Configure Emergency Responder and National E911 Service Provider Enterprise Services

Emergency Responder and National E911 Service Provider Enterprise Services Overview

Cisco Emergency Responder (Emergency Responder) supports National E911 Service Provider for Enterprise Service in the Cisco Unified Communications environment as an alternative to direct connection with the Local Exchange Carrier (LEC). The National E911 Service Provider for Enterprise Service provides local routing and emergency service response for National E911 Service Provider customers. Emergency Responder works in conjunction with National E911 Service Provider to provide emergency services to phones that are on the corporate network (on-premise) and phones that are located away from the corporate network (off-premise).

For more information about configuring Emergency Responder, managing Emergency Responder users, working with ERLs, and other related topics, see the "Add Scheduled National E911 Service Provider Updates" section.

These topics provide an overview of how Emergency Responder operates with National E911 Service Provider for Enterprise Service and how to configure and use Emergency Responder to support National E911 Service Provider Enterprise users.

National E911 Service Provider for Enterprise Service

If you are a subscriber to National E911 Service Provider for Enterprise Service, you can use Emergency Responder to simplify emergency call management. Emergency Responder provides an interface that allows you to enter and synchronize location information directly to the National E911 Service Provider database. Emergency Responder provides location information for emergency calls for both on-premise phones and

off-premise phones and works with National E911 Service Provider and Unified CM to complete emergency calls.

Emergency Responder tracks IP phones by the IP subnet or when someone manually configures and assigns the MAC address. Emergency Responder maintains the status of the phones (on-premise, off-premise, unlocated), and passes on any ALI or ELIN information to National E911 Service Provider. Users with on-premise phones rely on Cisco Unified Communications to route their emergency calls to National E911 Service Provider and the designated emergency provider.

Users with off-premise phones cannot make emergency calls until the users enter in their location and associate this information with their directory number. After the location information has been verified, emergency calls placed from off-premise phones can be completed.

Note Users can only configure one off-premise location for each DID (DN + External Mask). This configuration also applies to shared lines. If two off-premise phones share a DID, the user can only associate one location to the DID.

The following figure shows the interactions between users, Emergency Responder, and National E911 Service Provider.

Figure 1: Understanding the Interactions Between Users, Emergency Responder, and National E911 Service Provider

Emergency Call Flow

When a user makes an emergency call:

1. Unified CM routes the call to Emergency Responder.

2. Emergency Responder routes the call to National E911 Service Provider.

3. National E911 Service Provider receives the 10-digit ELIN for the calling party and obtains the ALI data for the caller from this calling party number.

4. National E911 Service Provider completes the call.

Set Up Support for National E911 Service Provider for Enterprise Service

After you have confirmed your emergency service support with National E911 Service Provider, you must configure Emergency Responder to support National E911 Service Provider for Enterprise Service.

You must complete the tasks described in the following procedure before creating National E911 Service Provider ERLs.

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Note   You must configure the IP address of the DNS server to resolve the URLs provided by National E911 Service Provider before completing these tasks. See *Cisco Unified Operating System Administration Web Interface For Cisco Emergency Responder*.

Procedure

Step 1   Configure the following items in the Validation and Update Interface (VUI):
   a) Upload the certificate provided by National E911 Service Provider.
   b) Validate the certificate.
   c) Configure National E911 Service Provider Account Information.

Step 2   Configure Route Patterns for routing calls to National E911 Service Provider on the Emergency Responder server.

Step 3   Configure Route Patterns and gateway for routing calls to National E911 Service Provider on Unified CM server.

See Understanding Route Plans chapter in *Cisco Unified Communications Manager System Guide,* and the "Gateway Configuration" chapter in the *Cisco Unified Communications Manager Administration Guide*.

Step 4   Create National E911 Service Provider ERL and verify the validity and consistency of the ALI data for the National E911 Service Provider ERL against the National E911 Service Provider TN database.

Step 5   Assign National E911 Service Provider ERLs to switch ports, IP subnets, and unlocated phones.

Related Topics

Set Up National E911 Service Provider VUI Settings

Before you can configure National E911 Service Provider VUI settings, you must have your account information and a certificate from National E911 Service Provider.

Note   To continue emergency service support when there is a failover to the Emergency Responder subscriber, you must upload the certificate file to the Emergency Responder subscriber separately.

Note   After upgrading the Cisco Emergency Responder, upload the certificate again to continue using the National E911 Service Provider Service.

