RedSky

Interface Control Document

for

Aruba Wi-Fi Controller

E911MANAGER

Revision History

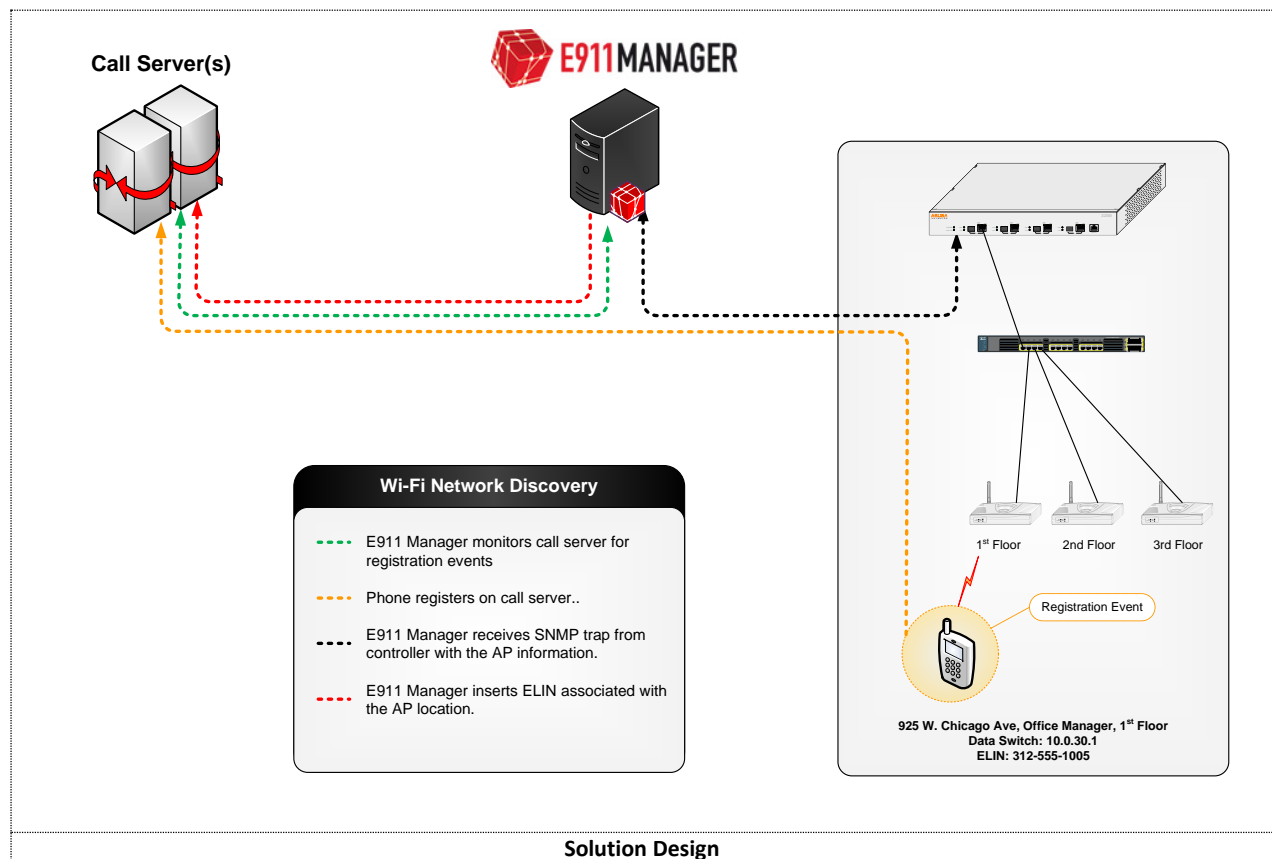| Date	Version	Revision	Made By
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Introduction

This document details the technical aspects of the integration between RedSky's E911 Manager and Aruba Wi-Fi controller. E911 Manager provides an automated solution for Enhanced 9-1-1 Services. E911 Manager tracks the location of wireless phones and updates the location of the device as the device moves within the enterprise environment. Additionally, E911 Manager integrates with the Local Exchange Carriers (LECs) to ensure the proper location information is received by emergency responders.

This document is intended for E911 Administrators. After reading this document an administrator should be able to fully prepare the enterprise's wireless environment for integration with E911 Manager

Solution Design

E911 Manager requires IP connectivity to the Aruba Controllers. E911 Manager communicates with the Aruba controller via SNMP to receive AP information and device registrations. E911 Manager uses this information to identify the devices registered to each access point. E911 Manager can then map the location of each device to the location of the AP.

Call Server(s)

Wi-Fi Network Discovery

- - - - E911 Manager monitors call server for registration events

- - - - Phone registers on call server..

- - - - E911 Manager receives SNMP trap from controller with the AP information.

- - - - E911 Manager inserts ELIN associated with the AP location.

