

CONFERENCE 911

USER GUIDE

NEC America, Inc.

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TABLE OF CONTENTS

	Page
Chapter 1 - About This Manual	1
What is Conference 911?	1
How This Guide is Organized	1
Using This Guide	2
General Conventions	2
Procedures	3
Keyboard Conventions	3
General Key Usage	3
Manual Descriptions	3
Chapter 2 - Getting Started	5
What is Included in the Conference 911 Package?	5
Equipment Requirements	5
C911 Server Requirements	5
Hardware	5
Software	6
C911 Client Requirements	6
Hardware	6
Software	6
C911 Agent Requirements	6
PBX Requirements	6
LAN Requirements	6
The Conference 911 Client Window	7
Tabs	8
Main Tab	8
Station Information Tab	9
Basic Tab	10
ALI Tab	11
Indicators	12
Connection Indicator	12
Call Status Indicator	12
Chapter 3 - Using the Conference 911 Client	13
Overview	13
Configuring the C911 Client	13
Logging On to the C911 Client Application	14
Logging Out of the C911 Client Application	15
Exiting the C911 Client Application	15
Working with Emergency Calls	16
Answering an Emergency Call	17
Working with the Messaging Feature	18
Monitoring the C911 Communications	18
Appendix A - Software Limitations	A-1
Overview	A-1
Service Conditions	A-1

Page

Appendix B - Glossary B-1

Figure	Title	Page
2-1	Conference 911 Client window	7
2-2	Main Tab	8
2-3	Station Information Tab	9
2-4	Basic tab	10
2-5	ALI tab	11
3-1	Configuration dialog box	13
3-2	Conference 911 Login dialog box	14
3-3	Log Out Confirmation dialog box	15
3-4	Quit Confirmation dialog box	15
3-5	D ^{term} Emergency Call message	16
3-6	Dismiss Active Call message	17
3-7	PBX Communication Lost message	18

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Chapter 1 About This Manual

The *Conference 911 User Guide* provides the information you need to operate the Conference 911 (C911) software. This manual is based on Revision 1.0 of the software.

What is Conference 911?

Conference 911 (C911) is an OAI application that enables telephone users, C911 agents, and emergency agencies or PSAPs (Public Safety Answering Point) to communicate when an emergency call is placed. When an emergency call is placed, C911 notifies the C911 agents and all designated parties of the emergency call and allows the C911 agents to monitor and participate in the emergency calls between telephone users and the PSAP. C911 uses the NEC Open Applications Interface (OAI) to communicate with the NEAX2400.

The Conference 911 package consists of the C911 Server and the C911 Client:

- The C911 Server provides connectivity between the PBX, the C911 agent's D^{term}, and the C911 Client application.
- The C911 Client application is used by C911 agents to monitor and participate in emergency calls.

Refer to the *Conference 911 Installation Manual* for more information about the C911 application.

How This Guide is Organized

The chapters in this guide are as follows:

Chapter 1 - About This Manual

This chapter outlines how to use the manual, including the actual manual organization, chapter layout, keyboard conventions, function keys, and basic terminology for C911.

Chapter 2 - Getting Started

This chapter gives a detailed overview of the C911 Client and its functions and features, including the hardware and software requirements, screen format, and field descriptions.

Chapter 3 - Using the Conference 911 Client

This chapter details how to use the C911 Client application, including the step-by-step instructions.

Appendix A - Software Limitations

This appendix describes the limitations of the Conference 911 software.

Appendix B - Glossary

This appendix gives definitions of the common terms relating to C911.

Using This Guide

This guide is designed to make the application easy to understand and simple to use. There are examples of the screens you will see in C911, with step-by-step instructions for the procedures you need to perform.

General Conventions

This guide uses the following type conventions:

Item	Typeface or Convention	Example
Book titles	Italics	<i>Conference 911 Operations Manual</i>
User input, variables	Boldface	Enter password at the prompt.
Menu names, Window titles, field names	Capitalized	Options menu, Line Status window, User ID field
Any screen output generated by C911	Monospace	A message that appears in a popup window or the status area of the screen.

This guide uses the following conventions for menus and shortcuts:

Example	Means
File > Workstation	Choose the Workstation submenu on the File menu.
CTRL+N	Hold down the CTRL key while pressing the “n” key
CTRL+Shift+N	Hold down the CTRL key and the Shift key while pressing the “n” key
Click	Click the left mouse button
Right-click	Click the right mouse button

Procedures

Step-by-step instructions are numbered. Simply follow the numbered steps to perform the desired function.