Procedure

Step 1   From Emergency Responder, choose **System > National E911 Service Provider VUI Settings.**

The National E911 Service Provider VUI Settings page displays.

Step 2   Click **Upload Certificate**.
An Upload Certificate window opens.

Step 3   Use the **Browse** button to locate the National E911 Service Provider certificate file, highlight the file, and click the **Upload** button.

Step 4   Enter the **Certificate Password** and the **VUI URL** in the adjacent text boxes. Click **Test and Validate**.

Step 5   Check the **Enable HTTP Proxy** check box if you want to use a proxy server for requests between Emergency Responder and National E911 Service Provider.

Step 6   Enter the **Proxy Host Name/IP Address** of the proxy server, along with the port.

Step 7   Check the **Authentication needed on HTTP Proxy** check box if you want to communicate with the National E911 Service Provider using authentication based proxy server. If you enable this check box, only then the **Proxy User Name** and **Proxy Password** fields are enabled.

Step 8   Enter the configured user name for proxy server in the **Proxy User Name** field and the **Proxy Password** associated to the username.

Step 9   Click the **Test and Validate Certificate** button to test the validity of your certificate.

Step 10   Enter the Account Information.

   • VUI Schema URL

- National E911 Service Provider Account ID

- Max VUI Connections

- Set MyE911 for location Updates: **True**

Note In case the remote users are not updating their locations using MyE911 or Remote Location Manager when Off-premises, set the **MyE911 for Location Updates** flag to **False**.

Step 11 Click **Update**.

Note To replace the National E911 Service Provider VUI certificate, you must delete the existing National E911 Service Provider account and then proceed from Step 1. Else, the **Upload Certificate** option will be grayed out.

For more information about the National E911 Service Provider VUI settings, see National E911 Service Provider VUI Settings.

Step 12 Click **Test Connectivity** to verify whether Emergency Responder can successfully connect to the customer specific account through the National E911 Service Provider VUI.

Related Topics

Set Up National E911 Service Provider Patterns on Emergency Responder

Before any emergency calls can be completed by National E911 Service Provider for Enterprise Service, you must configure the route patterns for routing the call to National E911 Service Provider.

Procedure

Step 1 From Emergency Responder, Choose **System** >**Telephony Settings.**

The Telephony Settings page is displayed.

Step 2 Under National E911 Service Provider Route Pattern Settings, enter the National E911 Service Provider Route/ Translation Pattern and click the **Add** button.

Set Up National E911 Service Provider ERLs

Before you begin

You must first configure National E911 Service Provider route patterns before you can add any National E911 Service Provider ERLs.

Note National E911 Service Provider ERLs differ from conventional ERLs in the following ways:

- You can only select route patterns from a preconfigured list in the Telephony Settings web page.

- You can query and validate ALI data from National E911 Service Provider by using National E911 Service Provider VUI (Validation & Update interface).

- You must submit ALI data (TN Update) to National E911 Service Provider by using National E911 Service Provider VUI before an emergency call can be successfully routed.

Procedure

Step 1 From Emergency Responder, choose **ERL**>**National E911 Service Provider ERL > National E911 Service Provider ERL(Search and List)**.

The Find National E911 Service Provider ERL Data page displays.

Step 2 Click the **Add New ERL** button.

Emergency Responder opens the Add New ERL window. See Find National E911 Service Provider ERL for a detail explanation of each field.

Step 3 Fill in the ERL Information.

Step 4 Click **ALI Details**

Emergency Responder opens the ALI Information window.

Step 5 Enter the ALI Information. The "ALI Information section", *Cisco Emergency Responder Administration Web Interface Appendix A*, contains detailed explanations of each field. To look up an address in the National E911 Service Provider MSAG database, click **Query from National E911 Service Provider**.

Step 6 After entering the ALI Information, click **Pre-validate from National E911 Service Provider**.

Step 7 Make the Add New ERL window the active window if it is not, and click **Insert**.

Emergency Responder saves the ERL and its ALI.

National E911 Service Provider ERL Imports

If you have multiple ERLs, and you want to add them all at once, you can create a file that contains more than one ERL definition, and import all the ERLs at the same time into your Emergency Responder configuration. For more information about importing ERLs, see Import Several ERLs.

National E911 Service Provider ERL Information Export

Use the Export ERL page to create ERL export files for our own use, for example, to back up or move an ERL configuration. For more information about importing ERLs, see Export ERL Information.

