Interface Control Document
Integrating CER and E911Anywhere®
Version 1.4

Revision History

Date	Version	Revision	Made By
5/4/2017	1.1	• Formatting & Network Configuration	Warren Hunter
6/1/2020	1.2		Ryan Olsen
12/16/2020	1.3	• Updated for E911 Anywhere© 7.x	Ryan Olsen
7/14/2022	1.4	• Added support for .bcfks file type	Ian Senne

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Introduction

This document details the technical aspects of the integration between RedSky's E911 Anywhere® and Cisco Emergency Responder Servers. E911 Anywhere provisions the ALI records in the national ALI Database, and provides routing of 911 calls to the correct PSAP based on the ELIN and ERL.

Audience

This document is intended for Call Server/CER and E911 Administrators. After reading this document an administrator should be able to prepare an enterprise's environment for integration between E911 Anywhere and Cisco Emergency Responder.

Requirements

E911 Anywhere directly integrates with Cisco Emergency Responder. Protocols and ports used by E911 Anywhere must have IP connectivity to the Cisco Emergency Responder. If a firewall is between Cisco Emergency Responder and E911 Anywhere (Redsky's cloud solution) ports must be opened allow communication. Additionally, DNS must be configured on the CER server, and able to resolve https://anywhere.e911cloud.com

Port Requirements

SSL	TCP	443	• Port opened on firewall that is used for communication between CER & E911 Anywhere which resides in the cloud.

Configuring Intrado VUI Settings

Redsky will provide the certificate to the customer to install on the Cisco Emergency Responder Server.