Sometimes in step-by-step instructions, you will have more than one option to complete the task. These options are presented in bulleted lists, as shown in the following example:

1. The Fields to display group box contains the fields that are displayed in the Directory window.
 - To add a field, select it from the Employee group box, and click **Add**.
 - To select all of the fields, click **Add all**.
2. Click **OK**.

Keyboard Conventions

General Key Usage

The general keys used throughout the C911 application are:

Arrow keys	Scrolls among options within a menu or field.
Backspace	Erases the character to the left of the cursor.
Enter	Accepts a selection or field entry.
ESC	Exits the current screen or action and moves to the previous screen or action.
Tab	Moves forward through fields and options.
Shift+Tab	Moves backward through fields and options.
CTRL+Tab	Moves forward through tabs.
CTRL+Shift+Tab	Moves backward through tabs.
ALT+ highlighted letter	Moves to that screen element.

Manual Descriptions

Following are descriptions of the manuals referenced in the chapters of this guide:

- *Applications Manager (APM) Installation Manual* - Contains step-by-step instructions for installing the software from the release media.
- *Applications Manager (APM) Operations Manual* - Explains how applications like C911 are configured in the APM environment and how its databases are created, using the entries and values provided in this guide.
- *NEAX2400 System Manuals* - Give very detailed explanations about the assignments that need to be made through the Maintenance Administration Terminal (MAT) commands on the NEAX2400.

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Chapter 2 Getting Started

The hardware required for any OAI application includes the Private Branch Exchange system (PBX) and the OAI Telephony Server. In order for the Conference 911 system to operate properly, your operating environment must meet the following requirements.

What is Included in the Conference 911 Package?

C911 package should include the following:

- C911 Server Disk
- C911 Client Disks (2 disks)
- AddClient Utility Disk
- Message Server Disk
- Beeper Interface Disk (Optional)
- Java (TM) 2 RunTime Environment Diskettes (5 disks)
- Serial Number and Activation Key for C911 OAI Application
- Conference 911 Installation Guide
- Conference 911 User Guide

Equipment Requirements

The hardware required for any OAI application includes the Private Branch Exchange system (PBX) and the OAI Telephony Server. In order for C911 to operate properly, your operating environment must meet the following requirements.

C911 Server Requirements

Hardware

- UAP (User Application Processor) 1000, 2000, or 3000
 - Floppy drive
 - Ethernet connection to the NEAX 2400 PBX and all C911 agent workstations
 - Unique IP Address
- Note:** *(The IP Address in the UAP must be on the same address as the PBX except for the last octal.)*
- 2 serial ports (if using the optional Beeper Interface); one port for a modem and one port for the Beeper Interface

Software

- SCO UNIX OpenServer 5.x or higher
- APM (Applications Manager) 3.x or higher
- Security dongle connected to a parallel port of the UAP. The dongle looks similar to a null modem or DB25 gender changer.

Note: *The dongle is only for this UAP and should be included with the UAP packaging. The dongle from a different UAP will not work.*

- Registration serial number for the security dongle

C911 Client Requirements

Hardware

- Pentium class processor
- 64 Megabytes of RAM recommended; 32 Megabytes of RAM minimum
- 200 Megabytes of available hard drive space
- Network Interface Card (NIC) to connect to the LAN that houses the UAP
- Sound card
- Maximum of eight C911 Client workstations

Software

- Java™ 2 Runtime Environment version 1.2 or higher
- Any operating system that is compatible with the Java™ 2 Runtime Environment 1.2 or higher, including:
 - Microsoft® Windows NT® 4.0
 - Microsoft® Windows® 95
 - Microsoft® Windows® 98

C911 Agent Requirements

- D^{term} with a minimum 2-line 16 character display
- Optional workstation on UAP LAN for C911 Client application

PBX Requirements

- NEAX2400 with HDS XH 3.x ('M' Version) software or higher with OAI-compatible hardware and software
- Ethernet connection to the UAP

Note: *A separate, isolated segment is recommended for the connection between the PBX and the UAP. The UAP should be multi-homed with two network cards to meet this recommendation and still achieve full client/server functionality.*

LAN Requirements

In order to run C911, the computer must be able to access the LAN where the PBX is located, in addition to the following considerations:

- Ethernet connection to the PBX
- Dedicated link to the PBX on a hub that will not cause an interruption if the rest of the LAN has problems.

The Conference 911 Client Window

The Conference 911 Client window is the main window of C911 and is used for all emergency call processing. This window displays a graphical representation of the status of each 911 route and trunk, as well as the status of the communications between the client workstation, the Agent Server, and the PBX.

