CHAPTER 8

Provisioning LBO Location with Cisco Emergency Responder

This chapter explains the deployment of Cisco Emergency Responder (CER) in the HUCS 7.1A platform. This chapter has the following sections.

Prerequisites for Deployment of CER

Before deploying CER the System Integrator should obtain the following minimum information:

- PRI trunks to connect to the service provider.

Note In Hosted UCS 7.1A CAMA trunks cannot be configured.

- Default emergency response location (ERL) automatic location informaiton (ALI) data and emergency location identification number (ELIN).
  - ELIN(s) Direct Inward Dial (DID) numbers for use as emergency location identification numbers (ELIN), for the emergency response locations (ERL).
  - ALI Data for the ERL. Emergency calls are routed to the appropriate PSAP based on the ELIN of the emergency caller. To route the call, the telephony network must have your automatic location information (ALI) that maps these ELINs to a location and also supplies the location information that appears on the PSAPs screens to help them locate the caller.
- ERL and associated ELIN(s) for each location. For every location that is going to be provisioned to use CER, ensure that you have the ELIN (DDIs) and ALI data.

Static, Basic and Repetitive configuration

While most of the provisioning is run once for the deployment of a CER group, some will need to be run once every time a new customer, location, phone switch, phone, ERL or ELIN is added to the platform.

Note One customer location as defined by the BVSM does not necessarily translate to one Emergency Response Locations (ERL).

The following steps must be run to add the switch / phone to the CER:

Step 1 LAN Switch SNMP configuration (new switch).

Step 2 Add the SNMP and related network IP data to the CER (new switch).

Step 3 Select poll switch to get latest phone information (new switch / phone).

Step 4 Phones discovered must be tagged to their respective ERL(s). (new switch / phone).

Another repetitive task is running the PSAP callback section when adding a new customer.

Note For further details on Planning for CER, refer to:

http://www.cisco.com/en/US/docs/voice_ip_comm/cer/7_1_1/english/administration/guide/e911plan.html

Static Configuration

This section has the following topics:

Configure a CER server group

In CER, Log in to the Administration page:

https://<Cisco_ER_IP_Address_or_name>/ceradmin**.**

Step 1 Select **System > Cisco ER Group Settings.**

Step 2 Fill in the group settings. Many fields have defaults that should work for most networks. At minimum, you must configure these fields:

- Cisco ER Group Name—Enter a name for the group. for example **CERGroup1**

- Peer TCP Por—<PeerTCPPort>, for example **17001**
- Heartbeat Count—<HeartbeatCount>, for example **3**
- Heartbeat Interval (secs)—<HeartbeatInterval>, for example **30**
- Active Call Timeout (mins)—<ActiveCallTimeout>, for example **180**
- Calling Party Modification—Select **Disable,** from the drop-down menu

Step 3 Click **Update Settings**.

Cisco Unified CM Static Configuration

When you configure the SNMP strings for the switches, you must also configure the SNMP strings for the Cisco Unified CM servers. CER must be able to make SNMP queries of all Cisco Unified Communication Manager servers in the cluster that it supports.

In Unified Communication Manager, to configure the SNMP strings on CCM, log into the Serviceability page:

https://<Unified_CM_IP_Address_or_name>/ccmservice.

Choose **SNMP > V1/V2c > Community String**, and configure the following:

Step 1 From the Server drop-down list box, choose the server for which you want to configure a community string, for example **10.10.4.2.**

Step 2 Click **Add New**.

Step 3 In the Community String Name field, enter a name for the community string, for example **CERGroup1**.

Step 4 From the **Host IP Addresses Information group box**, click the **Accept SNMP Packets only.**

Step 5 In the **Host IP Address field**, enter the IP addresses of the Primary Cisco ER server, for example **10.10.9.10.**

Step 6 Click **Insert**.

Step 7 If the Backup Cisco ER Server is installed, repeat this process.

Step 8 From the **Access Privileges** drop-down list box, choose the **ReadOnly access level.**

Step 9 Check the **Apply To ALL Nodes** check box, to apply the community string to all nodes in the cluster.

Step 10 Click **Save.**
The message, “Changes will not take effect until you restart the SNMP master agent. To restart the SNMP master agent service, click OK", is displayed.

Note Repeat the above steps to ensure that all the servers in the CUCM cluster have a community string, as CER must be able to make SNMP queries of all Cisco Unified Communication Manager servers in the cluster that it supports.

