

Application Note

Product: Emergency Notification Server (ENS)
Purpose: Setup instructions
Date: 3/22/05

Emergency Notification Server (ENS) Set-up Instructions

Overview

The Ascom Emergency Notification System (ENS) is an application that combines many Ascom products into a powerful system that provides notification, escalation, and the routing of distress signals to facilitate a quick and coordinated response. The ENS is composed of the following Ascom equipment.

	<u>HARDWARE</u>	<u>SOFTWARE LEVEL</u>
ECM -	Emergency Conference Module	NA
MS -	Mobility Server	3.0 or higher
IMS -	Integrated Messaging Server	2.32 or higher
ACG -	Ascom Communication Gateway	Release 6 or higher
ENSGATE -	Emergency Notification System Gateway	Release 6 build 6008
DCT1900 -	Wireless Telephone System	CPU2 MS release R1B or higher
9P23 -	Wireless Portable Telephone	R3B

All of the above equipment excluding the DCT1900 system and the portables must be connected via TCP/IP for inter-equipment communication purposes.

Once the system is configured correctly, a user in an emergency situation can press the 9P23 alarm button to cause an emergency notification event.

- The user will automatically be placed into a conference room.
- All other “group” members will receive text messages alerting them that an Emergency Call has been made from a particular extension.
- All “group” members will be automatically connected into the conference by pressing their Talk button.

The following sections detail the procedure for implementing the ENS application.

Data Collection

	IP Address	Subnet Mask	DNS Server (if required)
ACG	_____	_____	_____
ENSGate	_____	_____	_____
IMS	_____	_____	_____
MS	_____	_____	_____
ECM	_____	_____	_____

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Conference Room Data

Use the attached forms to collect the data required to configure the ECM. The data required is:

CNF Room - Room number. Range is between 1 and 92.

Room Name - The name for the group of users or the function of the conference room.

Room Ext. Number – The extension number assigned to the conference room. These numbers may or may not be valid PBX extension numbers. If the conference rooms are going to be accessed from desk phones, then the Conference Room Extension Numbers must be valid PBX extensions. If the Conference Rooms will only be accessed from portable phones then the Conference Room Extension Numbers do not need to be valid PBX extension numbers. Choose vacant numbers in the PBX for the Conference Room Extension Numbers in this case.

There may be more than one extension number assigned to a given room.

Passcode – Password for access to the conference room if required or choose No.

Exit by # - Enable exit of conference room by pressing #.

Quiet Mode – Enable entrance to conference room without sending tone to other members.

Communications Mode – Options are Default/Talk/Monitor. Default means normal Talk and Listen.

Times – Select whether you want to restrict the hours of access to the Conference Room or allow access all the time.

Weekdays - Select whether you want to restrict the days that the Conference Room can be accessed or allow access all the time.

Days of Month - Select whether you want to restrict access to the Conference Room to certain days of the week or allow access all the time.

Month - Select whether you want to restrict access to the Conference Room to certain months or allow access all the time.

Room Members – The extension numbers of the portable phones that are allowed access to the respective conference rooms.

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Hardware Connections

ECM - The ECM can be connected to the MS with a maximum of two T1 links. The ECM connects to the network via a straight through Ethernet cable.

MS - The MS connects to the network via a straight through Ethernet cable.

IMS - The IMS connects to the network via a straight through Ethernet cable.

ACG - The ACG connects to the network via a straight through Ethernet cable.

ENSGate - The ENSGate connects to the network via a straight through Ethernet cable.

Mobility Server Setup

Configure the link(s) between the MS and the ECM

- As T1/5ESS Network/B8ZS/ESF.
- Create one route for each link. Assign route numbers starting with 30.
- Create a PNP table where the selected route(s), if there are more than one, are entered as 30,31.

Set up the Route Number Series for the Conference Room Extension Numbers to choose the PNP table that will send them to the ECM.

Set the IMS IP address in the MS so they can communicate.

- Hardware resources.
- IMS interface.
- Enter the IP address for the IMS.
- Leave the Local IP Port and the IMS IP Port at the defaults.
- Apply.

Emergency Conference Module (ECM) Setup

Refer to the Ascom application note, AN-0486, Ascom Emergency Conference Module for instructions on how to set the ECM up.

- If the ECM will be on the customers network, enter the IP address and subnet mask as required.
- Add as many new conference rooms as required.
- Enter the required data for each conference room from the data collection forms.