1. **After logging into CER go to System > Intrado VUI Settings**

2. *Intrado VUI Settings*

Step 1: Upload Certificate

Click on the Upload Certificate button

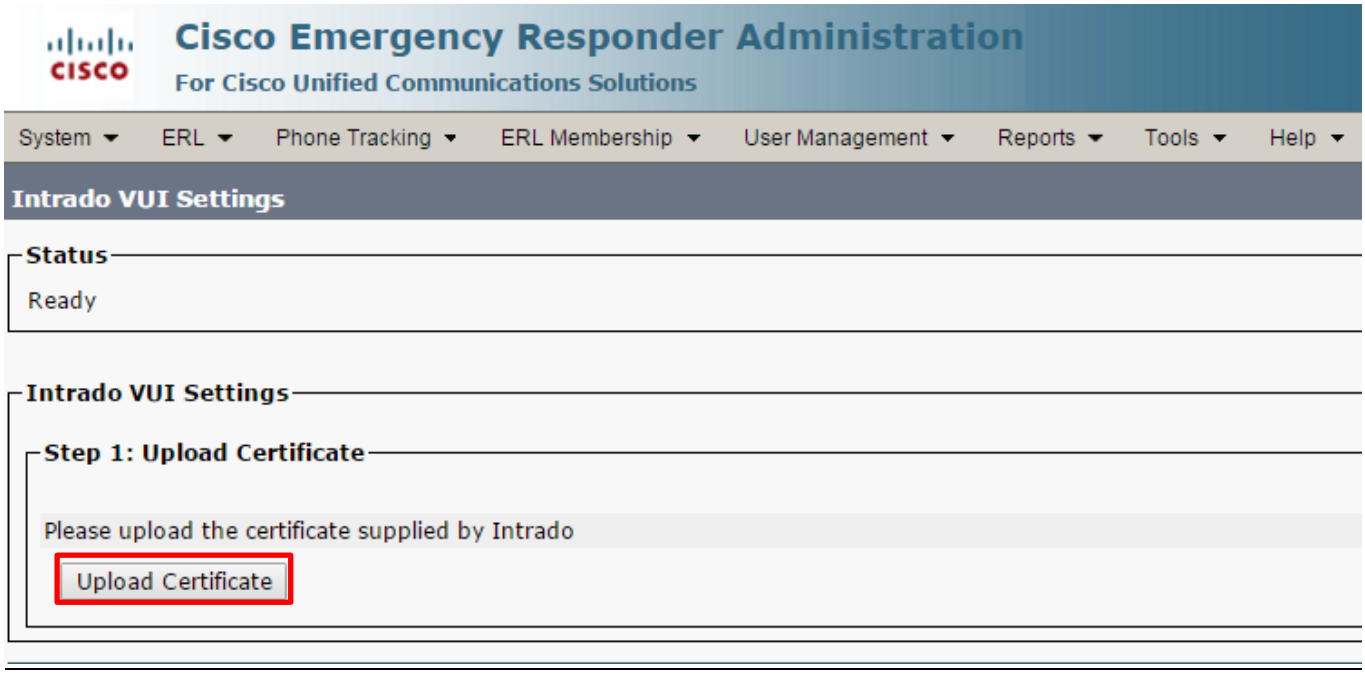

Figure 1: Intrado VUI Settings (Upload Certificate

3. <u>Upload Certificate</u>

Click on **Choose File Button**

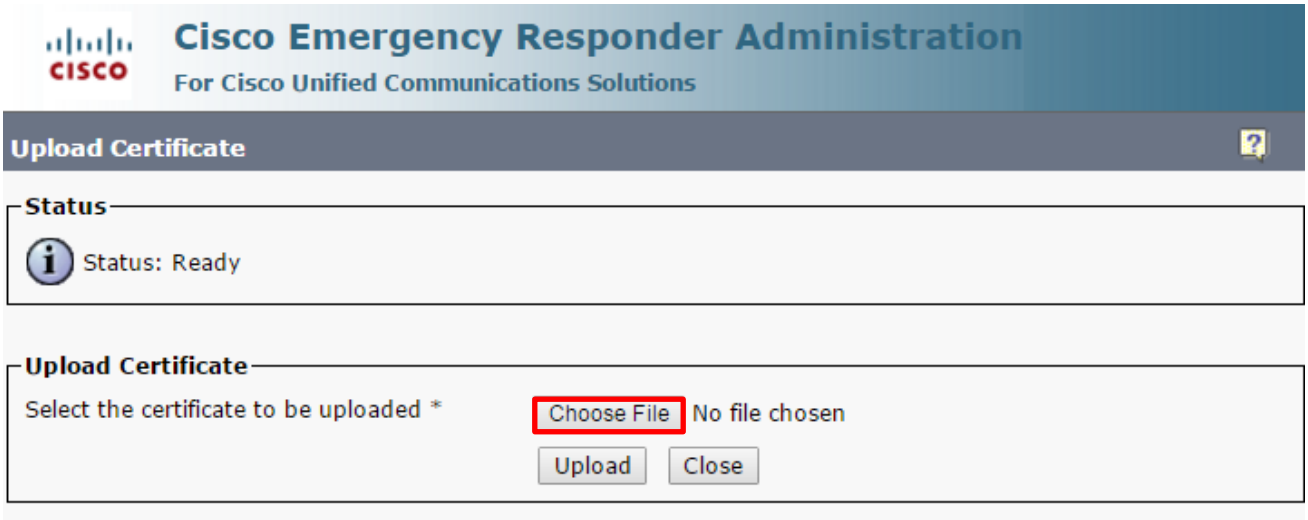

Figure 2: Upload Certificate cont. (Choose File)

4. Navigate to the directory where the certificate is stored/saved, Click on **Upload the Upload Button.**

Figure 3: Upload Certificate cont. (Upload)

*****CER 14.SU2 supports .bcfks file types instead of the .p12 pictured above*****

5. **Ensure file has be successfully uploaded. Click on Close after file has been successfully uploaded**

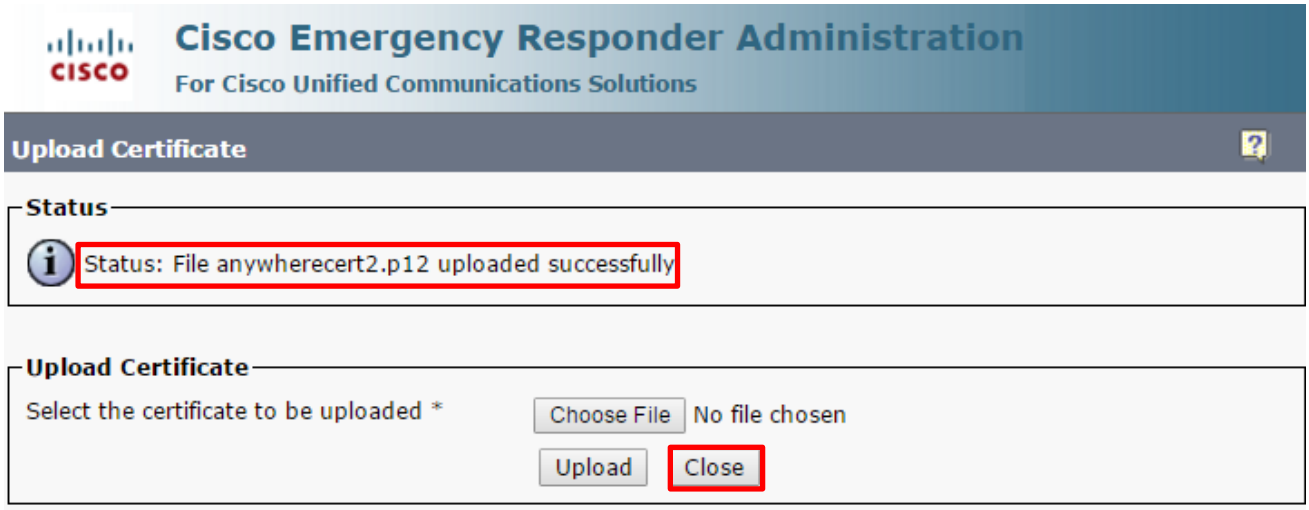

Figure 4: Upload Certificate cont. (uploaded successfully)

6. *Validate Certificates*

Step 2: Validate Certificates

Enter the Intrado Certificate Password (**password is provided by Redsky**),
VUI URL – Enter https://api.anywhere.e911cloud.com/cer-service/ws/CERService
Click on the **Test and Validate Button**