LAN Switch SNMP / CDP Configuration

CER uses Cisco Discovery Protocol (CDP) to locate phones, so you should enable CDP on all of your switches. If you do not enable CDP, CER must use the Content Addressable Memory (CAM) table on the switch to track phones which is less efficient than using CDP.

CER also uses SNMP to obtain information about the ports on a switch. CER only reads SNMP information; it does not write changes to the switch configuration, so you only have to configure the SNMP read community strings.

On the Phone Switch, to enable CDP and to configure the SNMP read community string, enter the following commands in Global Configuration mode:

```
cdp run
snmp-server community <Community_String> RO
```

For example:

```
hostname(config)#cdp run
hostname(config)#snmp-server community CERGroup1 RO
```

Add SNMP and related network data to CER

The Cisco Emergency Responder uses SNMP to obtain information about the phone ports on a switch. Obtain the read community strings from all of the switches to be defined in the CER.

In Cisco Emergency Responder, to configure the SNMP connection, log in to the Administration page:

https://<Cisco_ER_IP_Address_or_name>/ceradmin.

Step 1 Choose **Phone Tracking > SNMP Settings.**

Step 2 On the SNMP Settings page, enter the following:

- Enter IP address pattern to which you want to associate an SNMP read community string.

Note If all of your switches use the same read community string, enter *.*.*.*. If subsets of your switches use the same strings, create a mask that covers those subsets. If you use a separate string for each switch, you must enter each switch on this page.

Enter the timeout and retries values. The suggested optimal values are **10 - 15** seconds for timeout, and **2 - 3** for retries.

- Enter the read community string, for example **CERGroup11**.

Step 3 Click **Insert.**

Note Note: If your CER servers, Cisco Unified CM servers, and Cisco IP Phones are located in a different subnet than your switches, you must either configure the subnets for the Cisco Unified CM server, phones and the subnet for the switches OR use *.*.*.*.

CER to Identify and Poll the LAN Switches

You must inform CER the switches to be managed. CER tracks port changes, including changes to the devices connected to those ports, and can recognize which ports have phones connected to them. Identify all switches that might have phones attached to them, essentially all edge switches.

After creating the initial switch list on CER, make mass changes to switch definitions by exporting the switch definitions, editing the export file, and re-importing the file.

Note Ensure that you configure the SNMP read community strings before adding switches.

In Cisco Emergency Responder, to configure the LAN Switch log into the CER Administration page:

https://<Cisco_ER_IP_Address_or_name>/ceradmin.

Step 1 Choose **Phone Tracking > LAN Switch Details**.

Step 2 On the **LAN Switch Details** page, enter the following:

- Enter the IP address or DNS name of the switch—for example **10.10.20.1**
- Enter the Description—for example Phone Switch: **PH-SW01**

Step 3 Click **Insert** to add the switch to the CER configuration.

Note If CER prompts the message “Do you want to run the switch-port and phone update process”, then run this process. However, if you are adding more than one switch, you can skip running the process until you add the last switch and then re-run by selecting **Phone Tracking > Run Switch-Port & Phone Update**, at a later point in time when all the phones have been plugged into the phone switch.

Provisioning CER

This section contains the following topics:

Define Cisco ER Groups in VOSS-USM

To define a Cisco ER Group in VOSS-USM, do the following:

Step 1 Go to **Network > Emergency Responder.**

Step 2 Click **Add.**

Step 3 Click **Add** corresponding to CiscoEmergencyResponder in the Product Selection screen.

Step 4 Under **CERGroup Details**, enter the following:

- CERGroup Name: <uniquename>, same as the Cisco ER Group Name configured in Cisco ER, for example **CERGroup1**
- CERGroup Description: <CERGroupdescription>, for example **Cisco ER Group 1**
- ELIN for Default ERL: <ELINDefaultERL>, for example **4085550001**

Note The Default ERL's ELIN should belong to the Service Provider Representative Location and should be the DID of the phone number of Service Provider Representative.

