NEC Empowered by Innovation

NEC Corporation of America

NEC Meeting Center

System Administration Guide

Release 5.2

System Administration Guide

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NEC Support

NEC provides a telephone number for you to report problems or to ask questions about your product. The support telephone number for NEC Authorized Associates is 800-852-4632. NEC direct customers should call 877-463-2267 for support.

For additional support telephone numbers, see the NEC Web site: http://www.necunified.com.

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CHAPTER 1 – Guide Conventions

This guide uses the following conventions in formatting, terminology, and informational devices to help you more clearly identify specific elements and information.

The following formats are used throughout this guide.

Element	Format Definition
Commands	Tahoma Bold font identifies commands you type in specified interface fields.
Interface and Keyboard Items	Bold Times New Roman (Normal) identifies items within a described user interface, or keys on the keyboard.
Page and Window Names	Times New Roman italics identifies the name of a web page or user interface window.

The following elements are used to define special types of information provided periodically throughout this guide:

Note:

Provides additional information about the related topic.

Caution:

Provides information that should be heeded to ensure proper operation and function regarding the related topic.

Warning:

Provides information that, if not heeded, could result in lost information or damage to system components.

CHAPTER 2 – Introduction

This System Administrator's Guide is designed to enable you — the System Administrator — to install, operate, and maintain the NEC Meeting Center (NMC) system. With Telecom Platform Software Release 5.2, the NMC provides the following applications:

- Audio conferencing
- Web conferencing
- Enhanced Firebar (emergency dial-out conferencing)
- Mass Notification

All applications mentioned above work with packet-switched VoIP/SIP based interfaces. The exception is the Web Conferencing application, which only requires a data network connection to the Internet.

NMC Applications Overview

This System Administration Guide explains the features and procedures for the use of all the NEC Meeting Center applications.

The applications included with the NMC are briefly described in this section. More details are provided in subsequent chapters.

Audio Conferencing

Reservation-less Meet Me Audio Conference

This application allows three or more people to dial into the bridge and conduct an impromptu audio conference. No prior scheduling is required.

Reservation-based Meet Me Audio Conference

This application requires prior scheduling of the conference call. The system will send email notifications via Microsoft Outlook advising the dial-in number and the PIN for the conference. Moderator attendance is required for such conferences.

Web Conferencing

This application allows moderators to share their desktops, white boards, and documents (PPTs and PDFs) with fellow users.

The application can be used with or without an accompanying audio conference.

Enhanced Firebar (Emergency Dial-out Conferencing)

This application allows the system to dial out to multiple group members simultaneously, look for members at their multiple telephone numbers, locate them, and bring them into a conference. In addition to the audio conference, the system can send alert messages via email, SMS, and pagers.

This capability can be used effectively for arranging a quick conference between "first responders" when faced with an emergency situation. The number of simultaneous outbound calls is limited to the number of ports on the system.

Mass Notification

This application allows moderators to send alert/notification messages to a large number of people independent of the number of ports. Messages can be sent in any or all of the following media types: voice, email, SMS, and pagers. Messages can be sent instantaneously or during a scheduled time period. The speed of message delivery can be controlled by pre-determining the number of ports to be used for sending voice messages. The application also allows for gathering feedback from the recipients based on DTMF input.

Multi-service Operation Overview

All applications described in the previous sections co-exist on the NMC. These applications share available trunks dynamically based on the incoming Dialed Number Information service (DNIS) or incoming Automatic Number Indicator (ANI) or both. Please refer to *CHAPTER 11—Using Automatic Service Selection Rules* on page 39 for more details.

Note:

The DNIS and ANI capability might not be available on all trunk types. Contact the local telephone company about the availability of DNIS and ANI.

Additional Resources

A Moderator guide is available for understanding the NEC applications.

CHAPTER 3 – Understanding System Architecture

System Architecture

The system architecture consists of a standard server running a LINUX operating system, which supports a number of platform web and database services. Onto this platform is built many different applications, such as audio conferencing, web conferencing, and Mass Notification services, etc.

The system hardware is an industrial-grade server. The port scalability can range from 8 analog ports through 16,000 digital ports on one server.

The NMC can be deployed in a number of network configurations and supports SIP signaling.

CHAPTER 4 – Understanding NMC Deployment

VoIP/SIP Trunk Deployment

The following figure shows a NMC deployed behind a company's IP PBX. The IP PBX supports an SIP-based Tie trunk towards the NMC.

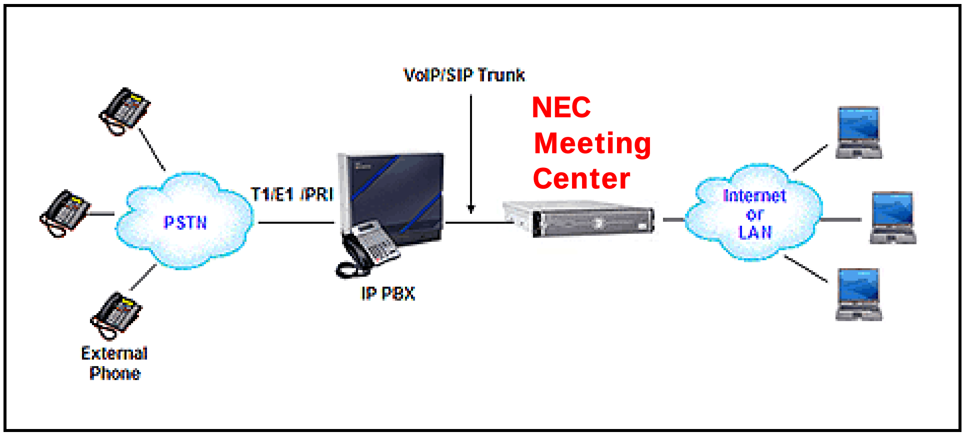


Figure 1: IP PBX — VoIP Trunk-side deployment

CHAPTER 5 – Installing the System

Before you begin the installation process, review the NMC Configuration Parameters checklist provided in *APPENDIX C—NMC Configuration Parameters* on page 167.

Site Preparation

The NMC should be installed in an air-conditioned room with sufficient ventilation. The product is designed to operate in a temperature range of 0 – 40 degrees Celsius.

System Peripherals and Cabling

1. Connect a standard monitor with 1024 x 768 resolution, a standard keyboard, and a PS2 mouse to the respective connectors at the back of the NMC.
2. Connect the NMC to the enterprise's 10/100 BaseT Ethernet LAN using a CAT5 cable. This step is required for accessing the NMC's user interface over the internal LAN or via the Internet.
3. Connect the power cable.

Powering Up

Turn the power switch to the “ON” position. Depending on the server model, this switch might be located near the power supply at the back of the unit, or at the front of the unit.

The unit is designed to auto-boot upon power-up. It will take approximately 5 – 6 minutes to boot up and auto-configure. After the unit is powered up, a CentOS (Linux Operating System) login window should appear on the monitor, as illustrated below.

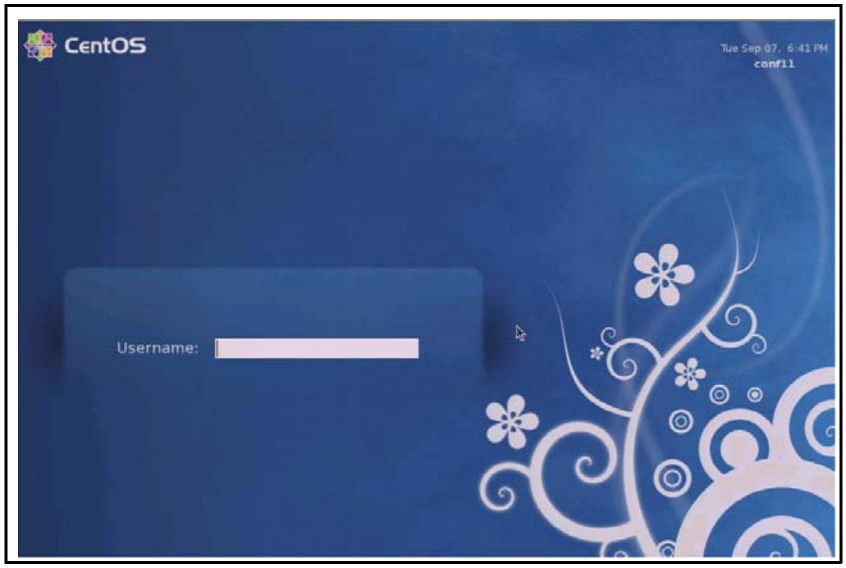


Figure 2: CentOS Login Screen

Root Login

Enter the root login and password. Refer to “NMC System Parameters — User Passwords” in *APPENDIX C—NMC Configuration Parameters* on page 169 for password information or contact NEC customer service. The system displays the screen illustrated below.

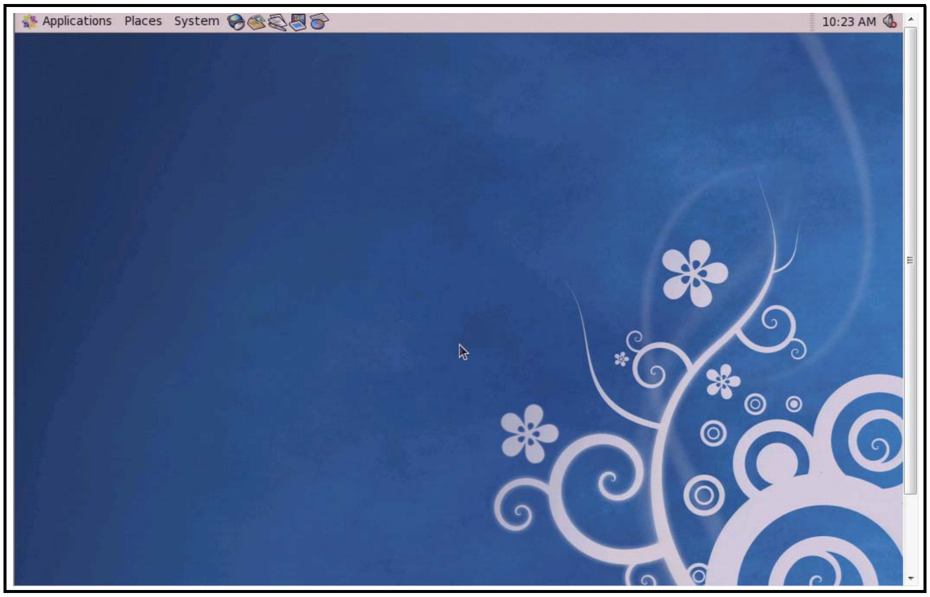


Figure 3: CentOS System WIndow

Opening a Terminal Window

You use the terminal window to enter various system-level commands.

To open a terminal window, complete the following steps, which are illustrated below.

1. Select **Applications**.
2. Select **Accessories**.
3. Select **Terminal**.

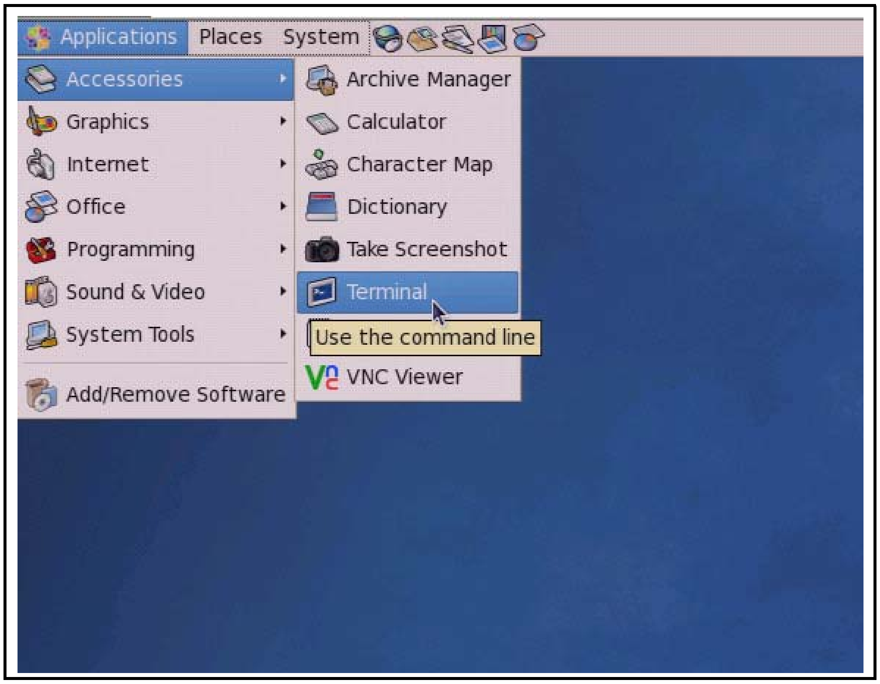


Figure 4: CentOS System Tools Terminal Window

Note:

Commands entered in the terminal window are case sensitive.

Connecting to the Data Network

This procedure configures the system to allow users to access the NMC applications through the public Internet.

1. In the terminal window, enter **netconfig**, as illustrated below.

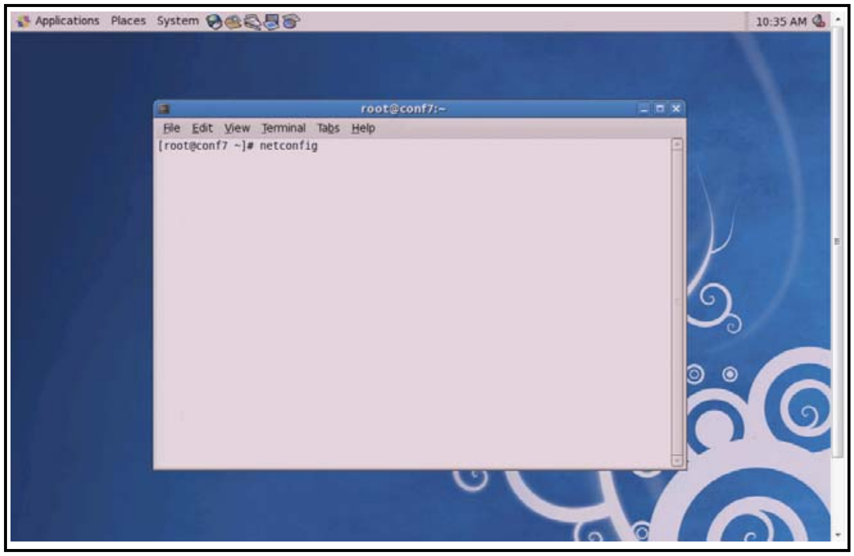


Figure 5: Entering Commands in the Terminal Window

2. Using the displayed form, enter the following information:
   - Static IP address
   - The mask
   - The gateway
   - The Domain Name Server (DNS) address
3. After configuring the IP address, exit the system.

The monitor should display the login prompt again. At this point the product's user interface can be accessed via the Internet. Ensure that the DHCP option **IS NOT** selected.

Caution:

If the product is deployed behind the company firewall or VPN, please ask the IT manager to allow access to the NMC's IP address by external users.

Use any personal computer connected to the Internet, or one on the same Local Area Network (LAN), and type the IP address of the NMC in a browser's URL field. (You can use any browser such as Internet Explorer, Netscape, Firefox, etc.)

The NMC's *Member Login* page should appear.

In case of any difficulty, return to the terminal window and enter **ifconfig** to verify that the correct IP address has been configured on the system.

If desired, the IP address associated with the NMC can be mapped to a URL. Place the appropriate entry into the company's DNS server. This will allow users to access the NMC over the public Internet by typing the address into their browser's URL field.

For example, if a company with a web address of *companyabc.com* has associated their NMC properly, their users could visit *NMC1.companyabc.com* to access the NMC.

Connecting to the Voice Network

Physical Layer

Connect an Ethernet cable from the NEC IP PBX to the Ethernet port on the NMC unit.

Signaling Layer

The NMC supports SIP 2.0 interface for use with VoIP calls.

Bringing up the Web Based User Interface

After the voice and data network connectivity is established, you should bring up the graphical user interface of the NMC.

1. Open a web browser on the system console.
2. Enter **http://localhost** in the URL field.

This will bring up the login prompt for logging into the user interface.

3. Enter **admin** in the **Username** field.
4. Enter the appropriate password in the **Password** field. Refer to "NMC System Parameters — User Passwords" in *APPENDIX C—NMC Configuration Parameters* on page 169 for password information or contact NEC customer service.

The graphical user interface can also be accessed using a personal computer connected to the LAN or over the Internet. To access it remotely, enter the IP address of the NMC in the browser's URL field.

Warning:

Remote access over the public Internet can expose the server to misuse. It is important that proper networking safeguards be put in place (VPN, Firewall, and so on) before the NMC is exposed to the public Internet.

Shutting Down

The NMC utilizes the LINUX operating system. You must halt the operating system before shutting down the NMC. To halt the system, complete the following steps.

1. Log in to the system.
2. Enter **poweroff** in a terminal window.
3. Press the **Enter** key.

After a few minutes, you will see that system has halted. At this point, power can be safely removed from the NMC.

Warning:

If power is removed without proper shut down, it can cause corruption of the operating system.

CHAPTER 6 – Getting Started With the NMC User Interface

The system ships with a web-accessible, graphical user interface. Any personal computer connected to the company's LAN or the Internet can be used to launch the user interface.

Logging On

Access the user interface through any standard web browser. Type the server's IP address in your browser's URL field. You will find the URL listed on the front of your user guide or provided by your System Administrator.

The system displays the *Log in page*, illustrated below.

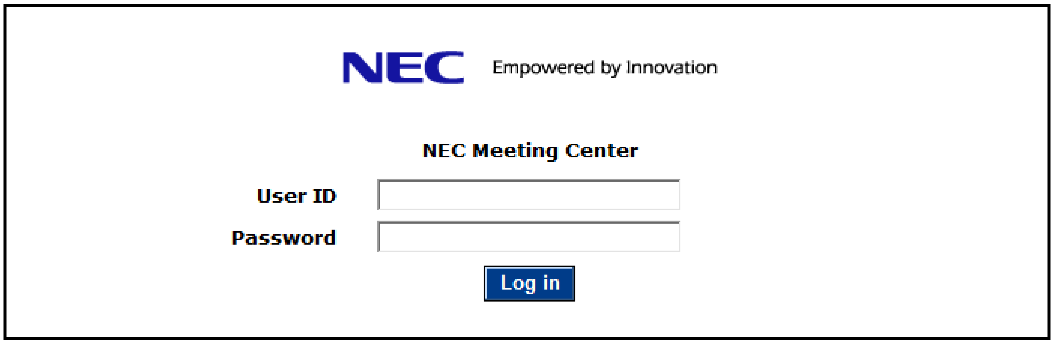


Figure 6: The Log In Page

The user interface has two distinct areas: the Admin Area and the Moderator Area. The User ID and Password entered determine which area you enter.

Note:

You will need to log in as Admin and create moderator accounts before other users can use the system.

1. Enter the **Admin User ID** and **Password** provided by your System Administrator.Refer to "NMC System Parameters — User Passwords" in *APPENDIX C—NMC Configuration Parameters* on page 169 for the administrator's User ID and Password.

2. Select **Log in**.

The system displays *The Home Page*.

Using the Home Page

The *System Admin Home page* provides access to the administrative functions for all of your licensed applications.

The Home Page

The *System Admin Home page* is illustrated below.

Figure 7: The Home Page

The *Home page* allows you to access the other screens, such as managing your profile and creating conferences, sending Mass Notifications, sending Firebar calls, setting up Hoot-n-Holler rooms and stations, and maintaining the system.

Select an item from the **Admin Menu** or the associated graphical links to open that page.

This System Administration Guide includes chapters on the options for Users, Groups, Prerecorded Messages, Mass Notifications, Audio Conferences, Web Conferences, Fire-bar Conferences, Hoot-n-Holler Conferences, RealView, and Reports.

CHAPTER 7 – Managing Address Book

This chapter explains how to set up your address book. The address book provides global users for moderators to use when setting up groups.

There are two methods to create entries in the address book. The first method is to manually enter users, then organize them into manually defined groups.

If you need to add users in bulk, you may want to use the second method. The second method is to upload a comma separated values (CSV) file of users and groups. The CSV File can include information for creating groups, including multiple users for one group, or multiple users in multiple groups.Refer to the “Bulk Uploading Users” section on page 20 section for more information about this feature.

Working with Users

If you set up your users, the system displays the user’s name on the RealView page for your active conferences.You must set up users before you can include them in Mass Notifications, Firebar conferences, or Hoot-n-Holler conferences. This section describes how to enter users manually into the Address Book.

The Defined Address Book Users Page

The *Defined Address Book Users page* lists any users you have previously defined.

To add users or edit user information, select **Address Book** from the *Admin* Menu or the **Address Book** link on the *Home page*. The system displays the *Defined Address Book Users page*, illustrated below.

Defined Users

Add Bulk Upload Delete

No.	User	Group Membership	Delete
1	Baker, Betsy	Groups	☐
2	Blair, John	Groups	☐
3	Brown, Tim	Groups	☐
4	Caldwell, Jane	Groups	☐
5	Garcia, Gustav	Groups	☐
6	Jones, Eric	Groups	☐
7	Murphy, Oniece	Groups	☐
8	Neighbors, Ruth	Groups	☐
9	Northcut, Don	Groups	☐
10	Reed, Donna	Groups	☐
11	Sheppard, Beth	Groups	☐
12	Smith, Randy	Groups	☐
13	Thornton, Grant	Groups	☐
14	Victor, Ashley	Groups	☐
15	Wilson, Herb	Groups	☐

Figure 8: The Defined Address Book Users Page

The system displays the following information related to the users:

- A system-generated number for the user
- The name of the user, with a link to edit the user's personal information
- A link to edit the user's group membership
- A check box to delete the user

1. To add a new user, select **Add** to open *The Add User Page*.
2. To add users to the address book using a CSV file, select **Bulk Upload** to open *The Upload Address Book Users Page*.
3. To edit an existing user's information, select the **highlighted user name** to open *The Edit User Personal Information Page* for the selected user.
4. To edit an existing user's group membership, select **Groups** to open *The Edit Group Membership Page* for the selected user.
5. To delete an existing user, check the **Delete** box next to the user's name and select **Delete**.

The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of users.

The Add User Page

The *Add User page* allows you to enter user personal and contact information.

To open the *Add User page*, go to the *Defined Address Book Users page* and select **Add**. The system displays the *Add User page*, illustrated below.

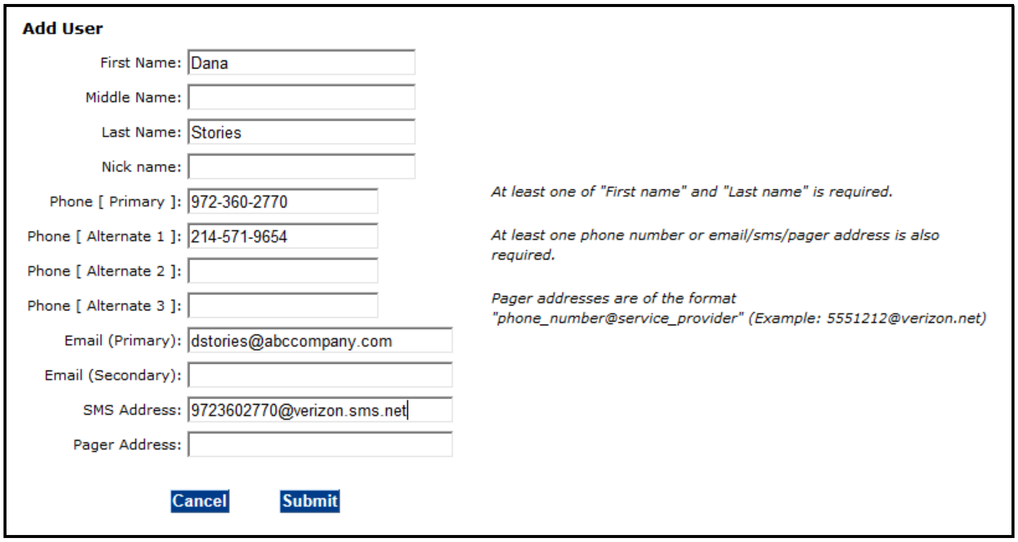


Figure 9: The Add User Page

1. Enter the user’s personal and contact information. Required information includes:
   - Either a first name and/or last name
   - At least one phone number or email/sms/pager address

Note:

Pager addresses must follow this format: “phone_number@service_provider” (Example: 5551212@verizon.net).

2. Select **Submit** to save the user information or **Cancel** to ignore the changes and return to the *Defined Address Book Users page*.

The Edit User Personal Information Page

The *Edit User Personal Information page* allows you to change user personal and contact information.

To open the *Edit User Personal Information page*, go to the *Defined Address Book Users page* and select the highlighted user name for the user whose information you want to change. The system displays the *Edit User Personal Information page*, illustrated below.

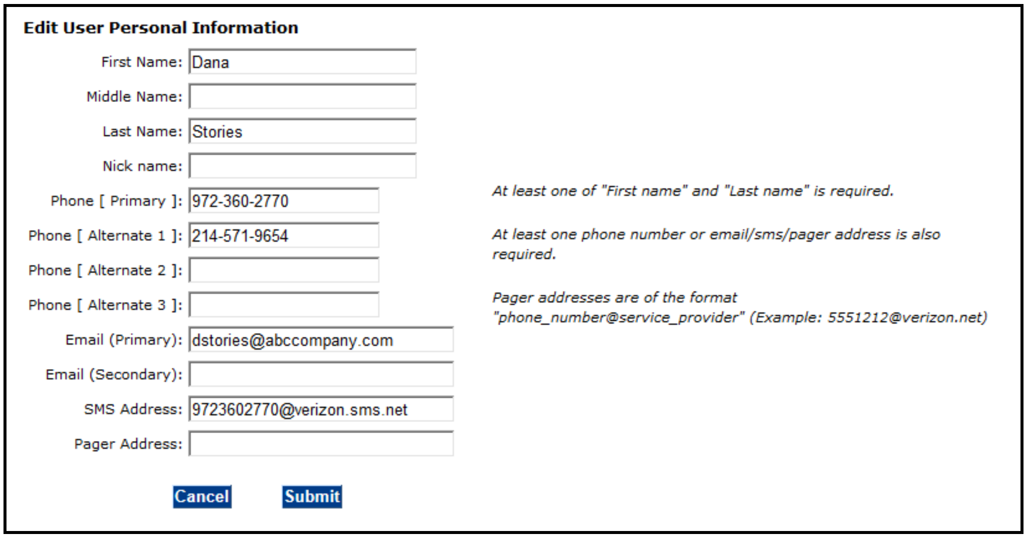


Figure 10: The Edit User Personal Information Page

1. Edit the user's personal and contact information as needed. Required information includes:
   - Either a first name or last name
   - At least one phone number or email/sms/pager address

Note:

Pager addresses must follow this format: "phone_number@service_provider" (Example: 5551212@verizon.net).

2. Select **Submit** to save changes to the user information or **Cancel** to ignore the changes and return to the *Defined Address Book Users page*.

The Edit Group Membership Page

The *Edit Group Membership page* allows you to change the group membership for the selected user.

Note:

You must have set up your groups before you can edit the group membership information for your users.

To open the *Edit Group Membership page*, go to the *Defined Address Book Users page* and select **Groups** next to the user whose group you want to change. The system displays the *Edit Group Membership page*, illustrated below.

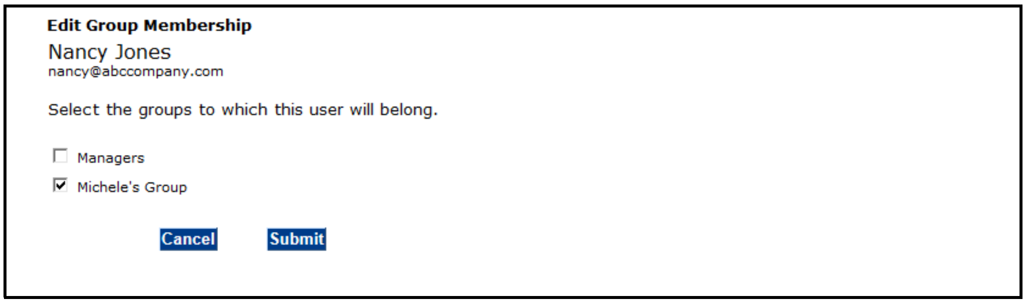


Figure 11: The Edit Group Membership Page

1. Check the box for one or more groups to which this user should belong. To remove the user from a group, uncheck the group box.

2. Select **Submit** to save changes to the group membership or **Cancel** to ignore the changes and return to the *Defined Address Book Users page*.

Bulk Uploading Users

You can upload a *CSV File* of multiple users and groups when you have a large list of users to add to the system, such as your company roster. These users can be divided into groups, such as departments.

CSV File

The CSV file should have a header line with the following fields:

- Person ID
- Group name
- Location
- Department
- First name
- Middle name
- Last name
- Phone1 - Phone4
- Email address
- Alternate email address
- SMS email address
- Pager email address

A sample CSV file is illustrated below.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Address	Group	Not Used	Not Used	First Names	Middle Name	ast Name	Phone #	Alt Phone #	Not Used	Not Used	Email	Secondary Email
2	1234 Maple Creek Lane	Main			Bobby		Barron	972 123 4567	469 360 2524			bobby@nowhere.com	
3	2345 Maple Creek Lane	Main			Sheila		Bata	972 672 4590				sheila@verizon.net	
4	1234 Foxden	Main			Fred & Mary		Novak	972 987 1234				f&m@somewhere.com	
5	4567 North Park	Main			Joe & Linda		Hughs	972 567 8765				JL@hughs.com	
6	2468 park Bend	Main			Jim		Huggins	972 465 1245				jim@huggins.com	
7	1234 Hickory Creek Lane	Main			Trish		Bowling	214 123 6789				trish@mac.com	
8	67891 Highland Creek	BOD			John		Campbell	972 987 6543	702 339 7033			john@tx.rr.com	
9	2345 Highland Ln.	BOD			John		Danis	972 652 4798				danis@gmail.com	
10	1234 Glenbrook Road	BOD			Leslie		Staggs	972 867 8780				leslie@verizon.net	
11	1234 Maple Creek Drive	BOD			Paul & Jan		Brunt	972 569 5421				quickdraw@zone.net	
12	1234 Highland Ln.	Crimewatch			John & Sylvia		Faletti	972 620 6446				thefalettis@gmail.com	
13	5678 Highland Creek	Crimewatch			Sarah		Wild	214 454 6584	214 234 5678			wild@nowhere.com	
14	2143 Highland Creek	Crimewatch			Bill		Gates	469 644 6061				billg@ms.com	

Figure 12: CSV File Format

There is no limit regarding the number of records included in one CSV file.

The first line is for formatting column titles and is ignored during the upload. The remaining lines must have the fields specified (although some fields may be blank).

Saving Excel Files as CSV

To save an Excel file as a CSV file, complete the following steps.

1. In your Excel spreadsheet of users and groups, select **Save As** from the **File** menu.
2. In the **Save as type** list at the bottom of the *Save As dialog*, select **.CSV** format.

The Upload Address Book Users Page

The *Upload Address Book Users page* allows you to upload a CSV file of users and groups.

To open the *Upload Address Book Users page*, first select **Address Book** from the *Admin Menu* or the **Address Book link** on the *Home page*. The system displays the *Defined Address Book Users page*. Select **Bulk Upload** from the *Defined Address Book Users page*. The system displays the *Upload Address Book Users page*, illustrated below.

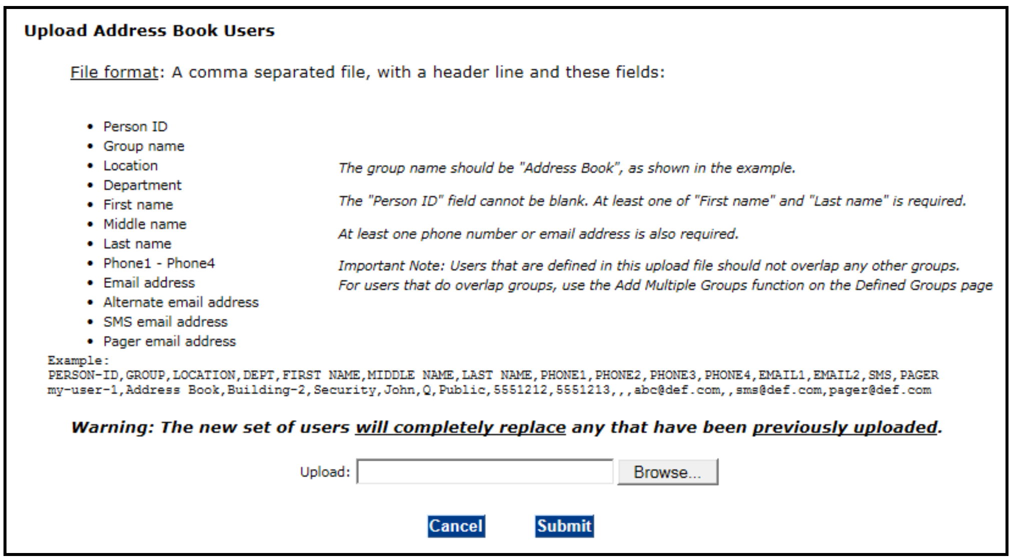


Figure 13: The Upload Address Book Users Page

1. To upload a CSV file, select **Browse** to locate the file on your PC or network. Highlight the file and select **Open**. The system adds the file information to the **Upload** field.

Warning:

The new set of users will completely replace any that have been previously uploaded.

2. Select **Submit** to save the group information or **Cancel** to ignore the changes and return to the *Defined Address Book Users page*.

The system adds the users defined in the CSV file.

Note:

Any groups defined in the CSV file are ignored for the address book.

CHAPTER 8 – Creating Moderators

This chapter explains how to set up your moderator accounts and privileges.

MODERATORS

Working with Moderators

You must set up your moderator accounts before they can use the system. This section describes how to enter moderators.

The Defined Moderators Page

The *Defined Moderators page* lists any moderators you have previously defined.

To add moderators or edit moderator information, select **Moderators** from the *Admin Menu* or the **Moderators link** on the *Home page*. The system displays the *Defined Moderators page*, illustrated below.

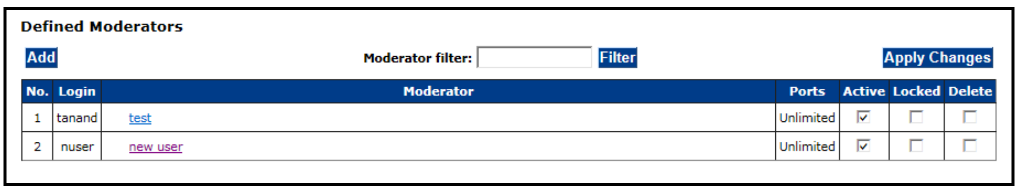


Figure 14: The Defined Moderators Page

The system displays the following information related to the moderators:

- A system-generated number for the moderator
- The login ID for the moderator
- The name of the moderator with a link to edit the moderator’s personal information
- The number of ports allotted to the moderator
- A check box to activate or inactivate the moderator
- A check box to lock or unlock the moderator
- A check box to delete the moderator

The system allows you to search for a specific moderator using the **Moderator Filter** field. Enter the text you want to search for in the **Moderator Filter** field and select **Filter**. The system displays any matching entries.

1. To add a new moderator, select **Add** to open *The Add Moderator Page*.

2. To edit an existing moderator’s information, select the **highlighted moderator name** to open *The Edit Moderator Profile Page* for the selected moderator.

3. To change the status of the moderator to inactive, or to reactivate an inactive moderator, uncheck or check the **Active** box next to the moderator’s name and select **Apply Changes**.

4. To change the status of the moderator to locked, or to unlock a locked moderator account, check or uncheck the Locked box next to the moderator’s name and select **Apply Changes**.

5. To delete an existing moderator, check the **Delete** box next to the moderator's name and select **Apply Changes**.

The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of moderators.

The Add Moderator Page

The *Add Moderator page* allows you to enter user personal and contact information for a moderator, as well as set the moderator privileges.

To open the *Add Moderator page*, go to the *Defined Moderators page* and select **Add**. The system displays the *Add Moderator page*, illustrated below.

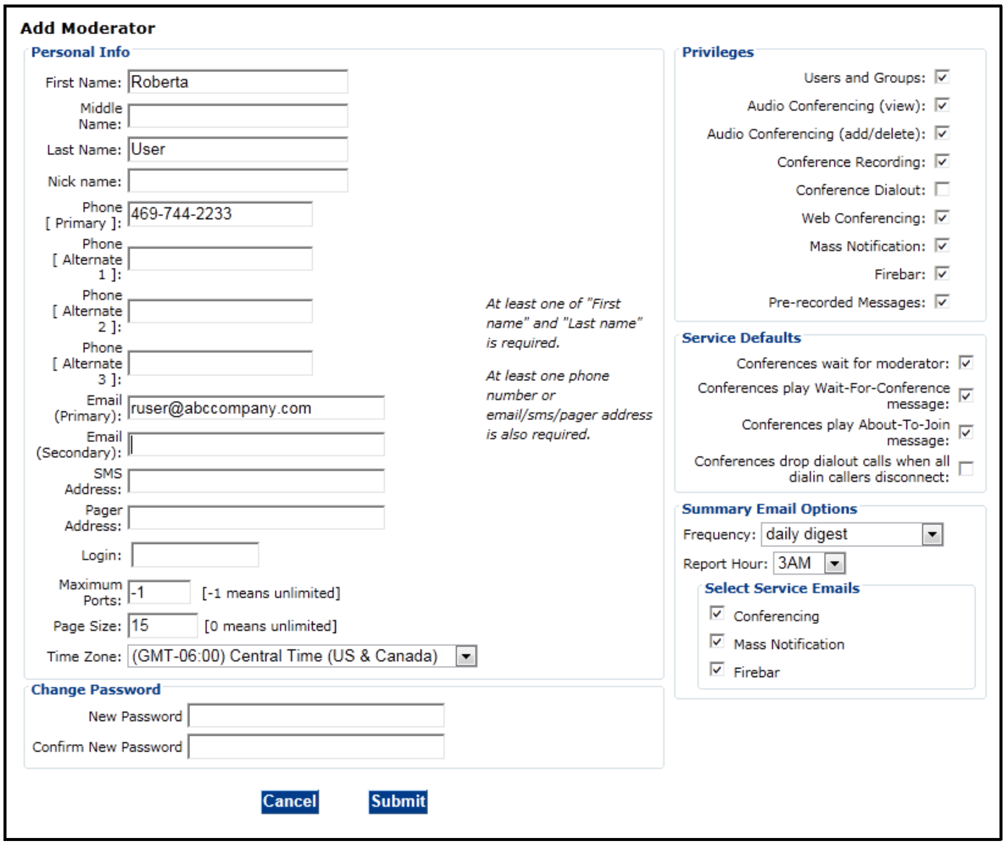


Figure 15: The Add Moderator Page

1. Enter the moderator’s personal and contact information. Required information includes:
   - First and last name
   - At least one phone number or email/sms/pager address

Note:

The local telephone numbers should be entered as NPA-NXX-XXXX. The long distance numbers (with respect to the location of the server) should be entered as 1+NPA-NXX-XXXX.

Pager addresses must follow this format: “phone_number@service_provider” (Example: 5551212@verizon.net).

Note:

The email address is used as a “from” address when the system generates emails on behalf of the moderator for any service applications.

2. Enter the moderator’s **Login** ID. This is the user ID the moderator will use to login to the NMC web portal.
3. For systems where the Administrator allocates ports, enter a number in the **Maximum Ports** field to indicate the maximum allowed ports that the given moderator can use. Note that recording a conference consumes a port.
4. Enter a number in the **Page Size** field to indicate the maximum page size that the moderator can have.
5. Select the moderator’s **Time Zone** from the drop down list.
6. Enter the moderator’s **New Password**. It can be any combination of numbers, letters, and underscores, and it is not case-sensitive. Re-enter the password in the **Confirm Password** field.
7. Set the **Privileges** (or services) the moderator is allowed to use. The moderator’s user interface, including the appropriate icons and links, are based on the services selected.
8. Select or deselect the **Service Defaults** as applicable:
   - Check **Conferences wait for Moderator** to indicate that conferences do not begin until the Moderator joins (if you have that feature).
   - Check **Conferences play Wait-For-Conference message** to indicate that conferences play a message when participants join before the conference has begun.
   - Check **Conferences play About-To-Join message** to indicate that participants hear a message notifying them that they are about to join the conference.
   - Check **Conferences drop dialout calls when all dialin calls disconnect** to hang up calls that have been dialed out from a conference.

Note:

Selecting this option does not affect any existing conferences.

9. Select your preferred **Summary Email Options**:
   - Select a **Frequency** to receive emails from the drop down list. If you select **Daily Digest** as the Frequency, also select the **Report Hour** to indicate the time the email should be sent.
   - Check the service option boxes to indicate the services for which you would like to receive summary email reports.
10. Select **Submit** to save the moderator information or **Cancel** to ignore the changes and return to the *Defined Moderators page*.

The Edit Moderator Profile Page

The *Edit Moderator Profile page* allows you to change moderator personal and contact information, as well as the service privileges and defaults.

To open the *Edit Moderator Profile page*, go to the *Defined Moderators page* and select the **highlighted moderator name** for the moderator whose information you want to change. The system displays the *Edit Moderator Profile page*, illustrated below.

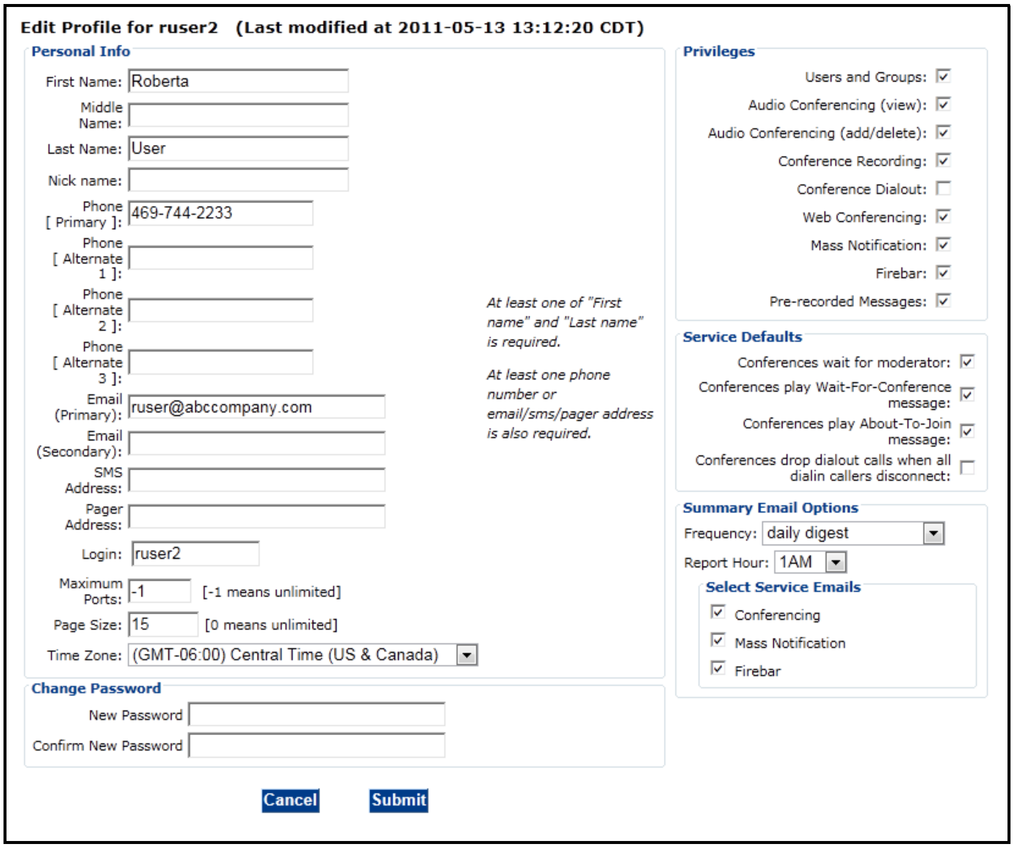


Figure 16: The Edit Moderator Profile Page

1. Edit the moderator's personal and contact information. Required information includes:
   - First and last name
   - At least one phone number or email/sms/pager address

Note:

The local telephone numbers should be entered as NPA-NXX-XXXX. The long distance numbers (with respect to the location of the server) should be entered as 1+NPA-NXX-XXXX.

Pager addresses must follow this format: "phone_number@service_provider" (Example: 5551212@verizon.net).

Note:

The email address is used as a “from” address when the system generates emails on behalf of the moderator for any service applications.

2. Edit the moderator’s **Login** ID. This is the user ID the moderator will use to login to the NMC web portal.
3. For systems where the Administrator allocates ports, edit a number in the **Maximum Ports** field to indicate the maximum allowed ports that the given moderator can use. Note that recording a conference consumes a port.
4. Edit the number in the **Page Size** field to indicate the maximum page size that the moderator can have.
5. Select the moderator’s **Time Zone** from the drop down list.
6. Enter the moderator’s **New Password**. It can be any combination of numbers, letters, and underscores, and it is not case-sensitive. Re-enter the password in the **Confirm Password** field.
7. Set the **Privileges** (or services) the moderator is allowed to use. The moderator’s user interface, including the appropriate icons and links, are based on the services selected.
8. Select or deselect the **Service Defaults** as applicable:
   - Check **Conferences wait for Moderator** to indicate that conferences do not begin until the Moderator joins (if you have that feature).
   - Check **Conferences play Wait-For-Conference message** to indicate that conferences play a message when participants join before the conference has begun.
   - Check **Conferences play About-To-Join message** to indicate that participants hear a message notifying them that they are about to join the conference.
   - Check **Conferences drop dialout calls when all dialin calls disconnect** to hang up calls that have been dialed out from a conference.

Note:

Selecting this option does not affect any existing conferences.

9. Select your preferred **Summary Email Options**:
   - Select a **Frequency** to receive emails from the drop down list. If you select **Daily Digest** as the Frequency, also select the **Report Hour** to indicate the time the email should be sent.
   - Check the service option boxes to indicate the services for which you would like to receive summary email reports.
10. Select **Submit** to save changes to the moderator information or **Cancel** to ignore the changes and return to the *Defined Moderators page*.

CHAPTER 9 – Creating Groups

This chapter explains how to create groups. This chapter assumes that most users will be using the web conferencing feature in conjunction with audio conferencing.

There are two methods to set up groups. The first method is to manually enter users, then organize them into manually defined groups.

If you need to add users and groups in bulk, you may want to use the second method. The second way is to upload a comma separated values (CSV) file of users and groups. The CSV file can include multiple users for one group, or multiple users in multiple groups. Refer to the “Uploading Multiple Users and Groups” section on page 32 for more information on this feature.

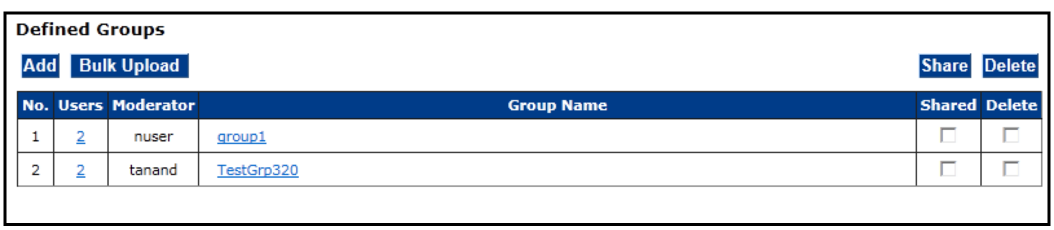
Working With Groups

After creating users, you can organize them into frequently-used groups. You can include both uploaded users and manually entered users.

The Defined Groups Page

The *Defined Groups page* lists all groups defined in the system by the administrator or any moderator.

To add groups or edit group membership, select **Groups** from the *Admin Menu* or the **Groups link** on the *Home page*. The system displays the *Defined Groups page*, illustrated below.



Defined Groups

Add Bulk Upload Share Delete

No.	Users	Moderator	Group Name	Shared	Delete
1	2	nuser	group1	☐	☐
2	2	tanand	TestGrp320	☐	☐

Figure 17: The Defined Groups Page

The system displays the following information related to the groups:

- A system-generated number for the group
- The number of users included in the group
- The moderator who created the group
- The name of the group with a link to edit the group information and members
- A check box to share the group with other moderators
- A check box to delete the group

1. To add a new group, select **Add** to open *The Add Group Page*.

2. To add multiple groups, select **Bulk Upload** to open *The Upload Groups and Users Page*.

3. To edit an existing group, select the **highlighted group name** to open *The Edit Group Page*.

4. To view an existing user's group membership, select the **highlighted number of users** to open *The Group Members Page* for the selected group.

5. To share a group with another moderators, check the **Shared** box next to the group's name and select **Share**. All shared groups appear in light beige color.

6. To delete an existing group, check the **Delete** box next to the group's name and select **Delete**.

The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of groups.

The Add Group Page

The *Add Group page* allows you to select users for your new group.

To open the *Add Group page*, go to the *Defined Groups page* and select **Add**. The system displays the *Add Group page*, illustrated below.

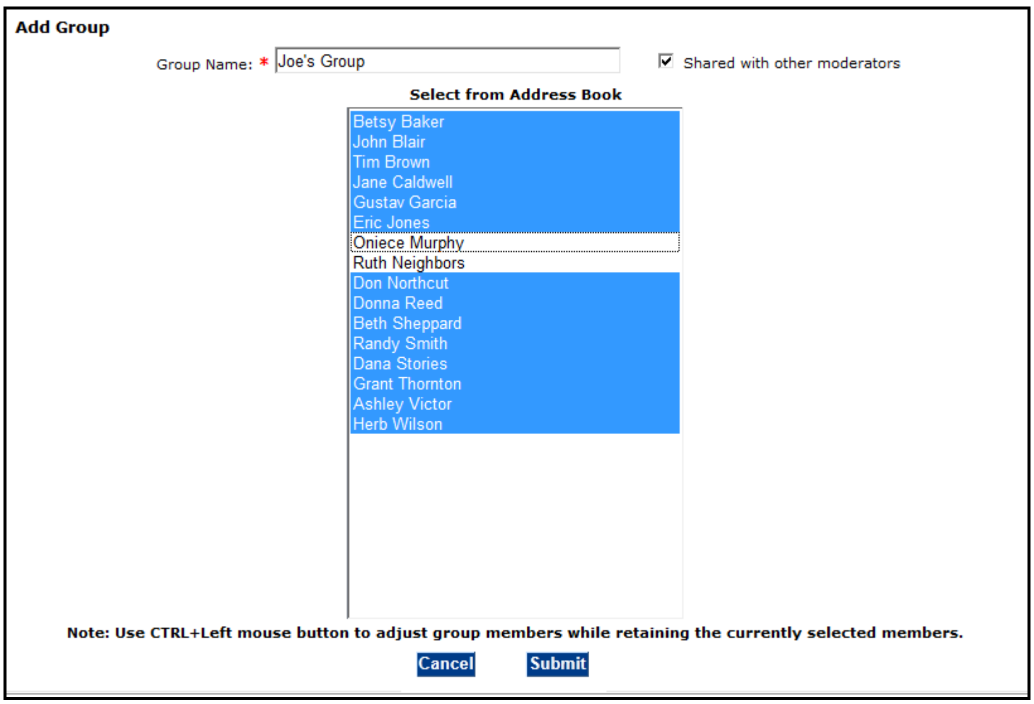


Figure 18: The Add Group Page

1. Enter the group name.

2. Highlight the group members from the *Users* column and/or the *Address Book* column. To select multiple members, use **Shift + click** to select adjacent users, or **Control + click** for non-consecutive users.

3. Select **Submit** to save the group information or **Cancel** to ignore the changes and return to the *Defined Groups page*.

The Edit Group Page

To open the *Edit Group page*, go to the *Defined Groups page* and select the **highlighted group name** of the group whose information you want to change. The system displays the *Edit Group page*, illustrated below.

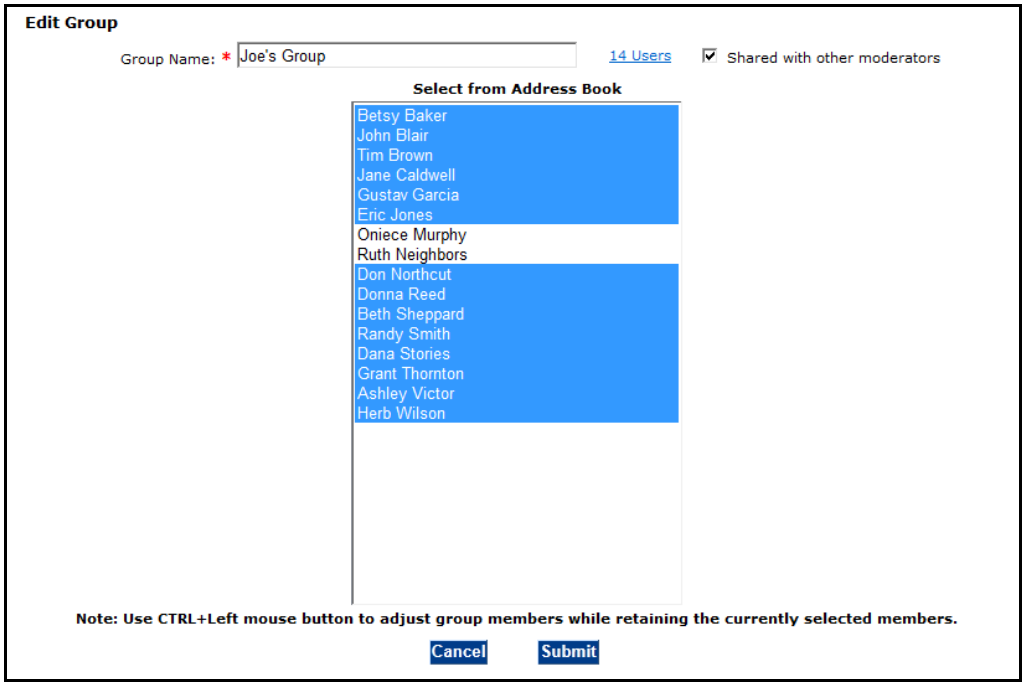


Figure 19: The Edit Group Page

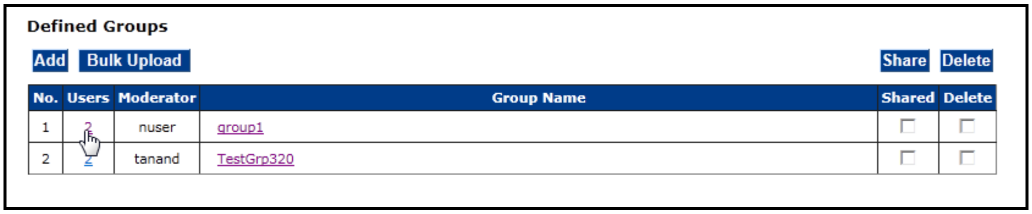
1. Change the group name as needed.

