



Dynamic Emergency Calling

Customer Admin Guide

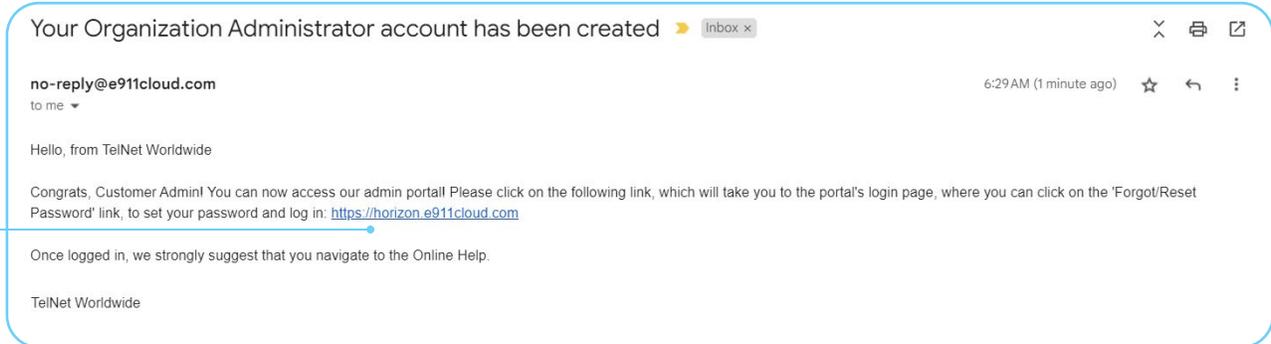
Cloud PBX & TelNet UC with Webex Integration

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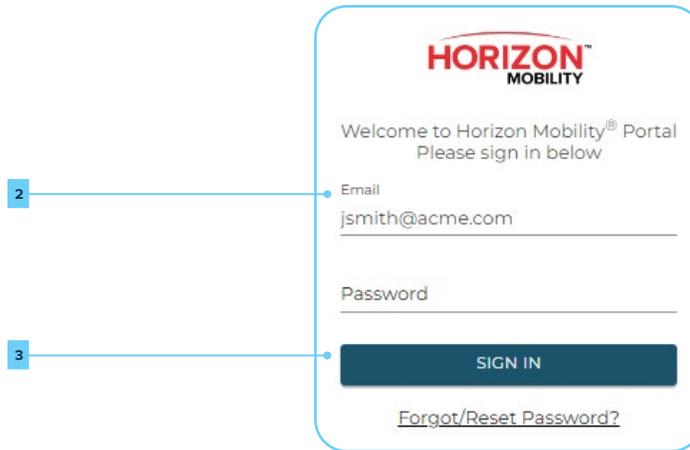
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Getting Started

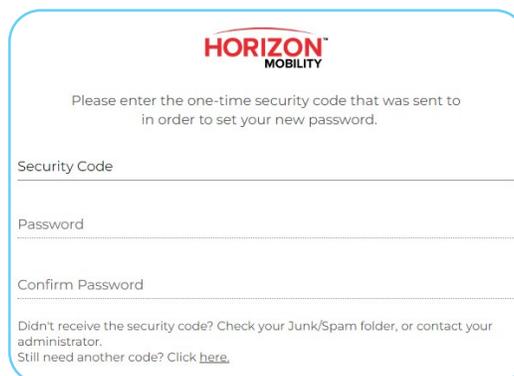
After your customer admin account is created by TelNet, you will receive a welcome email:



For first login, access **horizon.e911cloud.com** **1** from any browser, **enter email address** **2**, click **SIGN IN** **3** and then click the **Forgot/Reset Password** link. Enter your email address and click **NEXT**.



A security code will be emailed to you. Enter the security code that was received via email and enter your desired password (minimum of 16 characters) and confirm desired password.



As a customer admin, there are several steps that need to be completed to setup dynamic emergency calling.

This includes:

1. Define E911 Location information
2. Select and setup a Network Discovery method
3. Enable Alerts and Notifications

This admin guide will focus on those three steps plus bulk data importing. Refer to the online help documentation available directly within the customer admin portal for additional info. The same documentation is also available at:

https://resources.e911cloud.com/help/RedSky/E911_Anywhere_HM_Customer_Admin_Guide/Dashboard_and_Menu.htm

Define E911 Location Information

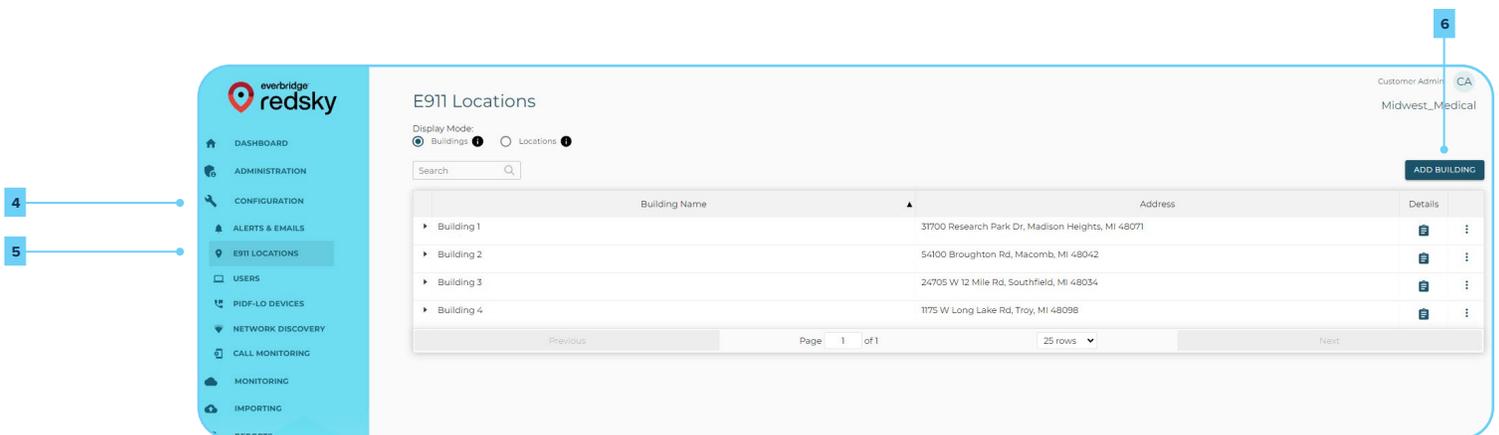
E911 Location info should be defined for ALL hard phones. This includes desk phones, conference phones and other physical calling devices.

Note: E911 Location info does **NOT** get defined by customer administrators for softphone applications within the customer admin portal. End users define their E911 location information either directly within the native softphone/ collaboration app itself (for example, Webex Desktop App or Microsoft Teams Desktop App) or within the MyE911 application for other 3rd party softphones.

An E911 location includes 2 key components:

- **Building** - this is the primary address or civic address of the workplace (office, home, etc)
- **Location** - this is a more detailed description within the building also known as a “dispatchable location”. Typically a room, floor, zone, lobby, etc

In the left navigation, click **CONFIGURATION** 4 then **E911 LOCATIONS** 5



The screenshot displays the 'E911 Locations' configuration page in the RedSky Customer Admin portal. The left-hand navigation menu is visible, with 'CONFIGURATION' (4) and 'E911 LOCATIONS' (5) highlighted. The main content area shows a table of buildings with columns for Building Name, Address, and Details. A search bar and 'ADD BUILDING' button are also visible.