- Peer TCP Port: <PeerTCPPort>, for example **17001**
- Heartbeat Count: <HeartbeatCount>, for example **3**
- Heartbeat Interval (secs): <HeartbeatInterval>, for example **30**
- Active Call Timeout (mins): <ActiveCallTimeout>, for example **180**
- UDP Port Begin: <UDPPortBegin>, for example **32000**
- Software Version: <CERVersion>, **CiscoEmergencyResponder : Any**
- Check the **Detailed trace file of configuration sessions?** check box
- Uncheck **Encrypt configuration sessions?** check box
- Click **Next**

Step 5 Under **Primary Cisco Emergency Responder Details**, enter the following:

- Host Name: <PrimaryCERHostName>, for example: **CER1a**
- Description: <PrimaryCERDescription>, for example: **Primary Cisco ER Server**
- IP Address: <PrimaryCERIPAddress>, for example: **10.10.9.10**
- Config User Id: <CERSystemAdmin>, for example: **CERAdministrator** (The user should be part of the CER System Administrator user group)
- Config Password: <CERSystemAdminPassword>, for example: **cisco123**
- Route Point for Main Server: <RPforMainServer>, for example: **911**

Under **Backup Cisco Emergency Responder Details**, enter the following: (optional)

- Host Name: <SecondaryCERHostName>, for example: **CER1b**
- Description: <SecondaryCERDescription>, for example: **Secondary Cisco ER Server**
- IP Address: <SecondaryCERIPAddress>, for example **10.10.9.11**
- Config User Id: <CERSystemAdmin>, for example **CERAdministrator** (The user should be part of the CER System Administrator user group).
- Config Password: <CERSystemAdminPassword>, for example **cisco123**
- Route Point for Backup Server: <RPforMainServer>, for example **912**

Step 6 Click **Add.**

Associate CER Groups with CUCM Clusters in VOSS-USM

To associate a Cisco ER Group with a Unified CM cluster in VOSS-USM do the following:

Step 1 Go to **Network > Emergency Responder**

Step 2 Click Connectivity corresponding to the Cisco ER Group, for example: **CERGroup1.**

Step 3 Click **Emergency Responder > PBX,** in the Connectivity Management Screen.

Step 4 Select the Unified CM cluster, for example **CUCM-POP1.**

Step 5 Click **Connect.**

Step 6 Under **Emergency Responder Details**, enter the following:

- Telephony Port Begin Address: <PortBeginAddress>, the number of the first CTI port to use for calling onsite alert (security) personnel, for example **3001**
- Number of Telephony ports: <NumberofPorts>, Number of CTI Ports, for example **10**

Note Ensure that the CTI Port numbers do not overlap with other configured Directory numbers, Extensions, as they are non-dialable, for example **3001-3010**.

Step 7 Click **Connect.**

Create User and associate with CTI Ports and Route Points in CUCM

In Cisco Unified Communication Manager, to create a Cisco Emergency Responder Cisco Unified Communication Manager user do the following:

Step 1 Log into the Cisco Unified CM Administration page: https://<Unified_CM_IP_Address_or_name>/ccmadmin,

Step 2 Choose **User Management > Application User**.

Step 3 Click **Add New** and configure the following:

- User ID: <UserID>, for example CERUser
- Password; <Password>, for example cisco123
- Confirm Password: <Password>, re-enter the password, for example cisco123

Step 4 In the **Device Information section**, select the configured Cisco ER route point(s) and CTI port(s), for example route points **RP911, RP912, RPELIN913**, and CTI Ports **3001-3010** and then click the down arrow to add the selected devices to the user's control list.
The list of devices appears in the Controlled Devices area.

Step 5 Click **Save.**

Step 6 Choose **User Management > User Group**, and configure the following:

Step 7 Click the **Standard CTI Enabled** user group link to display the User Group configuration page.

Step 8 Click **Find** to get a listing of users.

Step 9 Check the checkbox corresponding to the created user ID, for example **CERUser**

Step 10 Click **Add Application Users to Group.**
Cisco Unified Communications Manager adds the selected user to the Standard CTI Enabled user group.

Repeat the above procedure to add the Standard CTI Allow Calling Number Modification group to the CERUser.

Add CUCM data in CER

Note VOSS-USM cannot provision the CER; therefore you have to manually associate the CER with the CUCM cluster, define the CUCM user and the CTI devices that user will control.

In Cisco ER, to define the Unified CM cluster on Cisco ER do the following:

Step 1 Log into the CERAdministration page:
https://<Cisco_ER_IP_Address_or_name>/ceradmin.

Step 2 Choose **Phone Tracking > Cisco Unified Communications Manager**.

Step 3 In the **Cisco Unified Communications Manager page**, enter the following:

- Cisco Unified Communications Manager: <CUCMName>, IP address or DNS name of the server, for example **10.10.4.2**.