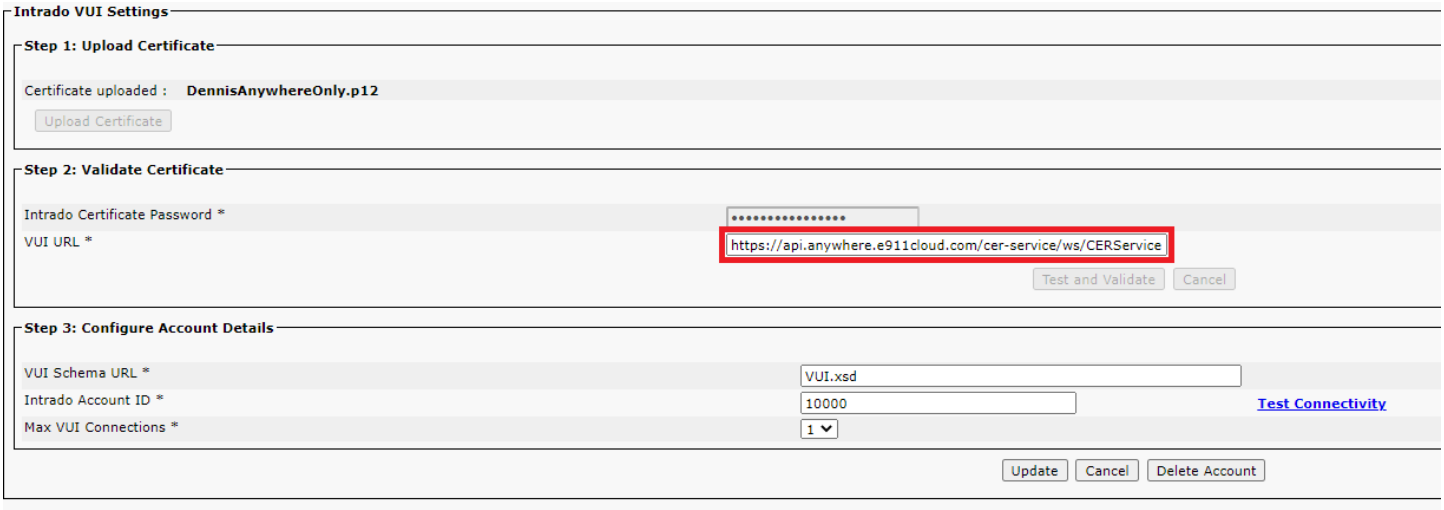

Figure 5: Validate Certificates

7. *Configuring Account Details*

Step 3: Configure Account Details

Enter in the following:
VUI Schema URL: Enter "VUI.xsd"
Intrado Account ID: Redsky will provide this Account ID
Max VUI Connections: this defaults to 1, Click **Update**.

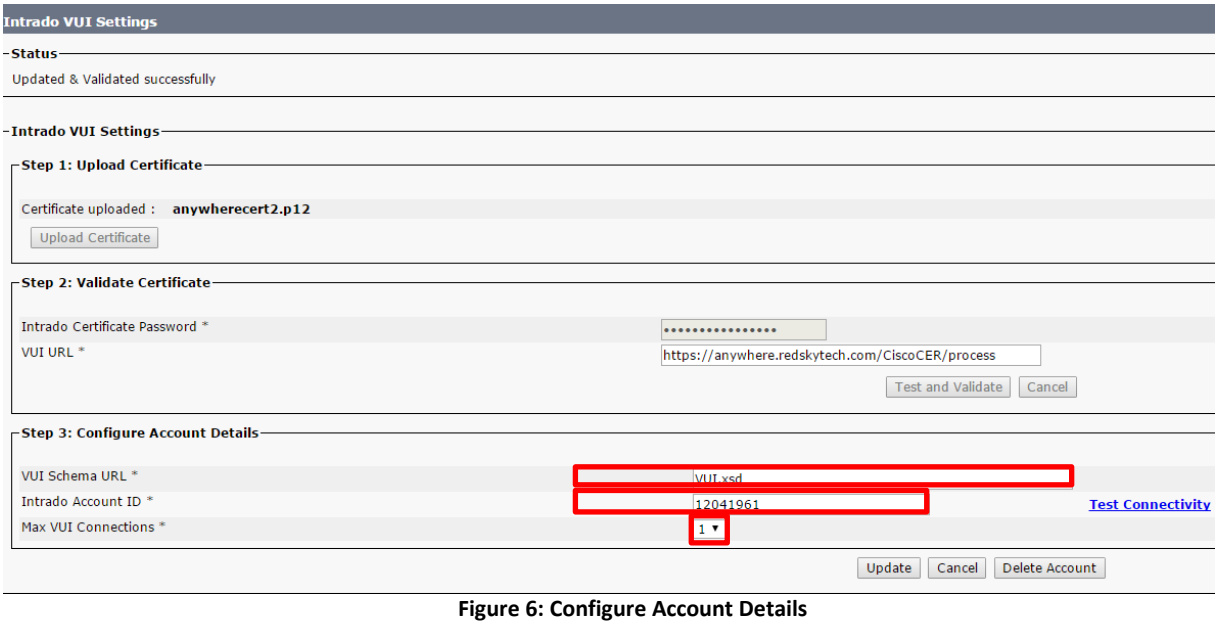

Figure 6: Configure Account Details

8. Test Connectivity – Perform this step to ensure TCP/SSL connectivity to E911 Anywhere

Click on: Test Connectivity

Click on Connect: Test Results should display the following:

Connection succeeded:

Response code – 200
Response from server: OK
Click on Close

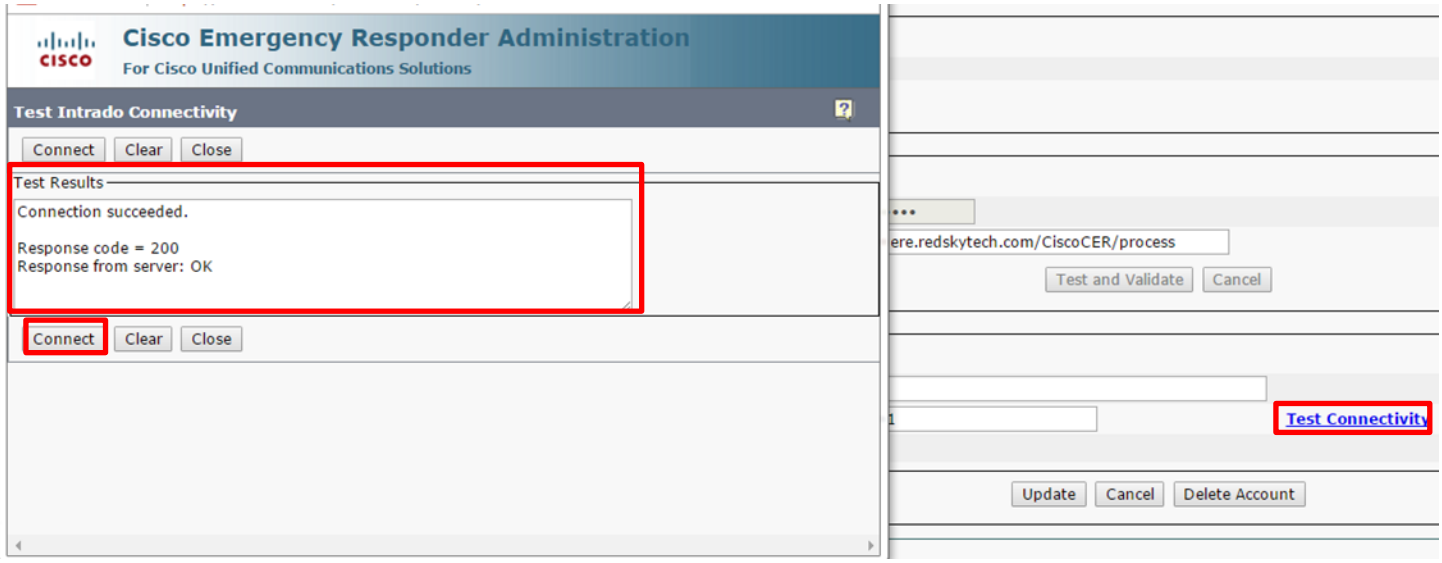

Figure 7: Test Connectivity

Migrating Conventional ERL's to Intrado ERL's

In order for ERL's record to be pushed into E911 Anywhere, Conventional ERL's must first be migrated into Intrado ERL's. If there are no Conventional ERL's listed in Cisco Emergency Responder, Intrado ERL's must be created or imported in Cisco Emergency Responder.

Listed below are procedures for migrating Conventional ERL's into Intrado ERL's. The ERL Migration tool can be used to perform a bulk migration of Conventional ERLs to Intrado ERLs.

Bulk pushing of Intrado ERL's can also be scheduled by going to the ERL > Intrado ERL > Intrado ERLs tab.
The details of the pushed Intrado ERL's can be tracked in CER by going to Reports > ERL Audit Trail. The information will provide the details as to whether the ERL pushed successfully or failed, and the reason.

9. **Migrate Conventional ERLs to Intrado ERLs –** Go to ERL > ERL Migration Tool Tab

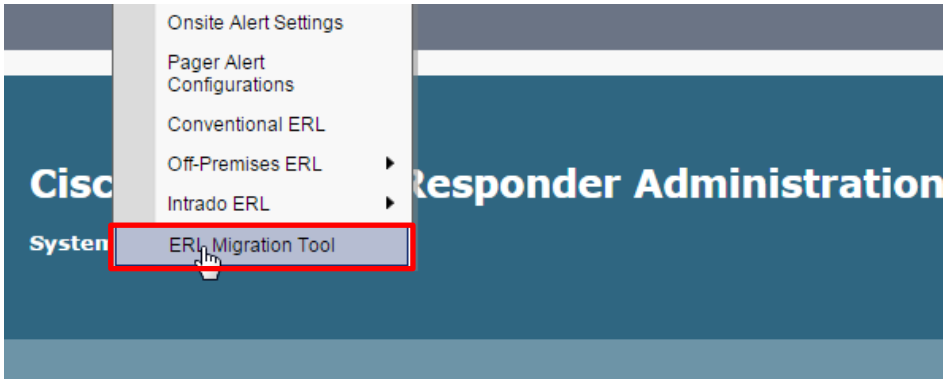

Figure 8: Migrate Conventional ERLs to Intrado ERLs

10. ***ERL Migration Tool***

ERL Migration Tool Configuration

In the ERL Search Parameters:

Find: From the Dropdown select **Conventional ERL > Click Find**, Conventional ERLs will be listed Ex. ERL Name – **Hunter.**

Put a check next to the ERL/s to be migrated into Intrado ERLS, Click on Migrate to Intrado ERL

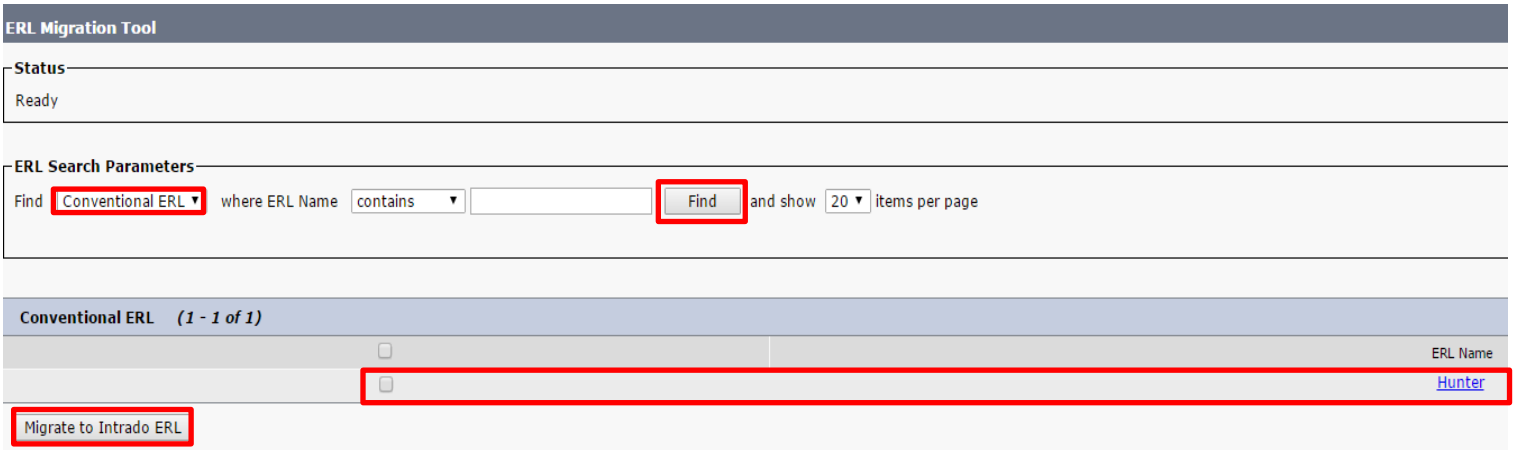

Figure 9: ERL Migration Tool

11. *ERL Migration Tool cont.*

ERL Migration Value Settings

Route/Translation pattern – This is the route/translation pattern configured in CUCM to route 911 calls out the gateway to Redsky E911 Anywhere.
Class of Service - From the dropdown Select VOIP Default
Type of Service – From the dropdown Select Non-Pub
Click on **Migrate to Intrado ERL**, Click Close