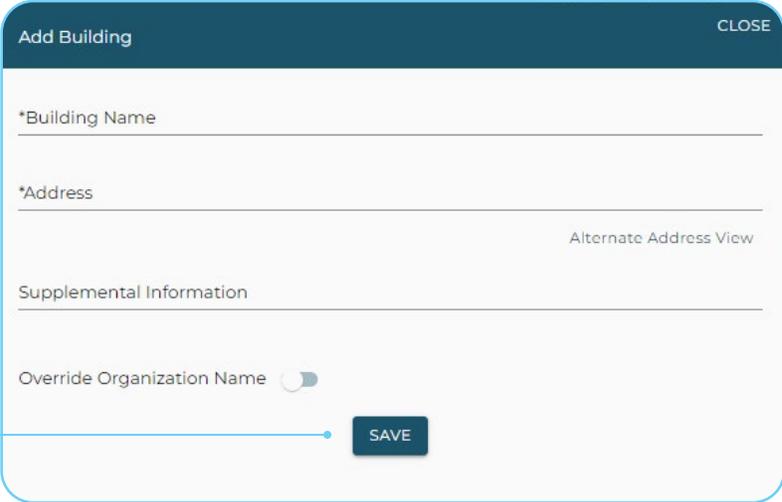
Building Name	Address	Details
▶ Building 1	3700 Research Park Dr, Madison Heights, MI 48071	[Edit] [Details]
▶ Building 2	54100 Broughton Rd, Macomb, MI 48042	[Edit] [Details]
▶ Building 3	24705 W 12 Mile Rd, Southfield, MI 48034	[Edit] [Details]
▶ Building 4	1175 W Long Lake Rd, Troy, MI 48098	[Edit] [Details]

If Buildings or Locations have been defined, they will be displayed similar to image above

To add a new building and address, click the **ADD BUILDING** ⁶ option near the upper right corner.

Enter the desired building name and address. Press **SAVE** ⁷ to complete.

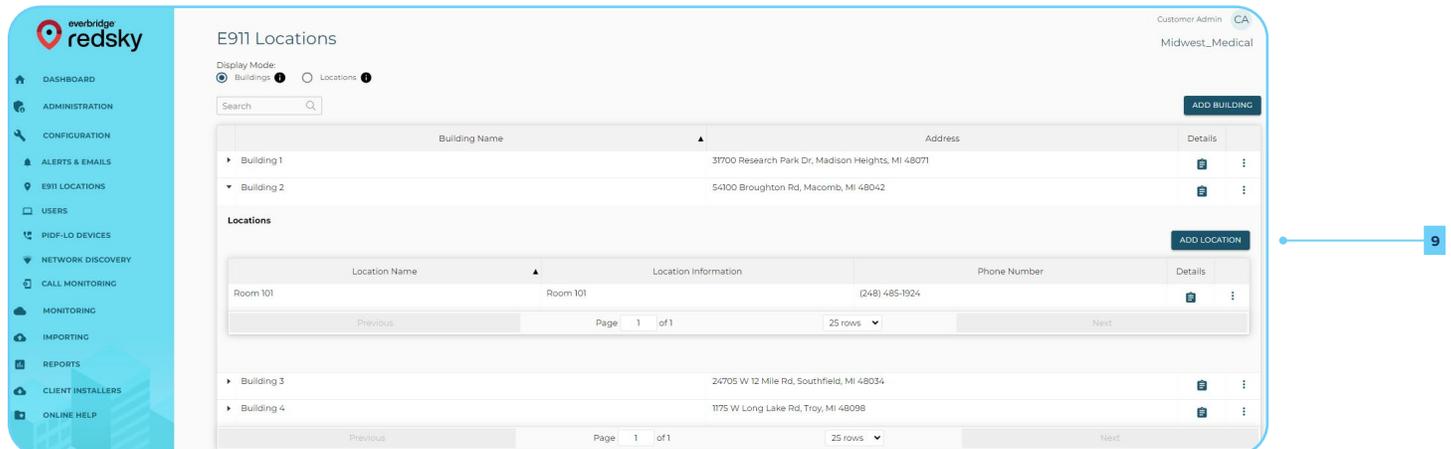
The system will try to match characters entered for the address, select the desired address from the matching list. Users can also click the **Alternate Address View** ⁸ if the address being entered does not appear in the matching list.



The screenshot shows the 'Add Building' form with the following fields and controls:

- *Building Name**: Text input field.
- *Address**: Text input field.
- Alternate Address View**: Link to view alternate addresses, indicated by callout 8.
- Supplemental Information**: Text input field.
- Override Organization Name**: Toggle switch.
- SAVE**: Button to save the building, indicated by callout 7.
- CLOSE**: Button in the top right corner.

After a Building is created, click the arrow next to the desired building and then click **ADD LOCATION** ⁹ near far right:



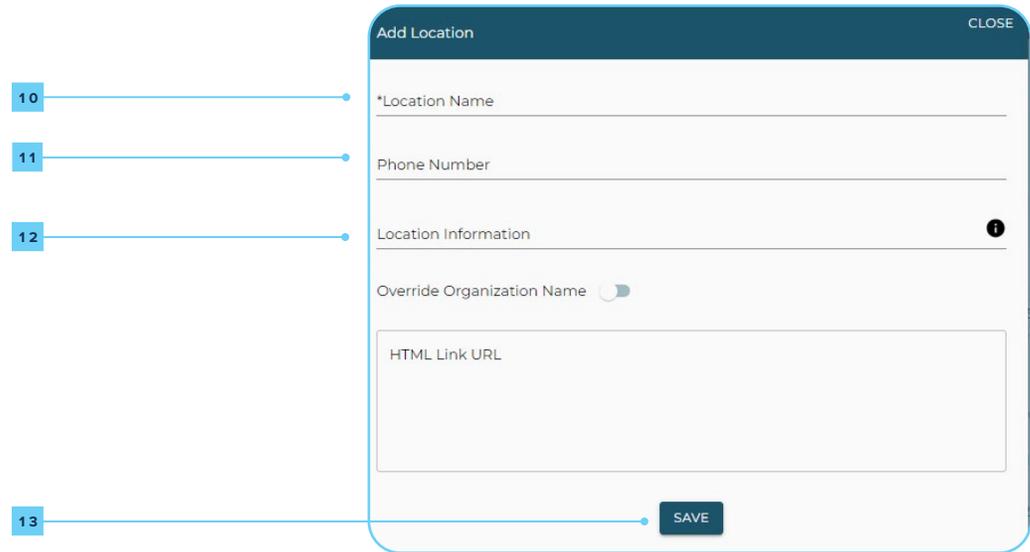
The screenshot shows the 'E911 Locations' interface with the following components:

- Navigation Menu**: Includes Dashboard, Administration, Configuration, Alerts & Emails, E911 Locations, Users, PIDF-LO Devices, Network Discovery, Call Monitoring, Monitoring, Reporting, Client Installers, and Online Help.
- Display Mode**: Radio buttons for Buildings (selected) and Locations.
- Search**: Search input field.
- Buildings Table**:

Building Name	Address	Details
▶ Building 1	31700 Research Park Dr, Madison Heights, MI 48071	[Edit] [Details]
▼ Building 2	54100 Broughton Rd, Macomb, MI 48042	[Edit] [Details]
- Locations Table**:

Location Name	Location Information	Phone Number	Details
Room 101	Room 101	(248) 485-1924	[Edit] [Details]
- Buttons**: **ADD BUILDING** and **ADD LOCATION** buttons are visible. Callout 9 points to the **ADD LOCATION** button.
- Pagination**: 'Page 1 of 1' and '25 rows' are shown for both tables.

