

NMC Meeting Center

Integration Guide

NEC NEC Corporation

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1

Overview

How This Guide is Organized

- | | |
|--|---|
| <i>Chapter 1 Overview</i> | This chapter provides an overview of the features, licensing requirements, available training, and customer site parameters of the NMC. |
| <i>Chapter 2 NMC Software Installation and Network Configuration</i> | This chapter details the procedures required to install the NMC software and configure the network. |
| <i>Chapter 3 Virtual Server Installation</i> | This chapter explains the installation of the OVA image of NMC Audio Conference Server software release 8.0 on the VMware ESXi host. |
| <i>Chapter 4 NMC Administrative Setup</i> | This chapter details the procedures required to perform NMC Administrative Setup. |
| <i>Chapter 5 Upgrading NMC Meeting Center</i> | This chapter details the procedures required to upgrade NMC Meeting Center. |

Introduction

The NEC Meeting Center (NMC) provides a collection of Value Added Service (VAS) applications. These applications can be hosted on physical or virtual servers (e.g., VMware). The NMC integrates with the UNIVERGE SV9100/SV9300 via SIP stations.

Value Added Service (VAS)

Audio Conferencing Application

The Audio Conferencing Application provides a rich conferencing experience for demanding users by providing the following features.

- Supports both reservation-less and reservation based audio conferences.
- Customizes each audio conference room per your requirements, e.g., select entry tones, select memorable vanity PINs, turn recording on/off, select enter audio conference muted on/off, select Moderator presence required or not etc.
- Schedules recurring audio conferences via the Web Portal. Uses Microsoft Outlook iCalendar application to send invitations to desired participants.
- Offers a HTML-5 based Web Portal for seeing real time view of a running audio conference. Ability to see/edit Participant's name on the Web Portal and is PC and iPad compatible.
- Displays loudest speaker. Allows the identification and muting of a participant who may be inadvertently injecting noise into the audio conference.
- Exercises multiple in-conference controls via phone key presses or the Web portal.
- Automatically mute noisy lines or lines with excessive echo.
- Merges two or more audio conferences into one without dropping any calls. Transfers participants between conferences.
- Sends a detailed end of conference summary report to the moderator after a given audio conference is over.
- Records the entire conference or excerpts from a conference and playback via PC's media player. (Requires the enhancement license.)
- Triggers a dial-out conference based on a) incoming phone call, or b) a click on a web portal.
- Supports unlimited number of call out groups.
- Sends a greeting message prompting recipients to join the conference (Selects communications medium to be used for message delivery (Voice only, Email only, or both)).
- Schedules one time or recurring dial out calls.
- Provides summary and detailed reports on call completions (Busy, No Answer, Answering machine etc.).
- Provides usage reporting.

Web Conferencing Application

Web Conferencing Application is designed to significantly boost the productivity of your meetings and offers the following features:

- Web based application, Client download required only for the presenter.
- Web Browser: Internet Explorer 8 and above, Chrome, Firefox, Mac Safari
- Desktop sharing
- Application sharing
- Participant control sharing
- Instant messaging

- Bandwidth optimization control
- Detachable windows, dual monitor support
- Webinar support – stream Microphone audio and Webcam video while sharing Desktop or an Application.
- Provides usage reporting.

Mass Notification Application

The Mass Notification Application is designed to send a large number of messages to people during emergency and non-emergency situations. Mass Notification offers the following capabilities:

- Select one or more communication mediums to be used for message delivery (Voice only, Email only, SMS using SMTP, etc.).
- Uses built-in '**Find-you**' capability to increase the probability of delivering a message.
- Multiple automatic retries of un-contacted members.
- Controls the speed of dialing out.
- Displays real time call activity and a progress bar on a Web Portal.
- Abandon a Group Alert in progress via web portal or through DTMF.
- Provides summary and detailed reports on call completions (Busy, No Answer, etc.).
- Provides usage reporting.

Required Licensing

On the UNIVERGE SV9100/SV9300 system, the following licensing is required:

- The SV9100 will require the appropriate number of System Resource Port license (0300) and IP station license (5111).
- The SV9300 will require the appropriate number of Port capacity license and Standard SIP station license.
- The SV8100 will require the appropriate number of IP station license (5111).

On NMC Meeting Center, the following licensing is required:

- Maximum quantity of simultaneous audio conference ports.
- Maximum quantity of simultaneous web conference ports.
- Maximum quantity of simultaneous mass notification ports.

Calculating Required Ports for Mass-Notification

Regarding Mass Notification, determining how many ports a customer needs is based on the following combinations:

- How long is their greeting message.
- How long is their message body.
- How many times do they estimate a phone will ring before someone answers (estimate 6 seconds per ring cycle).
- How many different telephone numbers will be dialed before one individual is reached (NMC allows up to 4 telephone numbers to be dialed. If the person does not answer on first number, NMC can second, then third and finally the fourth number to try and get an answer).
- How many times will they allow individuals who have answered a notification to replay the message.
- If the NMC dials all the telephone numbers for a party and they have not answered the call yet, how many times should NMC attempt to call "unreached parties".
- How many people do they need to notify via a voice call.
- How fast do they want all these people to be notified or put another way, within what time period must these people be notified.
- If the NMC dials all the telephone numbers for a party and they have not answered the call yet, how many times should NMC attempt to call "unreached parties".
- How many people do they need to notify via a voice call.
- How fast do they want all these people to be notified or put another way, within what time period must these people be notified.

Within the NEC Anytime Studio, the below methodology presented from an Excel sheet is available next to the Mass Notification Port entry question. [Table 1-1](#) provides an example of this Excel Sheet input:

Table 1-1 Mass Notification Port Calculations

| Items to Consider | Input Quantity | Unit of Measurement | Notes |
|--|----------------|---------------------|---|
| Greeting Time | 6 | Seconds | If Greeting/Notification is to be played to all callers. |
| Message Time | 15 | Seconds | Message time to be played. |
| Ring Time | 18 | Seconds | Ring time until recipient answers call. |
| Quantity of phone numbers called per "party to be called" | 2 | | On average, quantity of phone numbers that will be called per "party to call" before the party answers and receives the notification. |
| Quantity of times to replay message | 1 | | Average quantity of times to replay message body if the called party selects to have the message replayed. |
| Quantity of times to retry called parties if they do not answer any of their numbers this first time through | 1 | | Quantity of times to retry unanswered calls |
| Quantity of parties to call | 1000 | | Number of people to be contacted via voice call |
| Time period within which to complete all calls | 60 | Minutes | Time within which to call all voice participants. |

| Items to Consider | Input Quantity | Unit of Measurement | Notes |
|--------------------------|----------------|---------------------|-------|
| Quantity of ports needed | 18 | | |



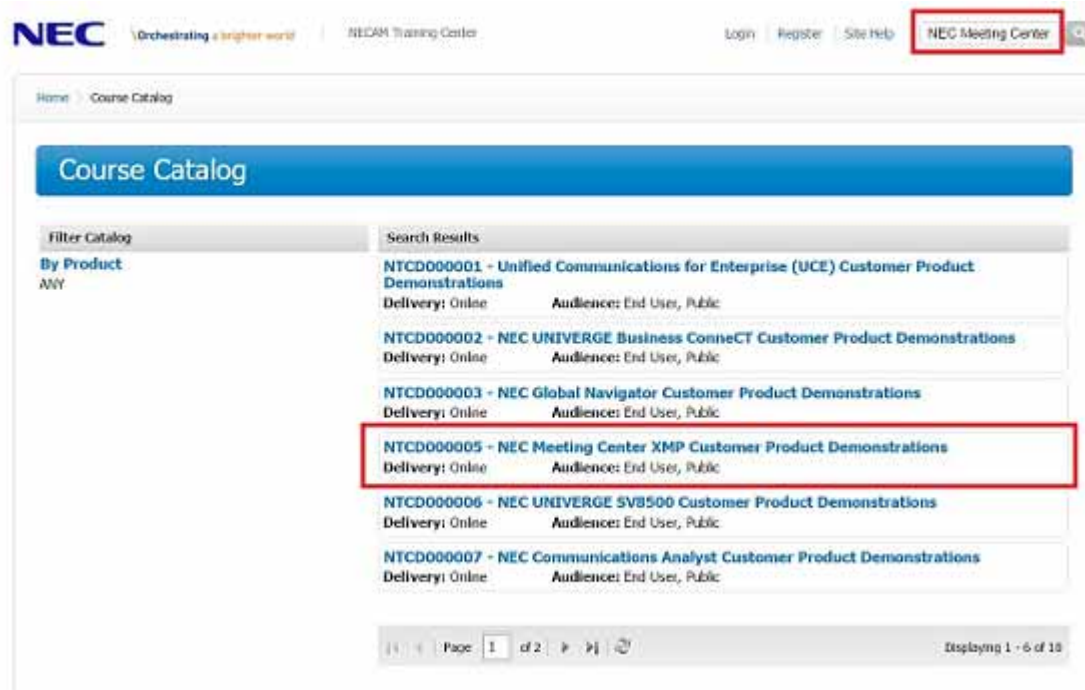
The quantity of System ports must be equal to or greater than the greatest quantity selected for Audio, Emergency or Mass Notification ports.