2. Highlight the group members from the *Users* column and/or the *Address Book* column. Use **Control + click** to de-select a high-lighted entry. To select additional users for this group, use **Shift + click** to select adjacent users, or **Control + click** for non-consecutive users.

3. Select **Submit** to save the group information or **Cancel** to ignore the changes and return to the *Defined Groups page*.

The Group Members Page

To view the users in a selected group, go to the *Defined Groups page* and select the **highlighted number of users** for the group you want to view, illustrated below.

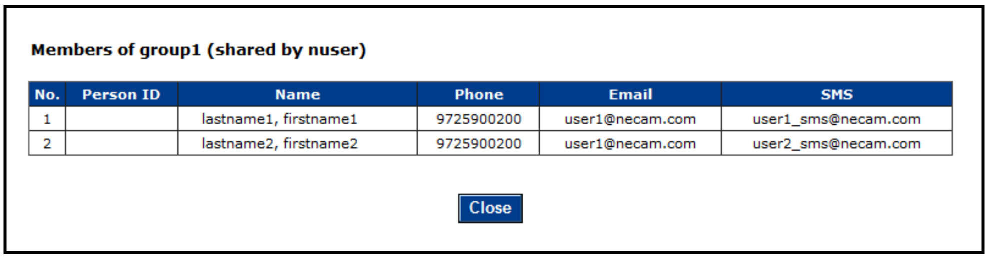

Defined Groups

Add Bulk Upload Share Delete

No.	Users	Moderator	Group Name	Shared	Delete
1	2	nuser	group1		
2	2	tanand	TestGrp320		

Figure 20: Viewing the Group Users

The system displays the *Group Members page*, illustrated below.


Members of group1 (shared by nuser)

No.	Person ID	Name	Phone	Email	SMS
1		lastname1, firstname1	9725900200	user1@necam.com	user1_sms@necam.com
2		lastname2, firstname2	9725900200	user1@necam.com	user2_sms@necam.com

Close

Figure 21: The Group Members Page

The system displays the name and contact information for the users in the selected group. It also shows which moderator created the group.

1. Select **Close** to close the window after you have finished viewing the information.

Uploading Multiple Users and Groups

You can upload a CSV file of multiple users and groups when you have a large list of users to add to the system, such as a list of homeowners arranged in subgroups.

CSV Files

Groups can be created by uploading users listed in a CSV file.

The CSV file should have a header line with the following fields:

- Person ID
- Group name
- Location
- Department
- First name
- Middle name
- Last name
- Phone1 - Phone4
- Email address
- Alternate email address
- SMS email address
- Pager email address

A sample CSV file is illustrated below.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Address	Group	Not Used	Not Used	First Names	Middle Name	Last Name	Phone #	Alt Phone #	Not Used	Not Used	Email	Secondary Email
2	1234 Maple Creek Lane	Main			Bobby		Barron	972 123 4567	469 360 2524			bobby@nowhere.com	
3	2345 Maple Creek Lane	Main			Sheila		Bata	972 672 4590				sheila@verizon.net	
4	1234 Foxden	Main			Fred & Mary		Novak	972 987 1234				f&m@somewhere.com	
5	4567 North Park	Main			Joe & Linda		Hughs	972 567 8765				JL@hughs.com	
6	2468 park Bend	Main			Jim		Huggins	972 465 1245				jim@huggins.com	
7	1234 Hickory Creek Lane	Main			Trish		Bowling	214 123 6789				trish@mac.com	
8	67891 Highland Creek	BOD			John		Campbell	972 987 6543	702 339 7033			john@tx.rr.com	
9	2345 Highland Ln.	BOD			John		Danis	972 652 4798				danis@gmail.com	
10	1234 Glenbrook Road	BOD			Leslie		Staggs	972 867 8780				leslie@verizon.net	
11	1234 Maple Creek Drive	BOD			Paul & Jan		Brunt	972 569 5421				quickdraw@zone.net	
12	1234 Highland Ln.	Crimewatch			John & Sylvia		Faletti	972 620 6446				thefalettis@gmail.com	
13	5678 Highland Creek	Crimewatch			Sarah		Wild	214 454 6584	214 234 5678			wild@nowhere.com	
14	2143 Highland Creek	Crimewatch			Bill		Gates	469 644 6061				billg@ms.com	

Figure 22: CSV File Format

There is no limit regarding the number of records included in one CSV file.

The first line is for formatting column titles and is ignored during the upload. The remaining lines must have the fields specified (although some fields may be blank).

Saving Excel Files as CSV

To save an Excel file as a CSV file, complete the following steps.

1. In your Excel spreadsheet of users and groups, select **Save As** from the **File** menu.
2. In the **Save as type** list at the bottom of the *Save As dialog*, select .**CSV** format.

The Upload Groups and Users Page

The *Upload Multiple Groups and Users page* allows you to upload a CSV file of users and groups.

To open the *Upload Multiple Groups and Users page*, first select **Groups** from the *Admin Menu* or the **Groups link** on the *Home page*. The system displays the *Defined Groups page*. Select **Bulk Upload** from the *Defined Groups page*. The system displays the *Upload Multiple Groups and Users page*, illustrated below.

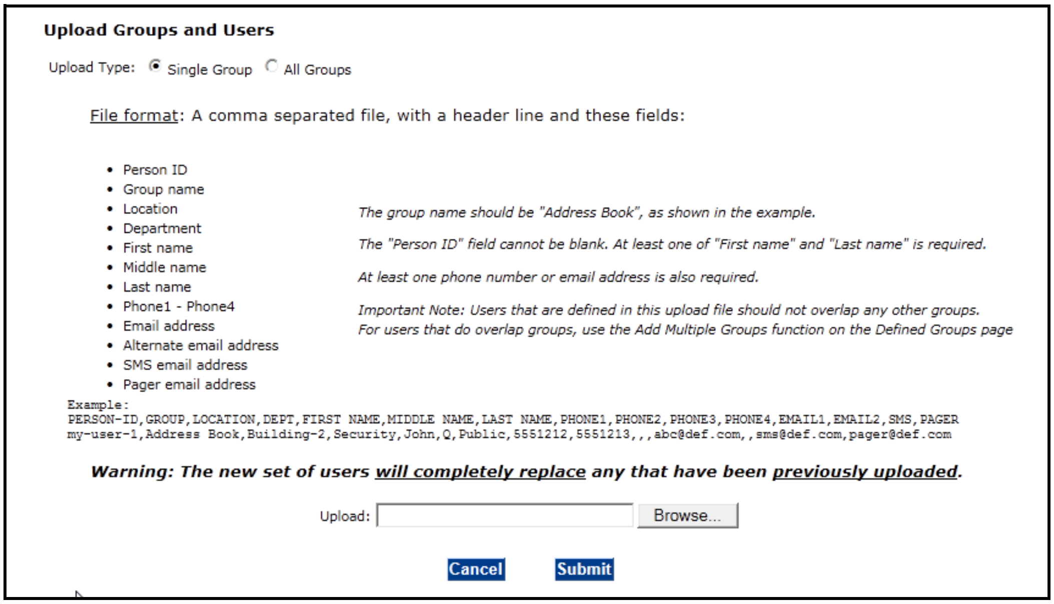


Figure 23: The Add Multiple Groups and Users Page

1. Indicate the **Upload Type**:
   - If you select **Single Group**, the uploaded group members will replace the corresponding members of the group indicated in the CSV file.
   - If you select **All Groups**, all uploaded groups will be updated, including any groups that are no longer contained in the CSV file.

2. To upload a CSV file, select **Browse** to locate the file on your PC or network. Highlight the file and select **Open**. The system adds the file information to the **Upload** field.

Warning:

The new set of users will completely replace any that have been previously uploaded.

3. Select **Submit** to save the group information or **Cancel** to ignore the changes and return to the *Defined Groups page*.

The system adds the users and groups defined in the CSV file. These groups are now available on the *Defined Groups page*.

CHAPTER 10 – Recording Messages

Mass Notification uses prerecorded messages. Firebar Conferencing can be configured to use prerecorded messages. There are two types of messages: a greeting and a message body, which are recorded separately. Messages you record as system administrator are system-wide messages available for all moderators.

Note:

While it is not mandatory to have recorded messages with Firebar conferencing, it is recommended that you include at least a short message, so that conference participants answering their calls have some indication that they are joining a conference.

There are four methods of recording messages. This chapter describes the procedures for:

- Recording a Message in Your Own Voice
- Using the text to speech converter to create messages
- Importing .wav files
- Recording a message on the fly as part of sending a mass notification or firebar conference

Recording a Message in Your Own Voice

You can record one or more messages using the system’s built-in Interactive Voice Response feature.

Follow these steps to record a message:

1. From a regular telephone, dial the dial-in number. You can obtain the number from your system administrator.
2. When prompted for a PIN, enter ***123#**.
3. When prompted for a Moderator PIN, enter your Moderator PIN. You can obtain this number from your system administrator or *The Edit Mass Notification Page* or *The Defined Firebar Conferences Page*.
4. When prompted for an announcement number, pick any number from 001 to 999. This is your unique message ID. The system allows each moderator to record up to 999 messages.

Warning:

If you pick an existing message ID, your recording will overwrite the old message.

5. After entering your selected announcement number, press #.
6. Record your message.

7. Review the message and re-record if necessary.

8. Press **9** to save the message and exit the system.

After the message has been successfully recorded, the system lists it on *The Defined Pre-recorded Messages Page* with a description of "NEW." There you can edit the name of the message and prepare it for use.

Working with Pre-recorded Messages

You can use the system to view a list of prerecorded messages or to listen to a selected message on your computer.

The Defined Pre-recorded Messages Page

The *Defined Pre-recorded Messages page* lists all messages defined in the system by the administrator or any moderator, either by calling the system and recording in your own voice or by using the other system features.

To add messages or edit message properties, select **Prerecorded Messages** from the *Admin Menu* or the **Prerecorded Messages link** on the *Home page*. The system displays the *Defined Pre-recorded Messages page*, illustrated below.

Defined Pre-recorded Messages

Add Delete

No.	Moderator	Msg Num	Prerecorded Message	Listen	Type	Created At	Delete
1	nuser	2	test greeting	Listen	Greeting	Wed May 11 2011 06:13:24 PM	☐
2	nuser	1	test message	Listen	Body	Wed May 11 2011 06:13:24 PM	☐
3	---	101	test system greeting	Listen	Greeting	Wed May 11 2011 06:13:24 PM	☐
4	---	100	test system message	Listen	Body	Wed May 11 2011 06:13:24 PM	☐

Figure 24: The Defined Pre-recorded Messages Page

The system displays the following information related to the pre-recorded messages:

- A system-generated number for the message
- The moderator who created the message
- The message number assigned when the message was created
- The description of the message with a link to edit the message
- A link to listen to the message
- The type of message (i.e., greeting or body)
- The time the message was created
- A check box to delete the message

Note:

Messages shown in Beige are shared messages recorded by another moderator or the system administrator. You cannot edit or delete shared messages that you did not create.

1. To add a new message using either text-to-speech or an uploaded .wav file, select **Add** to open *The Add Pre-recorded Messages Page*.

2. To edit an existing message's properties, select the **highlighted message name** to open *The Edit Pre-recorded Messages Page* for the selected message.

3. To listen to an existing message on your computer, select **Listen** next to the message you want to hear. The system opens your default media player and plays the message.

4. To delete an existing message, check the **Delete** box next to the message name and select **Delete**.

The system assigns a number to each message. It also displays the moderator who created the message, as well as the moderator-defined message number.

The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of messages.

The Add Pre-recorded Messages Page

The *Add Pre-recorded Messages page* allows you to add messages using either text-to-speech or .wav files recorded in another program on your computer.

To open the *Add Pre-recorded Messages page*, go to the *Defined Pre-recorded Messages page* and select **Add**. The system displays the *Add Pre-recorded Messages page*, illustrated below.

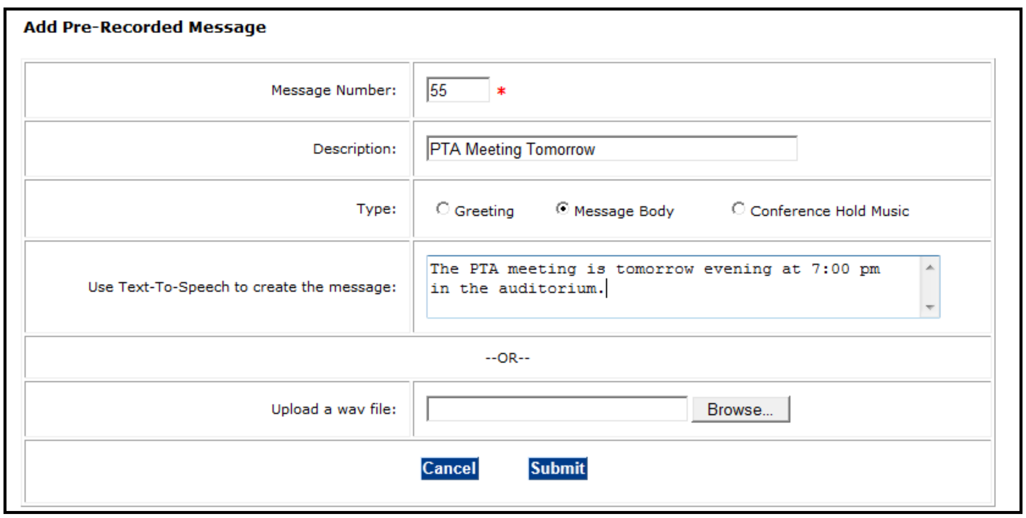


Figure 25: The Add Pre-recorded Messages Page

1. Enter a unique **Message Number** from 001 to 999. This is your unique message ID. The system allows each moderator to record up to 999 messages.

2. Enter a **Description** of the message.

3. Select whether the message is a **Greeting,** a **Message Body**, or **Conference Hold Music.**

Note:

The Conference Hold Music is not the main system hold music. It is only selectable as Custom Hold Music when configuring a Firebar Conference.

4. To use text-to-speech to create the message, enter the text of the message in the **Use text-to-speech** field.

5. To upload a .wav file, select the **Browse** button to open a *Choose File* dialog. Select the file located on your computer and select **Open**. The system adds the file and location to the **Upload a wav file** field.

Note:

The preferred format for the .wav file is: RIFF (little-endian) data, WAVE audio, Microsoft PCM, 16 bit, mono 8000 Hz.

6. Select **Submit** to save the message information or **Cancel** to ignore the changes and return to the *Defined Pre-recorded Messages page*.

The Edit Pre-recorded Messages Page

The *Edit Pre-recorded Messages page* allows you to change message properties.

To open the *Edit Pre-recorded Messages page*, go to the *Defined Pre-recorded Messages page* and select **Edit** next to the message whose properties you want to change. The system displays the *Edit Pre-recorded Messages page*, illustrated below.

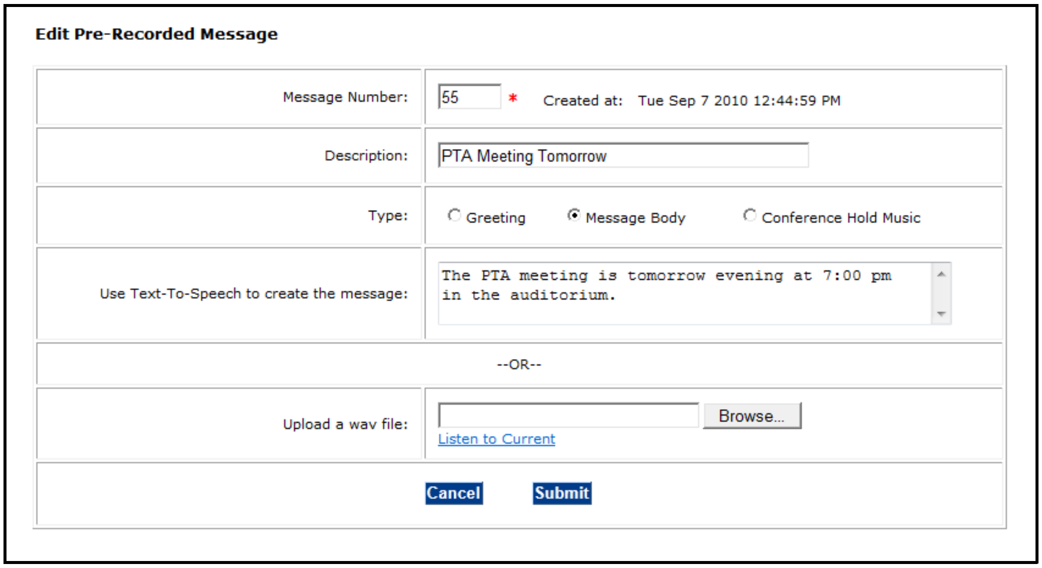


Figure 26: The Edit Pre-recorded Messages Page

1. Enter a unique **Message Number** from 001 to 999. This is your unique message ID. The system allows each moderator to record up to 999 messages.

2. Enter a **Description** of the message.

3. Select whether the message is a **Greeting,** a **Message Body**, or **Conference Hold Music.**

Note:

The Conference Hold Music is not the main system hold music. It is only selectable as Custom Hold Music when configuring a Firebar Conference.

4. If you used text-to-speech to create the message, edit the text of the message in the **Use text-to-speech** field.

5. To upload a different wav file, select the **Browse** button to open a *Choose File* dialog. Select the file located on your computer and select **Open**. The system adds the file and location to the **Upload a wav file** field.

6. Select **Submit** to save the message information or **Cancel** to ignore the changes and return to the *Defined Pre-recorded Messages page*.

CHAPTER 11 – Using Automatic Service Selection Rules

The system allows dynamic sharing of trunks across multiple services (e.g., Audio Conferencing, Mass Notification, Firebar, etc.). If the voice trunks are set up to receive the dialed number - also known as the Dialed Number Information Service (DNIS), then different services can be invoked based on the DNIS received.

This chapter explains the service selection rules. A service selection rule *binds* a given service with a dialed number.

Working with Service Selection Rules

Typically, a set of dialed numbers (DNISs) can be associated with the trunk(s) between the Central Office Switch, or a PBX, and the NMC. When external callers dial one of the DNIS numbers, the Switch/PBX routes the call to the NMC. As part of the signaling handshake between the Switch/PBX and the NMC, the NMC receives the dialed number (DNIS) and the originating number or the ANI associated with the call. The *Service Selection* page is used to set up associations between different DNISs and/or ANIs with different services available on the NMC.

For example, if the incoming DNIS is 972-590-0231 and is associated with the Audio Conferencing Service, the NMC will automatically place the caller into an audio conference.

Depending on the network configuration, it might also be possible for the NMC to receive a caller's ANI. In such cases, the ANI can be used for caller authentication. For example, a Firebar Service can be initiated based on incoming DNIS and ANI.

Note:

Before using the service selection rules, verify that the trunk(s) between the NMC and PBX, or to the PSTN support DNIS and ANI.

The Service Selection Page

The *Service Selection page* allows you to set up the mapping between each DNIS and its associated service.

To add or edit service selection rules, select **Service Selection** from the *Admin Menu* or the **Service Selection link** on the *Home page*.The system displays the *Defined Automatic Service Selection Rules page*, illustrated below.

Defined Automatic Service Selection Rules

Add Apply Changes

No.	Selection Rule	Pri	Ckt - Grp	Source	Destination	Moderator	Service To Invoke	PIN	Active	Delete
1	test					nuser	Conference: Subj=Conference 11111 22222; Moderator-PIN=11111; Participant-PIN=22222	11111	☑	☐
2	Tanand DNIS based Conference				9725900240	tanand	Conference: Subj=Conference for tanand; Moderator-PIN=58255; Participant-PIN=76750	76750	☑	☐

Figure 27: The Defined Automatic Service Selection Rules Page

The system displays the following information related to the service selection rules:

- A system-generated number for the service selection rule
- The name of the service selection rule with a link to edit the service selection rule
- The priority of the rule
- The circuit group associated with the service selection rule
- The source number to use for the rule
- The destination number for the rule, which is the telephone number to use for the rule
- The moderator for which the service selection rule applies
- The service to invoke for the service selection rule
- The PIN needed to invoke the selected service
- A check box to activate or deactivate the service selection rule
- A check box to delete the service selection rule

1. To add a new service selection rule, select **Add** to open *The Add Service Selection Rule Page*.

2. To edit an existing moderator's information, select the **highlighted selection rule name** to open *The Edit Service Selection Rule Page* for the selected service.

3. To change the status of a rule to inactive, or to reactivate an inactive rule, uncheck or check the **Active** box next to the rule name and select **Apply Changes**.

4. To delete an existing rule, check the **Delete** box next to the rule name and select **Apply Changes**.

The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of service selection rules.

The Add Service Selection Rule Page

The *Add Service Selection Rule page* allows you to select a specific service to be invoked automatically, based on the calling number, dialed number, or combination thereof.

To open the *Add Service Selection Rule page*, go to the *Defined Automatic Service Selection Rules page* and select **Add**. The system displays the *Add Service Selection Rule page*, illustrated below.

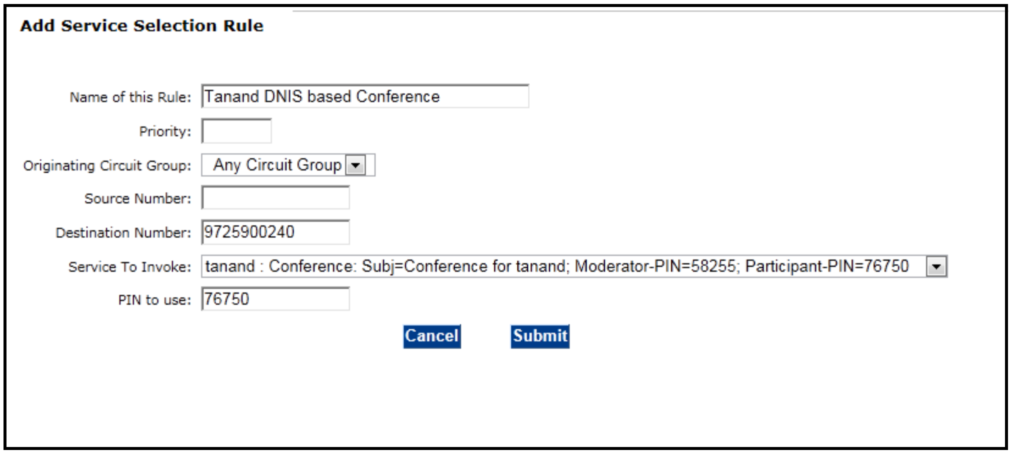


Figure 28: The Add Service Selection Rule Page

1. Enter a **Name** for this automatic service selection rule.
2. Enter the **Priority** for this automatic service selection rule.
3. Select the **Originating Circuit Group** from the drop down list.
4. To invoke a service automatically based on the ANI, enter the ANI as the **Source Number**.
5. Enter the number users will dial to invoke this service as the **Destination Number**.
6. Select the **Service to Invoke** from the drop down list.
7. Some services have various roles (e.g. Moderator versus Participant). Enter the **PIN to Use** to indicate which role the caller will use when entering the service.
8. Select **Submit** to save the service selection rule information or **Cancel** to ignore the changes and return to the *Defined Automatic Service Selection Rules page*.

The Edit Service Selection Rule Page

The *Edit Service Selection Rule page* allows you to change a specific service to be invoked automatically, based on the calling number, dialed number, or combination thereof.

To open the *Edit Service Selection Rule page*, go to the *Defined Automatic Service Selection Rules page* and select the **highlighted service selection name** for the service selection rule you want to update. The system displays the *Edit Service Selection Rule page*, illustrated below.

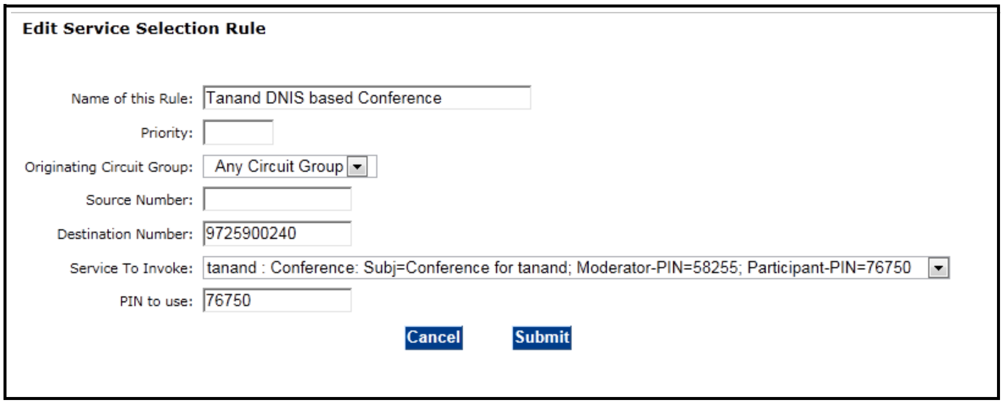


Figure 29: The Edit Service Selection Rule Page

1. Edit the **Name** for this automatic service selection rule.
2. Enter the **Priority** for this automatic service selection rule.
3. Select the **Originating Circuit Group** from the drop down list.
4. To invoke a service automatically based on the ANI, enter the ANI as the **Source Number**.
5. Edit the number users will dial to invoke this service as the **Destination Number**.
6. Select the **Service to Invoke** from the drop down list.
7. Some services have various roles (e.g. Moderator versus Participant). Edit the **PIN to Use** to indicate which role the caller will use when entering the service.
8. Select **Submit** to save the service selection rule information changes or **Cancel** to ignore the changes and return to the *Defined Automatic Service Selection Rules page*.

CHAPTER 12 – Using Conferences

You can control one or more conference rooms for your conferences. Conference rooms are required for audio or web conferences. This chapter explains how to set up conference rooms.

Creating a Conference

You must set up a “room” for each of your conferences before you can use audio or web conferences.

The Defined Conferences Page

The *Defined Conferences page* lists the conference “rooms” defined in the system by the administrator or any moderator.

To add conference rooms, select **Conferences** from the *Admin Menu* or the **Conferences link** on the *Home page*. The system displays the *Defined Conferences page*, illustrated below.

Defined Conferences

Add   Find: [ ] Find   Delete

No.	Moderator	Conference	iCal	Scheduled For	Moderator PIN	User PIN	Web	Delete
1	nuser	Conference 11111 22222	iCal	ON-DEMAND	11111	22222	meet	☐
2	ruser2	Conference for ruser2	iCal	ON-DEMAND	26342	30449		☐
3	tanand	Conference for tanand	iCal	ON-DEMAND	58255	76750		☐

Figure 30: The Defined Conferences Page

The system displays the following information related to the conferences:

- A system-generated number for the conference
- The moderator’s login who created the conference
- The conference name with a link to edit the conference details
- A link to invite conference participants via iCal using Microsoft Outlook or other iCal calendar application
- The scheduling information, including ports allocated and recurrence information
- The Moderator PIN, which allows an external party to join the conference as a an additional moderator
- The User PIN, which allows an external party to join the conference as a user/ conference participant
- A link to start the associated web conference, if applicable
- A check box to delete the conference

The system allows participants to enter a conference room based on a dialed number or Dialed Number Information Service (DNIS). When a service selection rule is applied to a Moderator’s conference room, the corresponding row is shown in Yellow color. For more information about service selection rules, refer to *CHAPTER 11—Using Automatic Service Selection Rules* on page 39.

1. To filter the list of conferences, enter one or more characters in the field next to Find and select **Find**. The system displays any matching conferences.
2. To add a new conference, select **Add** to open *The Add Conference Page*.
3. To edit an existing conference, select the **highlighted conference name** to open *The Edit Conference Page* for the selected conference.
4. To schedule and invite users to the conference in an iCal calendar application, i.e., Microsoft Outlook, select **iCal**. The appointment will be emailed to selected invitees with the conference details already populated.
5. To start a web conference, select **Meet** next to the conference you want to start.
6. To delete an existing conference, check the **Delete** box next to the conference and select **Delete**.

The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of conferences.

The Add Conference Page

The *Add Conference page* allows you to set up conferences on behalf of a moderator. Once a room is established, you can conduct on-demand conferences or scheduled reservation-based conferences. The scheduled reservation-based conferences can be one time or set up as recurring conferences. The on-demand conferences are supported on a ‘best effort’ basis. The reservation-based conferences provide guaranteed audio port availability for the duration of the conference.

To open the *Add Conference page*, go to the *Defined Conferences page* and select **Add**. The system displays the *Add Conference page*, illustrated below.

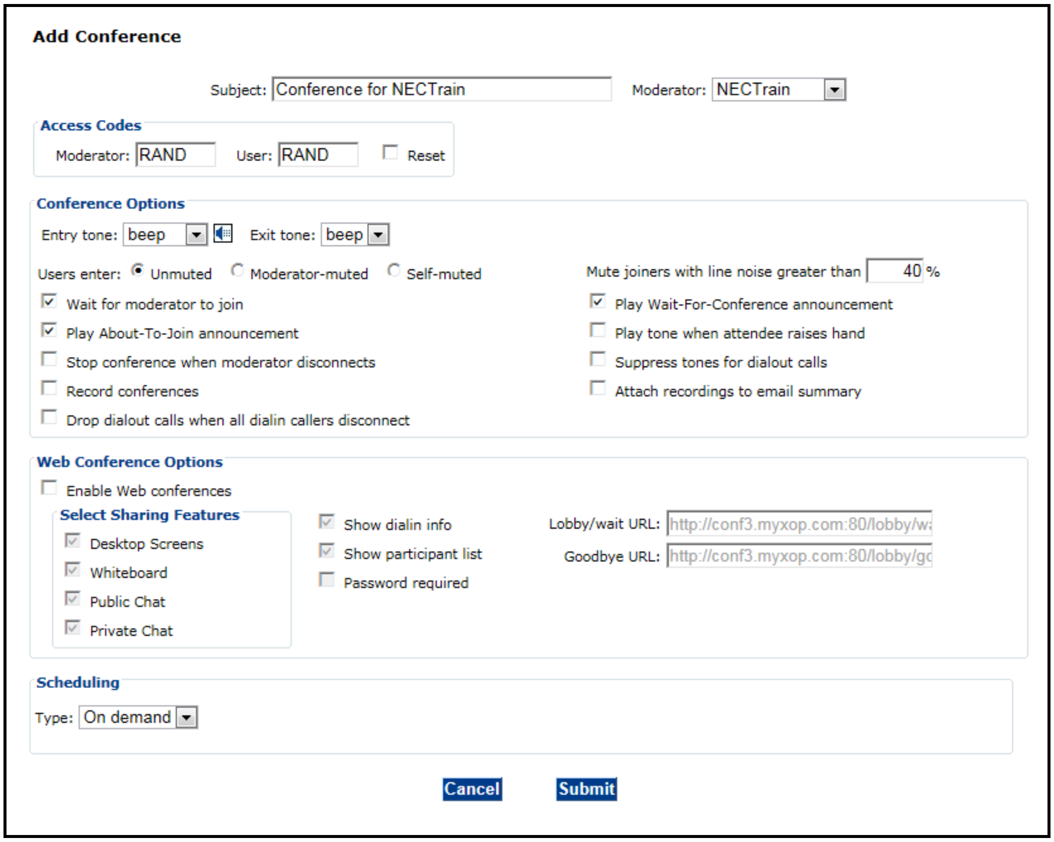


Figure 31: The Add Conference Page

1. To add a conference for another moderator, select the moderator name from the **Moderator** list and click **Select**.

2. Enter the name of the conference room in the **Subject** field. This name will be the subject of the invitation when you invite users to the conference.

3. Set the **Access Codes**.
   - You can set a **Moderator PIN** and separate **User PIN** or you can leave as RAND (random). The system generates random PINs automatically. If needed, you can change the PINs to any easily-memorized number. Check the **Reset PINs** box to create new PINs.

4. Set the **Conference Options**.
   - Select an **Entry Tone**. This tone is heard by participants when new users join the audio conference.
   - Select  to preview the sound.
   - Select an **Exit Tone**. This tone is heard by participants when users leave the audio conference.
   - Select one of the following options for the default setting for when **Users Enter** the conference: **Unmuted**, **Moderator-muted**, or **Self Muted.**

- In the **Mute joiners with line noise greater than** field, enter a percentage of noise below which the participant can join the conference unmuted. If the system detects noise levels above the percentage you set, that participant joins the conference but is muted.

Note:

Please contact your System Administrator to determine the appropriate percentage value.

- Check the **Wait for Moderator to join** box to indicate that the conference does not begin until the you join the conference and enter the Moderator PIN. The participants will hear music on the conference until you join. If the field is not checked, users can join the conference as soon as they enter the participant PIN.
- Check the **Play "about to join" announcement** box to play this announcement before a user enters the conference room.
- Check the **Stop conference when moderator disconnects** box to end the conference when the moderator disconnects.

Warning:

Using this setting can cause problems if the moderator is using a cell phone and looses voice path due to inadvertent connection drops in the cellular network.

- Check the **Record conferences** box to record the conference. If this box is checked, all conferences held in the associated conference room will be recorded. The call recordings will then be posted on the *Reports* page, and if desired, can be included with your email summary of the conference.
- Check the **Drop dialout calls when all dialin callers disconnect** box to disconnect any dialout calls when the dial in participants hang up.
- Check the **Play "wait for conference" announcement** box to have the wait for conference to start announcement.
- Check the **Play tone when attendee raises hand** box to play a tone when an attendee indicates a question.
- Check the **Suppress tones for dial-out calls** box to mute the tones when calling additional participants.
- Check the **Attach recordings to email summary** box to include the recording of the conferences in this conference room to the email summary at the end of the conference.

5. If you have web conferences enabled, set the **Web Conference Options**.
   - To associate a web conference with this conference room, check the **Enable Web conference** box.
   - Select the **Sharing Features** to indicate which web conference features to enable (**Video Camera**, **Desktop Screens**, **Whiteboard**, **Public Chat**, **Private Chat**).
   - Check the **Show dialin info**, **Show participant list**, and **Password required** boxes as needed.

- Indicate a different lobby or post-meeting URL for before and after the web conference in the **Lobby/wait URL** or **Goodbye URL** fields.

6. Schedule the conference.
   - Select **On-demand** to make the conference available at any time.
   - Select **Scheduled** to schedule a reservation-based conference. The system opens additional features depending on your selections. A sample is illustrated below.

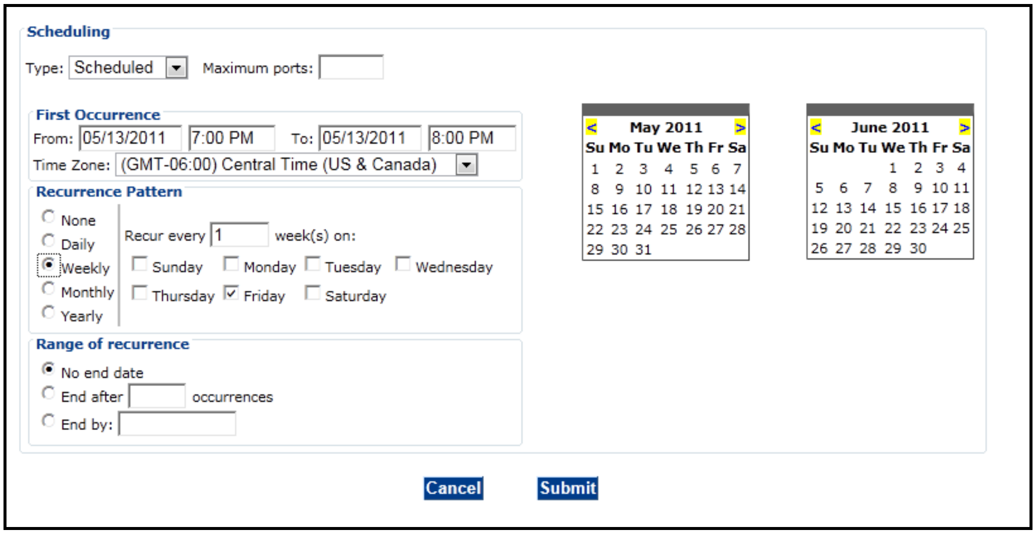


Figure 32: The Add Conference Page Scheduling Options

- Enter the maximum number of ports to reserve for the scheduled conference in **Maximum ports** field.
- Enter the **Start Date** and **Time**. Enter the **End Date** and **Time**. It is highly recommended that you provide a duration time cushion to prevent being cut off prematurely.Select the base **Time Zone** for the conference.
- If the conference is recurring, select a **Recurrence pattern** and enter the details.

- Select a **highlighted date** in the calendar to open the *Ports Scheduled by Time Slot page*, illustrated below.

Ports Scheduled by Time Slot **Max ports: 16**

September 09, 2010				
	xx:00 - xx:14	xx:15 - xx:29	xx:30 - xx:44	xx:45 - xx:59
12:xx AM				
1:xx AM				
2:xx AM				
3:xx AM				
4:xx AM				
5:xx AM				
6:xx AM				
7:xx AM				
8:xx AM	5	5	5	5
9:xx AM	5	5	5	5
10:xx AM	12	12	12	12
11:xx AM	12	12	12	12
12:xx PM	12	12	12	12
1:xx PM	5	5	5	5
2:xx PM	9	9	9	9
3:xx PM	5	5	5	5
4:xx PM	9	9	9	9
5:xx PM	9	9	9	9
6:xx PM	5	5	5	5
7:xx PM	5	5	5	5
8:xx PM	10	10	10	10
9:xx PM	5	5	5	5
10:xx PM	5	5	5	5
11:xx PM				

Figure 33: The Ports Scheduled by Time Slot Page

- The *Ports Scheduled by Time Slot page* shows the ports scheduled for the selected date for the entire system. The moderator can use this page to identify potential scheduling conflicts with other moderators on the system. Select **Close** to return to the *Add Conference page*.

7. Select **Submit** to save the conference information or **Cancel** to ignore the changes and return to the *Defined Conferences page*.

The Edit Conference Page

The *Edit Conference page* allows you to edit an existing conference room created by any moderator.

To open the *Edit Conference page*, go to the *Defined Conferences page* and select the **highlighted conference name** for the conference you want to edit. The system displays the *Edit Conference page*, illustrated below.

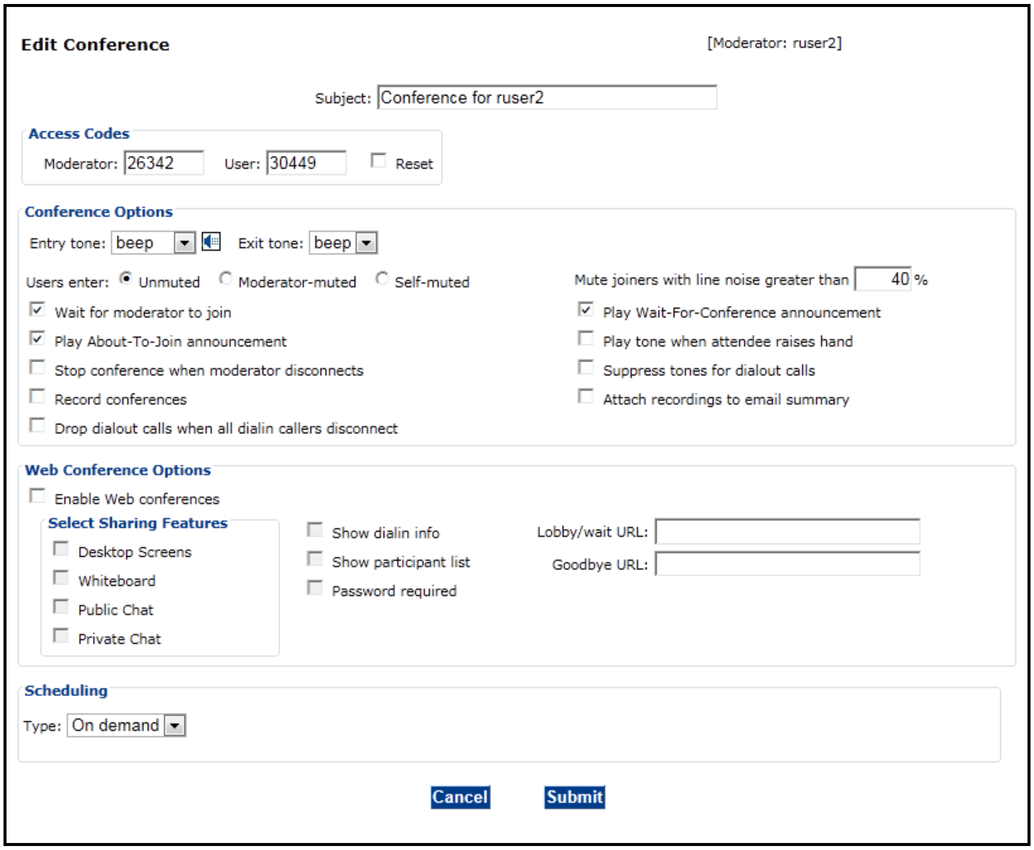


Figure 34: The Edit Conference Page

1. Edit the name of the conference room in the **Subject** field. This name will be the subject of the invitation when you invite users to the conference.

2. Edit the **Access Codes**.
   - You can edit the **Moderator PIN** and separate **Participant PIN** or you can leave the system generated PINs. Check the **Reset PINs** box to create new PINs.

3. Edit the **Conference Options**.
   - Select an **Entry Tone**. This tone is heard by participants when new users join the audio conference.
   - Select  to preview the sound.
   - Select an **Exit Tone**. This tone is heard by participants when users leave the audio conference.
   - Select one of the following options for the default setting for when **Users Enter** the conference: **Unmuted**, **Moderator-muted**, or **Self Muted.**

- In the **Mute joiners with line noise greater than** field, enter a percentage of noise below which the participant can join the conference unmuted. If the system detects noise levels above the percentage you set, that participant joins the conference but is muted.

Note:

Please contact your System Administrator to determine the appropriate percentage value.

- Check the **Wait for Moderator to join** box to indicate that the conference does not begin until the you join the conference and enter the Moderator PIN. The participants will hear music on the conference until you join. If the field is not checked, users can join the conference as soon as they enter the participant PIN.
- Check the **Play "about to join" announcement** box to play this announcement before a user enters the conference room.
- Check the **Stop conference when moderator disconnects** box to end the conference when the moderator disconnects.

Warning:

Using this setting can cause problems if the moderator is using a cell phone and looses voice path due to inadvertent connection drops in the cellular network.

- Check the **Record conferences** box to record the conference. If this box is checked, all conferences held in the associated conference room will be recorded. The call recordings will then be posted on the *Reports* page, and if desired, can be included with your email summary of the conference.
- Check the **Drop dialout calls when all dialin callers disconnect** box to disconnect any dialout calls when the dial in participants hang up.
- Check the **Play "wait for conference" announcement** box to have the wait for conference to start announcement.
- Check the **Play tone when attendee raises hand** box to play a tone when an attendee indicates a question.
- Check the **Suppress tones for dial-out calls** box to mute the tones when calling additional participants.
- Check the **Attach recordings to email summary** box to include the recording of the conferences in this conference room to the email summary at the end of the conference.

4. If you have web conferences enabled, set the **Web Conference Options**.
    - To associate a web conference with this conference room, check the **Enable Web conference** box.
    - Select the **Sharing Features** to indicate which web conference features to enable (**Video Camera**, **Desktop Screens**, **Whiteboard**, **Public Chat**, **Private Chat**).
    - Check the **Show dialin info**, **Show participant list**, and **Password required** boxes as needed.

- Indicate a different lobby or post-meeting URL for before and after the web conference in the **Lobby/wait URL** or **Goodbye URL** fields.

5. If you have web conferences enabled, set the **Web Conference Options**.
   - To associate a web conference with this conference room, check the **Enable Web conference** box.
   - Select the **Sharing Features** to indicate which web conference features to enable (**Video Camera**, **Desktop Screens**, **Whiteboard**, **Public Chat**, **Private Chat**).
   - Check the **Show dialin info**, **Show participant list**, and **Password required** boxes as needed.
   - Indicate a different lobby or post-meeting URL for before and after the web conference in the **Lobby/wait URL** or **Goodbye URL** fields.
6. Schedule the conference.
   - Select **On-demand** to make the conference available at any time.
   - Select **Scheduled** to schedule a reservation-based conference. The system opens additional features depending on your selections. A sample is illustrated below.

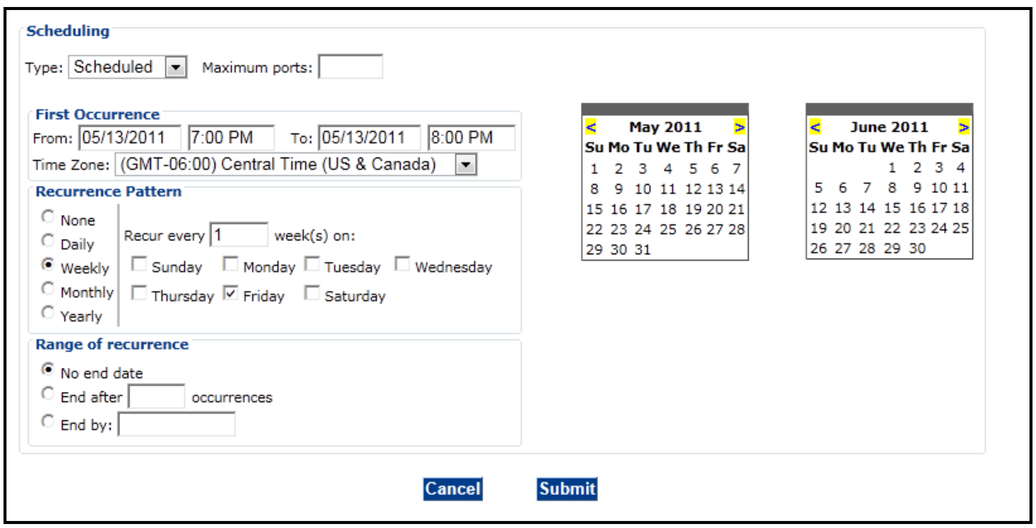


Figure 35: The Add Conference Page Scheduling Options

   - Enter the maximum number of ports to reserve for the scheduled conference in **Maximum ports** field.
   - Enter the **Start Date** and **Time**. Enter the **End Date** and **Time**. It is highly recommended that you provide a duration time cushion to prevent being cut off prematurely.Select the base **Time Zone** for the conference.
   - If the conference is recurring, select a **Recurrence pattern** and enter the details.
   - Select a **highlighted date** in the calendar to open *The Ports Scheduled by Time Slot page*. The *Ports Scheduled by Time Slot page* shows the ports scheduled for the selected date for the entire system. The moderator can use this page to identify potential scheduling conflicts with other moderators on the system. Select **Close** to return to the *Edit Conference page*.
7. Select **Submit** to save the conference information or **Cancel** to ignore the changes and return to the *Defined Conferences page*.

Inviting Users to Your Conference

The Audio and Web Conferencing Applications make use of Microsoft's Outlook Calendaring application (or other iCal enabled application) for sending conference invitations.

When you use the web portal user interface in collaboration with Microsoft Outlook to invite users to your conference, iCal becomes populated with your conference details. To invite participants to your conference, complete the following steps.

Note:

These steps are explained assuming the use of Microsoft Outlook. Other iCal applications will have similar, though slightly different, steps.

1. From the *Defined Conferences page*, illustrated below, select **iCal** next to the conference room you want to use.

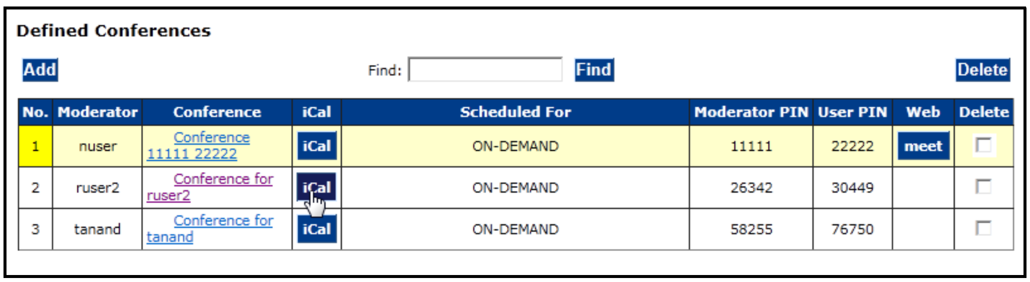


Figure 36: The iCal Option on the Defined Conferences Page

The system opens a *File Download dialog*, as illustrated below.

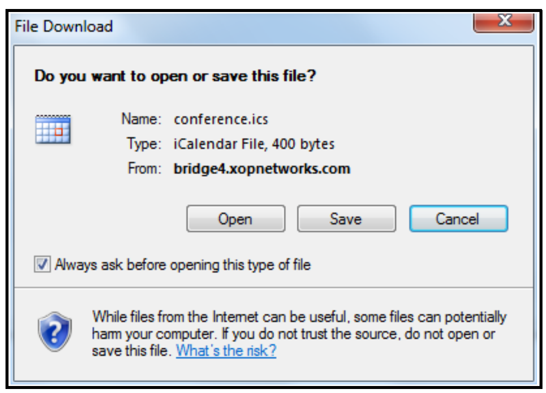


Figure 37: File Download Dialog for Conference Invitation

2. Select **Open** to open the file in Microsoft Outlook. If you select **Save**, you can open the file in Microsoft Outlook later. Select **Cancel** to cancel the invitation and scheduling process.

The system opens an appointment in your default calendar program, as illustrated below.

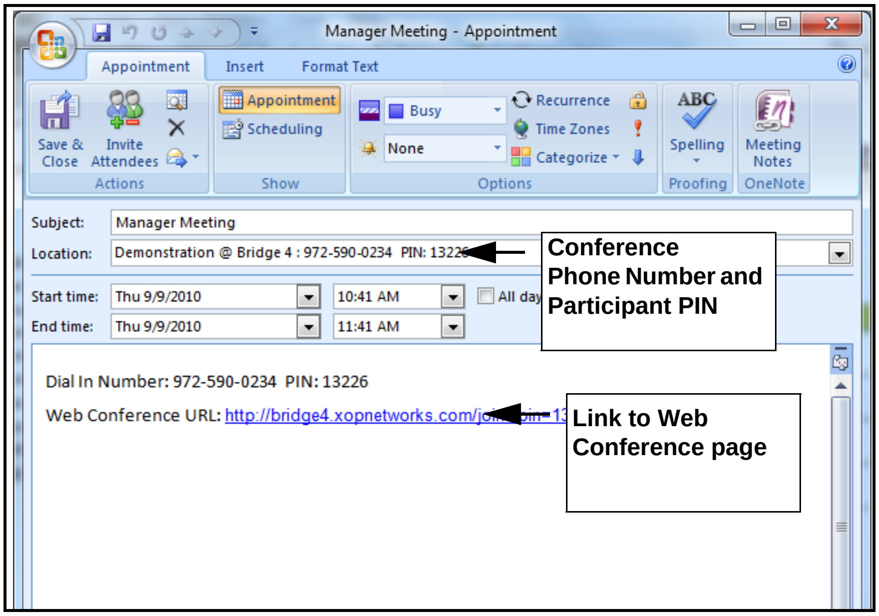


Figure 38: Sample Microsoft Outlook Conference Appointment

The calendar entry includes the following information:

- The name of the conference room in the Subject line
- The dial in number of the main conference bridge
- The participant PIN for the audio conference bridge and the web conference
- The scheduling and recurrence information, if applicable
- A link to the web conference page, if applicable

3. Update the appointment information or email text as necessary. You can also add attachments, such as a document you want to discuss on the conference call.

4. Select the **Invite Attendees** option, as illustrated below.

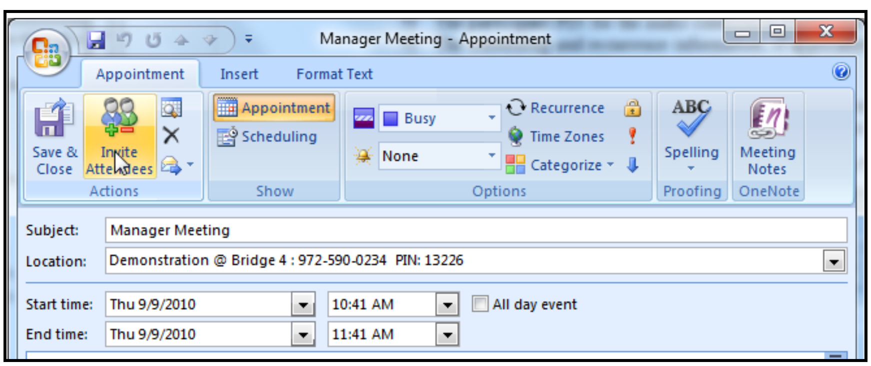


Figure 39: Inviting Attendees using Outlook

Microsoft Outlook adds the *To* field, allowing you to enter addresses from your Outlook address book just as you would for any email message.

