



Configuring Cisco Emergency Responder

These topics describe how to configure Cisco Emergency Responder:

- [Overview of Cisco Emergency Responder Configuration, page 4-2](#)
- [Creating Cisco Emergency Responder Users, page 4-4](#)
- [Logging Into and Out of Cisco Emergency Responder, page 4-6](#)
- [Configuring Servers and Server Groups, page 4-8](#)
- [Working with Emergency Response Locations \(ERLs\), page 4-17](#)
- [Configuring Switches for Cisco Emergency Responder, page 4-37](#)
- [Managing Phones, page 4-49](#)
- [Setting up Cisco IP SoftPhone for Cisco Emergency Responder, page 4-63](#)

Overview of Cisco Emergency Responder Configuration

After you install Cisco Emergency Responder (Cisco ER) and configure Cisco CallManager, you can configure Cisco ER so that it begins managing emergency calls. Because using Cisco ER requires different skill sets, you can set up different users to configure different aspects of the product. The [“Creating Cisco Emergency Responder Users”](#) section on page 4-4 describes the user models Cisco ER can accommodate.

This is an overview of the steps you need to complete to configure Cisco ER, and indicates which user types can complete the tasks, with pointers to more detailed information. Some steps can be done in parallel.

Procedure

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- Step 1** Create the users your organization requires for Cisco ER administration. See the [“Creating Cisco Emergency Responder Users”](#) section on page 4-4 and the [“Logging Into and Out of Cisco Emergency Responder”](#) section on page 4-6.
- Step 2** System administrator—Create and configure the Cisco ER groups:
- Create the Cisco ER group. See the [“Configuring a Cisco Emergency Responder Server Group”](#) section on page 4-9.
 - Configure the Cisco ER group’s telephony settings. See the [“Configuring Group Telephony Settings For the Cisco Emergency Responder Server”](#) section on page 4-10.
 - Update Cisco ER servers to the Cisco ER group. See the [“Configuring Cisco Emergency Responder Servers”](#) section on page 4-13.
 - Enter the product license key. See the [“Entering the Cisco Emergency Responder License Key”](#) section on page 4-14.
 - Identify and configure the Cisco CallManager clusters whose emergency calls this Cisco ER group will handle. The network administrator can also perform this step. See the [“Identifying the Cisco CallManager Clusters”](#) section on page 4-15.

- Step 3** Network Administrator—Identify the switches and configure the connection to them:
- a. Enter the SNMP read community strings. See the [“Configuring the SNMP Connection”](#) section on page 4-38.
 - b. Define the schedule Cisco ER should use for updating information from the switches. See the [“Defining the Phone Tracking and Switch Update Schedules”](#) section on page 4-41.
 - c. Identify the switches that can have phones connected to them. See the [“Identifying the LAN Switches”](#) section on page 4-42.
 - d. Run the switch-port and phone update process so that Cisco ER can identify the ports on the switches and whether phones are attached to them. See the [“Manually Running the Switch-Port and Phone Update Process”](#) section on page 4-48.
- Step 4** ERL Administrator—Identify your onsite alert (security) personnel, create the emergency response locations (ERLs), assign them to phones, and transmit your ALI data to your service provider. See the [“Understanding ERLs”](#) section on page 4-18 and [“Overview of ERL Management”](#) section on page 4-19 for a more detailed overview of ERL management.
- a. Identify the onsite alert (security) personnel that should receive alerts from Cisco ER. See the [“Identifying Security Personnel \(Onsite Alert Personnel\)”](#) section on page 4-21.
 - b. Create the ERLs. See the [“Creating ERLs”](#) section on page 4-23.
 - c. Assign the ERLs to switch ports. The network administrator must add the switches and run the switch-port and phone update process before you can do this task. See the [“Configuring Switch Ports”](#) section on page 4-50.
 - d. Add phones that Cisco ER does not directly support. Cisco ER does not automatically track the movement of these phones. See the [“Manually Defining a Phone”](#) section on page 4-57.
 - e. Identify the unlocated phones and work with the network administrator to resolve problems that are preventing Cisco ER from locating these phones. Assign ERLs to the phones that remain. See the [“Identifying Unlocated Phones”](#) section on page 4-55.
 - f. Export the ALI data and transmit it to your service provider. Work with your service provider to determine transmission requirements. See the [“Exporting ERL Information”](#) section on page 4-33 and the [“Exporting ALI Information for Submission to Your Service Provider”](#) section on page 4-34.

- Step 5** All administrators—Review these sections to understand your recurring tasks for Cisco ER:
- [Understanding the ERL Administrator’s Role, page 5-4](#)
 - [Understanding the Network Administrator’s Role, page 5-6](#)
 - [Understanding the Cisco Emergency Responder System Administrator’s Role, page 5-7](#)
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Creating Cisco Emergency Responder Users

Before you can log into Cisco Emergency Responder (Cisco ER), you must add users to the Cisco ER groups. These groups are created during Cisco ER installation, and are local to the Cisco ER server.

There are four groups, which correspond to four user security levels:

- **CERSystemAdmin**—For system administrators. Members of this group can create, modify, or view any Cisco ER setting.
- **CERLanSwitchAdmin**—For network administrators. Members of this group can work with network-related settings in Cisco ER, such as adding and removing switches, and setting up the switch discovery schedule.
- **CERERlAdmin**—For ERL administrators. Members of this group can define emergency response locations (ERLs), automatic location information (ALIs), and their associated settings, and map switch ports and phones to ERLs.
- **CERUser**—For security personnel. Members of this group can view the end-user interface, which shows emergency calls and call history, but does not include configuration information.

You should include the same people (user names and passwords) in each group on both the primary and standby servers within a single Cisco ER group. However, access is allowed based on the union of the user groups defined on the two servers. Thus, if a user is only defined in the group on the primary server, that user can still log into the backup server.

Before You Begin

Develop a list of users for each security level, based on Windows user name. You need to know the user names of all security personnel, and you should determine who should have access to each of the administration security levels.

You can always add or remove users later using this procedure.

Procedure

- Step 1** Open the Windows Computer Management control panel (right-click My Computer and select **Manage**, or select **Start>Programs>Administrative Tools>Computer Management**).
- Read the online help for this interface if you have questions about its use.
- Step 2** In the Tree view (left pane), select **System Tools>Local Users and Groups>Groups**.
- Computer Management shows the available groups in the right pane.
- Step 3** Double-click the group to which you want to add users.
- Computer Management opens the properties for the group.
- Step 4** Click **Add** on the properties window.
- Computer Management opens the Select Users or Groups window.
- Step 5** In the Select Users or Groups window, select the user you want to add. You can select the Windows domain where the user is defined at the top of the window. Then, double-click each name you want to add. The names are transferred to the bottom pane when you add them.
- When you have selected all the names you want to add, click **OK**. The names are added to the group. Click **OK** on the properties page to close the window.
- Step 6** Repeat [Step 3](#) to [Step 5](#) until you have added the desired users to each of the groups. At minimum, you need at least one member of the CERSystemAdmin group. You should also assign all security personnel to the CERUser group. Adding members to the other groups is optional; you only need to add members if you want to control administrative access to the product.
- When finished, close Computer Management.
- Step 7** Repeat this procedure on the other Cisco ER server in the Cisco ER group.
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**Tip**

- This procedure describes how to assign users to the groups. Alternatively, you can assign the groups to specific users, by opening the properties for each individual user.
- To remove a user from a group, you must remove the user from groups on both the primary and standby servers.

Related Topics

- [Logging Into and Out of Cisco Emergency Responder, page 4-6](#)
- [Preparing Users for Cisco Emergency Responder, page 5-1](#)

Logging Into and Out of Cisco Emergency Responder

You must log into the Cisco Emergency Responder (Cisco ER) administrative interface to view or change the system configuration. Access is controlled by Windows local groups on the Cisco ER server. See the “[Creating Cisco Emergency Responder Users](#)” section on page 4-4 for an explanation of setting up these groups.

Before You Begin

Your user ID must be added to the appropriate Windows group before you can log into Cisco ER. Contact the main Cisco ER administrator if you cannot log into the interface and you are supposed to have administrative access.

Procedure

Step 1 From an Internet Explorer 5.0 or Netscape Navigator 4.5 browser, or higher, open this URL, where `servername` is the DNS name or IP address of the Cisco ER server: `http://servername/ceradmin`.

The browser opens the CER Server Administration page.

Step 2 Click the link corresponding to the type of access you are allowed to have to the product:

- **CER System Administration**—For system administrators. Allows access to all pages and fields.
- **CER Network Administration**—For network administrators. Allows access to switch configuration pages.
- **CER ERL Administration**—For ERL administrators. Allows access to emergency response location pages.

Clicking one of these links opens the Log-in page.

Step 3 Enter your user name and password, and click **Login**.

Cisco ER logs you into the product. Unless you log in as a system administrator, some commands in the menus will have lock icons. These locks indicate pages you cannot view because of your authorization level.

If another administrator is logged in, you are asked if you want to invalidate the session and log in.

When you are finished, click **Logout** in the menu bar to log out.

**Tip**

If another administrator is logged in, you might be asked whether you want to invalidate the other session and log in, or you might be prevented from logging in. These are the login rules:

- One ERL and one network administrator can be logged in simultaneously.
 - If a system administrator is logged in, neither an ERL nor a network administrator can log in.
 - A system administrator can invalidate any other administrator's login.
 - An ERL administrator can only invalidate another ERL administrator's session.
 - A network administrator can only invalidate another network administrator's session.
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Related Topics

- [Creating Cisco Emergency Responder Users, page 4-4](#)
- [Preparing Users for Cisco Emergency Responder, page 5-1](#)

Configuring Servers and Server Groups

These topics describe how to configure Cisco Emergency Responder (Cisco ER) servers and server groups, and the telephony connection between the Cisco ER groups and Cisco CallManager:

- [Configuring a Cisco Emergency Responder Server Group, page 4-9](#)
- [Configuring Group Telephony Settings For the Cisco Emergency Responder Server, page 4-10](#)
- [Configuring Cisco Emergency Responder Servers, page 4-13](#)
- [Entering the Cisco Emergency Responder License Key, page 4-14](#)
- [Identifying the Cisco CallManager Clusters, page 4-15](#)

Configuring a Cisco Emergency Responder Server Group

To configure a Cisco Emergency Responder (Cisco ER) server group, you must connect to the administration interface on one of the servers that will be part of the group. A Cisco ER server group consists of up to two Cisco ER servers, a primary and a standby, or backup, server. This redundancy helps ensure that Cisco ER remains available in case one server becomes disabled. The standby server also can handle calls if the primary server is too busy handling other calls or tracking phone movements.