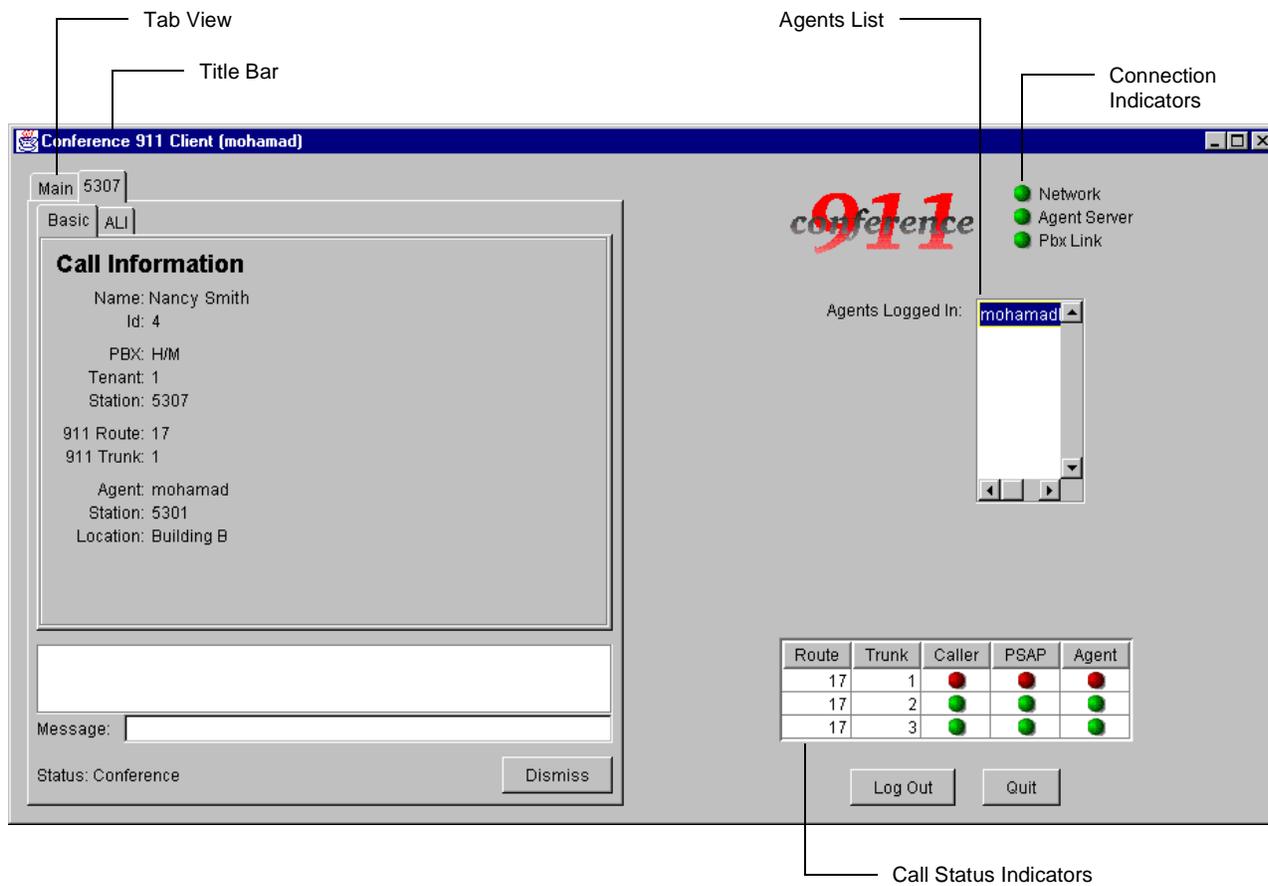


Figure 2-1 Conference 911 Client window

The Log Viewer window contains the following components:

Title Bar

Displays the name of the application and the name of the agent logged in to this C911 Client workstation.

Tabs

Displays various information about the stations placing emergency calls and the text of the messages sent between C911 agents.

Indicators

Shows the status of the various communication links used by C911. The indicators shown on the Conference 911 Client window include the Call Status indicators and the Connection indicators.

Agents List

Displays the agents currently logged in to C911.

Tabs

The Conference 911 window contains the Main tab and the Station Information tab.

Main Tab

The Main tab contains the messaging feature of C911 Client. The Main tab is displayed when C911 Client is started and is the only tab displayed unless an emergency call is made.

