



**SA-ERS Emergency Response System
User Manual Version 1.992**

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SA-ERS Emergency Response System

Overview

by Syn-Apps

Use your existing Cisco Communications Manager IP Telephony platform as a one-touch panic system. SA-ERS integrates with Communications Manager to allow traditional under-the-desk buttons to initiate a silent alarm and stream audio and text to designated destination phones, providing the security teams with real-time information, allowing them to assess the situation and act as needed.

About Syn-Apps

Syn-Apps L.L.C. was founded in 2000 as a consulting firm focused on developing software for IP telephony. Since that time Syn-Apps has more than tripled in size and has expanded its consulting services to include enterprise application development. We believe that our relatively small firm is able to fulfill the needs of our customers more efficiently and inexpensively than our larger competitors.

Syn-Apps has an extensive knowledge base in numerous technologies, including .NET, C#, VB.Net, SQL Server, Java, C++ and other mainstream development tools. Syn-Apps additionally has a strong background in network design and networking fundamentals. We believe this combination of experience in a broad range of technologies allows us to offer our customers an end-to-end application development solution.

We believe that in order to have a successful application deployment one should not only understand the development environment but also understand how the application will interact with the rest of network. Syn-Apps employs one of the Cisco Systems Engineers that was responsible for the network development and design for many Fortune 100 companies. We believe that this enables us to become a valuable asset to any development team.

Syn-Apps developers have a wide variety of development experience in many diverse industries. Our developers have been employed by, or consulted for companies such as Microsoft, Cisco, General Motors, General Dynamics, Bloomberg, and many others. All of our developers have a keen understanding of the software development life cycle and know how to develop successful applications.

At Syn-Apps we understand the importance of a team environment and are comfortable developing and sharing information to ensure that the best of breed product is produced.

Table of Contents

Part 1 Application Features	7
Part 2 System Requirements	9
1 Application Server Requirements.....	9
2 Cisco Communications Manager Requirements.....	11
Part 3 Configuring Cisco TAPI Service Provider (TSP)	13
1 Procedure for Windows 2000.....	13
2 Cisco TSP Configuration Settings.....	13
General Tab	14
User Tab	15
CTI Manager Tab	16
3 Creating the TSP user in Communications Manager.....	17
Part 4 Installation Procedure	21
Part 5 Configuration Steps	27
Part 6 Application Setup Overview	36
Part 7 Services	38
Part 8 Configuring Actions	40
Part 9 Configuring User Information	43
Part 10 Configuring Groups – Auto Registered in Communications Manager	45
1 General Tab.....	46
2 Phones Tab.....	47
3 Email Notification Tab.....	48
4 Actions Tab.....	49
5 Restarting the Service.....	50
6 Verifying the Group ID.....	51
Part 11 Configuring Groups – Manually Registered in Communications Manager	53
1 Adding the Group Phone Device.....	54
Part 12 License Information	59

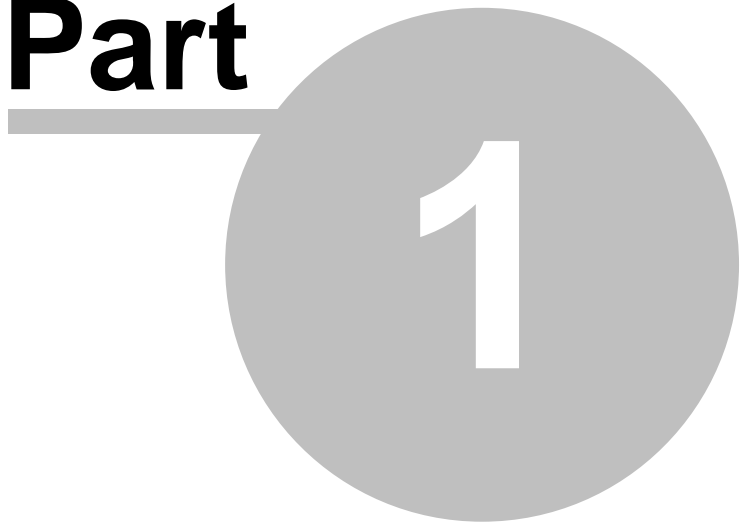


Part 13 Help	61
Part 14 Troubleshooting	63
1 Info	63
2 Tests	64
3 Prepare Report.....	65
4 Service Log Level.....	66
Part 15 Troubleshooting Tips	68



Application Features

Part



1 Application Features

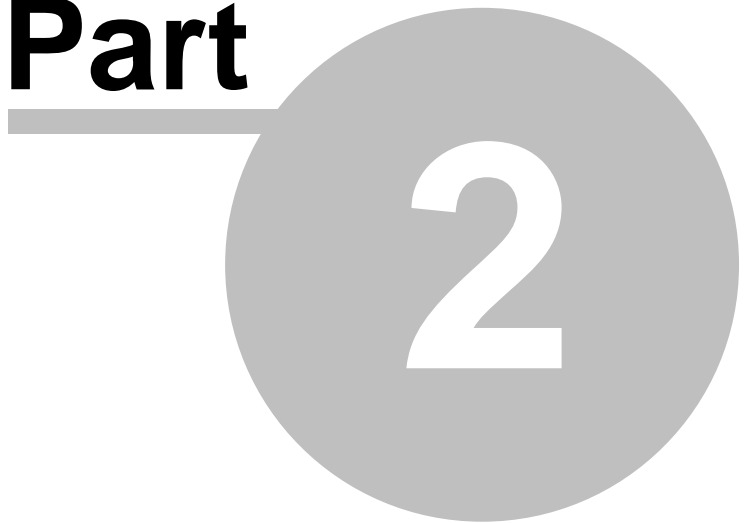
SA-ERS offers its users a multitude of features.

- Call a number, press one button on your phone, or press an under-desk button to trigger a set of user definable actions that would inform the security team of the existing problem.
- You may call several security teams at once. The desk phone will not exhibit any signals which may alert the intruder of the alarm.
- E-mails and text messages can be sent at the same time. A template system is provided which includes critical information in the message, such as:
 - calling number
 - user name
 - company
 - location of the phone
 - medical info of the user
- The security teams can choose on their Cisco 7940/41, 7960/61 and 7970/71 IP phones from several user-definable options which include:
 - calling a number
 - hang up and calling back
 - send e-mails and text messages.
- A TAPI interface allows SA-ERS to monitor under desk buttons, reflected as analog phone lines into Cisco Communications Manager.
- Web interface built upon Microsoft .NET allows the user to manage security groups, add/remove security phones for each group add/remove actions for each group and select standard security responses.
- Windows installer, with automated Communications Manager configuration.
- Web management console.
- SQL Server or MSDE databases.
- Built-in support features, enabling us to quickly detect and correct problems if they appear.



System Requirements

Part



2

2 System Requirements

In order for SA-ERS to function properly, there are a few system requirements that need to be met.

2.1 Application Server Requirements

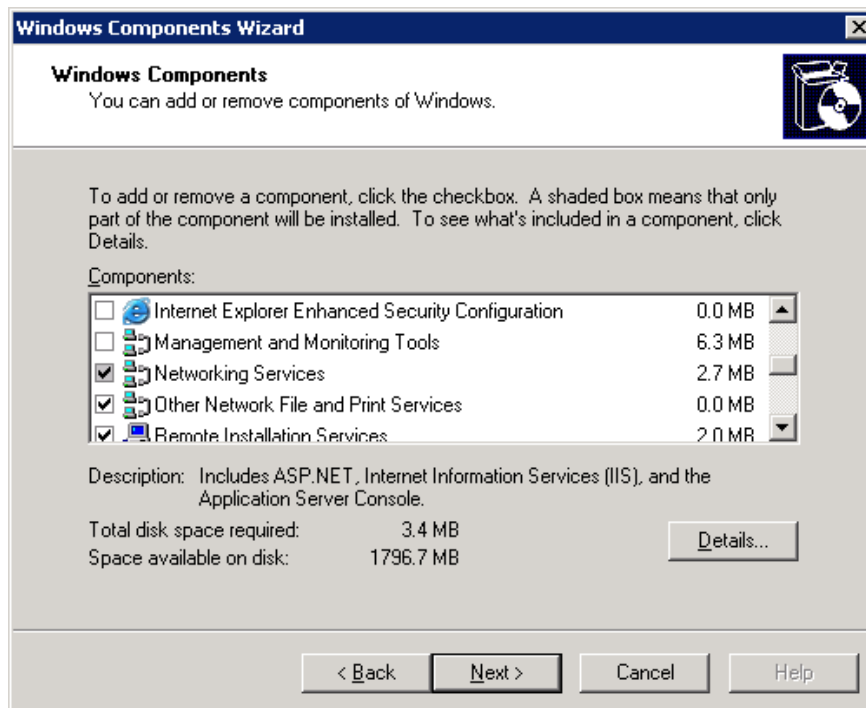
The Server must meet the following requirements before the SA-ERS application will function correctly.

- Microsoft .Net 1.1
- Windows 2000 or Windows 2003
- Microsoft SQL Server 2000 or MSDE ([Core Components](#))
- Microsoft IIS
- 1 gigabyte of system memory (minimum requirement)
- 1 gigabyte of hard disk space (minimum requirement)

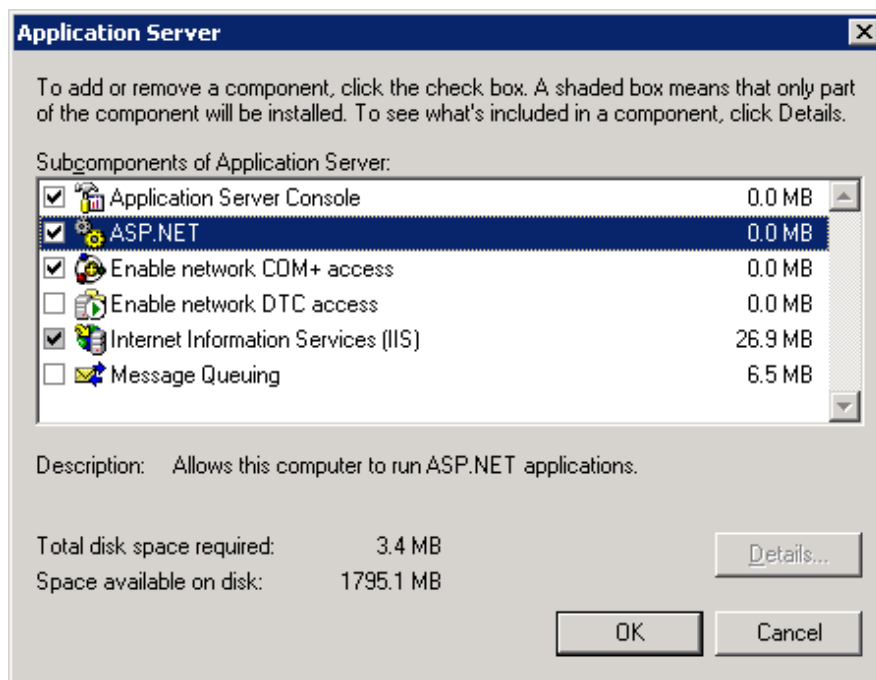
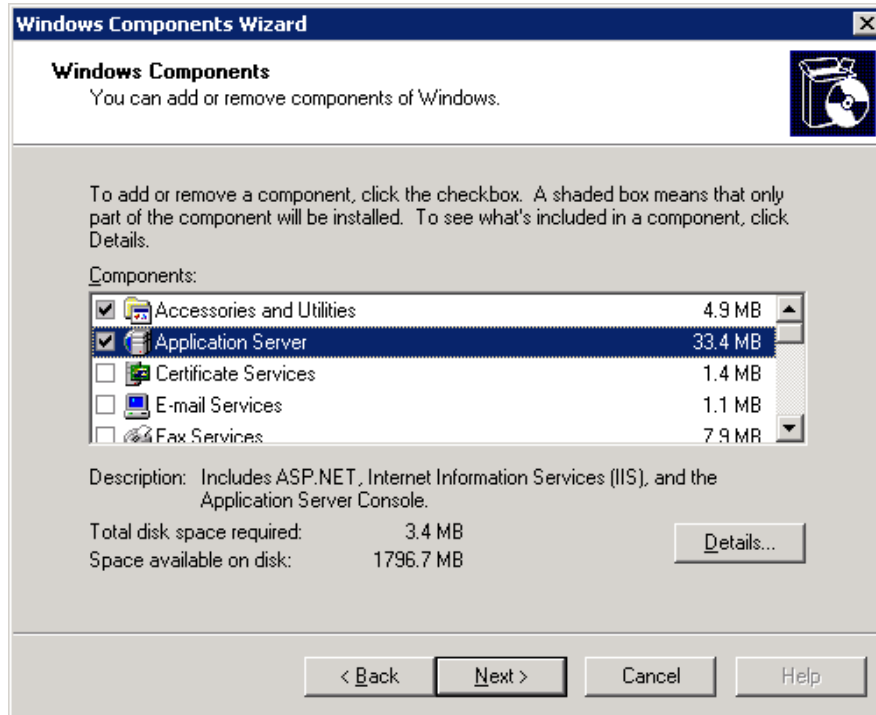
Windows 2003 Server

The Following items must be performed on a supported OS while logged in as the local Administrator.

1. You must first download the [Core Components](#). Once the install process has completed you must start MSSQL\$SYNAPPS, please note you must start before continuing.
2. Windows Components:
 - a. Internet Explorer Enhanced Security Configuration Box must be unchecked.



- b. Under Application Server the ASP.NET check box must be checked.



3. [TSP](#)
4. Continue to Install Application

Windows 2000 Server

Your Windows 2000 Server does not require any additional components to be configured.



2.2 Cisco Communications Manager Requirements

Cisco Communications Manager Support

- Cisco Communications Manager versions 3.x, 4.x, 5.x and 6.x.
- Communications Manager must have auto-registration enabled if using the auto-registration feature for Group setup in the SA-ERS Emergency Response System.
- All servers must have the same Communications Manager version and Administrative ID and password.
- If applicable, all back-up Communications Manager servers must use the same SQL SA ID and password.
- Cisco TSP installation required in order to enable TAPI Service Provider.



Configuring Cisco TAPI Service Provider (TSP)

Part



3

3 Configuring Cisco TAPI Service Provider (TSP)

Follow the steps outlined below to set up your system for detection capabilities. These steps must be completed in order for the system to function.

First, download the latest **Cisco TAPI Service Provider (TSP)** from the Communications Manager **Plugins URL** located in **Applications>Install Plugins**.

Once you have downloaded and run the installation, you will need to configure the TSP.

3.1 Procedure for Windows 2000

Step 1 Open the Control Panel.

Step 2 Double-click **Phone and Modem Options**.

Step 3 Choose the Cisco TSP that you want to configure.

Step 4 Click **Configure**. The system displays the Cisco IP PBX Service Provider dialog box.