Consider placing the two servers in a group in separate physical locations not separated by a WAN link so that problems that might affect one server do not affect the other, such as a fire, flood, or network disruption. See the [“Data Integrity and Reliability Considerations”](#) section on page 1-35 for more information.

Before You Begin

You must have system administrator authority to configure a Cisco ER server group.

Procedure

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- Step 1** Select **CER Groups > CER Group Settings**.
- Cisco ER opens the CER Group Settings page.
- Step 2** Fill in the group settings, as described in the [“CER Group Settings”](#) section on page A-2. Many fields have defaults that should work for most networks. At minimum, you must configure these fields:
- **CER Group Name**—Enter a name for the group. This name is mainly for your use, so choose a name you find meaningful.
 - **SMTP Mail Server** and **Source Mail ID**—If you want Cisco ER to send email alerts to your Cisco ER system administrator and/or onsite alert personnel (site security), enter the IP address or DNS name of a mail server, and the name of an account on that server to use for sending email. If you configure email addresses for onsite personnel (see the [“Identifying Security Personnel \(Onsite Alert Personnel\)”](#) section on page 4-21), they receive email alerts from this account when an emergency call is made in their assigned area. If their email address is for an email-based paging system, they are paged.

- **System Administrator Mail ID**—If you want Cisco ER to send email alerts in the case of critical errors, enter the email account information for the system contact.
- **Enable Syslog and Syslog Server**—If you are using CiscoWorks2000 as your network management software, you can configure Cisco ER to send log messages to the Syslog Collector. To use Syslog Collector, select **Enable Syslog** and enter the fully-qualified DNS name of the Syslog server.

Step 3 When you are satisfied with your settings, click **Update Settings**.

Cisco ER creates the Cisco ER group.

Related Topics

- [Configuring Cisco Emergency Responder Servers, page 4-13](#)
- [CER Group Settings, page A-2](#)
- [Collecting System Logs with Syslog, page 6-49](#)

Configuring Group Telephony Settings For the Cisco Emergency Responder Server

You must configure the telephony settings to tell Cisco Emergency Responder (Cisco ER) the phone numbers it should use for emergency calls and ELINs.

Before You Begin

You must have system administrator authority to configure the telephony settings.

Before you configure these settings, create the require route points and route patterns in Cisco CallManager. See these topics for more information:

- [Creating the Emergency Call Route Points, page 3-8](#)
- [Creating the Route Patterns for ELINs, page 3-14](#)
- [Creating Route Patterns for Inter-Cisco Emergency Responder-Group Communications, page 3-25](#)

Procedure

Step 1 Select **CER Groups > Telephony Settings**.

Cisco ER opens the Telephony Settings page.

Step 2 Enter the telephony settings, as described in the “[Telephony Settings](#)” section on page A-4:

- **UDP Port Begin**—The first UDP port Cisco ER can use for telephone calls. For example, 32000.
- **Inter CER Group Route Pattern**—The route pattern that other Cisco ER groups will use to route emergency calls to this group, for example, 1000.911.
- **PSAP Callback Route Point Pattern**—The CTI route point you created to receive calls from the PSAP. For example, 913XXXXXXXXXX (913 plus 10 Xs).
- **ELIN Digit Strip Pattern**—The digits to strip from the PSAP callback route point to reveal the ELIN. For example, 913.
- **Route Point for Primary CER Server**—The route point you created for the Cisco ER primary server to use. For example, 711. You may change this number. See the “[Modifying the Emergency Number](#)” section on page 4-11.
- **Route Point for Standby CER Server**—The route point you created for the Cisco ER standby server to use. For example, 912.

Step 3 Click **Update Settings** to save your changes.

Modifying the Emergency Number

With Cisco ER 1.2, you can configure or modify the emergency number that was automatically set at installation time, by entering the number in the **Route Point for Primary CER Server field**. Before you configure or change the emergency number, be sure to configure the new route point and associate it with the Cisco ER user in Cisco CallManager.



Caution

Modify the emergency number during off-peak hours.

To modify the emergency number, perform the following steps:

Procedure

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- Step 1** Associate the new route point with the Cisco ER user in Cisco CallManager. See [“Creating a Cisco Emergency Responder Cisco CallManager User”](#) section on page 3-27.
- Step 2** Modify the route point for the new number: enter the number in the field **Route Point for Primary CER Server**.
- Step 3** Click **Update Settings**.



Note

Cisco ER can still support only one emergency number; once you change it, Cisco ER will start routing calls received at the new emergency number route point.

Related Topics

- [Telephony Settings](#), page A-4
- [Creating the Emergency Call Route Points](#), page 3-8
- [Creating the Route Patterns for ELINs](#), page 3-14
- [Creating Route Patterns for Inter-Cisco Emergency Responder-Group Communications](#), page 3-25
- [Identifying the Cisco CallManager Clusters](#), page 4-15

Configuring Cisco Emergency Responder Servers

With Cisco Emergency Responder 1.2 (Cisco ER), you add Cisco ER servers when you start the Cisco ER services. You no longer insert servers from Cisco ER's Server Settings page. (See the [“Installing Cisco Emergency Responder 1.2 on a New System”](#) section on page 2-5.)

After you create a Cisco Emergency Responder (Cisco ER) group (see the [“Configuring a Cisco Emergency Responder Server Group”](#) section on page 4-9), you can use the Server Settings page to update Cisco ER server settings (such as, to change the server name or to change the trace and debug settings) and to delete servers.

**Note**

Do not use the Server Settings page to change the Server Host Name.

Before You Begin

You must have system administrator authority to update or delete a Cisco ER server.

Procedure

-
- Step 1** Select **CER Group > Server Settings**.
- Cisco ER opens the Server Settings page.
- Step 2** To change the server settings (name or Trace and Debug settings), select the server in the left-hand list. Cisco ER loads the server's settings into the edit boxes. Make your changes and click **Update**.
- Step 3** To remove a server from the group, select the server and click **Delete**. If you are permanently removing the server from your network, ensure that you make any required changes to your telephony network so that calls are not misdirected or dropped. If you delete the primary server, Cisco ER prompts you to identify the new primary server. The standby server continues to be the standby server.
- Step 4** When you are satisfied with your settings, click **Update**.
- Cisco ER saves your changes and displays them in the list of servers in the left-hand column.
-

Related Topics

- [Installing Cisco Emergency Responder 1.2 on a New System, page 2-5](#)
- [Configuring a Cisco Emergency Responder Server Group, page 4-9](#)
- [Configuring Group Telephony Settings For the Cisco Emergency Responder Server, page 4-10](#)
- [Identifying the Cisco CallManager Clusters, page 4-15](#)
- [Server Settings \(for CER Group\), page A-6](#)

Entering the Cisco Emergency Responder License Key

You must enter a valid Server License Key to use Cisco Emergency Responder (Cisco ER) 1.2. If you have over 100 users, you must also enter a valid User License Key. Be sure to have these keys on hand before you begin this procedure.

**Note**

If you are unsure about which license key(s) you require, see [Table 1-8 on page 1-22](#).

Before You Begin

You must have system administrator authority to enter the license key.

Procedure

-
- Step 1** Select **CER Group > License Manager**.
- Cisco ER opens the License Manager page. The license you have already configured appears in the left-hand list.
- Step 2** Enter the Server License Key you obtained with the product in the **License Key** field and click **Insert**.

**Tip**

The Server License Key starts with **UT**.

Cisco ER replaces any existing key with the key you enter.

- Step 3** If you have more than 100 users, enter the User License Key you obtained with the product in the **License Key** field and click **Insert**.
-

**Tip**

- Click a license in the list of licenses to view information about what usage the license supports.
 - Click **New** when viewing a license to add an additional license.
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Related Topics

- [License Manager, page A-8](#)

Identifying the Cisco CallManager Clusters

You must identify one Cisco CallManager server per Cisco CallManager cluster that you want to manage with the Cisco ER group you are configuring. Cisco ER gets the list of phones registered with these Cisco CallManager servers and tracks the movements of these phones

Cisco ER 1.2 provides three levels of CTI failover. To enable the three levels of CTI failover, enter an IP address or DNS name for the primary CTI Manager; the Backup CTI Manager 1; and the Backup CTI Manager 2.

Before You Begin

You must have system administrator or network administrator authority to identify the Cisco CallManager clusters.

Every Cisco CallManager server in the Cisco CallManager cluster must be running SNMP services so that Cisco ER can obtain the required information from the server.

Before configuring these settings, create the required users and CTI ports. This information must be complete before Cisco ER tries to create a provider with the Cisco ER cluster. Cisco ER only registers the CTI ports and route points that are associated with the user when the provider is created. See these topics for more information:

- [Creating a Cisco Emergency Responder Cisco CallManager User](#), page 3-27
- [Creating the Required CTI Ports](#), page 3-12

Procedure

Step 1 Select **Phone Tracking>Cisco CallManager Details**.

Cisco Emergency Responder opens the Cisco CallManager Details page.

Step 2 Enter the details for the Cisco CallManager server:

- **Cisco CallManager**—The IP address or DNS name of the server. This server must be running Cisco CallManager and SNMP services. Do not define more than one Cisco CallManager server within the same Cisco CallManager cluster in the Cisco ER configuration.
- **CTI Manager**—The IP address or DNS name of the CTI manager for the cluster to which the server belongs.
- **CTI Manager User Name**—The user you created for Cisco Emergency Responder. See the [“Creating a Cisco Emergency Responder Cisco CallManager User”](#) section on page 3-27 for more information.
- **CTI Manager Password**—The user’s password.
- **Backup CTI 1 Manager**—The IP address or DNS name of the first backup CTI manager for the cluster.
- **Backup CTI 2Manager**—The IP address or DNS name of the second backup CTI manager for the cluster.
- **Telephony Port Begin Address**—The first CTI port address in the sequence of ports you created for Cisco ER’s use. See the [“Creating the Required CTI Ports”](#) section on page 3-12 for more information.
- **Number of Telephony Ports**—The number of CTI ports in the sequence you created for Cisco ER’s use.