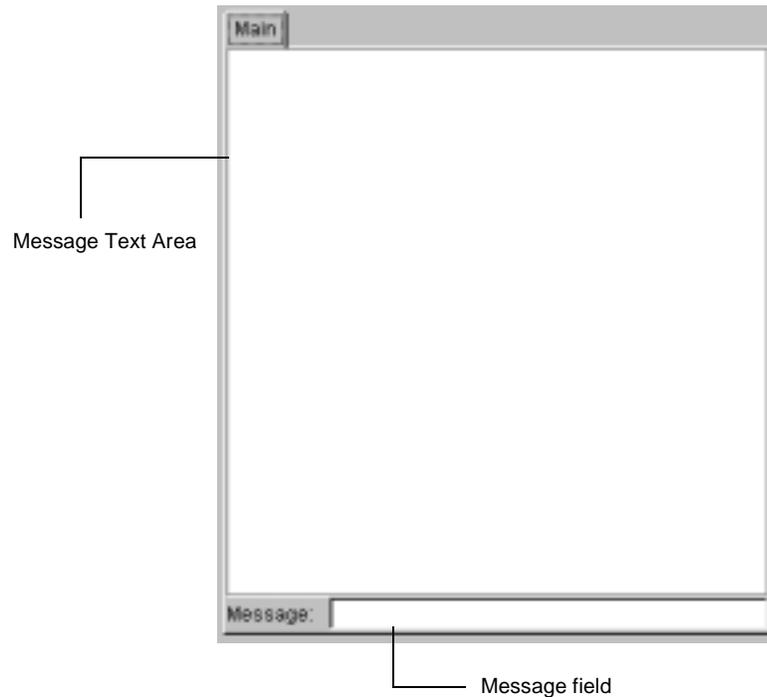


Figure 2-2 Main Tab

The Main tab contains the following:

Message Text Area

Displays the messages sent between C911 agents using the Messaging feature. (See [“Working with the Messaging Feature”](#) on page 18 for more information.)

Message field

Allows C911 agents to enter text messages to other C911 agents.

Station Information Tab

The Station Information tab contains information about the individual extensions calling the emergency number. C911 displays a Station Information tab for each station that is calling the emergency number.

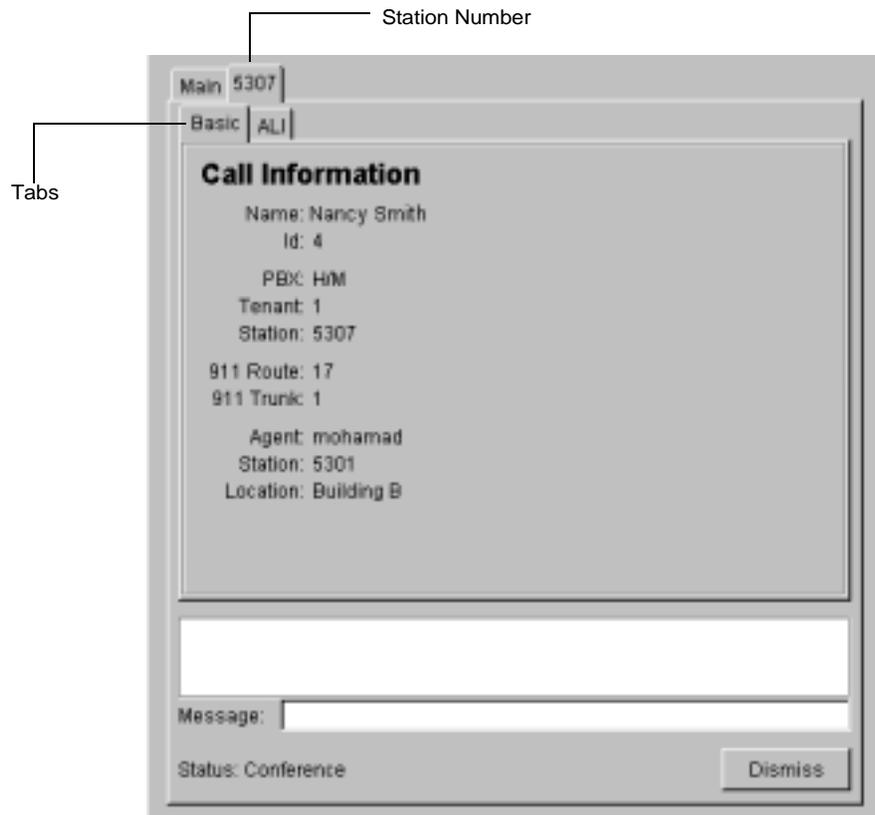


Figure 2-3 Station Information Tab

The Station Information tab contains the following:

Station Number

Shows the extension calling the emergency number on the Station Information tab.