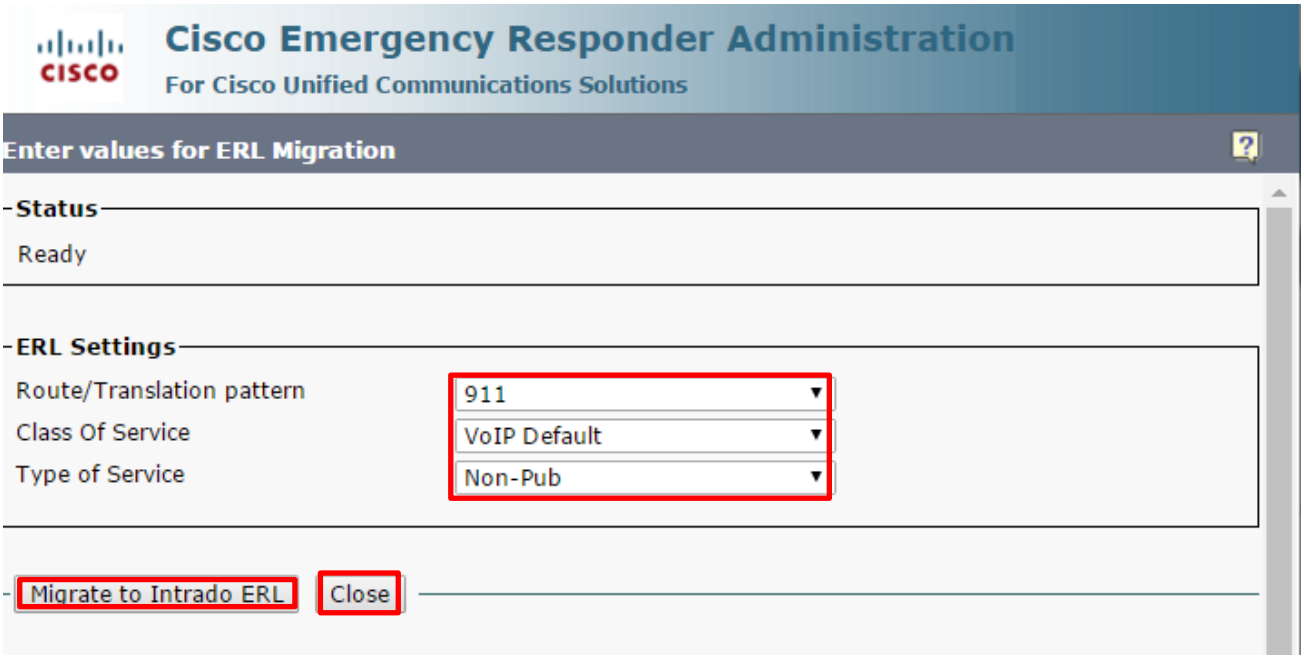

Figure 10: Enter Values for ERL Migration

Pushing ERL Records into E911 Anywhere

12. *Procedures for pushing ERL records into E911 Anywhere*

Log into Cisco Emergency Responder > ERL > Intrado ERL > Click **Search and List Tab**