Training

NMC Technician Training

To receive technical support on the NEC Meeting Center Application, your technicians must be certified. Certification Training is online within **MyNEClearning.com** and is free of charge. Within MyNEClearning, type NEC Meeting Center into the search dialog box to register and take the online certification training as shown in [Figure 1-1](#).

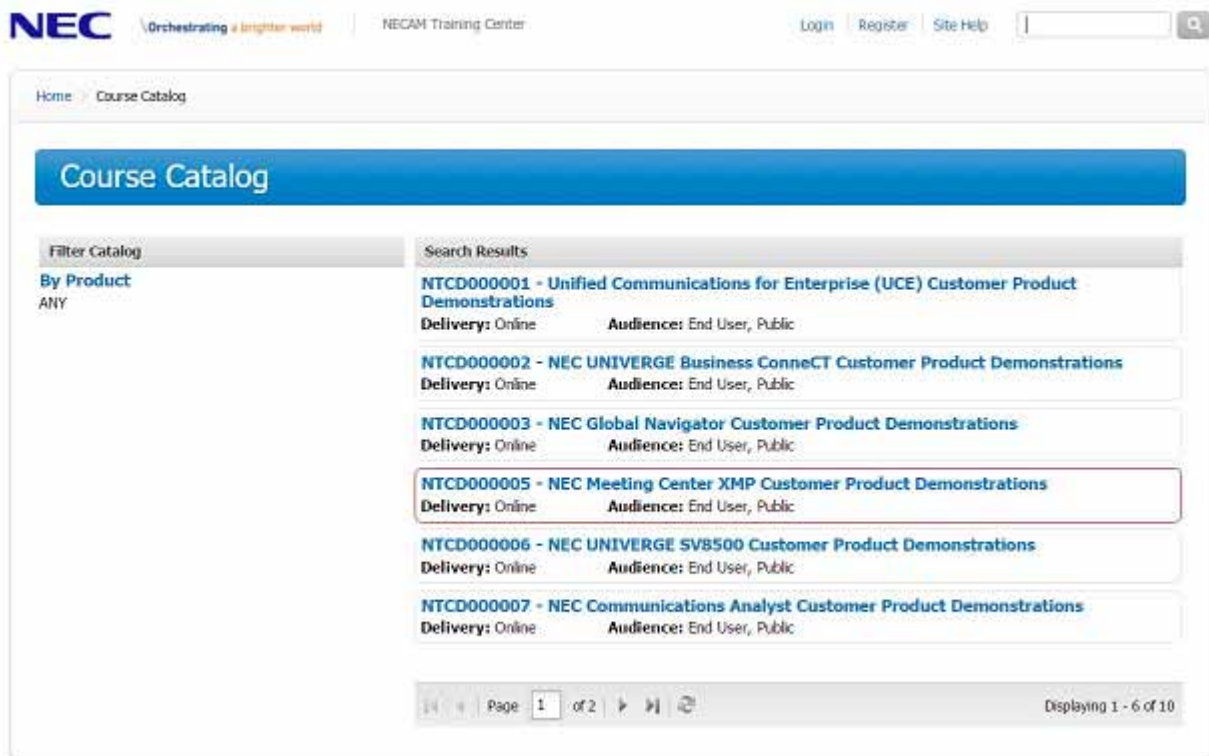
Figure 1-1 NMC Technician Training Registration



NMC End-User Admin Training

NEC Meeting Center end-user online administration training can be found at <http://www.myneclearning.com/video/externaltraining/index.html>. See Figure 1-2.

Figure 1-2 End-User Admin Training Registration



Integration

Follow the steps below to integrate the NMC server.

- Step 1** Setup the NMC server and install the NMC Software Disks. Refer to [NMC "Software Installation" on page 2-1](#).
- Step 2** Configure network integration on the NMC Server, i.e. IP Address, Default Gateway, Host Names, etc. Refer to ["NMC Network Configuration" on page 2-7](#).
- Step 3** Begin administrative setup within the NMC application, i.e. load license file, input URL Host Names, define SIP station interface to SV9100/SV9300/SV8100, input or import users, groups, etc. Refer to ["NMC Administrative Setup" on page 4-1](#).
- Step 4** Configure integration within the UNIVERGE SV9100/SV9300/SV8100 system, i.e. Extension/DID numbers, etc.

Customer Site Requirements

Table 1-2 lists items that need to be provisioned on a typical NMC system. This table should be completed before beginning the installation process.

Table 1-2 Customer Site Networking Parameters

| Row # | Parameter Name | Parameter Value Example | Parameter Value for this Installation |
|-------|---|-------------------------|---------------------------------------|
| 1 | IP Address of NMC | 10.1.1.252 | |
| 2 | Subnet Mask | 255.255.255.0 | |
| 3 | Gateway IP Address | 10.1.1.1 | |
| 4 | Primary DNS Address | 10.1.1.211 | |
| 5 | Secondary DNS Address | 8.8.8.8 | |
| 6 | Admin GUI Hostname | nmc.acme.com* | |
| 8 | NTP Time Server address | pool.ntp.org | |
| 9 | Dial in Phone Number for the NMC | (972) 555 1212 | |
| 10 | IP Address of SV 9100 (Circuit Group Address) | 10.1.1.250 | |

*The site network administrator will need to create a DNS entry that points the Admin GUI Hostname (e.g., nmc.acme.com) to the NMC's IP address (e.g., 10.1.1.252) or whatever the assigned address is for the specific installation). This is needed to allow users outside the office to access the NMC Web Portal by typing the hostname in the URL window of their browser.



2

NMC Software Installation and Network Configuration

This chapter provides step-by-step procedures to install and configure the NMC software. Descriptions and procedures are found in the following sections of this chapter.

- Chapter Topics*
- [Software Installation](#)
 - [NMC Network Configuration](#)

NEC Meeting Conference release 8.0 may be installed on a physical or virtual machine.



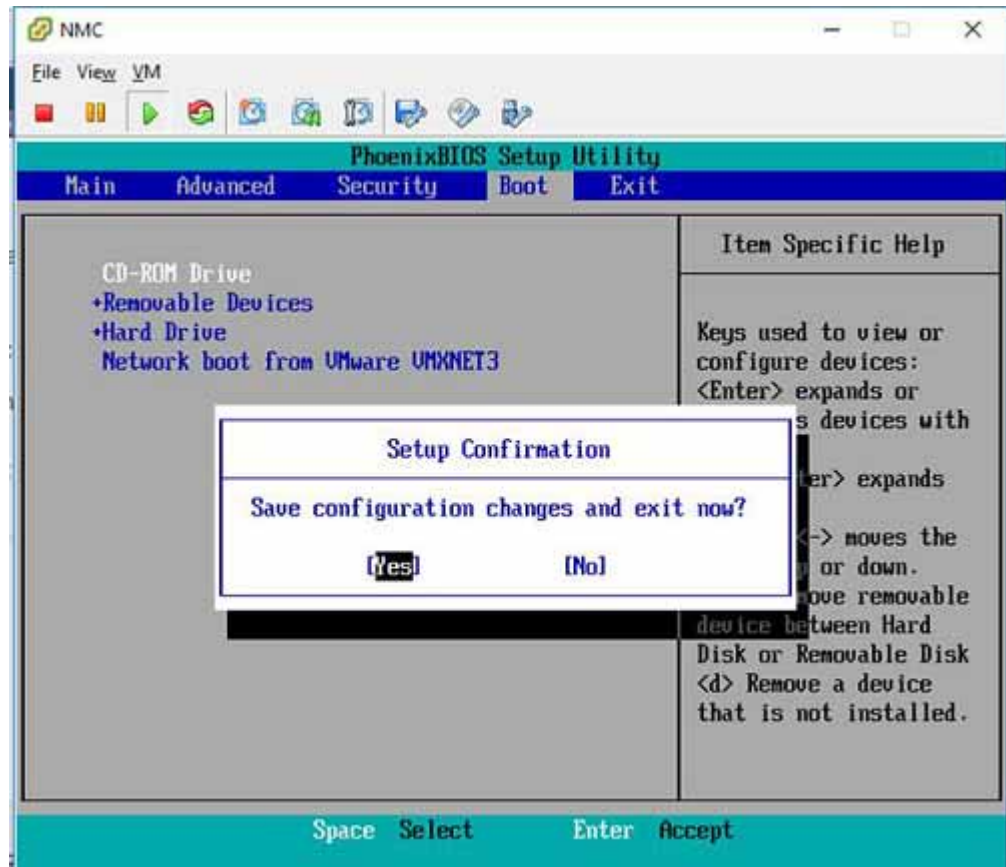
NOTE

The system administrator should configure BIOS for server to boot into DVD-ROM as first boot priority.

