



**Interface Control Document
Integrating Cisco Wireless Controller
for E911Manager®
Version 3.0
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Revision History

Date	Version	Revision	Made By
8/14/2012	1.5	<ul style="list-style-type: none"> Updated port requirements 	Steve Madlock
8/14/2012	1.5	<ul style="list-style-type: none"> Formatting Network Configuration 	Steve Madlock
8/20/2012	1.6	<ul style="list-style-type: none"> Updated port requirements 	Steve Madlock
5/8/2014	1.7	<ul style="list-style-type: none"> Updated Port requirements Updated Directory Number requirements 	Ryan Olsen
7/28/2014	1.8	<ul style="list-style-type: none"> Added Sample configuration Diagram 	James Rusch
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5/16/2016	2.0	<ul style="list-style-type: none"> Added Failover Route Point configuration 	Ryan Olsen
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7/25/2018	2.2	<ul style="list-style-type: none"> E911 Manager Interface Configuration 	Sam Schlicher
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Introduction

This document details the technical aspects of the integration between RedSky's E911 Manager and Cisco's Wireless LAN Controller. E911 Manager provides an integrated approach to enhance location tracking for Wi-Fi voice endpoints. E911 Manager tracks the location of Wi-Fi enabled endpoints as they move through the entire enterprise Wi-Fi network. This allows the endpoint to out pulse the appropriate Emergency Line Identification Number (ELIN) during a 911 call.

Audience

This document is intended for Call Server and E911 Administrators. After reading this document an administrator should be able to prepare an enterprise's environment for integration for E911 Manager using Cisco Wireless Controllers.

Requirements

E911 Manager integrates directly with Cisco Wireless Controllers. Support is available since Cisco WLC v5.X; however this document is designed for the 9800 Cloud Environment specifically.

Network Requirements

The Wi-Fi module requires the following network ports to be available

SNMP	UDP	161/162	<ul style="list-style-type: none">Traps are generated by the WLC and destined to the E911 Manager Server when phones authenticate with a new APE911 Manager will query the WLC when devices register to the call server
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Application Requirements

The following information will be required to configure the E911 Manager application.

WLC SNMP Community String	<ul style="list-style-type: none">Read-only
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WLC SNMP Configuration