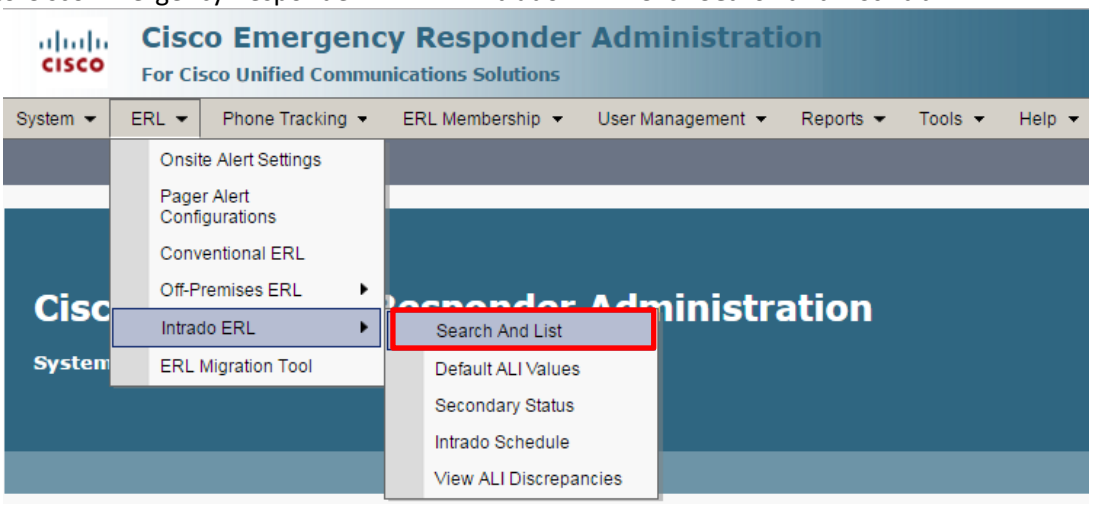

Figure 11: Pushing ERL records into E911 Anywhere

13. *Intrado ERL's*

List Intrado ERL's

Click on Find to list the migrated ERL's

Select the Intrado ERL to be pushed into E911 Anywhere

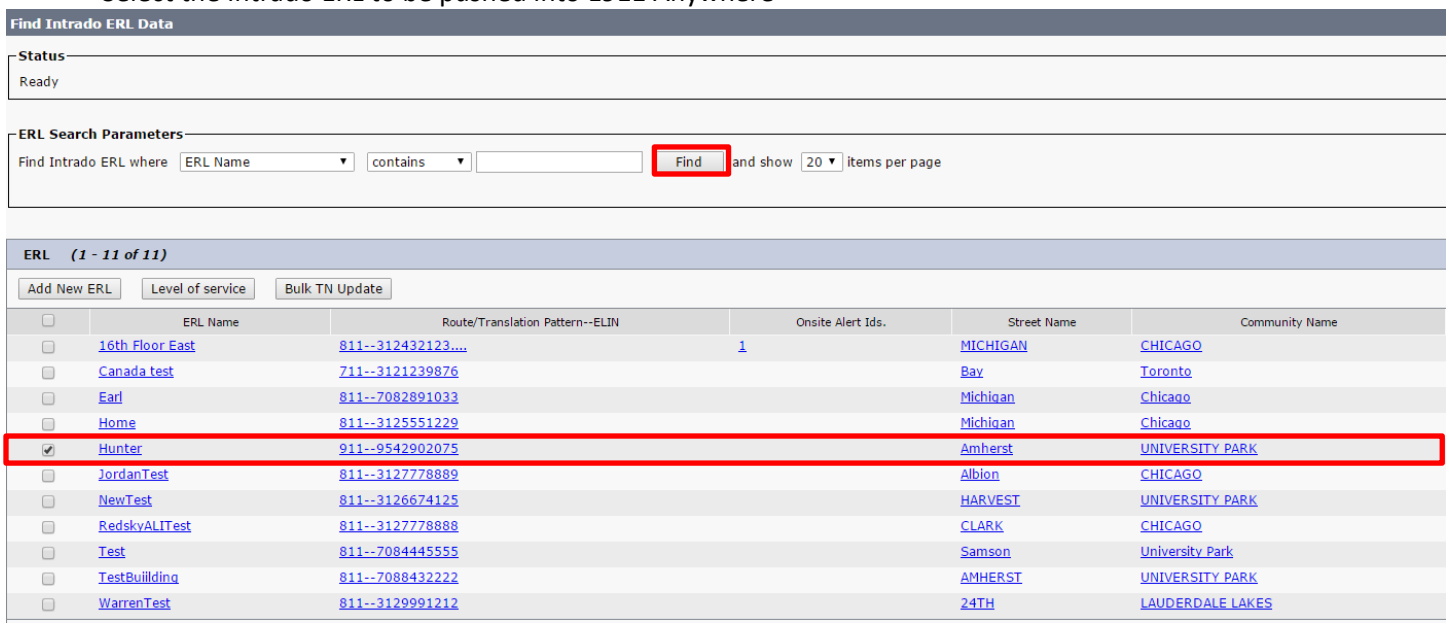

Figure 12: List Intrado ERL's

14. *Validating ALI/ERL record information*

Verify ERL and ELIN Settings

ERL Information for Hunter
Validate the ELIN Settings – Ensure the correct Route Pattern and ELIN are added/entered correctly.
Click the Edit ALI Button to check ALI/ERL information

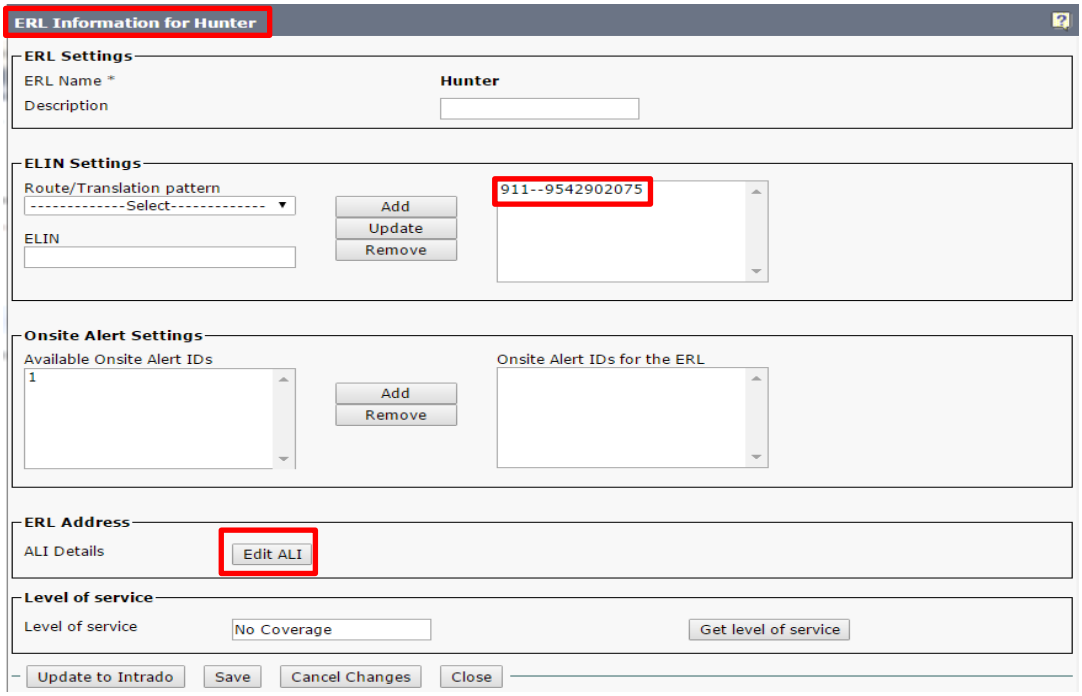

Figure 13: Validating ALI/ERL record information

15. Validating the ALI/ERL Information

The Query from Intrado and Pre-Validate from Intrado buttons are not supported. (Do Not Use)
Click on the **Update ALI Info** Button after verifying ALI information. Click the Close Button