1st Floor   2nd Floor   3rd Floor

Registration Event

925 W. Chicago Ave, Office Manager, 1st Floor
Data Switch: 10.0.30.1
ELIN: 312-555-1005

Solution Design

Requirements

System Requirements

SNMP v2

- o Controller IP Address
- o Read Community String
- o SNMP Trap Destination

SNMP v3

- o Controller IP Address
- o Read Community String
- o SNMP Trap Destination
- o SNMPv3 User Name
- o Authentication Protocol
- o Authentication Protocol Password
- o Privacy Protocol
- o Privacy Protocol Password

Network Requirements

The RedSky support team will require remote access to the server, the below list outlines the necessary ports and protocols.

SNMP	UDP	162	SNMP Traps

Aruba Controller Configuration

Configure Trap Generation

1. In the Aruba controller select Configuration>Management > SNMP.
2. Under System Group next to Read Community String enter a ready only community string, click Add.
3. Select Enable Trap Generation.

SNMP Management - Read Community String

Configure Trap Receiver

1. Under Trap Receivers click ADD.
2. Enter the IP address of the E911 Manager server
3. Select SNMPv2c.
4. For Type select Trap.
5. Enter the Security String provided by RedSky.
6. Use UDP port 162.
7. Click Add.

SNMP Management - Trap Receivers

SNMP v3 Configuration

The Aruba Controller supports SNMP v3. To use SMNP v3 you must configure an SNMP v3 user along with the appropriate encryption methods.

1. Under SMNP v3 Users click Add.
2. The user must be configured with the following information:

   - SNMPv3 User Name
   - Authentication Protocol (MD5 or SHA)
   - Authentication Protocol Password
   - Privacy Protocol (DES or AES)
   - Privacy Protocol Password

3. Click Add and then click Apply

SNMP Management - SMNP v3 User

E911 Manager Configuration

1. In E911 Manager go to Configuration>WiFi>Aruba Controllers and click Add.
2. Assign a name to the controller
3. Select Enabled.
4. Enter the IP address of the controller.
5. Select SNMP Version 2.
6. Enter the community string for the Aruba controller.
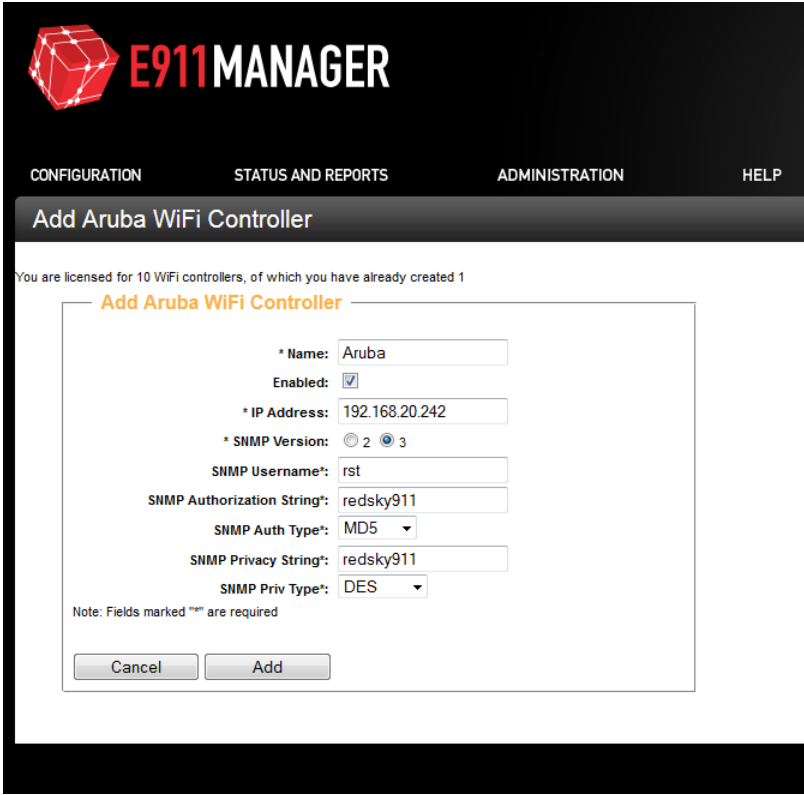

E911 Manager - Aruba Wi-Fi Controller SMNP v2

SNMP v3 Configuration

1. In E911 Manager go to Configuration>WiFi>Aruba Controllers and click Add.
2. Assign a name to the controller
3. Select Enabled.
4. Enter the IP address of the controller.
5. Select SNMP Version 3.

6. For the following, use the SMP v3 credentials used to configure the SNMP v3 User in the Aruba controller:

- SNMPv3 User Name
- Authentication Protocol - None, MD5 or SHA
- Authentication Protocol Password
- Privacy Protocol - None, DES or AES128. AES128 in E911 Manager in the equivalent to AES in the Aruba Controller.
- Privacy Protocol Password

E911 Manager - Aruba Wi-Fi Controller SMNP v3