  Note This server must be running CCM and SNMP services. Do not define more than one CCM server within the same CCM cluster in the CER configuration.

- CTI Manager: <CTIManagerIP>, IP address or DNS name of the CTI manager for the cluster to which the server belongs, for example **10.10.4.2** (Unified CM Subscriber in primary POP)
- CTI Manager User Name: <CERCUCMUser>, for example **CERUser**. (created earlier)
- CTI Manager Password: <CTIManPass>, for example **cisco123** (created earlier)
- Backup CTI 1 Manager: <BackupCTI1manager>, IP address or DNS name of the first backup CTI manager for the cluster, for example **10.10.4.3** (Unified CM Subscriber in secondary POP).
- Backup CTI 2Manager: <BackupCTI2Manager>, IP address or DNS name of the second backup CTI manager for the cluster
- Telephony Port Begin Address: <PortBeginAddress>, the first CTI port address in the sequence of ports created for Cisco ER, for example **3001**
- Number of Telephony Ports: <NumberofPorts>, the number of CTI ports in the sequence you created for Cisco ER's use, for example **10**
- Onsite Alert Prompt Repeat Count-The number of times a prompt is given on the onsite security phone. for example, **2**

Step 4 Click **Insert** to add the Unified CM to the Cisco ER configuration.
Cisco ER adds the Cisco Unified CM server to the list of servers.

Configure the Default ERL and ELIN on CER

Calls from the default ERL are managed by an IP Phone located within the HUCS platform. The HUCS service provider creates a Customer & Location and a dedicated phone at that location, using VOSS-USM as per the generic HUCS provisioning guide.

This section contains the following topics:

Setup onsite alert support for Default ERL

It is recommended that for every ERL at least one onsite security personnel is identified and assigned to the ERL. If an emergency call is made from an ERL, the associated onsite alert personnel receives a telephone call indicating that an emergency call is made. The personnel ID created in this step will be associated with an ERL as detailed in the following section:

For the Default ERL make sure that the Onsite Alert Number is the Service Provider Representative number, as the Default ERL is non-multi tenantable and caters to all the Customer/Location provisioned to use CER.

Note This step is repeated whenever a new onsite personnel has to be added to the Default ERL.

Step 1 In Cisco ER, log into the CER Administration page: https://<Cisco_ER_IP_Address_or_name>/ceradmin:

Step 2 Select **ERL > Onsite Alert Settings**.
Cisco ER opens the Onsite Alert Settings page.

Step 3 Enter the unique ID, name, telephone number of a security or onsite alert person.

Note The telephone number should be entered as a FINT (CPID+RID+SLC+EXT).

Step 4 Use the following available settings:

- CPID—Available on the CCM Cluster Management Page of the PBX Device menu on USM
- RID Code—Available on the Manage Location page of the Location menu on USM
- SLC—Available on the Manage Location page of the Location menu on USM
- Extension (Ext)—Available directly from the phone
- Click **Insert**.

Note CER adds the person to the list of onsite personnel. Repeat until you define all security or onsite personnel.

For further details on Setting up onsite alert support, please go to the following section of the CERAdministration Guide:

http://www.cisco.com/en/US/docs/voice_ip_comm/cer/7_1_1/english/administration/guide/e911conf.html#wpxref64756

Create Default ERL and ELIN

This step creates the Default ERL and uses the Default ELIN for the CER group. In a live deployment this step should be done only after a valid ERL, ELIN and data for the ALI database is available.

Note PSAP Callback is not supported for the Default ERL. The callback from the PSAP with default ERL will be sent to the Service Provider Representative, as the ELIN for the default ERL is the DID of the Service Provider Representative's DN.

The Default ERL is used internally by CER only if no other ERL is configured for a phone. The Default ERL should not be configured for any of the Switch Ports, Unallocated Phones, Manually Configured Phones or IP Subnets. CER uses the Default ERL for all emergency calls when the CER server is first started (or restarted when there is no standby CER server), until the initial switch port update is finished.

It is recommended that a phone / line at a dedicated location belonging to the service provider be used as Onsite Alert for the Default ERL so as to receive calls that are directed to the default ELIN.

Procedure:

Step 1 Choose **ERL > Conventional ERL**.
CER opens the Find and List ERLs page.