Software Installation

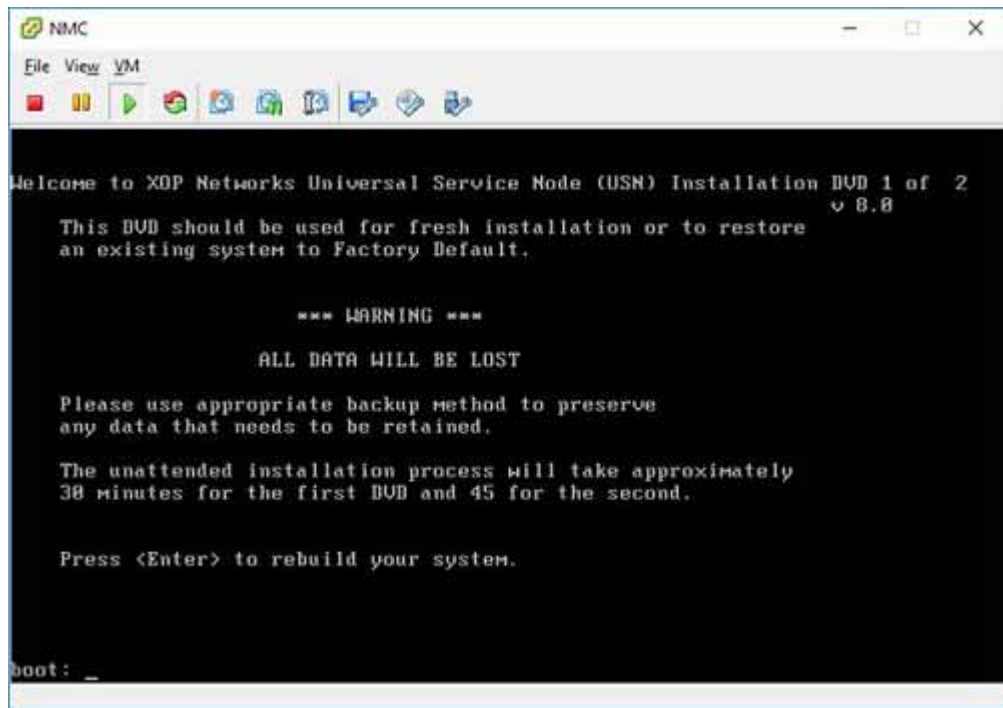
- Step 1** Power on the server and press **F2** or **DEL** key during POST process to enter the BIOS setup. [Figure 2-1](#) displays.

Figure 2-1 BIOS Setup and On-Screen Instructions

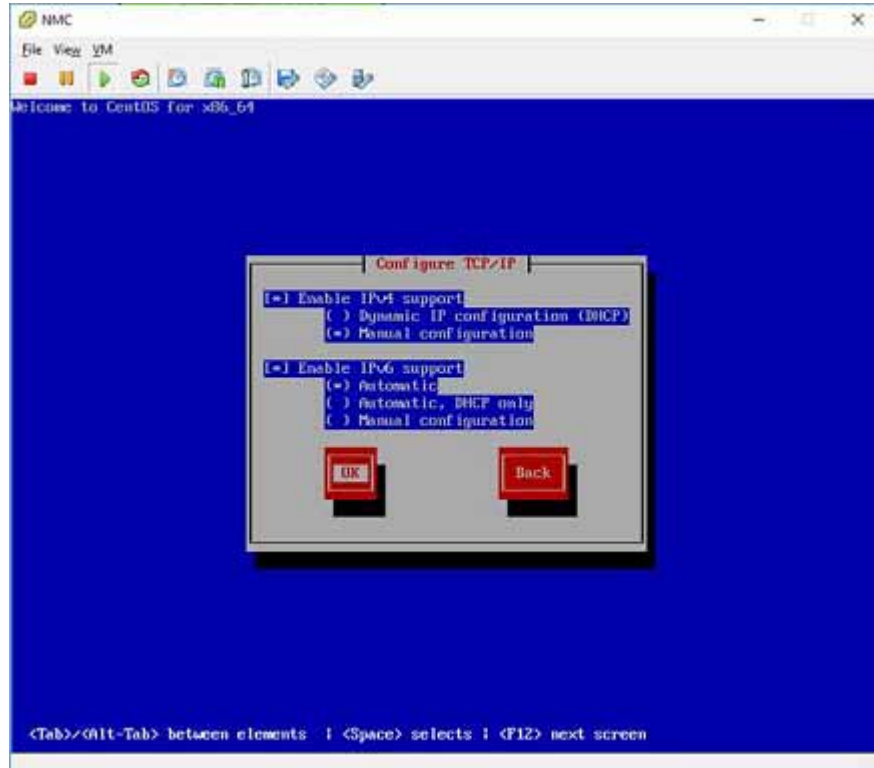


- Step 2** Follow the on-screen instructions to configure the BIOS for CD-ROM as the first boot priority.
- Step 3** Save BIOS configuration by pressing **F10** and select **YES** to confirm changes.
- Step 4** The server should boot from DVD Disc 1. Press **Enter** to install the Operating System and NMC application on the server. Refer to [Figure 2-2](#).

Figure 2-2 NMC Installation Screen – Boot into DVD Disc 1



- Step 5** When the installation process prompts for configuring TCP, use the arrow and space keys to enable **IPv4 Support** and select **Manual Configuration for LAN interface**. See [Figure 2-3](#).

Figure 2-3 Network Parameters Configuration

Step 6 Navigate to the **OK** button and press space to confirm.

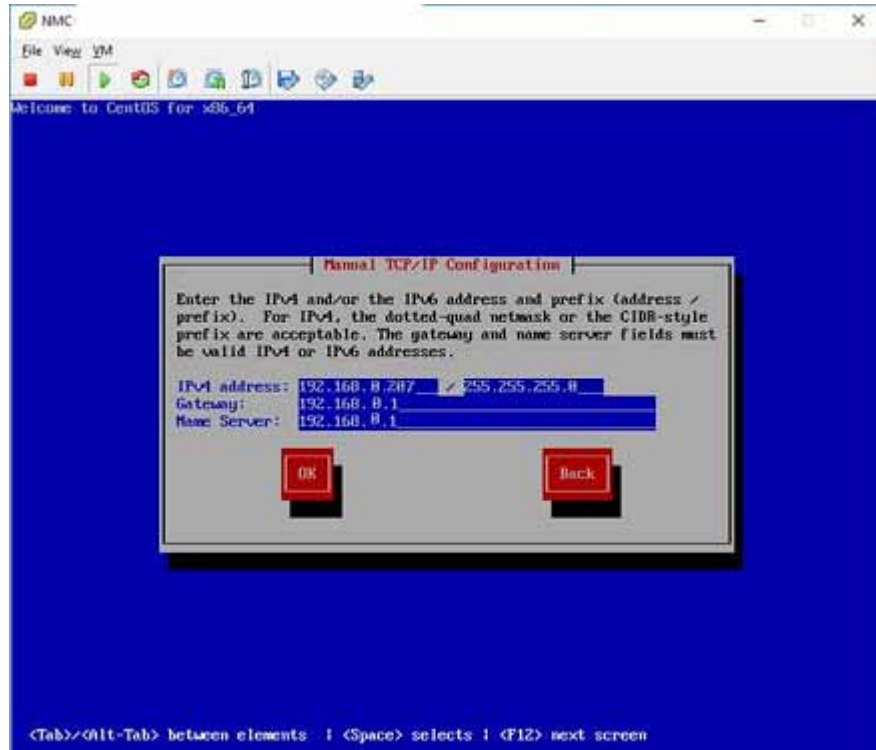
Step 7 Enter IP Address, Subnet Mask, Gateway and DNS information. The numbers entered in [Figure 2-4](#) are for demonstrative purpose only, contact your network administrator for details.



NOTE

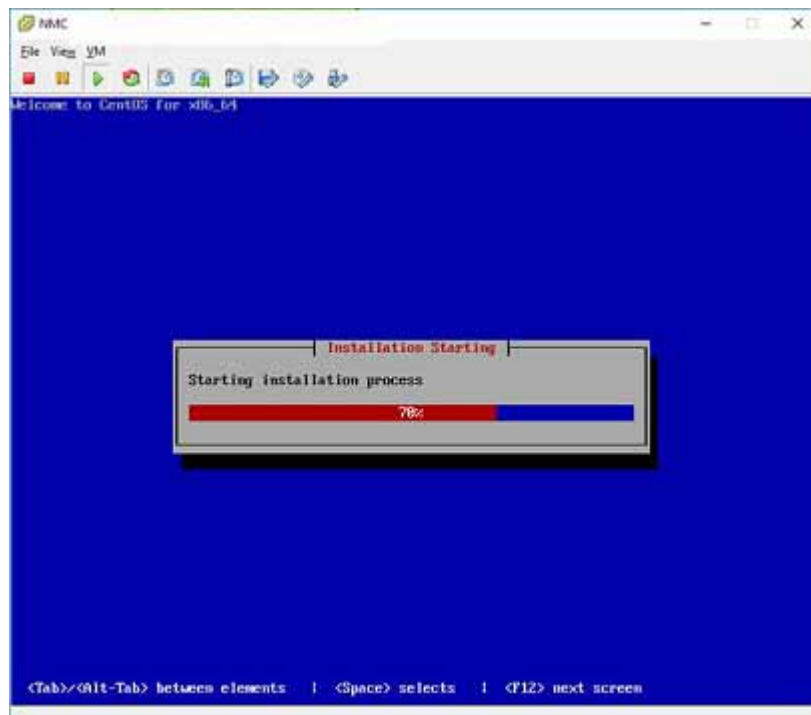
This information should be defined based on the information supplied in [Table 1-2](#), "Customer Site Networking Parameters" on page 1-7.

