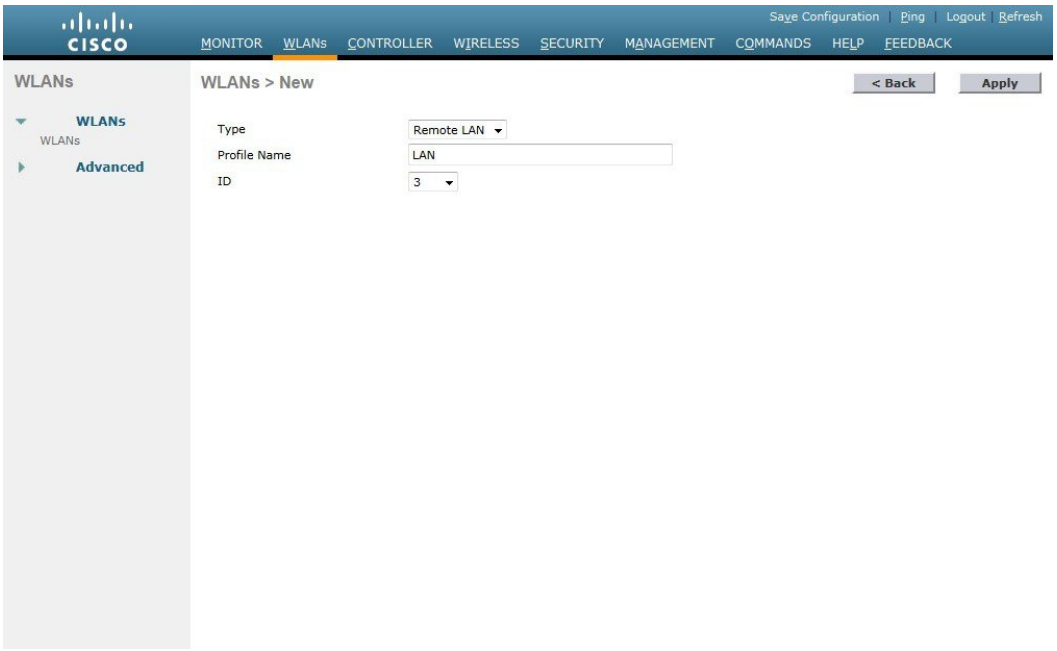
Step 1 Navigate to WLANs.

Step 2 In the drop-down list, choose **Create New**, and then click **Go**.



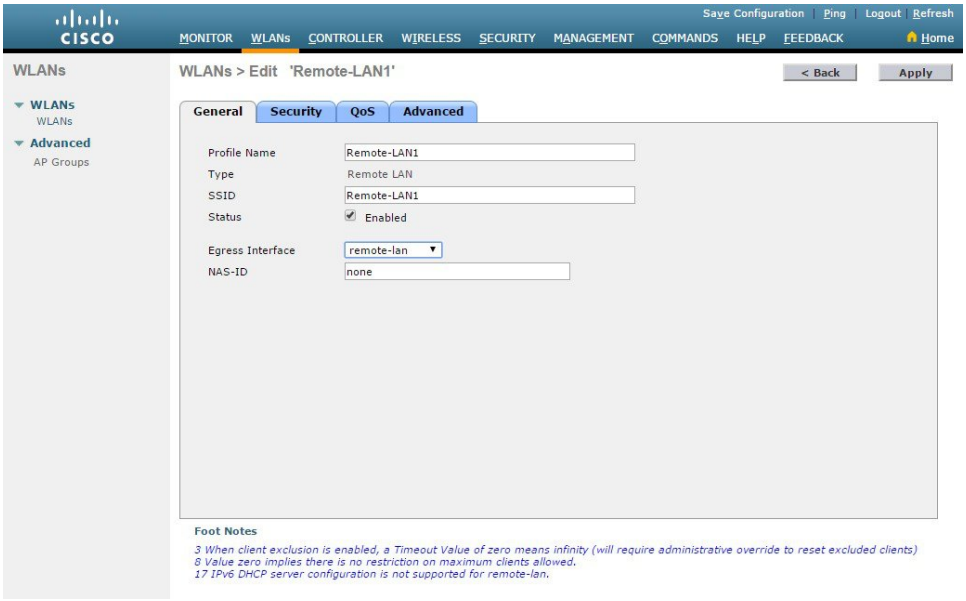
Step 3 In the **Type** list, choose **Remote LAN**.