Step 5 Enter the appropriate settings as described in Cisco TSP Configuration Settings section.

Step 6 Click **OK** to save changes.

Step 7 [Creating the TSP user in Communications Manager](#)

3.2 Cisco TSP Configuration Settings

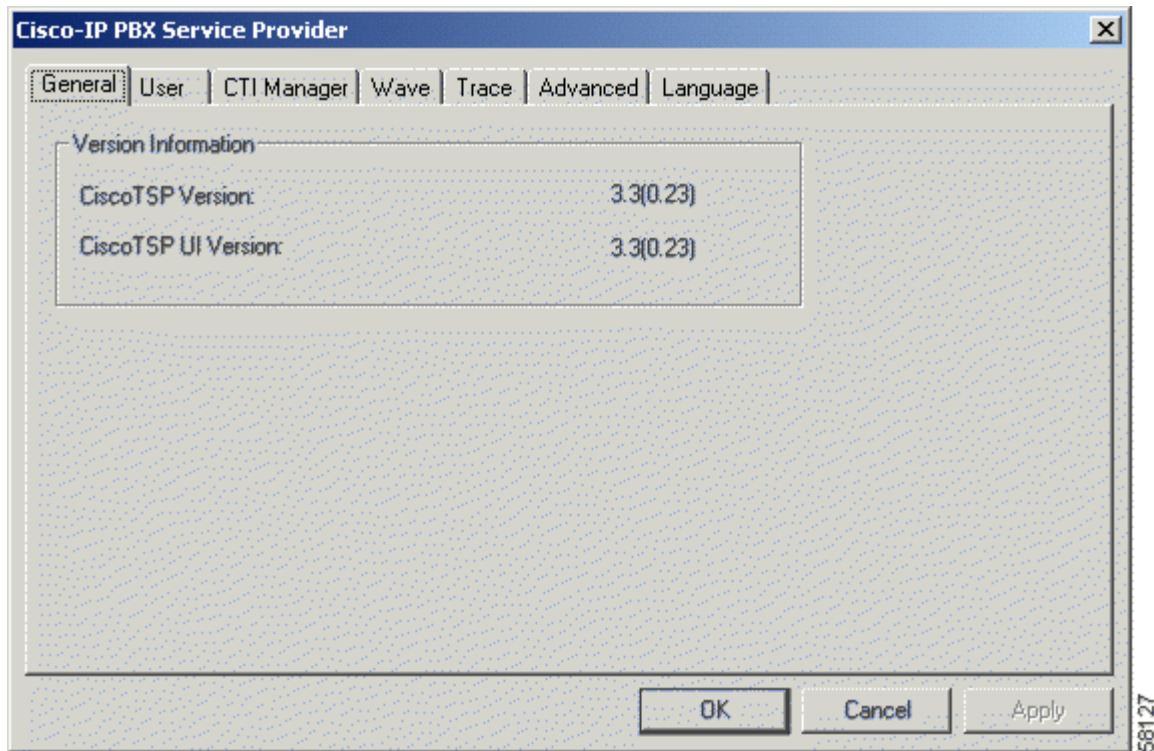
The following sections describe the fields in the Cisco_IP PBX Service Provider dialog box:

- [General Tab](#)
- [User Tab](#)
- [CTI Manager Tab](#)



3.2.1 General Tab

The General Tab displays TSP and TSPUI version information, as illustrated in the following figure.



3.2.2 User Tab

The User tab allows you to configure security information, as illustrated in the following figure.

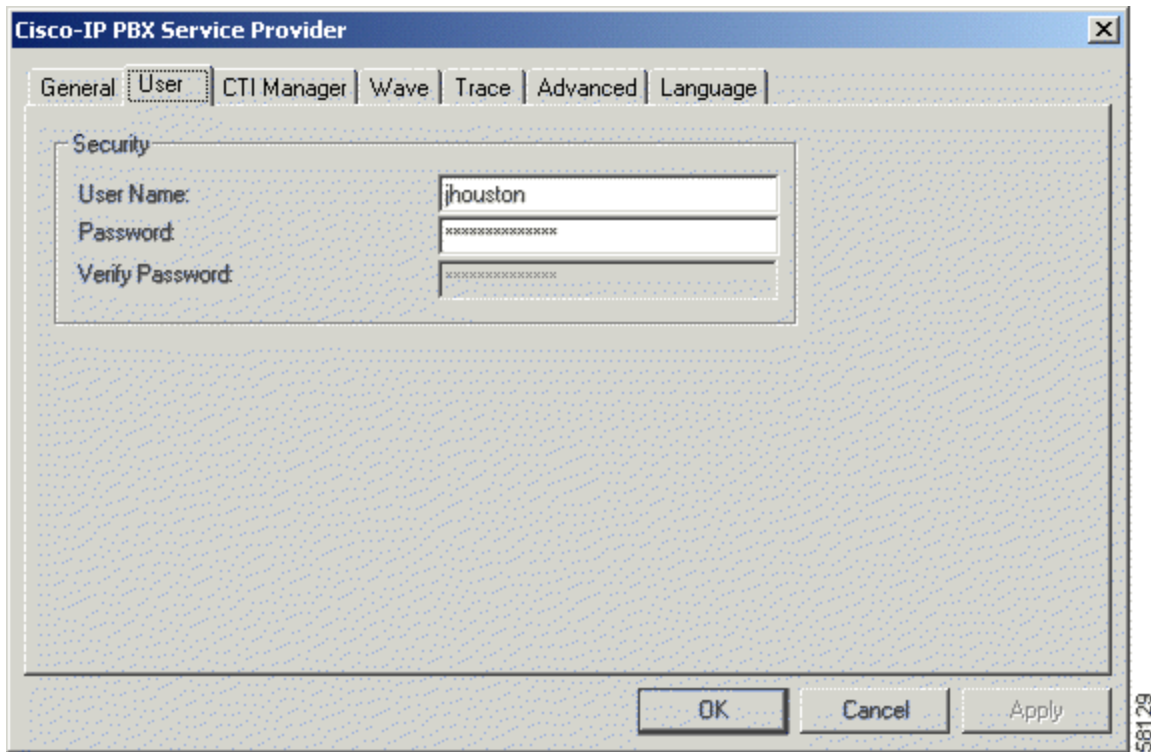


Table: User Tab Configuration Field contains a list of the fields for the User tab that must be set.

Field	Description
User Name	Enter the user name of the user that you want to give access to devices. This TSP can access devices and lines associated with this user. Make sure this user is also configured in the Cisco Communications Manager, so TSP can connect to Cisco Communications Manager. The TSP configuration registry keys store the user name and password that you enter.
Password	Enter the password associated with the user that you entered in the User Name field. The computer encrypts the password and stores it in the registry.
Verify Password	Reenter the user password.



3.2.3 CTI Manager Tab

The CTI Manager tab allows you to configure primary and secondary CTI Manager information, as illustrated in the following figure.

Table: CTI Manager Configuration Field contains a list of the fields for the CTI Manager tab that must be set.

Field	Description
Primary CTI Manager Location	<p>Specifies the CTI Manager to which the TSP attempts to connect first.</p> <p>If the TSP is on the same computer as the primary CTI Manager, choose the Local Host radio button.</p> <p>If the primary CTI Manager is on a different computer, choose the IP Address radio button and enter the IP address of primary CTI Manager or choose the Host Name radio button and enter the host name of primary CTI Manager.</p>
Backup CTI Manager Location	<p>Specifies the CTI Manager to which the TSP attempts to connect if a connection to the primary CTI Manager fails.</p> <p>If the TSP is on the same computer as the backup CTI Manager, choose the Local Host radio button.</p> <p>If the backup CTI Manager is on a different computer, choose the IP Address radio button and enter the IP address of backup CTI Manager or choose the Host Name radio button and enter the host name of backup CTI Manager.</p>



3.3 Creating the TSP user in Communications Manager

Complete these steps:

Select **User > Add a New User** from the main Cisco Communications Manager menu.



Communications Manager – Insert New User

Enter the user information as required on the Add a New User page, and click **Insert** when you are finished. **Make sure you enable CTI Application Use for your new user.**

User : New User

Status: Ready

First Name	<input type="text" value="John"/>
Last Name*	<input type="text" value="Doe"/>
User ID*	<input type="text" value="jdoe"/>
User Password*	<input type="password" value="password"/>
Confirm Password*	<input type="password" value="password"/>
PIN *	<input type="password" value="password"/>
Confirm PIN *	<input type="password" value="password"/>
Telephone Number	<input type="text"/>
Manager User ID	<input type="text"/>
Department	<input type="text"/>
User Locale	< None >
Enable CTI Application Use	<input checked="" type="checkbox"/>
Call Park Retrieval Allowed	<input type="checkbox"/>
Enable Calling Party Number Modification	<input type="checkbox"/>

* indicates required item.

View page in

Page displayed at Fri Apr 2 17:40:03 EST 2004
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Communications Manager – Device Association

Click the **Device Association** link.

User Configuration

[Add a New User](#)
[Back to User List](#)

Application Profiles of John

- [Device Association](#)
- [Cisco IPMA](#)
- [Extension Mobility](#)
- [SoftPhone](#)

User : John Doe

Status: Ready

First Name:

Last Name*:

User ID: jdoe

User Password*:

PIN *:

The following page appears.

Associate all analog devices that will have a button connected to them. Do not select Gateways.

Device Association

[User Configuration](#)
[Add a New User](#)
[Back to User List](#)

Device assigned to: jdoe (Doe, John)

Status: Ready

Available Device List Filters

Find Devices Where :

Filter Active

1 available device(s) listed at last search.
0 device(s) controlled or owned at last search.
0 device(s) selected currently to control.

Available Devices

Check All on Page Check All in Search No Primary Extension

Type	Device Name	Description	Primary Ext.	Extension
<input checked="" type="checkbox"/> 7900	SEP003094C25D4E	SEP003094C25D4E	<input checked="" type="radio"/>	7002

When you are finished, click **Update Selected**.



Communications Manager – Control Devices

You should see a screen similar to the following. The **Controlled Devices** field reflects the association that you just made.

Note: The controlled device is the phone itself, not the associated Device Numbers.

User : John Doe

Status Update Completed.

Update

First Name John

Last Name* Doe

User ID jdoe

User Password* Change..

PIN * Change..

Telephone Number

Manager User ID

Department

User Locale < None >

Enable CTI Application Use

Call Park Retrieval Allowed

Enable Calling Party Number Modification

Associated PC Not Defined

Primary Extension 7002

Controlled Devices SEP003094C25D4E

Enable Authentication Proxy Rights False

Controlled Device Profiles none

* indicates required item.

View page in English, United States

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TSP is now configured. This concludes the Configuring TSP section.



Installation Procedure

Part

4

4 Installation Procedure

To begin the installation, place the Syn-Apps application CD into the drive. The Syn-Apps Splash screen will start automatically. Select the **Install Applications** link, install the **Core Components** first. Once the **Core Components** install has completed, please make sure the MSSQL\$SYNAPPS service is started on your machine.

Next, click on the **Install SA-ERS** link from the Syn-Apps application CD.

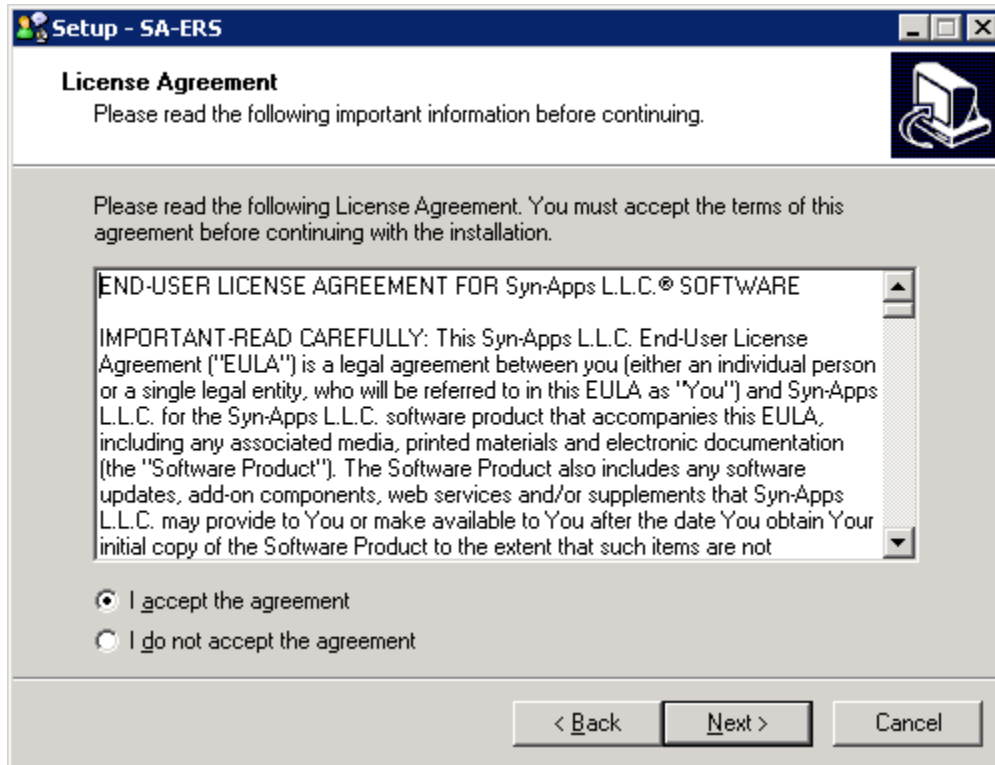
If the Install Wizard does not start installation, manually begin installation by:

- Click **Start** off of the Desktop
- Select **Run**
- Type in: **E:\SA-ERS\SA-ERS.exe** (where E: represents your CD drive)



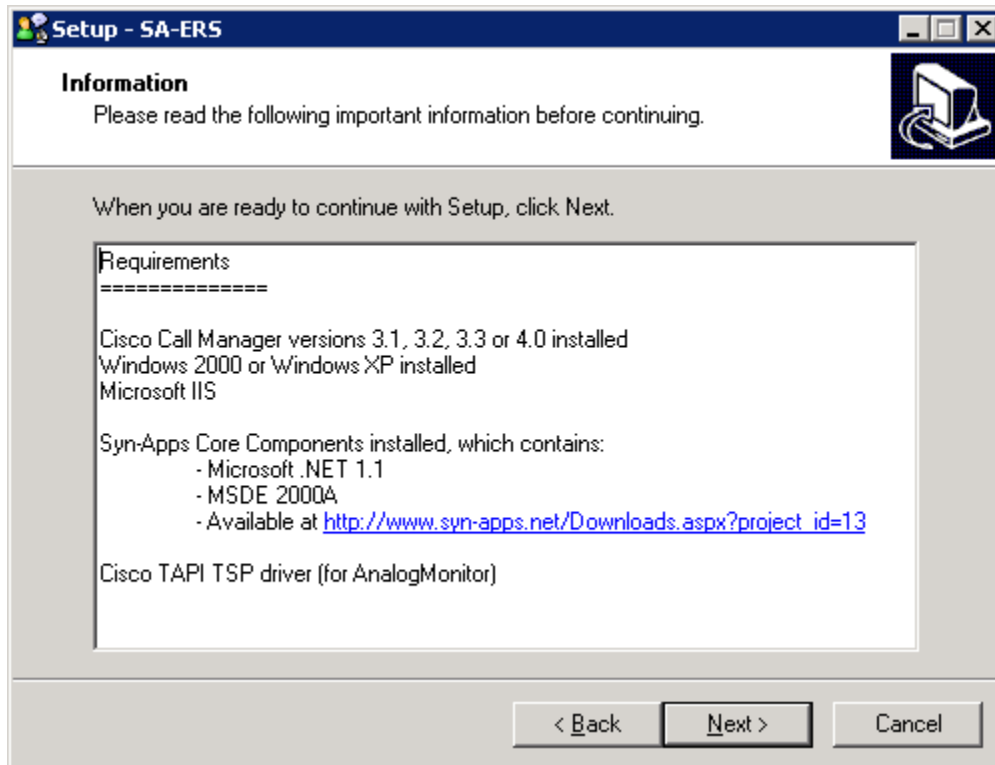
License Agreement

You will be prompted to read your License Agreement to use the Syn-Apps SA-ERS product. You may use your page down key to view by page. Once you agree with the terms, Click **Next** to proceed.