1. After logging into the WLC, navigate to **Administration > Management > SNMP**.

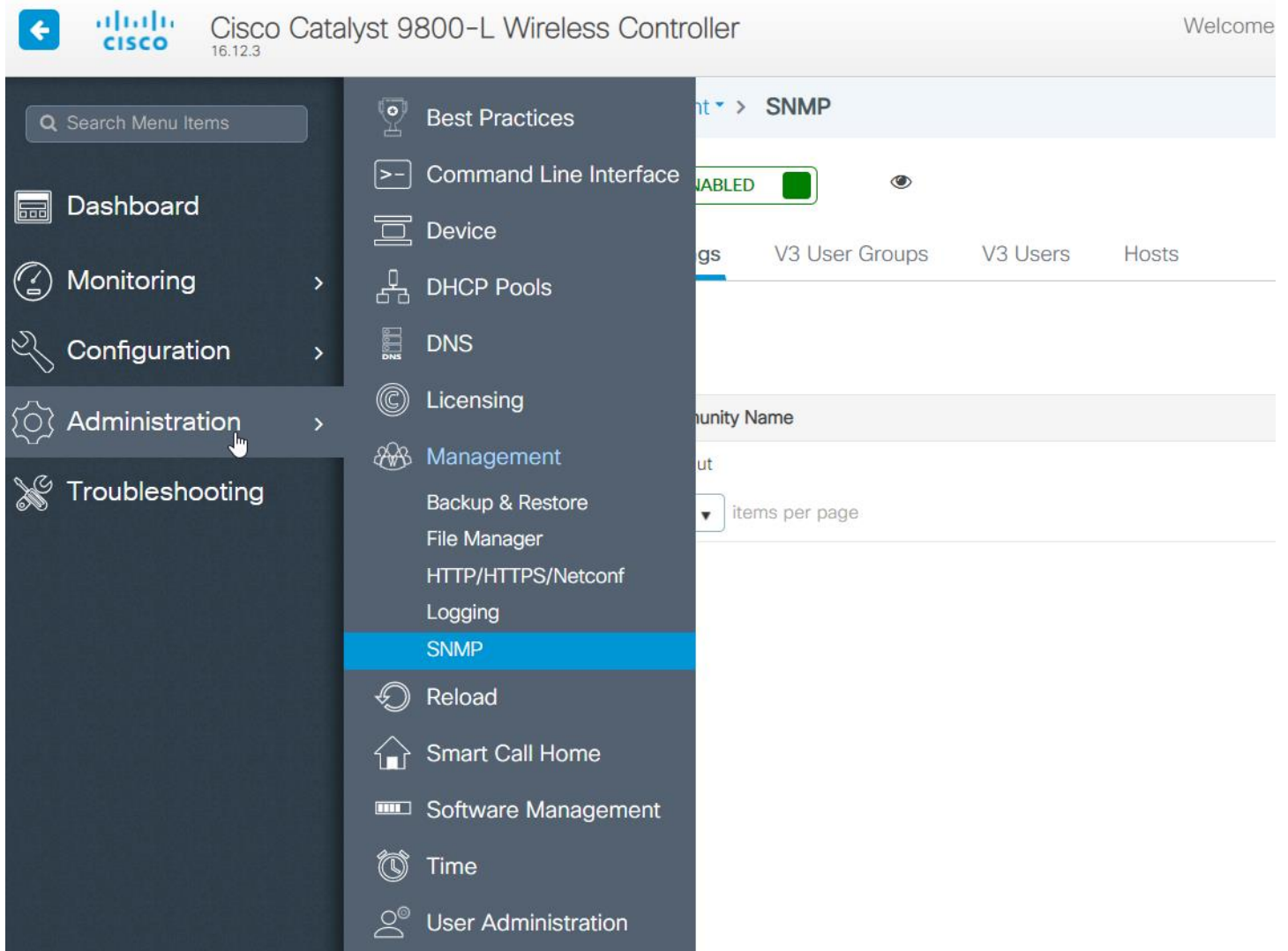


Figure 1: WLC SNMP Taskbar Navigation

2. By default, the SNMP mode is disabled. To enable it, **select the toggle button marked as DISABLED**.

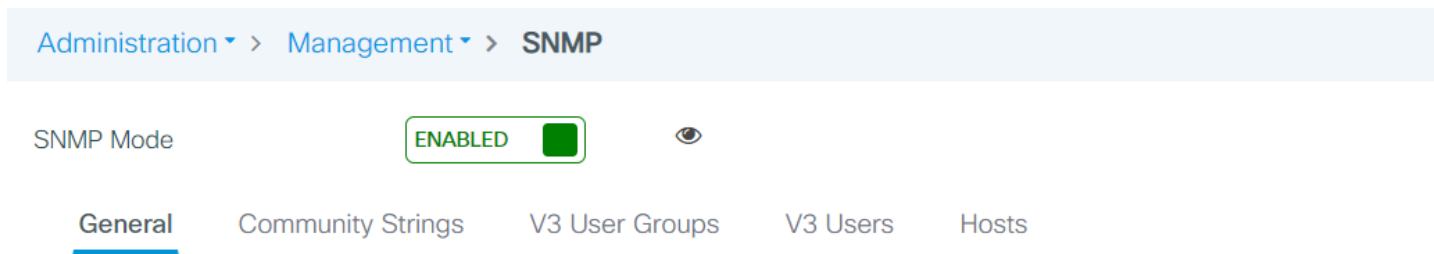