Enter the **Location Name** ¹⁰ , **Phone Number** ¹¹ and **Location Information** ¹² and press **SAVE** ¹³ .



The screenshot shows a form titled "Add Location" with a "CLOSE" button in the top right corner. The form contains the following fields and controls:

- Location Name**: A text input field with an asterisk indicating it is required. Callout 10 points to this field.
- Phone Number**: A text input field. Callout 11 points to this field.
- Location Information**: A text input field with a small circular icon containing the number 1 in the top right corner. Callout 12 points to this field.
- Override Organization Name**: A toggle switch, currently turned off.
- HTML Link URL**: A larger text input area.
- SAVE**: A dark blue button at the bottom right. Callout 13 points to this button.

Note: The data in the Location Information field is used during emergency calls

Override Organization Name can be enabled if you wish to use a different name for emergency calls than the one that is assigned to your organization. This assigned name is shown near the top right corner of the customer admin portal. In the above example, *Midwest_Medical* is the assigned name and could be changed to *Midwest Medical Group* or another more descriptive or meaningful name.

Select and Setup a Network Discovery Method

Note: A network discovery method must be used on supported hard phones or E911 will not function properly. Contact your project manager for details.

There are four different network discovery methods available including MAC, LLDP, BSSID and IP RANGES

MAC

This discovery method uses an endpoint’s MAC address to determine location. This method is beneficial for customers that wish to provide Enhanced 911 with a high level of granularity to endpoints that do not move often. Supported Input Formats: mm:mm:mm:ss:ss:ss, mm-mm-mm-ss-ss-ss, mm.mm.mm.ss.ss.ss, mm mm mm ss ss ss, and mmmmmmmsssss. Input format is not case sensitive.

LLDP

This discovery method uses the network switch to determine location. The endpoint uses **LLDP** (Link Layer Discovery Protocol) to identify its neighbor and passes this information to a HELD Service. When the LLDP information is received, the application associates the endpoint with the location assigned to the switch and/or port.

There are three requirements for LLDP Mappings to be successfully implemented:

- The customer must know the location of a switch and/or port.
- The endpoint and connected switch must support LLDP and pass the tags to the HELD Service.
- LLDP Chassis and Port Mappings must be properly configured in the application.

If the HELD Service receives an unknown Chassis ID in the request, it is automatically added to the database with no location. Similar to Chassis ID, if an unknown Port ID is in the request, it is automatically added to the database with no location and associated with the corresponding Chassis ID.

If the HELD request contains both Chassis ID and Port ID, Network Discovery returns the locations associated with the port. If the Port does not have a location associated with it, then Network Discovery returns the fallback location of the Chassis.

This method is beneficial for customers who wish to provide a unique location for each phone or for those customers who have IP segments that cannot be geographically grouped. If the customer does not require a precise location of each endpoint or change control practices are not in place for patch panel management, this option is not recommended.

BSSID

This discovery method uses the connected **Wireless Access Point (WAP)** to determine location. **Basic Service Set Identifier (BSSID)** is a 48-bit identity used to identify a particular WAP within a wireless network, usually, the BSSID is the MAC address of the WAP. There are two different categories available for BSSIDs, Corporate and Personal. When a BSSID is sent to the HELD Service, the endpoint is associated with the location of the BSSID.

There are three requirements for the BSSID Mappings to be successfully implemented. First, the customer must know the location of a WAP. Second, the endpoint must pass the BSSID to the HELD Service. Lastly, BSSID Mappings must be properly configured in the application.

This method is beneficial for customers who want to track the location of WIFI endpoints where a WIFI Controller based integration is not available. If the customer has WAPs that service multiple floors within a building this method is not recommended.

IP RANGES

This discovery method uses an endpoint's IP address to determine location. When a registration event is determined, the IP address of the endpoint is collected and mapped to a defined range. The endpoint is then associated with the location of the IP Range.

There are two requirements for Layer 3 Network Discovery to be successfully implemented. First, the customer must know the location of their IP Subnets. Second, the IP Ranges must be properly configured within the application.

IP Ranges may be defined as small or as large as the customer is capable of defining. The application uses a minimum and maximum IP address for all ranges, and the range does not have to comply with a specific IP subnet, for example, 192.168.124.15 through 192.168.125.27 is valid.

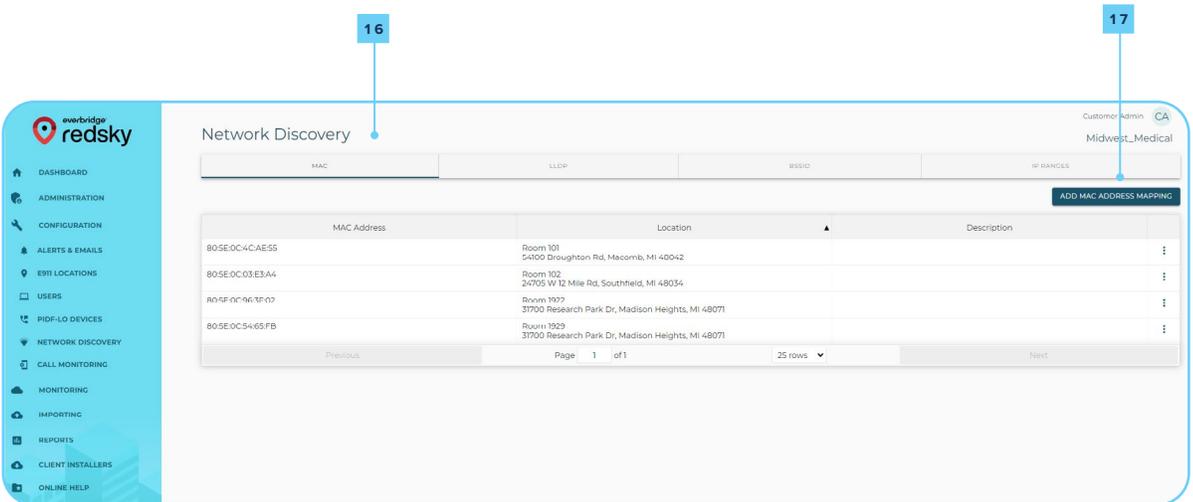
This method is beneficial for customers who wish to provide Enhanced 911 with minimal effort. If a high level of granularity is required, this method is not recommended.