Step 3 Click **Insert**.

Cisco ER adds the Cisco CallManager server to the list of servers in the left-hand column. Repeat this procedure if you are supporting other Cisco CallManager clusters with this Cisco ER group.

**Tip**

- To view or change a Cisco CallManager server's settings, click the server in the left-hand list of servers. The settings are loaded into the edit boxes. To change a setting, edit it and click **Update**.
 - To remove a Cisco CallManager server from the Cisco ER configuration, click it in the list of servers, then click **Delete**.
-

Working with Emergency Response Locations (ERLs)

An emergency response location (ERL) defines the area in which an emergency call is made. Security personnel and emergency response teams use ERL information to locate an emergency caller.

Cisco Emergency Responder (Cisco ER) system administrators or ERL administrators can create and modify ERLs. These sections explain ERLs in greater detail and explain how to work with them in CER:

- [Understanding ERLs, page 4-18](#)
- [Overview of ERL Management, page 4-19](#)
- [Identifying Security Personnel \(Onsite Alert Personnel\), page 4-21](#)
- [Creating ERLs, page 4-23](#)
- [Exporting ERL Information, page 4-33](#)
- [Exporting ERL Information, page 4-33](#)
- [Viewing the Audit Trail for an ERL, page 4-36](#)

Understanding ERLs

An emergency response location (ERL) is a building, area within a building, or outside area (if you extend phone service outdoors) that is to be treated as a single location for emergency response purposes. All telephones within the ERL are treated as coming from the same location.

Thus, when someone makes an emergency call, the public safety answering point (PSAP) and your onsite alert (security) team are notified of the ERL. If the emergency requires locating the individual who placed the emergency call, the response teams will have to find the person within the ERL. You can include more specific information using the Phone Location field for individual switch ports. This level of detail is only available for automatically tracked phones, and only appears on the Web Alert screen for onsite alert personnel.

This is similar to the way emergency calls are handled for individual home users: emergency response teams know the house from which the call was placed, but have to search from room to room until they find the caller. The bigger the house, the longer the potential search. Likewise, the larger you make your ERLs, the longer it might take a response team to find an emergency caller.

The laws relating to size of ERLs can vary for different cities, states, and countries. You are responsible for learning your local statutes and developing ERLs that satisfy those statutes. Work with your telephone service provider; they can help you understand the laws. Ultimately, you will have to submit the automatic location information (ALI) for your ERLs to your service provider so that calls from your ERLs are routed to the appropriate PSAPs.

Here are some examples of possible ERLs:

- You have a 25-story building, each floor has 10,000 square feet of office space. You might create 25 ERLs, one per floor. Better, you could divide each floor in half and create 50 ERLs, two per floor.
- You have 5 buildings. Each building was a former home, and they are approximately 3000 square feet. You might create 5 ERLs, one per building, even though some of the buildings are multi-story.

- You have a 5 story building, but the building is very large, so that each floor has 100,000 square feet of office space. You might create 20 ERLs per floor for a total of 100 ERLs, each ERL covering approximately 5,000 square feet.
- You have a high concentration of telephones, and local standards require that an ERL have no more than 48 telephones. In this case, you will have to define zones based on telephone coverage, rather than on physical space. Try to create zones that are recognizable as a physical location, for example, BldJFloor5Row3.

Related Topics

- [Overview of ERL Management, page 4-19](#)
- [Creating ERLs, page 4-23](#)
- [Exporting ERL Information, page 4-33](#)
- [Understanding E911 and Cisco Emergency Responder Terminology, page 1-3](#)
- [What Happens When an Emergency Call Is Made, page 1-28](#)

Overview of ERL Management

To establish a useful set of ERLs, consider following these steps:

1. Become familiar with local statutes on emergency call requirements. Local laws might have specific requirements or recommendations on the maximum size of an ERL (for example, no larger than 7,000 square feet).
2. Talk to your service provider to learn about their rules or recommendations.
3. Work with the security personnel in your organization to determine what they feel is required for them to effectively respond to an emergency call. Besides having suggestions about the size of the various zones, security personnel should also review the ERL naming strategy you propose to use, because the ERL name will be one of the major data points they will use to locate the emergency caller.

Security personnel also can use these fields to help locate a caller:

- The Location field in the ALI, which you can use to clarify ERL names, for example, by including the complete street address of the building. Although security can also view the ALI from the Cisco Emergency Responder (Cisco ER) user interface, it takes a few extra steps to view the entire ALI, so including a complete address in the Location field can expedite response.
 - The Phone Location field associated to the switch port. You can use this field to fine-tune the location, for example, by specifying the office or cube number that the port serves.
4. Use Cisco ER to enter information about your security (onsite alert) personnel. You should enter this information before defining the ERLs, because during ERL definition, you will assign personnel to each ERL. See the [“Identifying Security Personnel \(Onsite Alert Personnel\)”](#) section on page 4-21 for more information.
 5. Use Cisco ER to define the ERLs and their ALI. See the [“Creating ERLs”](#) section on page 4-23 for more information.
 6. Assign switch ports to the correct ERL and define the phone location for the port. See the [“Configuring Switch Ports”](#) section on page 4-50 for more information. Someone with network administrator authority must first add the switches to the Cisco ER configuration before you can complete this task.
 7. Define any phones that are not directly supported by Cisco ER. See the [“Manually Defining a Phone”](#) section on page 4-57, for more information.
 8. After you are satisfied with the ERL and ALI definitions, export the ALI information and submit it to your service provider. Work with your service provider to determine the file format and submission requirements. You must submit this information so that emergency calls from your ERLs can be routed to the correct public safety answering point (PSAP). See the [“Exporting ERL Information”](#) section on page 4-33 and the [“Exporting ALI Information for Submission to Your Service Provider”](#) section on page 4-34 for more information.

After you complete this task, emergency calls from your ERLs should result in the correct onsite response personnel receiving notification of an emergency call, and the correct local PSAP receiving the actual emergency call.



Note Ensure that you submit each ALI export file as you create it. The ALI export records include an indication that the record is either new or modified. If you do not submit an ALI export file, the subsequent file you submit might have incorrect status indications, which can result in your service provider rejecting some, or possibly all, of your submitted records.

9. Ensure you update the ERL, ALI, and switch port information as you:
 - Add or remove switches or ports
 - Add or remove manually defined phones
 - Add or remove ERLs
 - Update ALIs

Any time you update the ELINs for an ERL, or the ALI, you should re-export ALI data and submit it to your service provider.

Related Topics

- [Understanding ERLs, page 4-18](#)
- [Understanding the ERL Administrator's Role, page 5-4](#)

Identifying Security Personnel (Onsite Alert Personnel)

You must identify your security, or onsite alert, personnel so that you can assign them to your emergency response locations (ERLs). If an emergency call is made from an ERL, the associated onsite alert personnel receive:

- A web-based alert on the Cisco Emergency Responder (Cisco ER) end-user interface.



Note Cisco ER1.2 supports real-time web-based alerts.

- An email message. If you use an email-based paging address, the message will result in a page.
- A telephone call indicating that an emergency call was made.

Before You Begin

You must log into Cisco ER with system administrator or ERL administrator authority.

Collect information about all of your onsite alert personnel, including names, telephone numbers, and email addresses. Also, develop a unique identification name for each, if you do not already have one readily available (such as badge number).

Procedure

Step 1 Select **ERL>Onsite Alert Settings**.

Cisco ER opens the Onsite Alert Settings page.

Step 2 Enter the unique ID, name, telephone number, and email address of a security or onsite alert person.

Unique ID might be a badge number, email name, or other site-specific unique name. You will use this ID to assign the person to an ERL, so ensure that you use a naming strategy useful to you.

You can use an email-based paging address for the email address, so that onsite alert personnel receive a page rather than an email.

Step 3 Click **Insert**.

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



Tip

- To delete a person, first remove the person from all ERL definitions. Then click the delete icon on that person's record on the Onsite Alert Settings page.
 - To change a person's information, select the person from the list and modify the information that is presented in the edit boxes at the top of the page. You cannot change a person's unique ID: to change the unique ID, delete the person's entry and create a new one.
-

Related Topics

- [Onsite Alert Settings, page A-26](#)
- [Creating ERLs, page 4-23](#)

Creating ERLs

These sections describe how to create emergency response locations (ERLs):

- [Setting Up the Default ERL, page 4-23](#)
- [Setting up ERLs for Non-PSAP Deployment, page 4-25](#)
- [Setting Up an Individual ERL and Its Automatic Location Information \(ALI\), page 4-25](#)
- [Importing Several ERLs at Once, page 4-27](#)

Setting Up the Default ERL

Cisco Emergency Responder (Cisco ER) 1.2 does not automatically assign new switch ports and unlocated phones to the Default emergency response location (ERL). New switch ports and unlocated phones are treated as “ERL not configured.”

You must not configure the Default ERL to any of the Switch Ports, Unlocated Phones, Manually Configured Phones or IP Subnets. The Default ERL is used internally by Cisco ER only if no other ERL is configured for that phone.

Cisco ER 1.2 also uses the Default ERL for all emergency calls when the Cisco ER server is first started (or restarted when there is no standby Cisco ER server) until the initial switch port update is finished. (This process is started immediately.)

Before You Begin

You must log into Cisco ER with system administrator or ERL administrator authority.

You must first configure the required ELINs in Cisco CallManager (see the “[Setting Up the ELIN Numbers to Route Emergency Calls and Enable PSAP Callbacks](#)” section on page 3-13).

Procedure

- Step 1** Select **ERL > ERL Details**.
- Cisco ER opens the Find and List ERLs page.
- Step 2** Click **Configure Default ERL**.
- Cisco ER opens the ERL Information for Default window.
- Step 3** Fill in the ERL Information for Default window. The [“Add New ERL” section on page A-13](#) contains detailed explanations of each field.
- Step 4** Click **ALI Details**.
- Cisco ER opens the ALI Information window.
- Step 5** Fill in the ALI Information window. The [“ALI Information \(for Default\)” section on page A-17](#) contains detailed explanations of each field.
- When finished filling in the ALI, click **Update ALI Info**. Cisco ER saves your ALI. Click **Close** to close the window.
- Step 6** Make the ERL Information for Default window the active window if it is not, and click **Update**.
- Cisco ER saves the ERL and its ALI.
- Step 7** Click **Close** to close the window.
-



Tip

You cannot delete the default ERL.