Figure 2: WLC SNMP Management Page

3. Select the **Community Strings** tab and create a read only string.

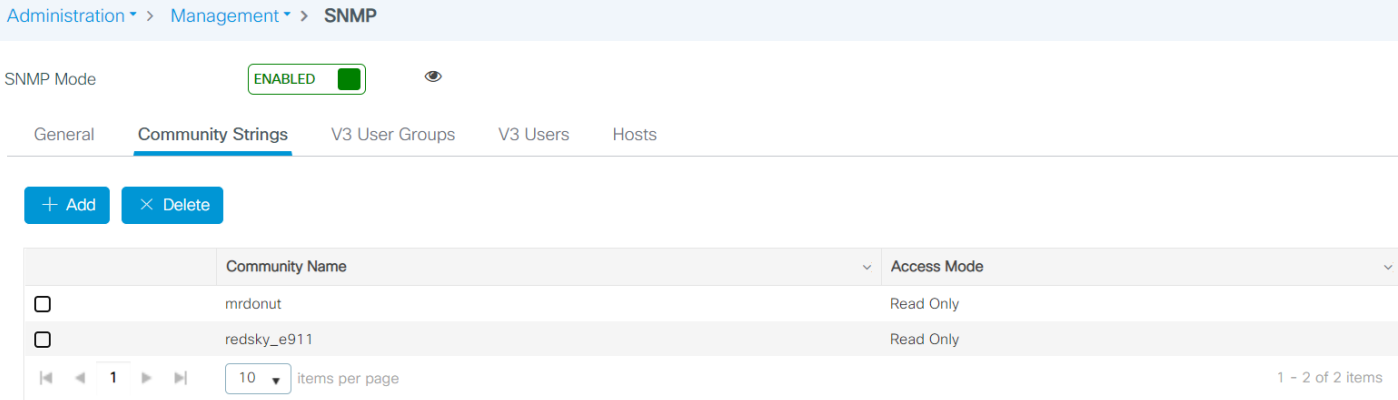


Figure 3: WLC SNMP Community Strings tab

4. Select **Apply**

SNMP Trap Configuration

5. While under **Administration > Management > SNMP**, move to **Hosts** to manage the SNMP traps