Figure 2-4 Configure NMC Network Parameters



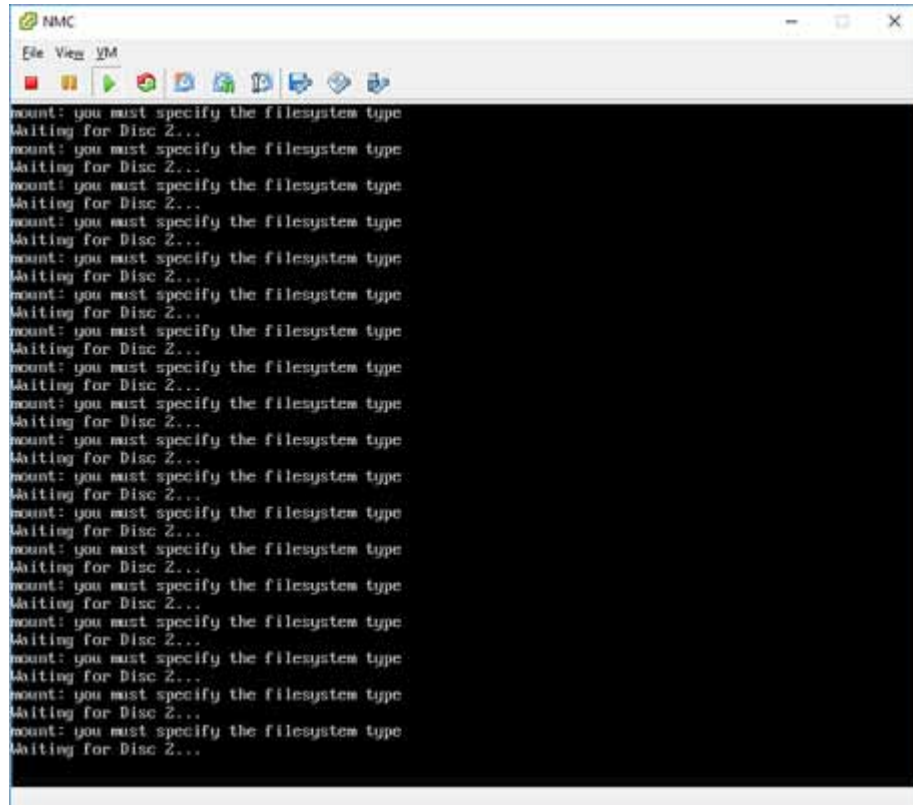
Step 8 The system begins installing and a progress bar displays showing the status as shown in [Figure 2-5](#).

Figure 2-5 NMC Installation Process



- Step 9** When prompted, remove DVD Disc 1, then insert DVD Disc 2 into server DVD-ROM to continue NMC application installation, as shown in [Figure 2-6](#).

Figure 2-6 System prompts for DVD Disc 2



- Step 10** Open the Web Browser found at the top of the Centos Shell and point it to <http://192.168.0.207> (default IP Address for NMC Administration Page on the Local Machine). This will take you to the login to the NMC Administrator. See [Figure 2-7](#). Default username and password is **admin, admin**, respectively.

Figure 2-7 NMC Administrator Login Page



NMC Network Configuration

This section provides the steps required for changing the default network settings to those applicable to the site as per [Table 1-2](#).



The NMC default IP address is 192.168.0.207.

Changing Network Settings

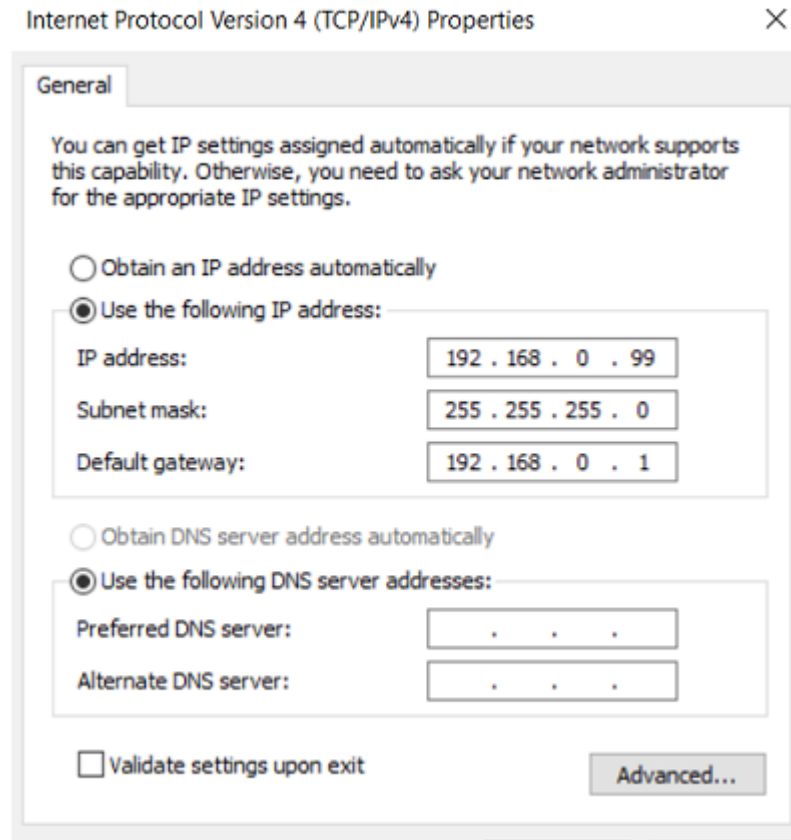
This chapter provides the steps required for changing the default network settings to those applicable to the site, as per [Table 1-2](#). Note that the NMC has a default IP address of **192.168.0.207**.

The user can use their laptop PC for making the changes to the network settings of the NMC. In order to do that, the user needs to temporarily change the IP address of the laptop so that they can access the server over a directly connected Ethernet cable.

Change the TCP/IP settings of your laptop. Refer to [Figure 2-8](#).

Use your PC's Start menu to go to: **Settings > Network and Internet > Ethernet > Change Adapter Options > Local Area Network > Properties**.

Figure 2-8 TCP/IP Settings



Use a browser and go to <http://192.168.0.207> and login as System Administrator. See [Figure 2-9](#).

Figure 2-9 NMC Login Page



Use the following credentials to log in:

- Account Name: **admin**
- Password: **admin**

Follow the steps below to change the Network Settings.

- Step 1** Go to Administration/Network Settings tab and enter the data from [Table 1-2, "Customer Site Networking Parameters"](#) on page 1-7.
- Step 2** Enter the Hostname, IP address, Gateway IP address, Subnet Mask IP address, and the Primary and Secondary DNS IP addresses. Press **Apply**.
- Step 3** Enter the System Clock and Time zone information. Press **Apply**.
- Step 4** Enter the Email Relay related information. Press **Apply**.
- Step 5** Enter the NTP Server URL. Press **Apply**.
- Step 6** Press Reboot for the new network settings to get configured on the NMC. Refer to [Figure 2-10](#).

Figure 2-10 Reboot to Configure Settings

My Profile Resources Services Real View Reports Administration Additions

Network Setup

Host Name and IP Addresses

Hostname: NMC

Ip Address: 10.1.1.205

Gateway: 10.1.1.1

SubNetmask: 255.255.255.0

Primary DNS: 10.1.1.1

Secondary DNS:

Apply

Email Relay

Relay Server Address: mail.necam.com

User Name: nmc@necam.com

Password: *****

Authentication: PLAIN

Apply

Test Email Address

To: From:

Test Email

Show Mail Log

System Clock and Timezone

System clock: 2017 June 29 10:55

System timezone: (GMT-05:00) EST

Apply

NTP Server

Clock is synchronized

IP Address: 0.us.pool.ntp.org

Apply

Reboot

Now as the local networking parameters are configured on the NMC, disconnect the Ethernet cable between your laptop and the NMC and reconnect it to the local LAN. At this point, you should be able to use any networked computer to access the NMC's web portal.

3

Virtual Server Installation

Installation in Virtual Environment

For the procedure of creating a virtual instance, each virtual environment such as VMware, Hyper-V, etc. has its own procedure to spin a new slice of virtual machine. You need to reserve CPU, memory and storage based on NMC system ports and our minimum requirement for NMC virtual machine shown in [Table 3-1](#).

Table 3-1 Support Virtual Machine Configuration

| | | | | |
|--------------------------|----------|----------|----------|----------|
| # of Ports | 100 | 250 | 500 | 1000 |
| # of Cores | 4 | 8 | 12 | 24 |
| Clock Speed (GHz) | 2.5+ | 2.7+ | 2.7+ | 2.7+ |
| Hyper Threading | Yes | Yes | Yes | Yes |
| Resource Reservation | Required | Required | Required | Required |
| RAM | 4 GB | 8 GB | 12 GB | 16 GB |
| Hard Disk (Minimum size) | 32 GB | 64 GB | 128 GB | 256 GB |

Follow the steps below to deploy a virtual NMC:

- Step 1** Follow the virtual machine vendor (e.g. VMware, Hyper-V) to spin a slice of virtual machine that will have CPU, memory and storage allocated according to our recommendation in [Table 3-1](#). (For storage, choose the option to simulate fixed storage, NOT dynamic.)
- Step 2** For each virtual environment, you need to follow their procedure to reserve the resources to guarantee NMC server performance.
- Step 3** Boot the virtual machine to CD-ROM to install software for NMC server like you do for a physical server (refer to "[NMC Software Installation and Network Configuration](#)" on page 2-1 and follow DVD Deployment steps).