Step 2 Click **Configure Default ERL**.
CER opens the ERL Information for Default window.

Step 3 In the **ERL Information for Default** window, configure the following in the ELIN Settings section:

- Route/Translation Pattern—<RTPDefaultERL>, Route Pattern for the Default ERL configured in Cisco Unified CM.
  - To identify the route pattern, log into the Cisco Unified CM Administration page: **https://<Unified_CM_IP_Address_or_name>/ccmadmin.**
  - Choose **Call Routing > Route/Hunt > Route Pattern**.
  - Select **ends with** as the search pattern.
  - Add **911** to the search box and click **Find**. This Route Pattern should be used in CER, for example: **29999999999.911**
- ELIN: <ELINDefaultERL>, for example **4085550001** (The Elin should be a DID number from the Service Provider Representative's Location)
- Onsite Alert Settings—Highlight the available IDs under Available Onsite Alert IDs

Step 4 Click Add

Step 5 Add ALI data.

For detailed information refer URL:

http://www.cisco.com/en/US/docs/voice_ip_comm/cer/7_1_1/english/administration/guide/e911page.html#wp1009232

Modify Default Route Pattern on the CUCM

In Cisco Unified CM, to create a Cisco ER Cisco Unified CM user do the following:

Step 1 Log into the Cisco Unified CM Administration page: **https://<Unified_CM_IP_Address_or_name>/ccmadmin**

Step 2 Choose Ca**ll Routing > Route/Hunt > Route Pattern.**

Step 3 Select **ends with** as the search pattern.

Step 4 Add **911** to the search box and click **Find**.

Step 5 Click the **Route Pattern**, for example: **29999999999.911**

Step 6 Under the **Calling Party Transformations,** modify the following

- Calling Party Tranformation mask—Change the value of this field to the FINT of the Default ELIN (CPID + RID + 8 + SLC+ EXT)

Step 7 Under the **Called Party Transformations,** modify the following

- Called Party Transform Mask—Change the value in this field by entering the internal number (8 + SLC + EXT) of the Service Provider Representative
- Prefix Digits (Outgoing Calls)—Modify this field by deleting the contents, if any, of this field

Step 8 Click **Save**.

Add Cisco ER partition to the IncomingToCluster CSS

VOSS-USM cannot add additional partitions to an existing CSS. The created CER partition (for example EUSA) should be manually added to the IncomingToCluster CSS.

Caution This step is run once after the CER is being provsioned for the first time on a CUCM Cluster.

In Unified CM, to add the created CER partition (for example EUSA), to the IncomingToCluster CSS do the following:

Step 1 Log into the Cisco Unified CM Administration page: **https://<Unified_CM_IP_Address_or_name>/ccmadmin**.

Step 2 Choose **Call Routing > Class of Control > Calling Search Space.**

Step 3 Click **Find** and select the **IncomingToCluster** CSS.

Step 4 Choose the created CER partition (for example **EUSA**) in the **Available Partitions list** box and add it to the Selected Partitions list box by clicking the **arrow button** between the two list boxes.

Step 5 Click **Save.**

Repeat this for all required Unified CMs you want to connect to this CER Group, and for all required CER Groups.

Per-customer PSAP Callback Configuration

For each customer the administrator should provision a 913XXXXXXXXXX DN associated to a RPELIN913 CTI Route Point. This has to be done manually on unified CM in the Hosted UCS 7.1A lite release.

To find the Customer ID in VOSS-USM, do the following:

Step 1 Go to **General Administration > Customers.**

Step 2 Select the Customer for which you want to use Cisco ER for Emergency Handling, for example: **Customer1**

Step 3 Click **Advanced Mgt.**

Step 4 Customer Identified should be available on the next screen, for example: **Customer Identifier - 1**

In Cisco Unified CM, to create the 913XXXXXXXXXX DN associated to a RPELIN913 CTI Route Point, do the following:

Step 1 Log into the Cisco Unified CM Administration page: **https://<Unified_CM_IP_Address_or_name>/ccmadmin**

Step 2 Choose **Device > CTI Route Point**, search for the **RPELIN913** CTI Route Point

Step 3 Select the **RPELIN913** CTI Route Point (if some customers have already been provisioned to use Cisco ER for Emergency handling, you will see multiple **RPEILN913** CTI Route Points). Select any one of them for the next step).