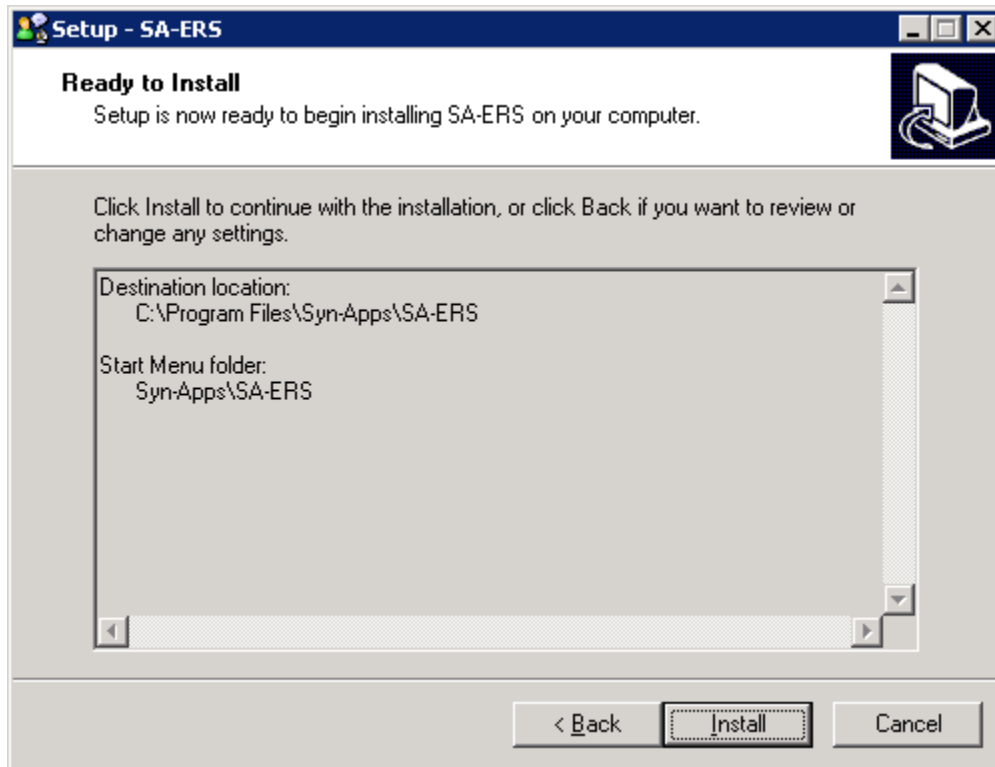
Setup Information

Click **Next** after you have reviewed and verified the software product and version requirements.



Ready to Install

Click **Install** if you are ready to proceed with the SA-ERS installation.

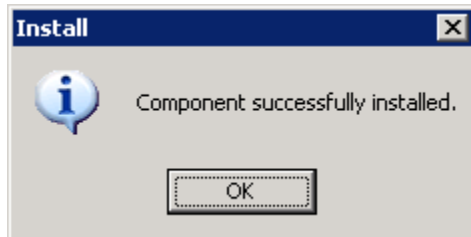


***Please wait while Setup installs SA-ERS on your computer.**

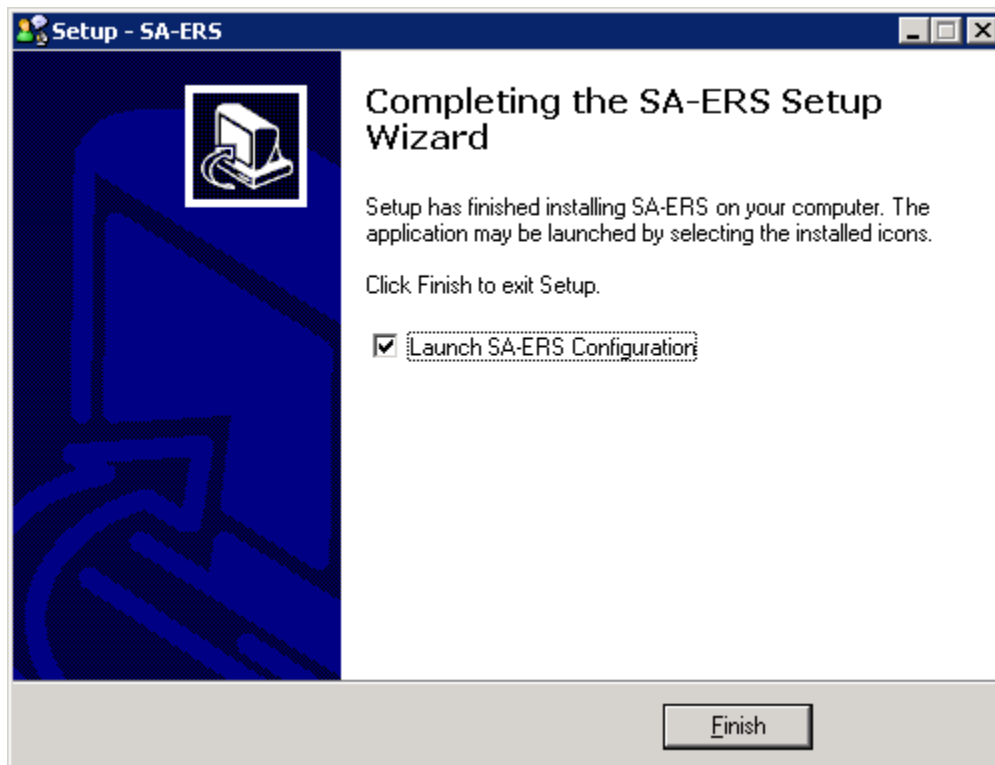


Installing

Once SA-ERS has been successfully installed, this message will appear. Click **OK**.

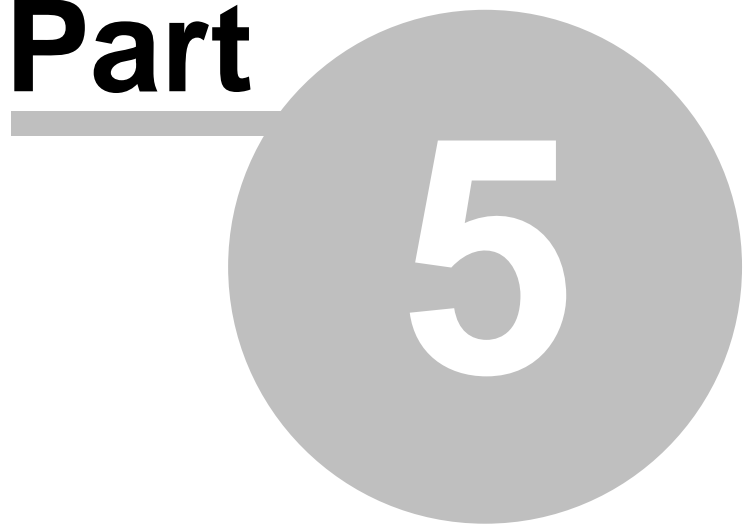


The following dialogue will appear, click the **Finish** button to continue to SA-ERS configuration.



Configuration Steps

Part

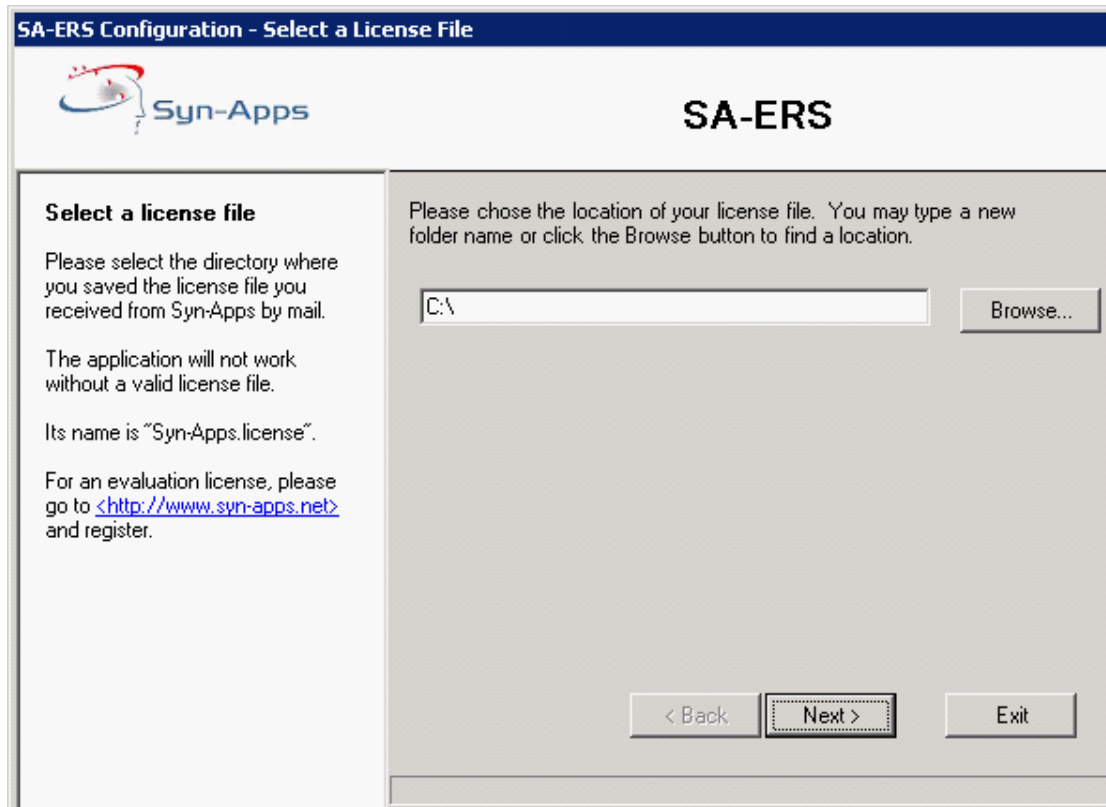


5

5 Configuration Steps

In order to use the SA-ERS software, a valid license key must be obtained. You can register and obtain product licenses by visiting the Syn-Apps website at www.syn-apps.com. If you have already obtained your key, click **Browse** to locate the license file that you acquired separately.

Click **Next** to proceed.



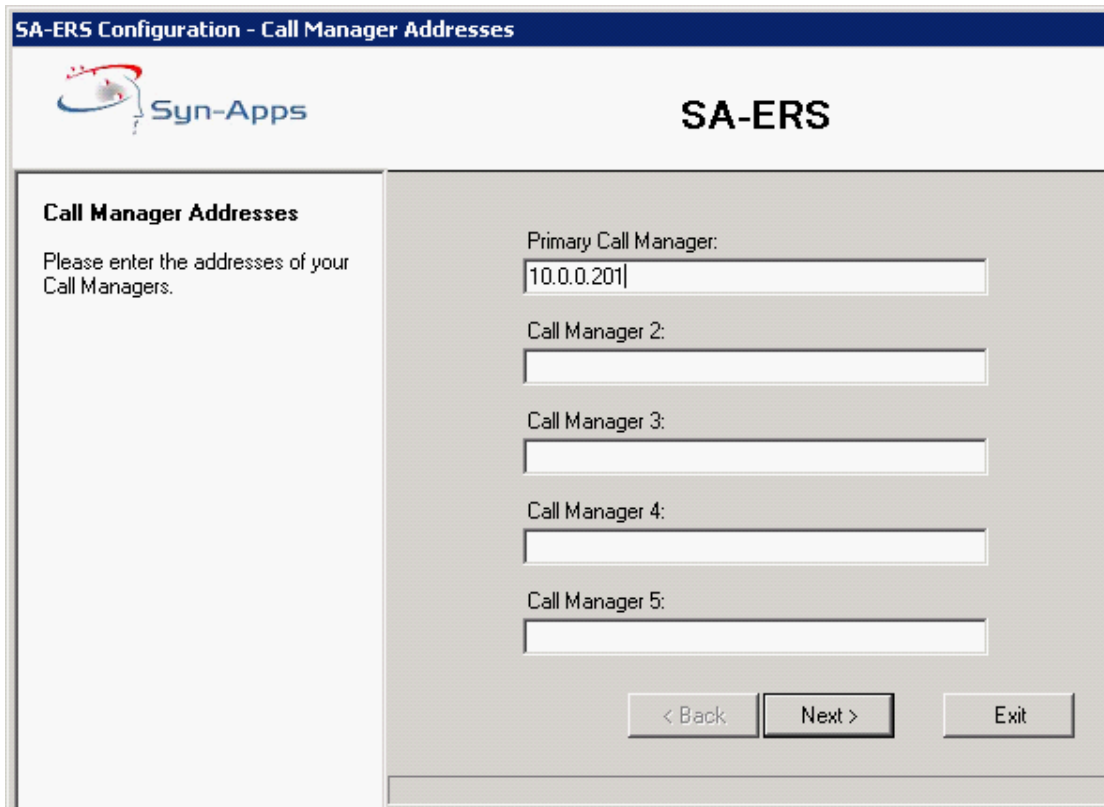
The screenshot shows a Windows-style dialog box titled "SA-ERS Configuration - Select a License File". The dialog has a blue header bar with the title. Below the header, there is a logo for "Syn-Apps" on the left and the text "SA-ERS" on the right. The main area is divided into two columns. The left column contains instructions: "Select a license file", "Please select the directory where you saved the license file you received from Syn-Apps by mail.", "The application will not work without a valid license file.", "Its name is 'Syn-Apps.license'.", and "For an evaluation license, please go to <<http://www.syn-apps.net>> and register." The right column contains the text "Please chose the location of your license file. You may type a new folder name or click the Browse button to find a location." Below this text is a text input field containing "C:\\" and a "Browse..." button. At the bottom of the dialog, there are three buttons: "< Back", "Next >" (which is highlighted with a dashed border), and "Exit".