Tabs

Contains the Basic tab and the ALI tab, which contain detailed information about the emergency call.

Basic Tab

The Basic tab contains the detailed information about the emergency call, such as the caller's information, the route and trunk information, and the information about the C911 agent conferenced in to the call.

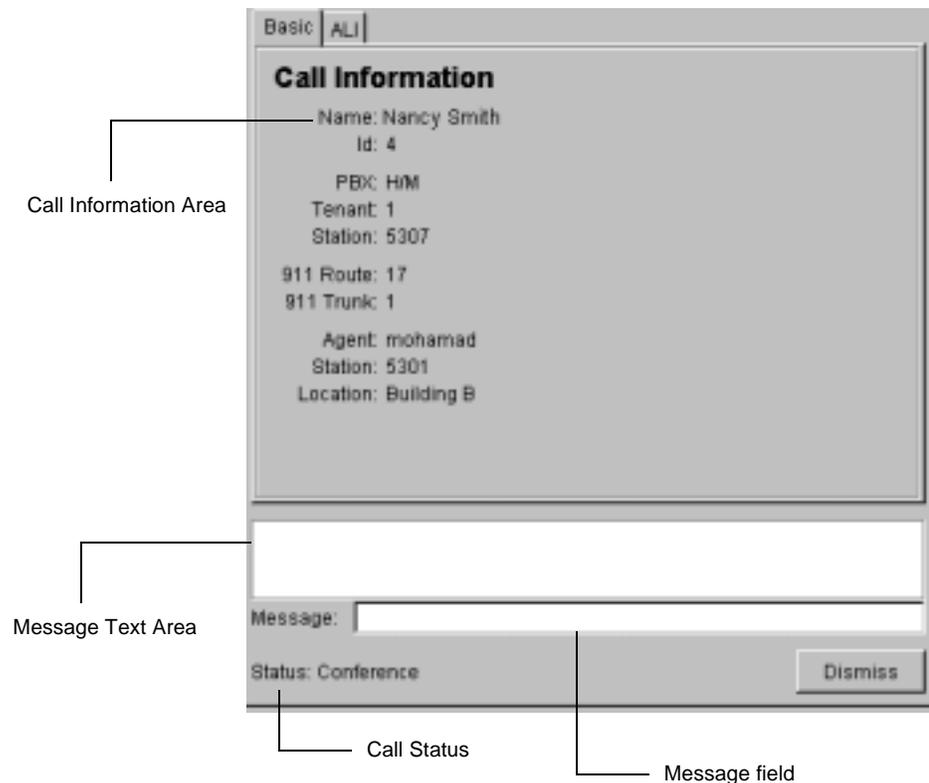


Figure 2-4 Basic tab

Call Information

Displays information about the emergency call, including the caller's information, the 911 Route and Trunk information, and, while conferenced, the information about the C911 agent conferenced into the emergency call.

Message Text Area

Displays the messages sent between C911 agents using the Messaging feature. (See [“Working with the Messaging Feature”](#) on page 18 for more information.)

Message field

Allows C911 agents to enter text messages to other C911 agents.

Call Status

Displays the current status of this station's call, such as “Conference” to indicate that a C911 agent is conferenced in to the emergency call.

ALI Tab

The ALI tab contains the detailed information about the emergency call found in the ALI table. The ALI table contains information found in the Automatic Location Information system used by the PSAPs to track down the origin of an emergency call. The information found on the ALI tab allows the C911 agent to quickly identify the physical location of the emergency caller's origin for the PSAP and internal authorities.