Related Topics

- [Find and List ERLs, page A-10](#)
- [Add New ERL, page A-13](#)
- [ALI Information \(for Default\), page A-17](#)
- [Setting Up an Individual ERL and Its Automatic Location Information \(ALI\), page 4-25](#)
- [Understanding ERLs, page 4-18](#)
- [Overview of ERL Management, page 4-19](#)

Setting up ERLs for Non-PSAP Deployment

You may want to deploy Cisco ER for on-site alerts only. That is, instead of routing emergency calls to a public safety answering point (PSAP), you route emergency calls to a specified security phone.

There are two ways to set up non-PSAP deployments:

Configure Security IDs Only—In this scenario, you configure security IDs for the zones for any ERL; you do not configure route/translation patterns. All emergency calls are routed to the zone security. If this fails, the calls are routed to the default zone security. Cisco ER then initiates a call to the configured security phone and plays prompts to alert security personnel to the emergency call.

Configure Security IDs and Route/Translation Patterns—In this scenario, you configure security IDs for the zones for any ERL and you also configure a route/translation pattern without an ELIN number. Cisco ER displays a popup warning message alerting you that this zone will not have an ELIN. The emergency call is routed using the route/translation pattern; if this fails, the default pattern is used. Cisco ER then initiates a call to the configured security phone and plays prompts to alert security personnel to the emergency call.



Note In this scenario, you must use a different route/translation pattern for each zone.

Setting Up an Individual ERL and Its Automatic Location Information (ALI)

This section explains how to define a single ERL. Because several ERLs often have similar information, see the [“Importing Several ERLs at Once” section on page 4-27](#) section for strategies for simplifying the definition of similar ERLs.

Before You Begin

You must log into Cisco Emergency Responder (Cisco ER) with system administrator or ERL administrator authority.

Procedure

- Step 1** Select **ERL > ERL Details**.
- Cisco ER opens the Find and List ERLs page.
- Step 2** Click **Add New ERL**.
- Cisco ER opens the Add New ERL window.
- Step 3** Fill in the Add New ERL window. The [“Add New ERL” section on page A-13](#) contains detailed explanations of each field.
- Step 4** Click **ALI Details**.
- Cisco ER opens the ALI Information window.
- Step 5** Fill in the ALI Information window. The [“ALI Information \(for Default\)” section on page A-17](#) contains detailed explanations of each field.
- When finished filling in the ALI, click **Save ALI Info**. Cisco ER saves your ALI. Click **Close** to close the window.
- Step 6** Make the Add New ERL window the active window if it is not, and click **Insert**.
- Cisco ER saves the ERL and its ALI.
- Step 7** Click **Close** to close the window.
-



Tip

- To create an ERL that is similar to an existing ERL, click **Find** to list the existing ERLs, then click copy for the similar ERL. Cisco ER creates a copy of some ERL and all ALI information, which you can modify for the new ERL.
 - You can create tags to simplify the ALI definition process. Navigate to the ALI Information window, and look for information about the location of the samplevalidate.txt file. The sample file explains how to set up tags. When you have created the desired tags, select the tag name on the ALI Information window and the ALI fields are loaded with the settings associated with the tag.
-

Related Topics

- [Find and List ERLs, page A-10](#)
- [Add New ERL, page A-13](#)
- [ALI Information \(for Default\), page A-17](#)
- [Importing Several ERLs at Once, page 4-27](#)
- [Understanding ERLs, page 4-18](#)
- [Overview of ERL Management, page 4-19](#)

Importing Several ERLs at Once

Rather than defining ERLs one at a time, as described in the “[Setting Up an Individual ERL and Its Automatic Location Information \(ALI\)](#)” section on [page 4-25](#), you can create a file that contains more than one ERL definition, and import these ERLs at the same time into your Cisco Emergency Responder (Cisco ER) configuration. This is especially useful if you already have ERL definitions set up in a spreadsheet, or if you are recovering an Cisco ER configuration using ERL data exported from Cisco ER.

Before You Begin

You must log into Cisco ER with system administrator or ERL administrator authority.

Prepare an import file. Cisco ER includes detailed information about the required file format on the Import ERL Data page. The page also includes the location in which you must place the file in order to import it. Use the procedure below to go to the page and view the format, create your file, copy the file to the required location, and then follow the procedure to import the file.

Procedure

- Step 1** Select **ERL > ERL Details**.
Cisco ER opens the Find and List ERLs page.
- Step 2** Click **Import ERL Data**.
Cisco ER opens the Import ERL Data page.
- Step 3** Select the format of your import file, and select your import file.

Step 4 Click **Import**.

Cisco ER imports your ERL and associated ALI data, and displays the status of the import as it proceeds. The imported data overwrites existing conflicting data in the Cisco ER configuration.

Step 5 Click **Close** to close the Import ERL Data window.**Related Topics**

- [Import ERL Data, page A-24](#)
- [Setting Up an Individual ERL and Its Automatic Location Information \(ALI\), page 4-25](#)
- [Understanding ERLs, page 4-18](#)
- [Overview of ERL Management, page 4-19](#)

Converting ALI Data

Use the PS-ALI Converter tool to generate an ERL csv (Comma Separated Value) text file that can be accepted by the Cisco Emergency Responder (Cisco ER) ERL. You import an existing ALI file in NENA 2.0 format.

Before You Begin

You must log into Cisco Emergency Responder (Cisco ER) with system administrator or ERL administrator authority.

Procedure**Step 1** Select **Tools>PS-ALI Converter**.

Cisco ER displays the PS-ALI Converter page.

Step 2 At the Select PS-ALI file (NENA 2.0 format) field, make sure the default value, NENA format 2.0 is selected.**Step 3** At the Output file (in csv format) Name, enter the name of the csv file you want to create.

Step 4 Click **Convert** to create the csv file.

The generated csv file is output at this location:

```
%cerroot%/import
```

Step 5 Modify the converted csv file. For example, add the ERL name, route pattern, and security details to update the ERL.

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

Related Topics

- [Import ERL Data, page A-24](#)
- [Setting Up an Individual ERL and Its Automatic Location Information \(ALI\), page 4-25](#)
- [Understanding ERLs, page 4-18](#)
- [Overview of ERL Management, page 4-19](#)

Configuring IP Subnet-based ERLs

In addition to supporting switch port-based ERLs, Cisco Emergency Responder (Cisco ER) 1.2 supports IP subnet-based (Layer 3) ERLs. You can configure IP subnets and assign ERLs to the configured IP subnets; Cisco ER then routes the emergency calls based on the configured IP subnet and ERL associations.

This is useful in environments where strict IP addressing rules are followed and cubicle-level location is not required, such as configurations with wireless phones.



Note

Be aware that subnet-based tracking covers only to the IP subnet level, not to the cubicle level.

Use IP subnet-based ERLs to locate and track 802.11b endpoints, such as Cisco Wireless IP 7920 Phones and Cisco IP SoftPhones running on 802.11b. Cisco ER cannot locate or track 802.11b wireless endpoints to a Cisco Access Point. It is recommended that:

- You configure a subnet-ERL for each access point.
- You identify the switch port to which the access point is connected and you assign the 802.11b wireless endpoint to the subnet ERL that is configured for that access point.

Before You Begin

You must have system administrator or ERL administrator authority to access this page.

Procedure

-
- Step 1** Select **ERL Membership > IP Subnets** and click the **Add new IP Subnet** link on the Find and List IP Subnets page.
Cisco ER opens the Configure IP Subnets page.
 - Step 2** At the Subnet ID field, enter the IP address of the subnet you want to define, for example, 10.76.35.0.
 - Step 3** At the Subnet Mask field, enter the mask of the subnet you want to define, for example, 255.255.255.224.
 - Step 4** At the ERL Name field, enter the ERL you want to assign to the subnet. Select the ERL from the drop-down list or type in a valid ERL name.
 - Step 5** Click **Insert** to add the subnet.
A popup message requests that you force a switch port update. You can do this after all the IP subnets have been added.
 - Step 6** To change the fields on this page back to the last saved settings, click **Cancel Changes**.
 - Step 7** To return to the Find and List IP Subnets page, click **Back to IP Subnet Search**.
-

Related Topics

- [Synthetic Phone Search, page A-59](#)
- [Add/Modify Synthetic Phones, page A-60](#)

Configuring Test ERLs

With Cisco Emergency Responder (Cisco ER)1.2, you can use CiscoWorks IP Telephony Environment Monitor (ITEM) 2.0 to monitor the health and functionality of Cisco ER.

To use ITEM with Cisco ER, you configure a test ERL, then add a synthetic phone and associate the synthetic phone to the test ERL. When a synthetic phone makes an emergency call, Cisco ER uses the associated test ERL to route the call.

**Note**

You can configure test ERLs only to synthetic phones.

All synthetic phones used for Cisco ER testing must belong to one of the configured test ERLs. For phones used for test ERLs, you enter the MAC address or address range allotted for synthetic phones.

The following conditions apply to test ERLs:

- Calls from synthetic phones will not be logged in Call History logs.
- Web alerts will not be generated for emergency calls from synthetic phones.
- PS-ALI records for test ERLs will not be exported in NENA export files.

**Tip**

You do not need to enter ALI data for test ERLs. Non-test ERLs must contain ALI data.

Before You Begin

You must have system administrator or ERL administrator authority to reach this page.

Procedure

Step 1 Select **ERL > ERL Details** and click **Add New ERL** on the ERL Configuration page.

Step 2 At the ERL field, type a name for the test ERL.

Step 3 At the Test ERL field, check the box to select it.



Note

This setting is not available on the ERL Information for Default; default ERLs may not be used as test ERLs.



Note

Do not click **ALI Details** to enter ALI data. You do not need to enter ALI data for test ERLs; only non-test ERLs must contain ALI data.

Step 4 Click **Insert** to save the test ERL and click **Close** to close the window.

Step 5 Select **ERL Membership > Synthetic Phones** and click **Add New Synthetic phone** on the Find and List Synthetic Phones page.

Step 6 At the MAC Address field, enter the MAC address or the range of MAC addresses allotted for synthetic phone.