5. Begin typing names or email addresses. Or select **To** to use your Outlook address book to select participants to invite to the conference, as illustrated below. You can double-click on the names or highlight the names and select **Required**.

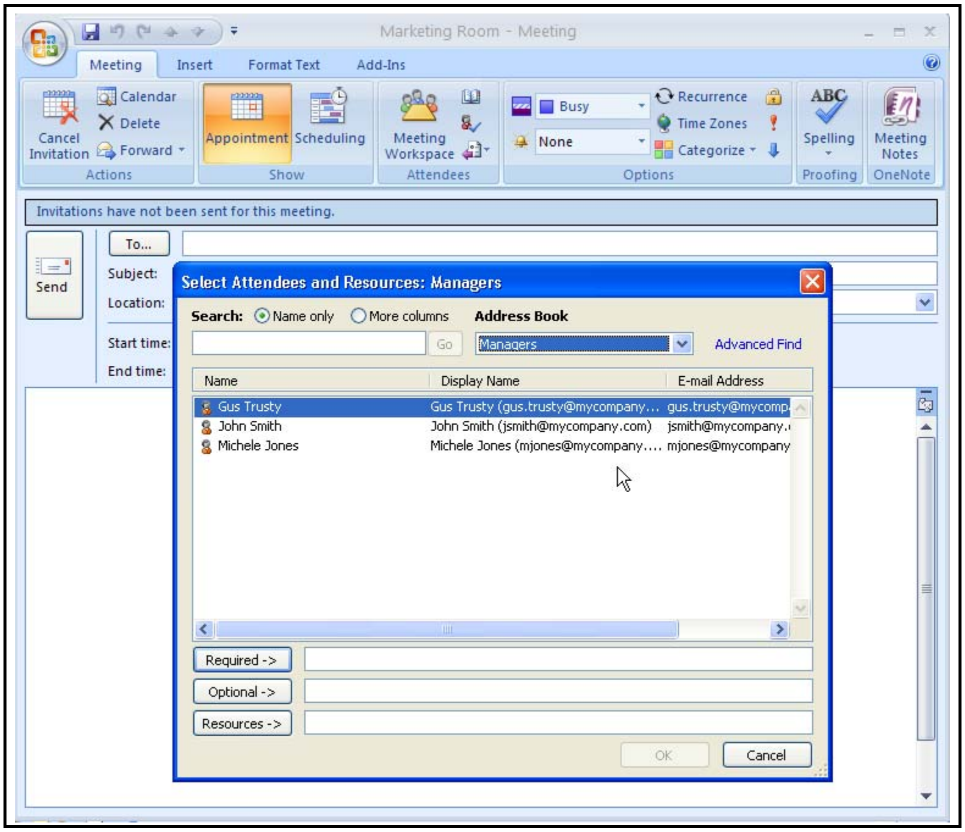


Figure 40: Selecting Attendees for the Conference Invitation Email

6. When you have finished selecting participant's emails for the invitation, select **OK**. You can also enter email addresses that are not in your Outlook Contacts.

7. When all the participant's email addresses are listed in the **To** field, select the **Send** button. The system will send email invitations to all users.

As the users accept their invitations, the appropriate conference-related information will be posted on their calendars. If the reminder feature is enabled, Outlook will remind all potential users when the conference start time approaches.

Accepting an Invitation

When you send an invitation through Outlook, all the participants you invited will receive an email message with the conference details.

A sample is illustrated below.

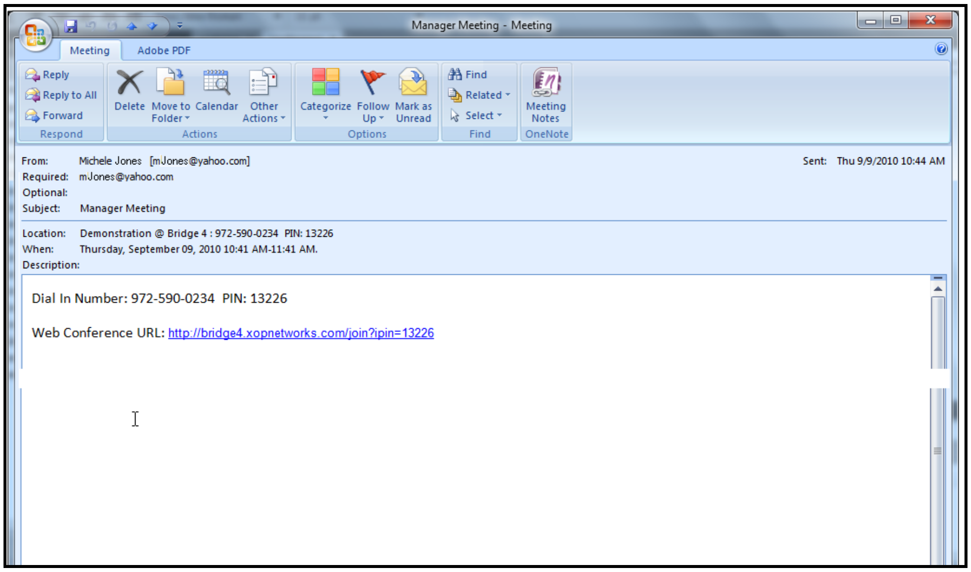


Figure 41: Accepting an Invitation for a Conference

The participants can **Accept** or **Decline** the invitation, indicating (with a return email) to you whether they will be present at the conference or not.

When it is time for a meeting that includes a web conference, the participants can click on the link in the email to join the meeting.

CONFERENCES

Conducting Audio Conferences

As system administrator, you can create and launch conferences on behalf of moderators.

There are several in-conference controls to enhance your conference. You can control conferences using the phone controls or by using RealView. Refer to *APPENDIX B—Audio Conference Controls* on page 165*Audio Conference Controls* for a listing of in-conference controls.

Joining a Conference

You will need the phone number for the main conference bridge. Please contact your system administrator.

1. To join a conference, dial the phone number of the main conference bridge.
2. Enter your PIN followed by **#** to enter the correct conference room. If you are the moderator, enter the moderator PIN. If you are a participant, enter the participant PIN. Depending on the settings, you may wait in a “lobby” until the moderator joins the conference.
3. You may hear ‘entry tones’ to indicate that other participants have joined or left the conference.
4. If necessary, you can rejoin the call by dialing the number again and re-entering your PIN.

Adding Participants to an Existing Conference

You can add new participants during a conference call. This is a great way to add people or to call and check information with another person by “stepping out” of the conference room momentarily.

1. Using your phone pad, dial **31#**. This will give you a new dial tone.
2. Dial the number of the person you want to add to the conference, followed by **#**.
3. When you have made contact with the person and the participant is ready to join the conference, dial **32#**. Both you and the new user are now part of the conference call.
4. If you cannot locate the person or the participant cannot join the conference, dial **33#** to drop the call. You will return to the original conference call.

Controlling Your Conferences Via The Phone

This section describes some of the options available to control noise, access, and record a conference call.

Mute and Unmute

There are two forms of muting available. The first is Self Muted, which can be activated by the participant or moderator, but can only be deactivated by the participant with 22#. This gives individual participants the ability to mute themselves or the moderator to mute participants in such a way the participants can deactivate the mute at will. This is useful if the moderator does not have access to RealView to see which line is the source of noise and mute it individually. As participants remove the mute, the offending line will be easily identified.

1. Press **11#** on the phone keypad to mute yourself. Or the moderator can press **16#** on the phone keypad to self mute all users.

2. Press **22#** on the phone keypad to unmute yourself.

1. A moderator can self mute all users. Using this option, the participants can use 22# to unmute themselves to ask a question or make a comment.Press **16#** on the phone key-pad to self mute all users.

The second form of muting is Moderator Muted. It can only be activated or deactivated by the moderator. This is used for presentations and other conferences that are a presentation, lecture, training, etc. At the appropriate time(s) the moderator can remove the muting and open the floor to questions. A more refined version of this is to instruct participants on the use of hand raising, then the moderator can unmute only those that have raised their hand.

1. Press **43#** on the phone keypad to moderator-mute all participants.

2. Press **44#** on the phone keypad to moderator-unmute all participants.

To mute a particular participant, the moderator should use the *RealView page*.

Use Classroom Mode

Classroom mode allows participants to enter a conference automatically self-muted. Participants can raise their hands, which plays a tone to let the teacher know there is a comment or question. Participants can also unmute themselves to barge in. The teacher can unmute all with raised hands.

To use classroom mode as a teacher, do the following:

- Press **16#** on the phone keypad to mute all attendees.
- A tone will play to indicate that a participant has raised his or her hand. This tone is configured in the web portal.
- Press **61#** on the phone keypad to unmute all with raised hands.
- Press **16#** again to remute all attendees. Hands are automatically lowered.

To mute a particular participant, the moderator should use the *RealView page*.

To use classroom mode as a participant, do the following:

- Press **14#** on the phone keypad to raise your hand. You will hear a confirmation tone that your hand is raised.
- Press **15#** on the phone keypad to lower your hand. You will hear a confirmation tone that your hand is lowered.
- Press **22#** on the phone keypad to unmute yourself to barge into the conference.

Use Analyst Mode

Analyst mode allows participants to enter a conference automatically moderator-muted. Participants can raise their hands, which plays a tone to let the analyst know there is a comment or question. Participants cannot unmute themselves. The moderator can unmute all with raised hands.

To use analyst mode as a moderator, do the following:

- Press **43#** on the phone keypad to moderator-mute all participants.
- A tone will play to indicate that a participant has raised his or her hand. This tone is configured in the web portal.
- Press **61#** on the phone keypad to unmute all with raised hands.
- Press **43#** again to remute all attendees. Hands are automatically lowered.

To use analyst mode as a participant, do the following:

- Press **14#** on the phone keypad to raise your hand. You will hear a confirmation tone that your hand is raised.
- Press **15#** on the phone keypad to lower your hand. You will hear a confirmation tone that your hand is lowered.

You cannot unmute yourself.

Start and Stop Recording

When you add the conference room, you can indicate whether the system should record conferences. This control allows you to start and stop recording as needed during the call.

1. Press **41#** on the phone keypad to start recording at any time during the conference.
2. Press **42#** on the phone keypad to stop recording at any time during the conference.

All recorded segments are accumulated in a file. The system places a link on your *Reports page* to allow you to listen to or download the recordings.

Lock and Unlock a Conference

If all of the necessary or a sufficient number of participants have joined, you can choose to lock the conference to additional participants. This prevents any users (unauthorized or authorized) from gaining access to the conference. This control is commonly used to prevent distractions by people arriving late to a conference. You can unlock a conference later as needed.

1. Press **45#** on your phone keypad to lock the conference.
2. Press **46#** on your phone keypad to unlock the conference.

Restore a Conference

Sometimes, after using dial out in-conference controls, you might loose track of the current conference state. This control allows you to restore the conference to its default state.

1. Press ****#** to restore the conference to its default state.

Disconnect a Conference

This control allows you to disconnect the conference to make the reserved ports available for other conference calls (e.g., a conference was scheduled for one hour, but completed in 30 minutes).

1. Press ***0#** to disconnect all participants and the moderator from the conference call.

Collect Votes

You can have conference participants vote on an issue by collecting their phone keypad responses. You must start the round of voting. Then participants enter their votes. Finally, you end the round of voting.

1. Using your phone pad, dial **54#**. This will start a round of voting.
2. To enter your vote (both the Moderator and Participants), press **55** on the phone keypad.
3. Enter up to eight vote digits.
4. Press **#**.
5. To end the round of voting, press **56#**.

Viewing the End of Conference Summary Report

Depending on the configuration of your system, you may receive an email with an end of conference summary report when your conference is over, as illustrated below.

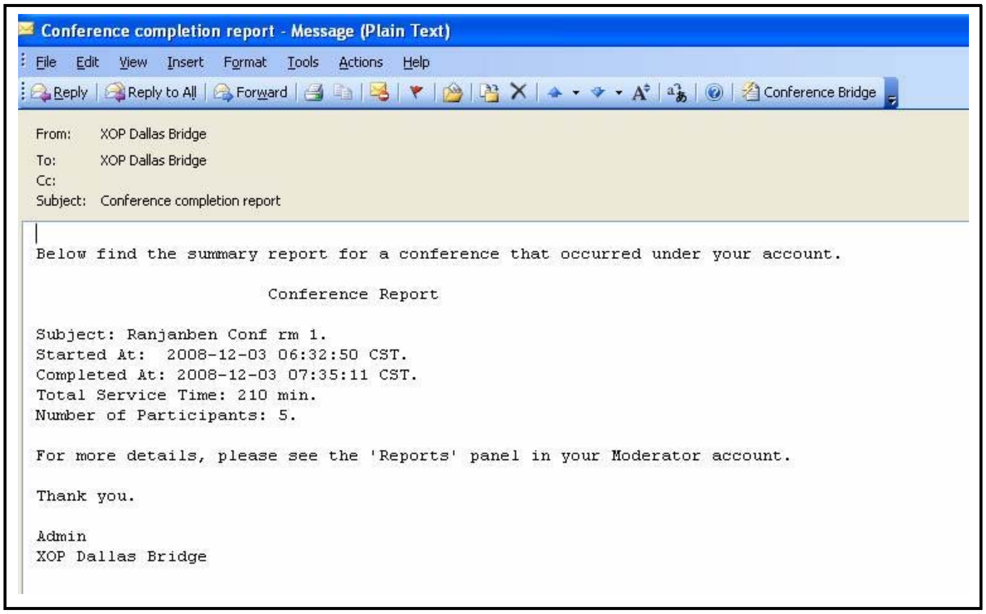


Figure 42: The End of Conference Summary Report

The report includes details about the conference start and end times and participants.

Conducting Web Conferences

As system administrator, you can create and launch conferences on behalf of moderators.

End User System Requirements

Web conference meetings run on typical desktop hardware. A computer with at least 1GHz processor, and 1 GB of RAM is required. An internet connection is required (broadband is recommended). GPRS is not supported for voice calls.

Client Browser Requirements

For attending web conference meetings, users can access the meeting with any of the following operating systems:

- Mac
- Windows
- Linux

Meeting attendees can use any of the following browser software:

- Internet Explorer 8.0
- Firefox
- Mac Safari

Although earlier versions of the browsers also function, it is recommended that you use the latest versions of the browsers with latest security patches.

Flash Version 9 onwards is required. Please upgrade to the latest Flash Player for optimal performance.

Starting a Web Conference

To start a web conference as the moderator (host), go to the *Defined Conferences page* and select **meet** next to the conference room you want to start, as illustrated below.

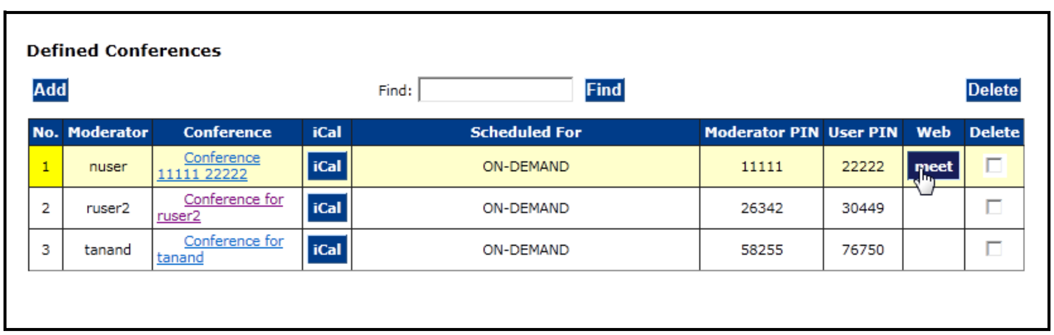


Figure 43: Starting a Web Conference

Joining a Web Conference

Participants receive an email message for the web conference. Refer to the “Inviting Users to Your Conference” section on page 52 for more information on sending and accepting invitations to web conferences.

1. To join a conference, the participant should click on the link in the email.

The system opens a page to join the meeting, illustrated below.

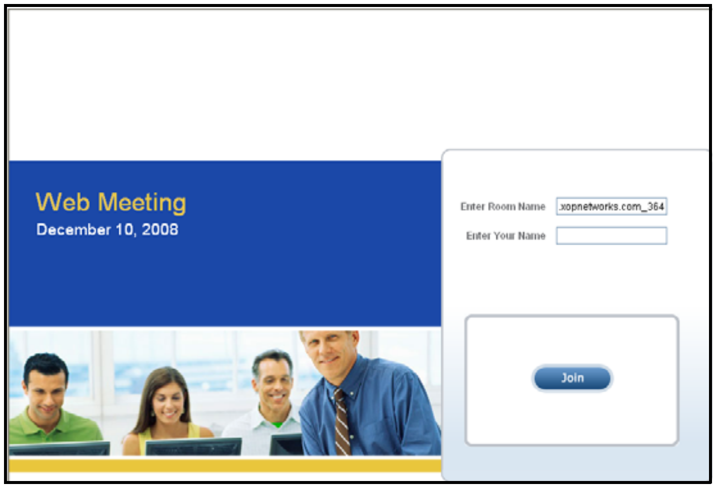


Figure 44: Web Meeting Sign In Page

2. If it is not already filled out, enter the **Room Conference Name**. Obtain the room name from the meeting host, if necessary.
3. Enter a **Name** to identify yourself in the web conference (up to 12 characters) and select **Join**.
4. Enter the **PIN** required for this conference. It is included with your invitation, or you can obtain it from the meeting host. Select **Join**.

Performing the Web Meeting Startup Check

For both the host and the participants, the system must check to make sure your operating system, browser, and Flash Player version support the web conference.

The system opens a new web browser page, with the Web Meeting startup check displayed, as illustrated below.

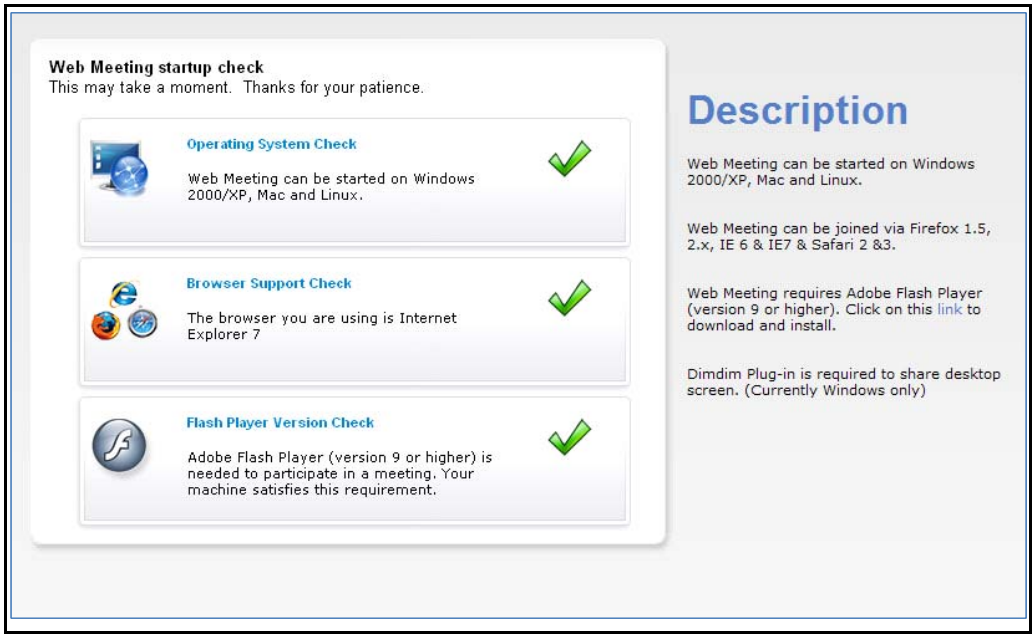


Figure 45: The Web Meeting Startup Check

Note:

If the Web Meeting Check is not successful, follow the on-screen instructions.

After a few moments of processing, the system displays the *Web Meeting page* in your browser.

Understanding the Web Meeting Interface

All of the web conference controls are on the Web Meeting page.

The Web Meeting Page

The *Web Meeting page* is where you will have your web conference. It includes all of the host and participant controls for the web conference. The following illustration provides an overview to the page, including labels to explain each part of the screen. Refer to the following sections for more details about each feature.

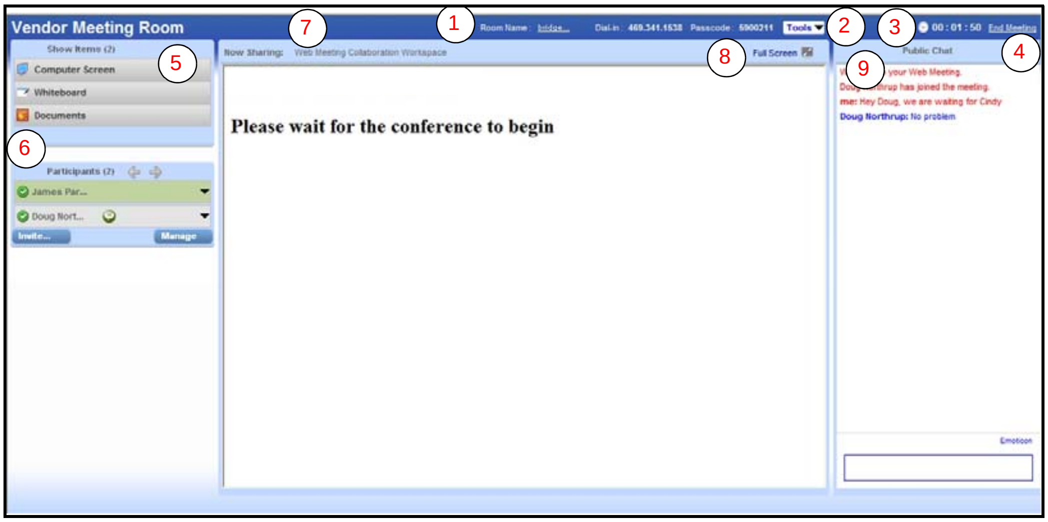


Figure 46: The Web Meeting Page

1. The top of the page displays the URL of the web meeting page as the conference **Room Name**, as well as the associated audio conference **Dial In number** and participant **PIN** (if you have that feature). You can click on the **Room Name** link to copy the URL to your clipboard.

2. The **Tools** menu allows the host to change the web meeting settings or use the web meeting assistant. The host and participants can also use the **Tools** menu to set the Web Meeting Information or see the web meeting information.

3. The **Time** displays shows how long the web conference has been in progress.

4. The **End Meeting** link allows the host to end the web conference. To end the conference, click on the link. Participants will have a **Leave Meeting** link instead. To leave the meeting, click on the link.

5. The *Show Items* area allows you to choose which item you want to share for the web conference (either your desktop, the whiteboard, or PDF or PPT documents).

6. The *Participants* area lists participant's names who have joined the web conference. It has links to invite additional participants and manage the participants' user privileges. It also allows you to chat privately with another participant and change the presenter control.

7. The *Now Showing* area indicates what is being shared in the web conference, such as the name of a document, “Whiteboard,” or the URL of a web page. The large area below is the presentation area.

8. The **Full Screen** link allows you to view the web conference in full screen. The Show Items and Participants area are not displayed in Full Screen Mode. While in Full Screen Mode, you can select the **Exit Full Screen** link to return to the previous view.

9. The *Public Chat* area displays the text from any related chat messages from the web conference.

Installing Screencaster

Before you can share your desktop for the first time, you must install the Screencaster Plug-in.

1. Select **Computer Screen** in the *Show Items* area of the *Web Meeting page*.

2. When the system displays the dialog box asking if you want to install the plug-in, select **OK** to continue (or **Cancel** to return to the Web Meeting page).

The system displays the *Installation page*, illustrated below.

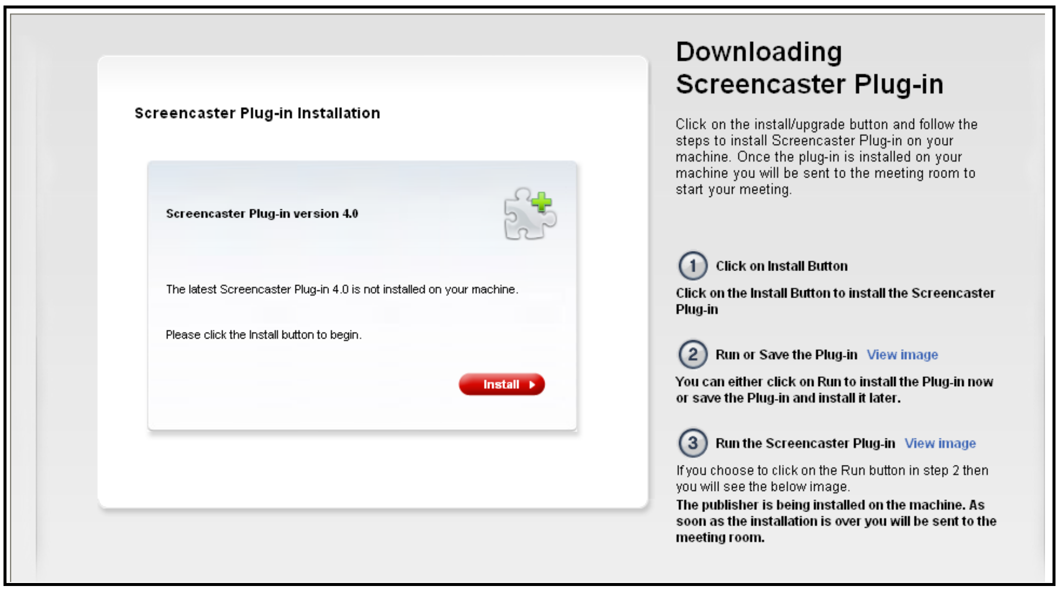


Figure 47: The Screencaster Plug-In Installation Page

3. Select **Install** to continue the installation process.

Note:

When you activate ScreenCaster, the resolution/mode of your Desktop Display may change to Vista Basic or similar. Your system will revert to the default settings automatically after you complete the screen share.

Sharing Your Desktop

When you share your desktop, the web conference participants see whatever you have on your screen.

You must install the Screencaster Plug-in before you can share your desktop the first time. Refer to the previous section for instructions.

Once the Screencaster Plug-in has been installed, you can share your desktop as follows.

1. Select **Computer Screen** in the *Show Items* area of the *Web Meeting page* to share your desktop with the web conference participants.

The system displays a dialog box to confirm your action, as illustrated below.

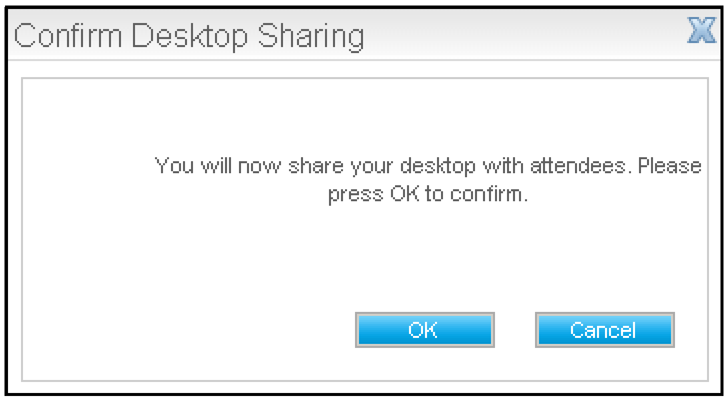


Figure 48: The Confirm Desktop Sharing Dialog

2. Select **OK** to continue sharing your desktop with web conference participants. Select **Cancel** to return to the *Web Meeting page* without sharing your desktop.

The system displays a dialog indicating that it is starting desktop sharing. The process may take a few moments.

3. Proceed with your presentation. While you are in desktop sharing mode, you may notice two items that indicate desktop sharing mode. The first is that the *Show Items* area on the *Web Meeting page* has **Computer Screen** highlighted. The second is an icon in the task bar for the Screencaster application. If you mouse over the icon, the system displays the message "Screencaster is currently in progress."

4. To stop desktop sharing, select **Computer Screen** in the *Show Items* area of the *Web Meeting page* again, or select another item to show.

The system displays a message indicating that it may take a moment to stop desktop sharing.

Sharing the Whiteboard

The Whiteboard is a drawing space with several tools for both the presenter and the participants.

A sample web conference using the whiteboard is illustrated below.

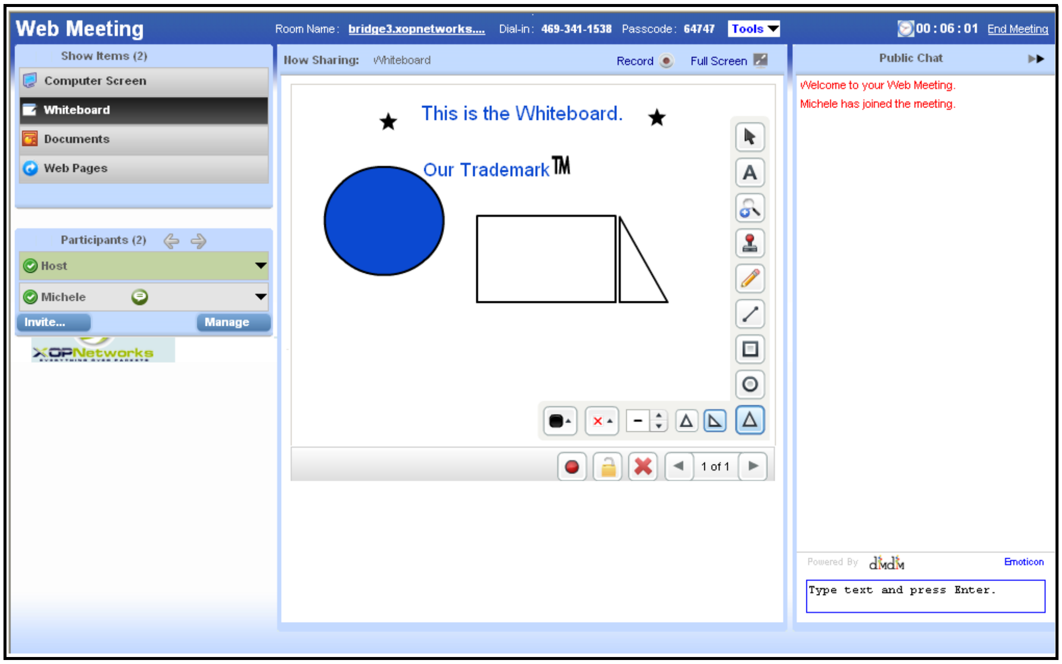


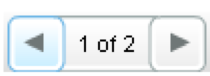
Figure 49: Web Meeting Using Whiteboard

1. Select **Whiteboard** in the *Show Items* area of the *Web Meeting page* to share the whiteboard with the web conference participants.

You can begin using the whiteboard immediately. Refer to the “Using the Annotation and Presentation Tools” section on page 71the *Using the Annotation and Presentation Tools* section for more information about the drawing, annotation, and presenter tools.

Whiteboard Navigation

You can share multiple pages of the whiteboard. Use the navigation tools, illustrated below.



Click on the left or right navigation arrows to move from one page to another. The numbers next to the arrows indicate the current page.

Sharing Documents

You can share MS PowerPoint or Adobe PDF documents as part of the web conference. During the document presentation, the presenter and the participants (if you allow them) can annotate the document using the annotation tools.

1. Select **Documents** in the *Show Items* area of the *Web Meeting page* to share a Power point or PDF document with the web conference participants.

The system displays a dialog box, illustrated below, to indicate which document to upload.

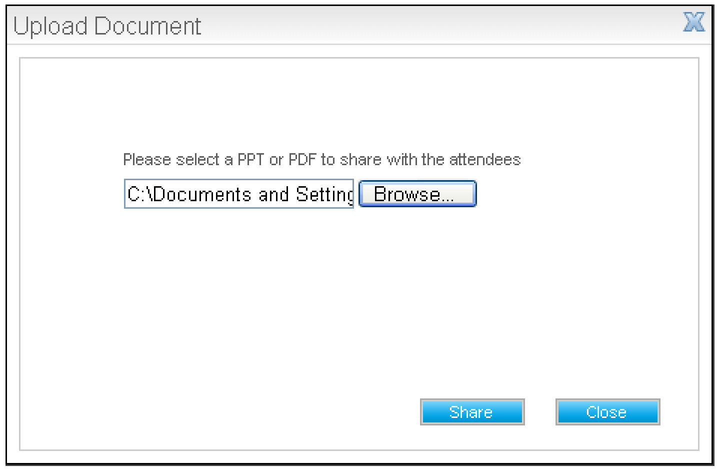


Figure 50: Upload Document Dialog

2. Select **Browse** to open the *Choose File dialog box*. Locate the file on your PC or network and select **Open** to upload the file.

3. Select **Share** to upload the document, or select **Close** to close the *Upload Document dialog* and return to the previous Web Meeting view.

The system must upload, convert, and prepare the presentation for sharing. This takes a few moments, or longer for larger documents. Then the system displays the document in the sharing window, as illustrated below.

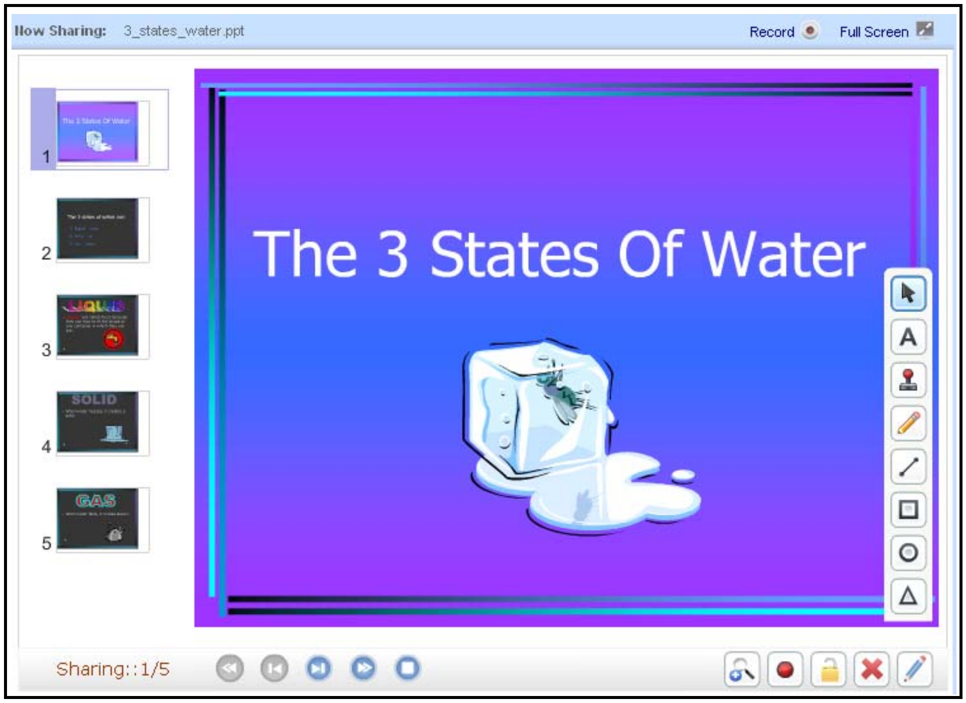


Figure 51: Web Meeting Using a Document

Refer to the “Using the Annotation and Presentation Tools” section on page 71the *Using the Annotation and Presentation Tools* section for more information about the drawing, annotation, and presenter tools.

Document Navigation

The following tools are available to navigate through the document:

- First – Select this tool to go to the first page in the document.
- Previous – Select this tool to go to the previous page in the document.
- Next – Select this tool to go to the next page in the document.
- Last – Select this tool to go to the last page in the document.
- Stop – Select this tool to stop the document presentation.

The Documents Menu

Once you have uploaded the first document, a menu is available to control your document presentation.

1. Select **Documents** in the *Show Items* area of the *Web Meeting page* to see the menu. A sample is illustrated below.

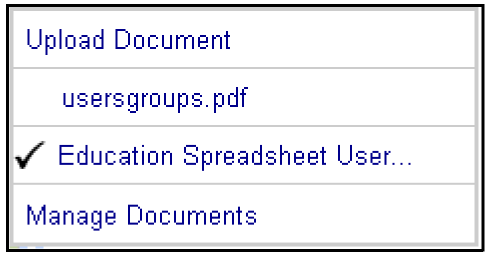


Figure 52: The Documents Menu

2. To upload a new document for the web conference, select **Upload Document**.

3. If you have more than one document open, a check mark indicates the current document. Select another document to switch the presentation to that document.

4. Select **Manage Documents** to manage the documents.

The system displays the *Manage Show Items page*, illustrated below.

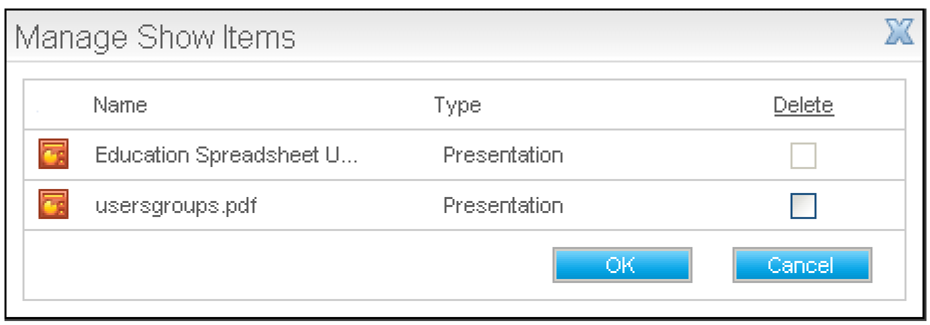


Figure 53: The Manage Show Items Page

5. To delete a document from the web conference, check the box next to the document and select **OK**. Or select **Cancel** to close the *Manage Show Items page*.

Using the Annotation and Presentation Tools

There are several drawing, annotation, and presenter tools available when you share the whiteboard or documents during the web conferences. The tools are explained below.

Use the **Selection** tool to select a shape that has previously been drawn. You can use this tool to move or resize the selected shape.

Click on the **Selection** tool. To move a shape, click and drag the shape. To resize the shape, click on the shape and move one or more of the shape handles.

Use the **Text** tool to add text to your drawing.

Click on the **Text** tool, then click anywhere in the whiteboard area to add text. When you have finished typing, click on another tool or in another area of the whiteboard.

When using the Text tool, the following two additional tools are available:

- Color Selection
- Text size

Use the **Color Selection** tool to select a color for your text, freehand drawing, line, square, circle, or triangle. The Color Selection tool is also available to select a fill color for squares, circles, or triangles.

You can select the color before using another selected tool for drawing or text. Or, you can use the **Selection** tool to select the text or object you have already drawn, then select a new color.

To select a color, click on the arrow to open the color palette. Click on a color to select it.

Use this tool to select a size for text. You can select the size before typing. Or, you can use the **Selection** tool to select the text you have already entered, and then select a new size.

To adjust the text size, click on the up or down arrows, or type a new size in the box.

Use the **Zoom** tool to zoom in or out in the whiteboard area.

When you click on the Zoom tool, the following three additional tools are available:

- Zoom out
- Zoom in
- Restore

Use this tool to zoom out on the drawing. Each time you click on the zoom out tool, the contents of the whiteboard area become smaller.

 Use this tool to zoom in on the drawing. Each time you click on the zoom in tool, the contents of the whiteboard area become bigger.

 Use this tool to restore the whiteboard area to the original zoom.

Use the Stamp tool to add a stamp to your drawing.

1. Select the **Stamp** tool.
2. Select the color for your stamp by clicking on the **Color** arrow and selecting the color.
3. Select a stamp shape (either star, back arrow, diamond, trademark, registered, or copyright).
4. Click on the drawing where you want the stamp to appear. You can add the shape as many times as you like.
5. Select a different tool to stop adding stamps to your drawing.

Use the **Freehand** tool to add freehand lines to your drawing.

Click on the **Freehand** tool, then click anywhere in the whiteboard area to draw. When you have finished drawing, click on another tool.

When using the **Freehand** tool, the following two additional tools are available:

- Color Selection
- Pencil size

Use this tool to select a width for your freehand drawings, lines, and borders for squares, circles, and triangles.

You can select the size before using another selected tool for drawing. Or, use the **Selection** tool to select a drawing you have already made, then select a new size.

To change the size of the selected drawing, click on the up or down arrows to adjust the size.

Use the **Line** tool to draw a straight line.

Click on the **Line** tool, then click anywhere in the whiteboard area to draw lines. When you have finished drawing, click on another tool.

When using the **Line** tool, the following additional tools are available:

- Color Selection
- Line Width
- Add Arrows

Use these tools to add an arrow to the beginning or end of your line. Select the tool to add an arrow. Select the tool again to remove the arrow.

You can select the arrow before drawing. Or, use the **Select** tool to select a line you have already made, and then click the tool to add the arrow.

Use the **Square** tool to draw a square.

Click on the **Square** tool, then click anywhere in the whiteboard area to draw squares. When you have finished drawing, click on another tool.

When using the **Square** tool, the following additional tools are available:

- Color Selection for line
- Color Selection for fill
- Line Width

Use the **Circle** tool to draw a circle.

Click on the **Circle** tool, then click anywhere in the whiteboard area to draw circles. When you have finished drawing, click on another tool.

When using the **Circle** tool, the following additional tools are available:

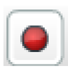
- Color Selection for line
- Color Selection for fill
- Line Width

Use the **Triangle** tool to draw a triangle.

Click on the **Triangle** tool, then click anywhere in the whiteboard area to draw triangles. When you have finished drawing, click on another tool.

When using the **Triangle** tool, the following additional tools are available:

- Color Selection for line
- Color Selection for fill
- Line Width
- Triangle Type

Use the **Pointer** tool to draw attention to your cursor point. Click on the **Pointer** tool to activate this feature. Continue your drawing. The red circle highlights your cursor actions to the participants.Click on the **Pointer** tool again to deactivate this feature.

Use the **Lock Out Attendees** tool to prevent participants from using the annotation tools.

Use the **Release Lock Out** tool to allow participants to use the annotation tools.

Use the **Delete All** tool to erase all shapes and annotations.

Use the **Hide Annotation** tool to remove the tools and any shapes or text drawn with the annotation tools from your screen. Select the tool again to show the annotation tools and drawings again.

Using Public Chat

The *Public Chat* area displays a message when participants join the meeting. It also displays any chat messages entered by any participant. A sample is illustrated below.

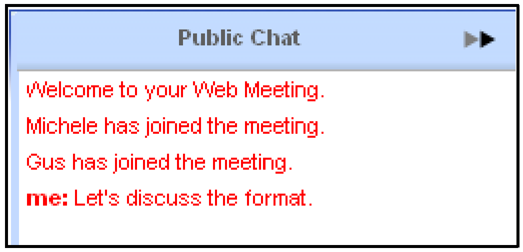


Figure 54: The Public Chat Area

1. To enter a chat message, type your message and press **Enter**.

The message is displayed in the Public Chat area. System messages and your own text appear in red. Messages by other participants appear in blue.

2. To include a Emoticon with your message, move your mouse over the **Emoticon** link. Click on one of the faces to include it with your message.

3. To hide the Public Chat area, click on the arrow in the Public Chat title bar. The system expands the presentation area. It also adds a “Show Chat” link. To restore the Public Chat area, select the **Show Chat** link.

Using the Participants List

The *Participants* area lists all of the participants who have joined the web conference. It shows an icon for their selected moods, their display names, and whether private chat is enabled or disabled. Each participant also has a menu of additional options.

The *Participants* area is where you can send additional invitations to the current conference, chat privately with one of the participants, change the presenter control, or remove a participant from the meeting.

A sample *Participants* area is illustrated below.

Figure 55: The Participants List

1. Select the left or right arrows to navigate through the list of participants.

2. Select **Invite** to invite additional participants to the web conference.
3. Select **Manage** to manage the participants private chat permissions.
4. Select the down arrow next to your name or another participant's name to open a new menu. These menus provide some of the following options, depending on your the name you selected and the privileges. Refer to the sections that follow for more information about each item.
   - Invitations
   - Presenter Control
   - Display Name and Mood
   - Leaving or Ending the Meeting
   - Private Chat with Another Participant

Inviting Additional Participants

The host and Participants can invite additional participants at any time during the web conference.

1. Select **Invite** from the *Participants* area. Or select your name in the *Participants* area and select Invite **Others to this Meeting** from the menu.

The system displays the *Meeting Invitations page*, illustrated below.

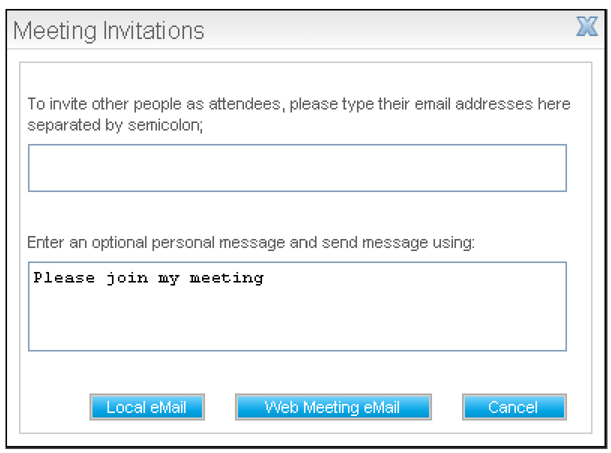


Figure 56: The Meeting Invitations Page

2. Enter the email address(es) of the person(s) you want to invite to the current web conference. You must enter at least one correct email address.
3. If desired, enter the text to include with the email message to send with the invitation.
4. To use your email program to send the invitation, select **Local eMail**. Use this option if you want to use your address book to add additional email addresses for invitations. The system opens your email editor with the details for the meeting, as well as a link to open the web conference. Finish the message and click Send.
5. Or select **Web Meeting eMail** to send the invitation right away using the web meeting email.

6. Select **Cancel** to close the *Meeting Invitations screen* without sending a message.

Managing Participant Private Chat Permissions

The host can manage whether participants can chat privately or not.

1. Select **Manage** from the *Participants* area.

The system displays the *Manage Participant Permissions page*, illustrated below.

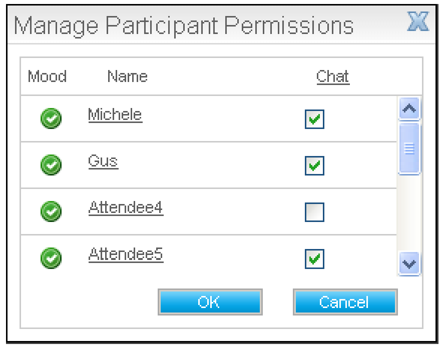


Figure 57: The Manage Participant Permissions Page

2. To chat privately with a participant, select the participant's name. The system opens the *Private Chat* area.

3. To allow participants to chat privately, check the box next to the participant's name. To disable private chat for a participant, uncheck the box next to that participant's name. The Participant Permissions do not affect the ability to chat privately with the meeting host.

4. Select **OK** to save the participant permissions, or **Cancel** to close the permissions without making changes.

Chatting Privately with a Participant

The host or a participant (if allowed) can chat privately with other participants.

1. Select the participant with whom you would like to chat.
   - Select the menu next to the participant's name and select **Chat Privately**.
   - The host can select **Manage** from the *Participants* area. Then select the participant with whom you want to chat from the *Manage Participant Permissions page*.
   - A participant can select **Show All** from the *Participants* area. Then select the participant with whom you want to chat from the *Participants* area.

2. To enter a chat message, type your message and press **Enter**.

The message is displayed in the *Private Chat* area. Your own text appear in red. Messages by the other participant appears in blue.

3. To include a Emoticon with your message, move your mouse over the **Emoticon** link. Click on one of the faces to include it with your message.

4. To minimize the Public Chat area, click on the line in the Private Chat title bar. The system minimizes the private chat area. To restore the Private Chat area, select the maximize icon.

5. To close the Private chat area, click on the X.

Changing Presentation Control

The host of the web conference can temporarily allow another participant to control the meeting.

1. Select the menu next to the participant’s name and select **Make Presenter**.

The host’s screen changes to look like that of the other participants.

The participant selected to gain presentation control receives an information message, illustrated below.

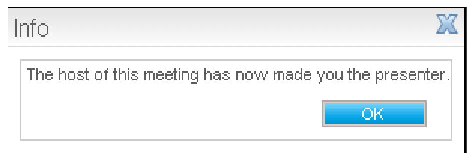


Figure 58: Participant Message to Gain Presenter Control

2. The new host selects **OK** and can now share the desktop, whiteboard, documents, or web pages.

3. To take control back, the original host selects the menu next to his or her **own** name and selects **Take Control Back**. The screen changes back to the presenter view. The participant who had control receives an information message indicating the host now has control again.

Setting Your Display Name and Mood

The host is signed in as “Host” automatically. Participants have a chance to include their name when they join the conference, but it is not required. Either the host or the participant can change his or her display name to control the name that shows in the *Participants* area.

Hosts and participants can also display an icon in the *Participants* area to indicate different “moods” to the host or other participants. These moods are:

- Normal
- Agree
- Disagree
- Be right back
- Busy
- Problem
- Question (participant only)

To change your display name, complete the following steps.

1. Select the menu next to your name (which may be not be your name, for example, “Host” or “Attendee2”). Select the **Set Display Name** option.

The system displays the *Set Display Name page*, illustrated below.

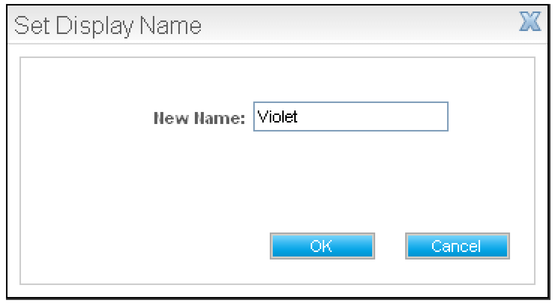


Figure 59: Set Display Name Page

2. Enter the **Name** to display, up to 12 characters.
3. Select **OK** to change the name or Cancel to close the *Set Display Name page* without making changes.

To change your display mood, complete the following steps.

1. Select the menu next to your name.
2. Select the **Set Mood** option.
3. Select the desired mood to display that icon next to your name.

Removing a Participant from the Meeting

The host can remove a participant from the web conference.

1. Select the menu next to the participant’s name and select **Remove from Meeting**.

The host receives a warning message, illustrated below.

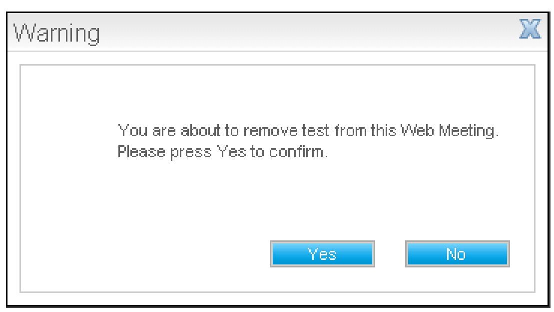


Figure 60: Warning for Removing Participant from Meeting

2. Select **Yes** to continue or **No** to close the warning without removing the participant.

When the host removes a participant from the meeting, the participant receives the a message illustrated below.

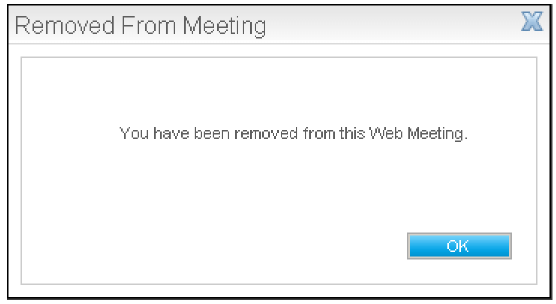


Figure 61: Removed From Meeting Notice

3. Select **OK** to continue. The system closes the *Web Meeting page* for that participant.

Extending a Meeting

The default meeting length is two hours. When you approach the end of the meeting, the system displays a Time Reminder message on the host's screen, illustrated below.

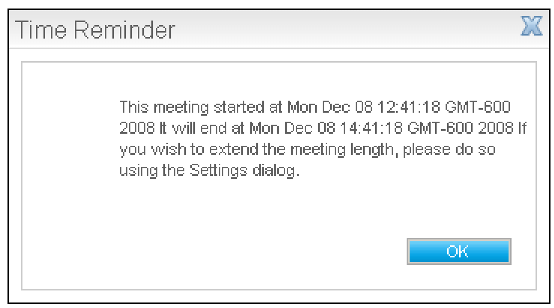


Figure 62: The Time Reminder Dialog Box

1. Click **OK** to close the *Time Reminder.*
2. Open *The Web Meeting Settings* to extend the time. Refer to the section on "The Web Meeting Settings" for more information.

Using the Administrative Tools

The Tools menu at the top of the presentation area provides options to control the web meeting, shortcuts for your presentation, and additional information about the meeting.

The Web Meeting Settings

The host can change several settings for the current web conference.

1. Select the **Tools** menu in the *Web Meeting* window and select the **Settings** option.

The system displays the *Web Meeting Settings page*, illustrated below.