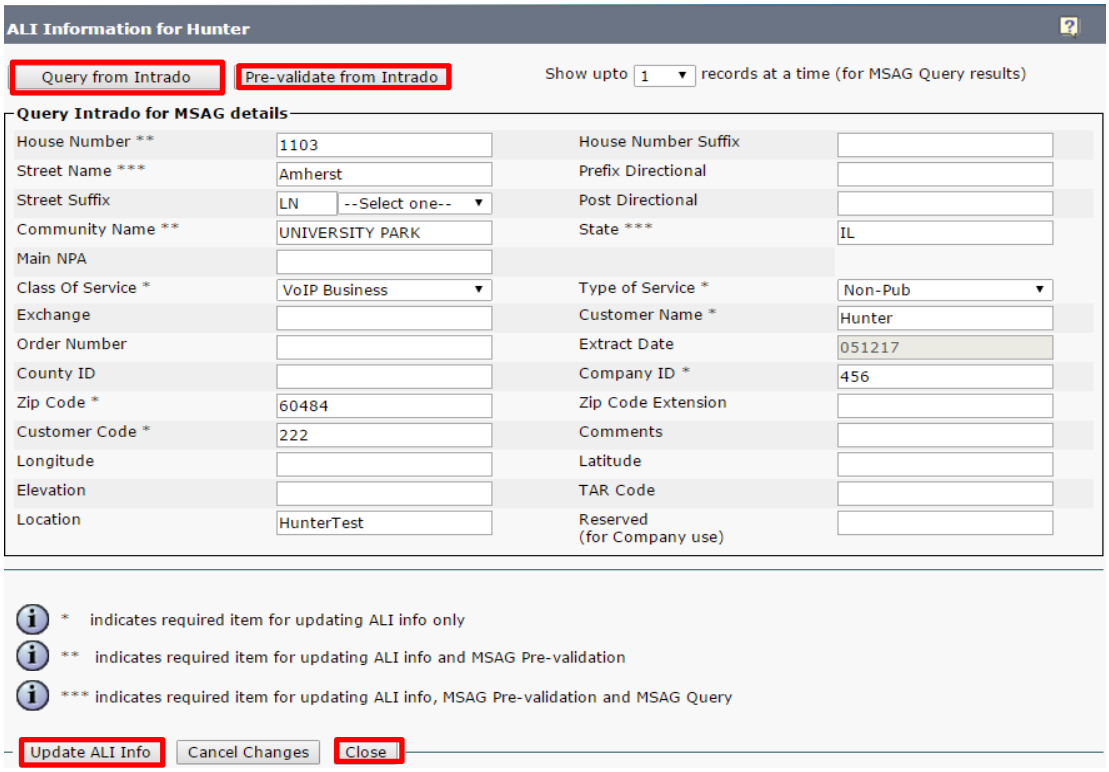

Figure 14: Validating ALI Information

ALI Information Field Mapping

House Number	Required by RedSky	House Number Suffix	Optional
Street Name	Required by RedSky	Prefix Directional	Optional
Street Suffix	Optional	Post Directional	Optional
Community Name	Required by RedSky	State	Required by RedSky
Main NPA	Not Used	Main Telephone No	Not Used
Class of Service	VoIP Default	Type of Service	Non-Pub
Exchange	Not Used	Customer Name	RedSky provided Account ID
Order Number	Not Used	Extract Date	Not Used
County ID	Not Used	Company ID	RedSky provided Account ID
Zip Code	Required by RedSky	Zip Code Extension	Not Used
Customer Code	911	Comments	Not Used
Longitude	Not Used	Latitude	Not Used
Elevation	Not Used	TAR Code	Not Used
**Location	Optional - Used for enhanced location information (eg. Floor and Room)	Reserved	Not Used

Figure 15: ALI Information Field Mapping

16. **<u>Click on the Update to Intrado Button to validate and push the record to E911 Anywhere.</u>**
A response of "SUCCESS" indicates that the record was pushed to E911 Anywhere and that the address was validated.