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Integrated Messaging Server (IMS) Setup

Entering of the IP address into the IMS module requires the use of Route to Elise software and a network crossover cable. (*Refer to the Elise2 manual for connector and switch locations.*) The procedure for setting the IP address is as follows:

- Set the module address to 00 if it is not connected to any other System 900 equipment 9(use SW02). If the IMS is connected to other System 900 equipment then the address selected cannot be 00 or any other addresses already in use.
- Before powering up, the IMS must be set in Network Setup Mode. To do this, locate switch module SW03 on the unit. Move SW03-1 to the on (right) position. All other switches in SW03 should be in the off (left) position.
- Connect the crossover cable between your PC and connector J20 on Elise 2.
- Power up the module.
- Start the Route to Elise program.

(Route to Elise will try to give your computer a default IP address, which allows connection to the module. The IP address will not load if the computer already has an IP address assigned to it. To see if the computer already has an IP address, run the command ipconfig in a DOS window. If there is an IP address assigned, run the command ipconfig /release or ipconfig /renew and this will release the IP address assigned to the computer.)

You might still have problems connecting, so as a last resort, restart your computer.

Start the Route to Elise program again.

- Select Attach. After a quick sequence of 3 to 4 screens opening and closing, you will be back to the opening screen for route to Elise.
- Select Launch config. This was grayed out before.
- If the logon screen opens up do the following. Otherwise, close everything and restart your PC.
- Username is admin.
- Password is changemetoo.
- System Setup should be displayed on the screen.
- Select Network from the left hand column and enter the new IP address.
- Set the default gateway for the customers network.
- Set the subnet mask for the customers network.
- Set the host name. (Whatever you want)
- Leave the rest of the settings at their defaults.
- Activate.
- Reboot.
- You will get a pop up box that tells you to take the module out of Network Setup Mode.
- Set SW02-1 back to the off (left) position.
- The module will reboot.

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- Go back to Route to Elise and select Detach.
- Disconnect the crossover cable.

At this point the IMS module should have a flashing orange light on it.

- Connect the IMS module to the network with a straight through cable.

When the IMS is connected to the network the LED on the unit will start flashing red because there is no license in it.

- Open up Internet Explorer and connect to the new IP address/admin.
- Username is admin.
- Password is changemetoo.
- This will open up to a screen labeled IMS/Unlicensed.

Entering the License

The license number is included in the documentation supplied with the unit. The license number corresponds to the module key number, which is located on a small 8-pin prom directly above the 64MB flash module. (I.e. 00026385) The license number associated with this module key will only work in this unit.

- Select License from the menu on the left hand side of the screen, under Common.
- Enter the license number. (It is not case sensitive)
- Select Activate.
- Select Reboot.

The LED on top of the IMS module should now be flashing orange.

- To re-enter the menu click on system setup after the reboot. Otherwise start Internet Explorer again.

Enter the IP address of the MS into the IMS

- Log onto the IMS via Internet Explorer with IP address/admin if you are not still in the system menu.
- Once you are in or if you still were in the system menu the header on the admin screen should say IMS/EMN.
- In the left hand column select EMN.
- Enter the IP address of the MS.
- Leave the PBX Port Number (1814), and the IMS Port Number (1815) as the defaults.
- Select Activate.
- The LED on top of the IMS should go green after 20 to 30 seconds.

If the license is already installed in the IMS module start here to set up the IMS programming. (*Remember to set the IMS IP address in the MS.*)

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Set up the IMS to handle messaging and alarms

- Open up Internet Explorer and connect with IMS IP address/admin.
- Username is admin.
- Password is changemetoo.
- A screen opens up labeled IMS/EMN.
- Select Set time.
- Select PC time and submit.
- Select DECT Interface.
- Select Message Distribution.
- You will see

DECT Message Distribution
Alarm
Mobile Data
Location

- Select Alarm.
- Enter 127.0.0.1/OAP on the first available line.
- Select Activate.
- Select Location.
- Enter 127.0.0.1/OAP in the first available line of the table.
- Select Activate.

If the IMS is not connected to any System 900 devices then you must do the following steps.

- Select System 900 (900 interface)
- Set the Bus operating mode to No A-Bus.
- Set the number of digits in call number to match the number of digits in your extension numbers.
- Select Activate.

Ascom Communication Gateway (ACG) Setup

The ACG must be configured with a license that allows OAP connectivity via a TCP/IP port in the ENSGate.