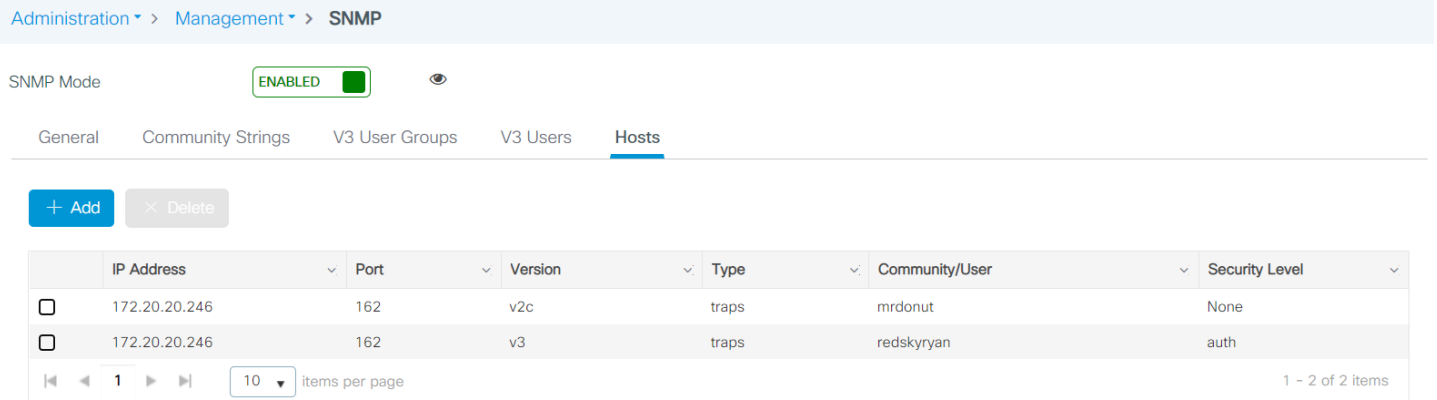


Figure 4: WLC SNMP Hosts Page

6. Select **+Add**

7. Set the IP to the E911Manager server IP, and the port to 162

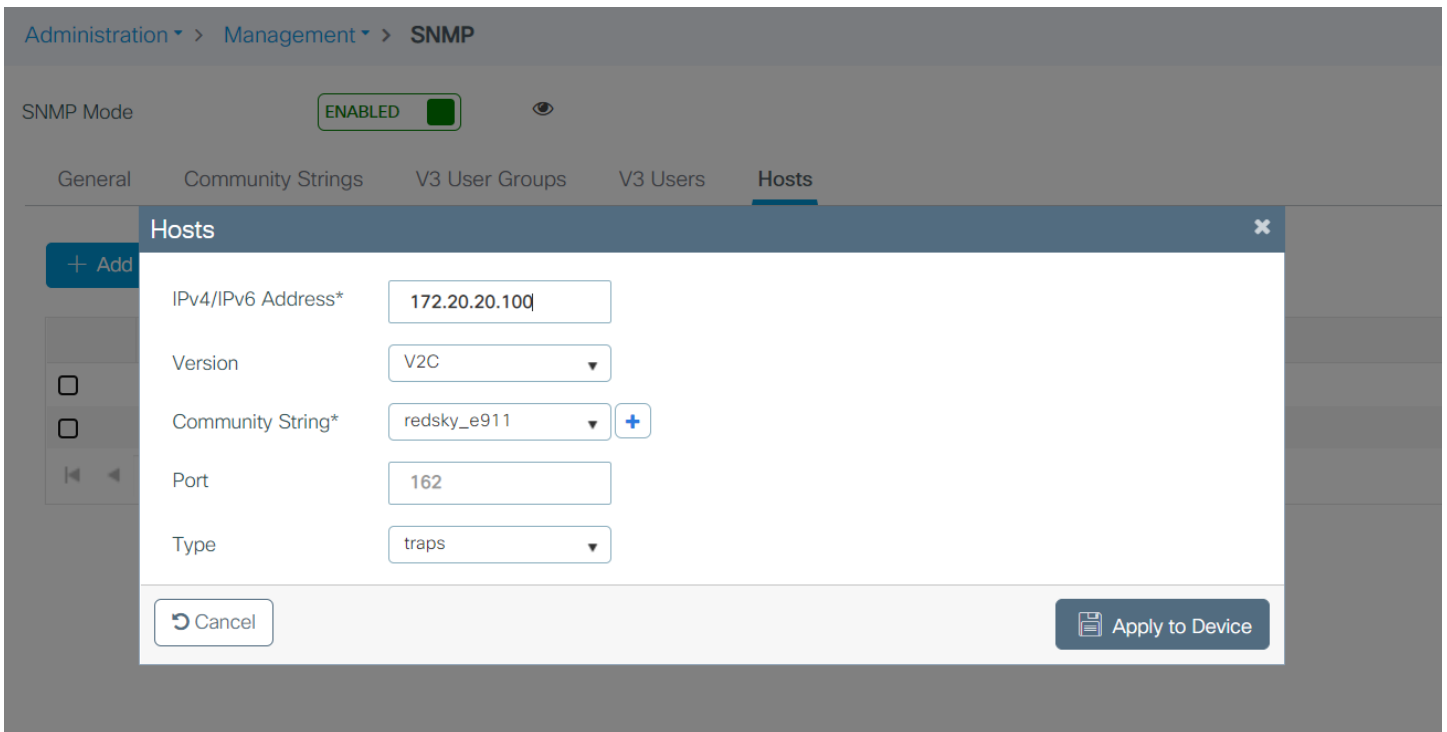


Figure 5: WLC SNMP add Host page

E911 Manager Configuration