Related Topics

Set Up National E911 Service Provider VUI Settings , on page 5

Reconcile ALI Discrepancies

You can use Emergency Responder to compare the records from National E911 Service Provider VUI with the records in the database and displays ALI records that have discrepancies. You can examine each record and choose to update the local record with information from National E911 Service Provider or update National E911 Service Provider's record.

Procedure

Step 1 In Emergency Responder Administration, choose **ERL >** National E911 Service Provider **ERL > View ALI Discrepancies**.

The View National E911 Service Provider ALI Discrepancies page appears.

Step 2 Enter search criteria to find any specific ELINS and click **Find**, or click **Find** without any search criteria to display all National E911 Service Provider ALI discrepancies. The search results appear.

Step 3 Click on the radio button next to the ELIN that you want to view or click **View ALI Discrepancies** to launch the View National E911 Service Provider ALI discrepancies for a particular ELIN.

The View National E911 Service Provider ALI Discrepancies for a particular ELIN window appears.

Step 4 Choose the correct data from either the local Emergency Responder database or from National E911 Service Provider.

Step 5 Click **Save** to save changes to the local Emergency Responder database. Click **Save** National E911 Service Provider **ALI Info** to save changes to the National E911 Service Provider VUI.

Step 6 Click **Close** to close this window.

Related Topics

ERL Data Migration

Emergency Responder supports migrating existing conventional ERLs to National E911 Service Provider ERLs and vice versa.

Migrate Conventional ERL Data to National E911 Service Provider ERL Data

Procedure

Step 1 In Emergency Responder Administration, choose **ERL > ERL Migration Tool**.

The ERL Migration Tool page appears.

Step 2 Choose **Conventional ERL** in the search parameter drop-down list, enter the search criteria, and click **Find**.

Step 3 Select the ERLs that you want to migrate by checking the check box next to the ERL name.

The Enter Route Patterns for ERL Migration window appears.

Step 4 Choose an updated route pattern from the drop-down list.

Step 5 Click **Migrate to** National E911 Service Provider **ERL**.

Related Topics

Migrate National E911 Service Provider ERL Data to Conventional ERL Data

Procedure

Step 1 In Emergency Responder Administration, choose **ERL > ERL Migration Tool**.
The ERL Migration Tool page appears.

Step 2 Choose National E911 Service Provider ERL in the search parameter drop-down list, enter the search criteria, and click **Find**.

Step 3 Select the ERLs that you wish to migrate by checking the check box next to the ERL name.
The Enter Route Patterns for ERL Migration window appears.

Step 4 Enter an updated route/pattern translation pattern in the adjacent text box.

Step 5 Click **Migrate to Conventional ERL**.

Related Topics

ERLs

Add Scheduled National E911 Service Provider Updates

You can create ALI and Secondary Status update schedules between Emergency Responder and National E911 Service Provider. A scheduled ALI update sends newly created TN records to National E911 Service Provider. A scheduled Secondary Status update sends queries to National E911 Service Provider requesting information about records with errors that have been corrected.

Procedure

Step 1 Choose **ERL** > National E911 Service Provider **ERL** > National E911 Service Provider **Schedule** from Emergency Responder.
The National E911 Service Provider Schedule page appears.

Step 2 Choose the days of the week and the time of day that you want to schedule an update.

Step 3   Check the **Enable Schedule** check box if you want to activate this schedule.

Step 4   Choose either **ALI Update Schedule** or **Secondary Status Update Schedule**.

Step 5   Click **Add** to add the schedule to the list of schedules.

Related Topics

Emergency Responder User Management

Emergency Responder Role Management

Emergency Responder User Group Management

Log In to Emergency Responder

Server and Server Group Configuration

Set Up Emergency Responder Cluster and Cluster DB Host

Cisco Unified Communications Manager Cluster Changes

Work with Emergency Responder Locations

Emergency Responder Switch Configuration

Phone Management

National E911 Service Provider ERL - Secondary Status

National E911 Service Provider Schedule

Update Scheduled National E911 Service Provider Update

Procedure

Step 1   From Emergency Responder, choose **ERL**National E911 Service Provider **ERL**National E911 Service Provider **Schedule**.
The National E911 Service Provider **Schedule** page appears.

Step 2   Click the **Edit** link adjacent to the schedule that you want to update.

Step 3   Choose the days of the week and the time of day.

Step 4   Check the **Enable Schedule** check box to activate this schedule.

Step 5   Click **Update** to change the schedule on the list of schedules.

Related Topics

Emergency Responder User Management

Emergency Responder Role Management

Emergency Responder User Group Management

Log In to Emergency Responder

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