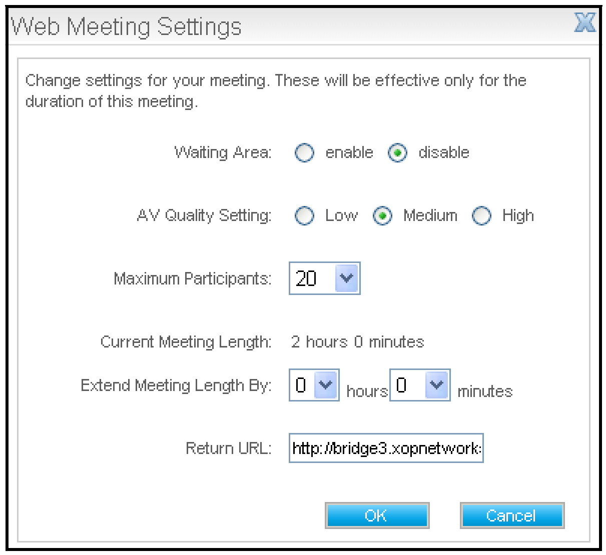


Figure 63: The Web Meeting Settings Page

2. Select whether to enable to disable the **Waiting Area**. The Waiting Area is a different web page to display while the participants wait for the web conference to begin. This page is a security feature that lets the host admit attendees to the meeting room from a waiting or lobby area.

3. Select **Low**, **Medium**, or **High** as the **AV Quality Setting**, to indicate the appropriate network connection based on your internet connection speed.

4. Indicate a number for the **Maximum Participants** in the web conference.

5. The system displays the **Current Meeting Length**. You can extend the meeting length by selecting the number of **hours** and/or **minutes** to extend the meeting.

6. Enter a **Return URL** to direct participants to the indicated web page after the meeting ends.

7. Select **OK** to save the Web Meeting settings or **Cancel** to return to the Web Meeting page without making changes to the settings.

The Assistant

The Assistant provides one-click shortcuts for sharing your desktop screen, whiteboard, or presentations.

1. Select the **Tools** menu in the *Web Meeting* window and select the **Assistant** option.

The system displays the page illustrated below.

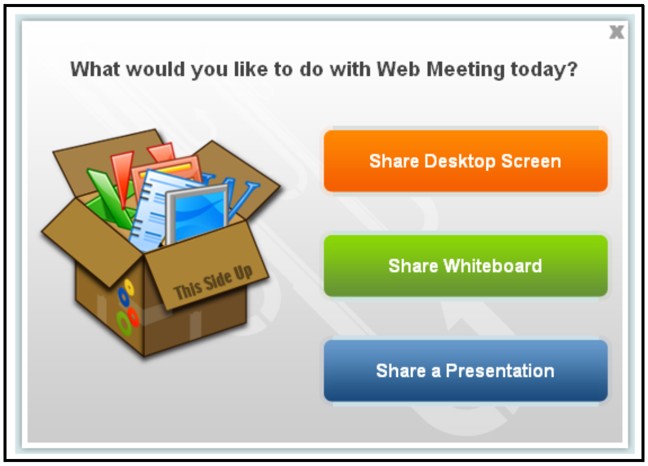


Figure 64: The Web Meeting Assistant

2. To share your desktop, select **Share Desktop Screen**.
3. To share the whiteboard, select **Share Whiteboard**.
4. To share a Power Point or Adobe PDF document, select **Share a Presentation**.

Refer to the sections on the “Sharing Your Desktop” section on page 66, the “Sharing the Whiteboard” section on page 67, or the “Sharing Documents” section on page 68 for details about each option.

The Meeting Details

The host or participants can view details about the current web meeting.

1. Select the **Tools** menu in the *Web Meeting* window and select the **Meeting Info** option.

The system displays the *Meeting Information page*, illustrated below.

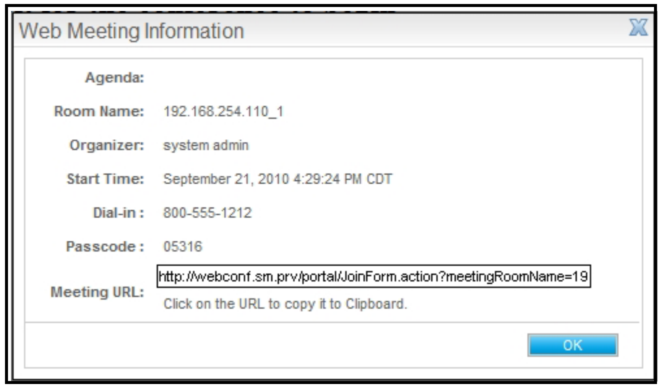


Figure 65: The Meeting Information Page

The system displays information about the meeting agenda, the conference room name, the organizer's name, the time the meeting started, the associated audio conference dial-in number and PIN (if that feature is available), and the URL of the web conference page. Select the **Meeting URL** to copy it to your clipboard, such as to email another participant.

1. Select **OK** to close the Web Meeting Information.

Leaving or Ending the Meeting

Participants can leave the meeting at any time.

1. To leave the meeting, select the **Leave Meeting** link above the *Public Chat* area. Or select the menu next to your name in the *Participants* area and select **Leave Meeting**.
2. The system displays a warning message to make sure you want to leave the meeting. Select **Yes** to leave the meeting or **No** to close the warning without leaving the meeting.

The host can end the meeting by selecting a link to end the meeting or by closing the browser where the meeting is being held.

1. To end the meeting, select the **End Meeting** link above the *Public Chat* area. Or select the menu next to your name and select **End Meeting**.
2. The system displays a warning message to make sure you want to close the meeting. Select **Yes** to close the meeting or **No** to close the warning without ending the meeting.

The system displays a warning message to all participants who have not left the meeting. Select **OK** to continue.

CHAPTER 13 – Using Firebar Conferences

A "Firebar" conference is a Dial Out conference.

Before setting up a Firebar conference, make sure that you have created any prerecorded messages that you want to use with the Firebar conference. You may also want to create users and groups for convenient alerting. These procedures are described in the previous chapters.

This chapter explains how to set up Firebar conferences.

Working with Firebar Conferences

FIREBAR CONFERENCES

A Firebar Conference is used to dial out to a group of participants and bring them into a conference as they answer their calls.

The Defined Firebar Conferences Page

The *Defined Firebar Conferences page* lists all firebar conferences defined in the system by the administrator or any moderator.

To set up Firebar conferences, select **Firebar Conferences** from the *Admin Menu* or the **Firebar Conferences link** on the *Home page*. The system displays the *Defined Firebar Conferences page*, illustrated below.

Defined Firebar Conferences

Add　　Delete

No.	Moderator	Users	Firebar Conference	Scheduled For	Act PIN	Mod PIN	User PIN	Status	Delete
1	NECTrain	1	Volunteer Fireman Dispatch	ON-DEMAND	57133	80272	69850	PIN=57133; Not yet triggered (from this system)	☐

Figure 66: The Defined Firebar Conferences Page

The system displays the following information related to the Firebar conferences:

- A system-generated number for the Firebar conference
- The moderator who created the firebar conference
- The number of users included in the Firebar conference
- The name of the Firebar conference with a link to edit the Firebar conference, including an option to trigger it immediately
- The schedule for the Firebar conference
- The Activation PIN, which the external party uses to dial in and activate the Firebar conference
- The Moderator PIN, which allows an external party to join the Firebar conference as a moderator
- The User PIN, which allows an external party to join the Firebar conference as a user/ conference participant
- The status of the conference, including the Activation PIN
- A check box to delete the Firebar conference

1. To add a new Firebar conference, select **Add** to open *The Add Firebar Conference Page*.

2. To edit an existing Firebar conference, select the **highlighted firebar name** to open *The Edit Firebar Conference Page* for the selected Firebar conference.

3. To view the users associated with the selected Firebar conference, select the highlighted number under **Users** to open *The Members Page*.

4. To delete a Firebar conference, check the **Delete** box next to the Firebar conference and select **Delete**.

The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of Firebar conferences.

The Add Firebar Conference Page

The first screen of the *Add Firebar Conference page* allows you to begin to set up a Firebar conference.

To open the *Add Firebar Conference page*, go to the *Defined Firebar Conferences page* and select **Add**. The system displays the *Add Firebar Conference page*, illustrated below.

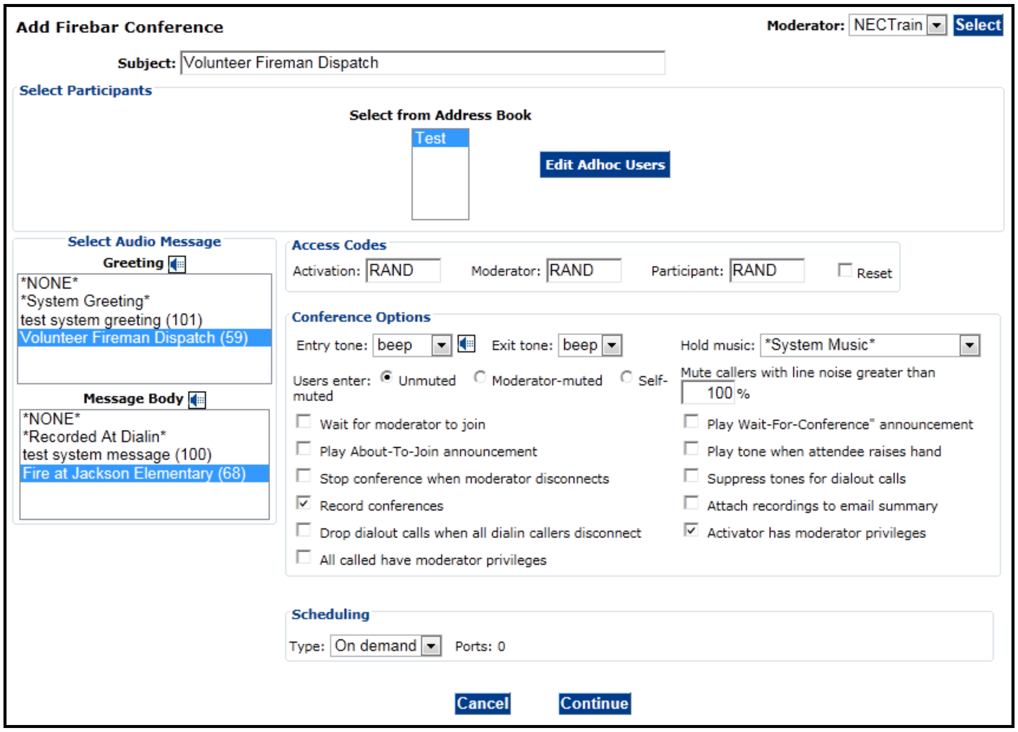


Figure 67: The First Screen of The Add Firebar Conference Page

1. To add a Firebar conference for another moderator, select the moderator name from the **Moderator** list and click **Select**.

2. Enter an identifying name for the Firebar conference in the **Subject** field. This title is also added to the Subject line of any emails that might be sent or reports that are generated. You may want to include the type of service in the name, such as 911 Dispatch Firebar Conference.

3. Select the **Participants** for a Firebar conference.
   - To include defined groups in the Firebar conference, highlight the group from the *Select Groups* column. Use **Shift + click** or **Control + click** to select multiple groups.
   - To include defined users in the Firebar conference, highlight the user from the *Select Users* column. Use **Shift + click** or **Control + click** to select multiple users.
   - To include users from the address book maintained by the system administrator, highlight the name from the *Select from Address Book* column. Use **Shift + click** or **Control + click** to select multiple names.

- To include users not otherwise defined in the system, you can use the *Add/Edit Adhoc Users page*. Select **Edit Adhoc Users** to open the *Add/Edit Adhoc Users page*, illustrated below.

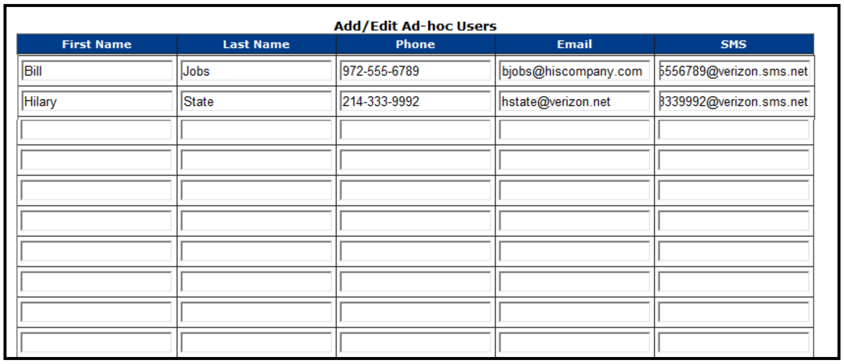


Figure 68: The Add/Edit Adhoc Users Page

Enter the **First Name**, **Last Name**, **Phone Number**, **Email,** and **SMS** for the adhoc users you want to include in the Firebar conference.

Scroll down to the bottom of the window. Select **Submit** to save the ad hoc user information or **Cancel** to ignore the changes and return to the *Add Firebar Conference page*.

4. Select the **Audio Message** to use in the Firebar conference. A message is made up of two parts, the greeting and the message body, which are recorded separately.

   For either part of the message, you can select to listen to the message on your computer.

   - Select the **Greeting** recording to use in the Firebar conference from the *Greeting* column. If you want to have the Firebar call leave messages on an answering machine or play a message body, you must select a greeting. If not, select "**NONE**" and no message will be played.
   - Select the **Message Body** recording to use in the Firebar conference from the *Message Body* column. If the entire message is included in the greeting, you may select "**NONE**."

Warning:

The system will play a message body with no greeting selected, but it will not allow a greeting with no message body. Therefore, if you want to only play one message file, it should be a message body.

To set up a generic Firebar conference to be recorded and triggered later, select "**Recorded At Dialin**."

Note:

If you want the users/conference participants to join the conference as soon as they answer the call, select "**NONE**" as both the **Greeting** and the **Message Body**.

5. Select the **Access Codes**. The value RAND means the system will choose a random PIN.
   - Enter or leave as RAND the **Activation PIN**, which is used by the Moderator to activate a Firebar call. The Moderator dials into the bridge using the main access number. When prompted for a PIN, the Moderator enters the Activation PIN. The system recognizes the unique activation PIN and then triggers the follow-on Firebar process.
   - Enter or leave as RAND the **Moderator PIN**, which is used to allow an external party to join an ongoing Firebar conference with moderator privileges. This PIN can be provided to the external party via a SMS/Email.
   - Enter or leave as RAND the **Participant PIN**, which allows an external party to join an ongoing Firebar conference with user privileges. This PIN can be provided to the external party via a SMS/Email.
   - Check the **Reset PIN** box to reset the PIN numbers for this Firebar conference.

Note:

If you choose your own PINs, the numbers should be at least five digits.

6. Set the **Conference Options**.
   - Select an **Entry Tone** from the drop down list. This tone is heard by participants when new users join the firebar conference.
   - Select to preview the sound.
   - Select an **Exit Tone**. This tone is heard by participants when users leave the conference.
   - Select the **Hold Music** from the drop down list. This recording is heard by participants when on hold or waiting for the conference to begin.
   - Select one of the following options for the default setting for when **Users Enter** the conference: **Unmuted**, **Moderator-muted**, or **Self Muted.**
   - In the **Mute joiners with line noise greater than** field, enter a percentage of noise below which the participant can join the conference unmuted. If the system detects noise levels above the percentage you set, that participant joins the conference muted automatically.
   - Check the **Wait for Moderator to join** box to indicate that the conference does not begin until the you join the conference and enter the Moderator PIN. The participants will hear music on the conference until you join. If the field is not checked, users can join the conference as soon as they answer the call or enter the participant PIN.
   - Check the **Play “about to join” announcement** box to play this announcement before a user enters the conference room.

- Check the **Stop conference when moderator disconnects** box to end the conference when the moderator disconnects.

Warning:

Activator has moderator privileges can cause problems when used in combination with this setting.

- By default, all Firebar conferences are recorded. The Moderator can uncheck the **Record the conference** field if a recording is not required.
- Check the **Drop dialout calls when all dialin callers disconnect** box to disconnect any dialout calls when the dial in participants hang up.
- Check the **All Called have Moderator Privileges** box to give all firebar conference participants moderator privileges.
- Check the **Play "wait for conference" announcement** box to have the wait for conference to start announcement.
- Check the **Play tone when attendee raises hand** box to play a tone when an attendee indicates a question.
- Check the **Suppress tones for dial-out calls** box to mute the tones when calling additional participants.
- Check the **Attach recordings to email summary** box to include the recording of the conferences in this conference room to the email summary at the end of the conference.
- Check the **Activator has Moderator Privileges** box to give the Firebar activator Moderator privileges.

7. **Schedule** the Firebar conference.
   - Select **On Demand** to save the Firebar conference for triggering at a later time or sending it as soon as you have finished creating it.
   - Select **Scheduled** to send the Firebar calls at a specific time, such as for scheduled drills or system tests. The system displays additional options, as illustrated below.

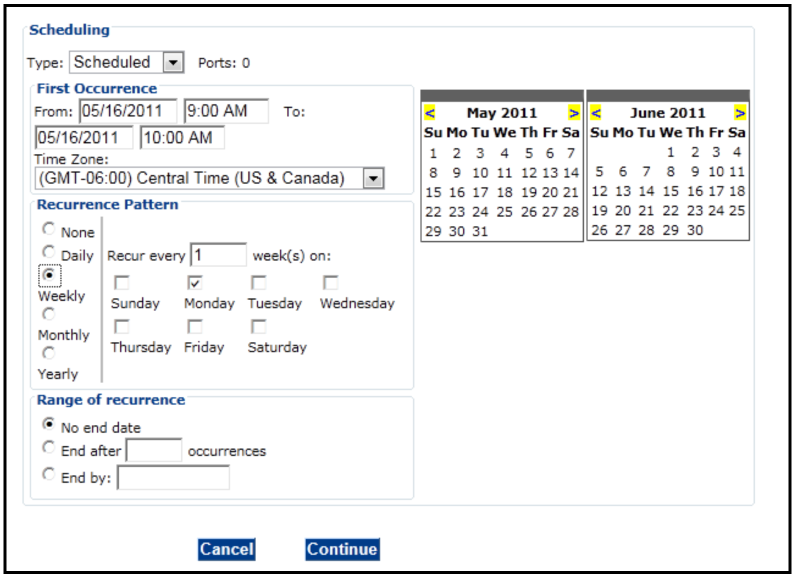


Figure 69: Add Firebar Conference Page Scheduling Options

   – Enter the **Start Date** and **Time**. Enter the **End Date** and **Time**. It is highly recommended that you provide a duration time cushion to prevent being cut off prematurely.

   – Select the base **Time Zone** for the conference.

   – If the conference is recurring, select a **Recurrence pattern** and enter the details.

   – If the conference is recurring, select the **Range of recurrence** to indicate when the recurrence should end.

   – Enter the maximum number of ports to reserve for the scheduled conference in **Maximum ports** field.

8. Select **Continue** to save the Firebar conference and continue to additional settings or **Cancel** to ignore the changes and return to the *Defined Firebar Conferences page*.

The Add Firebar Conference Page – Continued

When you select **Continue** on the first screen of the *Add Firebar Conference page*, the system displays the second screen of the *Add Firebar Conference page*, illustrated below.

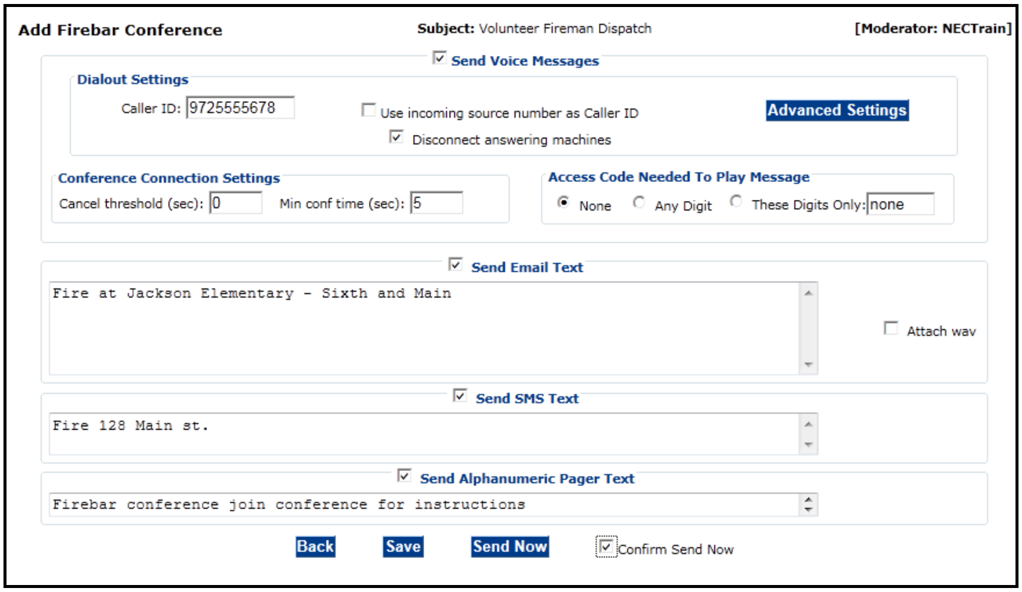


Figure 70: The Second Screen of The Add Firebar Conference Page

1. Check the **Send Voice Messages** to set up a call-out Firebar conference.
   - Enter the **Dialout Settings**.
     - Enter a **Caller ID**, if desired. This field is used to enter a 10-digit phone number that will be displayed on Caller ID on a recipient's phone.
     - Check the **Use Incoming Source Number as Caller ID** box to use the activator's caller ID instead. If no caller ID is specified and the Activator's caller ID is not selected, then the system will use the default originating number found on the System Configuration tab.
     - Check the **Disconnect answering machines** box, if applicable.

Note:

When expecting an answering machine to pick up an outbound call, select "the press any digit" option. This minimizes the risk of falsely detecting an answering machine as human.

- Select **Advanced Settings** to indicate how you want participants to enter the conference. The system displays the *Chosen-Attendee Properties page*, illustrated below.

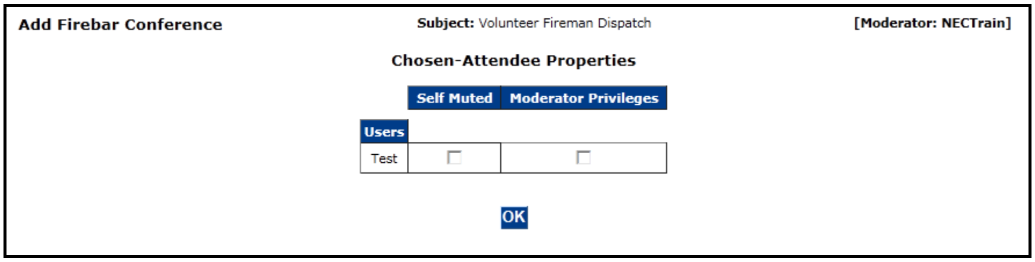


Figure 71: Firebar Conference Advanced Settings

  – Check the **Self-Muted** box next to a group or user to have those users and groups enter the conference self muted.
  – Check the **Moderator Privileges** box next to a group or user to allow that group or user to have moderator privileges during the conference.

Warning:

If a customer selects “Wait for moderator to join,” he/she must have either ‘Activator is moderator; checked or specify a moderator on this page.

  – Select **OK** to return to the *Add Firebar Conference page*.

- Indicate the **Conference Connection Settings**:
  – Enter the number of seconds allowed during which the moderator can cancel the conference in the **Cancel Threshold** field.

Note:

Cancel Threshold is only applicable for direct connect “red phone” or “hot line” configurations.

  – Enter the number of seconds for the **Minimum Conference Time**. Once two parties have been in conference for this long, the other phones will stop ringing when they end the call.

- As recipients pick up the Firebar calls, they first hear the message sent by the Moderator (if one was selected). Then, the recipient is placed into the conference based on the **Access Code Needed to Play message**. Select one of the following options:
  – Select **None** to indicate that the recipient goes into the conference without requiring any acknowledgement. Use this setting when dialing out to a phone that has no associated answering machine or voicemail configured.
  – Select **Any DTMF Digit** to indicate that the recipient can press any digit on the keypad to join the conference. This should be used when dialing to a phone that may have an associated answering machine or voicemail configured. The objective is for the system’s dial out Find-me process to skip the answering machine if a digit is not forthcoming.

   – Select **These Digits Only** to require a secret code to prevent someone other than the intended recipient to hear enter the Firebar conference. You can inform the recipients of the selected digits outside the system (e.g., via email). Enter the digits.

2. Select **Send Email Text** to include a message to send in emails related to the Firebar conference. Enter the text to send in the emails (up to 64000 characters). Check the **Attach Wav** box to attach the wav file of the message being sent in the firebar conference.
3. Select **Send SMS Text** to include an SMS related to the Firebar conference. Enter the text for the SMS (up to 150 characters).
4. Select **Send Alphanumeric Pager Text** to include a page related to the Firebar conference. Enter the text for the page (up to 50 characters).
5. Select **Save** to save the Firebar conference information for future use or **Back** to ignore the changes and return to the first screen of the *Add Firebar Conference page*. To send the Firebar calls immediately, check the **Confirm Send Now** box and select **Send Now**.

Note:

The Send Now option is not available for Firebar conferences that have "**Recorded at Dialin**" as the message body type.

The Edit Firebar Conference Page

The first screen of the *Edit Firebar Conference page* allows you to change Firebar conference details.

To open the *Edit Firebar Conference page*, go to the *Defined Firebar Conference page* and select the **highlighted firebar conference name** for the Firebar conference you want to change or send. The system displays the *Edit Firebar Conference page*, illustrated below.

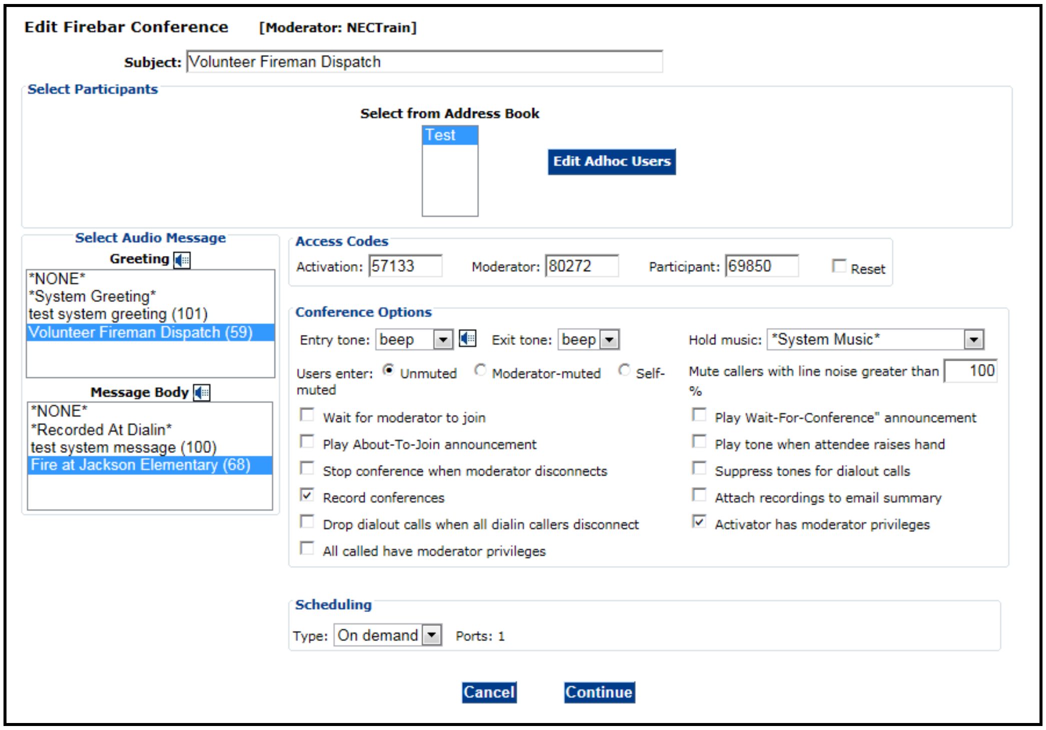


Figure 72: The First Screen of the Edit Firebar Conference Page

1. Edit the identifying name for the Firebar conference in the **Subject** field. This title is also added to the Subject line of any emails that might be sent or reports that are generated. You may want to include the type of service in the name, such as 911 Dispatch Firebar Conference.

2. Select the **Participants** for a Firebar conference.
   - To include defined groups in the Firebar conference, highlight the group from the *Select Groups* column. Use **Shift + click** or **Control + click** to select multiple groups.
   - To include defined users in the Firebar conference, highlight the user from the *Select Users* column. Use **Shift + click** or **Control + click** to select multiple users.
   - To include users from the address book maintained by the system administrator, highlight the name from the *Select from Address Book* column. Use **Shift + click** or **Control + click** to select multiple names.
   - To include users not otherwise defined in the system, you can use the *Add/Edit Adhoc Users page*. Select **Edit Adhoc Users** to open the *Add/Edit Adhoc Users page*. Enter the details for the adhoc users you want to include in the Firebar

conference. Scroll down to the bottom of the window. Select **Submit** to save the ad hoc user information or **Cancel** to ignore the changes and return to the *Edit Firebar Conference page*.

3. Change the **Audio Message** to use in the Firebar conference, if needed. A message is made up of two parts, the greeting and the message body, which are recorded separately.

   For either part of the message, you can select to listen to the message on your computer.

   - Select the **Greeting** recording to use in the Firebar conference from the *Greeting* column. If you want to have the Firebar call leave messages on an answering machine, you must select a greeting. If the entire message is included in the Message Body, you may select "**NONE**."
   - Select the **Message Body** recording to use in the Firebar conference from the *Message Body* column.

Warning:

The system will play a message body with no greeting selected, but it will not allow a greeting with no message body. Therefore, if you want to only play one message file, it should be a message body.

To set up a generic Firebar conference to be recorded and triggered later, select "**Recorded At Dialin**."

Note:

If you want the users/conference participants to join the conference as soon as they answer the call, select "**NONE**" as both the **Greeting** and the **Message Body**.

4. Change the **PINs**, if needed. The value RAND means the system will choose a random PIN. Ensure that there is no conflict with other PINs.
    - Edit the **Activation PIN**, which is used by the Moderator to activate a Firebar call. The Moderator dials into the bridge using the main access number. When prompted for a PIN, the Moderator enters the Activation PIN. The system recognizes the unique activation PIN and then triggers the follow-on Firebar process.
    - Edit the **Moderator PIN**, which is used to allow an external party to join an ongoing Firebar conference with moderator privileges. This PIN can be provided to the external party via a SMS/Email.
    - Edit the **Participant PIN**, which allows an external party to join an ongoing Firebar conference with user privileges. This PIN can be provided to the external party via a SMS/Email.
    - Check the **Reset PIN** box to reset the PIN numbers for this Firebar conference.

Note:

If you choose your own PINs, the numbers should be at least five digits.

5. Edit the **Conference Options**.
    - Select an **Entry Tone** from the drop down list. This tone is heard by participants when new users join the firebar conference.
    - Select to preview the sound.
    - Select an **Exit Tone**. This tone is heard by participants when users leave the conference.
    - Select the **Hold Music** from the drop down list. This recording is heard by participants when on hold or waiting for the conference to begin.
    - Select one of the following options for the default setting for when **Users Enter** the conference: **Unmuted**, **Moderator-muted**, or **Self Muted.**
    - In the **Mute joiners with line noise greater than** field, enter a percentage of noise below which the participant can join the conference unmuted. If the system detects noise levels above the percentage you set, that participant joins the conference muted automatically.
    - Check the **Wait for Moderator to join** box to indicate that the conference does not begin until the you join the conference and enter the Moderator PIN. The participants will hear music on the conference until you join. If the field is not checked, users can join the conference as soon as they answer the call or enter the participant PIN.
    - Check the **Play “about to join” announcement** box to play this announcement before a user enters the conference room.

- Check the **Stop conference when moderator disconnects** box to end the conference when the moderator disconnects.

Warning:

Activator has moderator privileges can cause problems when used in combination with this setting.

- By default, all Firebar conferences are recorded. The Moderator can uncheck the **Record the conference** field if a recording is not required.
- Check the **Drop dialout calls when all dialin callers disconnect** box to disconnect any dialout calls when the dial in participants hang up.
- Check the **All Called have Moderator Privileges** box to give all firebar conference participants moderator privileges.
- Check the **Play “wait for conference” announcement** box to have the wait for conference to start announcement.
- Check the **Play tone when attendee raises hand** box to play a tone when an attendee indicates a question.
- Check the **Suppress tones for dial-out calls** box to mute the tones when calling additional participants.
- Check the **Attach recordings to email summary** box to include the recording of the conferences in this conference room to the email summary at the end of the conference.
- Check the **Activator has Moderator Privileges** box to give the Firebar activator Moderator privileges.

6. **Schedule** the Firebar conference.
   - Select **On Demand** to save the Firebar conference for triggering at a later time or sending it as soon as you have finished creating it.
   - Select **Scheduled** to send the Firebar calls at a specific time. The system displays additional options, as illustrated below.

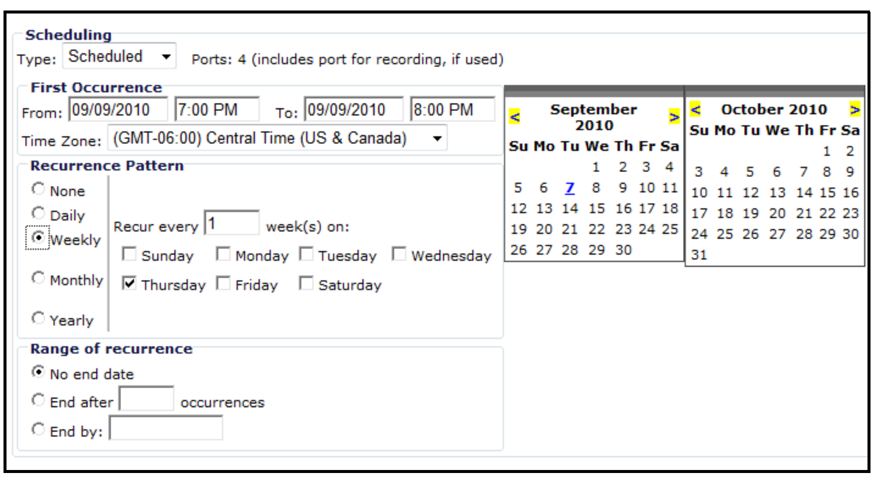


Figure 73: Edit Firebar Conference Page Scheduling Options

- Enter the **Start Date, Time**, and **Duration**. It is highly recommended thatyou provide a duration time cushion to prevent being cut off prematurely.
- Select the base **Time Zone** for the conference.
- If the conference is recurring, select a **Recurrence pattern** and enter the details.
- If the conference is recurring, select the **Range of recurrence** to indicate when the recurrence should end.
- Enter the maximum number of ports to reserve for the scheduled conference in **Maximum ports** field.

7. Select **Continue** to save the Firebar conference and continue to additional settings or **Cancel** to ignore the changes and return to the *Defined Firebar Conferences page*.

The Edit Firebar Conference Page – Continued

When you select **Continue** on the first screen of the *Edit Firebar Conference page*, the system displays the second screen of the *Edit Firebar Conference page*, illustrated below.

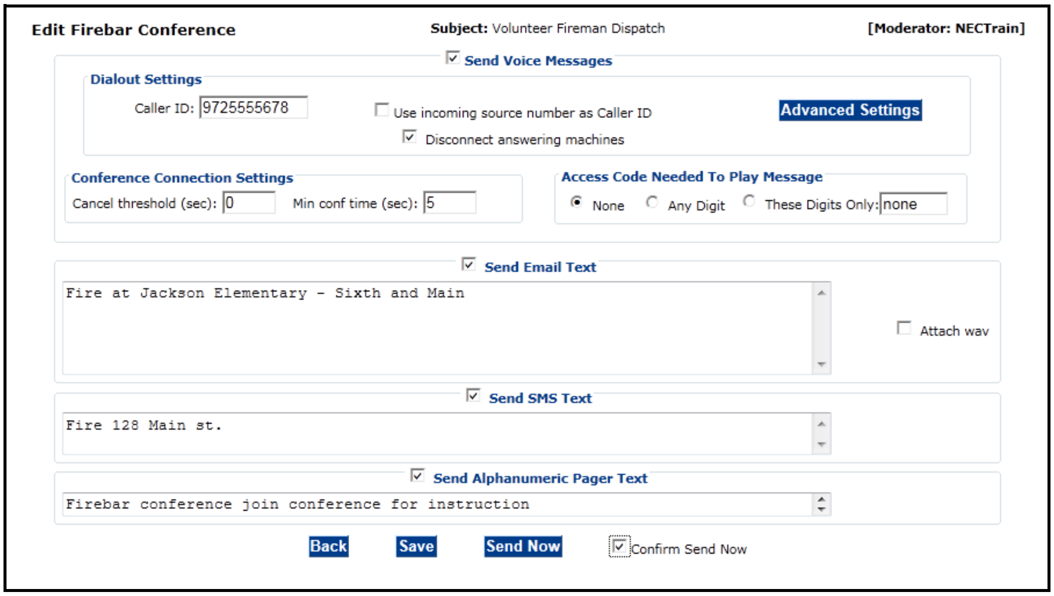


Figure 74: The Second Screen of The Edit Firebar Conference Page

1. Check the **Send Voice Messages** to set up a call-out Firebar conference.
   - Edit the **Dialout Settings**.
     - Enter a **Caller ID**, if desired. This field is used to enter a 10-digit phone number that will be displayed on Caller ID on a recipient's phone. This capability is only available on a system that is equipped with ISDN PRI trunk.
     - Check the **Use Incoming Source Number as Caller ID** box to use the activator's caller ID instead. If no caller ID is specified and the Activator's caller ID is not selected, then the system will use the default originating number found on the System Configuration tab.
     - Check the **Disconnect answering machines** box, if applicable.

Note:

When expecting an answering machine to pick up an outbound call, select the "press any digit: option. This minimizes the risk of falsely detecting an answering machine as human.

- Select **Advanced Settings** to indicate how you want participants to enter the conference. The system displays the *Chosen-Attendee Properties page*, illustrated below.

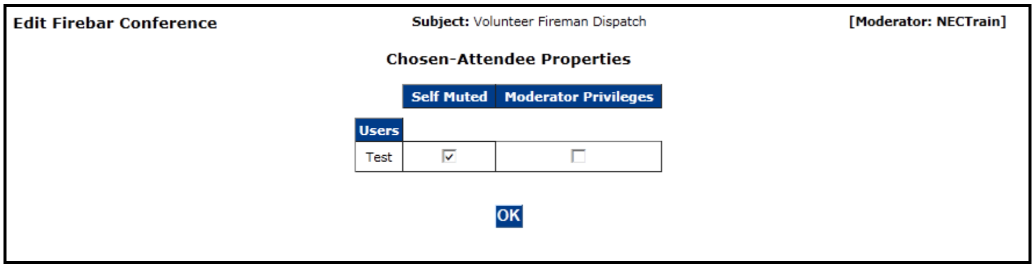


Figure 75: Firebar Conference Advanced Settings

  – Check the **Self-Muted** box next to a group or user to have those groups and users enter the call self-muted.
  – Check the **Moderator Privileges** box next to a group or user to allow that group or user to have moderator privileges during the conference.

Warning:

If a customer selects "Wait for moderator to join," he/she must have either 'Activator is moderator' checked or specify a moderator on this page.

  – Select **OK** to return to the *Edit Firebar Conference page*.

- Indicate the **Conference Connection Settings**:
  – Enter the number of seconds allowed during which the moderator can cancel the conference in the **Cancel Threshold** field.

Note:

Cancel Threshold is only applicable for direct connect "red phone" or "hot line" configurations.

  – Enter the number of seconds for the **Minimum Conference Time**. Once two parties have been in conference for this long, the other phones will stop ringing when they end the call.

- As recipients pick up the Firebar calls, they first hear the message sent by the Moderator (if one was selected). Then, the recipient is placed into the conference based on the **Access Code Needed to Play message**. Select one of the following options:
  – Select **None** to indicate that the recipient goes into the conference without requiring any acknowledgement. Use this setting when dialing out to a phone that has no associated answering machine or voicemail configured.

   - Select **Any DTMF Digit** to indicate that the recipient can press any digit on the keypad to join the conference. This should be used when dialing to a phone that may have an associated answering machine or voicemail configured. The objective is for the system's dial out Find-me process to skip the answering machine if a digit is not forthcoming.
   - Select **These Digits Only** to require a secret code to prevent someone other than the intended recipient to hear enter the Firebar conference. You can inform the recipients of the selected digits outside the system (e.g., via email). Enter the digits.

2. Select **Send Email Text** to include a message to send in emails related to the Firebar conference. Enter the text to send in the emails (up to 64000 characters). Check the **Attach Wav** box to attach the wav file of the message being sent in the firebar conference.

3. Select **Send SMS Text** to include an SMS related to the Firebar conference. Enter the text for the SMS (up to 150 characters).

4. Select **Send Alphanumeric Pager Text** to include a page related to the Firebar conference. Enter the text for the page (up to 50 characters).

5. Select **Save** to save the Firebar conference information for future use or **Back** to ignore the changes and return to the first screen of the *Edit Firebar Conference page*. To send the Firebar calls immediately, check the **Confirm Send Now** box and select **Send Now**.

Note:

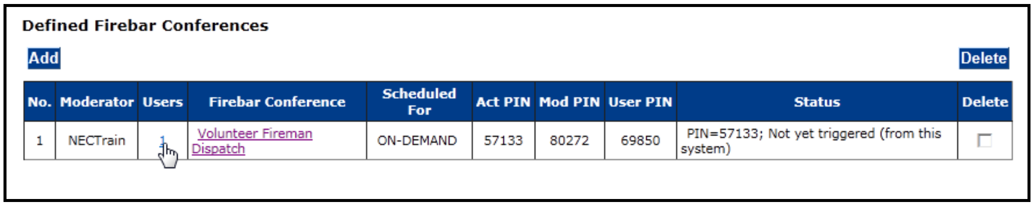
The Send Now option is not available for Firebar conferences that have "**Recorded at Dialin**" as the message body type.

Viewing Firebar Conference Members

You can view the members for a Firebar conference on the *Members page*.

The Members Page

To open the *Members page*, go to the *Defined Firebar Conference page* and select **the highlighted number of users** next to the Firebar conference you want to view, illustrated below.



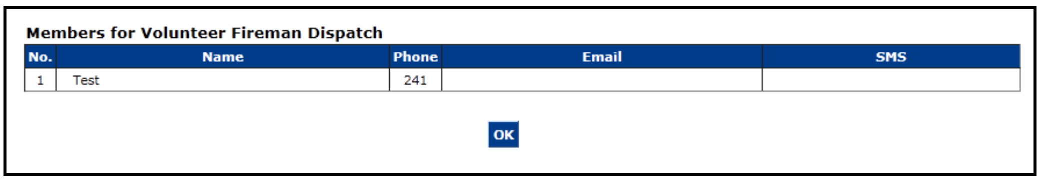
Defined Firebar Conferences

Add Delete

No.	Moderator	Users	Firebar Conference	Scheduled For	Act PIN	Mod PIN	User PIN	Status	Delete
1	NECTrain	1	Volunteer Fireman Dispatch	ON-DEMAND	57133	80272	69850	PIN=57133; Not yet triggered (from this system)	

Figure 76: Viewing the Firebar Members

The system displays the *Members page*, illustrated below.



Members for Volunteer Fireman Dispatch

No.	Name	Phone	Email	SMS
1	Test	241		

OK

Figure 77: The Members for a Firebar Conference Page

1. Select **OK** when you have finished viewing the members for the selected Firebar conference.

The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of members.

Conducting Firebar Conferences

As system administrator, you can create and launch Firebar conferences on behalf of moderators. The previous chapter explains how to set up a Firebar conference. Once you have set up the Firebar conference, there are multiple ways to initiate the conference:

- *Using the Firebar Conference Pages*
- *Using RealView To Make Firebar Calls*
- *Placing a Phone Call*

This chapter explains how to initiate Firebar conferences.

Using the Firebar Conference Pages

The Add Firebar Conference Page allows you to send new Firebar calls immediately. *The Edit Firebar Conference Page* allows you to send saved Firebar calls immediately.

When creating the Firebar conference, make sure that you select an **Audio Message**.

Note:

Do not choose "**Recorded At Dialin**" as the Audio Message, unless you want to trigger the Firebar conference by phone.

To send the Firebar calls immediately, the **Scheduling** should be **On Demand**. If you select **Scheduled** as the Scheduling option, the Firebar calls are triggered at the time you specified. Scheduled conferences can also be activated manually at any time with the activation pin or Send Now. They start automatically at the scheduled time without any human intervention.

On the second screen of *The Firebar Conference Pages*, you must check the **Confirm Send Now** box and select **Send Now** to trigger the Firebar Conference.

Figure 78: Firebar Launch Buttons

Refer to the "Working with Firebar Conferences" in *CHAPTER 13—Using Firebar Conferences* on page 84 section for more information about *The Add Firebar Conference Page* and *The Edit Firebar Conference Page*.

Using RealView To Make Firebar Calls

The RealView Page — Firebar Conference Tab lists the participants associated with the selected Firebar conference. Next to each participant's name, the system displays a **Connect** link.

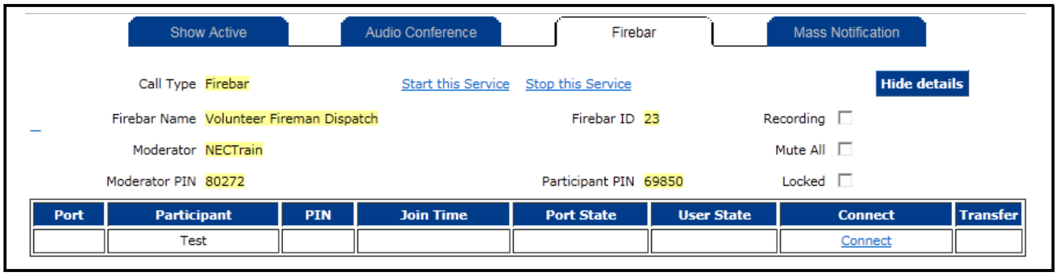


Figure 79: Connect Link on RealView Page - Firebar Conference Tab

To dial out to a Firebar participant, select the **Connect** link next to the associated participant's name.

A Firebar can be triggered by pressing the 'Start this service link' on the RealView page.

Refer to the "The RealView Page — Firebar Conference Tab" in *CHAPTER 15—Using RealView* on page 124 for more information about using RealView.

Placing a Phone Call

You can set up a generic Firebar conference to be triggered at a later time. You place a phone call to record the message and trigger the Firebar calls.

When setting up the Firebar conference, make sure that you select "**Recorded at Dialin**" for the **Audio Message Body** on the first screen of *The Add Firebar Conference Page* or *The Edit Firebar Conference Page*. The **Scheduling** should be **On Demand**.

Be sure to remember the **Activation PIN** for the Firebar conference from *The Defined Firebar Conferences Page*.

1. From a regular telephone, dial the dial-in number associated with the Firebar service. Obtain this number from your system administrator.

2. Enter the Activation **PIN** associated with the Firebar conference.

3. Record your message, using the IVR.
   - Press **1** to replay/listen to the recorded message.
   - Press **2** to re-record the message. Stop the recording by pressing **#**.
   - Press **3** to save the new message and send it later.
   - Press **4** to send the message now.
   - Press **9** to exit the system.
   - Press **0** to repeat the options.

4. Press **#** to stop recording.

5. When you press **4** to send the message, the Firebar calls are initiated.

6. You can hang up after you have triggered the Firebar conference. Or, you can stay on the line to join the Firebar conference.

Warning:

If ‘wait for moderator’ or ‘stop conference when moderator disconnects’ or ‘activator has moderator privileges’ are selected, it is not advised to hang up after triggering the conference.

CHAPTER 14 – Using Mass Notifications

A Mass Notification allows you to send out a message to a large number of people via telephone calls, email, SMS, and/or pagers.

Before setting up a Mass Notification, make sure that you have created any prerecorded messages that you want to use with the Mass Notification. You may also want to create users and groups for convenient notification. These procedures are described in the previous chapters.

This chapter explains how to set up a Mass Notification.

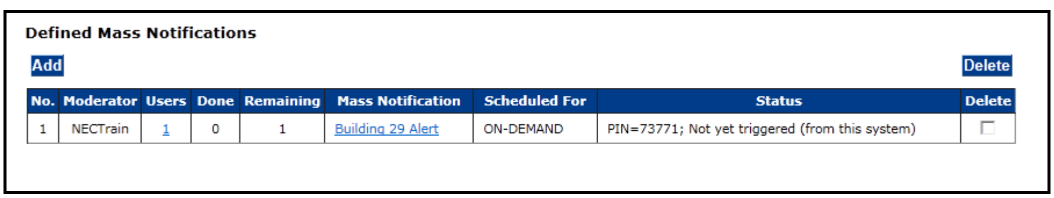
Working with Mass Notifications

You can set up your Mass Notifications and send them right away or schedule them for a later time. In either case, you must define a Mass Notification first.

The Defined Mass Notifications Page

The *Defined Mass Notifications page* lists all Mass Notifications defined in the system by the administrator or any moderator. The listing includes summary information about the progress of an in-progress Mass Notification.

To set up and send Mass Notifications, select **Mass Notifications** from the *Admin Menu* or the **Mass Notifications link** on the *Home page*. The system displays the *Defined Mass Notifications page*, illustrated below.



Defined Mass Notifications

Add | Delete

No.	Moderator	Users	Done	Remaining	Mass Notification	Scheduled For	Status	Delete
1	NECTrain	1	0	1	Building 29 Alert	ON-DEMAND	PIN=73771; Not yet triggered (from this system)	

Figure 80: The Defined Mass Notifications Page

The system displays the following information related to the Mass Notifications:

- A system-generated number for the Mass Notification
- The moderator who created the Mass Notification
- The number of users included in the Mass Notification
- The number of users contacted on the last run of the Mass Notification
- The number of users remaining to contact on the last run of the Mass Notification
- The name of the Mass Notification with a link to edit the Mass Notification, including an option to send it immediately
- The schedule for the Mass Notification
- The status of the Mass Notification, including the Moderator PIN
- A check box to delete the Mass Notification

1. To add a new Mass Notification, select **Add** to open *The Add Mass Notification Page*.
2. To edit an existing Mass Notification, select the **highlighted mass notification name** to open *The Edit Mass Notification Page* for the selected Mass Notification.
3. To view the users scheduled for the Mass Notification, select the highlighted number under **Users** to open *The Members Page* for the selected Mass Notification.
4. To delete a Mass Notification, check the **Delete** box next to the Mass Notification and select **Delete**.

The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of Mass Notifications.

The Add Mass Notification Page

The first screen of the *Add Mass Notification page* allows you to begin to set up a Mass Notification.

To open the *Add Mass Notification page*, go to the *Defined Mass Notifications page* and select **Add**. The system displays the *Add Mass Notifications page*, illustrated below.

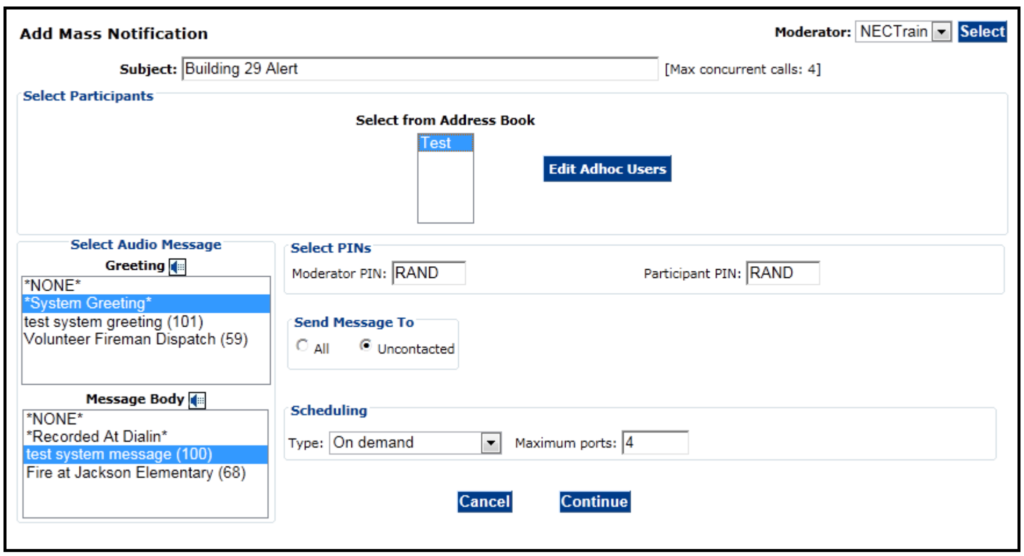


Figure 81: The First Screen of The Add Mass Notification Page

1. To add a Mass Notification for another moderator, select the moderator name from the **Moderator** list and click **Select**.
2. Enter an identifying name for the Mass Notification in the **Subject** field. This title is also added to the Subject line of any emails that might be sent.
3. Select the **Participants** to receive the Mass Notification. You can select by group, user, the system address book, and/or adhoc users.
   - To include defined groups in the Mass Notification, highlight the group from the *Select Groups* column. Use **Shift + click** or **Control + click** to select multiple groups.
   - To include defined users in the Mass Notification, highlight the user from the *Select Users* column. Use **Shift + click** or **Control + click** to select multiple users.

- To include users from the address book maintained by the system administrator, highlight the name from the *Select from Address Book* column. Use **Shift + click** or **Control + click** to select multiple names.
- To include users not otherwise defined in the system, you can use the *Add/Edit Adhoc Users page*. Select **Edit Adhoc Users** to open the *Add/Edit Adhoc Users page*, illustrated below.