1. Navigate to Cisco WLC in E911 Manager



Figure 6: E911 Manager Menu Navigation – Cisco WLC

2. Add Cisco WLAN Controller

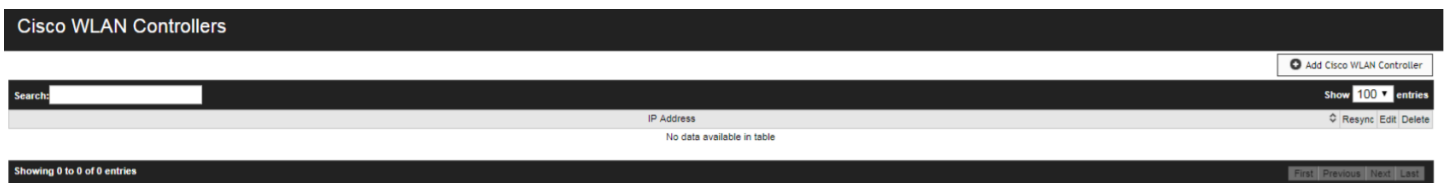


Figure 7: E911Manager Cisco WLAN Landing Page

3. Enter the IP Address and SNMP information for the WLC

Cisco WLAN Controllers

Add Cisco WLAN Controller

*** IP ADDRESS*:**

*** SNMP VERSION*:**

2 3

COMMUNITY STRING*:

Note: Fields marked "*" are required

Figure 8: E911Manager Add WLAN Page

Configure Access Points

- Access points will be pulled into E911 Manager from the Controller

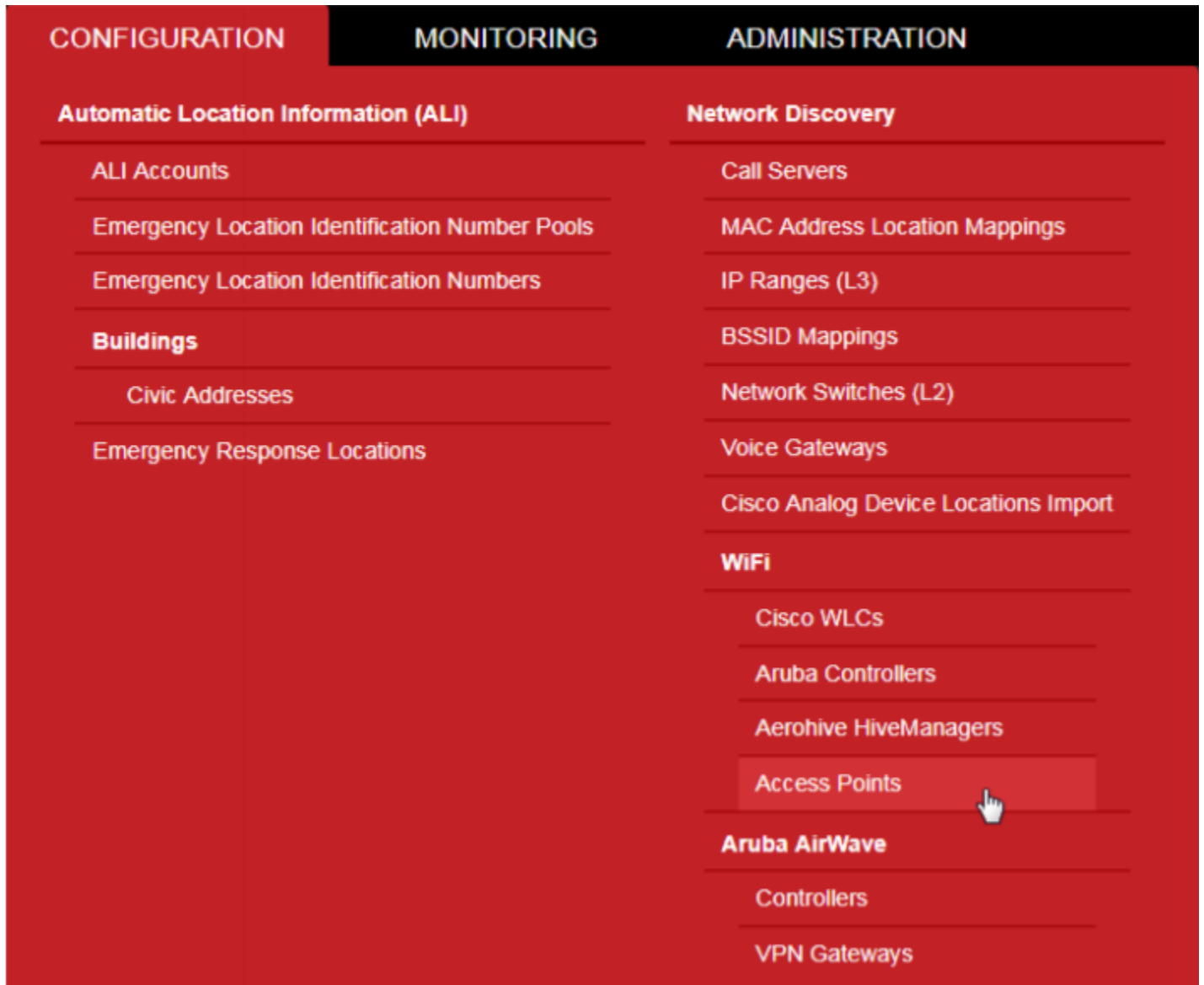
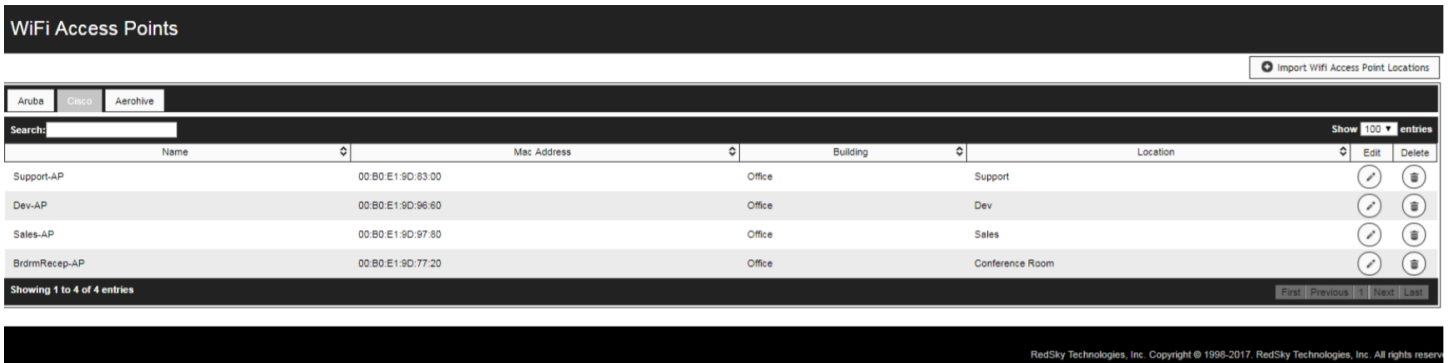