Enter the MAC address in this format:

xx-xx-xx-xx-xx-xx

or

xxxxxxxxxxxx

The synthetic MAC address must be within the following range:

00059a3b7700 - 0059a3b8aff

Step 7 At the ERL Name field, enter the test ERL that you want to assign to the synthetic phone. Select the configured test ERL from the drop-down list or type in a valid test ERL name.

Step 8 Click **Insert** to add the phone to the list of defined synthetic phones.

- Step 9** To change the fields on this page back to the last saved settings, click **Cancel Changes**.
- Step 10** To return to the Find and List Synthetic Phones page, click **Back to Synthetic Phone Search**.
-

Related Topics

- [Synthetic Phone Search, page A-59](#)
- [Add/Modify Synthetic Phones, page A-60](#)

Exporting ERL Information

Use the Export ERL page to create ERL export files for your own use, for example, to back up or move an ERL configuration. Do not submit ERL export files to your service provider—they are not exported in a format your service provider can use.

For information on exporting ALI information, refer to the “[Exporting ALI Information for Submission to Your Service Provider](#)” section on page 4-34.

For information on how to reformat ALI data to be accepted by the ERL, see the “[Exporting ALI Information for Submission to Your Service Provider](#)” section on page 4-34.

Before You Begin

You must log into Cisco Emergency Responder (Cisco ER) with system administrator or ERL administrator authority.

Procedure

- Step 1** Select **ERL > ERL Details**.
- Cisco ER opens the Find and List ERLs page.
- Step 2** Click **Export ERL Data** at the top of the window.
- Cisco ER opens the Export ER Data window.

Step 3 Click **Export**.

Cisco ER creates the export file, and tells you the location where the file was created and how many records were exported.

Step 4 Click **Close** to close the Export ERL Data window.

Related Topics

- [Export ERL Data, page A-22](#)
- [Understanding ERLs, page 4-18](#)
- [Overview of ERL Management, page 4-19](#)

Exporting ALI Information for Submission to Your Service Provider

Your service provider and their database provider need your automatic location information (ALI) so that emergency calls from your ERLs can be routed to the correct public safety answering point (PSAP). The PSAP can also use this information to dispatch emergency response teams (such as police, fire, medical) to deal with the emergency. As you create and update your ERLs and their ALIs, make sure that you export the data and send it to your service provider or the database provider they identify.



Tip

Refer to the ALI Formatting Tool documentation at the following URL for information on sending ALI details to your service provider:
http://www.cisco.com/univercd/cc/td/doc/product/voice/respond/ali_1_1/index.htm

Before You Begin

You must log into Cisco Emergency Responder (Cisco ER) with system administrator or ERL administrator authority.

**Caution**

Ensure that you submit each ALI export file as you create it. The ALI export records include an indication that the record is either new or modified. If you do not submit an ALI export file, the subsequent file you submit might have incorrect status indications, which can result in your service provider rejecting some, or possibly all, of your submitted records.

Procedure

-
- Step 1** Select **Tools>Export ALI Details**.
Cisco ER opens the Export PS-ALI Records page.
- Step 2** At the **Select the NENA Format** field, choose the format required by your service provider from the drop-down list.
- Step 3** At the File to Export field, enter the name of the file to export.
- Step 4** At the **Company Name** field, enter your company name.
- Step 5** Cisco ER automatically increments the Cycle Counter each time you export data. You do not need to change this counter unless you are redoing or correcting a previous exportation. However, changing the sequence number does not affect the data placed in the file—if you are redoing an export, you will have to manually edit the export file to change the record status fields.
- Step 6** Click **Export**.
Cisco ER creates the export file, and tells you the location where the file was created and how many records were exported.
- Step 7** Click **Close** to close the Export ALI Records window.
- Step 8** Use your service provider's method of transmitting the file to the service provider.
-

Related Topics

- [ALI Information \(for Default\), page A-17](#)
- [Export ERL Data, page A-22](#)
- [Export PS-ALI Data, page A-69](#)
- [Understanding ERLs, page 4-18](#)
- [Overview of ERL Management, page 4-19](#)

Viewing the Audit Trail for an ERL

You can view the audit trail for an ERL to determine how, when, and by whom an ERL was created or changed.

Before You Begin

You must have system administrator, ERL administrator, or network administrator authority to view the audit trail.

Procedure

Step 1 Select **Reports>ERL Audit Trail**.

Cisco Emergency Responder (Cisco ER) opens the ERL Audit Trail page.

Step 2 Enter search criteria to select the ERLs whose audit history you want to view.

To view all ERLs, click **Find** without entering any criteria.

To narrow your search:

- a. Select the field you want to search on, select the search relationship, and enter the search string. For some fields, you can select valid strings from the right-most drop-down list.
- b. To search on a combination of fields, click **More** to add additional search fields. Select **Any** at the top of the list to indicate that ERLs that match any search criteria be selected (an OR search); select **All** to indicate that only ERLs that match every criteria be selected (an AND search).
- c. Click **Find** when you have entered all of the search criteria.

Cisco ER lists the matching audit records. If there are a lot of matches, Cisco ER uses several pages to display them. Use the links at the bottom of the list to change pages.

**Tip**

You can also view the audit trail of a specific ERL by clicking **view** in the Audit Trail column in a list of ERLs shown on the Find and List ERLs page.

Related Topics

- [ERL Audit Trail, page A-66](#)
- [Working with Emergency Response Locations \(ERLs\), page 4-17](#)

Configuring Switches for Cisco Emergency Responder

Before you can assign switch ports to ERLs, you must identify the switches used in your network to Cisco Emergency Responder (Cisco ER). These topics describe the switch requirements and how to identify switches to Cisco ER.

- [Understanding Switch Requirements for Cisco Emergency Responder, page 4-38](#)
- [Configuring the SNMP Connection, page 4-38](#)
- [Defining the Phone Tracking and Switch Update Schedules, page 4-41](#)
- [Identifying the LAN Switches, page 4-42](#)
- [Manually Running the Switch-Port and Phone Update Process, page 4-48](#)

Understanding Switch Requirements for Cisco Emergency Responder

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

If some of the phones on your network do not use CDP, Cisco ER tracks them using the CAM table.

Ensure that the switches to which phones are attached are supported by Cisco ER, and that the switches are running the required software version. The [“Network Hardware and Software Requirements”](#) section on page 1-12 lists the supported switches and software versions.

If you are using Catalyst 3500 switch clusters, you must assign IP addresses to every switch. Cisco ER cannot work with a switch unless the switch has an IP address.

Related Topics

- [Configuring the SNMP Connection, page 4-38](#)
- [Defining the Phone Tracking and Switch Update Schedules, page 4-41](#)
- [Identifying the LAN Switches, page 4-42](#)
- [Manually Running the Switch-Port and Phone Update Process, page 4-48](#)

Configuring the SNMP Connection

Cisco Emergency Responder (Cisco ER) uses SNMP to obtain information about the ports on a switch. Cisco ER must obtain this port information so that you can assign the ports to ERLs, and so that Cisco ER can identify phones that are attached to the ports and update their ERL assignments.

Cisco ER only reads SNMP information, it does not write changes to the switch configuration, so you only have to configure the SNMP read community strings.

Before You Begin

You must have system administrator or network administrator authority to define the SNMP settings.

Obtain the read community strings from all of the switches you will define in Cisco ER. If you use different strings for different sets of switches, see if you can define an IP address pattern for these sets. For example, if you use the same string for all switches that begin with 10.1, and another string for switches that begin with 10.2, you can use the patterns 10.1.*.* and 10.2.*.*.

If two or more patterns match an IP address, Cisco ER uses the SNMP string associated with the most closely matching pattern. For example, if you define *.*.*.* and 10.1.*.*, and the IP address is 10.1.12.24, Cisco ER uses the SNMP string defined for 10.1.*.*. The sequence of entries on this page does not affect the selection.

When you configure the SNMP strings for your switches, you must also configure the SNMP strings for your Cisco CallManager servers. Cisco ER must be able to make SNMP queries of all Cisco CallManager servers in the cluster that it supports.

Procedure

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

Cisco ER opens the SNMP Settings page.

Step 2 Enter an IP address pattern to which you want to associate an SNMP read community string. Use the asterisk (*) as a wildcard character. You can also use number ranges for octets, such as 15-30. Because Cisco ER only tries to contact the switches you identify on the LAN Switch Details page (see the [“Identifying the LAN Switches”](#) section on page 4-42 for more information), it does not matter if the IP address patterns cover devices other than switches.

- If all of your switches use the same read community string, enter *.*.*.*. You will only need to create one entry.
- If subsets of your switches use the same strings, create a mask that covers those subsets, if possible. For simplicity, try to create the fewest number of patterns.
- If you use a separate string for each switch, you must enter each switch on this page.

Step 3 Enter the timeout and retries values. These values work together to determine how often and how long Cisco ER tries to obtain SNMP information from a switch before giving up. The first attempt lasts as long as the timeout value. If you enter 1 or higher for retries, Cisco ER tries again, and each retry lasts twice as long as the previous try. For example, if you specify 10 for timeout, the first retry lasts for 20 seconds, the second retry lasts for 40 seconds, and so forth.

The optimal values are 10 to 15 seconds for timeout, and 2 to 3 for retries.

Step 4 Enter the read community string, for example, **public**.

Step 5 Click **Insert**.

Cisco ER adds the SNMP setting to the list of settings.

Step 6 If you need to create more than one setting, return to [Step 2](#).

**Tip**

- Whenever you change the SNMP read community string on a switch, you must update the associated setting in Cisco ER.
- To change an SNMP setting, select it in the list. Cisco ER loads the setting in the edit boxes. Make your changes and click **Update**. Then, run the switch-port and phone update process on the switch after you update the SNMP setting. Select **Phone Tracking > LAN Switch Details** and select the switch in the left-hand column; then click **Locate Switch Ports**. If you are changing the setting for a large number of switches, run the process on all switches by selecting **Phone Tracking > Run Switch-Port & Phone Update**.
- To delete a setting, click the delete icon on the setting's entry.

Related Topics

- [SNMP Settings, page A-28](#)
- [Identifying the LAN Switches, page 4-42](#)

Defining the Phone Tracking and Switch Update Schedules

To track phones successfully, Cisco Emergency Responder (Cisco ER) must periodically contact switches to obtain port and device information. Cisco ER updates network information using two processes:

- Phone Tracking—A periodic comparison of the phones registered with Cisco CallManager to the location information obtained from the switches. If a phone moves, Cisco ER updates the phone's ERL. Phones that cannot be located are classified as unlocated phones (see the [“Identifying Unlocated Phones”](#) section on page 4-55).