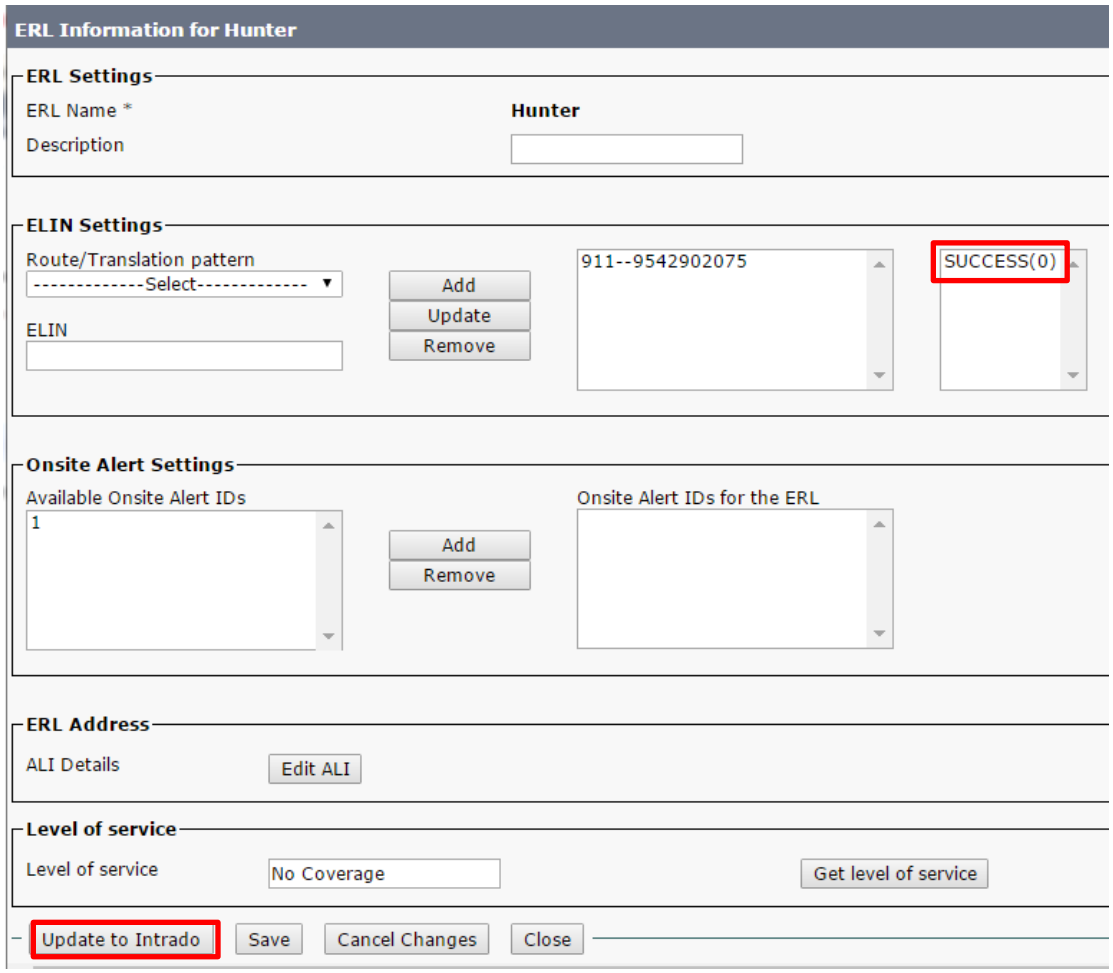

Figure 16: Records push to E911 Anywhere

17. *Validate ERL Records Pushed into E911 Anywhere*

Verify ERL Records

Log into https://anywhere.e911cloud.com with valid credentials
Navigate to Locations under the Configuration tab
Records pushed from CER will be listed under the CER Locations tab on the Locations screen.
CER Locations cannot be added, edited, or deleted from the E911 Anywhere portal

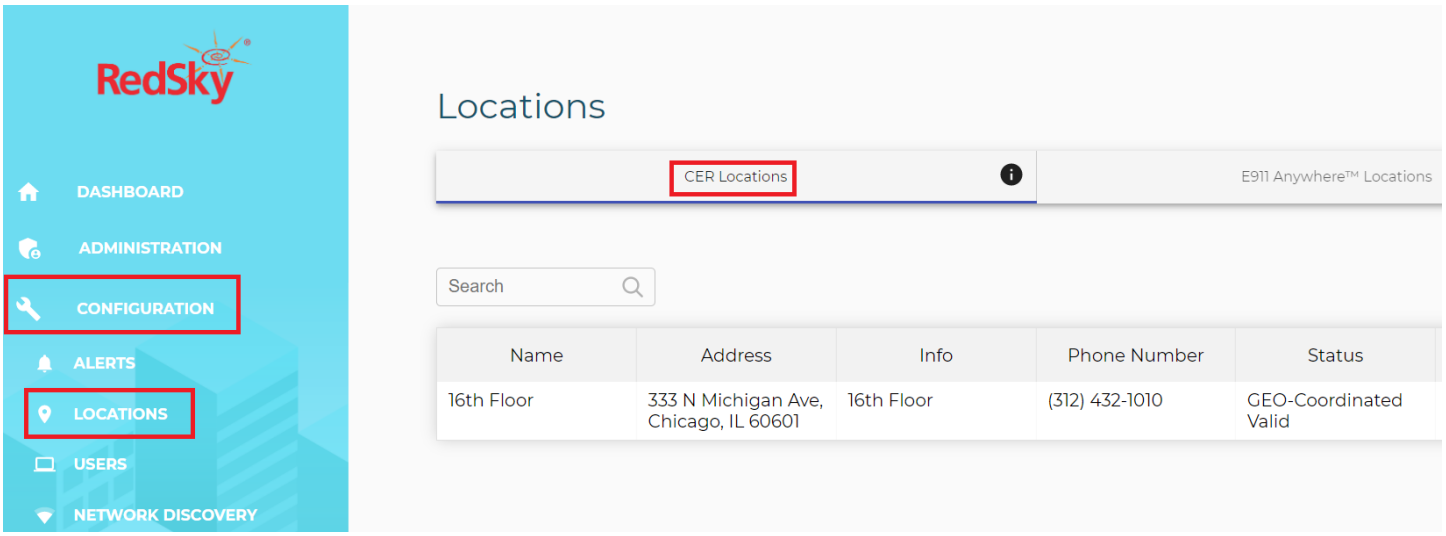

Figure 17: Validate Record Pushed into E911 Anywhere

Frequently Ask Questions (FAQ)

Question - **When an ERL is converted to an Intrado ERL, is call routing impacted for that location?**

Answer: No
Call routing will not be impacted until configuration changes are made within CUCM to send 911 calls to E911 Anywhere.

Question - **How to check that call back is working in CUCM when changing from Conventional to Intrado**

Answer: An inbound CTI route point and translation pattern must be created in CUCM and in CER under System > Telephony Settings >PSAP Callback Route Point Pattern must match the inbound CTI route point extension.

Call back can be testing by placing a call to the ELIN, from a cell phone, after a test emergency call has been placed. The call should route to the extension that placed the emergency call.

Question - **What is the difference between an Intrado ERL and Conventional ERL?**

Answer: Intrado ERL's allows you to enter and synchronize location information into E911 Anywhere database. Conventional ERL's – The ERL information is maintained in a database on Cisco Emergency Responder Server.

Question- **What do we need to enter in as a Route Pattern? / How do we route calls to RedSky through CER/CUCM?**

Answer: The customer is responsible for entering this route pattern. This could depend on whether the customer is routing call via PSTN or SIP. There are different ways this can be accomplished depending on how the customer routes their calls.

The call flows is "Device > CUCM>CER> CUCM>Gateway

Example - a 911 route pattern can be configured in CUCM to route calls out of a certain gateway. The 911 route pattern must also be configured in CER under System > Telephony Settings > Intrado Route Pattern Settings.

Question- **How to validate the connection/records transfer worked**

Answer: To validate the connection, follow the section #8 Test Connectivity in the ICD

To validate records transfer worked – Follow the procedures under the section Procedures to Validate ERL Records

Question - **How do we set up CER?**

Answer: Click on the link to download the Cisco Emergency Responder Guide **CER Administration Guide**