The prioritized order of Network Discovery is as follows:

- MAC Address Mapping
- LLDP Port Mapping
- LLDP Chassis Mapping
- BSSID Personal Mapping
- BSSID Corporate Mapping
- Layer 3 Network Discovery (IP Range)
- Airwave (VPN Network Discovery)
- WIFI Network Discovery
- Layer 2 Network Discovery

MAC

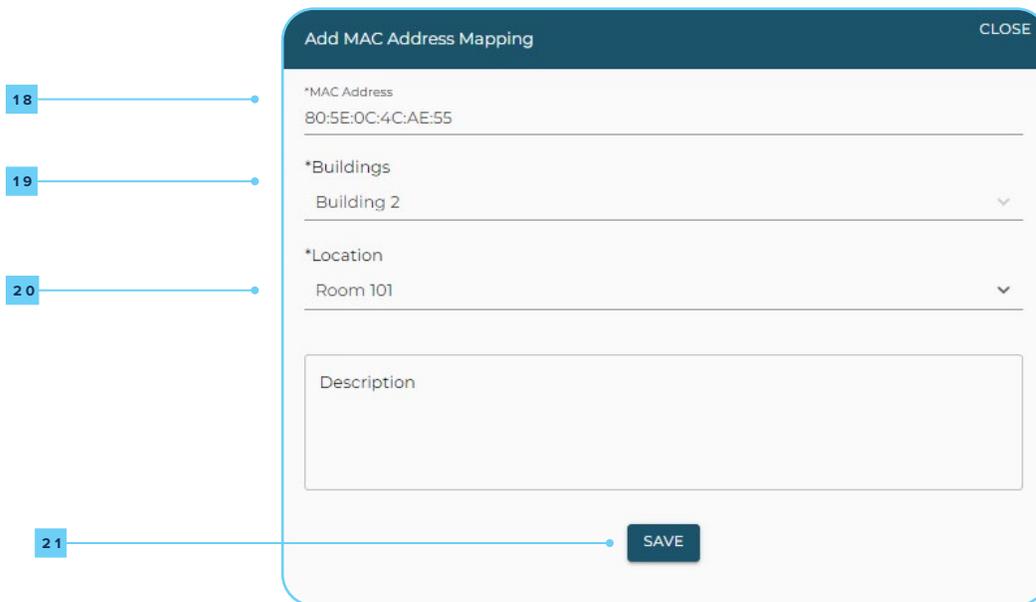
Network Discovery can be accessed within the customer admin portal. In the left navigation, click **CONFIGURATION** 14 then **NETWORK DISCOVERY** 15. Click the **MAC** 16 tab. Click **ADD MAC ADDRESS MAPPING** 17 near the upper right corner



The screenshot shows the 'Network Discovery' page in the 'redsky' customer admin portal. The left sidebar contains navigation options, with 'CONFIGURATION' (14) and 'NETWORK DISCOVERY' (15) highlighted. The main content area has four tabs: 'MAC' (16), 'LLDP', 'BSSID', and 'IP RANGES'. The 'MAC' tab is active, displaying a table with columns for 'MAC Address', 'Location', and 'Description'. A table with 4 rows is shown, listing MAC addresses and their corresponding locations. A button labeled 'ADD MAC ADDRESS MAPPING' (17) is located in the top right corner of the table area. The page footer indicates 'Page 1 of 1' and '25 rows'.

MAC Address	Location	Description
805E0C4CAE55	Room 101 54100 Droughnon Rd, Macomb, MI 48042	
805E0C03E3A4	Room 102 22705 W 12 Mile Rd, Southfield, MI 48034	
A05F0C061F02	Room 1027 37700 Research Park Dr, Madison Heights, MI 48071	
805E0C5465FB	Room 1029 37700 Research Park Dr, Madison Heights, MI 48071	

Enter the desired **MAC Address** **18**. Select a previously defined **Building** **19** and **Location** **20** from the drop down list. Click **SAVE** **21**. Note: Building and Location info must be defined prior to adding this mapping.



The screenshot shows a modal window titled "Add MAC Address Mapping" with a "CLOSE" button in the top right. The form contains the following fields:

- 18**: *MAC Address, with the value "80:5E:0C:4C:AE:55" entered.
- 19**: *Buildings, with a dropdown menu showing "Building 2".
- 20**: *Location, with a dropdown menu showing "Room 101".
- A text area for "Description".
- 21**: A "SAVE" button at the bottom right.

LLDP

Network Discovery can be accessed within the customer admin portal. In the left navigation, click **CONFIGURATION** **22** then **NETWORK DISCOVERY** **23**. Click the **LLDP** **24** tab. Click **ADD CHASSIS MAPPING** **25** near the upper right corner.



The screenshot shows the "Network Discovery" interface in the customer admin portal. The left navigation menu includes:

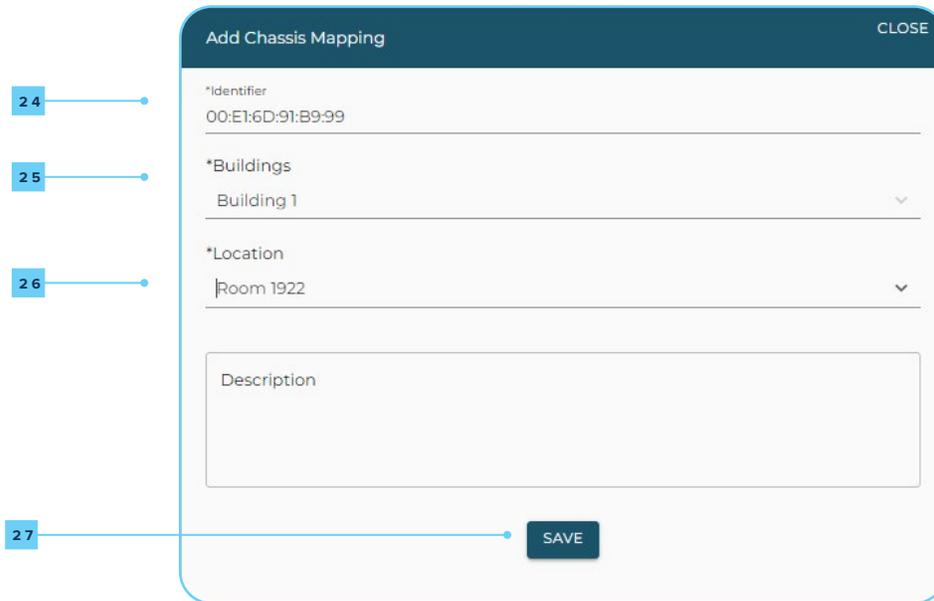
- 22**: CONFIGURATION
- 23**: NETWORK DISCOVERY

The main content area shows the "Network Discovery" page with the following elements:

- 24**: The "LLDP" tab is selected.
- 25**: The "ADD CHASSIS MAPPING" button is located in the top right corner.
- A table with columns: Description, Identifier, and Location. The table contains one row with the following data:

Description	Identifier	Location
	00:E1:6D:91:89:99	Room 1922 31700 Research Park Dr, Madison Heights, MI 48071
- Page navigation: "Page 1 of 1", "25 rows", "Previous", "Next".

Enter the Chassis ID in the **Identifier** ²⁴ field (this is typically the Mac address of the customer switch). Select the desired **Building** ²⁵ and **Location** ²⁶ from the drop down lists. Click **SAVE** ²⁷.