All portable telephones that are going to be conference members need to be defined as Users or Devices in the ACG

ENSGate

If the License in the ACG has been changed to allow OAP functionality you might need to restart the client application for it to recognize that it can do OAP. To restart the client, stop the Input Monitor and close the application. Restart the application and open the Input Monitor. The application should recognize the OAP functionality now.

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Set up a TCP/IP port

A TCP/IP port is required for the ENSGate to accept alarm input from the IMS unit.

- Go to Administration – Input.
- Right click in the box.
- Select New port.
- Select IP – then Next.
- Select OAP.
- Set IP Port to 1321.
- Enter the address of the IMS unit.

Set up a key for each extension

Example Name: EXT 8787
 Type: Location in input
 Start: 1 End: 4
 Operator: Exact Match
 Entry: 8787

Set up a key for the pushing of the alarm button

Example Name: PUSH BUTTON ALARM
 Type: Location in input
 Start: 6 End: 22
 Operator: Exact Match
 Entry: Push button Alarm

Set up an alert for each extension assigned to a conference room.

This needs to be done because we do not know which member of the conference room will be initiating the alarm and we do not want to send the alarm to the initiator. Assume the conference room, extension number 1001, for the alarm has members 8787, 8788, and 8789. Then the alert would look like this.

Example Name: EMERGENCY EXT 8787
 Input type: TCP/IP
 TCP/IP Port: 1321
 Keys: EXT 8787 AND PUSH BUTTON ALARM
 Standard Message
 Custom Message – EMERGENCY CALL – 8787 <<1001>
 Recipient Type: Wireless Office Server
 Select the other members of the conference room – 8788 and 8789

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Portable Phone Setup

Before programming the phone you need to know how the alarm button on the top of the portable is going to be used. There are two modes of operation for this button.

- Speed Dial – The alarm button is pressed once. The portable then dials the conference room extension number assigned and the portable goes into normal off hook mode for speech.
- Staff Assist – The alarm button must be pressed twice. The portable then dials the conference room extension number assigned and goes into loudspeaker mode.

Put the phone into administration mode.

- Type CONFIG (266344) on the keypad.
- Press the down arrow – The display says Administration Menu Active.
- Press the menu button.
- Scroll down to Settings – press Select.
- Scroll down to Administration – press Select.
- Scroll down to Alarm Type – press Select.
- Select IMS.
- Press Back.
- Scroll down to Custom – press Select.
- Scroll down to Alarm No. – press Select.
- Enter the extension number for the conference room assigned to this phone.
- Press Save.
- Scroll down to Alarm Options – press Select.
- Select Staff Assist or Speed Dial – press Select
- Press Back.
- Press Back.
- Press Exit.

Testing

After all of the separate systems are configured and the portables have been programmed you need to test the functionality of the system before the portables are handed out.

- Obtain all of the portables assigned to Conference Room number 1.
- Turn them on and set them on a desk or table where you can see them all.
- Pick one and press the alarm button on top of the portable.
- Verify that it gets connected to the conference room. You will hear a voice message from the ECM to this affect.
- Verify that all the other Room Members have received a text message stating Emergency Call with the alarm initiators phone number.

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- One at a time press talk and verify that you are connected to the ECM and are in conference with the originator.
- Depending on how many room Members there are you should also verify that they are all in conference with each other.
- Disconnect each portable from the ECM and verify that it goes back to standby mode and that the conference clears down when the last portable disconnects from the conference.
- Verify that the portable of each Room Member can initiate the conference and that the displays of the other Member phones show the correct display.
- Follow the same procedure for each Conference Room.

Forms

Configure the conference rooms using the forms on the next three pages. If additional forms are needed, make copies of these before starting.

Portable Alarm Button Programming

There are two modes of operation for the alarm button. Choose one of the options below.

_____ Speed Dial – Press the alarm button once to initiate the conference.

_____ Staff Assist – Press the alarm button twice to initiate the conference.

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Emergency Conference Module Forms

CNF Room	Room Name	Room Extension Number	Passcode <i>Code or NO</i>	Exit By # <i>Y or N</i>	Quiet Mode <i>Y or N</i>	Communications Mode <i>Default/Monitor/Talk</i>

CNF Room	Times <i>All/Restrict To</i>	Begin	End	Weekdays <i>All/Restrict To</i>	Begin	End

CNF Room	Days of Month <i>All/Restrict To</i>	Begin	End	Month <i>All/Restrict To</i>	Month