4

NMC Administrative Setup

This chapter provides step-by-step procedures to perform NMC Administrative Setup. Descriptions and procedures are found in the following sections of this chapter.

- Chapter Topics*
- [Uploading Application License](#)
 - [Applying the NMC Application License](#)
 - [Configure NMC System Parameters](#)
 - [Set up Administrator Profile](#)
 - [SV9300 Standard SIP Station Programming](#)
 - [SV9100 Integration Programming](#)
 - [SV8100 Integration Programming](#)

Uploading Application License

Follow the steps below to upload the Application License.

- Step** Use a browser and navigate to NMC's IP address (e.g., <http://10.1.1.205> in above case) and login as System Administrator. See [Figure 4-1](#).

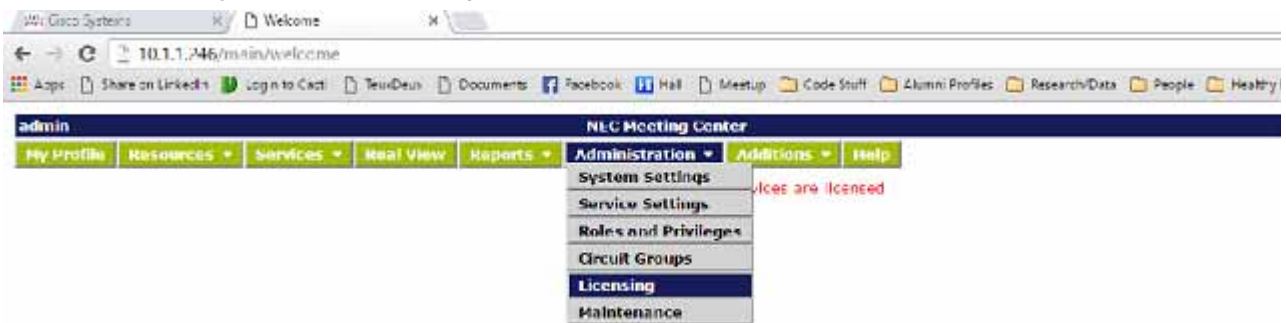
Figure 4-1 NMC Administrator Login Page



Applying the NMC Application License

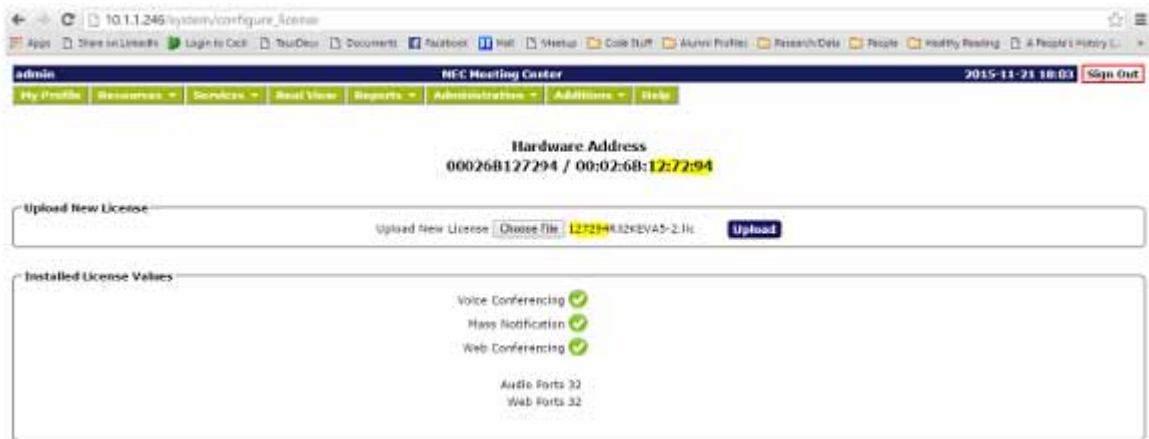
Step 1 Click on the **Administration** menu and the select **Licensing**. See [Figure 4-2](#).

Figure 4-2 NMC Licensing Portal Access



Step Use **Choose File** to point to the license file on your PC and then click on **Upload**. See [Figure 4-3](#).

Figure 4-3 Upload License



NOTE

The NMC's MAC address is also displayed on the web portal. The license file name contains 6 numerals that match the least significant 3 octets of the MAC address of the system. This helps an associate in determining that a correct license file pertaining to the NMC at hand is being loaded.

The upload process takes approximately 3 minutes. After the license is uploaded successfully, the portal self-refreshes and purchased number application ports are displayed.

Configure NMC System Parameters

Step Navigate to the **General Settings** tab (Figure 4-4) and input the required information.

Figure 4-4 System Settings Page

- **System Identification**
 - **System description:** Any name that you would like to provide to your system.
 - **Server Name:** This should match the Host Name that you setup within the Webmin application under “NMC Network Configuration” on page 2-7 of this document. This is the URL that users will use to access the NMC for administrative purposes or as a moderator.
 - **Dial-in Number:** This is the telephone number that is dialed to access the NMC audio conferencing application. This field appears in the iCal file as the number to dial to reach the NMC.
 - **Time Zone:** Specify the default time zone used by the NMC.
 - **Upload New Logo:** If you would like to replace the NEC logo with your own logo or the customer's, you may do so here. The logo image to be imported should not be more than 120 pixels tall.
 - **Upload New Welcome Prompt:** This is the opening welcome prompt that callers hear when calling into the NMC. You can record your own .WAV File and upload here to customize for your company.
 - **Web root page:** This determines the default login page (account login, web conference login etc.).
- **Voice Settings:** Enter appropriate voice settings for your configuration. Default originating number is used to populate the **From** field in outgoing invites.
- **Resource Constraints:** Specify any resource constraints you desire.

- **VoIP Settings**
- **Stack Address:** Enter the IP Address of the NMC Server.

Set up a SIP Extension between SV9100/SV9300/SV8100 and the NMC

- Step 1** Navigate to **Administration** and select **Circuit Groups**. Press the **ADD** button to add a new circuit group. The **Edit Circuit Group** screen displays (Figure 4-5). Assign a name for this circuit group. Select **SIP Extension** in the **Circuit Group Type** field and input the IP Address of the UNIVERGE SV9100/SV9300/SV8100 and the port number (e.g., 5070) that you wish to connect with.

Figure 4-5 Edit Circuit Group Screen

- **Circuit Group Type:** On UNIVERGE SV9100/SV9300/SV8100, the **Circuit Group Type** should be **SIP Extension**. On an SV system, **Circuit Group Type** would be **SIP Extension**.
- **Transport:** Should be set to **UDP**.
- **Circuit Group Address:** This is the IP Address to your communications system, SV9100/SV9300/SV8100.
- **Realm:** This can be left blank in most cases.
- **User Name and Password:** If your system requires **User Name** and **Password** for registration to your SIP Extensions, input that information here.

Set up Administrator Profile

- Step 1** Navigate to **Account Profile** and update and change the **Administration Login**, **password**, **phone number**, **email** and other options available. See Figure 4-6.

Figure 4-6 Account Profile Page

Personal Info

Cancel My Profile Submit

Login: admin
 New Password:
 Confirm New Password:
 First Name: admin
 Middle Name:
 Last Name:
 Nickname:
 Primary Phone: (214) 121543
 Alternate Phone 1:
 Alternate Phone 2:
 Alternate Phone 3:
 Primary Email: meconee@ecenter@necam.com
 Secondary Email:
 SMS Address:
 Pager Address:
 Maximum Services: -1 [-1 means unlimited]
 Page Size: 15 [8 means unlimited]
 Language: en-US
 Time zone: (GMT-05:00) Eastern Time (US & Canada)

At least one of first name and last name is required, and at least one phone number or email/text/pager address is also required.

Email Settings

Note: Summary reports are disabled by the system administrator.