Note If you do not configure a switch port phone update schedule, the default schedule will run at midnight.

- Switch-Port and Phone Update—The phone tracking process plus a more extensive check of the network switches, which can identify new or changed switch modules (additional or removed ports). Any newly-discovered ports are assigned to the Default ERL. Ensure that your ERL administrator updates the ERL assignment for new ports.

Before You Begin

You must have system administrator or network administrator authority to define the schedule.

Procedure

- Step 1** Select **Phone Tracking > Schedule**.
- Cisco ER opens the Schedule page.
- Step 2** Enter the incremental phone tracking schedule in minutes and click **Update**.
- Cisco ER will run the phone tracking process this number of minutes after finishing the previous phone tracking process.

Step 3 Enter the schedule for the switch-port and phone update process. You should run this process at least once per day (but not more than four times per day).

For example, if you want to run the process at midnight Monday through Friday, but at 6 PM on Saturday and Sunday, create two schedule entries:

- Select **Mon, Tue, Wed, Thu, and Fri**, and **00** for **Hour**, **00** for **Minute**, then click **Insert**. Cisco ER adds the schedule to the list.
- Select **Sat and Sun**, and **18** for **Hour**, **00** for **Minute**, then click **Insert**. Cisco ER adds the schedule to the list.

If you define schedules that overlap, Cisco ER only runs one process.

**Tip**

- To change a switch-port and phone update schedule, click the schedule in the list. Cisco ER loads the schedule's settings in the schedule fields. Make your changes and click **Update**.
 - To delete a schedule, click the delete icon on the schedule's list entry.
-

Related Topics

- [Schedule, page A-31](#)
- [Manually Running the Switch-Port and Phone Update Process, page 4-48](#)

Identifying the LAN Switches

You must tell Cisco Emergency Responder (Cisco ER) which switches to manage. Cisco ER 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.

Because Cisco ER must obtain information from the switches, you must ensure that the information you supply to Cisco ER is correct and kept up-to-date. After you have created the initial switch list, you can make mass changes to switch definitions by exporting the switch definitions, editing the export file, and reimporting the file.

These topics describe how to identify switches to Cisco ER, and how to export switch information:

- [Identifying LAN Switches One At a Time](#), page 4-43
- [Importing a Group of Switches](#), page 4-45
- [Exporting Switch Information](#), page 4-47

Identifying LAN Switches One At a Time

You can enter switches into the Cisco Emergency Responder (Cisco ER) configuration one at a time. If you have a large number of switches to add, consider creating an import file to add them instead of using this procedure. See the [“Importing a Group of Switches”](#) section on page 4-45 for more information.

Before You Begin

You must have system administrator or network administrator authority to add, remove, or change switch definitions.

Determine if your network includes phones that do not use the Cisco Discovery Protocol (CDP) to announce themselves to the network. For non-CDP phones, Cisco ER must use the CAM information on the switch to identify phones. See the [“Network Hardware and Software Requirements”](#) section on page 1-12 for information on which phones require CAM access.

Ensure that you configure the SNMP read community strings before adding switches. See the [“Configuring the SNMP Connection”](#) section on page 4-38 for more information.

Procedure

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

Cisco ER opens the LAN Switch Details page.

Step 2 Enter information about the switch:

- Enter the IP address or DNS name of the switch.
- If there might be non-CDP-enabled phones attached to the switch, select **Enable CAM-based Phone Tracking**.

Step 3 Click **Insert** to add the switch to the Cisco ER configuration.

Cisco ER asks if you want to run the switch-port and phone update process. You must run this process so that Cisco ER can identify the ports on the switch, so that your ERL administrator can assign the ports to the right ERLs.

If you are adding more than one switch, you can skip running the process until you add the last switch. When you select to run the process, Cisco ER runs the process on all switches added since the last time the switch-port and phone update process was run.

If you do not choose to run the process, you can run it later by selecting **Phone Tracking > Run Switch-Port & Phone Update**.

In either case, newly-discovered ports are assigned to the Default ERL.

**Tip**

- Click a switch in the left-hand list to view the switch's Cisco ER configuration. To change the configuration, make your changes and click **Update**.
 - Click **New** to add another switch if you are viewing an existing switch's configuration.
 - To delete a switch, select it from the left-hand list of switches and click **Delete**. If you do not remove the switch from the network, Cisco ER will identify any phones connected to the switch as unlocated phones.
-

Related Topics

- [Importing a Group of Switches, page 4-45](#)
- [Exporting Switch Information, page 4-47](#)
- [LAN Switch Details, page A-35](#)
- [Understanding Switch Requirements for Cisco Emergency Responder, page 4-38](#)

Importing a Group of Switches

You can define a large number of switches at one time by importing a file that contains the required switch information. You might be able to create this file by exporting switch information from your network management software, and then using a spreadsheet program to modify the records to match the Cisco Emergency Responder (Cisco ER) file format requirements (that is, by deleting columns, adding columns, rearranging columns, and so forth).

If you have a large network, importing switch definitions can save you a lot of time.

Before You Begin

You must have system administrator or network administrator authority to import switch definitions.

Prepare an import file. Cisco ER includes detailed information about the required file format on the Import LAN Switch page. The page also includes the location in which you must place the file in order to import it. Use the procedure below to go to the page and view the format, create your file, copy the file to the required location, and then follow the procedure to import the file.

Ensure that you configure the SNMP read community strings before adding switches. See the [“Configuring the SNMP Connection”](#) section on page 4-38 for more information.

Procedure

- Step 1** Select **Phone Tracking > LAN Switch Details**.
Cisco ER opens the LAN Switch Details page.
- Step 2** Click **Import** in the left-hand switch list.
Cisco ER opens the Import LAN Switch page.

- Step 3** Select the file format, and the name of the file you want to import. Then, select one of these:
- **Override with imported data**—Trust the data in the import file, and use it to overwrite conflicting data in the Cisco ER configuration. This is valuable if you are importing a file that you exported from Cisco ER and then updated. Using this technique, you can update many entries at once.
 - **Leave current data**—Trust the Cisco ER configuration, and do not overwrite configuration data with conflicting data from the import file. This is the default.

Step 4 Click **Import**.

Cisco ER asks you whether you want to run phone tracking on the imported switch. You must run phone tracking before you can configure the switch ports, so normally you should select **OK**. If you select **Cancel**, Cisco ER imports the switches but does not run the phone tracking process.

After you make your selection, Cisco ER adds the switch configurations and shows you the status of the import.

Step 5 Click **Close** to close the window.

Step 6 If you did not run phone tracking on the imported switches, select **Phone Tracking > Run Switch-Port & Phone Update**.

Cisco ER contacts each switch to discover the ports on the switch and any phones attached to the ports.

Alternatively, you can view each switch's configuration on the LAN Switch Details page and click **Locate Switch Ports**. This runs the process only on the selected switch.

Related Topics

- [Identifying LAN Switches One At a Time, page 4-43](#)
- [Exporting Switch Information, page 4-47](#)
- [LAN Switch Details, page A-35](#)
- [Understanding Switch Requirements for Cisco Emergency Responder, page 4-38](#)

Exporting Switch Information

You can export your Cisco Emergency Responder (Cisco ER) configuration. This can help you back up your data, or help you create a file you can use to update a large number of switch definitions in Cisco ER. You can edit the export file, make your changes, then reimport the file and overwrite the information in Cisco ER.

Before You Begin

You must have system administrator or network administrator authority to export switch definitions.

Procedure

- Step 1** Select **Phone Tracking>LAN Switch Details**.
Cisco ER opens the LAN Switch Details page.
- Step 2** Click **Export** in the left-hand switch list.
Cisco ER opens the Export LAN Switch page.
- Step 3** Select the file type and enter the file name for the export file. Do not include a file extension.
- Step 4** Click **Export**.
Cisco ER creates the export file. Click **Close** to close the window.
-

Related Topics

- [Identifying LAN Switches One At a Time, page 4-43](#)
- [Importing a Group of Switches, page 4-45](#)
- [LAN Switch Details, page A-35](#)
- [Understanding Switch Requirements for Cisco Emergency Responder, page 4-38](#)

Manually Running the Switch-Port and Phone Update Process

Before you can assign ERLs to switch ports, Cisco Emergency Responder (Cisco ER) must identify the ports on the switch using the switch-port and phone update process. Although Cisco ER runs this process according to the schedule you set (see the [“Defining the Phone Tracking and Switch Update Schedules” section on page 4-41](#) for more information), you might want to run it manually when you make a lot of changes to the switch configuration without running phone tracking on individual switches.

Because the switch-port and phone update process does extensive checking, only run it if you are trying to refresh the entire Cisco ER-tracking results. Alternatively, if you are only trying to update the results for a limited number of switches, you can run phone tracking on individual switches. Select **Phone Tracking > LAN Switch Details** and select the switch in the left-hand column; then click **Locate Switch Ports**.

These are some reasons you would run phone tracking on an individual switch:

- You add a switch to Cisco ER. When you add a switch, Cisco ER asks if you want to run the process. If you select to run it at that time, you do not have to click **Locate Switch Ports**—Cisco ER runs the process for all switches you added to the Cisco ER configuration since the last time the full switch-port and phone update process was run.
- You add, remove, or change a module in a switch already defined to Cisco ER.
- You can add and delete IP subnet-based ERLs.

Manually run the switch-port and phone update process as described below if:

- You want to refresh the Cisco ER-tracking results.
- You add switches to Cisco ER by importing switch definitions, as described in the [“Importing a Group of Switches” section on page 4-45](#), but you did not run phone tracking during the importation.
- If you find a large number of entries in the unlocated phones list (see the [“Identifying Unlocated Phones” section on page 4-55](#)), run this process to see if Cisco ER can find some of those phones. See the [“Too Many Unlocated Phones” section on page 6-3](#) for issues you should address to help resolve these problems before running the switch-port and phone update process.

Before You Begin

You must have system administrator or network administrator authority to manually run the switch-port and phone update process.

Procedure

Step 1 Select **Phone Tracking>Run Switch-Port & Phone Update**.