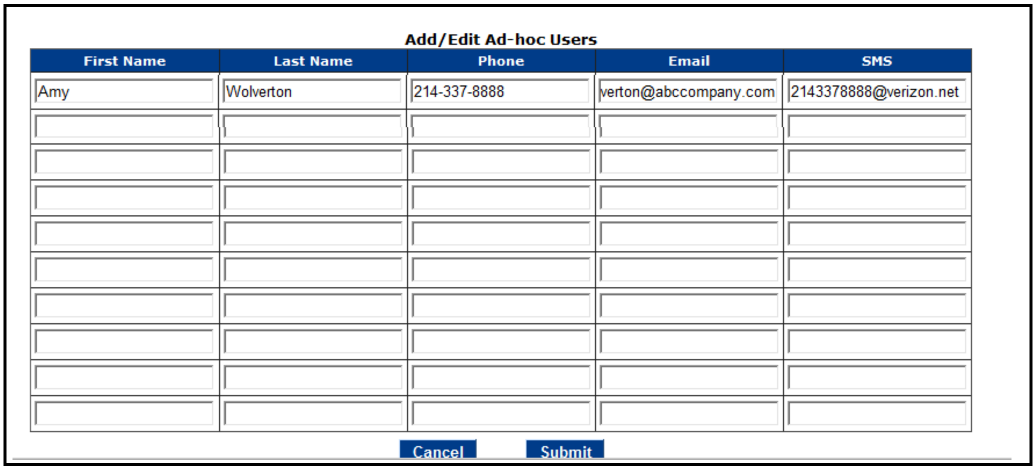


Figure 82: The Add/Edit Adhoc Users Page

Enter the **First Name**, **Last Name**, **Phone Number**, **Email,** and **SMS** for the adhoc users you want to include in the Mass Notification.

Scroll down to the bottom of the window. Select **Submit** to save the ad hoc user information or **Cancel** to ignore the changes and return to the *Add Mass Notification page*.

4. Select the **Audio Message** to use in the Mass Notification. A message is made up of two parts, the greeting and the message body, which are recorded separately.

   For either part of the message, you can select to listen to the message on your computer.

   - Select the **Greeting** recording to use in the Mass Notification from the *Greeting* column. If you want to have the Mass Notification leave messages on an answering machine or play a message body, you must select a greeting.
   - Select the **Message Body** recording to use in the Mass Notification from the *Message Body* column. If the entire message is included in the greeting, you may select "**NONE**."

Note:

You must select a greeting if you want to play a message body.

- To save the Mass Notification so that it can be triggered later by phone, select "**Recorded At Dialin**."

5. Select the **PINs**. The value RAND means the system will choose a random PIN.
   - Enter or leave as RAND the **Moderator PIN**, which is used to record, review, and optionally send the message.
   - Enter or leave as RAND the **Participant PIN**, which allows a user to call back into the system and hear the message.
6. Select which users get the message in the **Send Message To** area:
   - **All** means the system will contact all users selected for the Mass Notification.
   - **Uncontacted** means the system will contact only users not already contacted for this Mass Notification. You would use this feature to resend a message to the people not contacted the first time.
7. Enter the maximum number of ports to reserve for the scheduled conference in **Maximum Ports** field.
8. To schedule the Mass Notification, select an option from the Type drop down list.
   - Select **On Demand** to save the Mass Notification for triggering at a later time or sending it as soon as you have finished creating it.
   - Select **Scheduled Once** to have the Mass Notification sent at the scheduled time. You can schedule the Mass Notification for more than one time.
   - Select **Scheduled Recurring** to have the Mass Notification sent at the scheduled times. You schedule the Mass Notifications in a recurring pattern.
   - Select **Reserved Once** to reserve ports for the scheduled time. However, the Mass Notification is not sent unless it is triggered. This is for busy systems to make sure that ports are available in case a message needs to be sent. You can reserve more than one time.
   - Select **Reserved Recurring** to reserve ports for the scheduled times in a recurring pattern. However, the Mass Notification is not sent unless it is triggered. This is for busy systems to make sure that ports are a va ia lb le in case a message needs to be sent.

9. Complete the scheduling information as follows:
   - If you selected **Scheduled Once** or **Reserved Once**, the system displays additional options, as illustrated below.

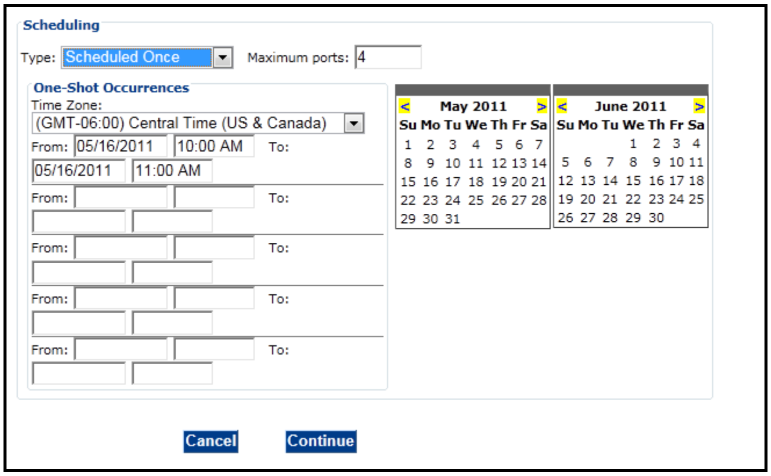


Figure 83: Add Mass Notification Page Scheduling Options

– Select the **Time Zone** for the mass notification from the drop down list.

– Enter the start date and time in the **From** fields. Enter the end date and time in the **To** fields. It is highly recommended that you provide a duration time cushion to prevent being cut off prematurely. Repeat to schedule multiple Mass Notifications.

   - If you selected **Scheduled Recurring** or **Reserved Recurring**, the system displays additional options, as illustrated below.

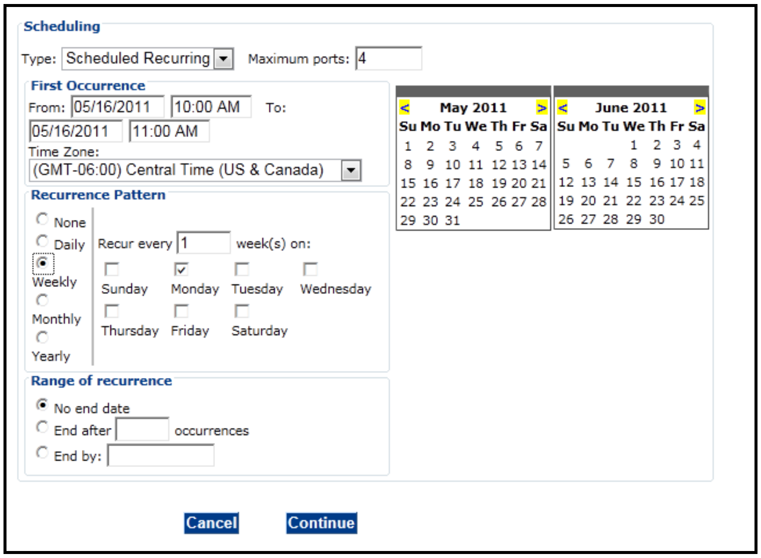


Figure 84: Add Mass Notification Page Recurring Options

– For the first mass notification, enter the start date and time in the **From** fields. Enter the end date and time in the **To** fields. It is highly recommended that you provide a duration time cushion to prevent being cut off prematurely.

– Select the **Time Zone** for the mass notification from the drop down list.

– Select a **Recurrence pattern** and enter the details.

– Select the **Range of recurrence** to indicate when the recurrence should end.

10. Select **Continue** to save the Mass Notification and continue to additional Mass Notification settings or **Cancel** to ignore the changes and return to the *Defined Mass Notifications page*.

The Add Mass Notification Page – Continued

When you select **Continue** on the first screen of the *Add Mass Notification page*, the system displays the second screen of the *Add Mass Notification page*, illustrated below.

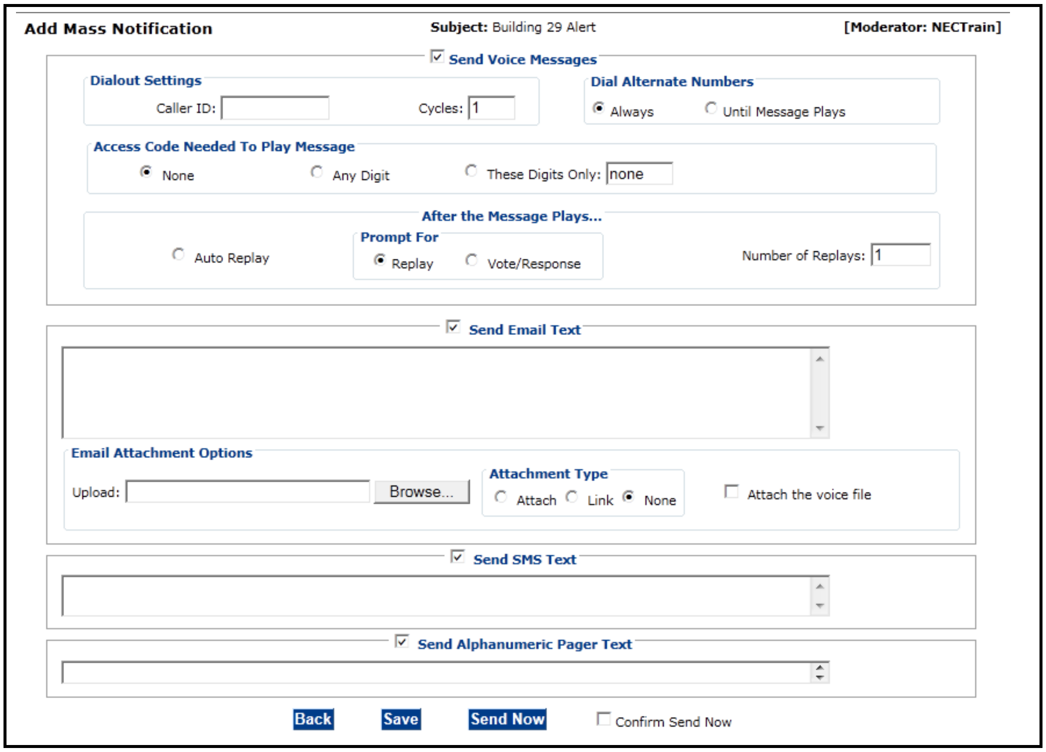


Figure 85: The Second Screen of The Add Mass Notification Page

1. Check the **Send Voice Messages** box to set up a call out Mass Notification.
   - Enter the **Dialout Settings**.
     – Enter a **Caller ID**, if desired. This field is used to enter a 10-digit phone number that will be displayed on Caller ID on a recipient's phone. This capability is only available on a system that is equipped with ISDN PRI trunk.
     – Enter the number of **Cycles** to send the Mass Notification.
   - Select the **Dial Alternate Numbers** setting to indicate how the system should dial for users who have multiple phone numbers.
     – Select **Always** to indicate that the system should dial all numbers and attempt to play the message.
     – Select **Until Message Plays** to indicate that the system should stop dialing alternate numbers after the message plays on one of the numbers and is received by a human (answering machines do not count).

- If you selected a greeting and message body both, you can require an acknowledgement from the user after the greeting plays and before playing the message body. Select one of the following **Access Codes**:
  - Select **None** to indicate that the system should play the message without requiring any acknowledgement. Use this setting for phones that do not have answering machines or Voicemail configured.
  - Select **Any Digit** to allow the recipient to press any digit on the keypad to play the message. Use this option when dialing to a phone that may have an associated answering machine or Voicemail configured so that the system knows it is leaving a message on an answering machine.
  - Select **These Digits Only** to require a secret code to prevent someone other than intended recipient to hear the Mass Notification message. You can inform the recipients of the selected digits before the Mass Notification is triggered. Enter the digits in the box.
- Indicate the actions to happen after the Mass Notification message plays in the **After the Message Plays...** area.
  - Select **Auto Replay** to have the system replay the message until the recipient hangs up, or the number of replays reaches the number indicated in the box to the right. Enter a number in the **Number of Replays** field to indicate the maximum number of replays.
  - Select **Prompt for Replay** to have the system replay the message after the recipient presses the indicated digit to hear the message again.
  - Select **Prompt for Vote/Response** to have the recipient press one of two digits you have described in your message. The system tracks the responses, which are available in the *Reports* area.

2. Check the **Send Email Text** box to include a message to send in emails related to the Mass Notification.
   - Enter the text to send in the emails (up to 64000 characters).
   - To include an attachment with the emails, select **Browse** next to **Upload**. Navigate to the file you want to include and select **Open**.
   - Select the type of attachment as **Attachment**, **Link**, or **None**.
   - Check the **Attach the Voice File** box to also attach a .wav file of the mass notification voice message.
3. Select **Send SMS Text** to include an SMS related to the Mass Notification. Enter the text for the SMS (up to 150 characters).
4. Select **Send Alphanumeric Pager Text** to include a page related to the Mass Notification. Enter the text for the page (up to 50 characters).
5. Select **Save** to save the Mass Notification information or **Back** to ignore the changes and return to the first screen of the *Add Mass Notification page*. To send the Mass Notification now, check the **Confirm Send Now** box and select **Send Now**.

Note:

The Send Now option is not available for Mass Notifications that have “**Recorded at Dialin**” as the message body type.

The Edit Mass Notification Page

The first screen of the *Edit Mass Notification page* allows you to change Mass Notification details, such as the participants, greetings, and scheduling for a Mass Notification you have defined by any moderator.

To open the *Edit Mass Notification page*, go to the *Defined Mass Notifications page* and select the **highlighted Mass Notification name** for the Mass Notification you want to change or send. The system displays the *Edit Mass Notifications page*, illustrated below.

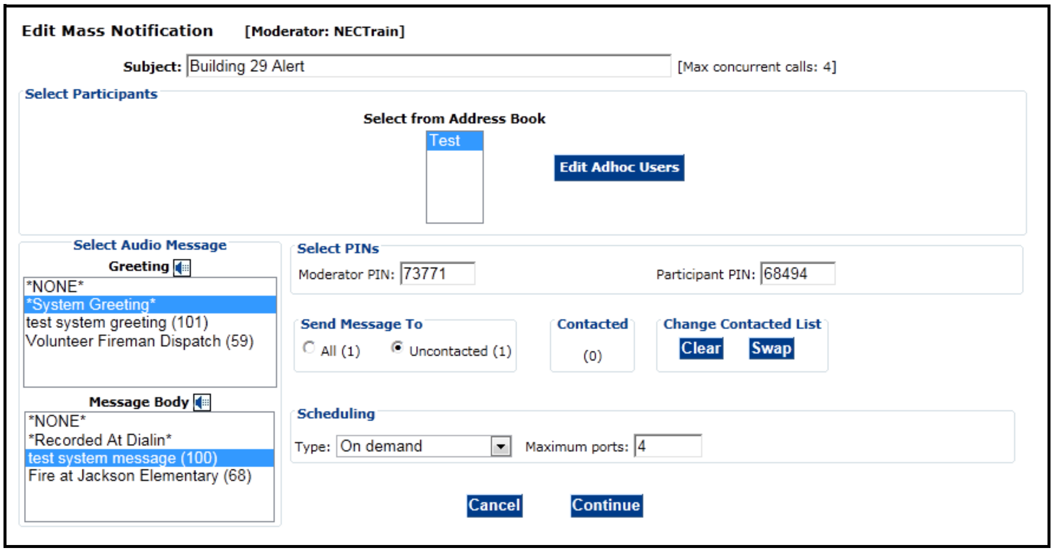


Figure 86: The First Screen of the Edit Mass Notification Page

1. Edit the identifying name for the Mass Notification in the **Subject** field.

2. Change the **Participants** to receive the Mass Notification. You can select by group, user, the system address book, and/or adhoc users.

   - To include a defined group in the Mass Notification, highlight the group from the *Select Groups* column. Use **Shift + click** or **Control + click** to select multiple groups.
   - To include individual users not included in a group, highlight the user from the *Select Users* column. Use **Shift + click** or **Control + click** to select multiple users.
   - To include users from the address book maintained by the system administrator, highlight the name from the *Select from Address Book* column. Use **Shift + click** or **Control + click** to select multiple names.
   - To include users not otherwise defined in the system, you can use the *Add/Edit Adhoc Users page*. Select **Edit Adhoc Users** to open the *Add/Edit Adhoc Users page*. Enter the details for the adhoc users you want to include in the Mass Notification. Scroll down to the bottom of the window. Select **Submit** to save the ad hoc user information or **Cancel** to ignore the changes and return to the *Edit Mass Notification page*.

3. Change the **Audio Message** to use in the Mass Notification, if needed. A message is made up of two parts, the greeting and the message body, which are recorded separately.

   For either part of the message, you can select to listen to the message on your computer.

   - Select the **Greeting** recording to use in the Mass Notification from the *Greeting* column. If you want to have the Mass Notification leave messages on an answering machine or play a message body, you must select a greeting.
   - Select the **Message Body** recording to use in the Mass Notification from the *Message Body* column. If the entire message is included in the greeting, you may select "**NONE**."

   Note:

   You must select a greeting if you want to play a message body.

   To save the Mass Notification so that it can be triggered later by phone, select "**Recorded At Dialin**."

4. Change the **PINs** if needed. Ensure that there is no conflict with other PINs.
   - Enter or leave the system-generated number for the **Moderator PIN**, which is used to record, review, and optionally send the message.
   - Enter or leave the system-generated number for the **Participant PIN**, which allows a user to call back into the system and hear the message.

5. Change which users get the message in the **Send Message To** area:
   - **All** means the system will contact all users selected for the Mass Notification.
   - **Uncontacted** means the system will contact only users not already contacted for this Mass Notification.

   The **Contacted** area lists how many recipients have heard the Mass Notification message through previous iterations.

   You can **Change the Contacted list**.

   - Select **Clear** to reset the Mass Notification as if no one has yet been contacted.
   - Select **Swap** to replace the uncontacted list with the previously contacted list. This option is useful to send an "All Clear" message to only the previously contacted recipients.

6. To schedule the Mass Notification, select an option from the Type drop down list.
   - Select **On Demand** to save the Mass Notification for triggering at a later time or sending it as soon as you have finished editing it.
   - Select **Scheduled Once** to have the Mass Notification sent at the scheduled time. You can schedule the Mass Notification for more than one time.
   - Select **Scheduled Recurring** to have the Mass Notification sent at the scheduled times. You schedule the Mass Notifications in a recurring pattern.
   - Select **Reserved Once** to reserve ports for the scheduled time. However, the Mass Notification is not sent unless it is triggered. This is for busy systems to make sure

that ports are available in case a message needs to be sent. You can reserve more than one time.

- Select **Reserved Recurring** to reserve ports for the scheduled times in a recurring pattern. However, the Mass Notification is not sent unless it is triggered. This is for busy systems to make sure that ports are available in case a message needs to be sent.

7. Complete the scheduling information as follows:
   - If you selected **Scheduled Once** or **Reserved Once**, the system displays additional options, as illustrated below.

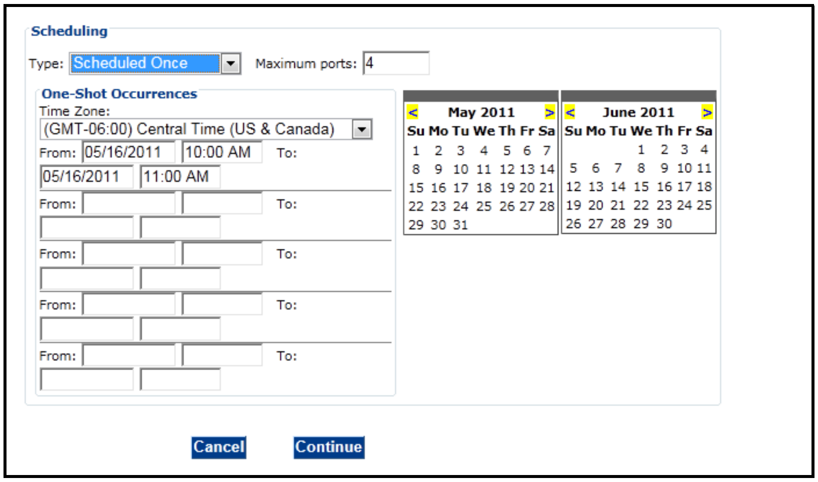


Figure 87: Edit Mass Notification Page Scheduling Options

– Select the **Time Zone** for the mass notification from the drop down list.

– Enter the start date and time in the **From** fields. Enter the end date and time in the **To** fields. It is highly recommended that you provide a duration time cushion to prevent being cut off prematurely. Repeat to schedule multiple Mass Notifications.

- If you selected **Scheduled Recurring** or **Reserved Recurring**, the system displays additional options, as illustrated below.

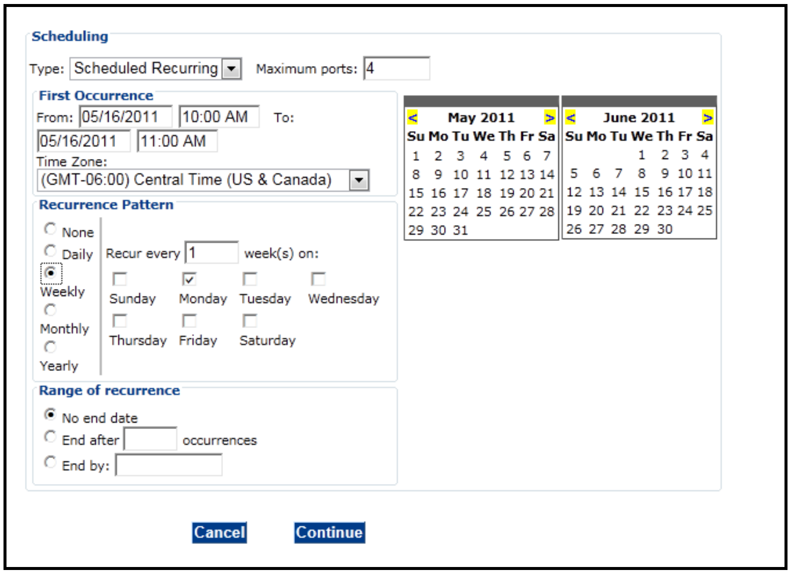


Figure 88: Edit Mass Notification Page Recurring Options

- For the first mass notification, enter the start date and time in the **From** fields. Enter the end date and time in the **To** fields. It is highly recommended that you provide a duration time cushion to prevent being cut off prematurely.
- Select the **Time Zone** for the mass notification from the drop down list.
- Select a **Recurrence pattern** and enter the details.
- Select the **Range of recurrence** to indicate when the recurrence should end.

8. Select **Continue** to save the Mass Notification and continue to additional Mass Notification settings or **Cancel** to ignore the changes and return to the *Defined Mass Notifications page*.

The Edit Mass Notification Page – Continued

When you select **Continue** on the first screen of the *Edit Mass Notification page*, the system displays the second screen of the *Edit Mass Notification page*, illustrated below.

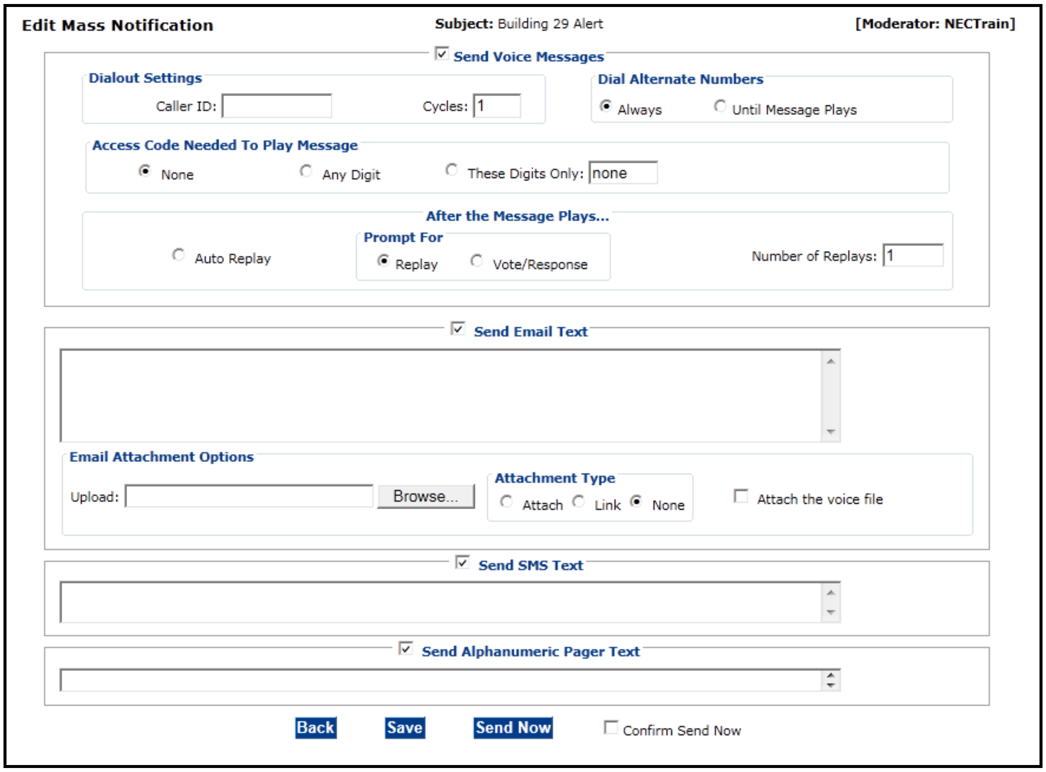


Figure 89: The Second Screen of The Edit Mass Notification Page

1. Check the **Send Voice Messages** to set up a call out Mass Notification.
   - Edit the **Dialout Settings**.
     – Edit the **Caller ID**, if desired. This field is used to enter a 10-digit phone number that will be displayed on Caller ID on a recipient's phone. This capability is only available on a system that is equipped with ISDN PRI trunk.
     – Edit the number of **Cycles** to send the Mass Notification.
   - Select/deselect the **Dial Alternate Numbers** setting to indicate how the system should dial for users who have multiple phone numbers.
     – Select **Always** to indicate that the system should dial all numbers and attempt to play the message.
     – Select **Until Message Plays** to indicate that the system should stop dialing alternate numbers after the message plays on one of the numbers and is received by a human (answering machines do not count).
   - If you selected a greeting and message body both, you can require an acknowledgement from the user after the greeting plays and before playing the message body. Select one of the following **Access Codes**:
     – Select **None** to indicate that the system should play the message without requiring any acknowledgement. Use this setting for phones that do not have answering machines or Voicemail configured.

- Select **Any Digit** to allow the recipient to press any digit on the keypad to play the message. Use this option when dialing to a phone that may have an associated answering machine or Voicemail configured so that the system knows it is leaving a message on an answering machine.
- Select **These Digits Only** to require a secret code to prevent someone other than intended recipient to hear the Mass Notification message. You can inform the recipients of the selected digits before the Mass Notification is triggered. Enter the digits in the box.

- Indicate the actions to happen after the Mass Notification message plays in the **After the Message Plays...** area.
  - Select **Auto Replay** to have the system replay the message until the recipient hangs up, or the number of replays reaches the number indicated in the box to the right. Enter a number in the **Number of Replays** field to indicate the maximum number of replays.
  - Select **Prompt for Replay** to have the system replay the message after the recipient presses the indicated digit to hear the message again.
  - Select **Prompt for Vote/Response** to have the recipient press one of two digits you have described in your message. The system tracks the responses, which are available in the *Reports* area.

2. Check the **Send Email Text** box to include a message to send in emails related to the Mass Notification.
   - Enter the text to send in the emails (up to 64000 characters).
   - To include an attachment with the emails, select **Browse** next to **Upload**. Navigate to the file you want to include and select **Open**.
   - Select the type of attachment as **Attachment**, **Link**, or **None**.
   - Check the **Attach the Voice File** box to also attach a .wav file of the mass notification voice message.
3. Select **Send SMS Text** to include an SMS related to the Mass Notification. Enter the text for the SMS (up to 150 characters).
4. Select **Send Alphanumeric Pager Text** to include a page related to the Mass Notification. Enter the text for the page (up to 50 characters).
5. Select **Save** to save the Mass Notification information or **Back** to ignore the changes and return to the first screen of the *Edit Mass Notification page*. To send the Mass Notification now, check the **Confirm Send Now** box and select **Send Now**.

Note:

The Send Now option is not available for Mass Notifications that have "**Recorded at Dialin**" as the message body type.

Viewing Mass Notification Members

You can view the members for a Mass Notification on the *Members page*.

The Members Page

To open the *Members page*, go to the *Defined Mass Notifications page* and select **the highlighted number of users** next to the Mass Notification you want to view, illustrated below.

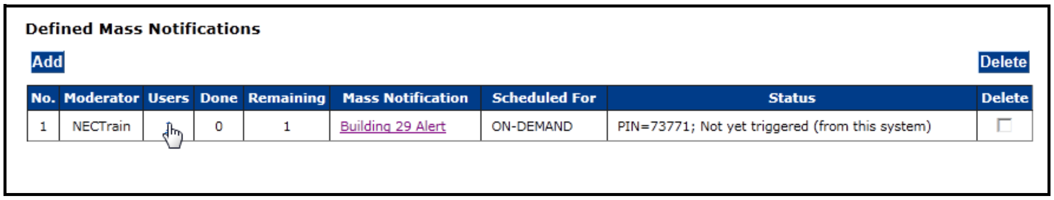


Figure 90: Viewing the Mass Notification Members

The system displays the *Members page*, illustrated below.

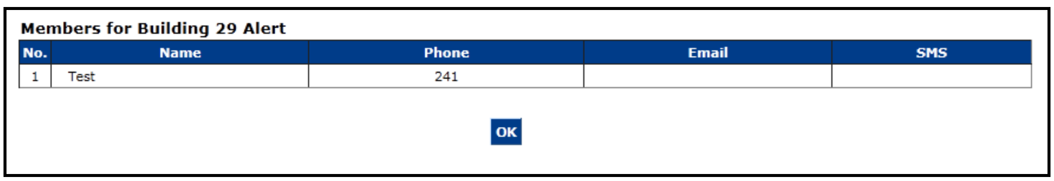


Figure 91: The Members for a Mass Notification Page

1. Select **OK** when you have finished viewing the members for the selected Mass Notification.

2. The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of members.

Conducting Mass Notifications

Once you have set up the Mass Notification, there are multiple ways to initiate the notification:

- *Using the Mass Notification Pages*
- *Placing a Phone Call*

This chapter explains how to initiate Mass Notifications.

Using the Mass Notification Pages

The Add Mass Notification Page allows you to send new Mass Notification calls immediately. *The Edit Mass Notification Page* allows you to send saved Mass Notification calls immediately.

When creating the Mass Notification, make sure that you select an **Audio Message**.

Warning:

Do not choose "**Recorded At Dialin**" as the Audio Message, unless you want to trigger the Group Alert by phone.

To send the Mass Notification immediately, the **Scheduling** should be **On Demand**. If you select **Scheduled** as the Scheduling option, the Mass Notification calls are triggered at the time you specified.

On the second screen of *The Mass Notification Pages*, you must check the **Confirm Send Now** box and select **Send Now** to trigger the Mass Notification.

Figure 92: Mass Notification Launch Buttons

Refer to the "Working with Mass Notifications" in *CHAPTER 14—Using Mass Notifications* on page 105 for more information about *The Add Mass Notification Page* and *The Edit Mass Notification Page*.

Placing a Phone Call

You can set up a generic Mass Notification to be triggered at a later time. For example, you may not have the details for an evacuation procedure. You can set up the Mass Notification, then use the phone later to record the message and trigger the Mass Notification.

When setting up the Mass Notification, make sure that you select "**Recorded at Dialin**" for the **Audio Message Body** on the first screen of *The Add Mass Notification Page* or *The Edit Mass Notification Page*. The **Scheduling** should be **On Demand**.

Be sure to remember the **Activation PIN** for the Mass Notification from *The Defined Mass Notifications Page*.

1. From a regular telephone, dial the dial-in number. You can obtain the number from your system administrator.
2. Enter the Moderator **PIN** associated with the Mass Notification.
3. Record your message, using the IVR.
    - Press **1** to replay/listen to the recorded message.
    - Press **2** to re-record the message. Stop the recording by pressing **#**.
    - Press **3** to save the new message and send it later.
    - Press **4** to send the message now.
    - Press **9** to exit the system.
    - Press **0** to repeat the options.
4. Press **#** to stop recording.
5. When you press **4** to send the message, the Mass Notification calls are initiated.
6. Hang up when you have finished.

CHAPTER 15 – Using RealView

This chapter explains how to use the RealView™ features. The RealView pages show real time activity occurring on the system across all Moderator accounts for each type of service.

Viewing Real Time Activity

While a Mass Notification or conference is in progress, you can use the RealView application to see the Mass Notification or conference taking place in real time.The RealView option shows real time activity occurring on the system for all moderators.As system administrator, you can view multiple instances of different services at the same time.

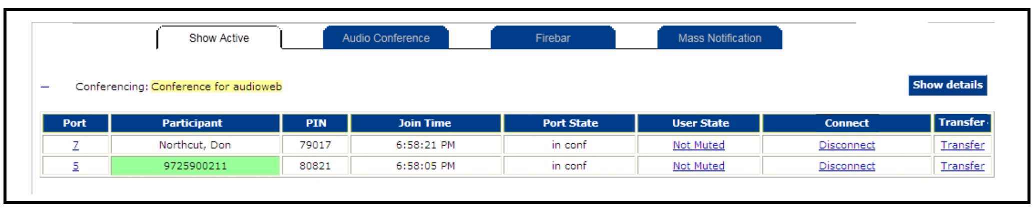
The header includes a **Status** indicator. Refer to *CHAPTER 18—Monitoring the System Status* on page 143 for more information on the system status.

The system automatically defaults to the *Show Active tab*.

The RealView Page — Show Active Tab

The *Show Active Tab* shows real time activity associated with any and all services that are currently active.

To access the RealView features, select **RealView** from the *Admin Menu* or the **Real View link** on the *Home page*. The system displays the *RealView page*, defaulted to the *Show Active tab*, illustrated below.



Port	Participant	PIN	Join Time	Port State	User State	Connect	Transfer
7	Northcut, Don	79017	6:58:21 PM	in conf	Not Muted	Disconnect	Transfer
5	9725900211	80821	6:58:05 PM	in conf	Not Muted	Disconnect	Transfer

Figure 93: The RealView Page Showing One Active Conference

You can show details, mute/unmute, connect, disconnect, transfer, start/stop recording, and lock the conferences, or stop an in-progress Mass Notification, or pager blast the same as on the tabs for each specific service. Refer to the tab for each service in the following sections for more information.

If your system has multiple simultaneous active services, then you can see them on your *RealView page*, as illustrated below.

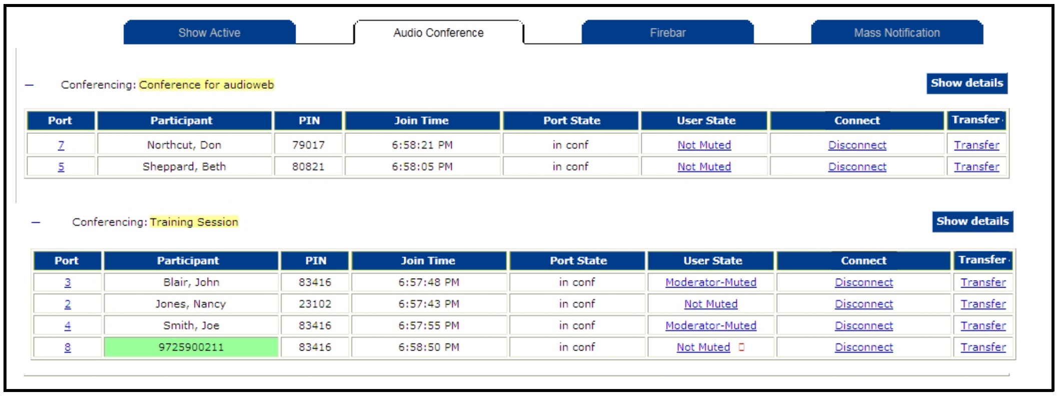


Figure 94: The RealView Page Showing Multiple Active Conferences

RealView Page — Audio Conference Tab

On the *RealView Audio Conference tab*, you can select one or more audio conferences to monitor, even if they are not currently active.As system administrator, you can select from any conference defined in the system.

Select the *Audio Conference tab* from the *RealView page*. Double-click the *Audio Conference* tab. The system displays a list of all conferences defined in the system. A sample is illustrated below.

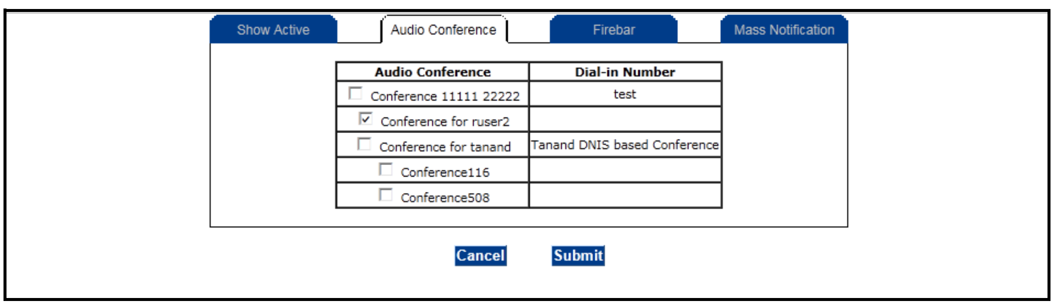


Figure 95: The RealView Page Audio Conference Tab Selections

1. Check the conferences you want to view, or uncheck the conferences you do not want to view.
2. If you have a large number of conferences defined in the system, scroll down to view the rest of the list.
3. Select **Submit** to show the conferences you selected, as illustrated below. Or select **Cancel** to return to the previous view.

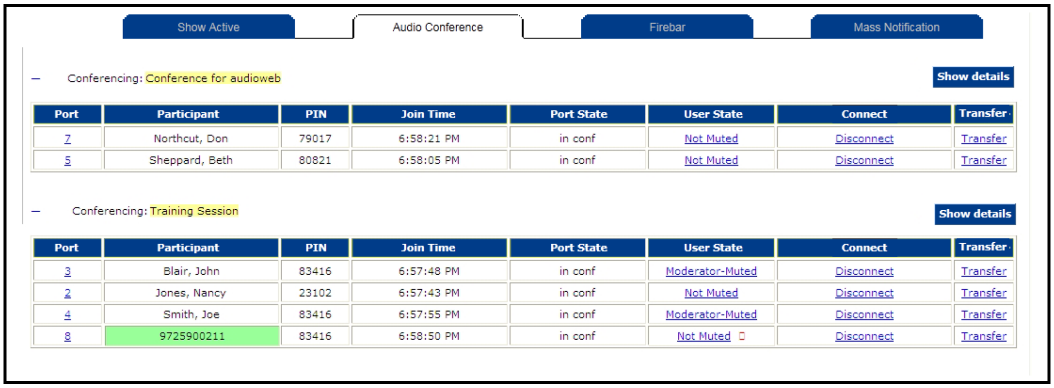


Figure 96: The RealView Page Audio Conference Tab

The system displays the following information related to an active conference:

- Port ID for each caller
- The participant's name, if it is in the system address book as a moderator-defined user; otherwise, the Participant phone number
- The PIN used
- The time the participant joined the call
- The port state (e.g., about to join conference, waiting to join conference, in conference, etc.)
- A link to mute or unmute the user with an indicator if the participant has raised his or her hand
- A link to connect or disconnect the caller
- A link to transfer the participant
- The loudest speaker (highlighted in green)

For additional information and features about a conference, select **Show Details**. The system displays the detail view for the conference, as illustrated below.

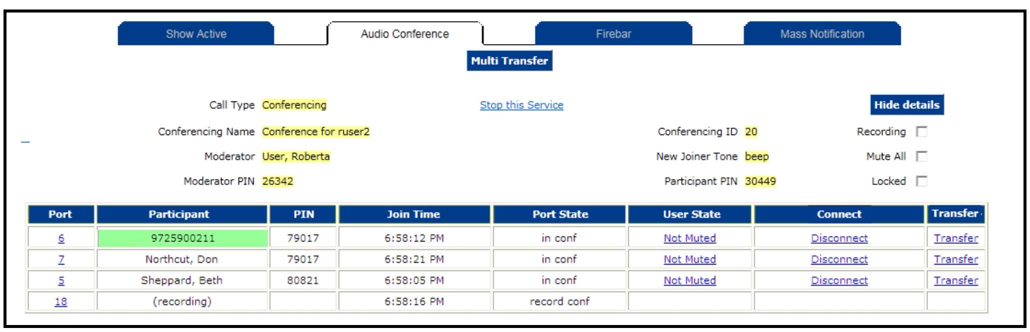


Figure 97: The RealView Page Showing Audio Conference Details

The detail view displays the following additional information for the conference:

- The Call Type
- The Conference Name
- The Moderator Name
- The Moderator PIN
- The Conference ID
- The New Joiner Tone
- The Participant PIN

The following Moderator controls are available during a conference on the web interface from the *RealView page*:

- Muting a single or all participants
- Disconnecting participants
- Starting or stopping recording
- Locking a conference
- Transferring participants to a different conference

Refer to the “Controlling Conferences with RealView” section on page 128*Controlling Conferences with RealView* for details about these features.

The RealView Page — Firebar Conference Tab

On the *RealView Firebar Conference tab*, you can select one or more Firebar conferences to monitor, even if they are not currently active. As system administrator, you can select from any conference defined in the system. You can also use the RealView Firebar Conference tab to trigger the Firebar conference or connect to Firebar conference participants.

Select the *Firebar tab* from the *RealView page*. Double-click on the *Firebar* tab. The system displays a list of all Firebar conferences defined in the system. A sample is illustrated below.

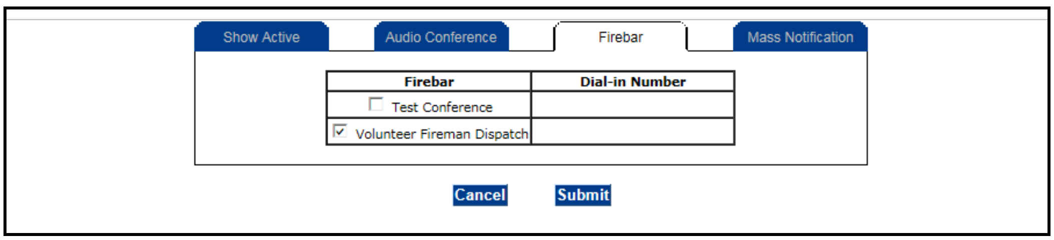


Figure 98: The RealView Page Firebar Tab Selections

1. Check the conferences you want to view.

Note:

If you have a large number of conferences defined in the system, scroll down to view the rest of the list.

2. At the bottom of the list, select whether to **View by Firebar** name or to **View by Dial-in Number**.

Note:

You must enable DNIS based service selection before you can view selections by dial in number.

3. Select **Submit** to show the Firebar conferences you selected, as illustrated below. Or select **Cancel** to return to the previous view.

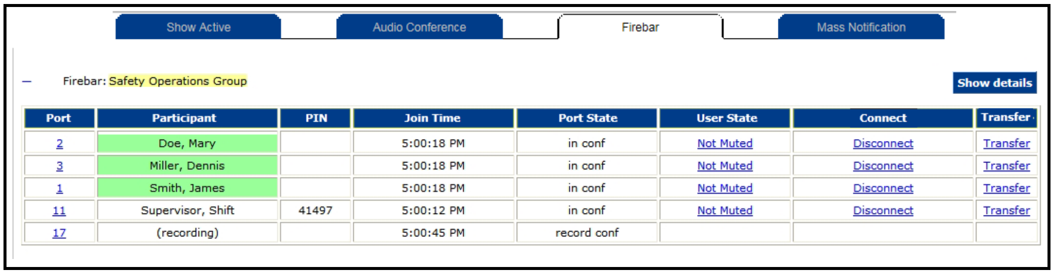


Figure 99: The RealView Page Firebar Tab

The system displays the participants associated with the selected Firebar conferences.

1. To dial a Firebar participant, select **Connect** next to the participant's name.

The system displays the following information related to an active Firebar conference participant:

- Port ID
- The participant's name, if it is in the system database as a user; otherwise, the Participant phone number
- The PIN used
- The time the participant joined the call
- The state (e.g., in conf, etc.)
- A link to mute or unmute the call
- A link to connect or disconnect the caller
- A link to transfer the participant
- The loudest speaker (highlighted in green)

For additional information and features about a conference, select **Show Details**.

The system displays the detail view for the conference, as illustrated below.

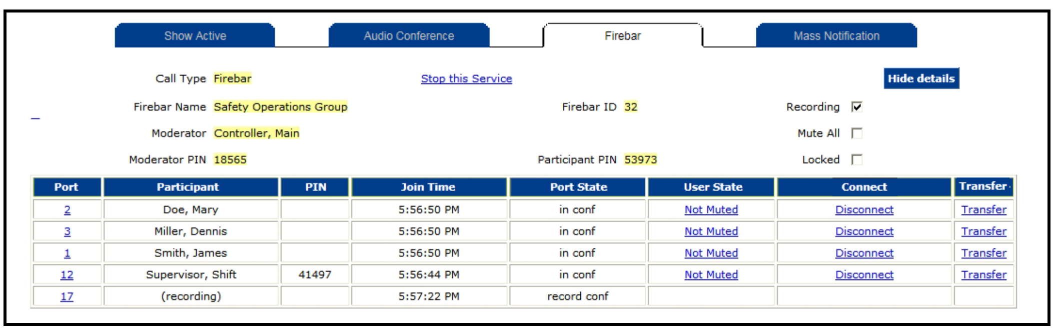


Figure 100: The RealView Page Showing Firebar Details

The detail view displays the following additional information for the conference:

- The Call Type
- The Firebar Name
- The Moderator Name
- The Moderator PIN
- The Firebar ID
- The New Joiner Tone
- The Participant PIN

The following Moderator controls are available during a conference on the web interface from the *RealView page*:

- Muting a single or all participants
- Disconnecting participants
- Starting or stopping recording
- Locking a conference
- Transferring participants to a different conference
- Linking conferences to each other

Refer to the "Controlling Conferences with RealView" section on page 128 for details about these features.

RealView Page — Mass Notification Tab

On the *RealView Mass Notification tab*, you can select one or more Mass Notifications to monitor, even if they are not currently active. As system administrator, you can select from any Mass Notification defined in the system.

Select the *Mass Notification tab* from the *RealView page*. The system displays a list of all Mass Notifications defined in the system. A sample is illustrated below.

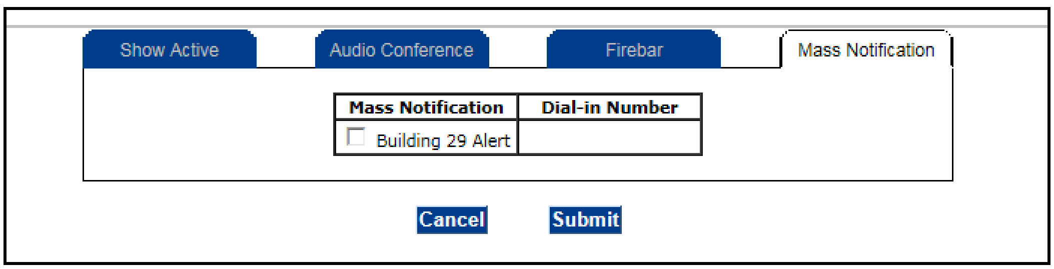


Figure 101: The RealView Page Mass Notification Tab Selections

1. Check the Mass Notifications you want to view, or uncheck the Mass Notifications you do not want to view.

2. If you have a large number of Mass Notifications defined in the system, scroll down to view the rest of the list.

3. Select **Submit** to show the Mass Notifications you selected, as illustrated below. Or select **Cancel** to return to the previous view.

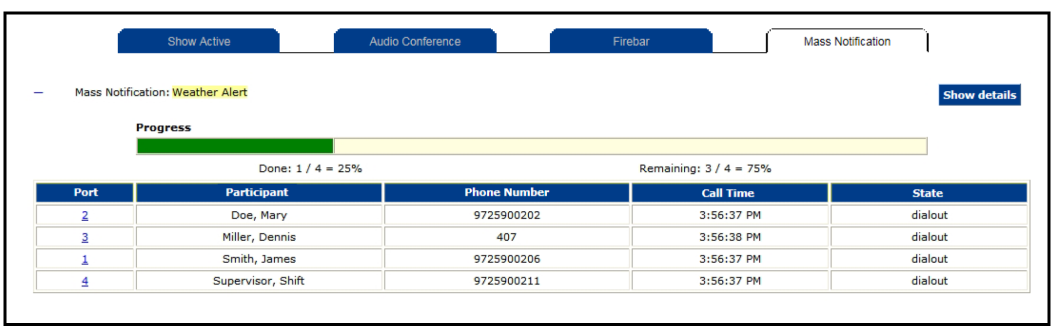


Figure 102: The RealView Page Mass Notification Tab

The system displays the following information related to the active Mass Notification:

- Port ID for recipients the system is contacting
- Participant's name and phone number
- The time the system started the call
- The state (e.g., dialout, play greeting, play notification, etc.)

For additional information and features about a Mass Notification, select **Show Details**. The system displays the detail view for the Mass Notification, as illustrated below.

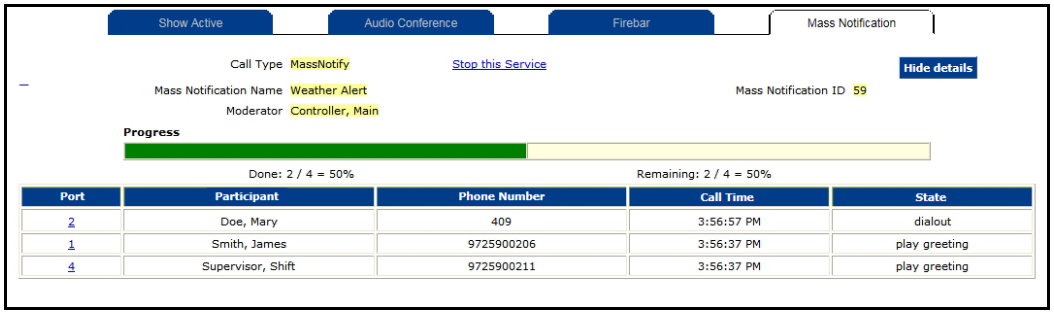


Figure 103: The RealView Page Showing Mass Notification Details

The detail view displays the following additional information for the Mass Notification:

- The Call Type is MassNotify
- The Mass Notification Name
- The Moderator Name
- The Mass Notification ID

The detail view also includes a link to stop the Mass Notification service.

1. To stop an in-progress Mass Notification, select the **Stop This Service** link.

Controlling Conferences with RealView

This section describes the various conference controls provided in RealView.

The following Moderator controls are available during a conference on the web interface from the *RealView page*:

- Muting a single or all participants
- Disconnecting participants
- Starting or stopping recording
- Locking a conference
- Transferring participants to a different conference

Muting Participants using RealView

To mute a particular participant, such as if a participant is in a noisy environment that is disrupting the call:

1. Select the link under **User State** for the participant you want to mute.
2. You can unmute the participant by selecting the **Moderator-Muted** link in the **User State** column.

This column also shows if a participant has used the conference control to self-mute.

When making a presentation, you may want to mute all participants.

1. Check the **Mute All** box to mute all participants.
2. Uncheck the **Mute All** box to unmute the participants, such as for a question and answer period at the end of the presentation.

Connecting or Disconnecting Participants using RealView

To connect a Firebar participant:

1. Select the **Connect** link under the *Connect column* next to the participant you want to call.

The system dials the participant's number.

To disconnect a participant and make the reserved port available:

1. Select the **Disconnect** link under the *Connect* column next to the participant you want to disconnect.

Recording Conferences using RealView

When you add a conference room, you can indicate whether the system should record conferences. This control allows you to start and stop recording as needed during the call. Firebar conferences are recorded by default.

1. Check the **Recording** box to start recording the call.
2. Uncheck the **Recording** box to stop recording the call.

Locking Conferences using RealView

If all of the necessary or a sufficient number of participants have joined, you can choose to lock the conference to additional participants. This prevents any users (unauthorized or authorized) from gaining access to the conference. This control is commonly used to prevent distractions by people arriving late to a conference. You can unlock a conference later as needed.

1. Check the **Locked** box to prevent additional participants from joining the conference to minimize distractions from late arrivers.

2. Uncheck the **Locked** box to allow participants to join again.

Transferring One Conference Participant using RealView

You may need to transfer one or more participants to another ongoing conference call.

1. To transfer the participant to another conference call, select the link under **Transfer**. The system displays the *Transfer Participant page*, illustrated below.

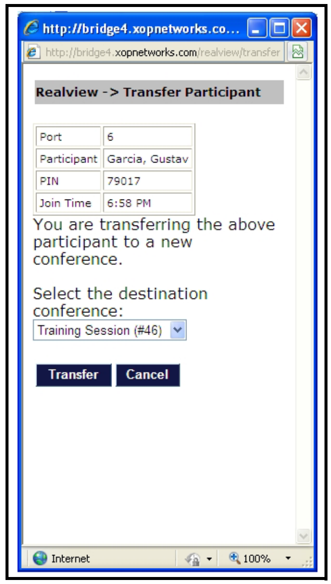


Figure 104: The Transfer Participant Page

2. To complete the transfer, select the destination conference from the list.

3. Select **Transfer** to transfer the participant to the new conference or select **Cancel** to return to the *RealView* page.

After the transfer, the system displays the new conference participants, as illustrated below. The participant named “Gustav Garcia” was transferred from the “Conference for audioweb” to the “Training Session” room.