Optional Email Provider (leave blank to use system default provider):

Server: Port: 25
 User Name:
 Password:
 Authentication: IMAP Login CRM-IPDS

Service Privileges

- Audio Conferencing (view)
- Audio Conferencing (add/delete)
- Conference Recording
- Conference Dialout
- Web Conferencing
- Mass Notification
- Audio Files
- RealView

Service Defaults

- Conferences wait for moderator
- Conferences disconnect lone participants
- Conferences stop when moderator disconnects
- Conferences play Wait-for-Conference message
- Conferences play About-to-Join message
- Conferences drop dial-out calls when all dial-in callers disconnect

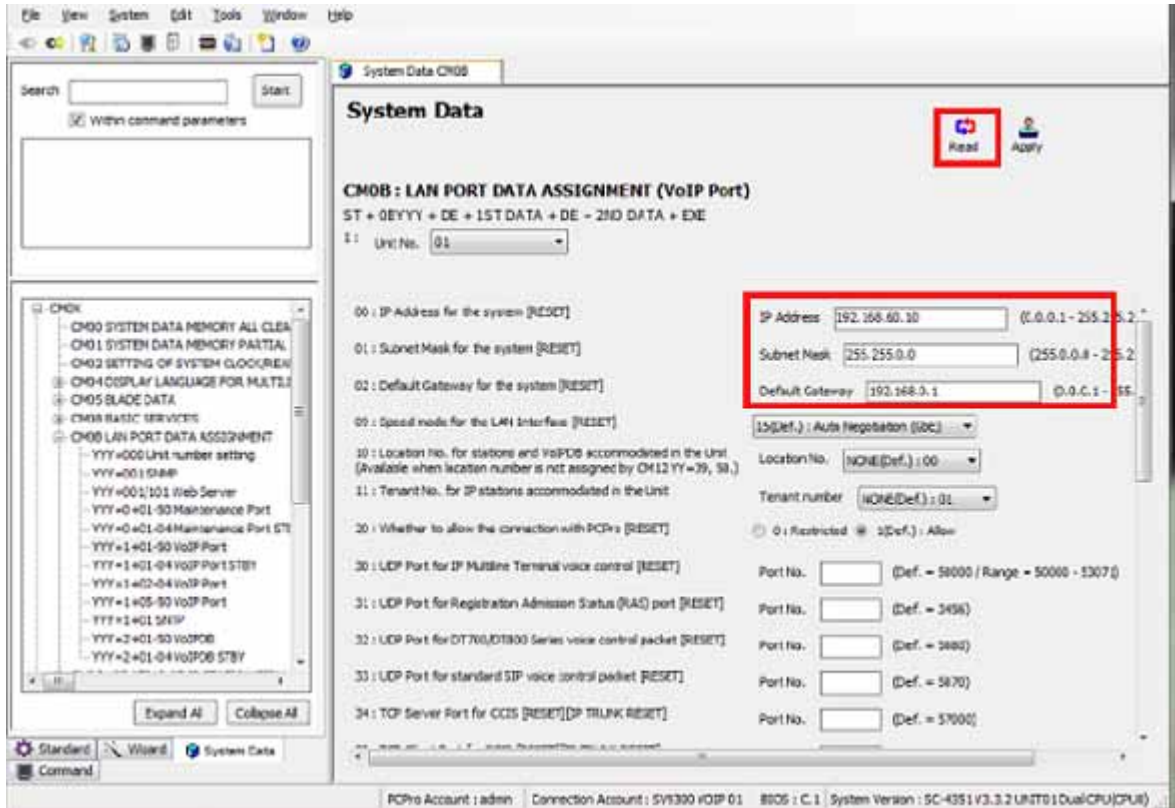
Webcasting

At a minimum, update the **Phone Number**, **Login**, **Password**, and **Email** address. It is recommended that you update all fields which are applicable. Page size determines how many rows are presented on a web page such as under conferences or mass notification listings page.

SV9300 Standard SIP Station Programming

This section describes programming the various parameters required for the SV9300 Standard SIP Station.

Figure 4-7 SV9300 Basic System Settings (1)



Step 1 You must assign an IP address, Subnet Mask and Default Gateway to the VOIP, Click **Read** to get the current settings. See Figure 4-7.

Step 2 FD=00 Enter SV9300 VoiPDB IP address Address.
 FD=01 Enter SV9300 VoiPDB Subnet Mask.
 FD=02 Enter SV9300 VoiPDB Default Gateway Address.

Step 3 FD=10 Set VoiPDB location number.

Step 4 Click **Apply**.

Command line example: Unit 01

CM 0B101>00>192.168.60.10 (Unit 01 VoiPDB Address)

CM 0B101>01>255.255.0.0 (Unit 01 VoiPDB Subnet)

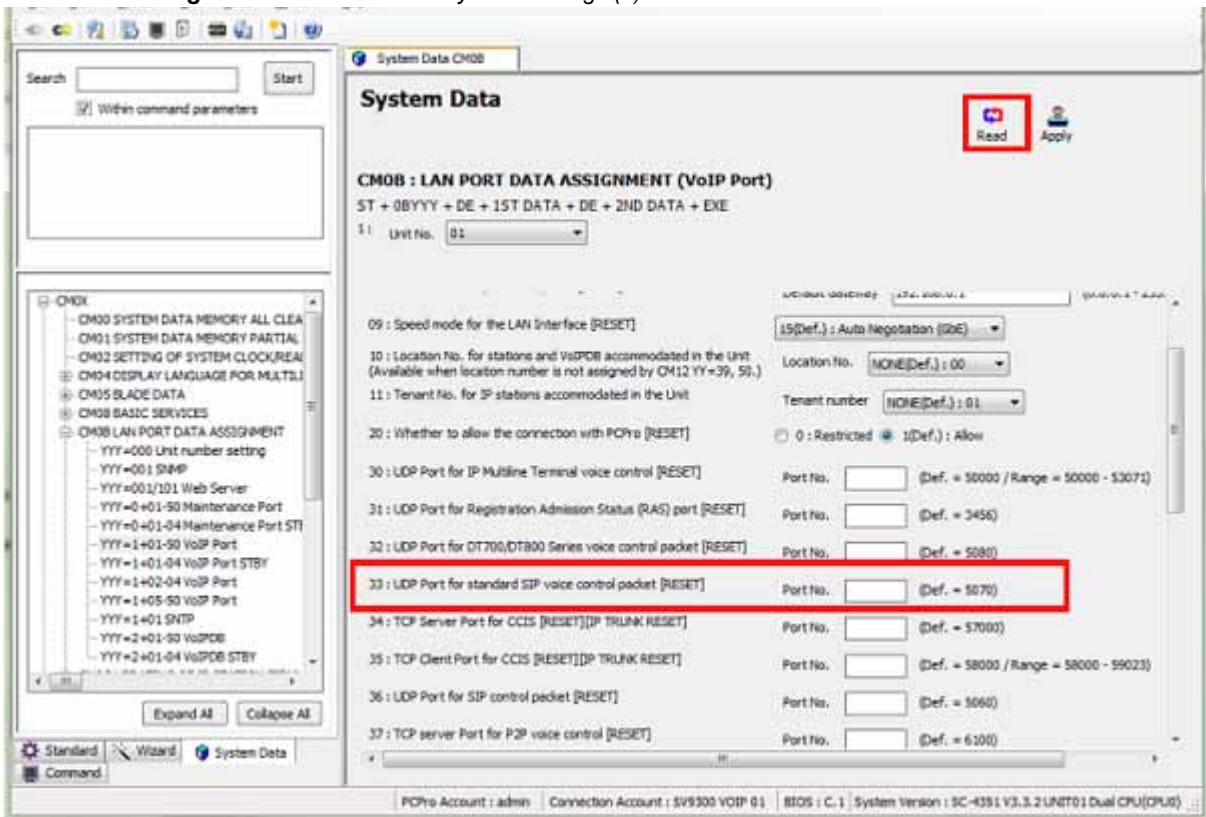
CM 0B101>02>192.168.0.1 (Unit 01 VoiPDB Default GW)

CM 0B101>10>NONE (Default: Location 00)



The SV9300 must be reset in order for the change to take effect.

Figure 4-8 SV9300 Basic System Settings (2)



Step 1 The customer may require the default Standard SIP Control port to be changed. Click **Read** to get the current settings. See Figure 4-8.

Step 2 Enter the desired port number.

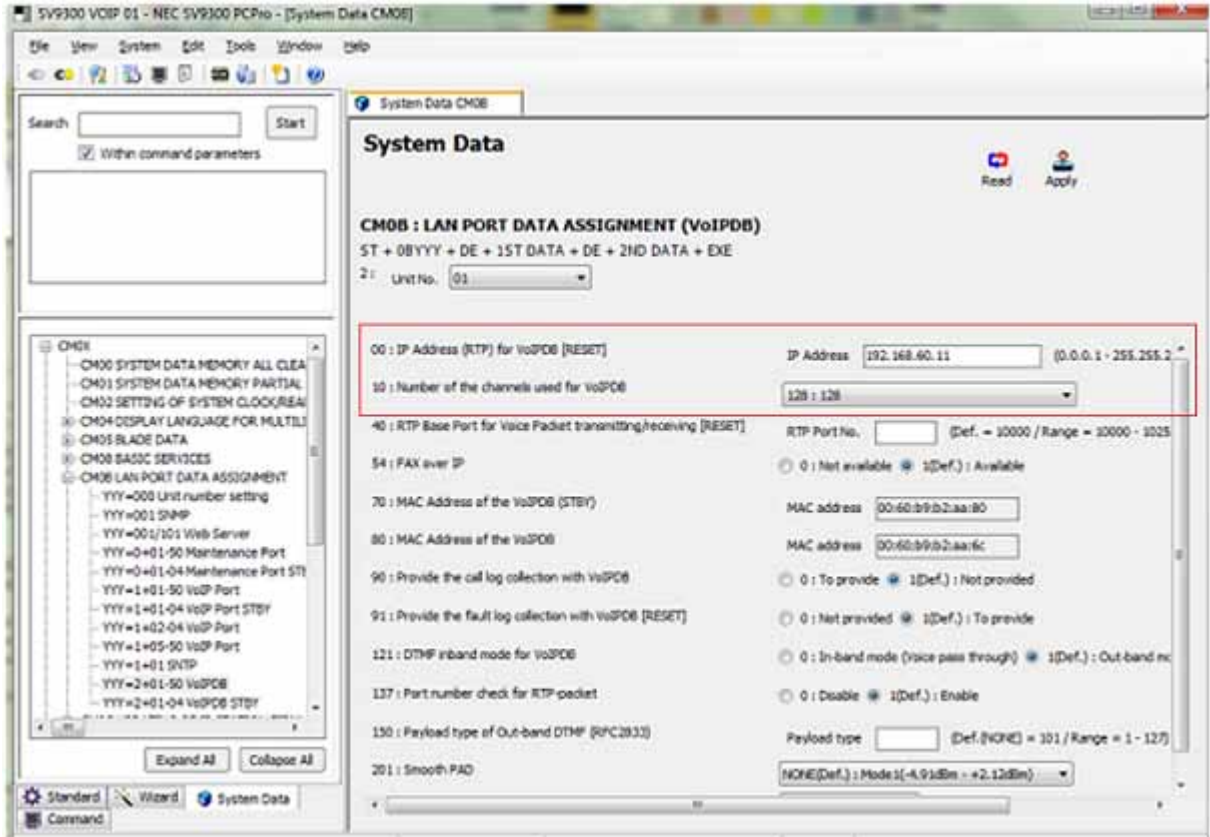
Step 3 Click **Apply**.