Cisco ER runs the process without changing the page you are viewing. Any newly-discovered ports are assigned to the Default ERL.

Related Topics

- [Defining the Phone Tracking and Switch Update Schedules, page 4-41](#)
- [Identifying Unlocated Phones, page 4-55](#)
- [Understanding Switch Requirements for Cisco Emergency Responder, page 4-38](#)

Managing Phones

These topics describe how to assign switch ports and phones to the appropriate emergency response locations (ERLs), and how to view the history of emergency calls handled by Cisco Emergency Responder (Cisco ER):

- [Configuring Switch Ports, page 4-50](#)
- [Identifying Unlocated Phones, page 4-55](#)
- [Manually Defining a Phone, page 4-57](#)
- [Viewing the Emergency Call History, page 4-62](#)

Configuring Switch Ports

After the network administrator adds switches to the Cisco Emergency Responder (Cisco ER) configuration, and runs the switch-port and phone update process, you can assign the switch ports to emergency response locations (ERLs). When you assign a port to an ERL, make sure that you assign the ERL based on the location of the device attached to the port, not the location of the port itself.

For example, say your wiring closet is on Floor 1, and half its ports serve Floor 1, the other half serve Floor 2. Also, you have defined two ERLs, Floor1 and Floor2. Although the switch is on Floor 1, only half its ports belong in the Floor1 ERL, the other half belong in the Floor2 ERL.

Before you assign ports to ERLs, ensure you have a reliable mapping of switch ports to their end points (for example, cubicle numbers or office numbers). Your assignments will only be reliable if this map is kept static, that is, so long as wires are not indiscriminately moved from port to port on the switch. Work with your network administrator to ensure the integrity of the wiring closet. See the [“Data Integrity and Reliability Considerations”](#) section on page 1-35 for more information.

These topics describe how to assign switch ports to ERLs:

- [Configuring a Few Switch Ports at a Time](#), page 4-50
- [Configuring a Large Number of Ports at Once](#), page 4-53
- [Exporting Switch Port Information](#), page 4-54

Configuring a Few Switch Ports at a Time

You can assign switch ports to ERLs a few at a time. If you have a large number of ports to map, it is much easier to create an import file to add them instead of using this procedure. See the [“Configuring a Large Number of Ports at Once”](#) section on page 4-53 for more information.

Before You Begin

You must have system administrator or ERL administrator authority to assign ports to ERLs.

You can only configure ports defined for the Cisco Emergency Responder (Cisco ER) group to which you are logged in.

Procedure

Step 1 Select **ERL Membership/Switch Ports>Switch Port Details**.

Cisco ER opens the Switch Port Details page. This page has two tabs, Find and Configure. Before you can configure a port, you must list it in the bottom frame using the Find tab.

Step 2 On the Find tab, enter search criteria to list the ports you want to configure.

- **Find** will display a maximum of 1,000 records. Refine your search accordingly.
- If you want to list all ports on a specific switch, select **Switch IP Address** or **Switch Host Name**, enter the IP address or host name, and click **Find**. Cisco ER lists all ports discovered on the switch.
- If you want to narrow your search by using multiple criteria, click **More** to add search fields. Select **Any** at the top of the list to indicate that ports that match any search criteria be selected (an OR search); select **All** to indicate that only ports that match every criteria be selected (an AND search).
- For all searches, select the Cisco ER group you want to search. If your initial search does not list the ports you are looking for, it might be because the ports are managed by a different Cisco ER group. You can only search one Cisco ER group at a time.

Step 3 Click **Configure**.

Cisco ER opens the Configure tab.

Step 4 Assign ports to ERLs:

- a. In the list of ports in the bottom frame, select the ports you want to assign to a single ERL. If you want to assign all listed ports, select the check box in the title row. You can only assign ports on one page at a time, so if there is more than one page of ports in the listing, complete this task for each page separately.
- b. Select the ERL you want to assign to the ports.

- c. Optionally, enter more specific location information in the **Phone Location** field. Click **view** to open a window so that you can enter information. For example, you could enter the cubical or office number that the port serves. This information is sent to the onsite alert (security) personnel to help them locate the emergency caller. You can only update the phone location information if you are logged into the primary Cisco ER server in the Cisco ER group.
 - d. Click **Configure Ports**.

Cisco ER assigns the ERL to the selected ports. You can continue assigning ports on this page of the ports list, but do not change the search results page before completing these steps.
 - e. Click **OK** when you are finished configuring ports on the displayed list.

Cisco ER commits your ERL assignments. From here, you can continue to the another page of the listed ports, or click **Find** to enter new search criteria to obtain another list of ports.
-

**Tip**

- You can change the fields and arrangement of fields in the port list by clicking **Edit Table View**.
 - The phone location information is saved on the primary Cisco ER server. Back up this data regularly. See the [“Backing Up and Recovering Data” section on page 6-50](#).
-

Related Topics

- [Switch Port Details, page A-41](#)
- [Import Switch Port, page A-46](#)
- [Configuring a Large Number of Ports at Once, page 4-53](#)
- [Exporting Switch Port Information, page 4-54](#)
- [Working with Emergency Response Locations \(ERLs\), page 4-17](#)

Configuring a Large Number of Ports at Once

You can assign a large number of ports to ERLs at one time by importing a file that contains the required information.

If you have a large network, importing port to ERL mappings can save you a lot of time.

Before You Begin

You must have system administrator or ERL administrator authority to import switch port definitions.

Prepare an import file. The easiest way to create this file is to first export the switch port details from Cisco ER (see the [“Exporting Switch Port Information” section on page 4-54](#)), and then use a spreadsheet program to change the ERL to the desired ERL and add phone location information. Ensure that the switch-port and phone update process is run before creating the export file, so that the file includes records for every switch port.

Before you import the file, you must copy it to the location identified on the Import Switch Port page. The procedure below explains how to get to this page. Links on the page also will display the detailed information about the required file format for the import file if you need it.

Cisco ER must already be aware of the ports before you import the file. Ensure that all ports you are importing have been located by Cisco ER.

You can only configure ports defined for the Cisco ER group to which you are logged in.

Procedure

Step 1 Select **ERL Membership/Switch Ports>Switch Port Details**.

Cisco ER opens the Switch Port Details page.

Step 2 Click **Import**.

Cisco ER opens the Import Switch Port page.

- Step 3** Select the file and file format, and click **Import**.
- Cisco ER imports the file and shows you the import results. The ERL-to-port mappings and port location information in the import file overwrite any existing data in the Cisco ER configuration.
- Step 4** Click **Close** to close the Import Switch Port page.
-

Related Topics

- [Switch Port Details, page A-41](#)
- [Export Switch Port, page A-45](#)
- [Configuring a Few Switch Ports at a Time, page 4-50](#)
- [Exporting Switch Port Information, page 4-54](#)
- [Working with Emergency Response Locations \(ERLs\), page 4-17](#)

Exporting Switch Port Information

You can export your Cisco Emergency Responder (Cisco ER) port configuration. This can help you back up your data, or help you create a file you can use to update a large number of switch port mappings in Cisco ER. You can edit the export file, make your changes, then reimport the file and overwrite the information in Cisco ER.

Before You Begin

You must have system administrator or ERL administrator authority to export switch port definitions.

Procedure

- Step 1** Select **ERL Membership/Switch Ports >Switch Port Details**.
- Cisco ER opens the Switch Port Details page.
- Step 2** <Click **Export**.
- Cisco ER opens the Export Switch Port page.

- Step 3** Select the file format and enter the desired file name, and click **Export**.
Cisco ER exports the file to the location described on the page.
- Step 4** Click **Close** to close the Export Switch Port page.
-

Related Topics

- [Switch Port Details, page A-41](#)
- [Configuring a Few Switch Ports at a Time, page 4-50](#)
- [Configuring a Large Number of Ports at Once, page 4-53](#)
- [Working with Emergency Response Locations \(ERLs\), page 4-17](#)

Identifying Unlocated Phones

If Cisco Emergency Responder (Cisco ER) cannot locate a phone, it places the phone in the Default ERL and puts it in a list of unlocated phones. Using this list, you can reassign the phones to a different ERL, or you can use the list to help identify the problems that are preventing Cisco ER from locating the phones.

These are some things that can prevent Cisco ER from locating a phone:

- The phone is attached to a switch that is not defined in Cisco ER.
- The phone is connected to an unsupported device, such as a router port, a hub connected to a router, or an unsupported switch.
- The switch to which the phone is connected is currently unreachable, for example, it does not respond to SNMP queries.
- The phone has moved to a switch served by a different Cisco ER group. If this is the case, the Cisco ER group name is shown for the phone in the unlocated phones list.
- No IP subnet is configured for the phone.

Because Cisco ER cannot assign an unlocated phone to the appropriate ERL, try to identify and resolve all problems that are preventing Cisco ER from locating these phones on your network. If you cannot resolve the problems by defining switches in Cisco ER, or by moving phones to supported switch ports, you can manually assign a phone to an ERL. See the [“Too Many Unlocated Phones” section on page 6-3](#) for more detailed information on resolving these problems.

Before You Begin

You must have system administrator or ERL administrator authority to view or configure unlocated phones.

Procedure

Step 1 Select **ERL Membership/Switch Port Details>Unlocated Phones**.

Cisco ER opens the Unlocated Phones page and lists all unlocated phones.

Step 2 To assign a phone to an ERL, select or enter the ERL, select the phone, and click **Assign to ERL**.

Cisco ER assigns the phone to the ERL, but leaves it in this list. If you later resolve the problem that is preventing Cisco ER from locating this phone, Cisco ER removes it from the list and assigns it the correct ERL based on port assignment.

**Tip**

- You can select all the phones on the displayed page by selecting the check box in the list title.
 - You can only assign phones to ERLs on a single page at a time. If there is more than one page of phones, use the links at the bottom of the list to move from page to page.
-

Related Topics

- [IP Subnet Phones, page A-50](#)
- [Configuring Switch Ports, page 4-50](#)
- [Manually Defining a Phone, page 4-57](#)

Manually Defining a Phone

To manage all emergency calls in your network, Cisco Emergency Responder (Cisco ER) must know about every phone whose calls are routed by Cisco CallManager, even if Cisco ER does not directly support the phone. Cisco ER handles emergency calls from these manually-defined phones in the same way it handles calls from phones attached to supported switch ports. The only difference is that Cisco ER cannot dynamically change the ERL of a manually-defined phone if that phone is moved.