Figure 9: E911 Manager Menu Navigation – Access Points

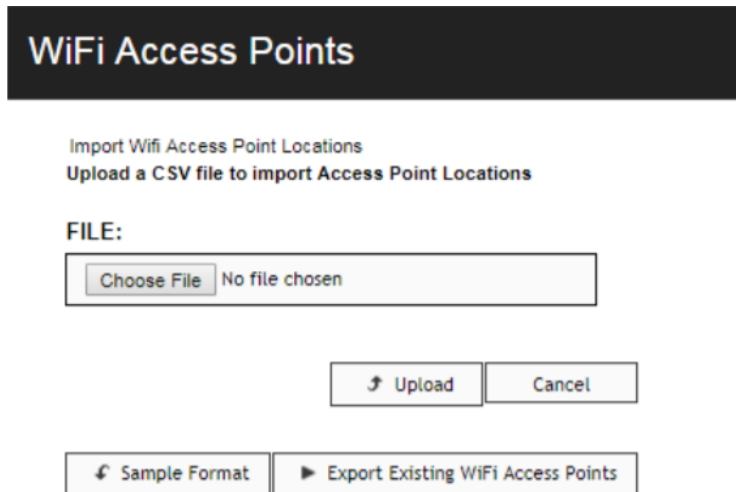
5. Associate Access Points with Locations (Buildings and Emergency Response Locations must be configured prior to this step)