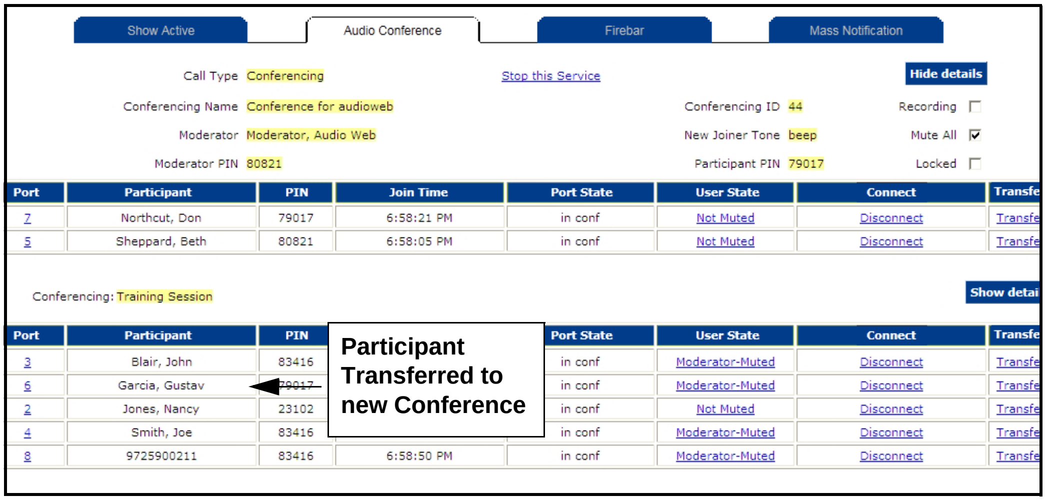


Figure 105: The RealView Page after a Transfer

CHAPTER 16 – Configuring the System

The system configuration features allow you to modify system configuration parameters. You can also set up parameters associated with different services available on the system. This chapter explains how to set up your system configuration parameters.

Setting System Configuration Parameters

There are six tabs for the System Configuration Parameters page:

- *The Configure System Parameters Page — General Settings Tab* allows you to set the system configuration parameters for the system's current operating environment.
- *The Configure System Parameters Page — Circuit Groups Tab* allows you to define groups of circuits (i.e., telephone lines).
- *The Configure System Parameters Page — Service Settings Tab* configures the Audio Conferencing, Firebar Conferencing, and Mass Notification services.
- *The Configure System Parameters Page — Security Settings Tab* allows you to define the security settings.
- *The Configure System Parameters Page — SMSC Settings Tab* allows you to define settings for the SMPP interface required for interfacing with external SMSCs.
- *The Configure System Parameters Page — Licensing Tab* allows you to upload a licensing file for your audio and web conferencing system, enabling various applications on the system.

The Configure System Parameters Page — General Settings Tab

To set system configuration parameters, select **System Configuration** from the *Admin Menu* or the **System Configuration link** on the *Home page*. The system displays the *Configure System Parameters page*, defaulted to the *General Settings tab*, illustrated below.

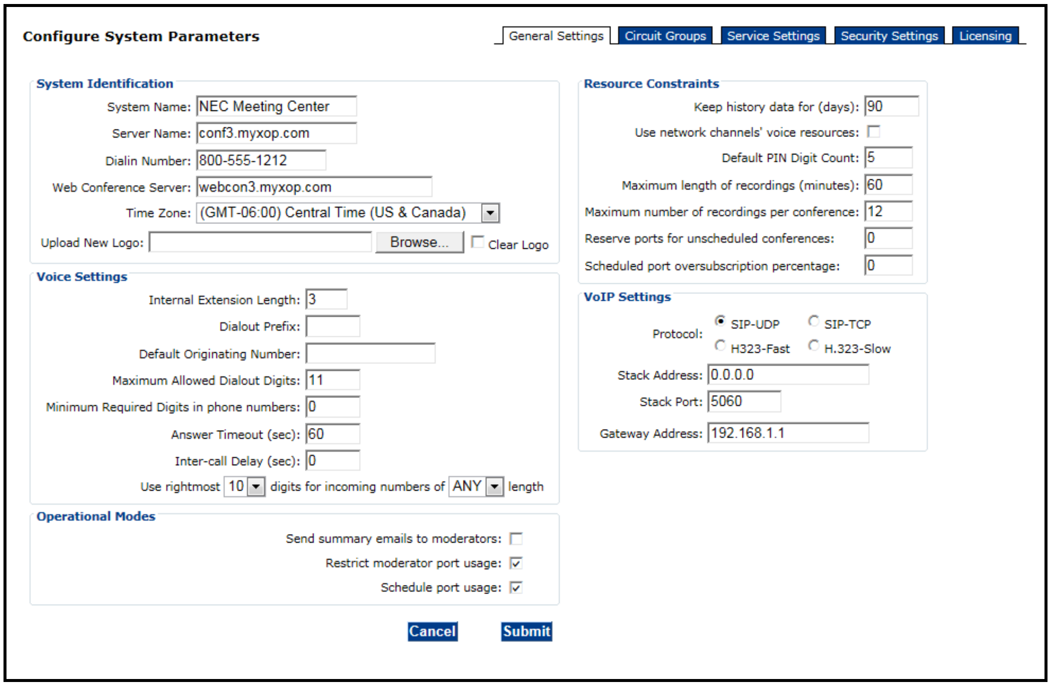


Figure 106: The Configure System Parameters Page - General Settings Tab

1. Configure the **System Identification** settings.
   - The **System Name** field allows you to define a system name, which is then displayed on the top bar of the user interface.
   - The **URL Name** allows you to define the system URL address, which is the address users will enter to access the system.
   - The **Dial-in Number** field allows you to define a system-wide dial-in number for accessing the NMC. All users and moderators dial this number to obtain access to the various services available on the NMC. For DNIS-based services, you assign a separate dial-in number to each service on *The Service Selection Page*. Refer to *CHAPTER 11—Using Automatic Service Selection Rules* on page 39 for more information on DNIS-based services.
   - If web conference service is licensed, enter the address to use for web conferencing in the **Web Conference Address** field.
   - Select the system default **Time Zone** from the drop down list.
   - To **Upload new logo**, select the **Browse** button to open a *Choose File* dialog. Select the file located on your computer and select **Open**. The system replaces the default NEC logo in the user interface. To clear the NEC logo without replacing it, check the **Clear Logo** box.

Note:

The recommended dimensions for the logo are 300 pixels (width) by 100 pixels (height).

2. Configure the **Voice Settings**.
   - Enter a number in the **Internal Extension length** field to define the length of PBX extensions. When making outbound calls from the system, this length is used to determine if a dial-out prefix (for example, digit 9) should be pre-pended to the number being dialed. For numbers longer than the internal extension length, the “dial out prefix” is appended.
   - Enter a **Dial out Prefix** to define a string of digits to be dialed before an outside, Public Switched Telephone Network (PSTN) number is dialed (e.g., ‘9’)
   - Enter the **Default Originating Number** to indicate the ‘ANI’ on outgoing calls unless is it superseded by entry made on the **Advanced** page of Firebar and/or Mass Notification applications.
   - Enter a number in the **Maximum Allowed Dial-out Digits** field to restrict the dialing out of calls. Depending on the length defined, calls can be limited to:
     - Internal extensions only (length = 6)
     - Internal extensions and local PSTN numbers only (length = 11)
     - Internal extensions, local PSTN, and domestic long distance (length = 12)
     - Internal extensions, local PSTN, and domestic long distance and international calls (length = 17)
   - Enter the **Minimum Required Digits in phone numbers** to indicate the smallest number of digits a service phone number may contain.
   - Enter a time (in seconds) in the **Answer Timeout** field to determine the time period for which the system will ring the dialed telephone before declaring it “No Answer.”
   - Enter a time (in seconds) in the **Inter-call Delay** field to specify a delay parameter in seconds (for example, 1 second) that will be inserted between calls sent on the same port.
   - Select number of right most digits that will be used from the incoming source number to identify a user.
3. Select the **Operational Modes** settings.
   - Check the **Send summary emails to moderators** box to have the system send a summary report to the moderator after an Audio Conference, Firebar, or Mass Notification session has completed.
   - Check the **Restrict moderator port usage** box to allow moderators to be created with specific number of ports.
   - Check the **Schedule port usage** box to allow moderators to conduct reservation based conference calls.
4. Configure the **Resource Constraints** settings.
   - Enter a number (in days) in the **Keep History data** field to indicate the number of days for which the Call Detail Records are kept in the system. A typical value is 90 days.

- Check the **Use network channels' voice resources** box to allow the NMC to borrow from voice resource ports for conference recordings if needed.
- Enter the **Default PIN Digit** count to indicate how many digits randomly generated PIN numbers will include.
- Enter the number (in minutes) in the **Maximum length of recordings** field to set the maximum length for conference recordings.
- Enter a number to indicate the **Maximum number of recordings per conference**.
- Enter a number in the **Reserve ports for unscheduled conferences** field to reserve the indicated number of ports for on demand reservation less conferences.
- Enter a number in the **Scheduled port oversubscription percentage** field to indicate percentage of over subscription. For example, on a 48 port system with 25% oversubscription, it will be possible to schedule up to 60 ports. For example, on a 24 port system with 25% oversubscription, it will be possible to schedule up to 30 ports.
- The **Link DSPs** feature applies to some TDM board based systems. Check this box to optimize the system for very large (>60 participants) individual conferences.

5. Configure the **VoIP Settings**.
   - Select **H323** or **SIP** as the **VoIP Protocol**.
   - If VoIP interface is supported on the NMC, enter the system's IP address in the **SIP/H323 Stack Address** field.
   - Enter the **SIP/H323 Gateway Address** to indicate the destination IP address (switch address) to which the system sends outbound calls.
   - If VoIP interface is supported on the NMC, enter the SIP Port (i.e., 5060 etc.) that the far end system will be listening on in the **SIP/H323 Listening Port** field.
6. Select **Submit** to save the configuration parameters or **Cancel** to ignore the changes and return to the *Home page*.

The Configure System Parameters Page — Circuit Groups Tab

The *Circuit Groups tab* allows you to define groups of circuits (i.e., TDM or SIP trunks).

Select the *Circuit Groups tab* from the *Configure System Parameters page*. The system displays the *Circuit Groups page*, illustrated below.

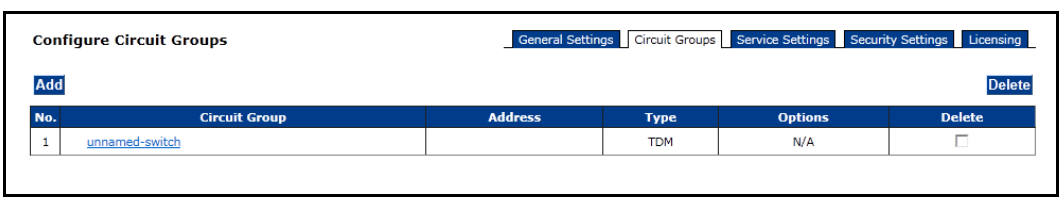


Figure 107: The Configure Circuit Groups Page

The system displays the following information related to the circuit groups:

- A system-generated number for the circuit group

- The name of the circuit group with a link to edit the circuit group information
- The address of the circuit group
- The type of circuit group
- The circuit group options
- A check box to delete the circuit group

1. To add a new circuit group, select **Add** to open *The Add Circuit Group Page*.
2. To edit an existing circuit group's information, select **Edit** to open *The Edit Circuit Group Page* for the selected circuit group.
3. To delete an existing circuit group, check the **Delete** box next to the group name and select **Delete**.

The Add Circuit Group Page

The *Add Circuit Group page* allows you to enter a new circuit group.

To open the *Add Circuit Group page*, go to the *Configure Circuit Groups page* and select **Add**. The system displays the *Add Circuit Group page*, illustrated below.

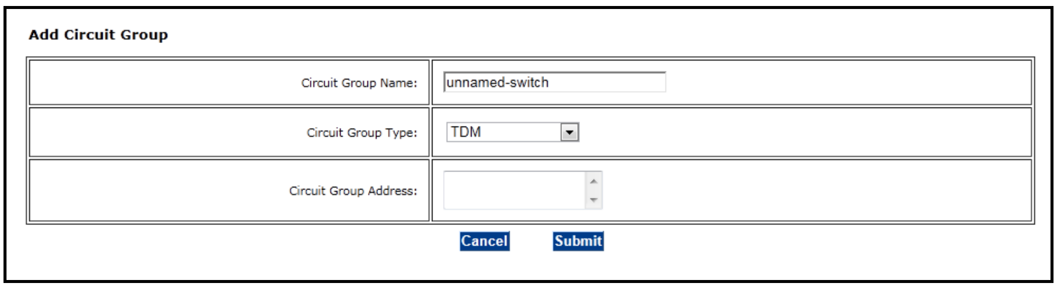


Figure 108: The Add Circuit Group Page

1. Enter the **Circuit Group Name** to define the group of circuits.
2. Select the **Circuit Group Type** from the drop down list.
    - Select **TDM** to indicate a T1 or E1 trunk.
    - Select **SIP Trunk** to indicate a VoIP trunk.
    - Select **SIP Extensions** to indicate if the NMC appears as a SIP extensions to the far end IP PBX.
    - Select **H323 Trunk** to indicate H.323 based VoIP trunk.
    - Select **H323 Extensions** to indicate that the NMC appears as a number of H.323 extensions to the far end IP PBX.
    - Select **ANALOG** to indicate an analog circuit group.
3. Enter the IP Address of the destination IP PBX in the **Circuit Group Address** field.
4. Select **Submit** to save the circuit group information or **Cancel** to ignore the changes and return to the *Configure Circuit Groups page*.

The Edit Circuit Group Page

The *Edit Circuit Group page* allows you to edit a circuit group.

To open the *Edit Circuit Group page*, go to the *Configure Circuit Groups page* and select the **highlighted circuit group name** for the circuit group you want to edit. The system displays the *Edit Circuit Group page*, illustrated below.

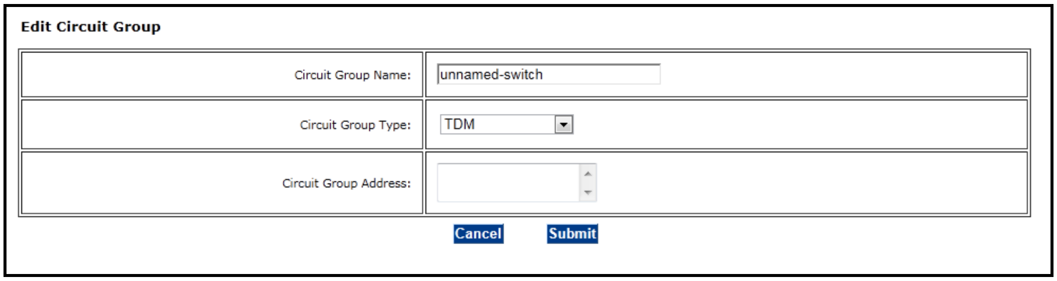


Figure 109: The Edit Circuit Group Page

1. Edit the **Circuit Group Name** to define the group of circuits.
2. Select the **Circuit Group Type** from the drop down list.
   - Select **TDM** to indicate a T1 or E1 trunk.
   - Select **SIP Trunk** to indicate a VoIP trunk.
   - Select **SIP Extensions** to indicate if the NMC appears as a SIP extensions to the far end IP PBX.
   - Select **H323 Trunk** to indicate H.323 based VoIP trunk.
   - Select **H323 Extensions** to indicate that the NMC appears as a number of H.323 extensions to the far end IP PBX.
   - Select **ANALOG** to indicate an analog circuit group.
3. Edit the IP Address of the destination IP PBX in the **Circuit Group Address** field.
4. Select **Submit** to save the circuit group information or **Cancel** to ignore the changes and return to the *Configure Circuit Groups page*.

The Configure System Parameters Page — Service Settings Tab

The *Service Settings tab* allows you to define system-wide settings of various services.

Select the *Service Setting tab* from the *Configure System Parameters page*. The system displays the *Configure Services page*, illustrated below.

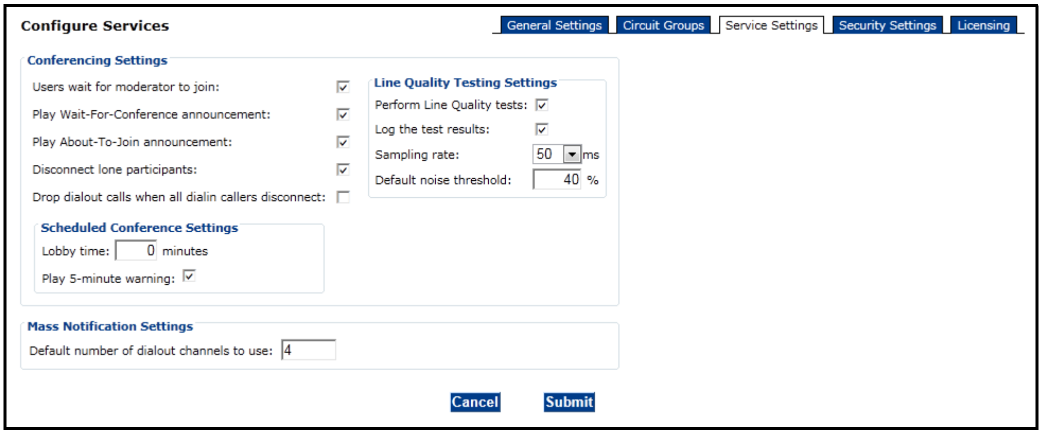


Figure 110: The Configure Services Page

1. Set the **Default Conferencing Settings**. These settings apply to basic conferences.
   - Check the **Users wait for moderator to join** box to indicate that a moderator must join conferences before the other users can hear each other.
   - Check the **Play Wait-For-Conference announcement** box to indicate that conferences play a message when participants join before the conference has begun.
   - Check the **Play "about to join" announcement** box to play the "You are about to join the conference in progress" announcement to each participant as they join conferences.
   - Check the **Disconnect Lone Participants** box to indicate that if all participants leave the conference, a single remaining participant will be automatically disconnected.
   - Check the **Drop dialout calls when all dialin callers disconnect** box to indicate that if all dial in participants leave the conference, any dial out participants are automatically disconnected.
   - Indicate the **Scheduled Conference Settings**.
     – Enter a time (in minutes) a participant's PIN will be accepted before the start time of a scheduled audio conference in the **Lobby Time** field.
     – Check the **Play 5-minute warning** box to play a message notifying the moderator and the participants that the end time for their scheduled conference is five minutes away.
   - Indicate the **Line Quality Testing Settings**.
     – Check the **Perform Line Quality tests** box to turn on the Auto mute of lines with Noise or Echo feature. Clear the box to turn this feature off.
     – If you have activated the Line Quality tests, check the **Log the test results** box to store a log of Line Quality test results.

– Select a **Sampling rate** from the drop down list.
– Enter the **Default noise threshhold** as a percentage. Callers with noise levels above this threshhold will enter their conferences muted.

2. Configure the **Mass Notification Settings**.
   - Enter the **Default Number of Dialout Channels** to use to indicate the number of voice channels that will be used by default for sending mass notification calls.
3. Select **Submit** to save the configuration parameters or **Cancel** to ignore the changes and return to the *Home page*.

The Configure System Parameters Page — Security Settings Tab

The *Security Settings tab* allows you to define the security settings.

Select the *Security Setting tab* from the *Configure System Parameters page*. The system displays the *Configure Services page*, illustrated below.

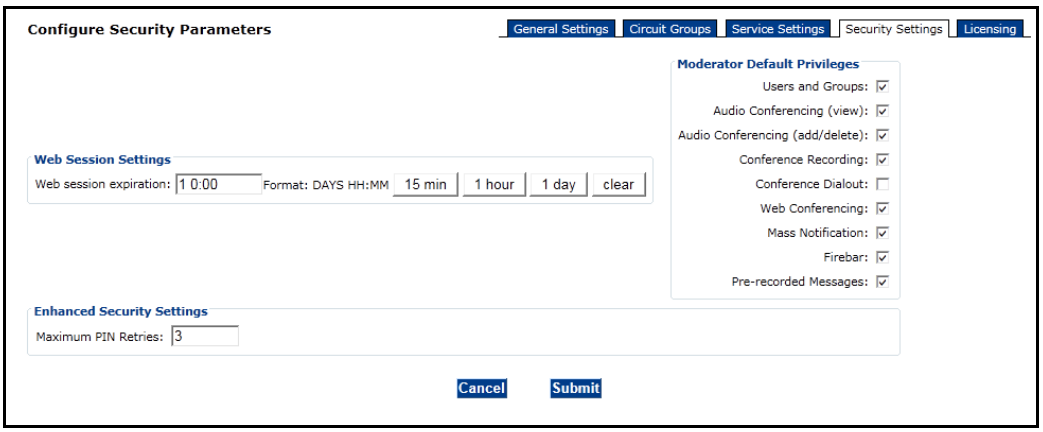


Figure 111: The Configure Security Settings Page

1. Check or clear the **Moderator Default Privileges** boxes to indicate the default service privileges when creating new moderators.
2. Indicate the **Web Session Settings**. Enter the amount of time before a web session will expire in days, hours, and minutes. You may use the **15 min**, **1 hour**, and/or **1 day** buttons to enter those amounts automatically. Use the **Clear** button to clear the field if you need to start over.
3. For the Enhanced Security Settings, enter the **Maximum PIN Retries** to indicate the maximum number of times a participant may retry a PIN before locking the service to that participant.
4. Select **Submit** to save the configuration parameters or **Cancel** to ignore the changes and return to the *Home page*.

The Configure System Parameters Page — Licensing Tab

The *Licensing tab* allows you to upload a licensing file for your licensed services. It displays the Hardware Address required for generating a license.

Select the *Licensing tab* from the *Configure System Parameters page*. The system displays the *Licensing page*.

1. Select the **Browse** button to select a file to upload.

The system displays the **Choose File to Upload dialog** box.

2. Navigate to the file you want to upload on your computer and select **Open**.

3. Select **Upload License**.

The system displays a notification, illustrated below, that all conferences will end and that the process will take several minutes.

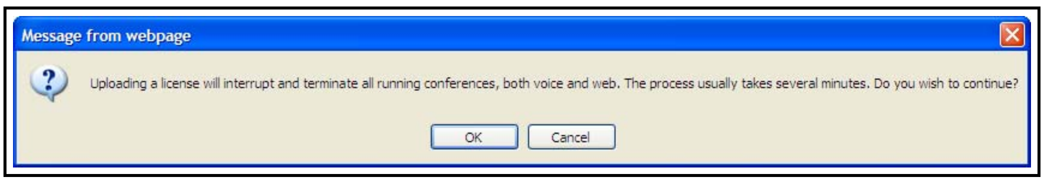


Figure 112: Upload License Warning

4. Select **OK** to continue.

The system displays the license information on the Licensing tab. A sample is illustrated below.

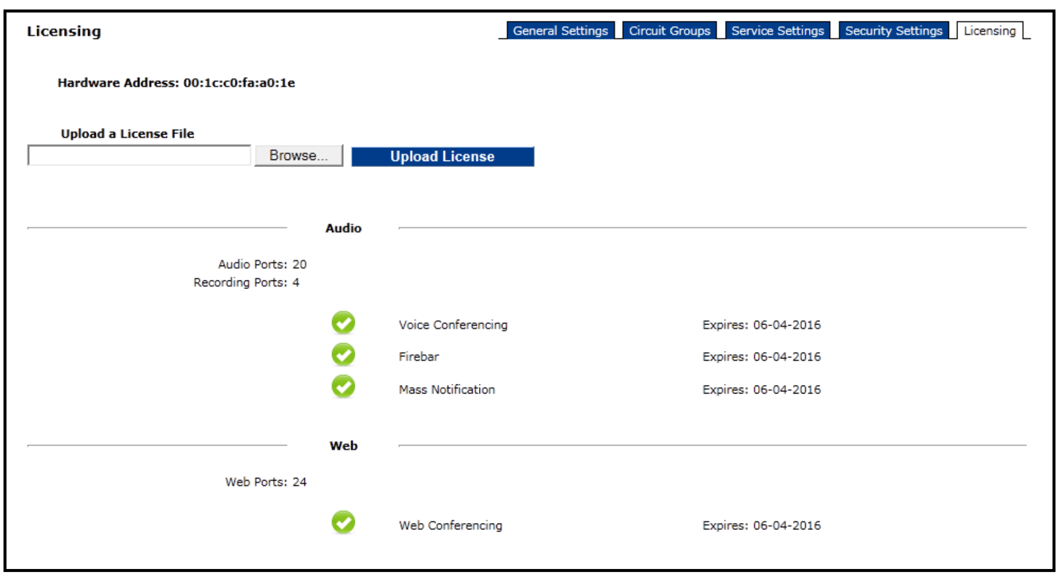


Figure 113: The Configure Licensing Page

Note:

Contact support if you have difficulties with the licensing process.

CHAPTER 17 – Maintaining the System

The System Maintenance page allows you to generate and download diagnostics to help customer support when performing diagnostics on your system. displays the currently installed version of the software. You can back up the NMC database and other relevant files to your personal computer. If needed, you can import the backed up file to restore the database. You can also purge all usage data from the system when required, or reset the system to the factory default state. This chapter explains the system maintenance features.

Backing Up or Restoring Data

The *System Maintenance page* has two tabs. The system defaults to *The Backup/Restore tab*. This page allows you to create, download, delete, or upload a backup file. It also allows you to restore data from a selected backup file. *The Advanced Functions tab* allows you to clear data or stop the voice processor.

The System Maintenance Page — Backup/Restore Tab

To set backup or restore functions, select **Maintenance** from the *Admin Menu* or the **Maintenance link** on the *Home page*.The system displays the *System Maintenance page*, defaulted to the *Backup/Restore tab*, illustrated below.

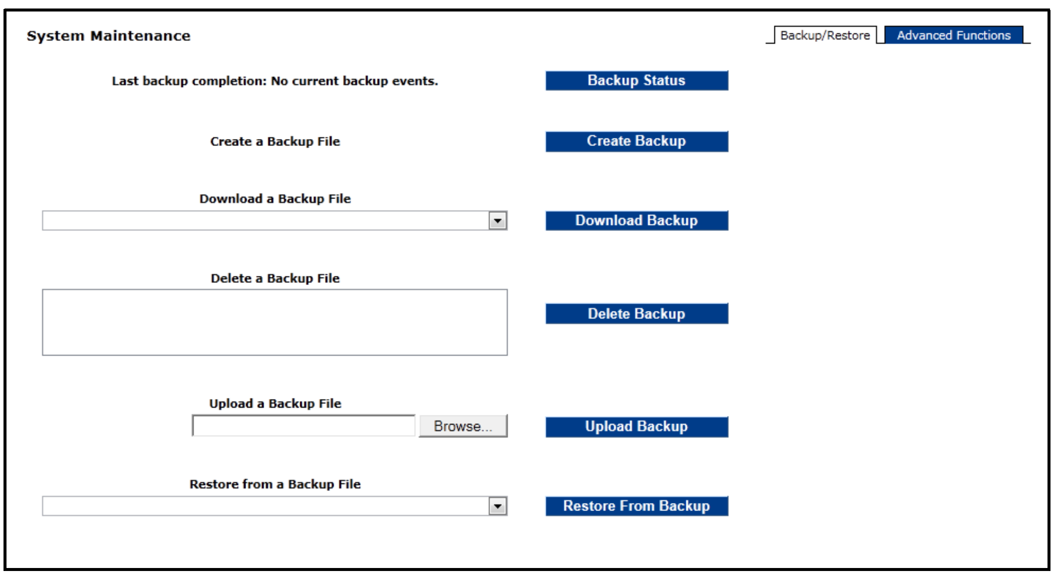


Figure 114: The System Maintenance Page - Backup/Restore Tab

1. To create a backup file, select **Create Backup.**
2. To download a backup file from the server, selection an file from the **Download a Backup File** drop down list and select **Download Backup**.
3. To delete a server backup file, select a file from the **Delete a Backup File** drop down list and select **Delete Backup**.
4. To upload a backup file to the server, select the **Browse** button to open a *Choose File* dialog. Select the file located on your computer and select **Upload Backup**.
5. To restore the system to a previous backup file, select a file from the **Restore from a Backup File** drop down list and select **Restore From Backup**.

Clearing Data or Restarting the Voice Processor

The Advanced Functions tab of the *System Maintenance page* allows you to clear data or stop the voice processor.

The System Maintenance Page — Advanced Functions

The System Maintenance page allows you to generate and download diagnostics to help customer support when performing diagnostics on your system. The *Advanced Functions tab* allows you to clear data. Also, the voice process application needs to be restarted to accommodate any changes made to the *System Configuration page*. After making appropriate changes, you must restart the Voice Processor for those changes to take effect.

To generate or download system diagnostics clear data or stop or restart the voice processor, select **Maintenance** from the *Admin Menu* or the **Maintenance link** on the *Home page*. select the *Advanced Functions tab* from the *System Maintenance page*. The system displays the *System Maintenance - Advanced tab page*, illustrated below.

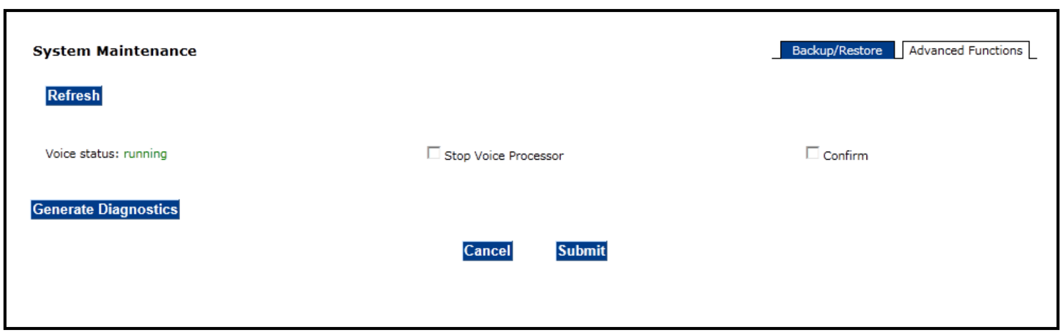


Figure 115: The System Maintenance Page - Advanced Functions Tab

1. Select **Generate Diagnostics** to generate a single file that contains important information for your system.

2. When the file has finished generating, select **Download Diagnostics**.

3. Check the **Stop Voice Processor** box to stop the voice process application for accommodating any changes made to the *System Configuration page*. Check the **Confirm** box. Save the file to the local PC.

4. To restart the voice processor, return to the *Advanced Functions tab* and check the **Restart Voice Processor** box. Check the **Confirm** box. The file is quite large. Customer Support can advise you of the best method of transferring the file to them.

5. Select **Submit** to submit the changes or **Cancel** to ignore the changes and return to the *Home page*.

CHAPTER 18 – Monitoring the System Status

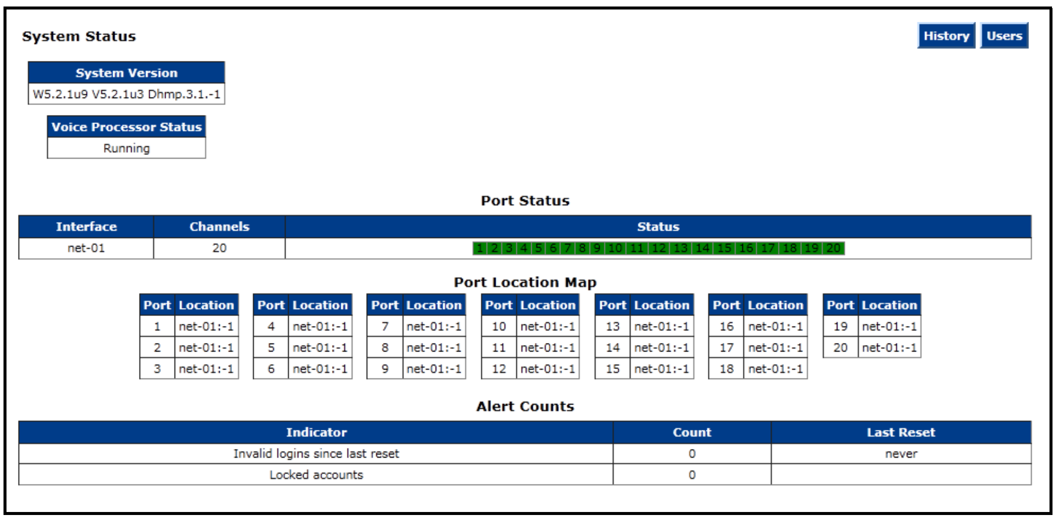
This chapter explains how to monitor the system status and search through system status history logs.

Viewing the System Status

Use *The System Status Page* to see the status of NMC's voice application, the system's redundant RAID-1 hard drives, and each circuit or VoIP port.

The System Status Page

To access the system status, select **System Status** from the *Admin Menu* or the **System Status link** on the *Home page*. The system displays the *System Status page*, illustrated below.



System Status

History | Users

System Version
W5.2.1u9 V5.2.1u3 Dhmp.3.1.-1

Voice Processor Status
Running

Port Status

Interface	Channels	Status
net-01	20	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Port Location Map

Port	Location
1	net-01:-1
2	net-01:-1
3	net-01:-1

Port	Location
4	net-01:-1
5	net-01:-1
6	net-01:-1

Port	Location
7	net-01:-1
8	net-01:-1
9	net-01:-1

Port	Location
10	net-01:-1
11	net-01:-1
12	net-01:-1

Port	Location
13	net-01:-1
14	net-01:-1
15	net-01:-1

Port	Location
16	net-01:-1
17	net-01:-1
18	net-01:-1

Port	Location
19	net-01:-1
20	net-01:-1

Alert Counts

Indicator	Count	Last Reset
Invalid logins since last reset	0	never
Locked accounts	0	

Figure 116: The System Status Page

The **System Version** shows the version numbers for the (W) web application (V) voice application and (D) the sip stack version.

The **Voice Processor Status** field shows the status of the voice application either running or stopped.

A typical system is equipped with redundant hard drives in RAID-1 disk mirroring configuration. The **Port Status** field shows the status of individual hard drives and their associated RAID status.

The **Port Location Map** field shows the status of each circuit (or VoIP port). Unblocked circuits are green. Blocked circuits are red.

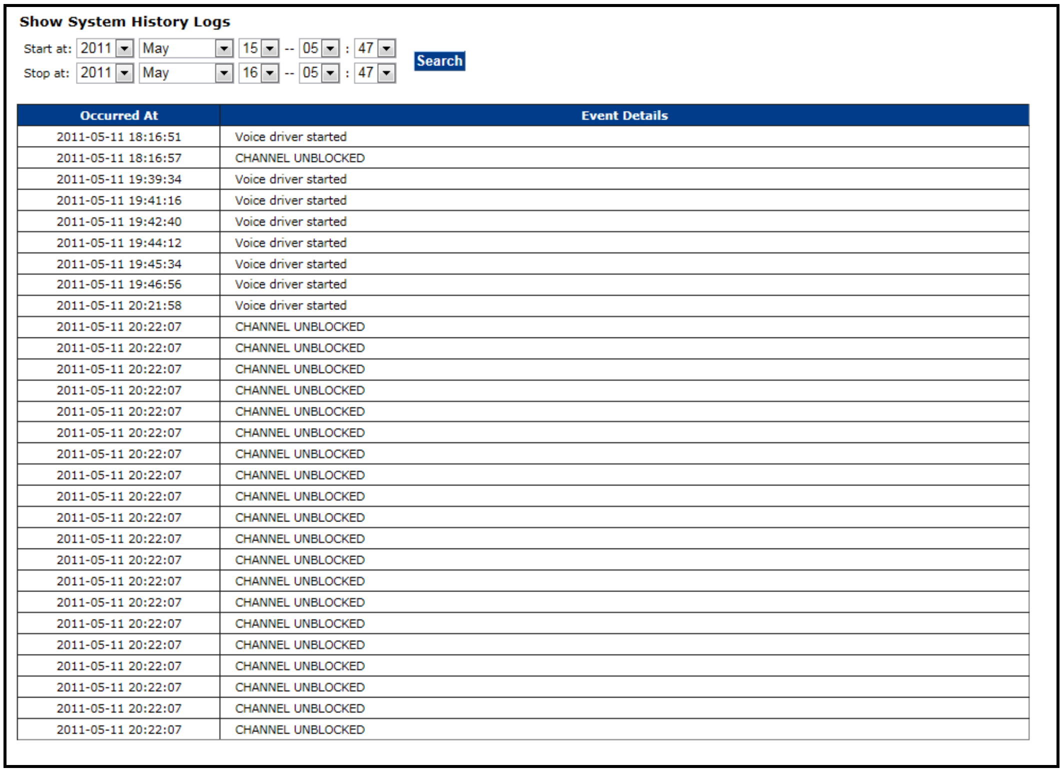
The **History** link in the top right cornerallows you to search through system status history logs.

The **Users** link in the top right corner allows you to see all the Users logged into the system.

Searching System Status History Logs

The System Status History Logs display system-wide events and the time at which they occurred. You can search through the recent history to find a particular log.

Select the **History** link from the *System Status page*. The system displays a list of all history logs. A sample is illustrated below.



Occurred At	Event Details
2011-05-11 18:16:51	Voice driver started
2011-05-11 18:16:57	CHANNEL UNBLOCKED
2011-05-11 19:39:34	Voice driver started
2011-05-11 19:41:16	Voice driver started
2011-05-11 19:42:40	Voice driver started
2011-05-11 19:44:12	Voice driver started
2011-05-11 19:45:34	Voice driver started
2011-05-11 19:46:56	Voice driver started
2011-05-11 20:21:58	Voice driver started
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED
2011-05-11 20:22:07	CHANNEL UNBLOCKED

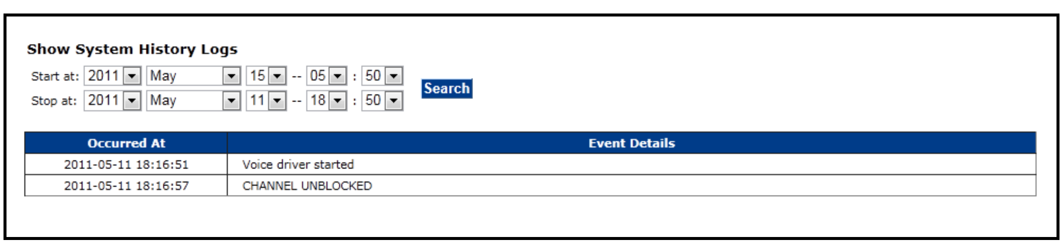
Figure 117: System Status History Logs Page

1. Select the year, month, date, hour (on a 24-hour clock), and minute for the **Start** of the time frame you want to view.

2. Select the year, month, date, hour, and minute for the **Stop** of the time frame you want to view.

3. Select **Search**.

The system displays any matching entries. A sample is illustrated below.

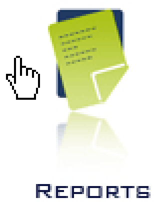


Occurred At	Event Details
2011-05-11 18:16:51	Voice driver started
2011-05-11 18:16:57	CHANNEL UNBLOCKED

Figure 118: System Status History Logs Search

CHAPTER 19 – Using Reports

This chapter explains how to use the reporting features. The *Reports page* has three tabs, including *Service Reports*, *Web Activity Logs*, and *Usage Reports*.

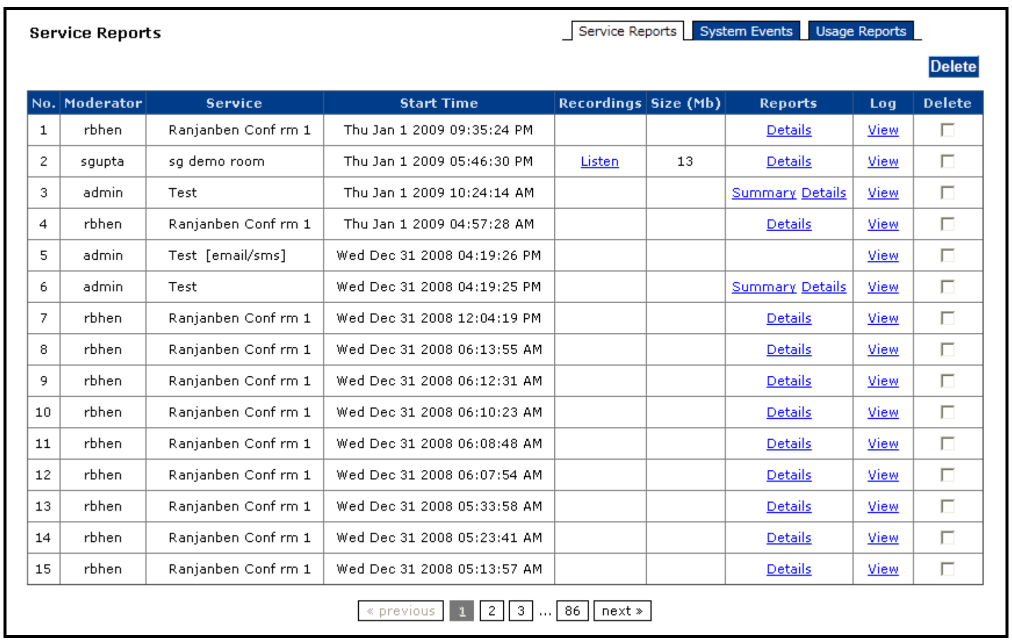


Viewing Service Reports

The system creates reports for all conferences and Mass Notifications. The reports are listed on *The Service Reports Page*. This page provides links for Audio Conference Recordings and Web Conference Recordings, Firebar Conference Recordings, Hoot-n-Holler Recordings, and Mass Notification logs, and overall voice activity logs across all Moderators on the system. *The Service Reports Page* indicates additional information for selected services.

The Service Reports Page

To access the service reports, select **Reports** from the *Admin Menu* or the **Reports link** on the *Home page*. The system displays the *Service Reports page*, illustrated below.



Service Reports

Service Reports | System Events | Usage Reports

Delete

No.	Moderator	Service	Start Time	Recordings	Size (Mb)	Reports	Log	Delete
1	rbhen	Ranjanben Conf rm 1	Thu Jan 1 2009 09:35:24 PM			Details	View	☐
2	sgupta	sg demo room	Thu Jan 1 2009 05:46:30 PM	Listen	13	Details	View	☐
3	admin	Test	Thu Jan 1 2009 10:24:14 AM			Summary Details	View	☐
4	rbhen	Ranjanben Conf rm 1	Thu Jan 1 2009 04:57:28 AM			Details	View	☐
5	admin	Test [email/sms]	Wed Dec 31 2008 04:19:26 PM				View	☐
6	admin	Test	Wed Dec 31 2008 04:19:25 PM			Summary Details	View	☐
7	rbhen	Ranjanben Conf rm 1	Wed Dec 31 2008 12:04:19 PM			Details	View	☐
8	rbhen	Ranjanben Conf rm 1	Wed Dec 31 2008 06:13:55 AM			Details	View	☐
9	rbhen	Ranjanben Conf rm 1	Wed Dec 31 2008 06:12:31 AM			Details	View	☐
10	rbhen	Ranjanben Conf rm 1	Wed Dec 31 2008 06:10:23 AM			Details	View	☐
11	rbhen	Ranjanben Conf rm 1	Wed Dec 31 2008 06:08:48 AM			Details	View	☐
12	rbhen	Ranjanben Conf rm 1	Wed Dec 31 2008 06:07:54 AM			Details	View	☐
13	rbhen	Ranjanben Conf rm 1	Wed Dec 31 2008 05:33:58 AM			Details	View	☐
14	rbhen	Ranjanben Conf rm 1	Wed Dec 31 2008 05:23:41 AM			Details	View	☐
15	rbhen	Ranjanben Conf rm 1	Wed Dec 31 2008 05:13:57 AM			Details	View	☐

« previous 1 2 3 ... 86 next »

Figure 119: The Service Reports Page

The system displays the following information for your reports:

- The **Number** is a system generated report number.
- The **Moderator** is the name of the moderator who initiated the service.
- The **Service** is the conference name.
- The **Start Time** indicates when the conference or service began.
- The **Recordings** column lists any recordings associated with the selected conference. Single recordings are marked **Listen**. If there are multiple recordings (as for multiple

segments or a recurring conference), the recordings are numbered. Refer to the "Listening to a Recorded Conference" section on page 146 for more information.

- The **Size** indicates the file size of the recording(s).
- The **Reports** column includes links to summary and/or detail reports.The **Summary** link provides an overall summary of the Mass Notification service or Firebar conference. The **Details** link opens a CSV file containing a detailed view of the service. Refer to the "Viewing a Summary Report" section on page 146 or the "Viewing Report Details" section on page 147 for more information.
- The **Log** column includes a link to download call textual logs associated with the conference all services. Refer to the "Viewing a Conference Log" section on page 148the *Viewing a Conference Log* section for more information.

Note:

The Recordings and Size columns are not applicable to Mass Notification Reports.

To delete a report, check the **Delete** box next to the item and select **Delete**.

The **previous**, **next**, and **page numbers** at the bottom allow you to navigate to different pages in the list of reports.

Listening to a Recorded Conference

The Service Reports Page provides links to any recordings of your conferences.

1. To listen to recorded conference, select the **Listen** link (or the number for multiple segments) next to the conference listed on the *Service Reports page*.

The system opens your default media player and begins playing the recording.

Viewing a Summary Report

To open a summary report, select the **Summary** link next to the service listed on the *Service Reports page*. The system displays the *Service Summary Report*, illustrated below.

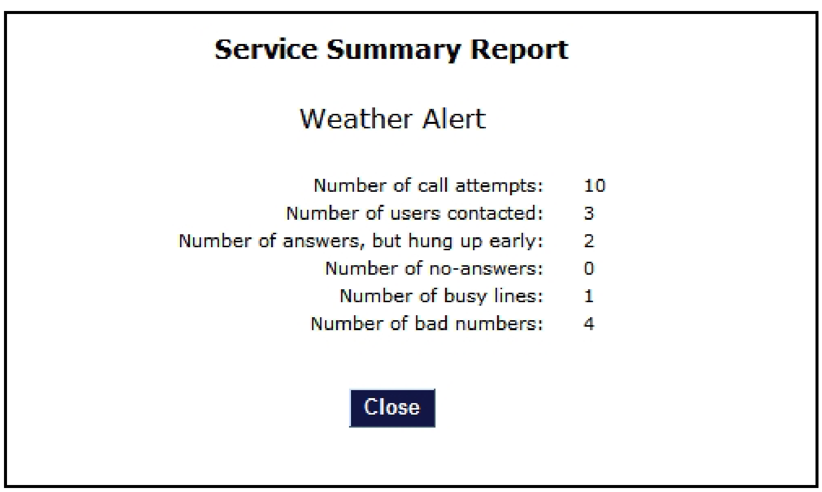


Figure 120: The Service Summary Report Page

The Service Summary Report provides a high level view of the following numbers:

- Call attempts
- Users contacted
- Hang ups
- No-answers
- Busy lines
- Bad numbers

1. Select **Close** when you have finished viewing the summary report.

Note:

A user is considered contacted if a message is left for him/her on an answering machine.

Viewing Report Details

You can download a CSV file with service details to use in your spreadsheet program to sort or manipulate the information as needed.

1. To download a CSV file containing details about a service, select the **Details** link next to the service listed on the *Service Reports page*.

The system opens a dialog asking whether you would like to Open or Save the file.

2. Select **Open** to open the file in a spreadsheet (such as Microsoft Excel) or **Save** to save the report on your computer to open at a later date.

	A	B	C	D	E
1	Caller	Name	Called At	Disconnected At	Time (min)
2	469-555-1212	Nancy Jones	2010-09-09 14:13:11 CDT	2010-09-09 14:25:40 CDT	12.5
3	469-555-1213	John Blair	2010-09-09 14:13:20 CDT	2010-09-09 14:25:40 CDT	12.3
4	469-555-1214	Joe Smith	2010-09-09 14:13:26 CDT	2010-09-09 14:25:40 CDT	12.2
5	972-590-0211	Shift Supervisor	2010-09-09 14:13:47 CDT	2010-09-09 14:25:52 CDT	12.1

Figure 121: Report Details File

The file displays the following information for conferences:

- The caller phone number
- Name, if available in the system database as a user
- The time the participant was called and disconnected
- The total time the participant was connected
- Any votes collected during the conference

The file displays the following information for Mass Notifications:

- Participant name
- Number dialed
- Time Called
- The response, if the Mass Notification included a Prompt for Vote/Response option
- The time the message body played
- The time the call disconnected
- The duration of play
- The outcome
- Additional information, such as whether the contact was an answering machine

A sample *Detail View* for a Mass Notification is illustrated below.

	A	B	C	D	E	F	G	H	I	J
1	Name	Number Dialed	Called At	Response	Msg Body Played At	Disconnected At	Play Duration	Time (h:m:s)	Outcome	Additional Info
2	Dennis Miller	9725900203	2010-09-13 15:56:37 CDT	N/A	N/A	2010-09-13 15:56:38 CDT	N/A	N/A	BUSY	
3	Mary Doe	9725900202	2010-09-13 15:56:37 CDT	N/A	N/A	2010-09-13 15:56:57 CDT	N/A	N/A	ANSWERED	NOT-CONTACTE
4	Shift Supervisor	9725900211	2010-09-13 15:56:37 CDT	3	2010-09-13 15:57:00 CDT	2010-09-13 15:57:26 CDT	26	N/A	ANSWERED	CONTACTED
5	James Smith	9725900206	2010-09-13 15:56:37 CDT	2	2010-09-13 15:56:59 CDT	2010-09-13 15:57:28 CDT	29	N/A	ANSWERED	CONTACTED
6	Mary Doe	9725900202	2010-09-13 15:57:28 CDT	2	N/A	2010-09-13 15:57:40 CDT	N/A	N/A	ANSWERED	NOT-CONTACTE
7	Dennis Miller	9725900203	2010-09-13 15:57:26 CDT	3	2010-09-13 15:57:51 CDT	2010-09-13 15:58:44 CDT	53	N/A	ANSWERED	CONTACTED

Figure 122: Sample Detail Report (Excel) for Mass Notification

Viewing a Conference Log

The conference log provides details on when each participant joined and left the conference and the time of any in-conference controls.

1. To view the conference log, go to the *Service Reports page* and select the **View** link next to the conference.

The system displays the log information, as illustrated below.

Figure 123: The Detailed Service Activity Log

2. To download a text file including the log information, select **Download**.

The system opens a dialog asking whether you would like to Open or Save the file. Select **Open** to open the file in Notepad or **Save** to save the log on your computer to open at a later date.

The file displays the conference events (such as participants joining) by the time they occurred. It also indicates the line noise detection for determining whether to allow a participant to join a conference unmuted.

3. To return to the *Service Reports page*, select **Cancel**.

Viewing a Mass Notification Log

The Mass Notification log provides details on the time of each action of the Mass Notification.

1. To view the Mass Notification log, select the **View** link next to the Mass Notification listed on the *Service Reports page*.

The system displays the log information, as illustrated below.

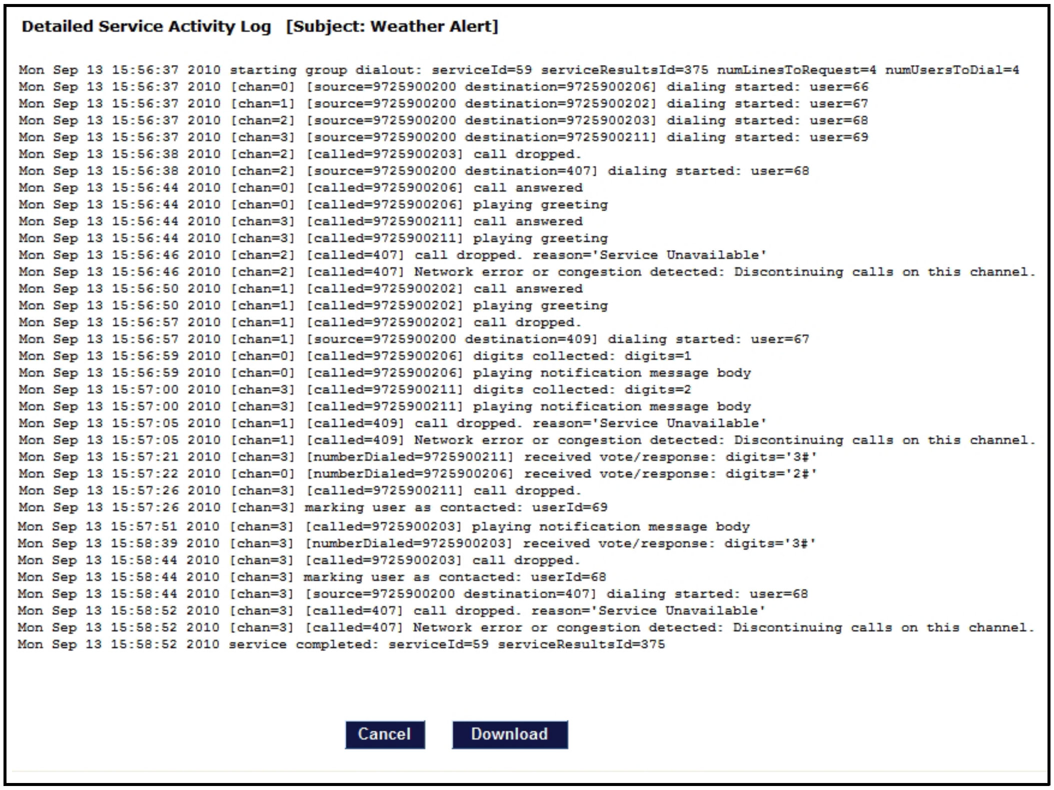


Figure 124: The Detailed Service Activity Log

2. To download a text file including the log information, select **Download**.

The system opens a dialog asking whether you would like to Open or Save the file. Select **Open** to open the file in Notepad or **Save** to save the log on your computer to open at a later date.

The file displays the Mass Notification events (such as digits collected for a response) by the time they occurred.

3. To return to the *Service Reports page*, select **Cancel**.

Viewing a Service Activity Log

The Service Activity Log allows you to view all the details for the selected service.

The Detailed Service Activity Log Page

The service activity log provides call textual details on the selected service.