Step 4 Enter the **Profile Name**, and then click **Apply**. (Example: LAN)



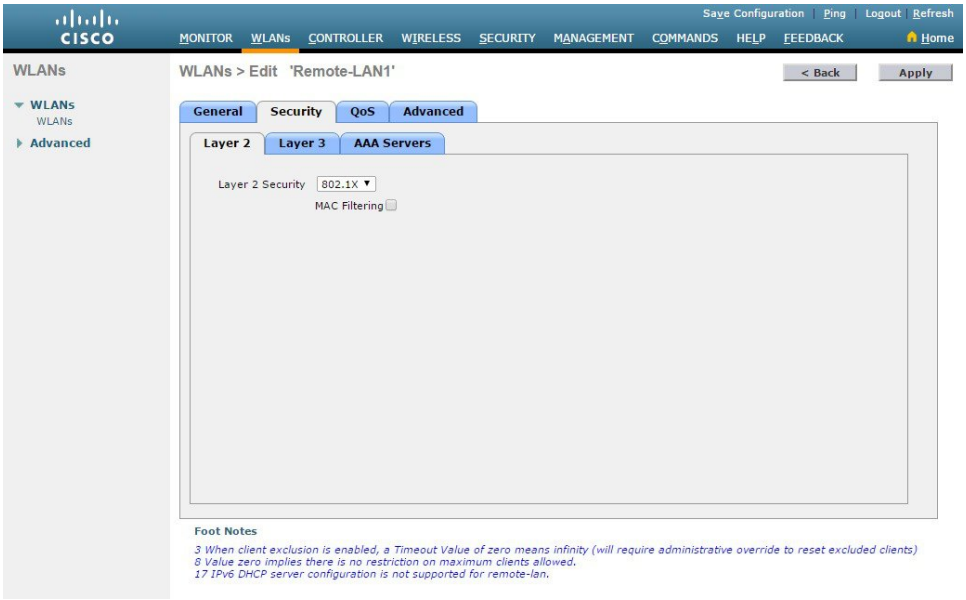
Step 5 On the **General** tab, to the right of **Status**, select **Enabled**.

Step 6 In the Interface list, choose the interface created in Procedure 3. (Example: Remote-LAN)

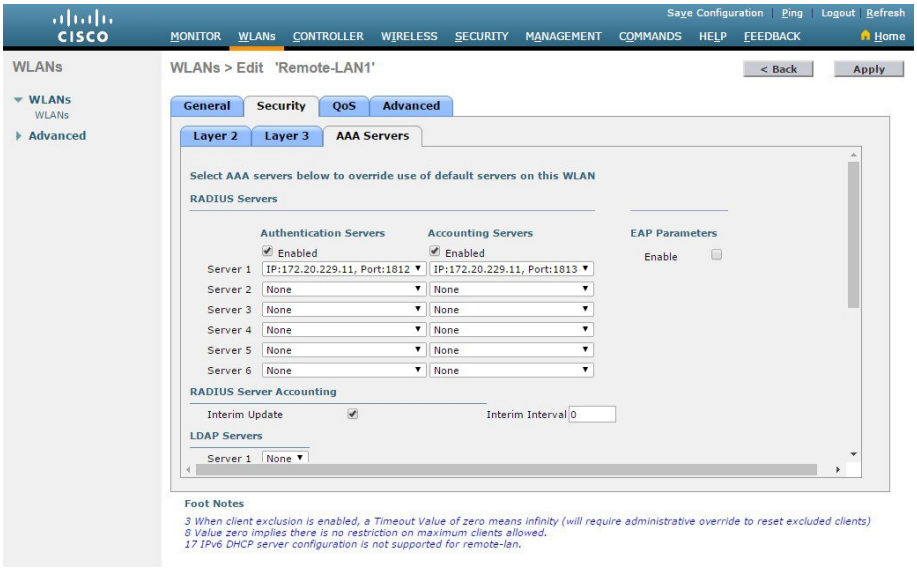


Step 7 Click the **Security** tab.

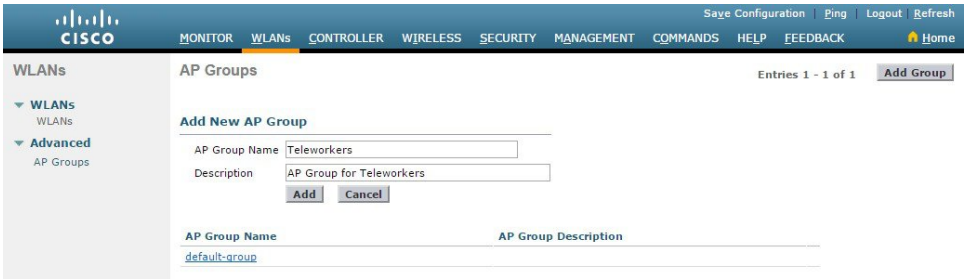
Step 8 On the Layer 2 tab, clear **MAC Filtering** and select **802.1x**.