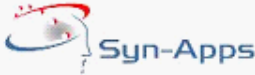
Configuring Communications Manager Addresses

Type the IP address of your Communications Manager Server(s). You are allowed to input a maximum of five Communications Manager Servers. The first IP address field populated designates the primary Communications Manager server. In the event that you wish to designate a secondary Communications Manager for the SA-ERS Emergency Response System to rollover to in case of system failure, you may designate up to 4 back up Communications Manager servers. All servers are required to have the same administrator user ID and password designated and must be running the same version of Communications Manager. Additionally all back-up Communications Manager servers must be using the same SQL SA password.

Click **Next** to proceed.



SA-ERS Configuration - Call Manager Addresses

 **SA-ERS**

Call Manager Addresses

Please enter the addresses of your Call Managers.

Primary Call Manager:

Call Manager 2:

Call Manager 3:

Call Manager 4:

Call Manager 5:

< Back Next > Exit



Communications Manager Authentication

Enter the Windows user account name for the Communications Manager. (This user and password must be the same on all Communications Manager servers and the Syn-Apps application server.)

Click **Next**

The screenshot shows a configuration window titled "SA-ERS Configuration - Call Manager NT Authentication". The window has a header bar with the Syn-Apps logo and the text "SA-ERS". The main area is divided into two sections. On the left, there is a scrollable text box containing instructions: "Enter the user and password for Call Manager NT administrator account. SA-Announce requires you to be logged on local machine (not on the domain) with an identical user as the Call Manager NT Administrator, with an identical password." followed by "Using the 'administrator' account, with the password identical to the one on CallManager is recommended." and "When it is not possible to change the use the local 'administrator' user, there is the option of creating a new user on all CallManagers used by SA-Announce, member of the Administrators group, and with that same name and password as the local user." On the right, there are two input fields: "Call Manager NT User:" with the text "administrator" entered, and "Call Manager NT Password:" with a masked password "xxxxxxxx". At the bottom right, there are three buttons: "< Back", "Next >", and "Exit".




Application Database Server

If you have installed the Syn-Apps Core Components (Required), please enter **SynApps** as your **Instance Name**.

Click **Next** to proceed.

SA-ERS Configuration - Application Database

 **SA-ERS**

Application Database Server

Enter SQL Server instance where you want to install the application database.

If you installed *Syn-Apps Core Components* (recommended), use "SynApps" for the instance name.

Syn-Apps Core Components can be downloaded from http://www.syn-apps.net/Downloads.aspx?project_id=12.

If you don't have a named instance, leave the instance name field blank.

You can only use a local database.

SQL Server:
synapps02

Instance Name (leave blank for default):
SynApps

Database Name:
SA-ERS 1.5

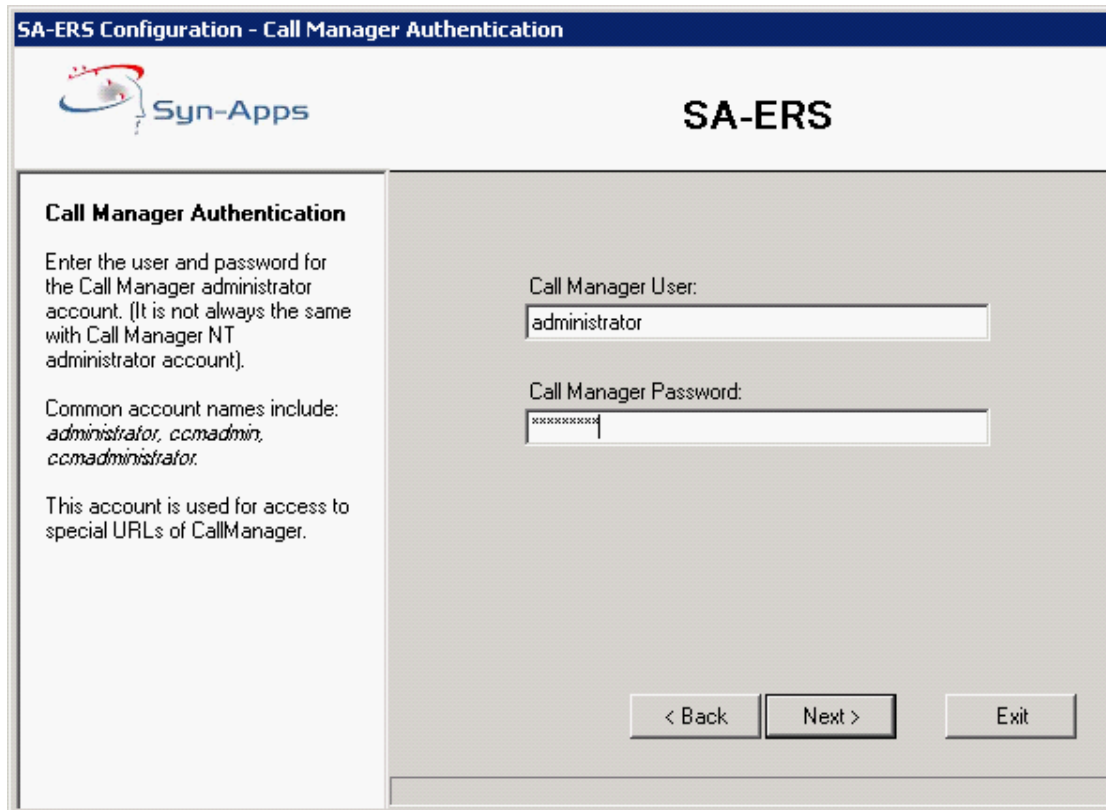
< Back Next > Exit



Communications Manager Authentication

Enter the Communications Manager Administrator account information.

Select **Next** to continue.



The screenshot shows a configuration window titled "SA-ERS Configuration - Call Manager Authentication". The window has a blue header bar with the title. Below the header, there is a logo for "Syn-Apps" on the left and "SA-ERS" on the right. The main content area is divided into two sections. The left section, titled "Call Manager Authentication", contains the following text: "Enter the user and password for the Call Manager administrator account. (It is not always the same with Call Manager NT administrator account).", "Common account names include: *administrator, ccadmin, ccadministrator.*", and "This account is used for access to special URLs of CallManager." The right section contains two input fields: "Call Manager User:" with the text "administrator" entered, and "Call Manager Password:" with "*****" entered. At the bottom right of the window, there are three buttons: "< Back", "Next >", and "Exit".




Other Parameters

- Enter the SMTP Server address in the provided field.
- Enter the Mailer address in the provided field, this is the From field of outgoing messages (this can be a fictitious address).
- Enter the Company Name in the provided field.

Select **Configure** to continue

SA-ERS Configuration - Other parameters

 SA-ERS

Other parameters

Enter the address of your outgoing mail server (SMTP) to be used for sending emails as a result of security events.

Mailer address is the address used for the **From** field when sending emails (can be a fictive address)

SMTP Server:

Mailer address:

Company Name:

< Back Configure Exit



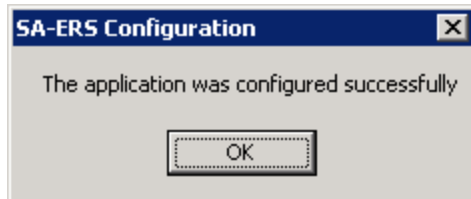
Successful Configuration

After clicking the Configure button:

You will see a series of windows and the status bar will be updated as steps are completed.

When the application is configured you will see the following success window.

Click **OK** to proceed.



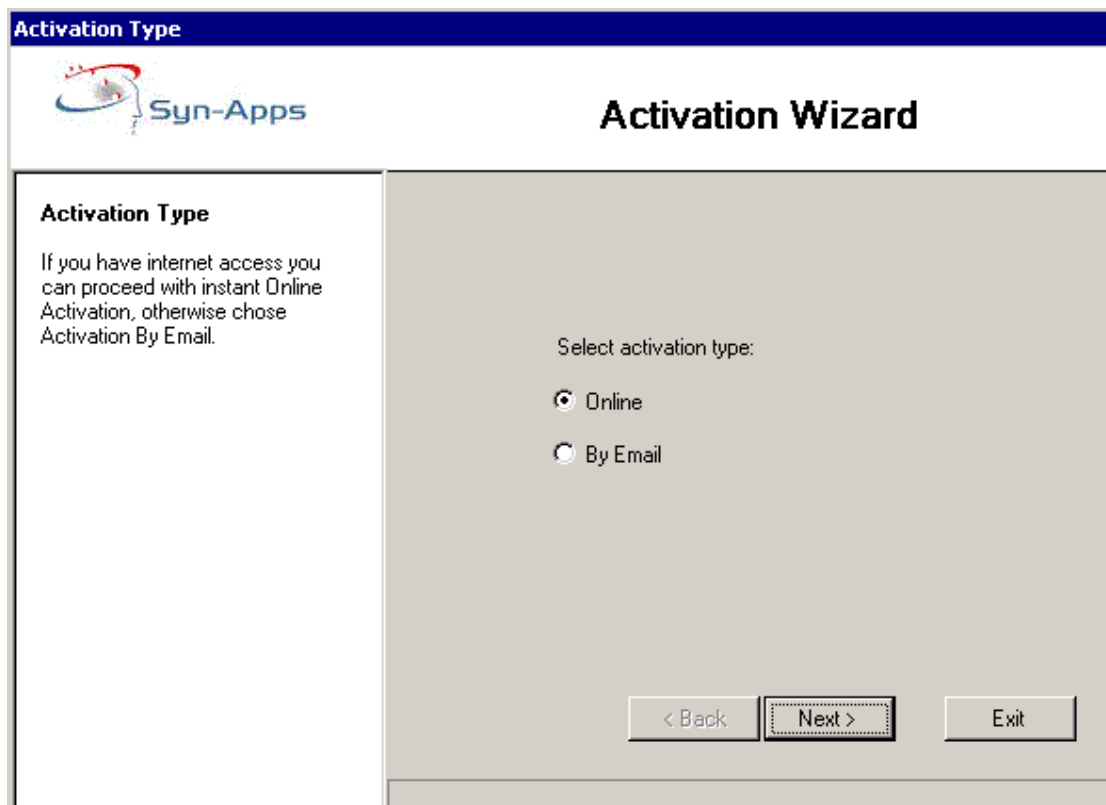
Activation Type

You are now required to activate your copy of SA-ERS.

Select **Activate** online if your SA-ERS server has access to the Internet.

Select **By Email** if your SA-ERS server does not have access to the Internet.

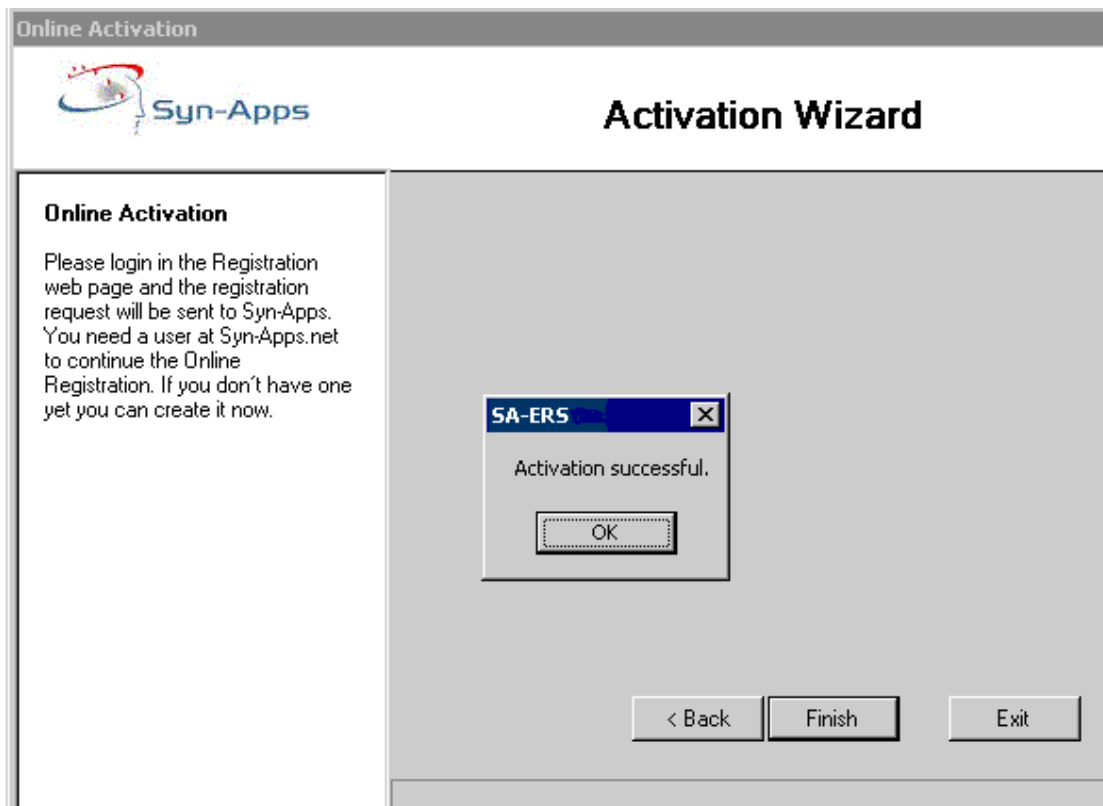
Click **Next** to proceed.



Online Activation

If you selected the **Online** option you will be presented with a success window once your application is activated.

Click **OK** to continue.



Once the Install Wizard has completed the installation you will see a shortcut on the desktop labeled **SA-ERS**.

This completes the SA-ERS Installation Procedure.



Application Setup Overview

Part

6

6 Application Setup Overview

The steps required to configure a successful SA-ERS deployment are listed below.

- Configure Cisco TSP (TAPI service provider).
- Create Actions for the SA-ERS Emergency groups to use.
 - These actions are available to all Emergency groups. They are used by the Security Monitoring Members when an emergency is invoked. They will display on the screen of any IP phone that has XML capabilities when the Security Monitoring Members presses the reply button.
- Enter user information for each phone in the “Phone Settings” section
 - This is the information that will be displayed to the security person when an emergency event is invoked.
- Create Emergency Groups and associate Security Monitoring Members and Phones that are allowed to use the group. You will also compose the messages and actions that this group will use.
 - Security Monitoring Members are the people that you want to receive the audio broadcast and the XML screen pop. You can have one or many Security Monitoring Members. They will all hear the audio stream from the person in an emergency and have the ability to reply to the event with any of the actions that you previously defined.
 - The users that you allow to access this group will be able to call into this emergency group and start an event.
- When you have created your first group you can then start the service on the services page.
 - SA-ERS has two services:
 - SA-ERS Broadcaster service – This is the main service and must be started for the application to function. You can only start the service after you create your first group.
 - SA-ERS Analog Monitor service – This is used if you implement analog emergency panic buttons. This service is not required unless you have implemented emergency buttons.
- If using manual registration in Communications Manager, register the group using the Communications Manager administration utility.
- Start the services and refresh the phone settings.