1. To view the conference log, go to the *Service Reports page* and select the **View** link next to the service.

The system displays the log information, as illustrated below.

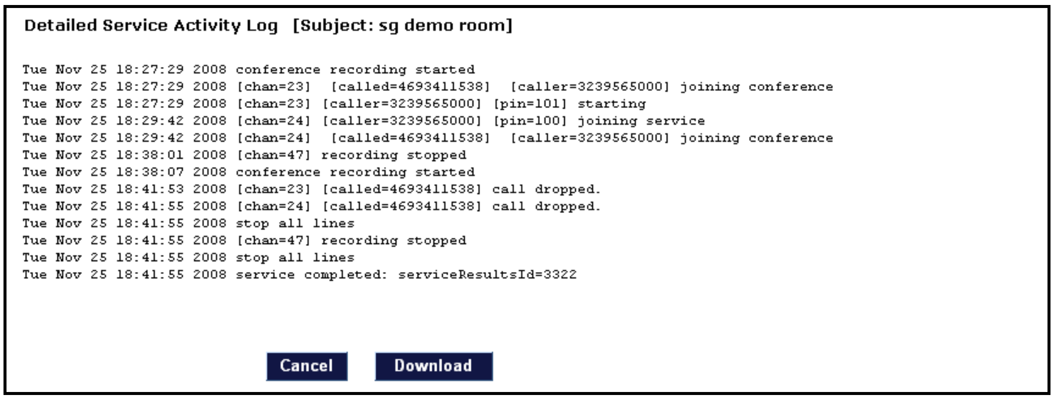


Figure 125: The Detailed Service Activity Log

2. To download a text file including the log information, select **Download**.

The system opens a dialog asking whether you would like to Open or Save the file. Select **Open** to open the file in Notepad or **Save** to save the log on your computer to open at a later date.

The file displays the conference events (such as participants joining) by the time they occurred.

3. To return to the *Service Reports page*, select **Cancel**.

Viewing Web Activity Logs

The *Web History Logs page* provides web activity logs across all Moderators in the system. These logs are initiated from the *Real View page*.

The System Events Page

The *System Events page* shows a history of actions that are initiated from the Web interface. It also shows Voice Quality events that control whether a user enters a conference muted or not muted.

Select the *System Events tab* from the *Service Reports page*. The system displays the *System Events page*, illustrated below.

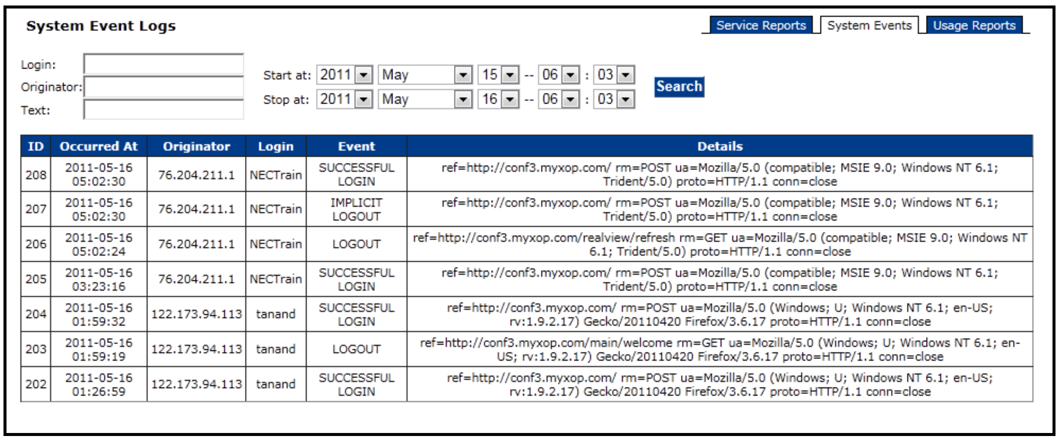


Figure 126: The System Events Page

By default, the previous 24 hours are shown. For each event the following information is displayed:

- A system generated log number
- The time at which the event occurred
- The originating login account
- A description of the event

You can search through the recent history to find a particular web activity log.

1. Select the year, month, date, hour (on a 24-hour clock), and minute for the **Start** of the time frame you want to view.

2. Select the year, month, date, hour, and minute for the **Stop** of the time frame you want to view.

3. Select **Search**.

The system displays any matching entries.

Viewing Usage Reports

The *Usage Reports page* allows you to run a variety of queries to determine usage within a certain time frame, by moderator, and by service type.

The Usage Reports Page

The *Usage Reports page* shows a history of usage within a given time period.

Select the *Usage Reports tab* from the *Service Reports page*. The system displays the *Usage Reports page*, illustrated below.

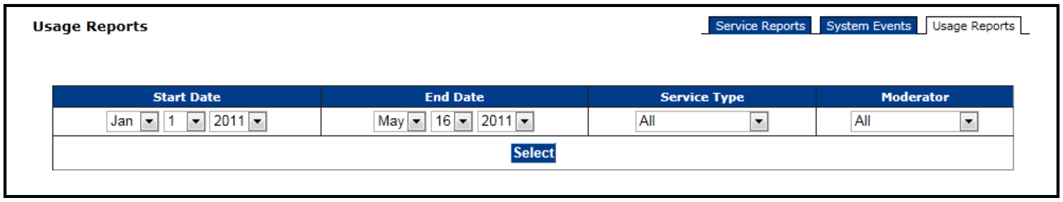
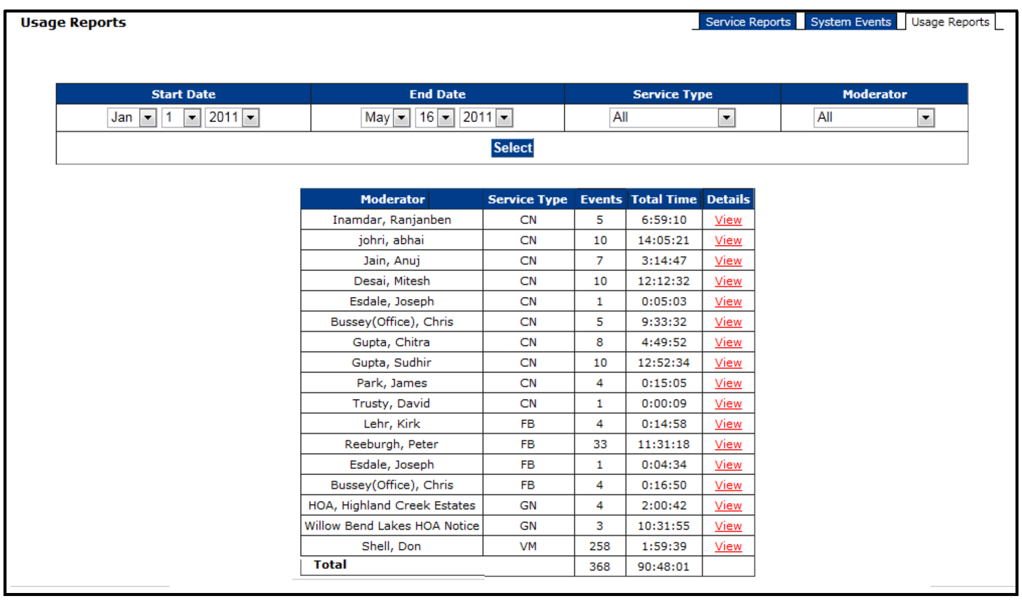


Figure 127: The Usage Reports Page

To determine the time period for which to display usage reports:

1. Select the year, month, date, hour (on a 24-hour clock), and minute for the **Start** of the time frame you want to view.
2. Select the year, month, date, hour, and minute for the **Stop** of the time frame you want to view.
3. Select the **Service Type** from the drop down list.
4. Select the **Moderator** from the drop down list.
5. Select **Search**.

The system displays any matching entries. A sample is illustrated below.



Moderator	Service Type	Events	Total Time	Details
Inamdar, Ranjanben	CN	5	6:59:10	View
johri, abhai	CN	10	14:05:21	View
Jain, Anuj	CN	7	3:14:47	View
Desai, Mitesh	CN	10	12:12:32	View
Esdale, Joseph	CN	1	0:05:03	View
Bussey(Office), Chris	CN	5	9:33:32	View
Gupta, Chitra	CN	8	4:49:52	View
Gupta, Sudhir	CN	10	12:52:34	View
Park, James	CN	4	0:15:05	View
Trusty, David	CN	1	0:00:09	View
Lehr, Kirk	FB	4	0:14:58	View
Reeburgh, Peter	FB	33	11:31:18	View
Esdale, Joseph	FB	1	0:04:34	View
Bussey(Office), Chris	FB	4	0:16:50	View
HOA, Highland Creek Estates	GN	4	2:00:42	View
Willow Bend Lakes HOA Notice	GN	3	10:31:55	View
Shell, Don	VM	258	1:59:39	View
Total		368	90:48:01	

Figure 128: The Usage Reports Page With Matching Entries

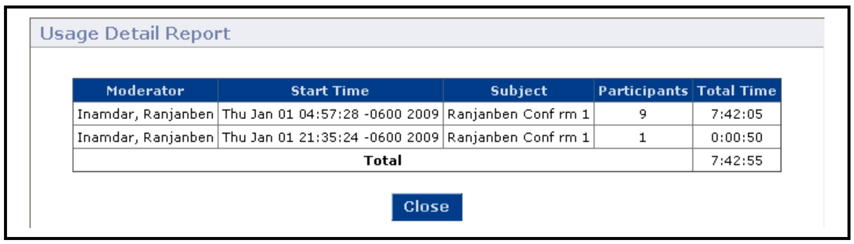
Reports are shown by company, moderator, service type, number of events for that service, total time, and a link to more detailed records is provided.

Viewing the Usage Detail Report

The *Usage Detail Report* provides details about the selected service usage. It shows the Moderator who used the service, the start time, the name of the service (or Subject), the number of participants, and the total time.

1. To view the *Usage Detail Report*, go to the *Usage Reports page* and select the **View** link next to the service.

The system displays the log information, as illustrated below.


Usage Detail Report

Moderator	Start Time	Subject	Participants	Total Time
Inamdar, Ranjanben	Thu Jan 01 04:57:28 -0600 2009	Ranjanben Conf rm 1	9	7:42:05
Inamdar, Ranjanben	Thu Jan 01 21:35:24 -0600 2009	Ranjanben Conf rm 1	1	0:00:50
		Total		7:42:55

Figure 129: The Usage Detail Report

2. To return to the *Usage Reports page*, select **Close**.

CHAPTER 20 – Managing Your Profile

This chapter explains how to update your the system administrator profile.

Managing the System Admin Profile

MANAGE PROFILE

The Manage System Administrator Profile page allows you to control your personal information and view the system administrator privileges and defaults.

The Edit Administrator Profile Page

To modify your the system admin profile, including changing your the system admin password, select **Manage Profile** from the *Admin Menu* or the **Manage Profile link** on the *Home page*. The system displays the *Edit Administrator Profile page*, illustrated below.

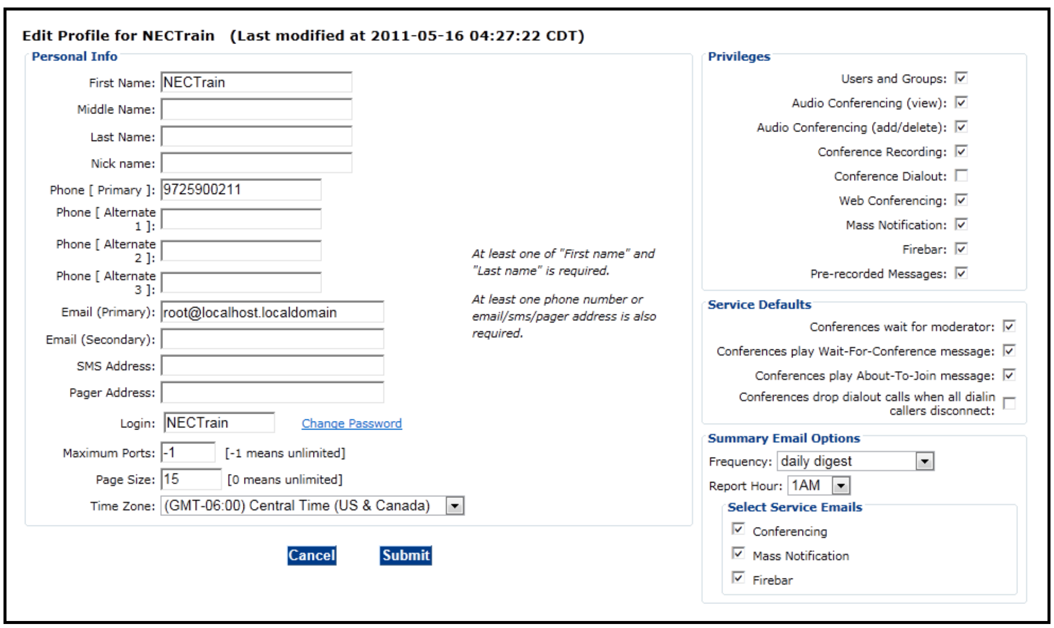


Figure 130: The Edit Moderator Administrator Profile Page

Warning:

For added security, you should change your password at the earliest possible opportunity.

1. Enter your **Personal Information**. Required information includes:
   - Either a first name or last name
   - At least one phone number or email/sms/pager address
   - Your Login ID

Note:

The email address is used as a “from” address when the system generates emails on behalf of the moderator for any service applications.

2. Select the **Change Password** link to open *The Change Password Page*.
3. Select your home time zone from the **Time Zone** drop down list.
4. The **Privileges** on the right side identify the services that are turned on for the profile.
5. Select or deselect the **Defaults** as applicable from the following. These Defaults will apply to any conference added by the Administrator, but do not change existing conferences.
    - Check **Conferences wait for Moderator** to indicate that conferences do not begin until the Moderator joins (if you have that feature).
    - Check **Conferences play Wait-For-Conference message** to indicate that conferences play a message when participants join before the conference has begun.
    - Check **Conferences play About-To-Join message** to indicate that participants hear a message notifying them that they are about to join the conference.
    - Check **Conferences drop dialout calls when all dialin calls disconnect** to hang up calls that have been dialed out from a conference.

Note:

Selecting this option does not affect any existing conferences.

6. Select your preferred **Summary Email Options**:
    - Select a **Frequency** to receive emails from the drop down list. If you select **Daily Digest** as the Frequency, also select the **Report Hour** to indicate the time the email should be sent.
    - Check the service option boxes to indicate the services for which you would like to receive summary email reports.
7. Select **Submit** to save changes to your profile information or **Cancel** to ignore the changes and return to the *Home page*.

The Change Password Page

To change your the system admin password, select the **Change Password** link from the *Edit Moderator Administrator Profile page*. The system displays the *Change Password page*, illustrated below.

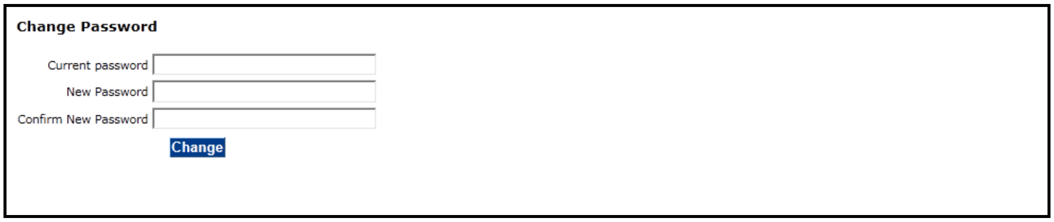


Figure 131: The Change Password Page

1. Enter your **Current Password**.

2. Enter your **New Password**.

Retype your new password in the **Confirm New Password** field.

CHAPTER 21 – Using Online Help

The NMC User Interface includes online help to assist with completing your tasks in each NMC application. Online help is provided as context-sensitive help for the current screen, and as a comprehensive system that supplements the application user guides and system administration guide.

Viewing Context Sensitive Online Help

On each page of the NMC applications, there is a **Help** link in the upper right-hand-corner of the screen, as illustrated below.

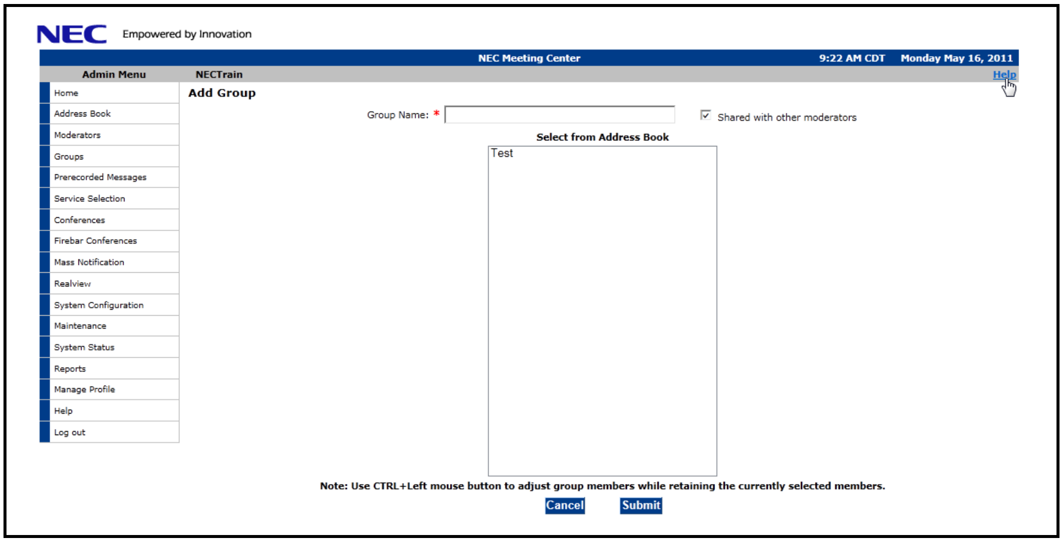
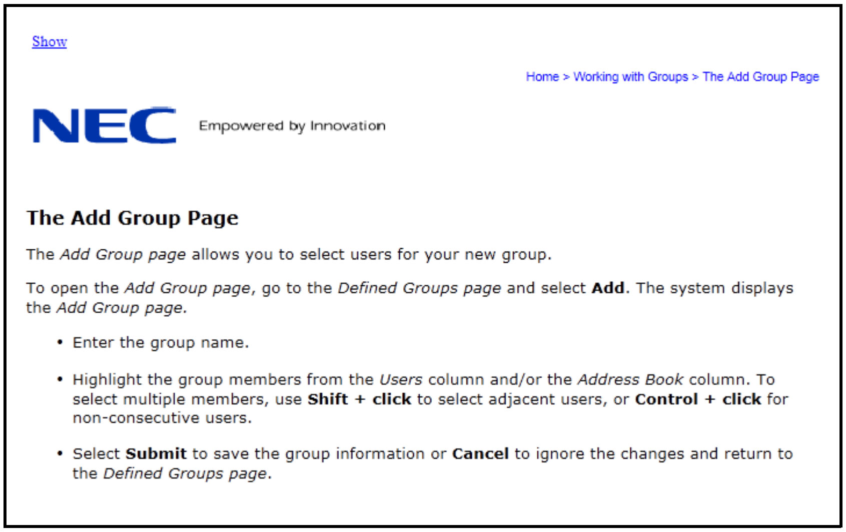


Figure 132: Viewing Online Help for a Page

1. To view online help for the current page, select **Help** from the top right-hand-corner of the screen.

The system displays the online help for that topic in a separate browser window. A sample is illustrated below.



Show

Home > Working with Groups > The Add Group Page

NEC Empowered by Innovation

The Add Group Page

The *Add Group page* allows you to select users for your new group.

To open the *Add Group page*, go to the *Defined Groups page* and select **Add**. The system displays the *Add Group page*.

- Enter the group name.
- Highlight the group members from the *Users* column and/or the *Address Book* column. To select multiple members, use **Shift + click** to select adjacent users, or **Control + click** for non-consecutive users.
- Select **Submit** to save the group information or **Cancel** to ignore the changes and return to the *Defined Groups page*.

Figure 133: Sample Context-Sensitive Online Help

2. When you have finished viewing the online help for that screen, you can close that browser window.

Viewing Comprehensive Online Help

On each page of the NMC applications, there is a **Help** link in the menu bar on the left side of the screen, as illustrated below.

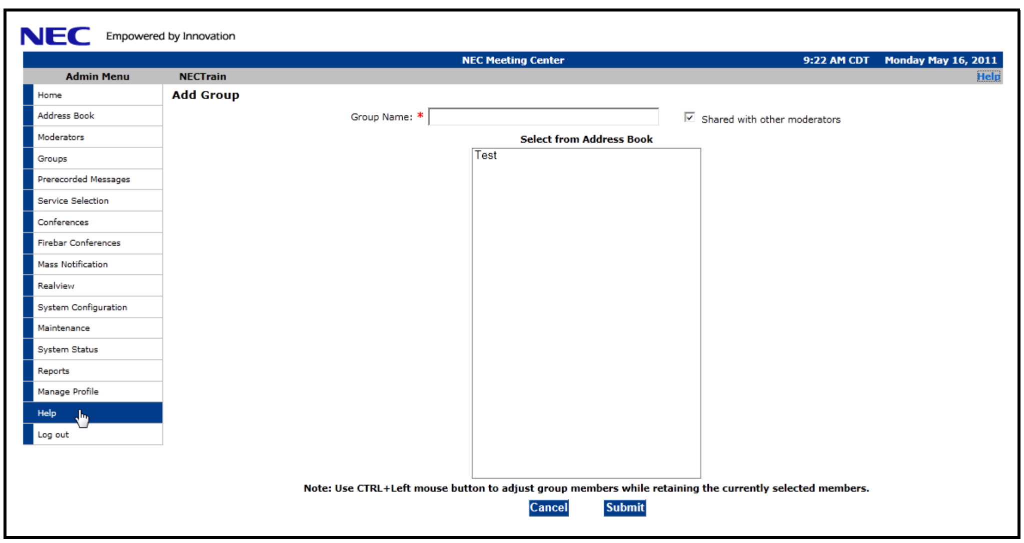


Figure 134: Viewing the Complete Online Help System

1. To view the complete online help system, select **Help** from the menu bar on the left side of the screen.

The system displays the complete online help system, open to the *Getting Started with the NMC User Interface* chapter, as illustrated below.

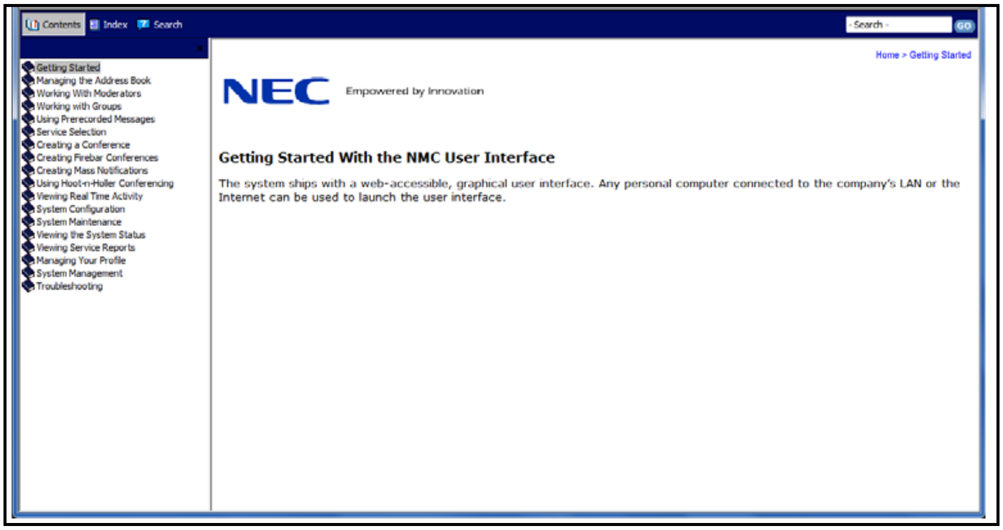


Figure 135: The Complete Online Help System

2. To read a specific topic, click on a Book to open that chapter. Click on a topic to read that topic. A sample is illustrated below.

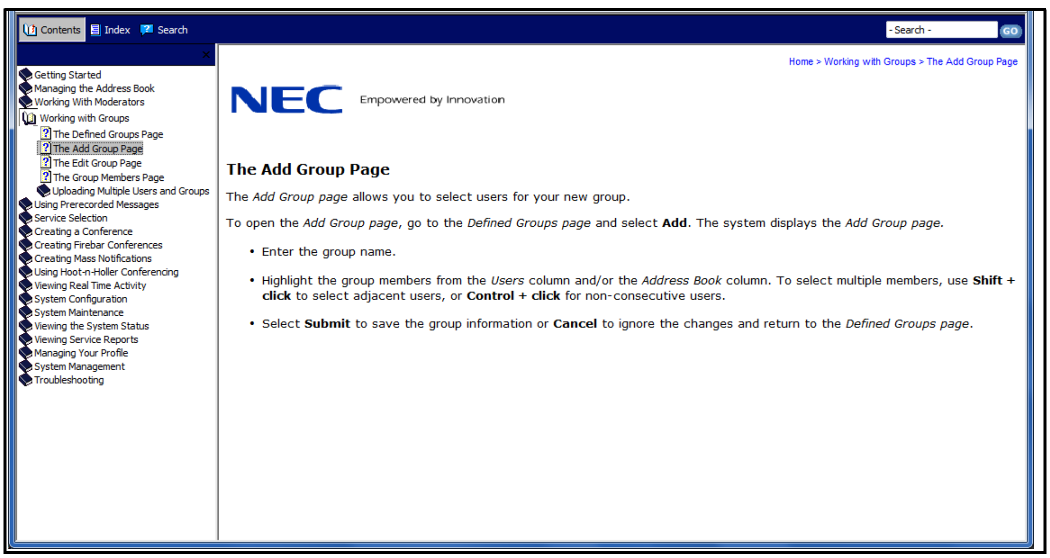


Figure 136: Navigating the Complete Online Help System

3. To look up a specific topic in the Index, click on the **Index** tab.
   - Enter the keyword you would like to find and press **Enter**.

   The system displays the Index, with the closest matching keyword highlighted.
   - Click on a keyword to display the related online help topic, as illustrated below.

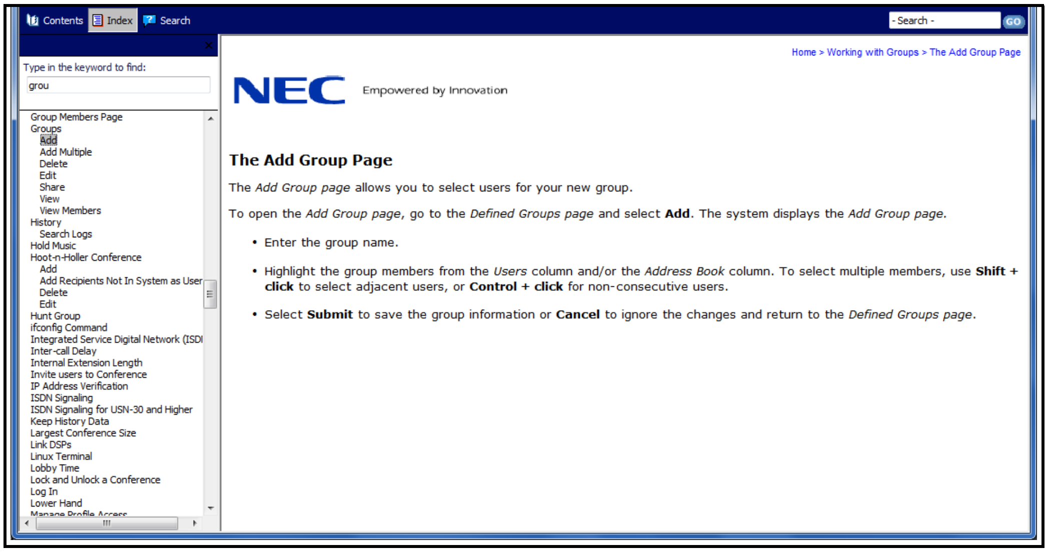


Figure 137: Using the Online Help Index

4. To use the search feature, click on the **Search** tab.
   - Enter the keyword you would like to find
   - Check the Highlight Search Results box to highlight the keyword(s) you entered in the online help topic.
   - Click **Go**.

   The system displays a list of topics that include the keyword(s) you entered.

- Click on a topic file name to display the related online help topic, as illustrated below.

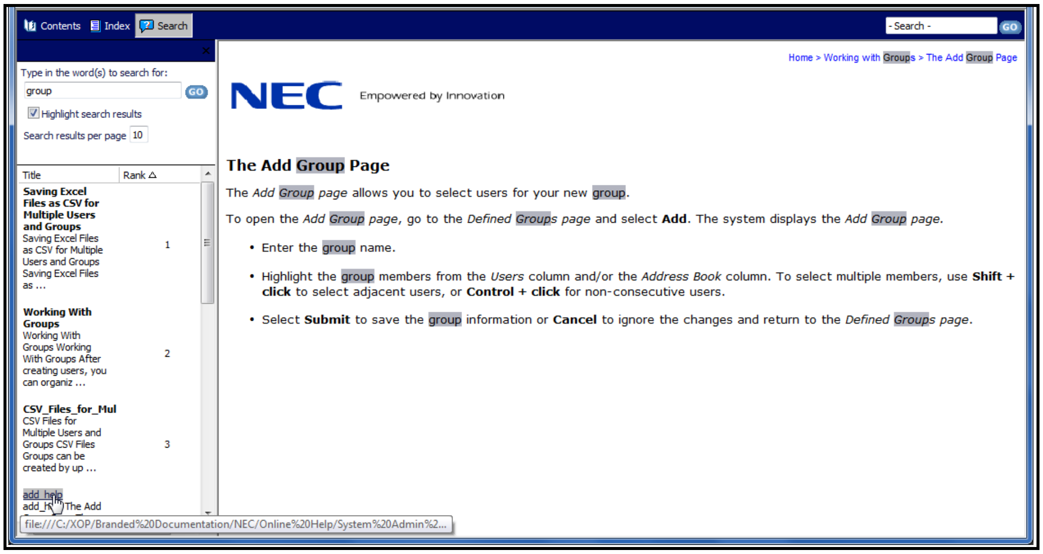


Figure 138: Using the Online Help Search Feature

APPENDIX A – Frequently Asked Questions

General Questions

1. What is a T1 trunk?

T1 trunks are used mainly in North America. T1 refers to a carrier interface that carries 24 channelized time slots. Each time slot carries one 64 KB/s voice circuit. The line rate of the T1 trunk is 1.544 MB/s.

2. What is a E1 trunk?

E1 trunks are mainly used outside of North America. This interface is common place in Europe, Asia, South America and Australia. E1 refers to a carrier interface that carries 32 channelized time slots. The 30 out of 32 time slot carry one 64 KB/s voice circuit. The remaining two are used for signaling and other overhead data. The line rate of the E1 trunk is 2.048 MB/s.

3. What is a VoIP trunk?

VoIP refers to carriage of voice calls in packetized format. The VoIP trunk is used between a PBX with a VoIP interface, or with an IP PBX to route calls to the NMC over an Ethernet interface. The signaling layer is based on Session Initiation Protocol (SIP).

4. What is a Port?

A port refers to one voice channel. On TDM based T1 or E1 lines, it refers to one time slot. On VoIP trunks, it refers to one packetized voice channel.

5. Do I need any special settings on the PBXs when installing a NMC?

The NMC operates with any PBX or telephone switch that provides an ANSI T1.403 compliant T1 carrier or CCITT standard G.704 compliant E1 carrier.

The NMC's T1 interface can support either D4/AMI or ESF/B8ZS encoding. The signaling method can be CAS E&M Wink Start or ISDN PRI.

The NMC's E1 interface can support either ESF/B8ZS encoding. The signaling method should be ISDN PRI.

6. Does the NMC support VoIP?

Yes. The NMC supports VoIP. The signaling is based on industry-standard Session Initiation Protocol (SIP).

Audio Conferencing Service

1. What is the largest conference size I can set up on NMC?

It depends upon the NMC model purchased. Our product line can scale from 8 ports to 480 ports in a single chassis. Multiple chassis can be daisy chained for higher densities. The total number of ports defines the largest single conference size that a system can handle.

2. How many concurrent conferences can NMC support?

NMC can support any number and combination of conferences as long as the total port count for all conferences is less than or equal to the maximum port count available on the NMC.

3. What is a hunt group and how is it used with NMC?

The NMC is typically installed behind a PBX or a Central Office Switch. A given number of T1 lines are used to connect the PBX or the Central Office Switch to the NMC. All of these T1 trunks can be in set up in one sequential group or random hunt group. The hunt group is assigned one lead telephone number. When multiple people dial the assigned lead number, all calls are routed to the NMC via the hunt group.

4. Can NMC support Mixed Mode conferencing?

Yes, the NMC can support either TDM-only conferences, VoIP-only conferences, or mixed-mode TDM and VoIP conferences.

5. Can the system send out e-mail invitations for Reservation-based conferencing?

Yes. You send out e-mail notifications when a call is scheduled via the Microsoft Outlook Calendar Interface. Emails originate from your Outlook or other iCal based calendaring system.

6. How far ahead of time can I schedule a meet me conference?

You can schedule a conference over the next 12 months from today's date.

7. Can I set-up recurring conferences?

Yes. Through the Microsoft Outlook Calendar interface you can set up recurring Meet-me conference calls.

8. Does NMC support Web Conferencing?

Yes. The NMC supports Web Conferencing. This allows moderators to share any document (Word, Excel, Power Point, PDF, and so on) with their fellow users. This feature might not be available on all systems. Contact your System Administrator to learn how to add this feature.

Mass Notification Service

1. How many calls can I send in 10 minutes?

The numbers of calls that can be sent in a given duration of time is a function of the 'length of the message' and the 'number of ports' available on the system. For example, on an NMC-96, 96 calls can be launched simultaneously. Assuming the message is 30 seconds long and it takes another 30 seconds before the destination end picks up (each ring cycle typically takes 6 seconds), then it will take one minute to complete a call. So with 96 ports, the system will deliver 96 calls in one minute or 960 calls in 10 minutes.

2. How are SMSs and Emails delivered?

The NMC is typically connected to the Internet via local LAN. It sends SMSs and emails using the SMTP port on the system.The speed at which SMSs and emails can be delivered depends on the size of the Internet pipe and delay through the SMS and email servers that are used to route the messages.

User Interface

1. Do I need to install a software client on my personal computer to use the NMC user interface?

No. Any terminal, desktop personal computer or laptop that supports Internet Explorer 5.0 or higher can pull up the user interface on its browser. This interface is HTML-based and can be viewed on any web browser connected to the Internet. The user simply has to type in the IP address of the NMC in the URL window.

2. Does the system provide any usage data?

The usage data is kept in the system's database for the previous three months. A variety of reports can be generated by the Administrator based on Moderator, call type, number of minutes used, number of calls made, and so on.

3. Which Class 5 switches does the NMC interoperate with?

The NMC has been tested with Lucent's #5 ESS switch and Nortel's DMS 100.

4. Where can I get technical support for NMC?

For technical support, visit the customer service area on the NEC website.

5. What warranty support is included with the NMC?

All NEC products ship with one-year hardware and software warranty included. Extended warranty beyond the first year can be purchased at the time of initial purchase.

6. I have additional questions – who should I contact?

The support telephone number for NEC Authorized Associates is 800-852-4632. NEC direct customers should call 877-463-2267 for support.

APPENDIX B – Audio Conference Controls

Participant Conference Controls

The table below describes the controls currently available on the system for participants during a conference. Press the code into your phone keypad, including #, for each action.

Code	Description
11#	Mute Self
22#	Unmute Self
14#	Raise Hand
15#	Lower Hand
55<vote digits>#	Enter a series of vote digits (up to eight)

Moderator Conference Controls

The table below describes the controls currently available on the system for moderators during a conference. Press the code into your phone keypad, including #, for each action. Most of these controls are also available as web controls on the *RealView page*.

Code	Description
11#	Mute Self
22#	Unmute Self
16#	Self Mute all users
31#	Initiate Dial out. Moderator will hear dial-tone. Next, dial external party's number followed by #. After conversing with the called party, use the following two controls: 32# or 33#.
32#	Bring external party into conference
33#	Drop external party and re-join conference
41#	Start recording
42#	Stop recording
43#	Mute all
44#	Unmute all
45#	Lock conference
46#	Unlock conference
* * #	Restore original conference (abort dial out)
54#	Start a round of voting
55<vote digits>#	Enter a series of vote digits (up to eight)
56#	End a round of voting
61#	Unmute all with raised hands
62#	Disable hand raise notifications
* 0 #	Disconnect conference

APPENDIX C – NMC Configuration Parameters

The tables below identify system-related parameters that need to be provisioned on the NMC. Please supply these parameters to NEC Support at the time the system is configured at the factory.

NMC System Parameters — Data Network

Item	Value	Comments/ Example
Server IP address		Required
Subnet mask		Required
Gateway IP address		Required
Primary DNS IP address		Required
Secondary DNS IP address		Optional
ILO IP address		Required, for network management module
Mail Relay Server IP address		Required, for sending outbound emails
VPN client software		Optional. Needed for installations using VPN access. Client software needs to be provided to NEC for remote access.
VPN client account name		Optional
VPN client password		Optional
Modem Call in number		Optional. Needed only for installations where analog modem is the only available means for remote access.
Server Host Name		Optional, “confbridge.xopnetworks.com” The URL should translate to the server IP address shown above.
Customer Logo		Optional, In GIFF format, for placement on the User Interface
Admin “from” email address		Required, e.g., admin@abccompany.com

NMC System Parameters — PSTN Network (T1 Physical Layer)

Item	Value	Comments
Framing/encoding	___ ESF/B8ZS ___ D4/AMI	
Clocking	___ Bridge supplies clock ___ Bridge receives clock	

NMC System Parameters — PSTN Network (ISDN)

Item	Value	Comments
ISDN variant	___ NI2 ___ 5ESS ___ 4ESS ___ Other: ___________	
Network Mode	___ Bridge is network ___ Bridge is user	
Outbound calls: Called number type	___ National ___ Other: ___________	
Outbound calls: Number plan	___ ISDN ___ Other: ___________	

NMC System Parameters — PSTN Network (CAS)

The following table provides a PSTN Network Checklist (CAS E&M Wink Start).

Item	Expected (yes or no)	Comments
Inbound ANI supplied		Towards the bridge.
Inbound DNIS supplied		Towards the bridge.
Inbound DNIS before ANI		Towards the bridge.
Inbound DNIS Wink needed		Towards the bridge. Bridge to generate a Wink immediately after receiving the DNIS digits
Outbound ANI expected		From the bridge.
Outbound DNIS before ANI		From the bridge.
Outbound DNIS wink needed		From the bridge. Bridge to generate a Wink immediately after sending the DNIS digits

NMC System Parameters — Call Routing.

Item	Value	Comments
Inbound hunt group dial-in number		This is typically the pilot number
DID or DNIS number range		Needed for Service Selection
External call routing prefix for the PBX	___ "9" ___ None ___ Other: ____	
Internal extension length		Bridge uses extension length to determine if the outbound call is for local extension or external PSTN

NMC System Parameters — User Passwords

Item	Value	Description
Administrator password		Contact NEC
Root login and password		Contact NEC

APPENDIX D – Security Features

The **Enhanced Security Package** includes a set of features designed to harden NEC's NMC against various forms of network intrusion and hacking. With the entire collection of features enabled, the NMC becomes a highly secure platform. However, organizations have varying security requirements and with this in mind NEC has designed many of the NMC's security features to be optional.

Features include:

- Password management:
  - Complex passwords enforced (optional)
  - Prevent password reuse for 'n' generations (optional)
  - Force password change upon first account access (optional)
  - Passwords & PINs encrypted in database (optional)
  - Enforce periodic password changes (configurable)
  - Prevent frequent password changes.
  - Conference PINs encrypted in database (optional)
- Intrusion Prevention
  - Lock account after multiple login failures (optional, configurable)
  - Temporary freeze access from IP address upon multiple login failures.
  - Lock unused accounts.
  - Prevent multiple logins from the same accounts or bump upon second login
  - (optional, configurable)
  - Restrict administrator account logins by IP address. (optional, configurable)
  - Disconnect idle sessions (optional, configurable)
  - Disconnect sessions that are unable to communicate with server for 15 seconds
  - Detect and lock upon automated PIN attacks on dial-in lines.
- Alerting and logging
  - Log login attempts (both success & failure)
  - Email alerts for important security events.
- Authorization restrictions
  - Administrator accounts optionally allowed access to user accounts.
  - Administrator may lock/unlock accounts
  - Auditor accounts to review system alerts, but not allowed user rights.
- SSL
  - Only TLSv1 (SSLv3) connections allowed.
  - Client certificates required for access (optional).
- Programming quality control
  - Internal code reviews performed for XSS (Cross site scripting) attacks.
  - External third party security review.

APPENDIX E – Security Certificate Installation

Overview

Revision 4.3.1 supports requiring each client to the NMC Web portal have an SSL client certificate issued by a trusted Certificate Authority.

The NMC must be configured to specify which issuing Certificate Authorities (CAs) to recognize as valid certificate issuers. Only requests from browsers which have a certificate also signed by one of the recognized CAs (or a valid intermediate CA) will be allowed access to the system.

The public certificates for each authorized CA and each valid intermediate CA must be installed on the NMC.

Additionally, Certificate Revocation Lists (CRLs) are needed from each CA to specify which certificates may have been revoked by the CA. Configuring CRLs is a periodic task the frequency of which depends on the frequency with which a CA issues CRLs.

Preparation and Requirements for Configuration

A copy of each of the public certificates for the signing CAs and intermediate CAs must be copied to the NMC prior to configuration. The inventory of required CA certificates is specific to each customer and should be determined in consultation with installation support staff. The inventory primarily depends on your CA provider and the procedure by which your organization issues client certificates.

An administrative user must log in on the unix root account to perform this function.

The procedure requires the NMC web portal to be stopped.

Provider	URL	Notes
US DoD / Defense Information Systems Agency (DISA)	TBD	TBD
Verisign	https://knowledge.verisign.com/support/ssl-certificates-support/index?page=content&id=AR657	What you need depends on the type of Verisign certificate you have purchased. Please contact Verisign for details.

Table 2.1: Root & Intermediate CA Public Certificate Repositories

Provider	URL	Notes
US DoD / Defense Information Systems Agency (DISA)	https://crl.gds.disa.mil/	Download the “ALL CRL ZIP”
Verisign	http://crl.verisign.net/	Please contact Versign for which crls to use.

Table 2.2: CRL Repositories

Initial CA Configuration Procedure

To configure your CA initially, complete the following steps.

1. Login as a normal user. For purposes of this procedure the user login name will be referred to as <user>, but the actual name will depend on your system.
2. Create a directory with a unique name (i.e., **mkdir certs**).
3. Copy all the CA public certificates and the Intermediate CA public certificates to the NMC into the certs directory you created in step 2.
4. Log in (to the terminal) as “root”.

   su -

5. You will be prompted for a password. The password is unique to your system.
6. Enter the following commands, where <user> is your user name:

```
cd /home/wwwrun/etc/certs
cp ~<user>/certs/* .
cd ../../bin
service webd stop
./sslchain
service webd start
exit
rm -rf certs/*
```

Adding a Single CA Public Certificate

To add a single CA Public Certificate after you have already done the initial configuration, complete the following steps.

1. Login as a normal user. For purposes of this procedure the user login name will be referred to as <user>, but the actual name will depend on your system.
2. Copy the CA public certificate to the NMC and into the **<user>/certs directory**.
3. Log in (to the terminal) as “root”.

   su -

4. You will be prompted for a password. The password is unique to your system.
5. Enter the following commands, where <user> is your user name:

   cd /home/wwwrun/etc/certs

   cp ~<user>/certs/* .

   cd ../../bin

   service webd stop

   ./sslchain

   service webd start

   exit

   rm -rf certs/*

Replacing a Single CA Public Certificate

To replace a single CA Public Certificate after you have already done the initial configuration, complete the following steps.

1. Login as a normal user. For purposes of this procedure the user login name will be referred to as <user>, but the actual name will depend on your system.
2. Copy the CA public certificate to the NMC and into the **<user>/certs directory**.

Note:

The replacement certificate must be given the same name as the certificate in **/home/wwwrun/etc/certs** directory that is being replaced!

3. Log in (to the terminal) as “root”.

   su -

4. You will be prompted for a password. The password is unique to your system.

5. Enter the following commands, where <user> is your user name:

```
cd /home/wwwrun/etc/certs
cp ~<user>/certs/* .
cd ../../bin
service webd stop
./sslchain
service webd start
exit
rm -rf certs/*
```

Installing or Updating a CRL Set

You must first obtain CRLs. If the individual CRL(s) are not already contained in a zip file you must zip all the CRLs into a single zip file. The resulting zip file may not contain zip files or directories.

Where to obtain CRLs depends on the process defined by the CA that issues your client certificates.

This process will usually need to be executed monthly, or more frequently if specified by your issuing certificate authority.

To install or update a CRL set, complete the following steps.

1. Login as a normal user. For purposes of this procedure the user login name will be referred to as <user>, but the actual name will depend on your system.
2. Copy the CRL zip file (<crl zip file>) to the NMC and into the **<user> home directory**.
3. Upgrade your log in (to the terminal) as "root".

```
su -
```

4. You will be prompted for a password. The password is unique to your system.
5. Enter the following commands, where <user> is your user name:

```
cd /home/wwwrun/bin
service webd stop
installCRL /home/<user>/<crl zip file>
service webd start
exit
```

APPENDIX F – List of Service Access Codes

Service Access Codes

Service Access Code	Purpose	Comments
*123#	For recording messages for GA	Allows a message to be recorded in human voice.

APPENDIX G – System Management

Stopping and Starting the voxd service

After the system is powered up, it automatically boots up with all services running. All services run on NMC under the service master called “voxd.”

Use the following commands if you must stop or restart the “voxd” service.

Open a terminal window at the local console or login remotely using a SSH client. Refer to “Opening a Terminal Window” in *CHAPTER 5—Installing the System* on page 8*Opening a Terminal Window* for more information on opening a terminal window.

6. To stop the voice processing software, enter **service voxd stop** at the command prompt.

Note:

The conferencing software can take more than 60 seconds to completely shut down and more than 180 seconds to restart.

Stopping and Starting the LINUX Operating System

Follow these steps to properly shut down and restart the LINUX Operating system:.

1. Shut down the voice processing software.
2. Enter **poweroff** to shut down.
3. Enter **reboot** to restart the Linux operating system.

Using the LINUX OS

The NMC uses the LINUX operating system. Linux is a multi-threaded (multi-tasking) and multi-user operating system, capable of handling multiple tasks simultaneously. Linux supports 256-character file names. Linux is case sensitive, so a file called 'voxd.log' is different from one called 'voxD.log'.

Visit *http://www.linux.org* for more information on the Linux operating system.

The Root Account

The Linux operating system controls access to resources (programs, folders, and files) based on the user account. In Linux, the user account that has unlimited access to all system resources is called "root." The root user can control every process, access every file, and perform any function on the system.

Caution:

For this reason, it is very important that the root account is protected with a secure password. You must change the root password from the default password.

The Linux Terminal

The administrative tasks are conducted from the terminal (also known as shell or console) in Linux. The command prompt in the terminal looks very similar to the command prompt on a DOS or OS/2 system. In many cases, using the terminal is faster than using the graphical user interface. Because Linux is multi-threaded, it is possible to have several virtual terminals operating on the machine at once.

When you start a terminal you will see a prompt, such as **[root@confbridge] #**.

The prompt shown above is sometimes called the "bash prompt". The last character in the bash prompt is the **#**, which you will only see when you are logged on as the root account.

If you are in graphical mode, you can open a terminal by right clicking on the Linux desktop. You can also right click on the desktop to display the **Options** menu. Go to **System Tools >Terminal**.

When you are finished, press **CTRL+D** at the bash prompt to close the terminal.

Setting the System Date and Time

A computer has two devices for tracking the date and time: a battery-backed hardware clock and the operating system software clock. The software clock is used by all programs and utilities on the system for the current date and time. Because the software clock is a utility, it stops whenever the operating system or computer is restarted. Each time the system is restarted, the software clock sets itself to match the hardware clock. To ensure that the NMC keeps the correct time and date, use the following procedure.

1. Shut down the voice processing software.
2. To set the system software clock to the current date and time, enter **date MMDDhhmmYYYY** at the command prompt, where:

- MM is the month
- DD is the day
- hh is the hour (in 24-hour format)
- mm is the minute
- YYYY is the year

3. Press **Enter**.
4. To synchronize the hardware clock to the software clock, enter **hwclock -- systohc** and press **ENTER**.
5. Restart the voice processing software.

Checking the Status of the Application Software

1. To check the status of the application software, enter **Service voxd status** at the command prompt.
2. Press **Enter**. The output should be: **voiced (pid xxxxx is running...**

Using Secure Sockets

The web application supports using Secure Sockets (https) for enhanced security of the web traffic between the client web browsers and the server.

To use https, an encryption certificate is required. For testing, a self-signed certificate is available. However, most browsers issue severe warnings when encountering a self-signed certificate. Therefore, a commercial, purchased certificate is generally required when enabling https.

To install a commercial certificate, you will need to install the public part of the certificate in the file **/home/www/etc/server.crt** and the private key part should be placed in the file **/home/www/etc/server.key**.

After installing the certificate files, restart the web server, by using the command:
service webd restart

Changing Database Passwords

The system uses a relational database to store its data. By default, the database is accessible only from processes internal to the server. In general, it is not required to change the database passwords used for these internal processes.

If a database password does need to be changed, complete the following steps.

1. Log onto the server using Secure Shell
2. Become the root user
3. Issue these commands:

   /usr/XOP/bin/dbutil set

4. Use Mysql GRANT commands to change the user names and passwords for accessing the database.
5. Re-enter the new user names and passwords, which will be stored in encrypted files used by the local server processes.
6. Issue these commands:

   service webd restart

   service voxd stop

   service voxd start

APPENDIX H – Using Webmin

Webmin allows you to use a graphical user interface to manage the networking aspects of the NMC. For example, you can use it to change the IP address, configure Sendmail etc.

Accessing Webmin

To access webmin, complete the following steps.

1. Open a web browser to the webmin address provided by customer support.

The system displays the webmin main screen, illustrated below.

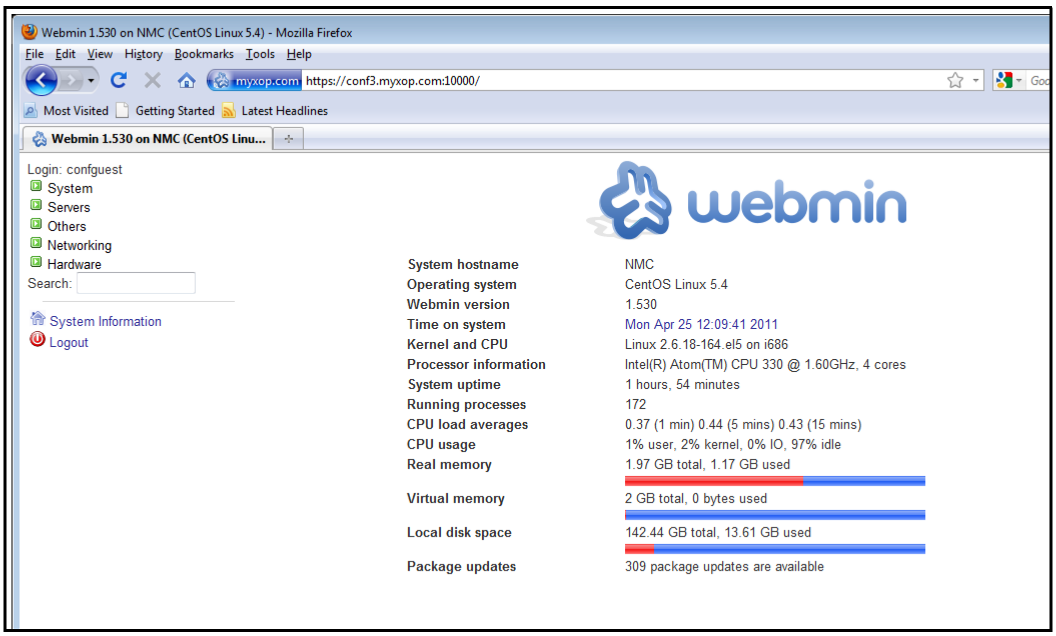


Figure 139: Webmin Main Screen

Changing Your IP Address

The process for changing your IP address includes the following procedures:

1. Open *The Network Configuration Menu*.
2. Edit your Host Address for the selected IP address on *The Host Addresses Page*.
3. Indicate your Host Name on *The Hostname and DNS Client Page*.
4. Indicate the Routing and Gateway on *The Routing and Gateways Page*.
5. Apply the Network Interfaces on *The Network Interfaces Page*.
6. Return to *The Network Configuration Menu* to apply your changes.

The Network Configuration Menu

The *Network Configuration Menu* includes links to the pages you will use for changing your IP address.

To open the *Network Configuration Menu* in webmin, select **Networking** from the list on the left side of the *Webmin Main* page. Select **Network Configuration**. The system displays the *Network Configuration Menu*, illustrated below.