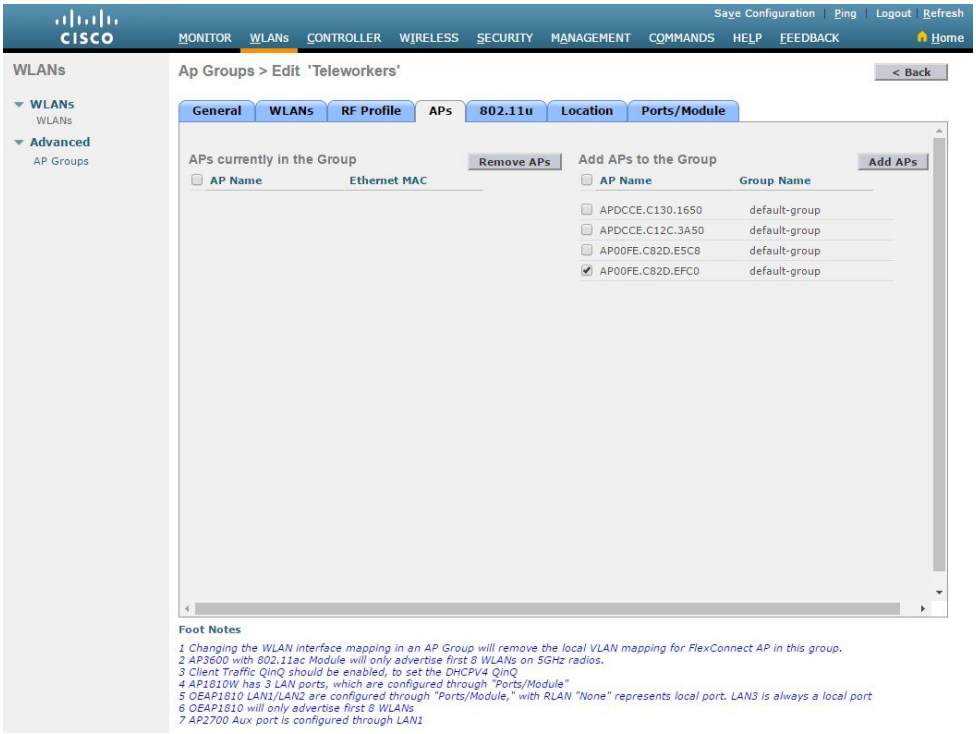
Step 9 On the **AAA Servers** tab, select RADIUS servers and the click **Apply**.



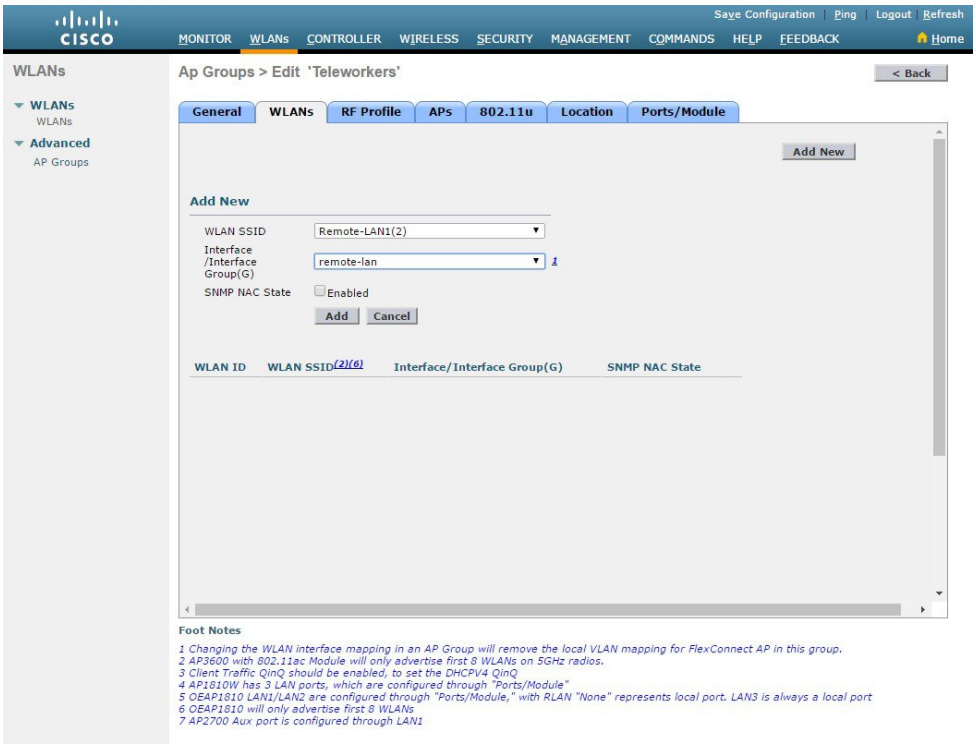
Step 10 Create an AP Group for the Teleworkers.



Step 11 Add the Cisco Aironet 1815T(Teleworker) Access Point to the AP Group.



Step 12 Associate the WLAN and RLAN to the AP Group.



Step 13 Assign RLANs to Wired LAN ports. One can Enable/Disable Wired LAN ports along with PoE onPSE LAN1 port .