Command line Example: Unit 01

CM 0B101>33>NONE (Default: 5070)

- The SV9300 must be reset in order for the change to take effect.
- Only change this port if directed by the customer.

Figure 4-9 SV9300 Basic System Settings (3)



Step 1 IP Pad address will need to be assigned to the VOIP. Click **Read** to get the current settings. See Figure 4-9.

Step 2 FD=00 Enter the VoIP IPPAD IP address.
FD=10 Select the number of VoIP IPPad channels.

Step 3 Click **Apply**.

Command line Example: Unit 01

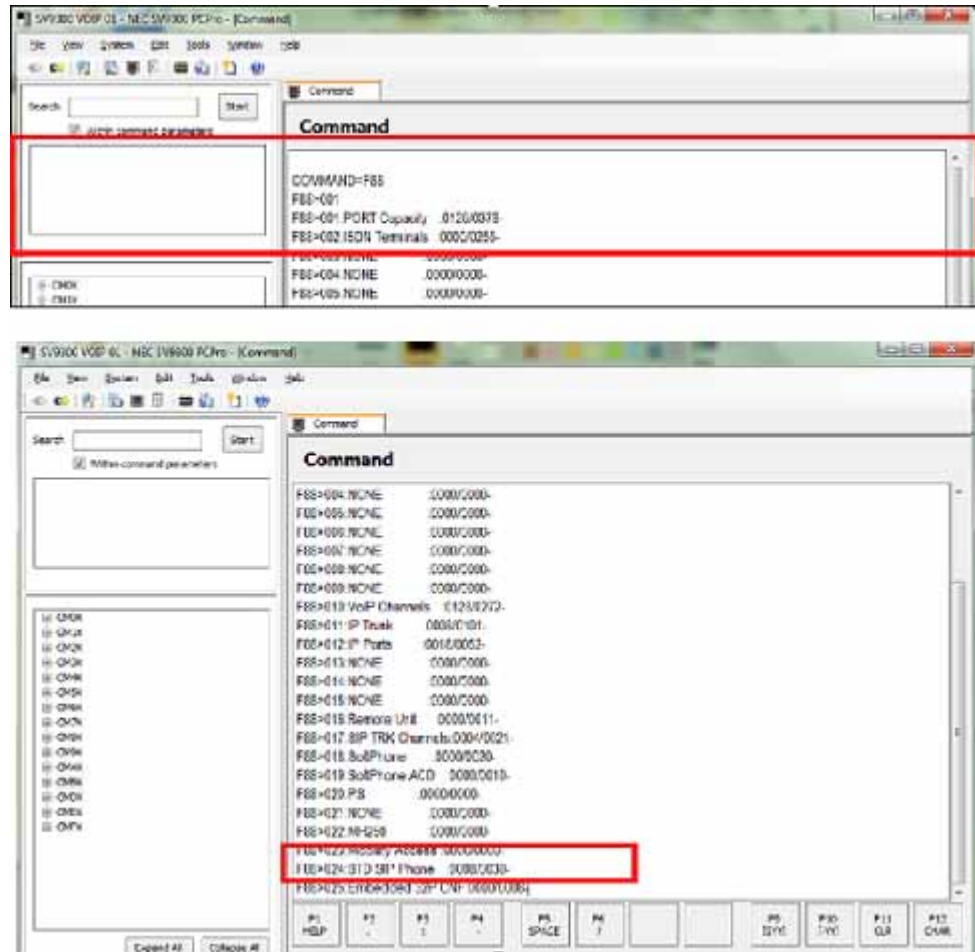
CM 0B201>00>192.168.60.11 (VoIP IPPAD Address)

CM 0B201>10>128 (VoIP IPPAD channels)



The SV9300 must be reset in order for the changes to take effect.

Figure 4-10 SV9300 License Confirmation



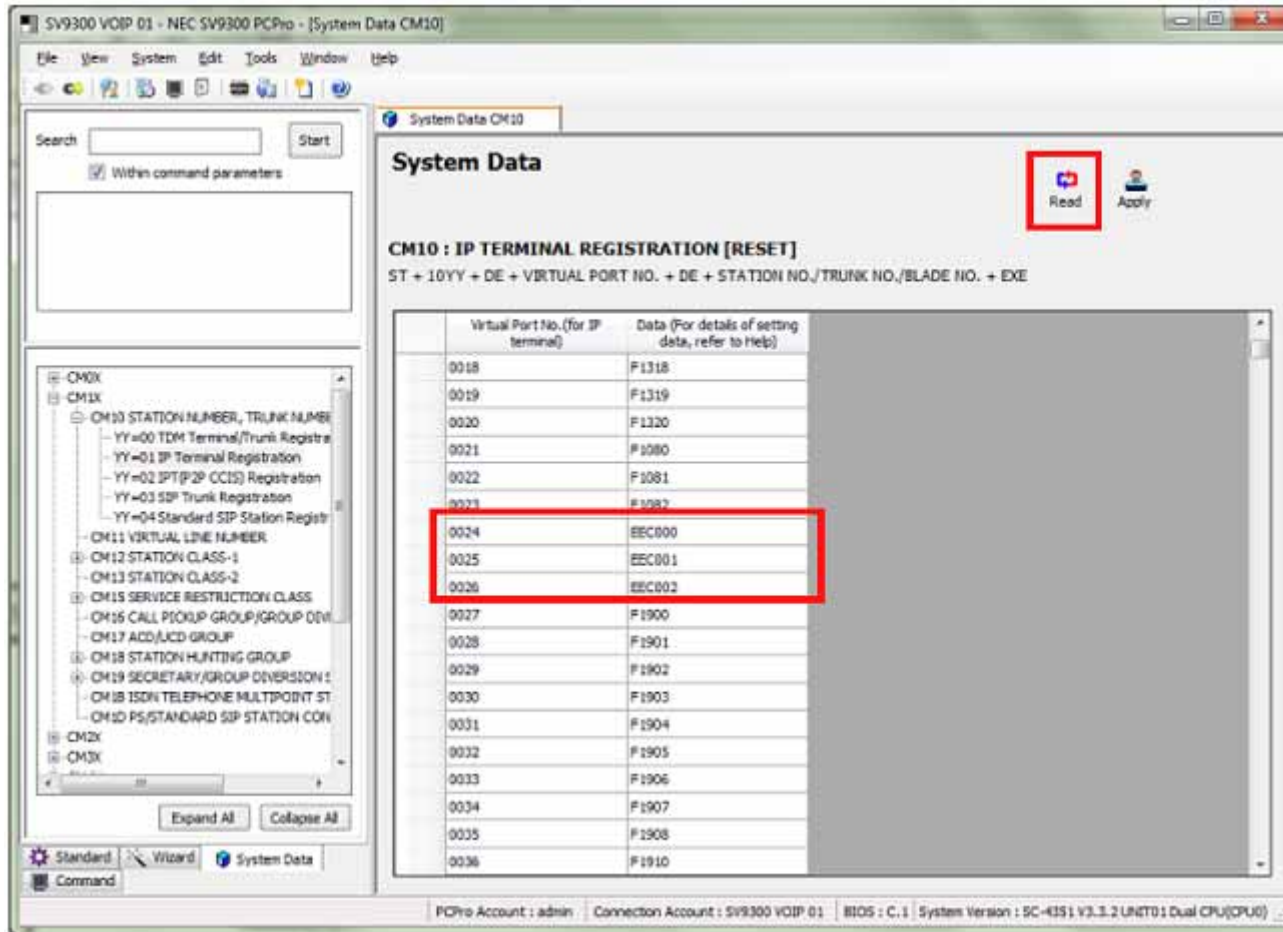
- Step 1** Please confirm that the SV9300 has the appropriate license. See [Figure 4-10](#).
- Step 2** Each Standard SIP Station will need one IP port license and one Standard SIP station license.
- Step 3** This is confirmed in CM F88>001 (Port capacity) and F88>024 (Standard SIP station).