Add Chassis Mapping
CLOSE

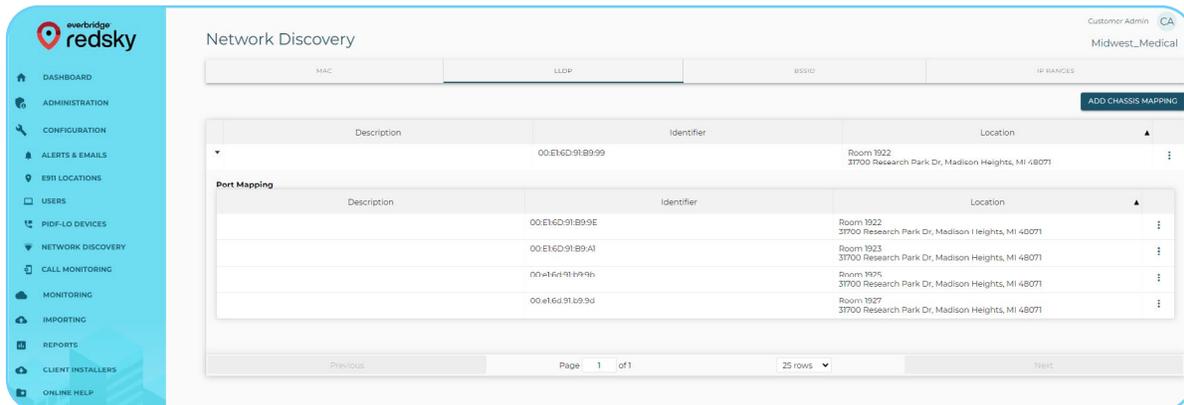
*Identifier ²⁴

*Buildings ²⁵

*Location ²⁶

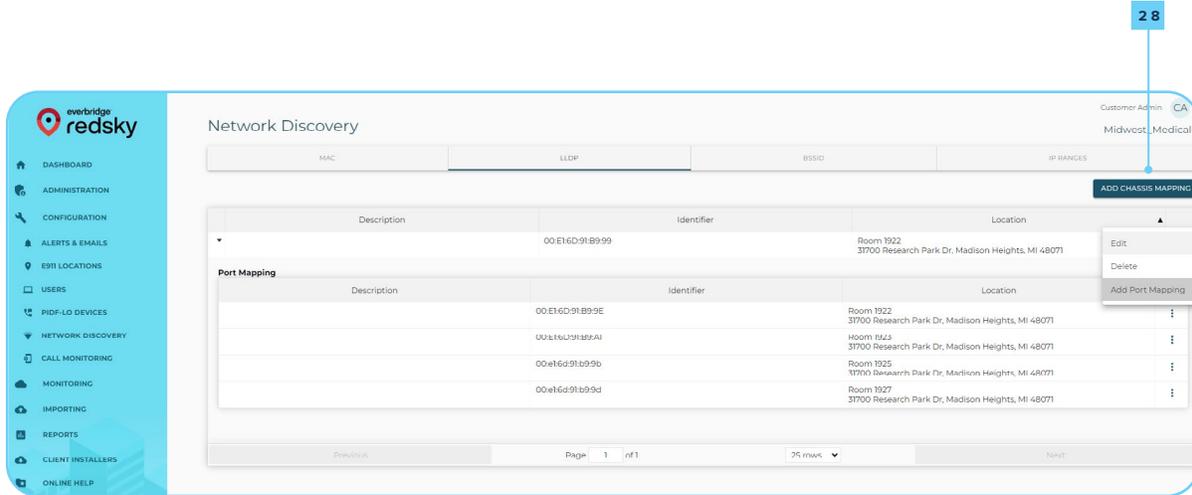
Description

After a switch Chassis is added, click the arrow on left to display any available ports that are associated with the Chassis.

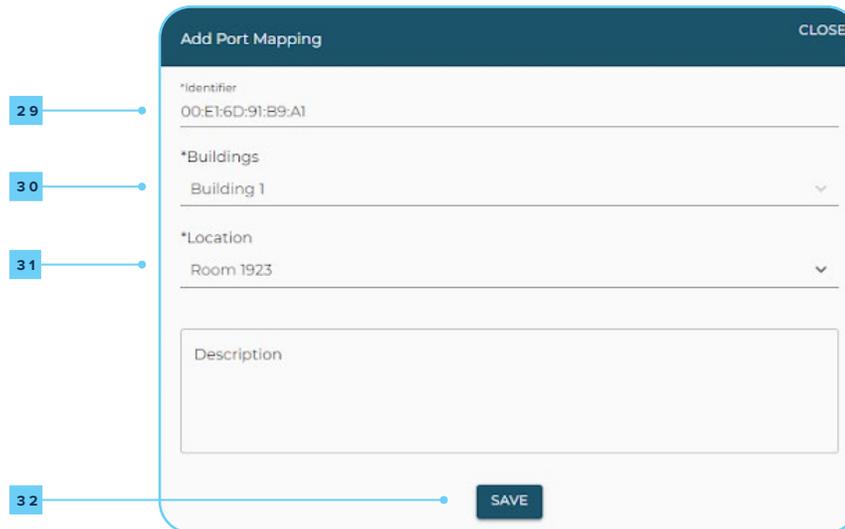


Network Discovery			
MAC	LLDP	SSID	IP RANGES
			ADD CHASSIS MAPPING
Description	Identifier	Location	
	00:E1:6D:91:B9:99	Room 1922 3700 Research Park Dr, Madison Heights, MI 48071	
Port Mapping			
Description	Identifier	Location	
	00:E1:6D:91:B9:9E	Room 1922 3700 Research Park Dr, Madison Heights, MI 48071	
	00:E1:6D:91:B9:A1	Room 1923 3700 Research Park Dr, Madison Heights, MI 48071	
	00:e1:6d:91:b9:9b	Room 1925 3700 Research Park Dr, Madison Heights, MI 48071	
	00:e1:6d:91:b9:9d	Room 1927 3700 Research Park Dr, Madison Heights, MI 48071	

Click the ellipses near far right of Chassis and then click **Add Port Mapping** [28](#).

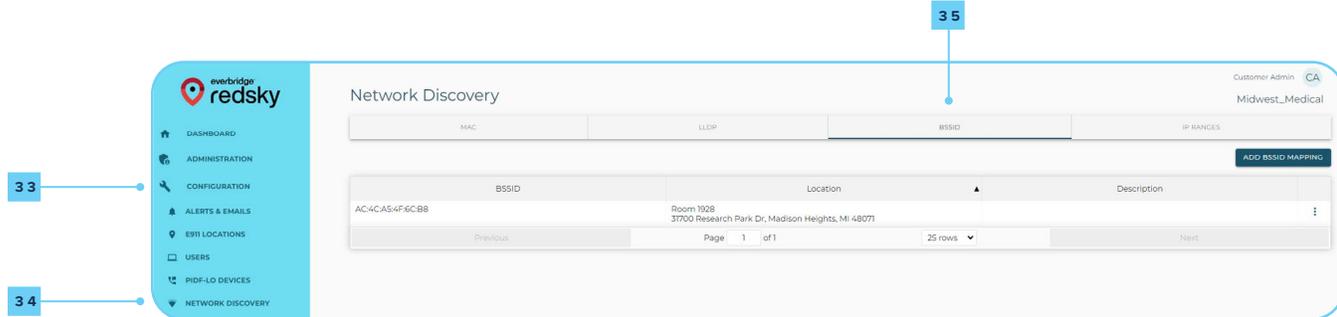


Enter the port **Identifier** [29](#) (typically the mac address of the switch port). Select the desired **Building** [30](#) and **Location** [31](#) from the drop down lists. Click **SAVE** [32](#).