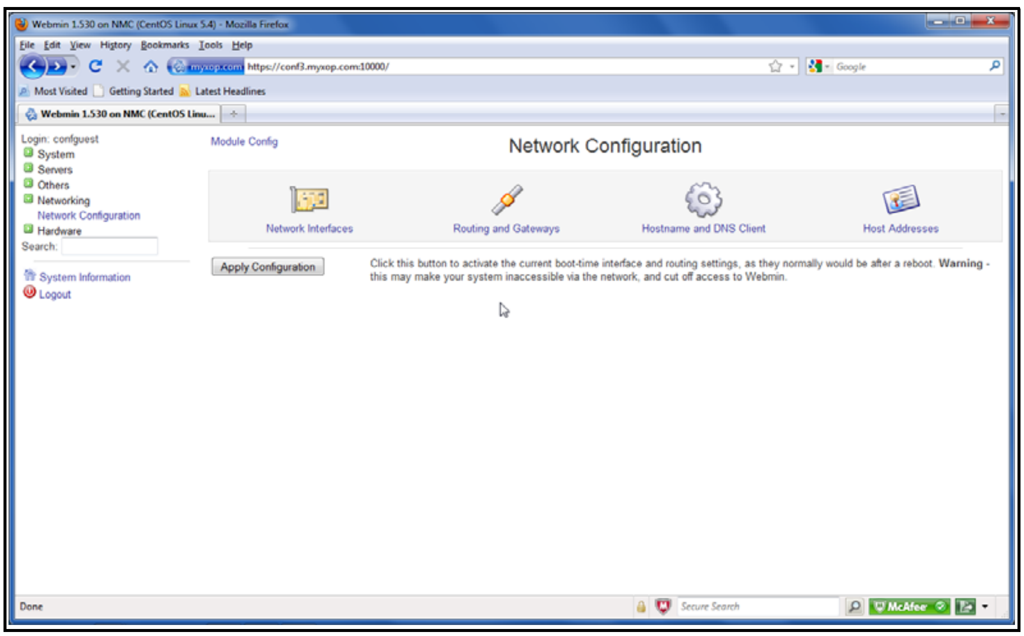


Figure 140: Network Configuration Menu

The Host Addresses Page

The *Host Addresses page* lists the hostnames for the IP Addresses associated with your system.

To edit the hostnames for your IP address, select **Host Addresses** from the *Network Configuration* menu. The system displays the *Host Addresses page*, illustrated below.

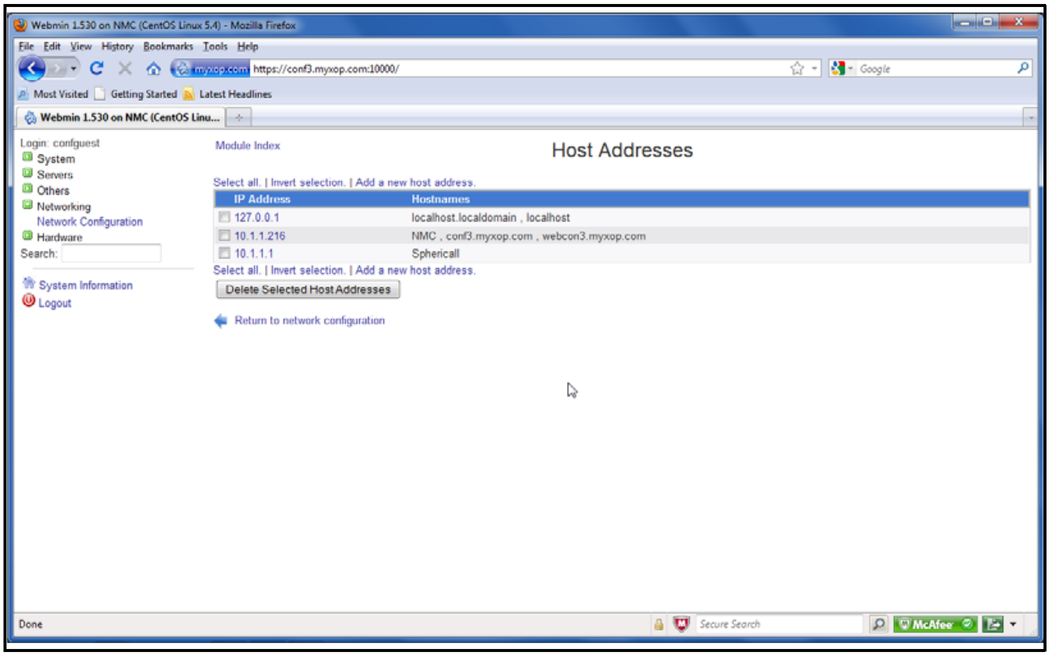


Figure 141: The Host Addresses Page

The system displays any IP Addresses with their associated hostnames for your system.

1. Select the link for the IP address that you want to change.

The system displays the *Edit Host Address* page. A sample is illustrated below.

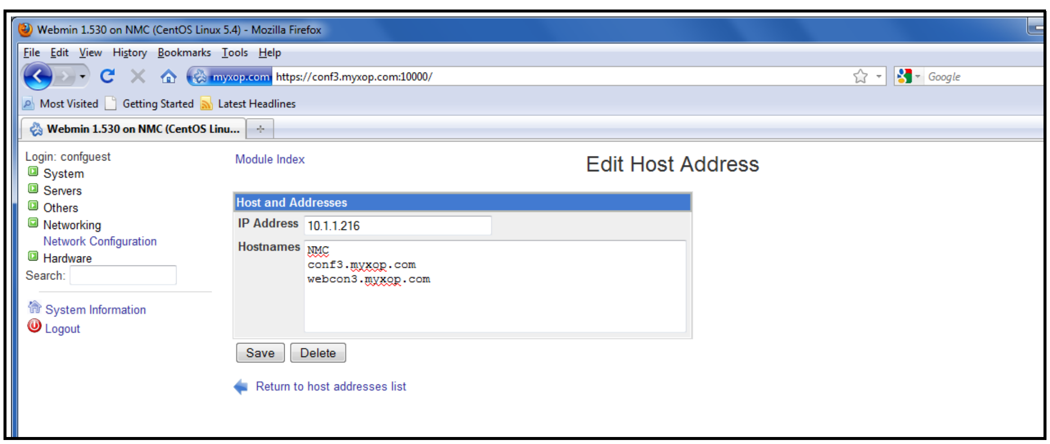


Figure 142: The Edit Host Addresses Page

2. Edit the **Hostnames** as needed.

The top line of the Hostnames field must match exactly the contents of the Host Name screen (next procedure).

3. Select **Save**.

The Hostname and DNS Client Page

The *Hostnames and DNS Client page* lists the details for the hostname.

To edit the hostname for your IP address, select **Hostname and DNS Client** from the *Network Configuration* menu. The system displays the *Hostname and DNS Client page*, illustrated below.

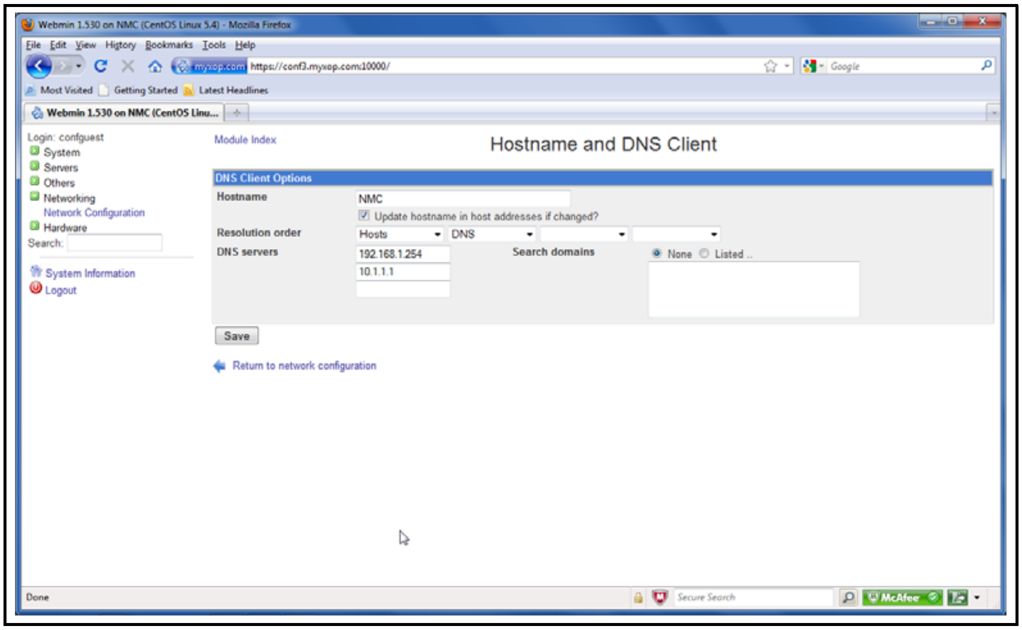


Figure 143: The Hostname and DNS Client Page

1. Edit the **Hostname** as needed.

This field must match exactly the top line of the Hostnames field on the Host Addresses page.

2. Check the **Update hostname in host addresses if changed** box to automatically update the Host Addresses page if necessary.

3. Set your **DNS server** addresses.

4. Select **Save**.

The Routing and Gateways Page

The *Routing and Gateways page* allows you to configure the routes that are activated when the system boots up, or when the network settings are fully re-applied.

To change the IP address, select **Routings and Gateway** from the *Network Configuration* menu. The system displays the *Routing and Gateways page*, illustrated below.

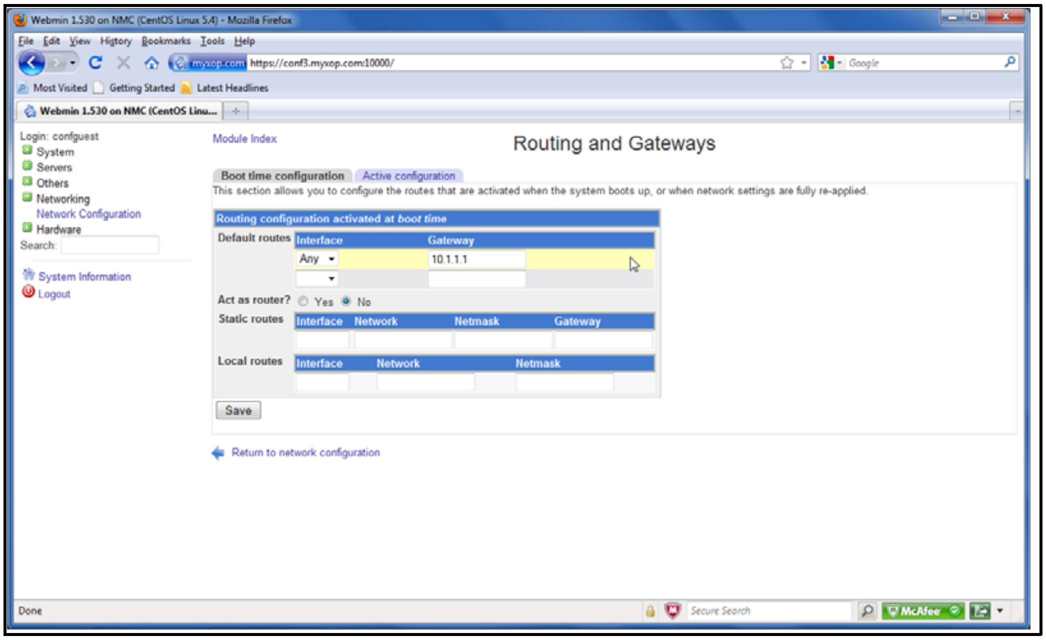


Figure 144: The Routing and Gateways Page

1. Edit the **Gateway** as needed.
2. Select **Save**.

The Network Interfaces Page

The *Network Interfaces page* lists network interfaces to be activated at bootup.

To edit your network interfaces, select **Network Interfaces** from the *Network Configuration* menu. The system displays the *Network Interfaces page*, illustrated below.

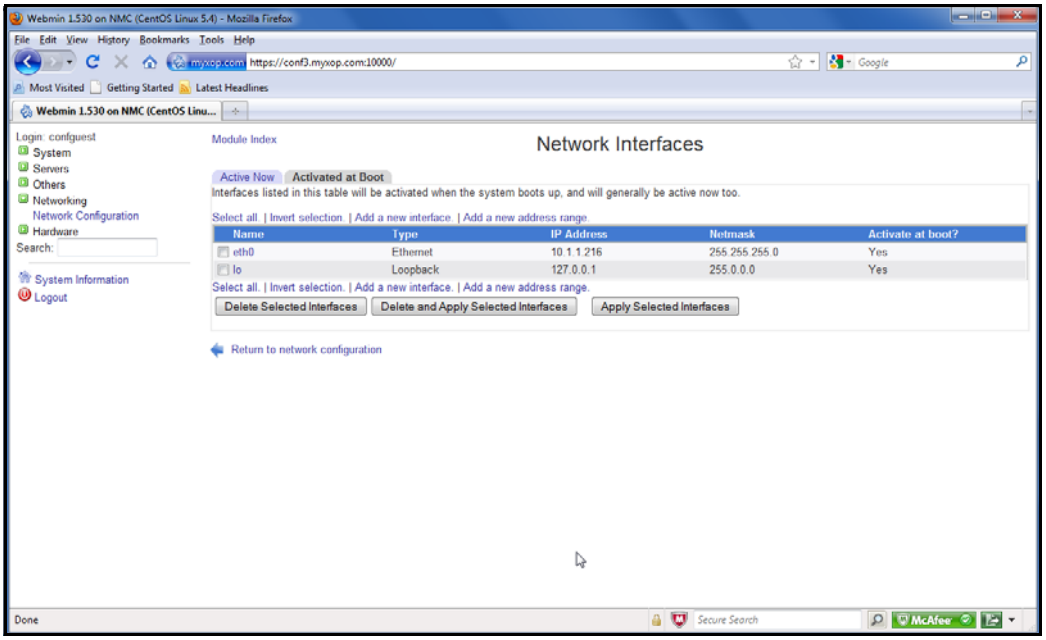


Figure 145: The Network Interfaces Page - Active Now Tab

The system displays the interfaces that are currently active on the system.

1. To edit an interface, select the **Activated at Boot** tab.

The system displays the interfaces that are activated at bootup. A sample is illustrated below.

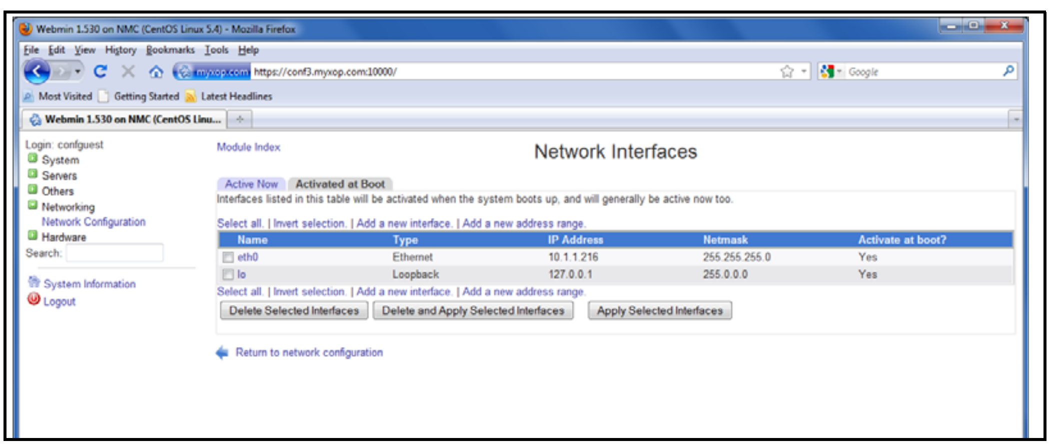


Figure 146: The Network Interfaces Page - Activated at Boot Tab

2. Select the link next to the Name/IP Address that you want to change.

The system displays the *Edit Bootup Interfaces* page, illustrated below.

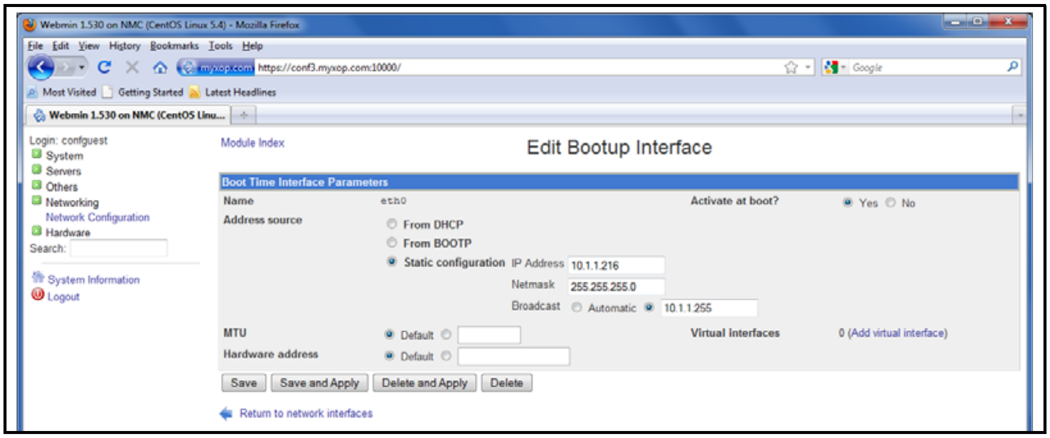


Figure 147: The Edit Bootup Interface Page

3. Edit the **Static configuration IP Address** and **Netmask**.
4. Select **Save and Apply**.
5. Select **Return to Network Interfaces**.
6. Check the box(es) next to the name/IP Address that you want to activate.
7. Select **Apply Selected Interfaces**.
8. Select **Return to Network Configuration**.
9. Select **Apply Configuration**.

Configuring Send Mail

To use the feature of receiving system-generated emails, you must enter your mail relay server address on *The Host Addresses Page*. Then you must activate the sendmail service on *The Bootup and Shutdown Page*.

The Sendmail Mail Server Menu

The *Sendmail Mail Server Menu* includes links to the screens you will use for configuring your mail server for system-generated emails.

To open the *Sendmail Mail Server Menu* in webmin, select **Servers** from the list on the left side of the *Webmin Main* page. Select **Sendmail Mail Server**. The system displays the *Sendmail Mail Server Menu*, illustrated below.

Figure 148: Sendmail Mail Server Menu

The Sendmail M4 Configuration Page

The *Sendmail M4 Configuration page* lists the relevant entries from the Sendmail M4 configuration file from which the actual configuration file is built.

To edit the sendmail configuration, select **Sendmail M4 Configuration** from the *Sendmail Mail Servers* menu. The system displays the *Sendmail M4 Configuration page*, illustrated below.

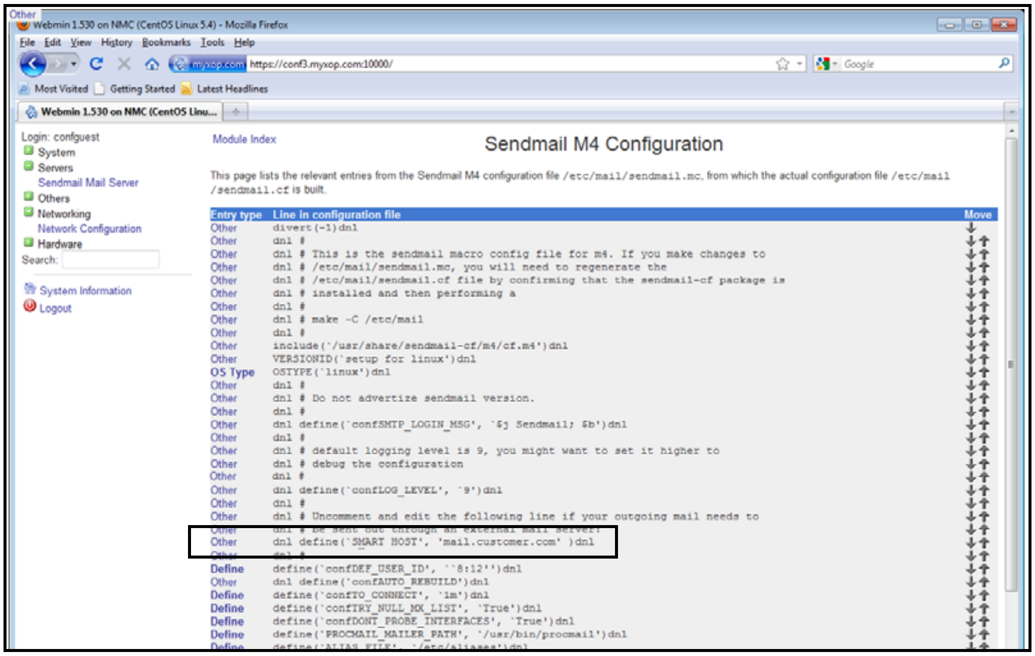


Figure 149: The Sendmail M4 Configuration Page

The system displays many entries for the configuration file.

1. Look for the line labeled “Other” with the following entry:
   dnl define (‘SMART HOST’, ‘mail.customer.com’) dnl

2. Select the link for Other for that line.

The system displays the *Edit Configuration Entry* page. A sample is illustrated below.

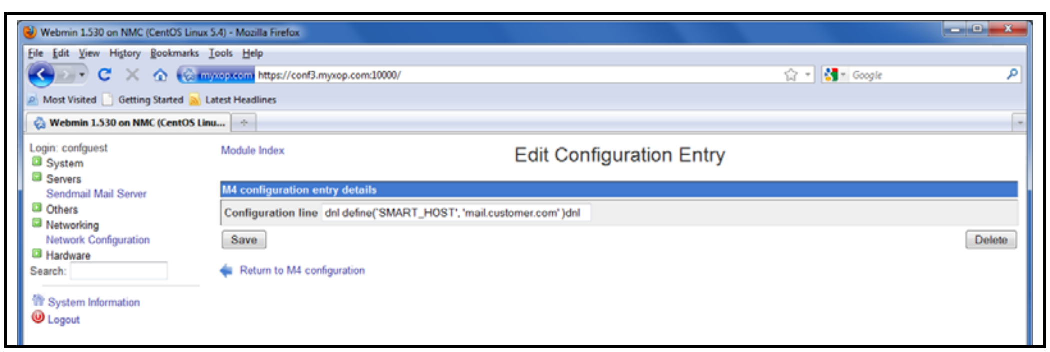


Figure 150: The Edit Configuration Entry Page

3. Remove the letters “dnl” from the beginning of the line, as shown below.

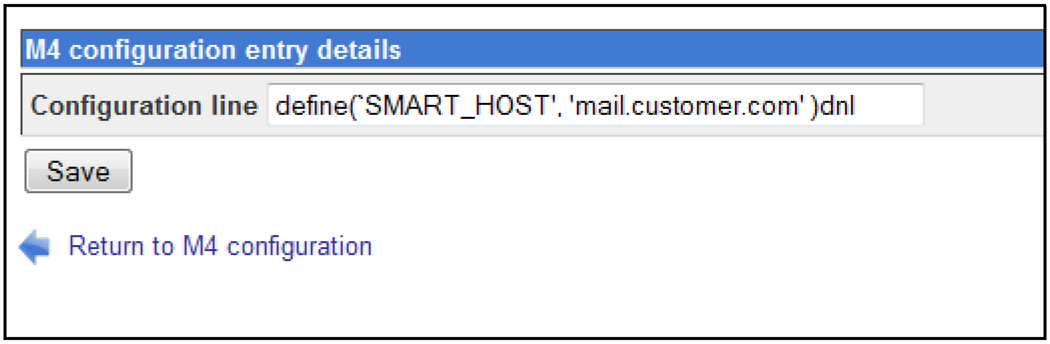


Figure 151: The Edit Configuration Entry Page with dnl removed

Note:

The letters “dnl” at the end of the line are NOT removed.

4. Replace **mail.customer.com** with your mail relay address.
5. Select **Save**.

The Bootup and Shutdown Page

The *Bootup and Shutdown* page allows you to turn on your sendmail services, once you have defined the mail relay address.

To open the *Bootup and Shutdown Page*, select **System** from the list on the left side of the *Webmin Main* page. Select **Bootup and Shutdown**. The system displays the *Bootup and Shutdown page*, illustrated below.

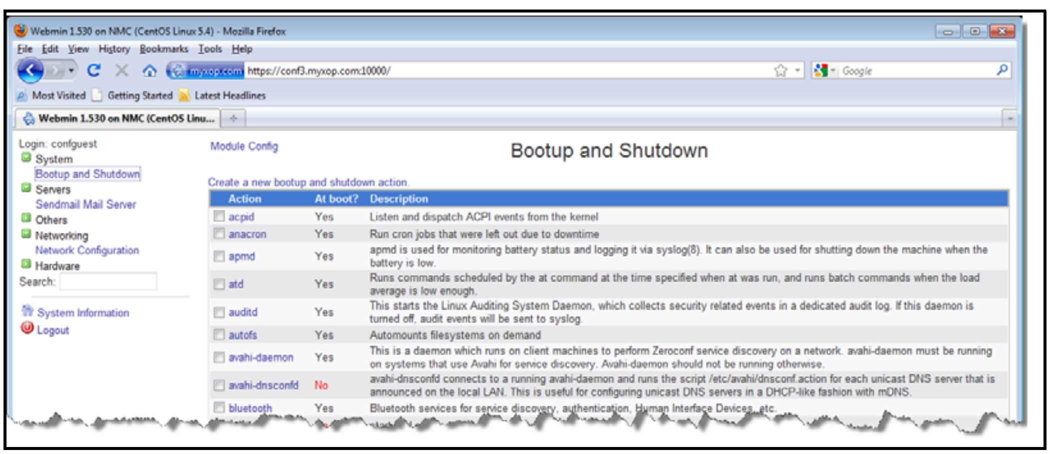


Figure 152: The Bootup and Shutdown Page

1. Check the box next to sendmail, as illustrated below.

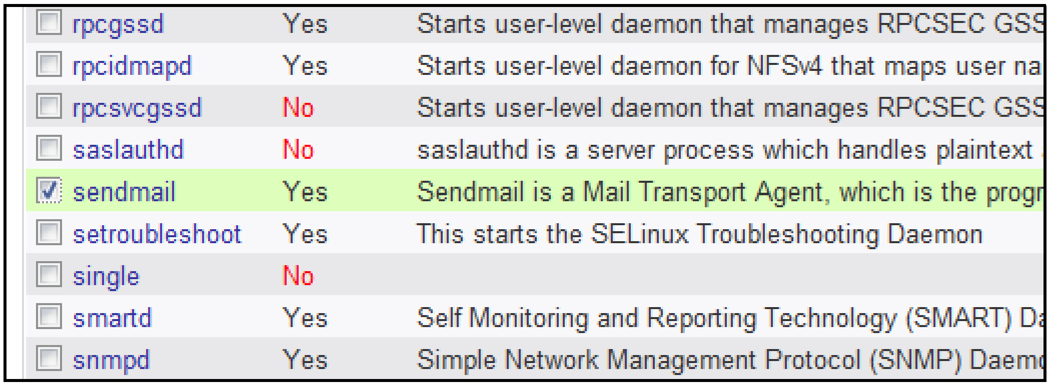


Figure 153: The Bootup and Shutdown Page - Sendmail Box Checked

2. Select **Start Now and On Boot** from the bottom of the page.

APPENDIX I – Remote Access

On occasion, NEC will need to access your NMC to make enhancements or upgrades. When you need to provide remote access to NEC Customer Service, there are three options available. The preferred order of the options are:

- *Remote Access Via Virtual Private Network (VPN)* connection
- *Remote Access Via Log Me In on External PC*
- *Remote Access Via Modem*

Each option is explained in the following sections.

Remote Access Via Virtual Private Network (VPN)

When your NMC is deployed behind a firewall, you can provide a virtual private network connection to allow NEC Customer Service staff access to your NMC. NEC Customer Service prefers to use a Cisco VPN client to access any NMC behind a firewall.

The figure below illustrates how customer support can have remote access to your NMC via VPN.

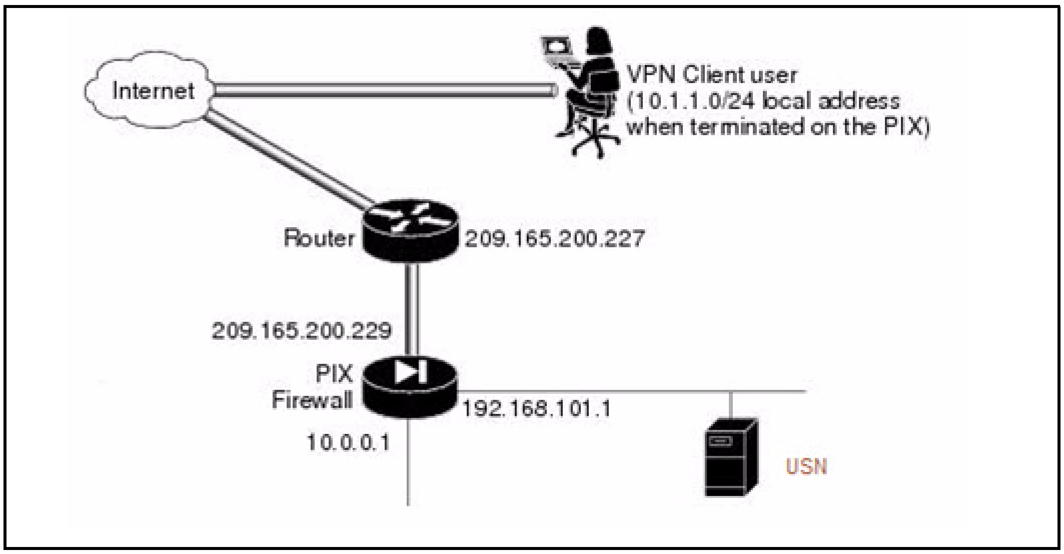


Figure 154: Remote Access Via VPN

1. Obtain a .PCF file for the virtual private network connection and provide it to NEC Customer Service staff.

2. This allows customer support to access your NMC for upgrades and enhancements.

Remote Access Via Log Me In on External PC

If allowing temporary access through the system firewall is not an option, you can still provide NEC Customer Service with remote access.

The figure below illustrates how customer support can have remote access to your NMC using "Log Me In" software.

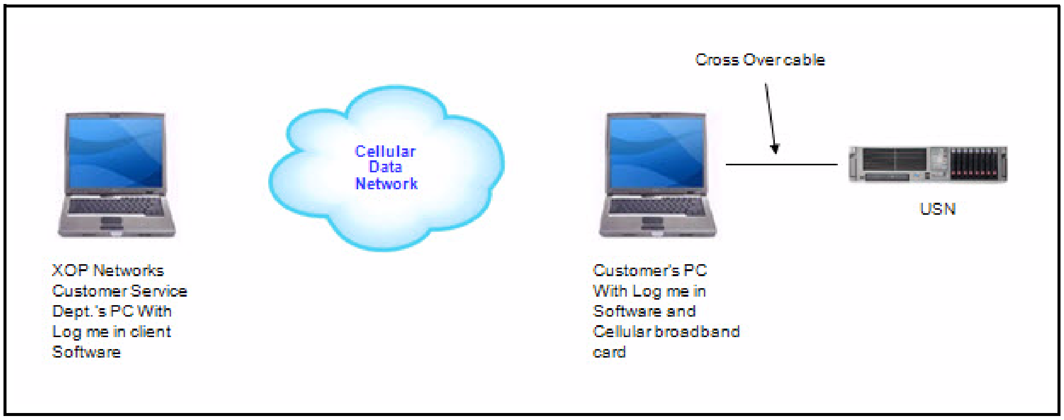


Figure 155: Remote Access Via Log Me In Client Software

You will need a laptop computer and a broadband cellular network card.

1. Connect the laptop computer to the NMC with a crossover cable.
2. NEC Customer Service accesses the PC through the cellular data network, using your broadband cellular network card. Once customer service has access to the PC, the staff can access the NMC for upgrades and enhancements.

Remote Access Via Modem

Some deployment environments do not allow for VPN or broadband access to the NMC. In this case, the customer can use an external modem to provide remote access to the NMC.

The figure below illustrates how customer support can have remote access to your NMC using an external modem.

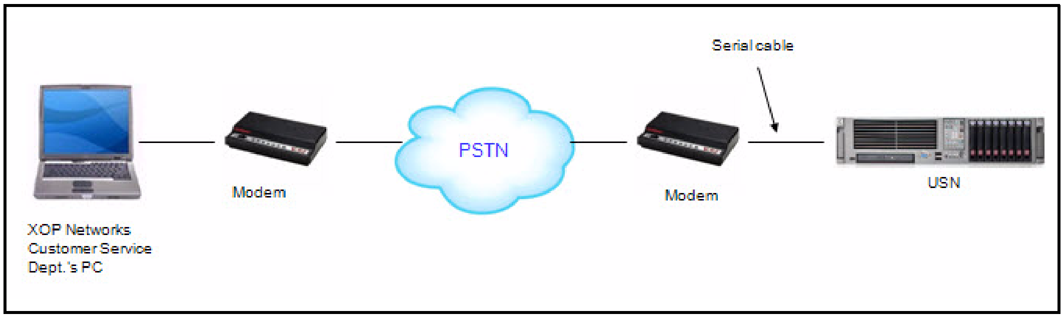


Figure 156: Remote Access Via VPN

You will need an external modem and an analog telephone line.

The figure below shows the settings for a US Robotics 56 KB/s Modem with a serial port and a USB port.

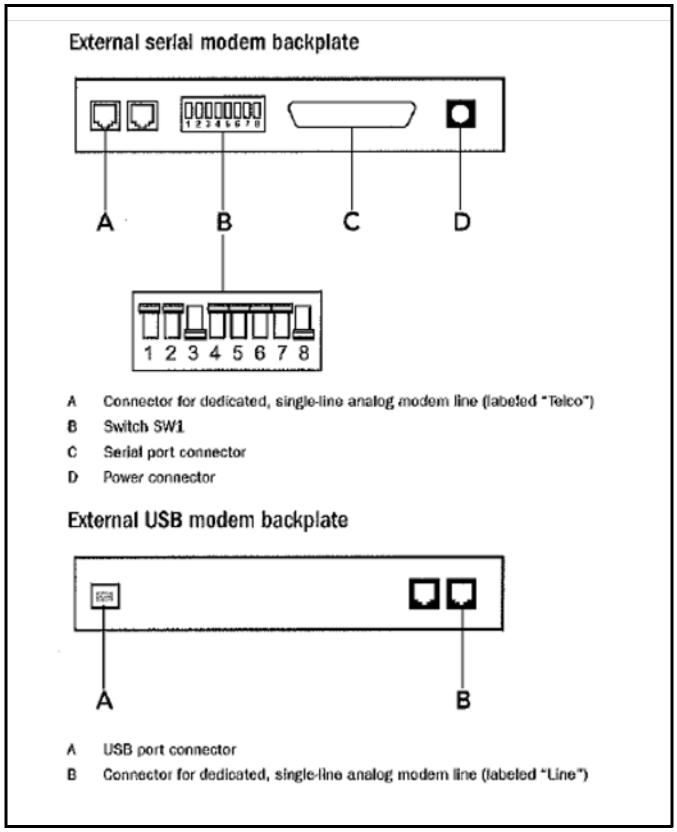


Figure 157: Remote Access via Modem

1. Connect the modem to the NMC and the analog telephone line.
2. NEC Customer Service accesses the PC through a dial-up connection. Once customer service has access to the NMC, the staff can perform the upgrades and enhancements.

APPENDIX J – Cable Assemblies and Pinouts

Analog Ports

NMC-8 supports 8 RJ-11 jacks. These are numbered 1 – 8. Port number 1 is closest to the black plastic latch. Telephone cables should always be added to the starting with port #1.

The figure below shows the cable assembly and breakout box used for connecting analog loop start circuits to NMC-16.

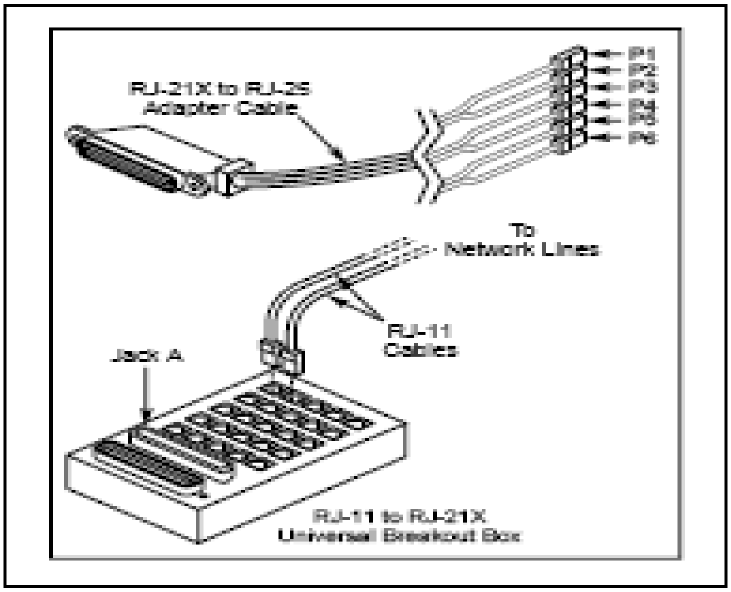


Figure 158: Analog Connection via Breakout Box

The figure below shows the pinout of an RJ-45 Jack. These jacks are used for ports P1–P6. Ports P1–P5 carry three analog circuits. Port P6 carries one analog circuit.

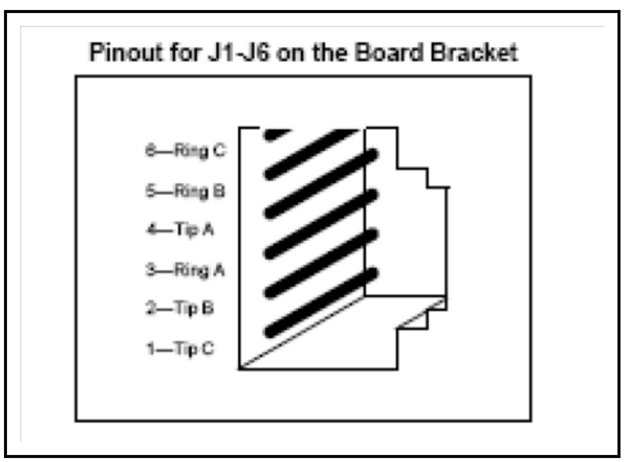


Figure 159: RJ-45 Jack for NMC-16

Digital T1/E1 Ports

The NMC platform supports three types of T1/E1 modules. In a given system, one or more modules may be used based on the desired number of TDM and VoIP ports.

Single T1/E1 with VoIP Module

The figure below illustrates a Single T1/E1 module with VoIP module.

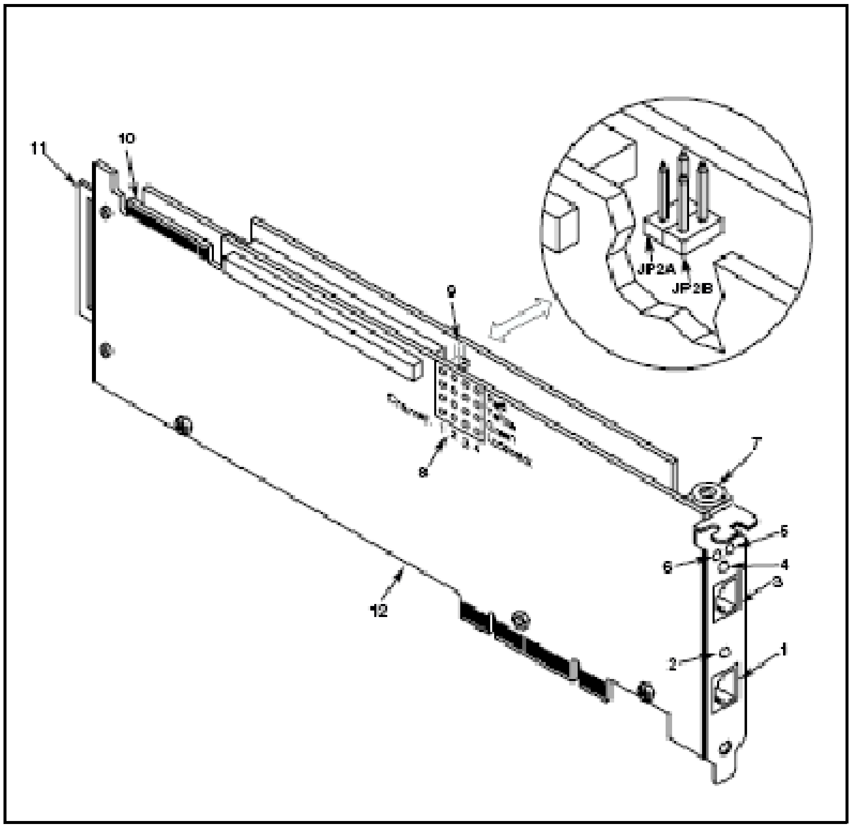


Figure 160: Single T1/E1 Module with VoIP interface

1. Ethernet interface connector.
2. Good link LED.
3. RJ-48c Jack Connectors (4) to external digital telephone network interface.
4. General network interface alarm LED.
5. Power LED
6. Reset LED
7. SW1 Rotary switch to set board identification.

8. Alarm LEDs indicate network alarms for each trunk.
   - Red – indicates loss of signal.
   - Beige – indicates loss of frame synchronization at far end of external network.
   - Green – indicates signal present, powered up, and receiving signal from external sources.
   - Loopback – indicates loopback mode activated.
9. CT/MVIP bus termination jumpers. Bus signal is terminated when the corresponding jumper is installed.
   - JP2A – CT bus termination jumper.
   - JP2B – MVIP bus termination jumper
10. P3 CT bus connector.
11. ISA edge retainer.
12. Signal processor daughter board.

Note:

Signal must be terminated only on board at each of the CT bus cable.

Dual T1/E1 Module

The figure below illustrates a Dual T1/E1 module.

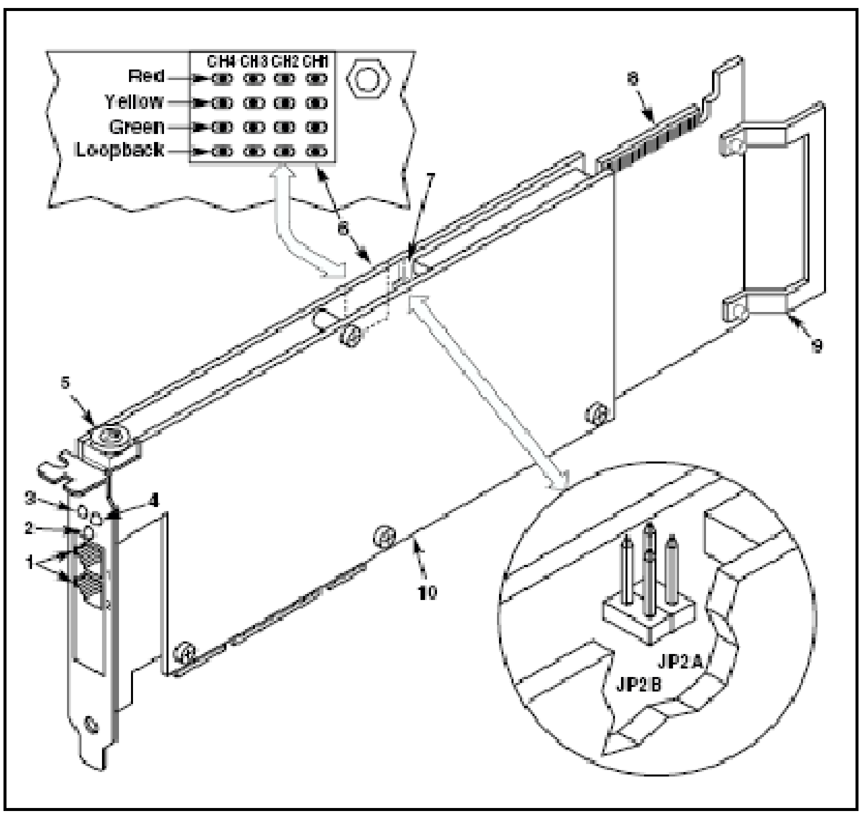


Figure 161: Dual T1/E1 Module

1. RJ-48c Jack Connectors (2) to external digital telephone network interface.
2. General network interface alarm LED.
3. Power LED.
4. Reset LED.
5. SW1 Rotary switch to set board identification.
6. POST LEDs indicate power on self-test (POST) during power up.
   Alarm LEDs indicate (CH1 and CH2 only) network alarms for each trunk.
   - Red – indicates loss of signal.
   - Beige – indicates loss of frame synchronization at far end of external network.
   - Green – indicates signal present, powered up, and receiving signal from external sources.
   - Loopback – indicates loopback mode activated.
7. CT/MVIP bus termination jumpers. Bus signal is terminated when the corresponding jumper is installed.
   - JP2A – CT bus termination jumper.
   - JP2B – MVIP bus termination jumper
8. P3 CT bus connector.
9. ISA edge retainer.
10. Signal processor daughter board.

Quad T1/E1 Module

The figure below illustrates a Quad T1/E1 module.

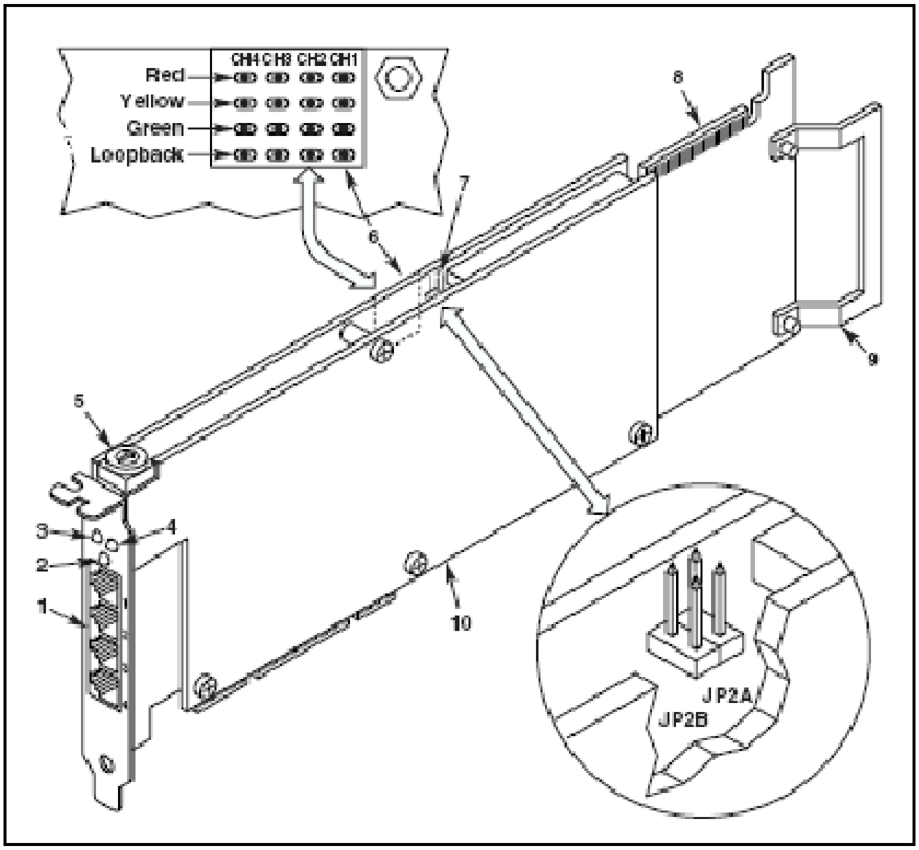


Figure 162: Quad T1/E1 module

1. RJ-48c Jack Connectors (4) to external digital telephone network interface.
2. General network interface alarm LED.
3. Power LED.
4. Reset LED.
5. SW1 Rotary switch to set board identification.
6. POST LEDs indicate power on self-test (POST) during power up.
   Alarm LEDs indicate (CH1 and CH2 only) network alarms for each trunk.
   - Red – indicates loss of signal.
   - Beige – indicates loss of frame synchronization at far end of external network.
   - Green – indicates signal present, powered up, and receiving signal from external sources.
   - Loopback – indicates loopback mode activated.
7. CT/MVIP bus termination jumpers. Bus signal is terminated when the corresponding jumper is installed.
   - JP2A – CT bus termination jumper.

- JP2B – MVIP bus termination jumper

8. P3 CT bus connector.
9. ISA edge retainer.
10. Signal processor daughter board.

The T1/E1 RJ-48c Jack

The T1/E1 circuits are connected to the NMC using a RJ-48c Jack. Figure 50 shows the pinout of a RJ-48c Jack.

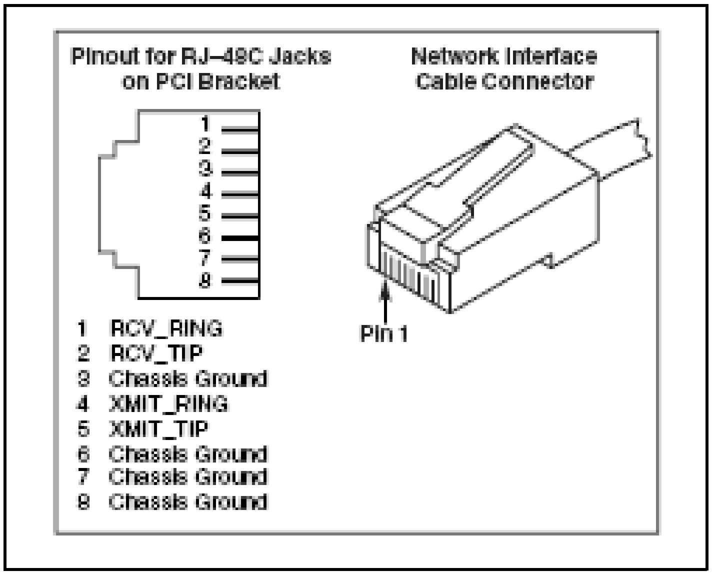


Figure 163: RJ48-c Jack

APPENDIX K – Troubleshooting

The troubleshooting appendix helps you take the first steps towards problems you may face when trying to set up or use the NMC. The following tables are organized into categories so you can more quickly locate the information you need.

Troubleshooting Networking Issues

The following table lists the current collection of troubleshooting issues related to networking.

Item #	Description	Possible Cause	Action Required
1	Call the server telephone number, get no response.	T1/E1 might be unplugged.	Use the **lineadmin** command and verify that the operational state of the network interfaces is ‘green’.
2	Call the server telephone number, get fast busy.	Encoding settings for T1/E1 might not be correctly set.	Use **lineadmin** command and verify that the operational state of the network interfaces is ‘green’.
3	The operational state of T1/E1 lines from the **lineadmin** command shows ‘green,’ but there is no response from the server.	The voice application might be in a hung state.	Go to *The System Maintenance Page — Advanced Functions* and restart the voice processor software. Refer to “Stopping and Starting the voxd service” in *APPENDIX G—System Management* on page 176 for more information.
4	Not able to log into the web server.	Web GUI application might be in a hung state.	Go to *The System Maintenance Page — Advanced Functions* and restart the voice processor software. Refer to “Stopping and Starting the voxd service” in *APPENDIX G—System Management* on page 176 for more information.
5	Not getting any emails from the server.	The mail relay server IP address might not be configured properly.	Contact NEC customer service.

Troubleshooting Audio Conferencing

The following table lists the current collection of troubleshooting issues related to conferencing applications.

Item #	Description	Possible Cause	Action Required
1	After calling, I hear the “Welcome to …” prompt, but the system does not accept any PIN.	Audio conference service might not be licensed.	Contact NEC customer service.
2	When I call into a conference room, I hear an ‘echo’ or a ‘reverberating’ sound.	If callers are very close to each other and using speaker phones, the audio from the active speaker can also get fed from a secondary caller’s phone into the bridge. This appears as an echo or reverberating sound to the speaker.	Maintain a minimum distance of 5 feet between phone users -- especially if speaker phones are being used.
3	When I call into a conference room, I hear a buzzing or ‘helicopter’ noise.	There might be a call(s) from a previous conference still connected between the PBX and the Bridge. This can happen if the bridge does not receive a proper disconnect signal after the calling party has hung up. Such connected call legs can lead to noise build-up in a conference room.	Make sure that the PBX is configured correctly to drop the connection towards the NMC after the caller has hung up.
4	After being in a conference for some time, I start hearing bursts of ‘white noise’.	This can happen if noise reduction parameters are not appropriately configured on the system.	Please contact NEC customer service.

APPENDIX L – Acronyms

List of Acronyms

AMI–	Alternate Mark Inversion
ANA–	Automatic Number Announcements
ANI–	Automatic Number Indicator
B9ZS–	Bipolar 8 Zero Suppression
CAS–	Channel Associated Signaling
CCITT–	Comité Consultatif International Téléphonique et Télégraphique
CLEC–	Competitive Local Exchange Carrier
CLID–	Calling Line ID
CNA–	Changed Number Announcements
COS–	Central Office Switch
CPE–	Customer Premise Equipment
CSU–	Channel Service Unit
CSV–	Comma Separated Values
DHCP–	Dynamic Host Configurable Protocol
DID–	Direct Inward Dialing
DNIS–	Dialed Number Information Service
DNS–	Domain Name Server
DTMF–	Dual Tone Multi Frequency
E1 Carrier–	2.048 Mb/s trunk interface
ESF–	Extended Super Frame
FXO–	Foreign Exchange Office
HDB3–	High Density Bipolar Order 3
iCal–	Microsoft Calendering Application
IP–	Internet Protocol
ISDN–	Integrated Service Digital Network
LAN–	Local Area Network
LED–	Light Emitting Diode
LS–	Loop Start
PBX–	Private Branch EXchange

PIN–	Personal Identification Number
PRI–	Primary Rate Interface (23B+D or 30B+D ISDN interface)
PSTN–	Public Switched Telephone Network
RAND–	Random
SIP–	Session Initiation Protocol
SMS–	Short Message Service
T1 Carrier–	1.544 Mb/s trunk interface
TDM–	Time Division Multiplexing
UPS–	Uninterruptible Power Supply
URL–	Universal Resource Locator
NMC–	NEC Meeting Center
VoIP–	Voice over Internet Protocol

APPENDIX M – Index