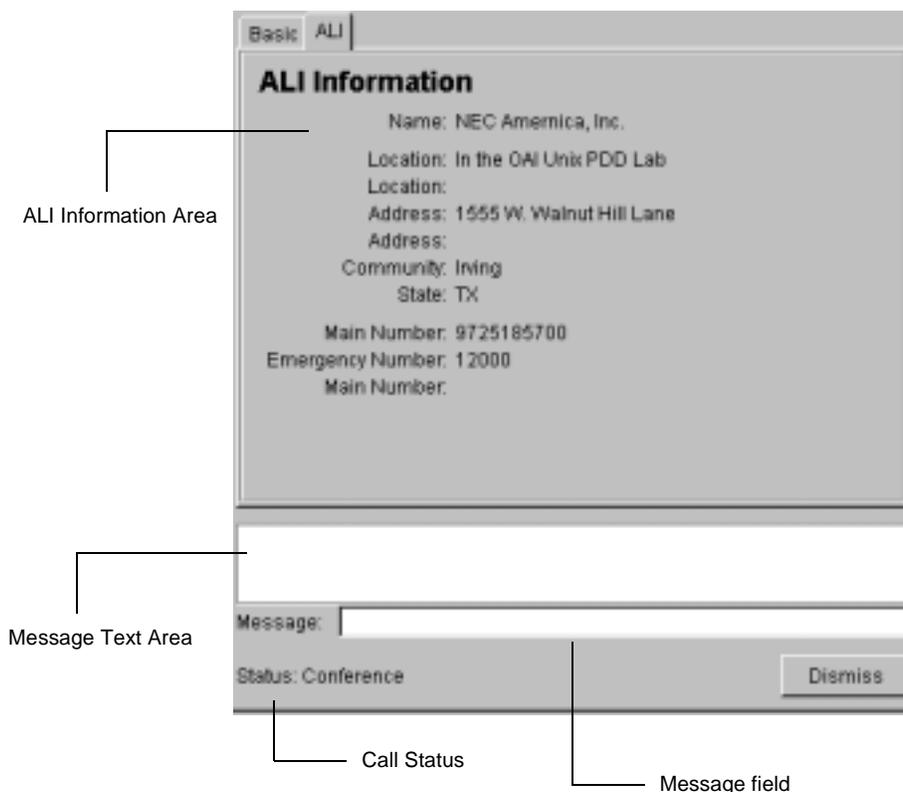


Figure 2-5 ALI tab

ALI Information

Displays information about the emergency call, including the caller's physical location and general information about the caller's site.

Message Text Area

Displays the messages sent between C911 agents using the Messaging feature. (See [“Working with the Messaging Feature”](#) on page 18 for more information.)

Message field

Allows C911 agents to enter text messages to other C911 agents.

Call Status

Displays the current status of this station's call, such as “Conference” to indicate that a C911 agent is conferenced in to the emergency call.

Indicators

Because the C911 Client may often run for long periods of time between emergency calls, the Conference 911 Client window contains indicators to verify that all necessary connections between the components of the C911 system are active.

The Conference 911 Client window contains the following indicators:

Connection Indicator

Shows the status of the connections between the C911 Client and the network, C911 Agent Server, and the PBX.

Light Color	Means:
Red	Connection is down.
Green	Connection is open and working.

Call Status Indicator

Shows the status of the routes and trunks configured to handle emergency call, including the status of the emergency caller, the C911 agent handling the call, and the PSAP.

Light Color	Means:
Red	Connected to an emergency call.
Yellow	Emergency call with new data requiring action is present.
Green	No emergency calls present.

Chapter 3 Using the Conference 911 Client

Overview

C911 allows callers to place an emergency call directly to the PSAP authorities, but notifies the designated parties internally of the emergency situation, enabling them to conference into the call with the emergency caller and the PSAP. C911 can notify internal authorities of the presence of an emergency situation via the D^{term}, pagers, an audible alarm from the C911 Client, or a visual alarm like a flashing light.

Configuring the C911 Client

Before using the C911 Client, you must configure the application. Use the following steps to configure a C911 Client workstation:

1. From the workstation desktop, double-click the **Conference 911 icon**. The Configuration dialog box is displayed.



Figure 3-1 Configuration dialog box

2. Do one of the following:
 - Type the **C911 Server name** in the **Host** field. The value entered in the Host field must match the UAP name entered in the User Defined #3 parameter of the C911_Agent_Server. (See the *Conference 911 Installation Guide* for more information.)
 - Type the **IP address** of your UAP in the **Host** field. (For example, 143.101.192.16)
3. Type the **station number** in the **Station** field.
4. Type the **physical location of the workstation** in the **Location** field.
5. Do one of the following to select the wave file C911 plays for incoming calls:
 - Type the **name of the wave file** in the **Call Alert** field.
 - Click the **Browse** button and select the desired wave file.
6. Do one of the following to select the wave file C911 plays when there is a problem with the network connection:
 - Type the **name of the wave file** in the **Network Alert** field.
 - Click the **Browse** button and select the desired wave file.

7. Click **OK**.

The Configuration dialog box closes and the Conference 911 Login dialog box is displayed.

Logging On to the C911 Client Application

Each time you work with the C911 Client, log in with your user ID and password. When you have finished using the C911 Client, you can log out or quit the application completely.