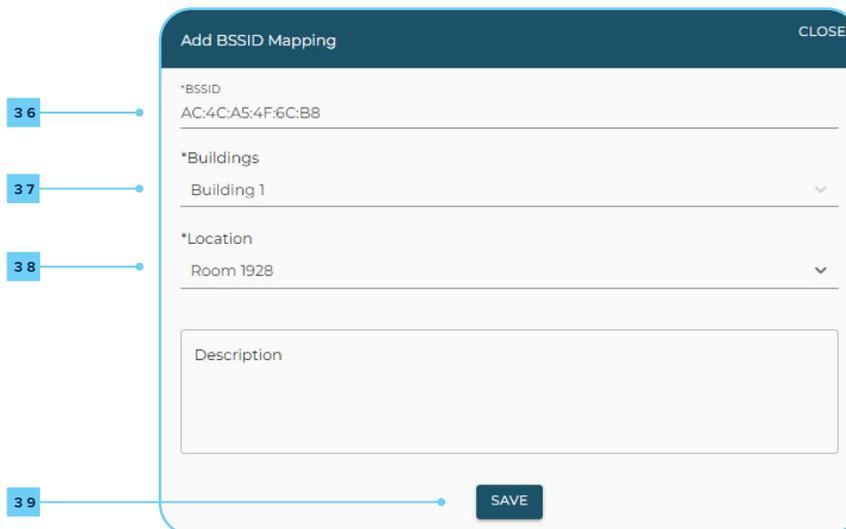


BSSID

Network Discovery can be accessed within the customer admin portal. In the left navigation, click **CONFIGURATION** ³³ then **NETWORK DISCOVERY** ³⁴. Click the **BSSID** ³⁵ tab. Click **ADD BSSID MAPPING** ³⁶ near the upper right corner.

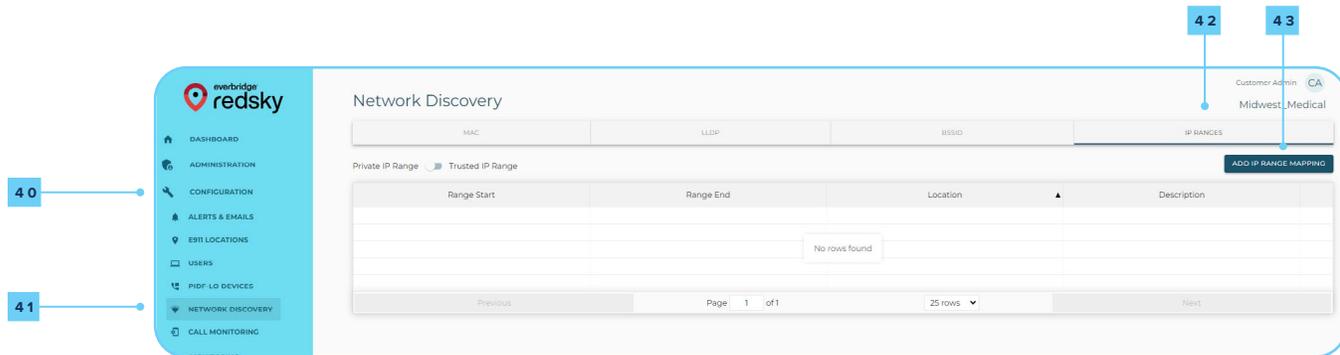


Enter the BSSID of the wireless access point in the **BSSID** ³⁶ field. Select the desired **Building** ³⁷ and **Location** ³⁸ from the drop down lists. Click **SAVE** ³⁹.

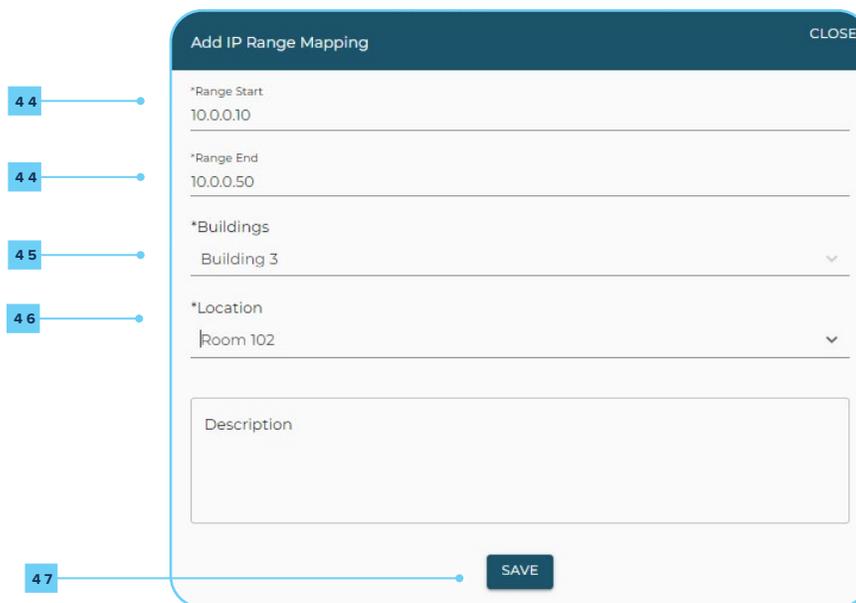


IP RANGES

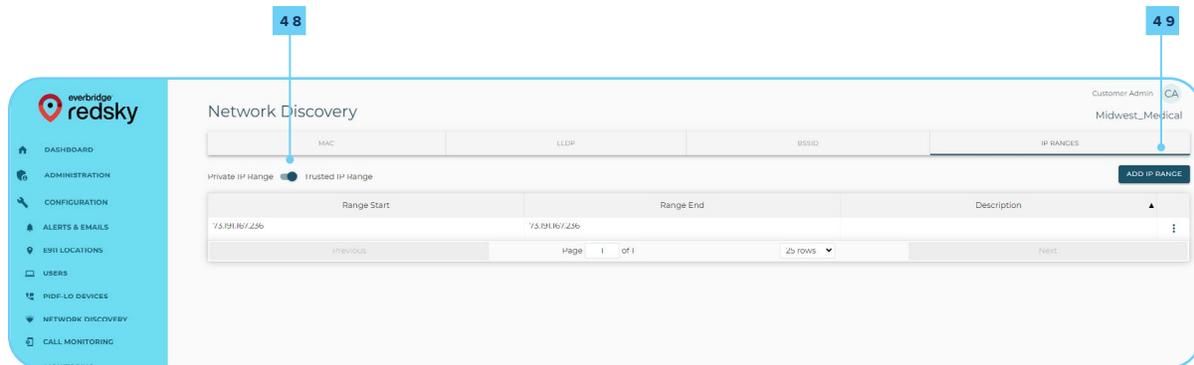
Network Discovery can be accessed within the customer admin portal. In the left navigation, click **CONFIGURATION** [40](#) then **NETWORK DISCOVERY** [41](#). Click the **IP RANGES** [42](#) tab. Click **ADD IP RANGE MAPPING** [43](#) near the upper right corner.