Services

Part

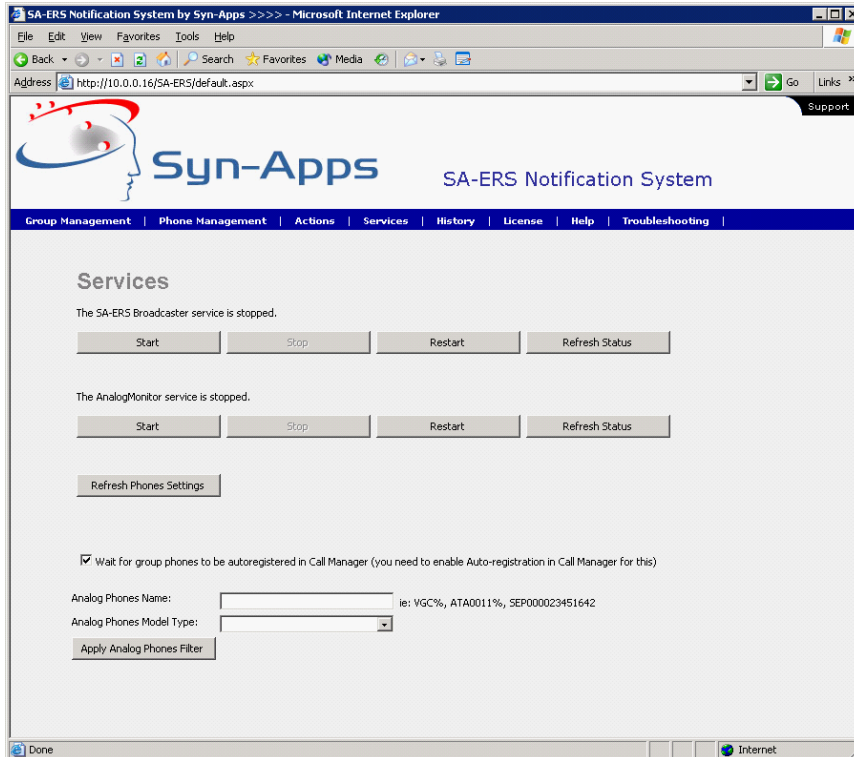


7

7 Services

Double click on the **SA-ERS shortcut** that was created on your desktop at the end of installation. This will bring you to the home page of the SA-ERS Emergency Response System. The application can also be started by browsing to <http://<SA-ERS-Host-Machine>/SA-ERS>.

Click the **Services** menu item to test Call Manager connectivity and import phone information.



Until the first group is created the service is stopped. You will see a message on the **Services** page stating: The SA-ERS Broadcaster service is stopped and the SA-ERS Analog Monitor service is stopped.

Click **Refresh Phone Setting**

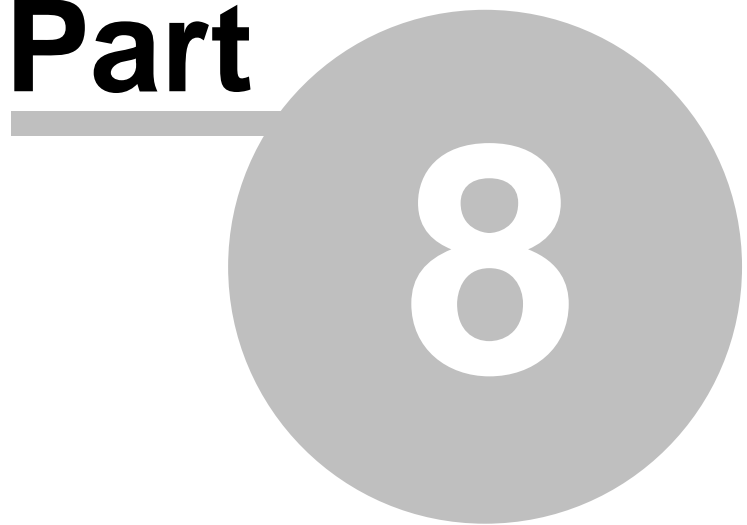
This will pull all phones and extensions from the Communications Manager server into SA-ERS. Once completed, a message will display stating “Phone Settings have been successfully read from Communications Manager.”

For initial Setup it is recommended to check the box at the bottom of the screen titled: **“Wait for group phones to be auto registered in Communications Manager.”** This will eliminate several steps during the initial setup. To have this box checked you must enable auto-registration in Communications Manager.



Configuring Actions

Part

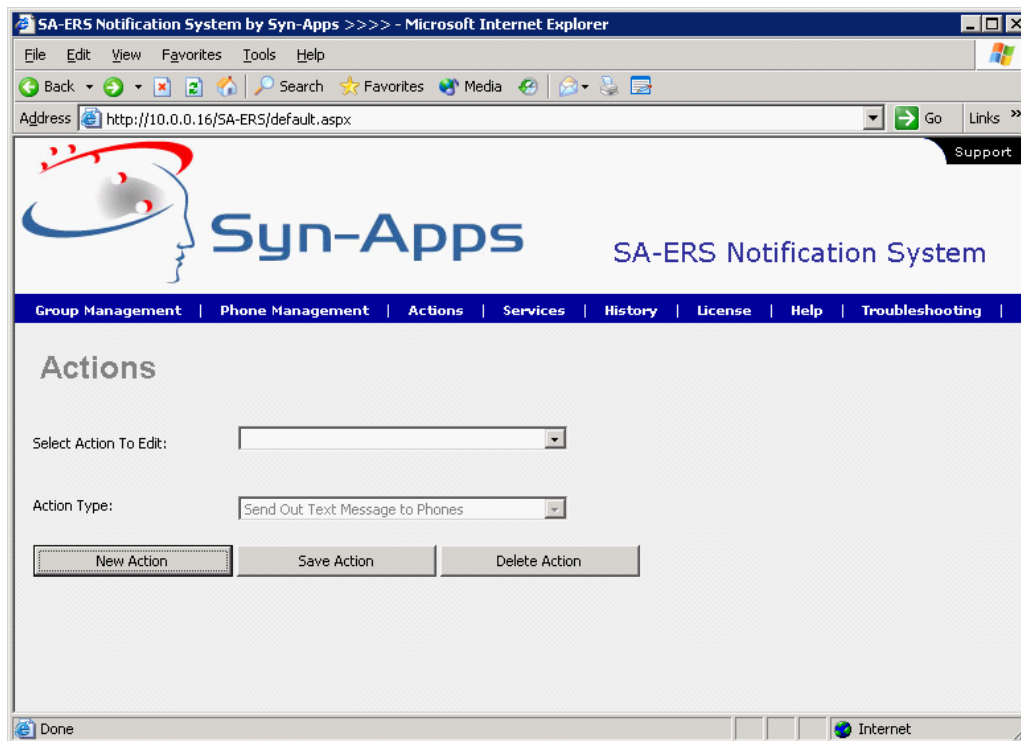


8 Configuring Actions

The first step is to configure actions that will be used by the SA-ERS groups.

Select **Actions** from the application menu.

Once the actions page appears click **New Action**.



Configuring Actions

In the **Action Name** field type in a logical action name that the users will recognize.

Select one of the Action Types from the dropdown box

- Close connection and call back user – When selected by the Security Monitor Member this action will cancel the current emergency event and call the user back automatically.
- Send out E-mail Message – When selected, this action will send out an e-mail message with the configured text to the configured list of e-mail addresses
- Send out text Message to phones – This action sends an XML text message to the display of all phones selected in the action configuration.
- Send out Text Message to Sender – This action only sends a defined XML text message to the source phone. The phone that initiated the emergency event.

Fill in the appropriate information for the action type selected.

E-mail addresses – You can enter multiple e-mail addresses if you separate them with a semicolon.

Message – The message to be displayed if the action is selected in the event of an emergency.

Click **Add Action**. Now you are ready to enter User information for each phone.



Configuring User Information

Part

9

9 Configuring User Information

Select the **Phone Management** menu item.

The **Phone Management** page is used to enter user information on a per phone basis. This information is used by e-mail and group notifications, explained later in the Configuring Groups section.

The following fields are available:

- **Filter:** Apply a filter to the phones listed in the **Select Phone to Edit** dropdown menu.
- **Select Phone to Edit:** The phone to be updated.
- **Phone Location:** Enter a description of the phone's location.
- **Medical Information:** Enter medical information for the phone user.
- **Manager:** Enter the manager of the phone user.
- **Miscellaneous:** Enter miscellaneous information.
- **Associated Button:** Select the MAC Address of the **Emergency Button** associated with this phone. This dropdown menu is populated with devices that match the filter on the **Services** page.

The screenshot shows a Microsoft Internet Explorer browser window displaying the SA-ERS Notification System web application. The browser's address bar shows the URL `http://10.0.0.16/SA-ERS/default.aspx`. The page header features the Syn-Apps logo and the text "SA-ERS Notification System". A navigation menu includes "Group Management", "Phone Management", "Actions", "Services", "History", "License", "Help", and "Troubleshooting". The main content area is titled "Phone Management" and contains the following form fields:

- Filter:** A text input field with an "Apply" button. The text "I.e: 20 for all the extensions beginning with 20" is displayed to the right of the field.
- Select Phone To Edit:** A dropdown menu showing "2002 - SEP00036BDD37F8".
- Phone location:** A text input field containing "Syn-Apps Lab SW".
- Medical information:** A text input field containing "Diabetic".
- Manager:** A text input field containing "Ian Pitts".
- Miscellaneous:** A text input field containing "Security Phone".
- Associated button:** A dropdown menu showing "No button".

At the bottom of the form are "Save" and "Cancel" buttons. The browser's status bar at the bottom shows "Done" and "Internet".



**Configuring Groups –
Auto Registered in
Communications
Manager**

Part



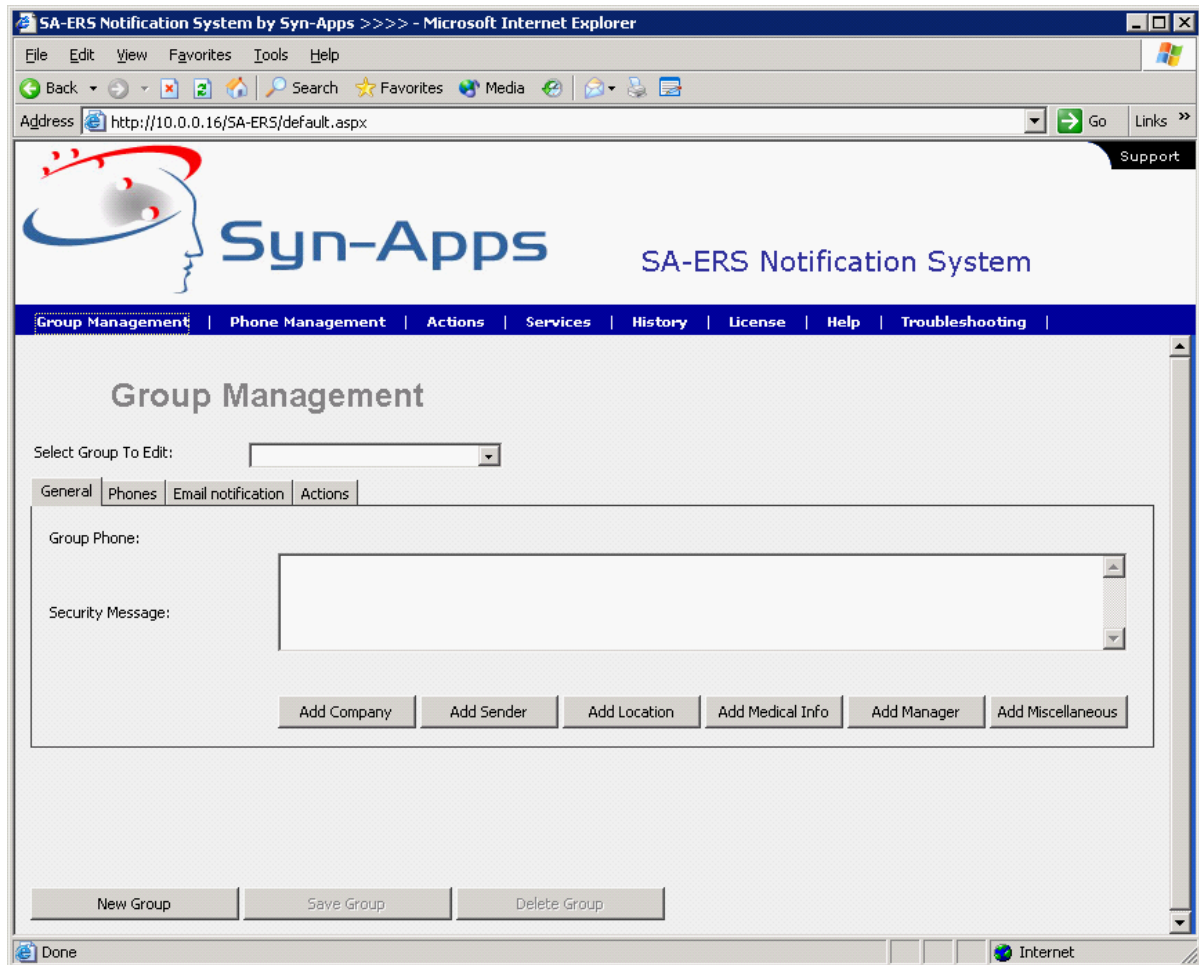
10

10 Configuring Groups – Auto Registered in Communications Manager

There are two sections for **Configuring Groups** – this section describes creating a group with the “Wait for group phones to be auto registered in Call Manager.” box checked on the SA-ERS **Services** page.

Select the **Group Management** menu item.

Click the **New Group** button.



10.1 General Tab

Select **Group Management** from the main menu. The General tab is where the group name is entered and the Security Message template is defined.

In the **Please Enter Group Name** field enter a logical group name that the users will recognize.

In the **Security Message** field enter the message to be sent to Security Monitoring Members of the group (this message will be displayed on all Security Monitoring Members phones in the event of an emergency).

SA-ERS Notification System by Syn-Apps >>>> - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media

Address http://10.0.0.16/SA-ERS/default.aspx Go Links

Support

Syn-Apps SA-ERS Notification System

Group Management | Phone Management | Actions | Services | History | License | Help | Troubleshooting

Group Management

General | Phones | Email notification | Actions

Please Enter Group Name:

Group Phone:

Security Message:

Add Company Add Sender Add Location Add Medical Info Add Manager Add Miscellaneous

Add Group Cancel

Done Internet



10.2 Phones Tab

Click the **Phones** tab of the **Group Management** page.