You need to manually define a phone if any of these conditions apply:

- Cisco ER does not support automatic tracking of that type of phone, for example, if the phone is analog.
- The phone is hosted on an unsupported port, such as a router port, a hub connected to a router, or a port on an unsupported switch.
- No IP subnet is configured for the phone.

For any phones you must manually define, you should regularly audit the location of those phones to determine if you need to update the ERL assignment for the phone in Cisco ER.

**Note**

New switch ports and unlocated phones will NOT be associated to Default ERLs automatically. They will be treated as “ERL not configured.” The Default ERL is used only internally by Cisco ER if no other ERL is configured for that phone. Cisco ER will not allow the Default ERL to be configured to Switch Ports; Unlocated Phones; Manually Configured Phones; or IP Subnets.

**Note**

You cannot manually add a phone that is used with Cisco CallManager Extension Mobility. With Cisco CallManager Extension Mobility, a user can log into a phone and the phone is assigned the user’s extension. However, with manually-defined phones, you are defining the phone based on extension, not on device, so the extension of the logged-in person does not get assigned the appropriate ERL. Ensure that all phones used with Cisco CallManager Extension Mobility are connected to supported switch ports.

Before You Begin

You must have system administrator or ERL administrator authority to manually define phones.

Procedure

-
- Step 1** Select **ERL Membership > Manually Configured Phones**.
- Cisco ER opens a new page, the Find and List Manually Configured Phones page.
- Step 2** To search for phones that you need to modify, enter the extension and click **Find**. Cisco ER performs a search and displays the results of your search.
- From the search result on the Find and List Manually Configured Phones page, you can remove a phone, change an existing phone or add a new phone:
- Step 3** To remove a phone, click the delete icon on the phone's entry.
- Step 4** To change an existing phone:
- Click the phone's entry in the list. Cisco ER opens the Add/Modify Phones page with the phone's information displayed in the edit boxes.
 - Make your changes and click **Update**. Cisco ER updates the phone.
 - Click **Back to Phone Search** to return to the Find and List Manually Configured Phones page.
- Step 5** To add a new phone:
- Click **Add a new phone**. Cisco ER opens the Add/Modify Phones page.
 - Enter information about the phone you want to define. You must enter the phone's extension and select an ERL. If the phone is an IP phone, you must also enter the IP address and MAC address for the phone. Other fields are optional and are mainly for your information.
 - Click **Insert**. Cisco ER adds the phone to the list of manually defined phones.
 - Click **Back to Phone Search** to return to the Find and List Manually Configured Phones page.
-

Related Topics

- [Add/Modify Phones, page A-54](#)
- [Identifying Unlocated Phones, page 4-55](#)

- [Network Hardware and Software Requirements, page 1-12](#)
- [Configuring a Large Number of Manually Configured Phones at Once, page 4-59](#)
- [Exporting Manually Configured Phone Information, page 4-60](#)

Configuring a Large Number of Manually Configured Phones at Once

You can assign a large number of manually-configured phones to ERLs at one time by importing a file that contains the required information.

If you have a large network, importing manually-configured phone to ERL mappings can save you a lot of time.

Before You Begin

You must have system administrator or ERL administrator authority to import switch port definitions.

Prepare an import file. The easiest way to create this file is to first export the manually configured phone details from Cisco ER (see the [“Exporting Manually Configured Phone Information” section on page 4-60](#)), and then use a spreadsheet program to change the ERL to the desired ERL and add phone location information. Ensure that the manual phone configuration and phone update process is run before creating the export file, so that the file includes records for every manually configured phone.

Before you import the file, you must copy it to the location identified on the Import Manual Phones page. The procedure below explains how to get to this page. Links on the page also will display the detailed information about the required file format for the import file if you need it.

Cisco ER must already be aware of the manually configured phones before you import the file. Ensure that all manually configured phones you are importing have been located by Cisco ER.

You can only configure manually configured phones defined for the Cisco ER group to which you are logged in.

Procedure

- Step 1** Select **ERL Membership > Manually Configured Phones**.
Cisco ER opens the Find and List Manually Configured Phones page.
- Step 2** Click **Import**.
Cisco ER opens the Import Manually Configured Phone page.
- Step 3** Select the file and file format, and click **Import**.
Cisco ER imports the file and shows you the import results. The ERL-to-port mappings and the location information for manually configured phones in the import file overwrite any existing data in the Cisco ER configuration.
- Step 4** Click **Close** to close the Import Manually Configured Phone page.
-

Related Topics

- [Switch Port Details, page A-41](#)
- [Export Switch Port, page A-45](#)
- [Configuring a Few Switch Ports at a Time, page 4-50](#)
- [Exporting Switch Port Information, page 4-54](#)
- [Working with Emergency Response Locations \(ERLs\), page 4-17](#)

Exporting Manually Configured Phone Information

You can export your Cisco Emergency Responder (Cisco ER) manually configured phone configuration. This can help you back up your data, or help you create a file you can use to update a large number of manually configured phone mappings in Cisco ER. You can edit the export file, make your changes, then reimport the file and overwrite the information in Cisco ER.

Before You Begin

You must have system administrator or ERL administrator authority to export switch port definitions.

Procedure

- Step 1** Select **ERL Membership > Manually Configured Phones**.
Cisco ER opens the Find and List Manually Configured Phones page.
- Step 2** Click **Export**.
Cisco ER opens the Export Manually Configured Phone page.
- Step 3** Select the file format and enter the desired file name, and click **Export**.
Cisco ER exports the file to the location described on the page.
- Step 4** Click **Close** to close the Export Manually Configured Phone page.
-

Related Topics

- [Manually Defining a Phone, page 4-57](#)
- [Configuring a Large Number of Manually Configured Phones at Once, page 4-59](#)
- [Working with Emergency Response Locations \(ERLs\), page 4-17](#)
- [Adding Synthetic Phones, page 4-61](#)

Adding Synthetic Phones

With Cisco Emergency Responder (Cisco ER)1.2, you can use CiscoWorks IP Telephony Environment Monitor (ITEM) 2.0 to monitor the health and functionality of Cisco ER. To use ITEM with Cisco ER, you configure a synthetic phone in Cisco ER and associate the synthetic phone to an ERL that will be used as a test ERL. When a synthetic phone makes an emergency call, Cisco ER uses the associated test ERL to route the call.

For more information, refer to the “[Configuring Test ERLs](#)” section on page 4-31.

Viewing the Emergency Call History

You can view the history of emergency calls made in your network that are handled by Cisco Emergency Responder (Cisco ER). Cisco ER sends emergency call notifications to the onsite alert personnel you identify in your ERLs, and these people react to the notifications. From the administrator's interface, you can view the same call history your onsite alert personnel can view, and see the comments they make about the calls. You might need to review the call history to report on usage or to troubleshoot call routing problems.

**Tip**

From the Call History page, you can view detailed information on the 10,000 most recent calls. You can find records of older calls in Cisco ER's raw call log files. See the [“Collecting Call History Logs”](#) section on page 6-44 for more information.

Procedure

Step 1 Select **Reports>Call History**.

Cisco ER opens the Call History page.

Step 2 Click **Find**.

All call summary information displays.

Step 3 Enter the search criteria you want to use to create a list of emergency calls.

To view a list of all calls, click **Find** without entering any search criteria.

To narrow your search, select the item you on which you want to search, and click **Find**. For example, you can view calls that were made in a specific ERL, or calls that were made from a specific phone extension. If you want to search on more than one criteria, click **More** to add additional search fields. Then, select **All** at the top of the list to perform an AND search (a call only matches the search if each of the criteria is met), or **Any** for an OR search (a call matches the search if it matches one or more of the criteria).

- Step 4** From the list of calls that Cisco ER shows you in response to your search criteria, you can:
- View the call characteristics.
 - Click on the ERL name to view the ERL details. From the ERL details, you can also view the ALI for the call.
 - Click **edit** in the comment field to change the comment. Cisco ER opens a separate window where you make your editorial changes.
-

**Tip**

If a large number of calls match your search criteria, Cisco ER uses additional pages to list the calls. Use the links at the bottom of the list to move through these additional pages.

Related Topics

- [“Collecting Call History Logs” section on page 6-44](#)

Setting up Cisco IP SoftPhone for Cisco Emergency Responder

This section provides information about:

- [Setting Up Cisco IP SoftPhone with Cisco Emergency Responder URLs, page 4-64](#)
- [Changing Cisco Emergency Responder URLs for Cisco IP SoftPhone, page 4-65](#)

Setting Up Cisco IP SoftPhone with Cisco Emergency Responder URLs

Perform the following procedure when you first install Cisco IP SoftPhone.

Procedure

When you install Cisco IP SoftPhone, the application prompts you for master and backup Cisco Emergency Responder (Cisco ER) URLs. make the following responses:

Step 1 For the Master Cisco ER, enter:

`http://Master_CER_IP_Address/softphone/servlet/SoftphoneLocationServlet`

Step 2 For the backup Cisco ER, enter:

`http://Backup_CER_IP_Address/softphone/servlet/SoftphoneLocationServlet`

Related Topics

- [Changing Cisco Emergency Responder URLs for Cisco IP SoftPhone, page 4-65](#)

Changing Cisco Emergency Responder URLs for Cisco IP SoftPhone

To change the Cisco Emergency Responder (Cisco ER) URLs after you have installed Cisco IP SoftPhone, perform the following procedure.

Procedure

- Step 1** Go to the registry using this path:
`\\HKEY_CURRENT_USER\Software\CiscoSystems\AVVIDSoftphone
\\1.1<or your SoftPhone version>\E911`
- Step 2** For the Primary URL, enter:
`http://Master_CER_IP_Address/softphone/servlet/SoftphoneLocationServlet`
- Step 3** For the backup URL, enter:
`http://Backup_CER_IP_Address/softphone/servlet/SoftphoneLocationServlet`
- Step 4** At the SupportsE911 field, click **True**.
- Step 5** Enter the correct IP addresses for master and backup Cisco ER in these URLs and restart Cisco IP SoftPhone.
-

Related Topics

- [Setting Up Cisco IP SoftPhone with Cisco Emergency Responder URLs, page 4-64](#)

■ Setting up Cisco IP SoftPhone for Cisco Emergency Responder