Use the following steps to log in to the C911 Client application:

1. From the workstation desktop, double-click the **Conference 911 icon**.
The Conference 911 Client Login dialog box is displayed.



Figure 3-2 Conference 911 Login dialog box

2. Type the **Agent name** in the Agent field.
3. Type the **password** in the Password field.
4. Click **Log On**.

The Conference 911 Client window is displayed, indicating the names of the agents currently logged in, the current status of the communication links to C911, and the current status of the 911 routes and trunks.

Logging Out of the C911 Client Application

Use the following steps to log out of the C911 Client application:

1. Click **Log Out** on the Conference 911 Client window.
The following message is displayed:

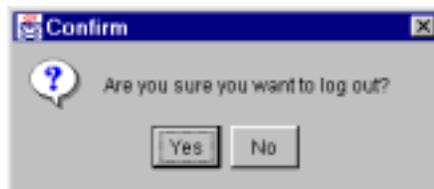


Figure 3-3 Log Out Confirmation dialog box

2. Click **Yes** to continue logging out.
The Conference 911 Client window closes and the Login desktop is displayed.

Exiting the C911 Client Application

Use the following steps to exit and close the C911 Client application:

1. Do one of the following:
 - Click **Quit** on the Conference 911 Login dialog box.
 - Click **Quit** on the Conference 911 Client window.The following message is displayed:

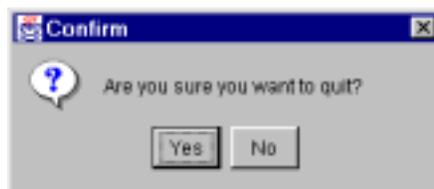


Figure 3-4 Quit Confirmation dialog box

2. Click **Yes** to confirm that you want to quit the application.
The Conference 911 Client window closes and the Windows desktop is displayed.

Working with Emergency Calls

When an emergency call is placed, C911 alerts all parties configured to receive notification of an emergency in the following manners:

- Sending a message to a D^{term}
When the emergency caller connects to the PSAP, C911 sends the following message to the D^{term} of all C911 agents:

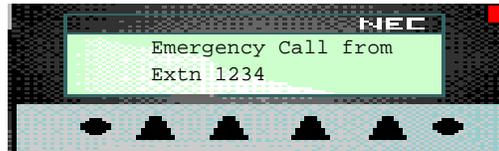


Figure 3-5 D^{term} Emergency Call message

When the D^{term} receives this message, it also sounds an audible alarm. The “Emergency Call from Extn” message continues to be displayed until the caller hangs up.

- Notifying the C911 Client
C911 sends notification to all C911 Client workstations that are logged in as soon as the emergency call is placed. The C911 Client does the following:
 - The Station Information tab displays the available information about the caller and their location.
 - The Call Status Indicator updates to show red for the Caller light and yellow for the PSAP light. When the emergency caller is connected to the PSAP, the PSAP light becomes red. The Agent light remain yellow until a C911 agent answers the call, then turns red.
 - The Call Status changes to reflect the current status of the call. When a C911 agent is connected to the call, the status is “Conference”.
 - An alarm sounds from the workstation.
 - If the emergency caller is transferring another caller through a screened transfer, the status will display “Talking to PSAP with party on hold” and the emergency call will not be conferenced with the agent’s D^{term}.
- Notifying the C911 agents with pagers via the optional Beeper Interface
If using the Beeper Interface, C911 sends the message “Emergency Call from Extn XXXX” where XXXX is the station number of the emergency caller.

Answering an Emergency Call

When an emergency call is placed, the call goes directly to the PSAP. C911 alerts the C911 Clients to the presence of an emergency call. When the PSAP answers the emergency call, C911 then alerts all C911 agents to the presence of an emergency call.

To answer an emergency call, do the following:

1. Answer the call from a C911 Agent D^{term} and select the C911 line.
The C911 agent is on a three-way call with the caller and the PSAP. The C911 Clients are updated to reflect the new information for that C911 agent.
2. Other calls can be answered by other C911 agents and the C911 Client shows a new Station Information tab for each new emergency call.
3. If the C911 agent in conference on an emergency call hangs up, C911 will send the emergency call notification again. C911 will continue to send these alerts until another agent answers the call.
4. If the emergency caller hangs up while in conference with the PSAP and the C911 agent, the agent and the PSAP remain on the line.
5. If the PSAP hangs up while in conference with the caller and the C911 agent, the C911 agent and the caller remain on the line.
6. When the emergency call is finished, the lines are released, but the Station Information tab for each emergency call remain on the C911 Client. To clear the information on the Station Information tab, click the Dismiss button on the ALI tab or the Basic tab.