Step 4 Add **new DN.**

- When configuring the platform for the first customer using CER a DN "913XXXXXXXXXX" would have be created by default and hence we do not have to create another one.
- For the second customer onwards you have to add a new DN (select the first available line), for example **Line [2] - Add a new DN**

Step 5 In the Directory Number Information section, configure the Directory Number with **913XXXXXXXXXX.**

Step 6 In the Directory Number Information section, first configure the **Route Partition** by selecting an entry from the drop down box with E#ISO# (where #ISO# is the ISO 3166-1 alpha-3 3-digit country code), for example **EUSA**.

Step 7 Click anywhere else on the screen to update the configuration. This step is used to auto-populate some of the other fields on the line and associate the line with the **RPELIN913 CTI** Route Point.

Step 8 Under Directory Number Settings, configure the Calling Search Space with EmergencyCust<CustomerID>, for example **EmergencyCust3** (Customer Identifier is retreived from VOSS-USM in the previous step).

Step 9 In the Directory Number Information section, change the Route Partition to EmergencyCust<CustomerID>, for example **EmergencyCust3**.

Step 10 Click **Save.**

Step 11 Choose **Device > CTI Route Point**, search for the **RPELIN913** CTI Route Point and check if **RPELIN913** CTI Route Points (with the associated **913XXXXXXXXX** extensions) are registered. If this is not the case, proceed to the next step.

Step 12 Choose **User Management > Application User**, search for the Cisco ER Cisco Unified CM user, for example **CERUser.**

Step 13 Select the Cisco ER Cisco Unified CM user

Step 14 In the Device Information section, select the configured **RPELIN913** CTI Route Point from the **Controlled Devices** area and then click the **up arrow** to remove it temporarily from this area.

Step 15 Click **Save.**

Step 16 In the Device Information section, select the configured **RPELIN913** CTI Route Point from the Available Devices area and then click the **down arrow** to add the selected devices to the user's control list. The list of devices appears in the Controlled Devices area

Step 17 Click **Save.**

Step 18 Choose **Device > CTI Route Poin**t, search for the **RPELIN913** CTI Route Point and verify that all **RPELIN913** CTI Route Points (with the associated **913XXXXXXXXX** extensions) are registered

Create Hardware Group with CER

BVSM uses Hardware Groups to determine which Network Components should be provisioned when; for example, an ELIN is is added to an ERL. To add a Hardware Group, use the following steps:

Step 1 Choose **Network > Hardware Groups.**

Step 2 Click **Add.**

Step 3 Under **Hardware Group Details,** enter the following:

- Name—<uniquename>; for example **cergr1-pgw4-e4c4-hwgrp**
- Description—<hwgrpdesc>, for example **City 4 CER Group 1-PGW 4-Unified CM Cluster 4**
- Limit usage of this Hard ware Group to—Any Action

Step 4 Under **Available Emergency Responder Servers,** choose the required Cisco ER Group, for example **CERGroup1**.

Step 5 Under **Available Transit Switches**, choose the required PGW, for example **PGW-ENT4.**

Step 6 Under **Available PBX Systems**, choose the required Unified CM Cluster, for example **e4c4.**

Add Location (with Enhanced Emergency Support)

To add Location, refer the VOSS deployment Guide.

While adding Location which needs to have CER support, make sure to check the **Enhancement Emergency Support** check box.

When a location that does not require Enhanced Emergency Support is created, add two site specific route patterns (911 and 9.911) to Unified CM to detect emergency calls, and tag the Calling Party Number with an Emergency call type (CT 4). This enables the PGW to detect emergency calls and handle them differently.

If Enhanced Emergency Support is selected when a location is created, instead of the two route patterns described above, add two site specific translation patterns (911 and 9.911) to Unified CM for detecting emergency calls and route them to Cisco ER.

Adding an ERL and ELIN for a location

This section creates a ERL and uses ELIN(s) provided for this ERL. The following topics are described in this section:

Setup onsite alert support for Conventional ERL

It is recommended that for every ERL at least one onsite security personnel is identified so that they can be assigned to ERLs such that If an emergency call is made from an ERL, the associated onsite alert personnel receive a telephone call indicating that an emergency call is made. The personnel ID created in this step will be associated with an ERL as detailed in the following section

Note This step needs to be repeated whenever a new onsite personnel has to be added to the Conventional ERL.

Procedure:

Step 1 In Cisco ER, log into the CER Administration page: **https://<Cisco_ER_IP_Address_or_name>/ceradmin**.