There are two separate fields populated with phones, add phones to their respective groups by selecting the phone in the proper input field and clicking the corresponding **Add** button:

- **Security Monitoring Members:** Users who receive this groups defined actions.
- **Phones that can access this security group:** Devices that can initiate this particular emergency.

Note: Phones that can access the security group (i.e. kick off the emergency event) should not be made Security Monitoring Members. This is because the event sends audio from the initiator to all monitoring members; if the initiator is a monitoring member then the process will fail.

If there are no **Email Notifications** or **Actions** to add to this group, click the **Add Group** button and proceed to the [Restarting the Service](#) section. Otherwise continue.

The screenshot shows a Microsoft Internet Explorer browser window displaying the SA-ERS Notification System web interface. The address bar shows the URL <http://10.0.0.16/SA-ERS/default.aspx>. The page title is "SA-ERS Notification System by Syn-Apps >>>>". The interface includes a navigation menu with options: Group Management, Phone Management, Actions, Services, History, License, Help, and Troubleshooting. The main content area is titled "Group Management" and has tabs for General, Phones, Email notification, and Actions. The "Phones" tab is active. Under "View List By:", there are radio buttons for "Phone" and "Extension", with "Extension" selected. A "Filter:" field and an "Apply" button are present. Below this, there is a text box stating: "When you add a Shared Line all the phones that use it will be added. A phone is added with all it's corresponding lines." There are two main sections for adding phones. The first section, "Security Monitoring Members:", has a list box containing "2002 - Auto 2002", "2007 - Auto 2007", "2008 - Auto 2008", "2010 - Auto 2010", and "2013 - Auto 2013". To the right of this list are "Add" and "Remove" buttons. The second section, "Phones that can access this security group:", has an identical list box and "Add" and "Remove" buttons. At the bottom of the page, there are "Add Group" and "Cancel" buttons. The browser's status bar at the bottom shows "Done" and "Internet".

10.3 Email Notification Tab

Click the **Email Notification** tab of the **Group Management** page.

Enter the email address of the members who are to receive notification of this event in the **To** field. Multiple addresses' can be entered by separating them with a semicolon.

Enter the email message to be sent in the **Email Message** field. Use the hot-buttons at the bottom of the page for adding variables to the message.

If there are no **Actions** to add to this group, click the **Add Group** button and proceed to the [Restarting the Service](#) section. Otherwise continue.

SA-ERS Notification System by Syn-Apps >>>> - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media Print

Address http://10.0.0.16/SA-ERS/default.aspx Go Links >>

Support

Syn-Apps SA-ERS Notification System

Group Management | Phone Management | Actions | Services | History | License | Help | Troubleshooting

Group Management

General Phones **Email notification** Actions

To

Email Message:

Security Alert: {Sender} requests assistance at location {Location}.
Manager: {Manager}.
Medical info: {MedicalInfo}.
Other info: {Miscellaneous}

Add Company Add Sender Add Location Add Medical Info Add Manager Add Miscellaneous

Add Group Cancel

javascript:void 0; Internet



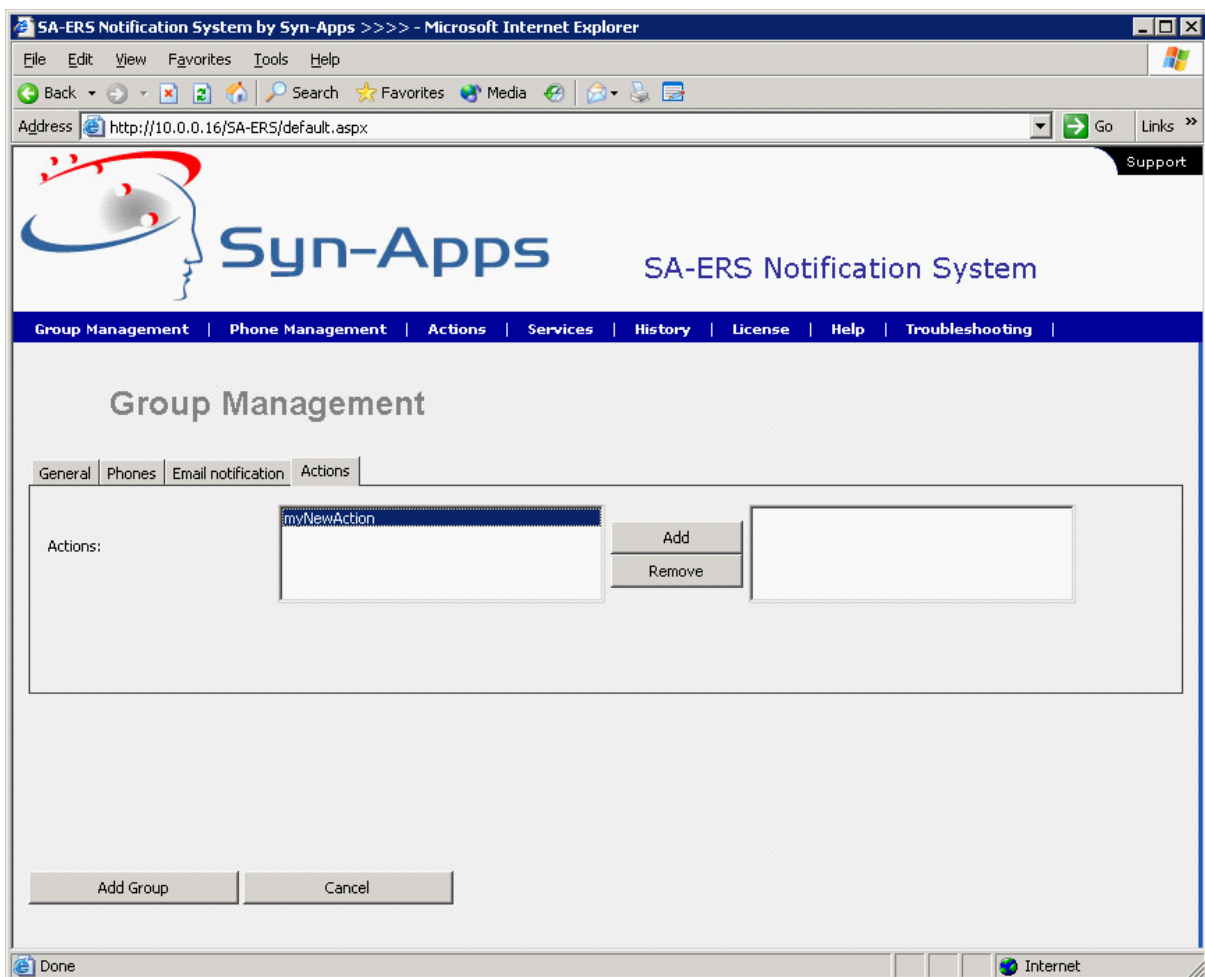
10.4 Actions Tab

Click the **Actions** tab of the **Group Management** page.

Add Actions to the group by selecting them in the left-hand field and clicking **Add** to add them to the right-hand field.

Once you have finished adding actions, click **Save Group**.

After Saving the Group a Group Phone MAC Address will be provided on the **General** page. In order for the Group to be active within the SA-ERS system the service will need to be restarted and phone settings refreshed (see [Restarting the Service](#) for details).



10.5 Restarting the Service

Select **Services** from the main menu.

Click the **Restart** button.

Click the **Refresh Phone Settings** button.

SA-ERS Notification System by Syn-Apps >>>> - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media

Address http://10.0.0.16/SA-ERS/default.aspx Go Links

Syn-Apps SA-ERS Notification System

Group Management | Phone Management | Actions | Services | History | License | Help | Troubleshooting

Services

The SA-ERS Broadcaster service is running.

Start Stop Restart Refresh Status

The AnalogMonitor service is running.

Start Stop Restart Refresh Status

Refresh Phones Settings

Phones settings have been successfully read from Call Manager.

Wait for group phones to be autoregistered in Call Manager (you need to enable Auto-registration in Call Manager for this)

Analog Phones Name: ie: VGC%, ATA0011%, SEP000023451642

Analog Phones Model Type: Cisco ATA 186

Apply Analog Phones Filter

Done Internet

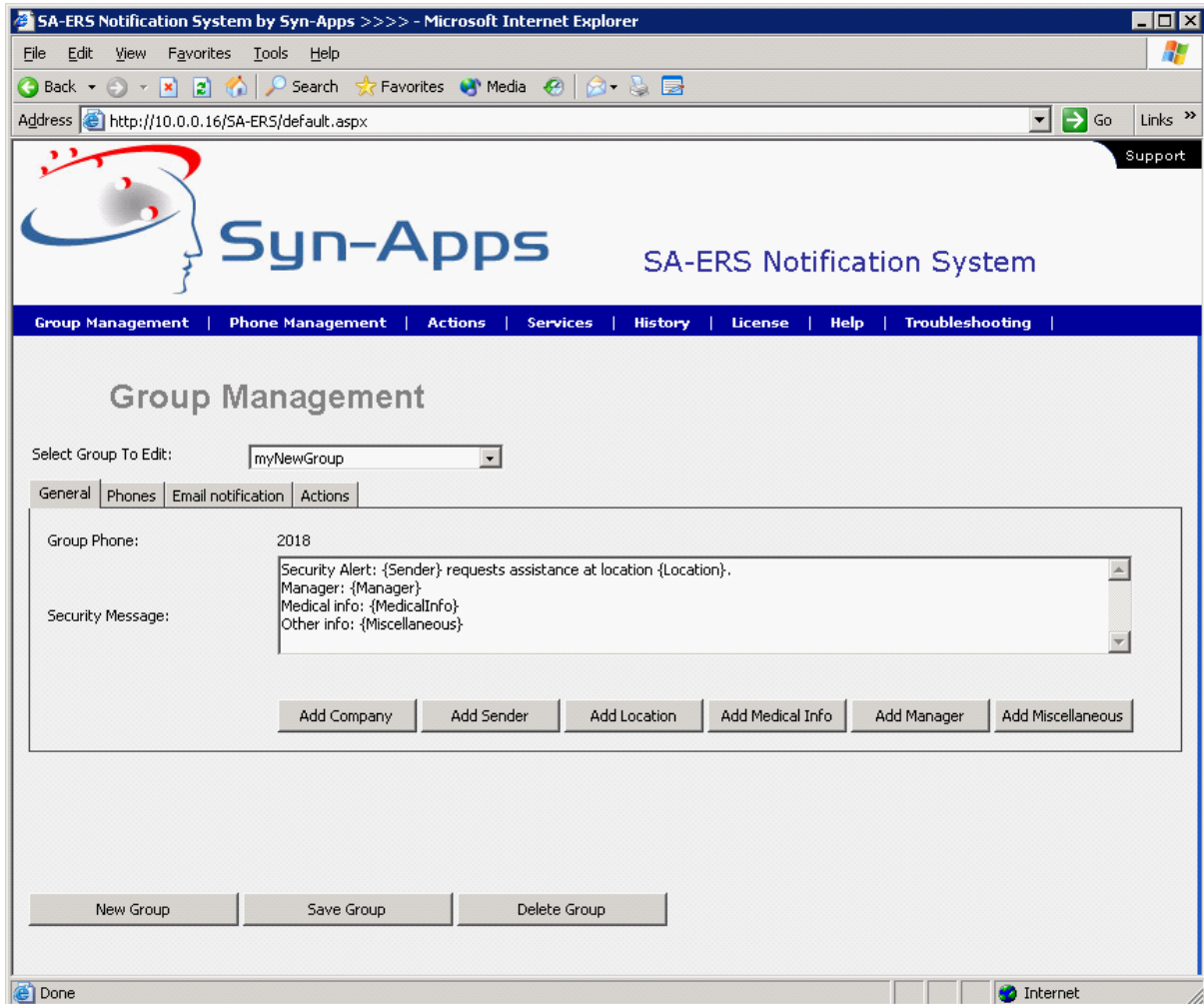


10.6 Verifying the Group ID

Select **Group Management** from the main menu.

Find the new group in the **Select Group to Edit** pull down menu.

The **Group Phone** field will show the groups extension (Group ID) that was translated from the MAC Address (only for auto registration in Communications Manager, see Manually Registered in Call Manager for manually adding the group device).



Congratulations! You have created your first group! Repeat steps as needed.



**Configuring Groups –
Manually Registered in
Communications
Manager**

Part



11

11 Configuring Groups – Manually Registered in Communications Manager

There are two sections for **Configuring Groups** – this section describes creating a group with the “Wait for group phones to be auto registered in Communications Manager.” box unchecked on the SA-ERS **Services** page.

With the box unchecked a group is created within SA-ERS and must be manually configured to register within Communications Manager.

Follow the steps in the above section [Auto Registered in Communications Manager](#) until you have created a new group.

After saving the group a Group Phone MAC Address is provided in the **Group Phone** field which is located on the **Group Management** page under the **General** tab.

Copy the MAC Address listed in the **Group Phone** field, it will be used to manually register the group phone within the Communications Manager administration utility.

The SA-ERS application page may be left open while adding the group manually within the Communications Manager system.



11.1 Adding the Group Phone Device

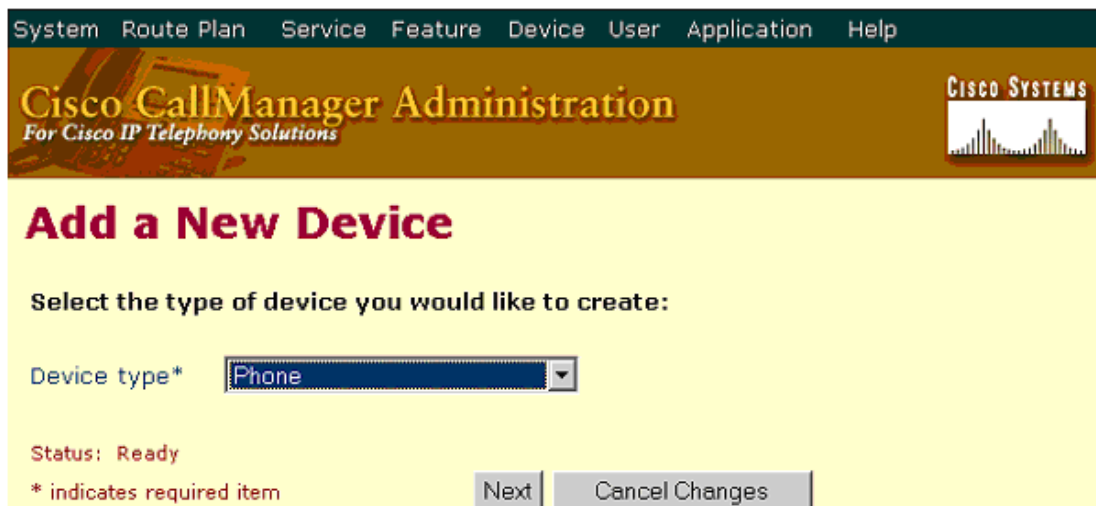
Open the **Cisco Call Manager Administration** tool.