The tab is cleared.

If you attempt to dismiss an active call, the following message is displayed.

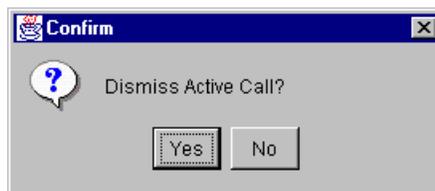


Figure 3-6 Dismiss Active Call message

To dismiss the information, click Yes.

To return to that Station Information tab, click No.

Note: *A maximum number of INSERT NUMBER tabs can be displayed. Unless another tab is specifically dismissed when that maximum number is reached, C911 automatically closes the oldest tab.*

Working with the Messaging Feature

The C911 Client contains a messaging feature that allows you to communicate with other C911 agents, similar to an IRC chat. Using the messaging feature, you can receive and send text messages to other C911 agents using the C911 Client.

To send a message, do the following:

1. Type the text you want to send in the Message field.
The text is displayed below your Agent name in the Message Text area for the other C911 agents that are logged in to read. Their replies will appear below their names as well.
2. Repeat this for each message you want to send.

Monitoring the C911 Communications

For the C911 Client to function properly, it must be connected to the Agent Server, the network, and the PBX. To make sure that all of the applications that make up the C911 package are communicating, C911 periodically performs sends out a “heartbeat” to make sure that C911 is operational.

If the PBX goes down, you will receive the following message:

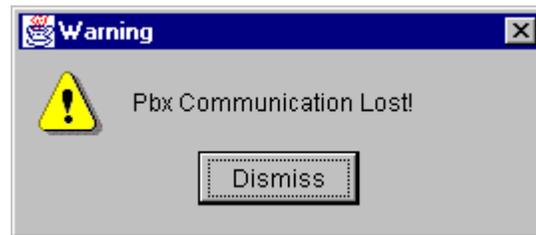


Figure 3-7 PBX Communication Lost message

Click dismiss to close this warning message.

The PBX light in the Communication Indicator will turn red to show that the C911 Client is no longer communicating with the PBX.

When the connection is re-established, the PBX light in the Communication Indicator will turn green.

Appendix A Software Limitations

Overview

This section specifies the limitations and service conditions of the Conference 911 system.

Service Conditions

The following are some service conditions found in the C-911 applications.

- Conferencing with C-911 agent is not available when an attendant console calls 911.
- Conferencing with C-911 agent is not available during a screened transfer to 911. A Screened Transfer to 911 is a scenario where a party transfers another party to 911 number and the 911 trunk answers before the transferring party releases. The transferring party could be a station or attendant console. The status will display “Talking to PSAP with party on hold.”
- Conferencing with C-911 agent is not available when the caller is from a remote PBX (e.g. CCIS call to 911 trunk)
- Conferencing with C-911 agent is not available when the caller is a wireless phone.

In all of these cases, the C-911 agent screen will show the caller status, but no conferencing will take place.

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Appendix B Glossary

911

The slogan for the United States is “One Nation, One Number” and “911” is that number. The goal is to be able to dial 911 from anywhere in the United States to request emergency service.

APM

Applications Manager. The support platform or software which resides on the UAP and provides the user with management capabilities within the Open Applications Interface system.

Beeper Interface

The device that will broadcast encoded information over radio frequencies to receiving devices that can decode these transmissions.

Conference Call

Connects two callers and an agent into a 3-way conversation; adds or rings a third party after two parties are in conversation.

Full Capcode Paging

A paging mode that allows the signaling of a beeper device by its pager address (capcode and function digit).

IP

Interface processor. A module within the NEAX2400 which services the OAI system.

IPC

Interprocess communication. A method used by one UNIX application process to inform another UNIX application process within the same discrete device.

My Line

Refers to the physical station used by a caller to make a call or answer a call, as opposed to one of the sublines that could be used for a call. The MyLine is very important because C911 needs to know the physical location of the caller, not what line was used. A line (subline, virtual,.) could be on several different phones in several different areas and would not help in knowing the origin of the call.

NENA

National Emergency Number Association

OAI

Open Applications Interface. A proprietary protocol and set of routines that links the NEAX2400 to a UAP. Programs executing on the UAP are able to monitor and control switch features and telephones.

UAP

User Application Processor. General purpose multi-tasking computer supporting System V UNIX and the Applications Manager running OAI.

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