Name	Mac Address	Building	Location	Edit	Delete
Support-AP	00:B0:E1:9D:83:00	Office	Support		
Dev-AP	00:B0:E1:9D:96:60	Office	Dev		
Sales-AP	00:B0:E1:9D:97:80	Office	Sales		
BrdrmRecep-AP	00:B0:E1:9D:77:20	Office	Conference Room		

Figure 10: E911 Manager Cisco Access Points Page

- a. This can be done individually using the edit button
- b. Or via a CSV import



WiFi Access Points

[Import Wifi Access Point Locations](#)
Upload a CSV file to import Access Point Locations

FILE:

No file chosen

Figure 11: E911 Manager Upload Access Points

Automatic Wi-Fi Resync

After importing your Wi-Fi controllers, you can set them to be automatically resynced.

6. Go to Administration → Scheduled Tasks

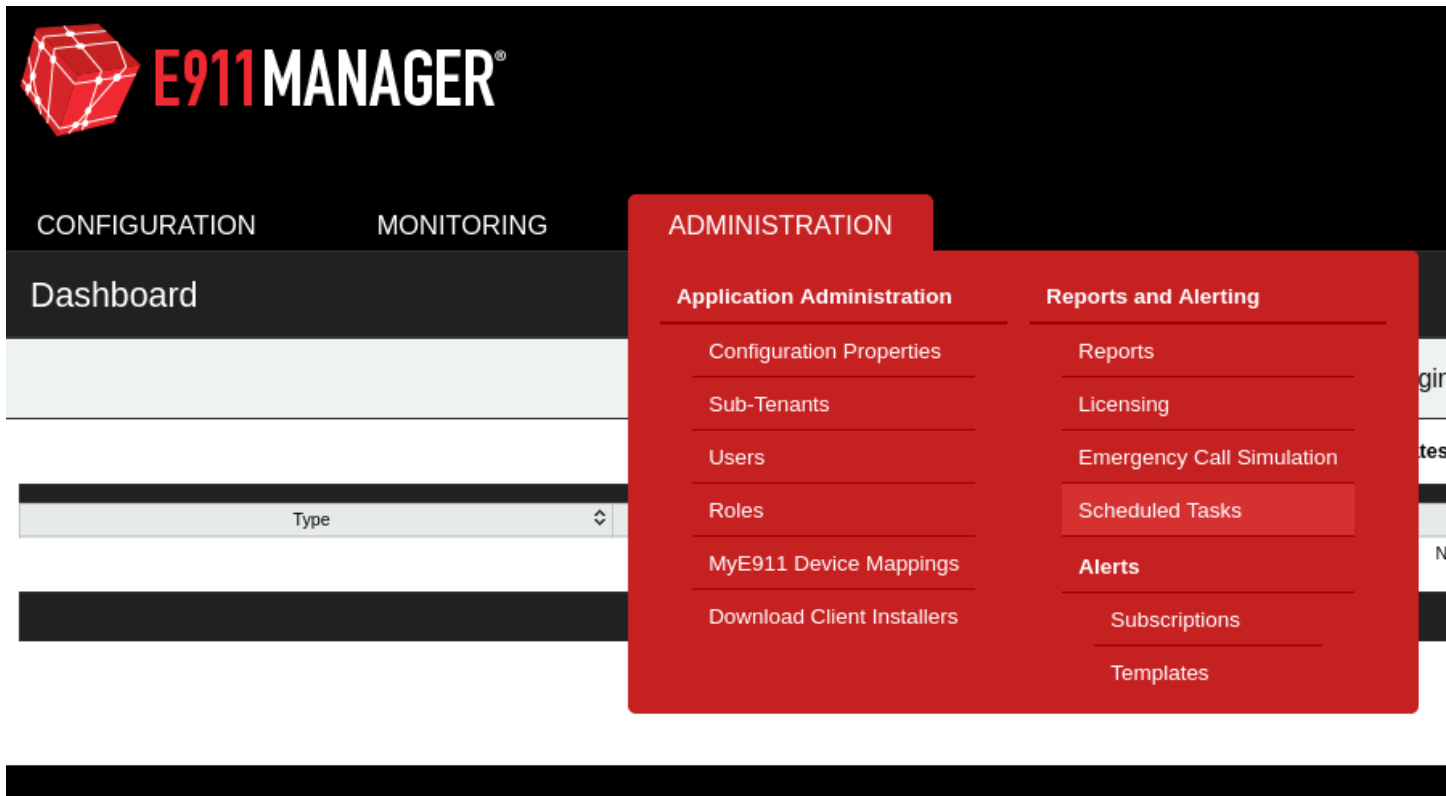


Figure 12: E911 Manager Menu Navigation – Scheduled Tasks

7. Next, choose Add Task

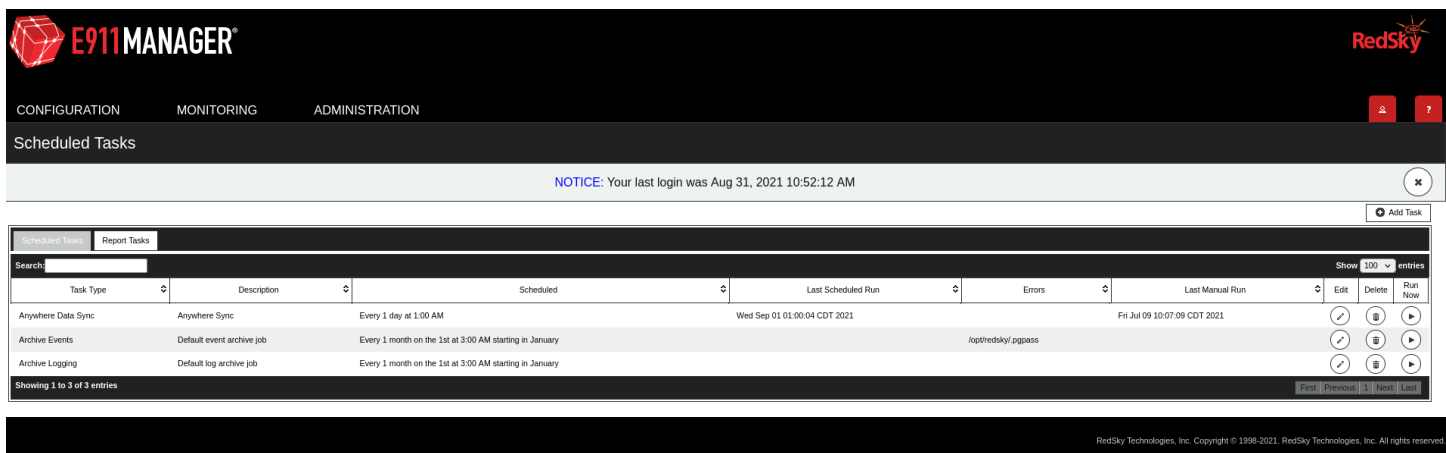


Figure 13: E911 Manager Page- Scheduled Tasks

8. From the dropdown, set the **Task Type** to **Wi-Fi Controller Resync**.
9. Give it a name, such as Wi-Fi Resync Process
10. Then set the task's frequency, for every hour, day, week, or month. Redsky uses daily as a standard.
11. Set your preferred time sync. Running this outside of peak hours is preferred.
12. Finally, hit **Save**.

Add Task

*** TASK TYPE:**

*** TASK NAME:**

FREQUENCY: ?
 Every

 at
 :

NEXT 5 TASKS WILL EXECUTE:

	Date	Time
1st	09/02/21	00:00
2nd	09/03/21	00:00
3rd	09/04/21	00:00
4th	09/05/21	00:00
5th	09/06/21	00:00

Note: Dates and times are approximate.

Note: Fields marked with (*) are required

Figure 14: E911 Manager Wi-Fi Sync