Step 2 Select ERL > Onsite Alert Settings.
Cisco ER opens the Onsite Alert Settings page.

Step 3 Enter the unique ID, name, telephone number of a security or onsite alert person.

Step 4 Use the following settings:

- Telephone number—Enter as a FINT (CPID+RID+SLC+EXT).
- CPID—Available on the CCM Cluster Management Page of the PBX Device menu on USM
- RID Code—Available on the Manage Location page of the Location menu on USM
- SLC—Available on the Manage Location page of the Location menu on USM
- Extension (Ext)—Available directly from the phone

Step 5 Click **Insert.**

Note CER adds the person to the list of onsite personnel. Repeat until you define all security or onsite personnel.

For further details on Setting up onsite alert support, please go to the following section of the CERAdministration Guide:

http://www.cisco.com/en/US/docs/voice_ip_comm/cer/7_1_1/english/administration/guide/e911conf.html#wpxref64756

Add Emergency Response Location on VOSS-USM

Depending on the requirements, a number of Emergency Response Locations (ERLs) can be associated to a location. For each of the created ERLs a number of ELINs can be defined.

To add an ERL in VOSS-USM, do the following :

Step 1 Go to **Location Administration > Telephony**.

Step 2 Click **Emergency Response Location Management.**

Step 3 Click **Add**.

Step 4 Under **Details**, enter the following:

- Name—<ERLName>, for example E-ERL1
- Description—<ERLDescription>, for example ELOC1-ERL1 Emergency Response Location 1
- Emergency Responder Hardware Group—<ERHwGroup>, for example ccm-pgw-cer-hwgrp

Click **Submit.**

Add ELIN to ERL on the VOSS-USM

For each of the created ERLs a number of ELINs can be defined.

To add an ELIN in VOSS-USM, do the following:

Step 1 Go to **Location Administration > Telephony**.

Step 2 Click **Emergency Response Location Management**.

Step 3 Select an ERL you want to add an ELIN to, for example **ELOC1-ERL1.**

Step 4 Click **Add ELIN**

Step 5 Select a DDI for the ELIN from the drop-down menu, for example **4085550008**

Step 6 Click **Submit.**

VOSS-USM cannot configure CER and therefore you must configure the ERL and ELINs manually.

In VOSS-USM, the information you provide should correspond with the information in VOSS-USM. To get this information from VOSS-USM:

Step 1 Go to **Location Administration > Telephony**.

Step 2 Click **Emergency Response Location Management**

Step 3 Select the ERL you want to configure, for example **ELOC1-ERL1**

Step 4 Use the following settings in the **Emergency Line Identification Numbers (ELINs)**:

- Line Number— <ELINNumber>, for example **408-5550008**
- Route Number— <RoutePattern>, for example **408-5550008.911**

Configure the ERL and ELIN

Step 1 Choose **ERL > Conventional ERL**.
CER opens the Find and List ERLs page.

Step 2 Click **Add New ERL**.
CER opens the ERL Information window.

Step 3 In the **ERL Information** window, configure the following in the ELIN Settings section:

- Route/Translation Pattern— <RTPERL>, Route Pattern for the ERL configured in Cisco Unified CM.
  - To identify the route pattern, log into the Cisco Unified CM Administration page: **https://<Unified_CM_IP_Address_or_name>/ccmadmin**, for example: **https://10.52.211.144/ccmadmin**.
  - Choose **Call Routing > Route/Hunt > Route Pattern**,
  - Select **ends with** as the search pattern.
  - Add **911** to the search box and click **Find**. This Route Pattern should be used in CER, for example: **24085550008.911**
- ELIN—<ELINERL>, for example **4085550008**
- Onsite Alert Settings—Highlight the available IDs under Available Onsite Alert IDs and click **Add**

Step 4 Add ALI data.
For detailed information refer URL:
http://www.cisco.com/en/US/docs/voice_ip_comm/cer/7_1_1/english/administration/guide/e911page.html#wp1009232

Note At this stage you can assign the switch ports to the created Emergency Response Location (ERL). However it is also possible to assign a large number of ports to ERLs at one time by importing a file that contains the required information. For further details on how to assign switch ports to ERLs, please go to the following section of the CERAdministration Guide:
http://www.cisco.com/en/US/docs/voice_ip_comm/cer/7_1_1/english/administration/guide/e911conf.html#wp1050998