Select **Device>Add a New Device**



Select **Phone** in the Device Type field

Click **Next**



Communications Manager - Adding a New Phone

Select **Cisco 30 VIP** in the Phone Type field

Click **Next**

The screenshot shows the 'Add a New Phone' page in Cisco CallManager Administration. The page title is 'Add a New Phone' in red. Below the title, it says 'Select the type of the phone you would like to create:'. There is a dropdown menu for 'Phone type*' with 'Cisco 30 VIP' selected. Below the dropdown, it says 'Status: Ready' and '* indicates required item'. There are two buttons: 'Next' and 'Cancel Changes'.

In the MAC Address * field **Paste in the MAC Address** that was copied from the SA-ERS Group Management section (**Remove the SEP prefix** from the pasted MAC Address) Description field is **auto populated**. The remaining fields are populated with the standard settings

Click **Insert**

Click **OK**

The screenshot shows the 'Phone Configuration' page in Cisco CallManager Administration. The page title is 'Phone Configuration' in red. Below the title, it says 'Add a new phone' and 'Back to Find/List Phones'. There is a 'Directory Numbers' section on the left with a note: 'Lines can be added after the new phone is inserted in the database.' The main section is 'Phone: New' with 'Status: Ready' and 'Insert' and 'Cancel Changes' buttons. Below this is the 'Phone Configuration (Model = Cisco 30 VIP)' section, which is divided into several sub-sections: 'Device Information' with fields for MAC Address* (FFFF3E4F2C3B), Description (SEPPFFFF3E4F2C3B), Device Pool* (Default), Calling Search Space (Syn-Apps-LD-CSS), Media Resource Group List (<None >), User Hold Audio Source (1 - SampleAudioSource), Network Hold Audio Source (1 - SampleAudioSource), and Location (<None >); 'Phone Button Template Information' with Phone Button Template* (Default 30 VIP); and 'Firmware Load Information (leave blank to use default)' with Phone Load Name (blank).



Click **OK** on the message confirming the phone has been inserted and requesting if you would like a directory number.



Click in the title on the left hand side labeled **“Devices using this Directory Number”**
Click **Insert** - the Directory Number appears within the Directory Number field.

System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Directory Number Configuration

[Configure Device \(SEPFFFF3E4F2C3B\)](#)

Devices using this Directory Number

SEPFFFF3E4F2C3B (Line 1)

Directory Number: New
Status: Ready

Directory Number

Directory Number*

Partition

Directory Number Settings

Voice Mail Profile
(Choose <None> to use default)

Calling Search Space

User Hold Audio Source

Network Hold Audio Source

Call Waiting

Auto Answer

Call Forward and Pickup Settings

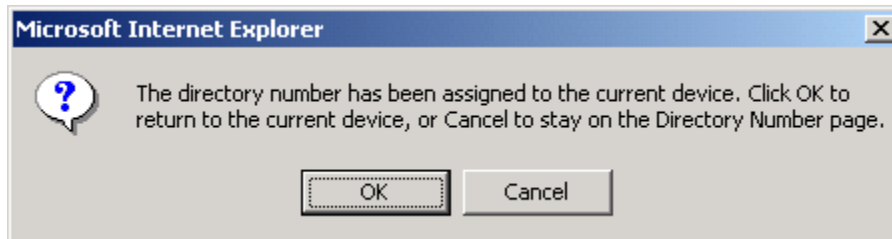
	Voice Mail	Destination	Calling Search Space
Forward All	<input type="checkbox"/>	<input type="text"/>	<input type="text" value=" < None >"/>
Forward Busy	<input type="checkbox"/>	<input type="text"/>	<input type="text" value=" < None >"/>



Communications Manager – Directory Number

A confirmation message appears stating a directory number has been assigned.

Click **OK**



The Phone group is now created within Communications Manager to match the Phone Group with SA-ERS Intercom. The SA-ERS server is ready to be restarted to link the Phone Group.

If the SA-ERS application is not open, double click on the SA-ERS Shortcut.

Select **Settings** from the main menu.

Click the **Restart** button.

Click the **Refresh Phone Settings** button.

Select **Group Management** from the main menu to view the new group.



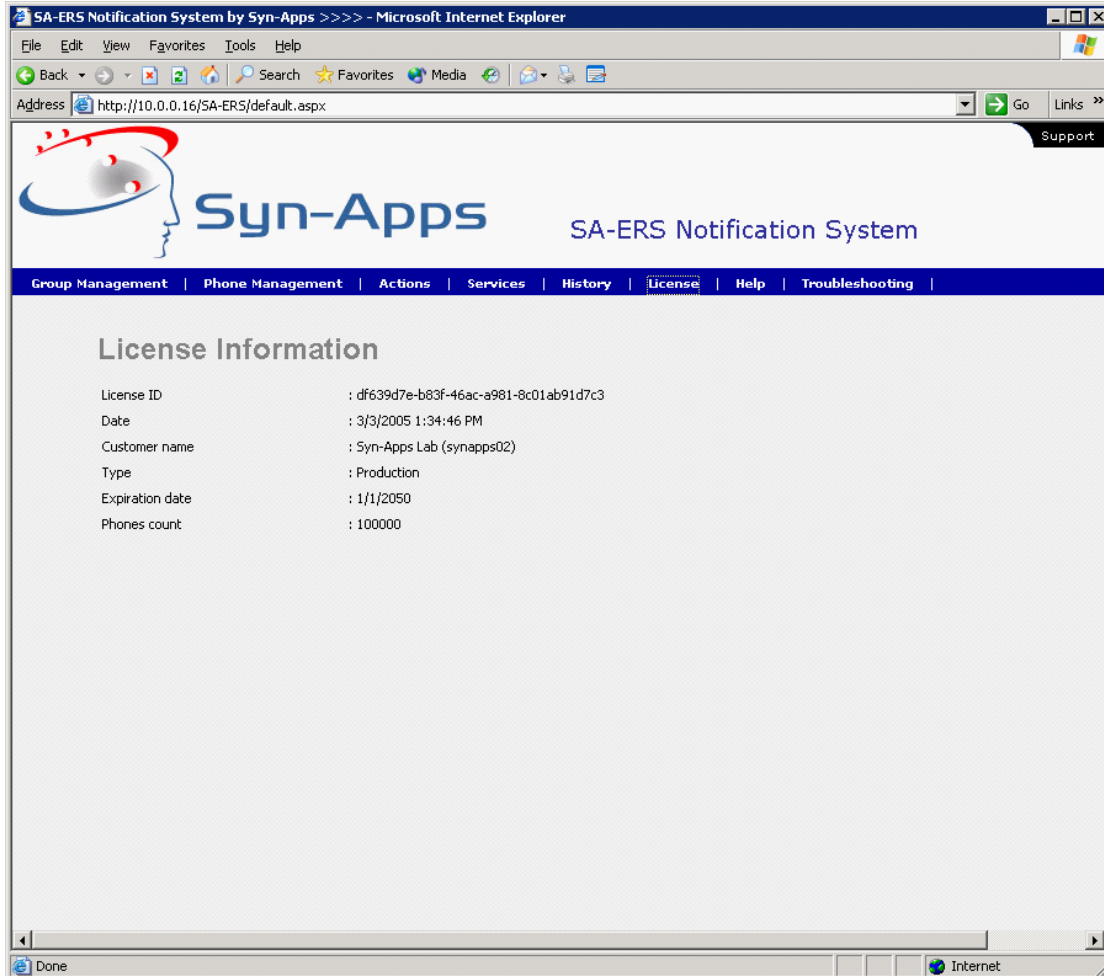
License Information

Part

12

12 License Information

Your company's License Information is available within the SA-ERS web interface. Select **License** from the main menu.



The screenshot shows a Microsoft Internet Explorer browser window displaying the SA-ERS Notification System web interface. The browser's address bar shows the URL `http://10.0.0.16/SA-ERS/default.aspx`. The page header features the Syn-Apps logo and the text "SA-ERS Notification System". A navigation menu includes links for Group Management, Phone Management, Actions, Services, History, License, Help, and Troubleshooting. The "License" link is highlighted. The main content area displays the following License Information:

License ID	: df639d7e-b83f-46ac-a981-8c01ab91d7c3
Date	: 3/3/2005 1:34:46 PM
Customer name	: Syn-Apps Lab (synapps02)
Type	: Production
Expiration date	: 1/1/2050
Phones count	: 100000

Help

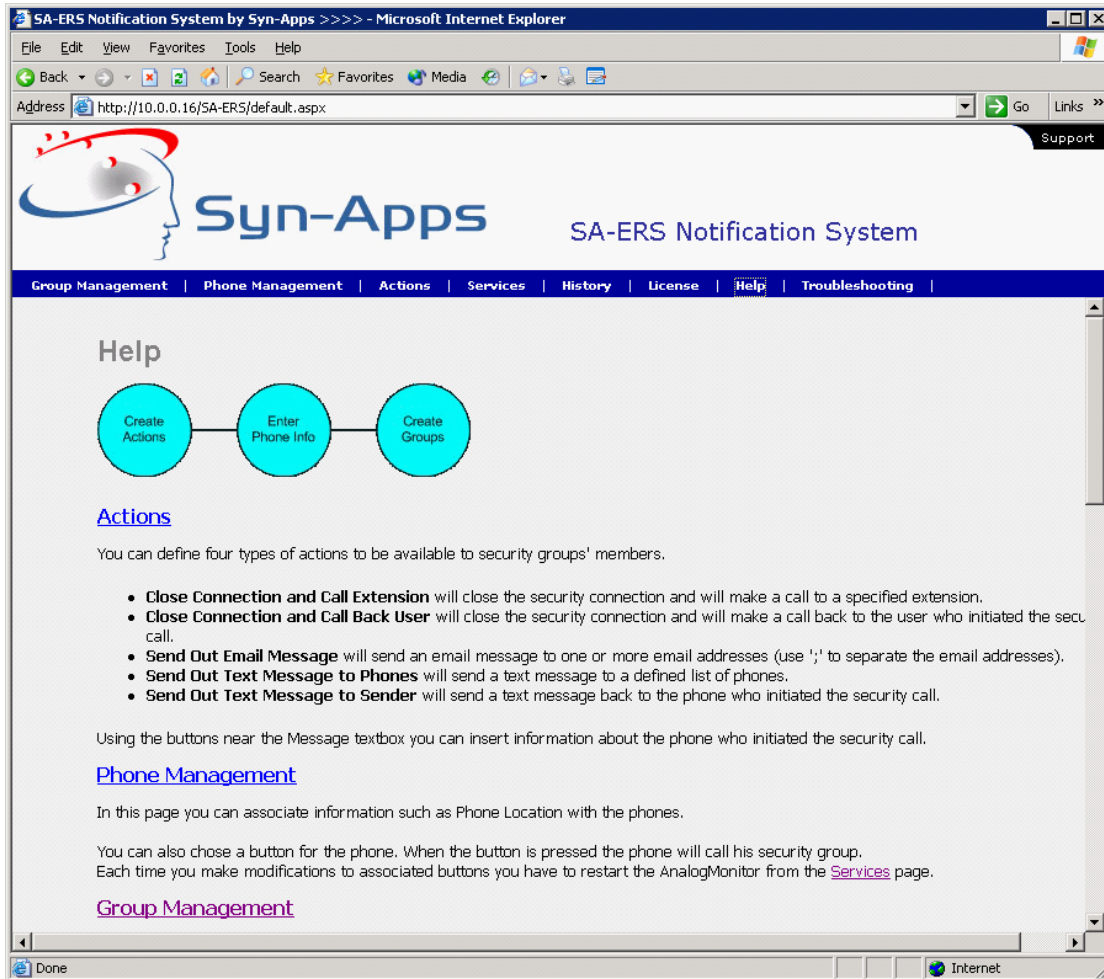
Part

13

13 Help

Select **Help** from the main menu.

This page explains the basic steps for a successful deployment. If you have any questions please refer to this page.



The screenshot shows a Microsoft Internet Explorer browser window displaying the SA-ERS Notification System help page. The browser's address bar shows the URL <http://10.0.0.16/SA-ERS/default.aspx>. The page header features the Syn-Apps logo and the text "SA-ERS Notification System". A navigation menu includes links for Group Management, Phone Management, Actions, Services, History, License, Help, and Troubleshooting. The main content area is titled "Help" and contains a flow diagram with three cyan circles: "Create Actions", "Enter Phone Info", and "Create Groups". Below the diagram, there are sections for "Actions", "Phone Management", and "Group Management", each with descriptive text and bulleted lists of actions.

Help

Group Management | Phone Management | Actions | Services | History | License | **Help** | Troubleshooting

Create Actions — Enter Phone Info — Create Groups

[Actions](#)

You can define four types of actions to be available to security groups' members.

- **Close Connection and Call Extension** will close the security connection and will make a call to a specified extension.
- **Close Connection and Call Back User** will close the security connection and will make a call back to the user who initiated the security call.
- **Send Out Email Message** will send an email message to one or more email addresses (use ';' to separate the email addresses).
- **Send Out Text Message to Phones** will send a text message to a defined list of phones.
- **Send Out Text Message to Sender** will send a text message back to the phone who initiated the security call.

Using the buttons near the Message textbox you can insert information about the phone who initiated the security call.

[Phone Management](#)

In this page you can associate information such as Phone Location with the phones.

You can also chose a button for the phone. When the button is pressed the phone will call his security group. Each time you make modifications to associated buttons you have to restart the AnalogMonitor from the [Services](#) page.