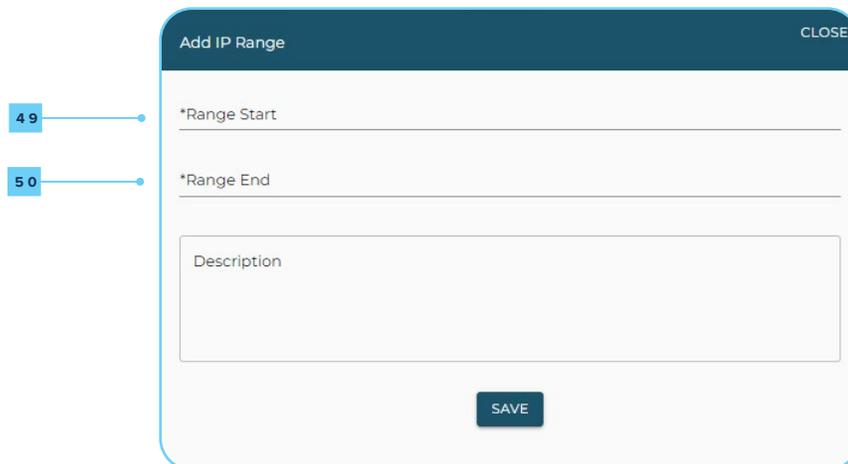
The **Private IP Range** is selected by default. Enter the **IP Range Start** [44](#) and **IP Range End** [44](#) values. Select the desired **Building** [45](#) and **Location** [46](#) from the drop down lists. Click **SAVE** [47](#).



The next step is to set the Public IP Address. Click the toggle near upper left to enable the **Trusted IP Range** [48](#). Click **Add IP Range** [49](#).

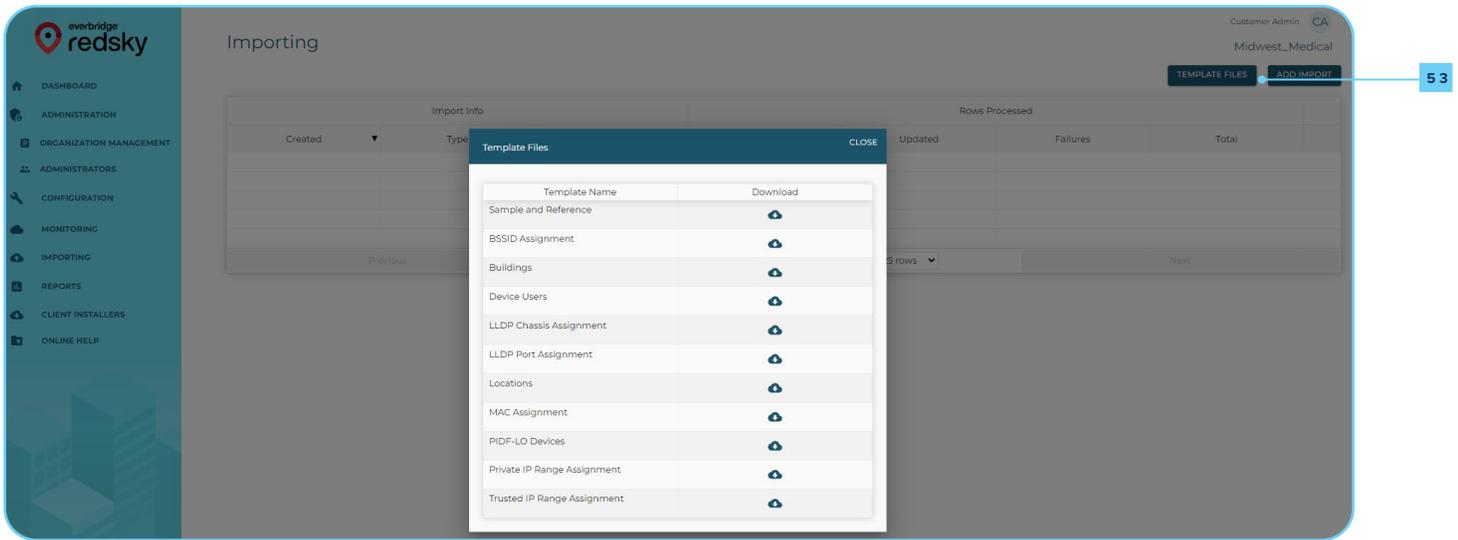


Enter the IP **Range Start** [49](#) and IP **Range End** [50](#) values. Click **SAVE** [51](#).



Bulk Importing

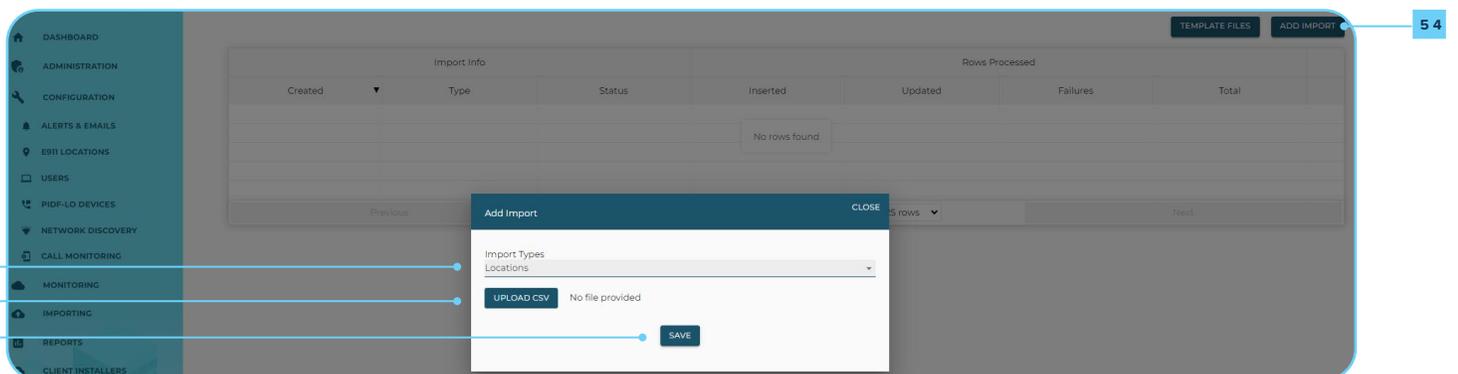
If there are numerous E911 Locations or Network Discovery inputs, bulk importing may be an easier approach. Importing can be accessed within the customer admin portal. In the left navigation, click **IMPORTING** [52](#). Then Click **TEMPLATE FILES** [53](#) near upper right. This shows a list of all available import methods. Select and download the desired csv file.