[Group Management](#)

Troubleshooting

Part

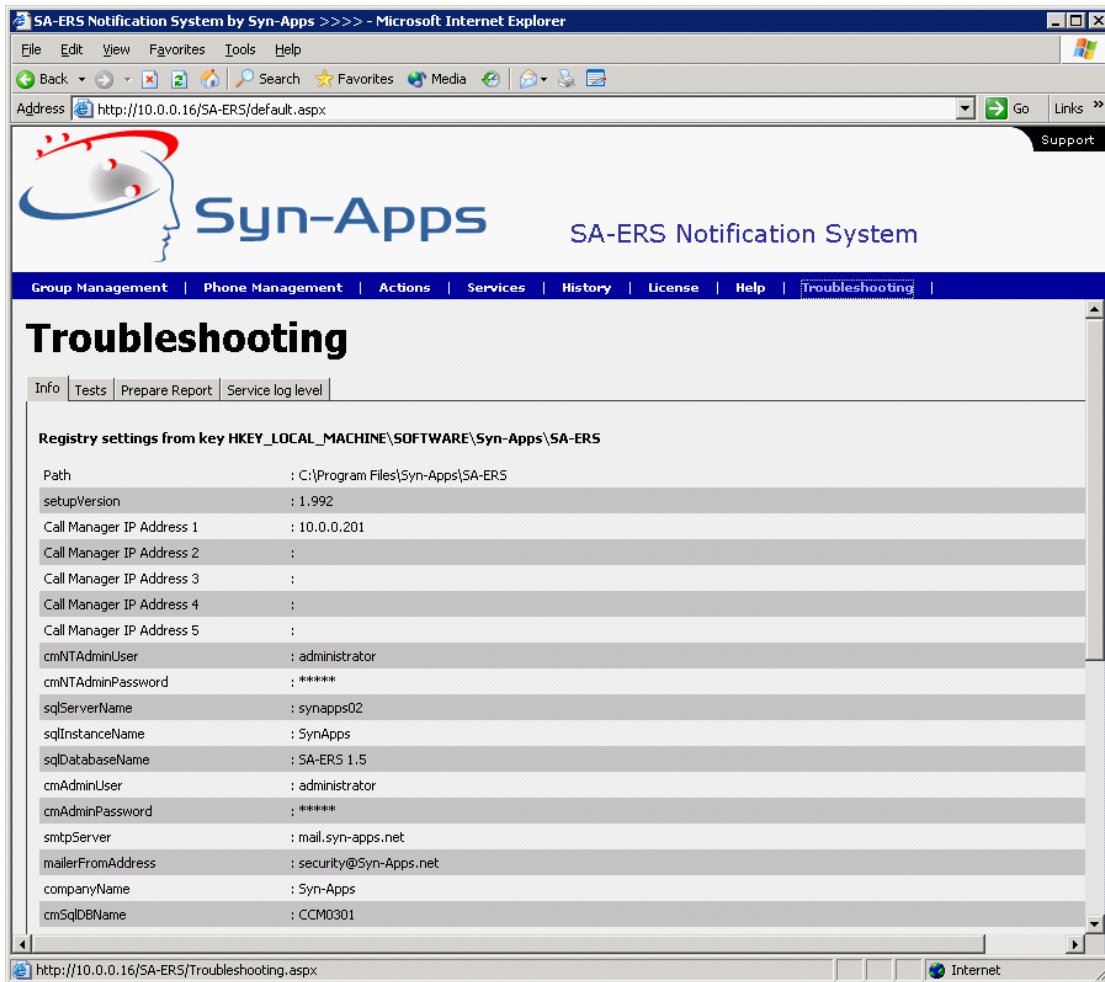
14

14 Troubleshooting

Select **Troubleshooting** from the main menu.

14.1 Info

The **Info** tab is the default Troubleshooting view. It contains application registry settings and other basic application information.

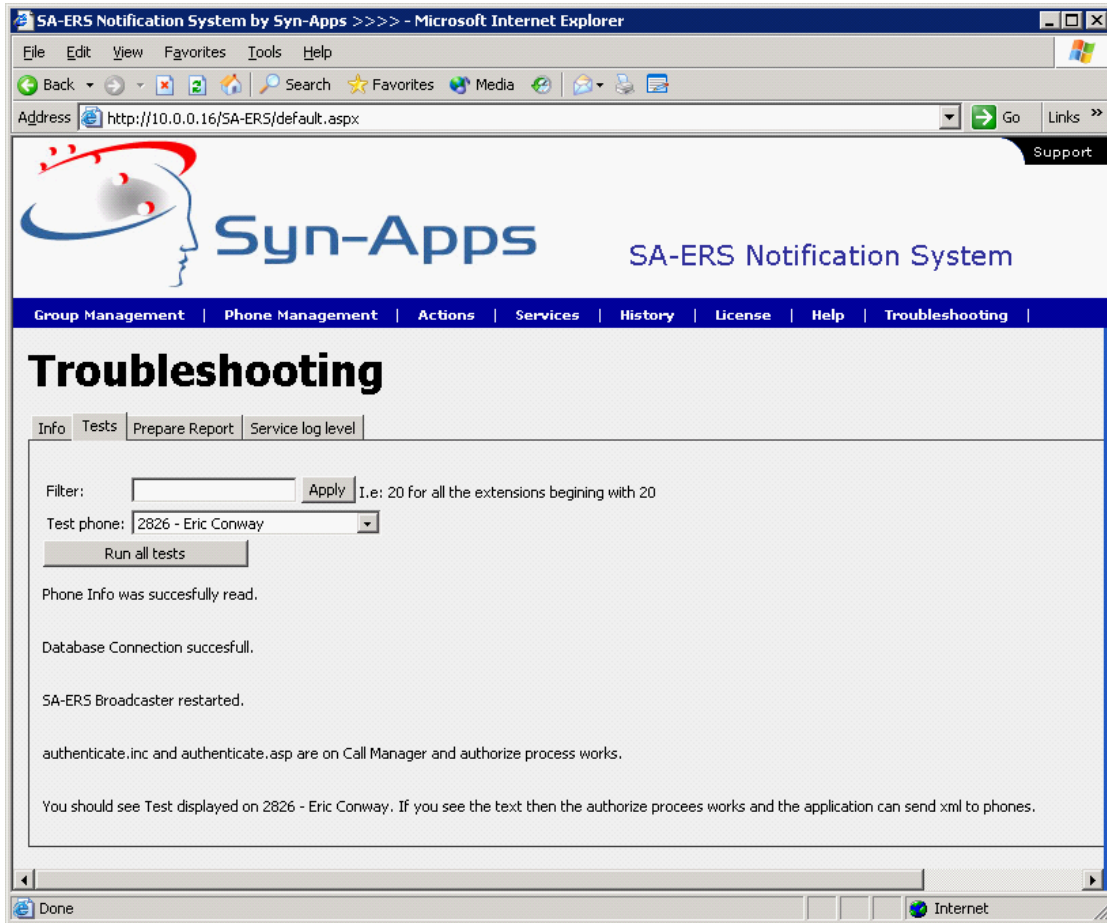


14.2 Tests

In the Test Phone pull down menu **select an extension near you.**

Click **Run all tests**

1. A message will display on the application screen confirming if the database connection was successful.
2. Look at the phone you selected to test and verify if it shows Test on the display screen.



If the test fails, review the confirmation data on the application screen and the web.config settings to determine where the connection was lost.

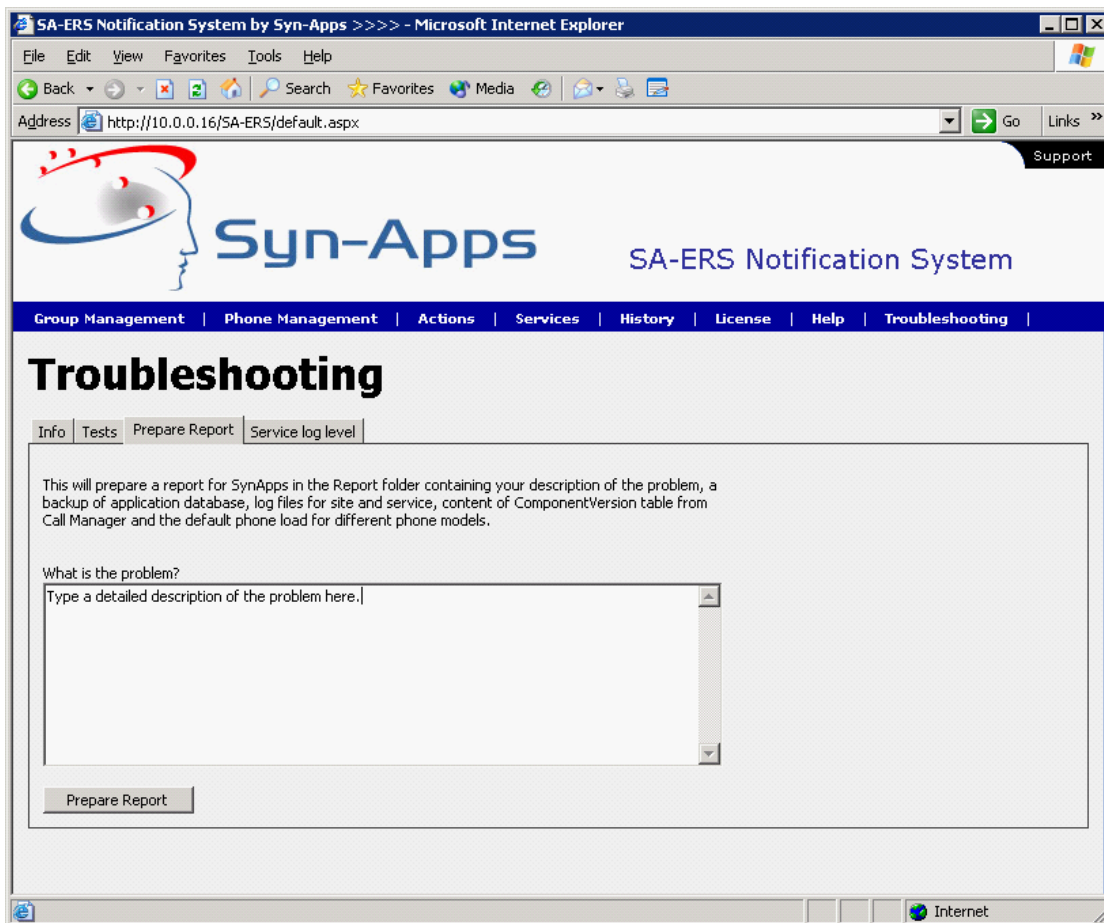


14.3 Prepare Report

The **Prepare Report** tab contains a method for preparing an error report for Syn-Apps Engineering.

To Prepare a Report, first make sure you have experienced the problem with the Service Log Level set to the appropriate selection (See: [Service Log Level](#) for more info).

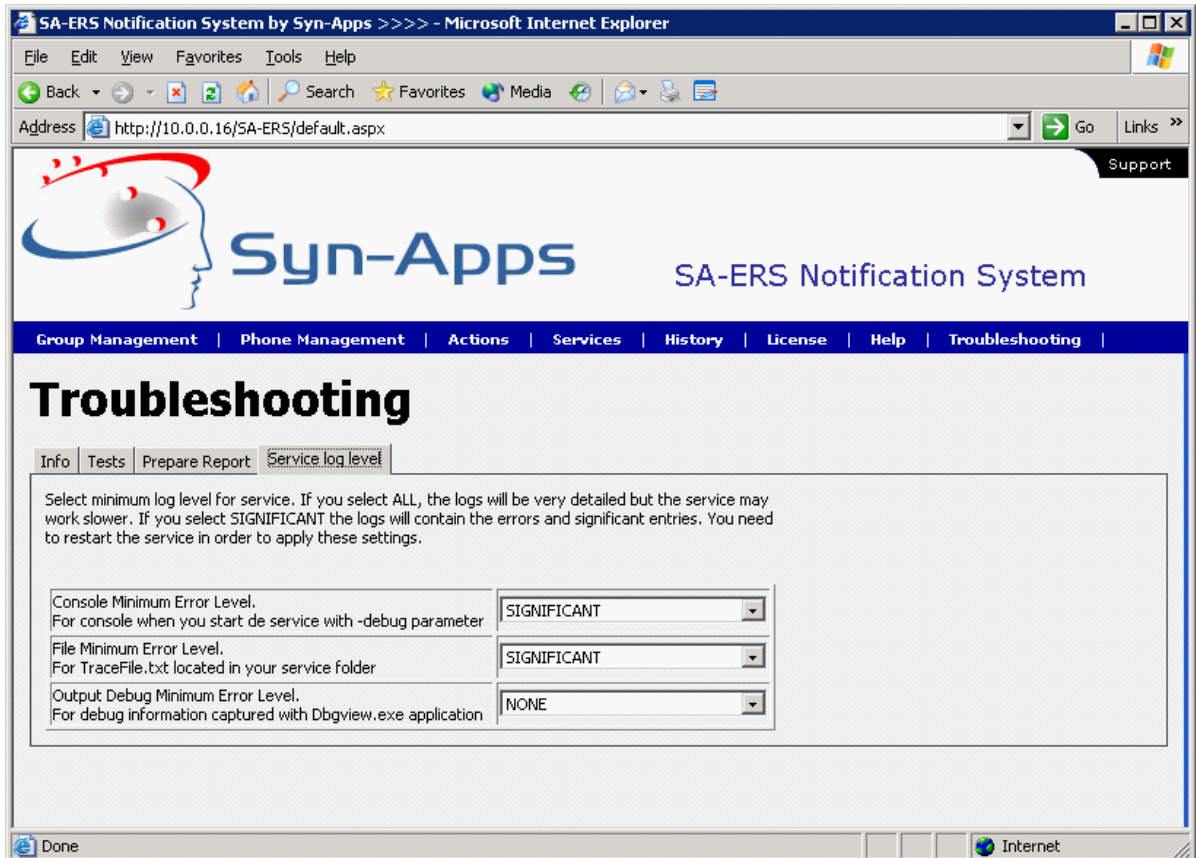
Proceed by filling out a description of the problem in the provided field. Click the **Prepare Report** button to prepare the report. Once completed, the application will provide you with the location of the report (a directory under the application install). Zip up the directory and send it to support@syn-apps.com.



14.4 Service Log Level

The **Service Log Level** tab contains fields for setting the level of error reporting in the application.

The default settings are shown in the figure below. Set the level lower, or to **NONE**, to log less information and save hard drive space. You must restart the service for any changes to take effect.



Troubleshooting Tips

Part

15

15 Troubleshooting Tips

SA-ERS System Not Responding:

To investigate any issues with the SA-ERS the Help section in the web interface will provide you details of any failures.

In the SA-ERS web interface:

Click **Help** tab

Select **Phone Extension** to test

Click **Run all tests**

View results provided on the screen

Refresh Status of the SA-ERS Services:

If you have made changes to the phone groups and they are not showing up in the Group Management tab refresh the system to display the new changes.

In the SA-ERS web interface:

Click **Settings** tab

Select **Refresh**

Halt SA-ERS Services:

In the SA-ERS web interface:

Click **Settings** tab

Select **Stop**

Resume SA-ERS Services:

In the SA-ERS web interface:

Click **Settings** tab

Select **Start**

Group ID unavailable after creating a Group

Once you have created a new group there should be a Group ID provided after linking the new group into the Communications Manager System. This Group ID is replaced by a MAC address from the initial creation.

Determine the configuration for linking the groups from SA-ERS System and Communications Manager

Open the **SA-ERS System** application

Click **Settings** from the menu

At the **bottom of the screen verify** if the box is unchecked or checked stating: Wait for group phones to be auto registered in Communications Manager.

1. If the box is checked verify that auto-registration is enabled within Communications Manager
2. If the box is unchecked perform the manual steps within Communications Manager with the MAC address provided after creating the group within SA-ERS System.





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