Below is an example of the .csv file for **Locations**

	A	B	C	D	E	F	G	H	I
1	##Locations								
2	## A Location can only be provisioned with a Phone Number OR Alternate ID, not both.								
3	## Callback Number will be required if a value is provided for Alternate ID.								
4									
5	Building Name *	Location Name *	Phone Number (10)	Alternate ID (50)	Callback Number (10)	Location Info (20)	Organization Name Overri	HTML Link Name (64)	HTML Link URL (1024)
6									

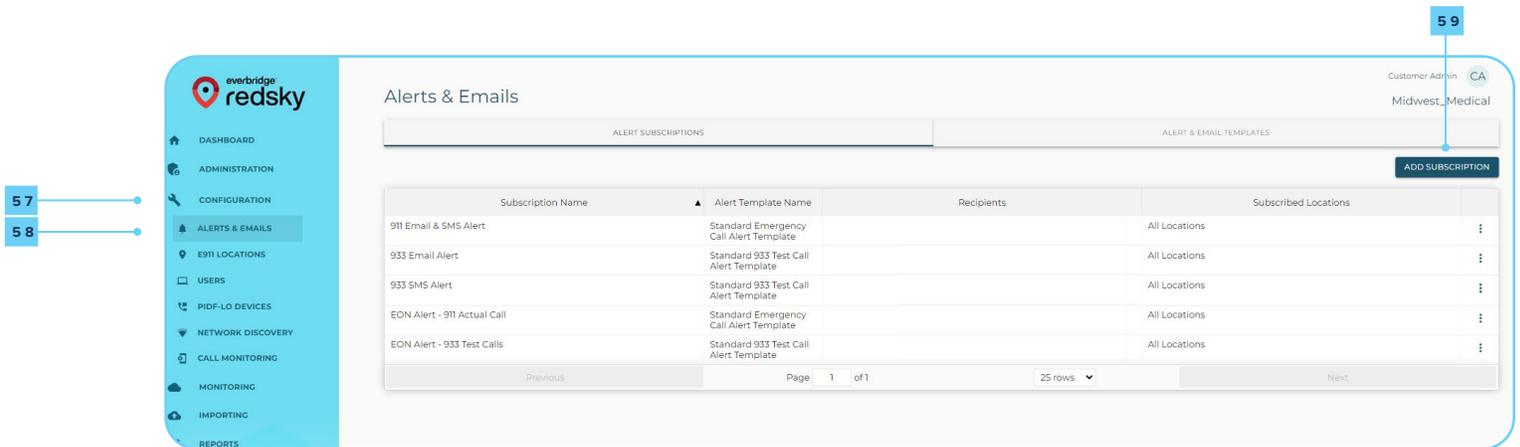
Populate the required data fields and save the .csv file. Click the **ADD IMPORT** [54](#) button and select the desired **Import Type** [55](#) from the list (Locations is shown here as an example). Select the **UPLOAD CSV** [56](#) option and search for the desired file. Click **SAVE** [57](#).



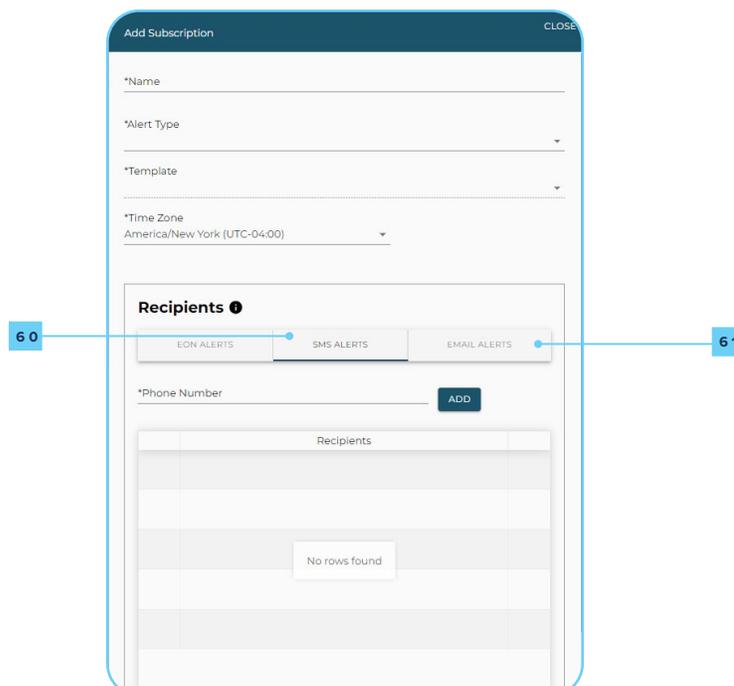
Enable Alerts

When an emergency call is made, others within your organization should be automatically alerted or notified. Two different methods for the notification are SMS text or Email. Either method can be used (both methods can also be used at the same time).

Alerts can be accessed within the customer admin portal. In the left navigation, click **CONFIGURATION** [57](#) then **ALERTS & EMAILS** [58](#). Click **ADD SUBSCRIPTION** [59](#) near the upper right corner.



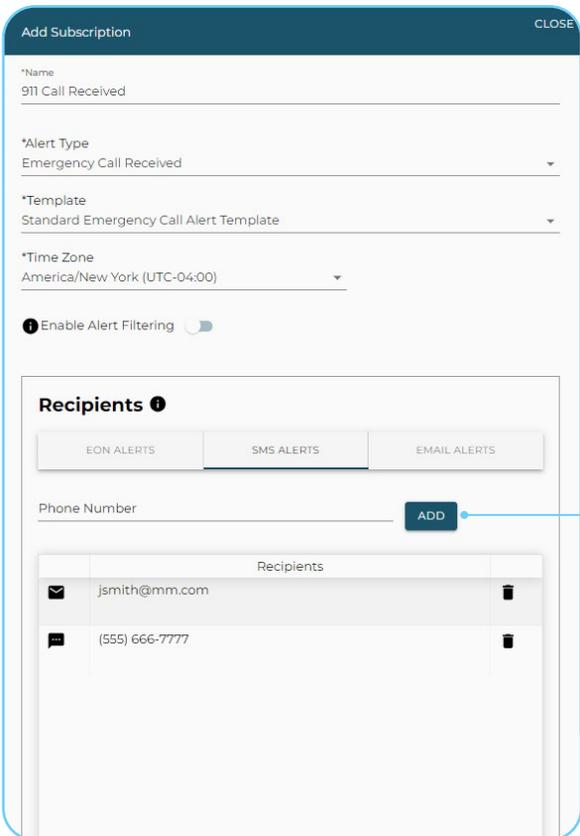
Click the **SMS ALERTS** [60](#) or **EMAIL ALERTS** [61](#) tabs



Dynamic Emergency Calling

Customer Admin Guide

Enter the subscription **Name** ⁶² and **Alert Type** ⁶³. Select the desired Template from the drop down list. Enter the desired **Phone Number** or **Email** address (click **ADD** ⁶⁴ after each). Scroll to the bottom of the form and click **SAVE**. Below is an example of an alert when an actual 911 call is made.



The screenshot shows the 'Add Subscription' form with the following fields and callouts:

- 62** points to the ***Name** field containing '911 Call Received'.
- 63** points to the ***Alert Type** dropdown menu, which is set to 'Emergency Call Received'.
- 64** points to the **ADD** button next to the **Phone Number** input field.

Other visible fields include:

- *Template**: Standard Emergency Call Alert Template
- *Time Zone**: America/New York (UTC-04:00)
- Enable Alert Filtering**:

The **Recipients** section includes tabs for EON ALERTS, SMS ALERTS, and EMAIL ALERTS. Below the **Phone Number** field, there is a table of recipients:

Recipients		
	jsmith@mm.com	
	(555) 666-7777	