Command line example:

CM F88>001>0125/0378, this example shows there are 378 Port licenses in the system and 125 have been used.

CM F88>024>0008/0030, this example shows there are 30 Standard SIP Stations in the system and 8 have been used.

Figure 4-11 SIP Converter Data Assignment (1)



Step 1 The SIP Data Converter will need to be assigned to the virtual port. Click **Read** to get the current settings. See [Figure 4-11](#).

Step 2 The SIP converter is assigned as EECXXX (XXX=000-127, SIP Converter No.)

Step 3 Click **Apply**.

Command line Example:

CM 1001>0024>EEC000 (Assigns the SIP Converter)

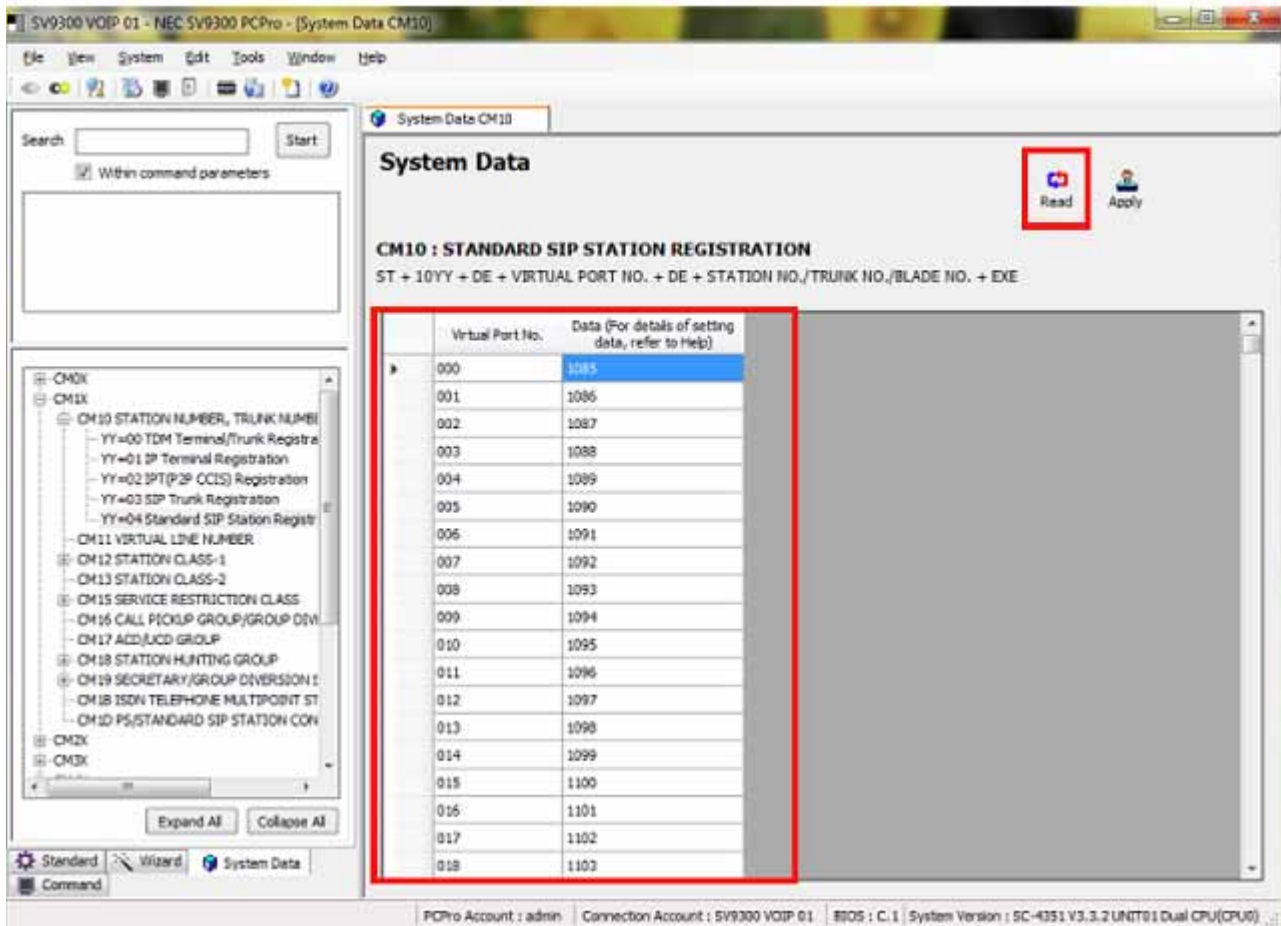
- The SV9300 must be reset in order for the changes to take effect.
- One SIP converter can control 3 simultaneous calls. Example: 12 Standard SIP Stations will require at least 4 SIP Converter's.



NOTE

A reset of the Standard SIP Station is required after the system reset.

Figure 4-12 SIP Converter Data Assignment (2)



Step 1 Once you click on CM 1001, it will read automatically. See [Figure 4-12](#).

Step 2 Enter the Standard SIP station number to the first available port.

Step 3 Continue Standard SIP Station assignment until all stations are assigned.

Step 4 Click **Apply**.

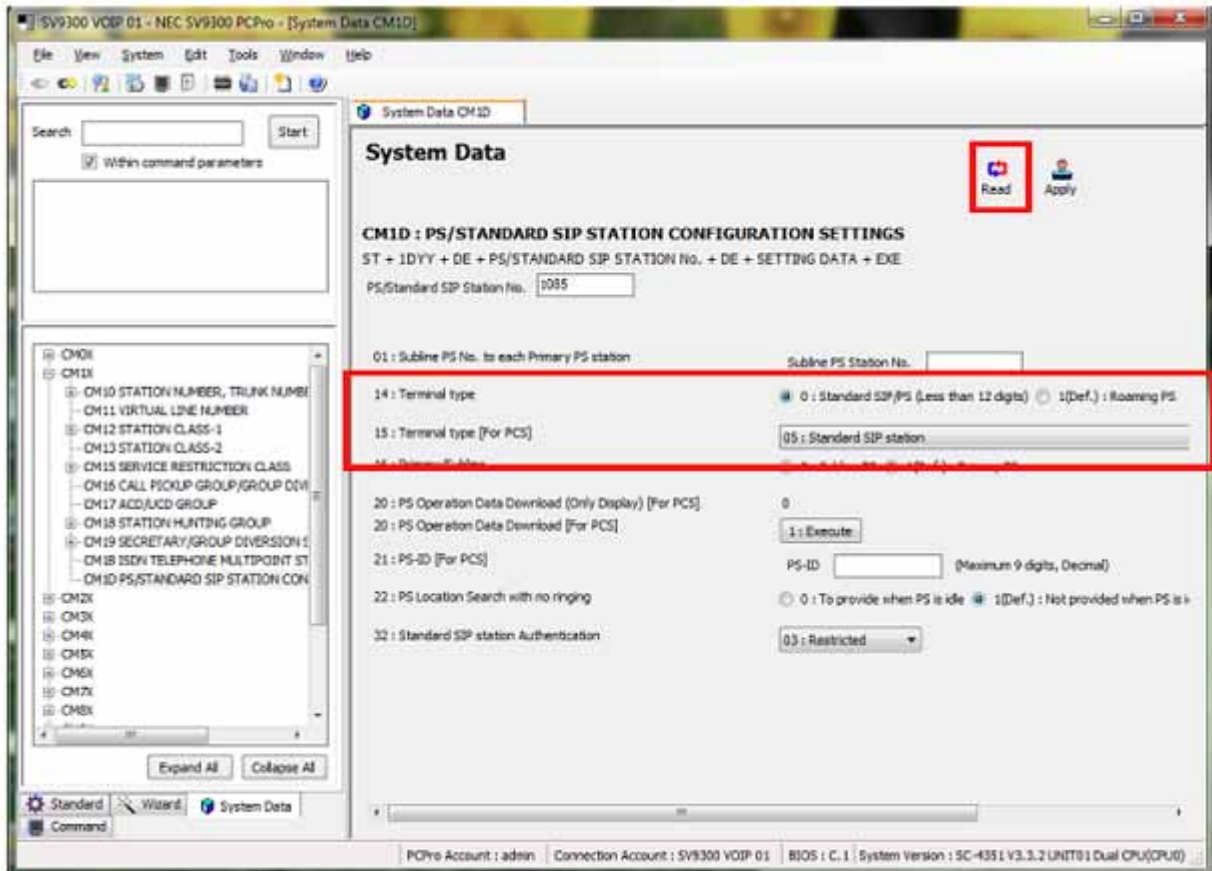
Command Line Example:

CM 1001>000>1085, Assigns station 1085 to port 000

CM 1001>001>1086, Assigns station 1086 to port 001

- Standard SIP Stations are programmed like Single Lines.

Figure 4-13 SIP Converter Data Assignment (3)



- Step 1** Enter the Standard SIP station number. Click **Read** to get current settings. See [Figure 4-13](#).
- Step 2** Set command 1D14 for Standard SIP station to a 0.
- Step 3** Set command 1D15 for the Standard SIP station to 05.
- Step 4** Click **Apply**.

Command Line Example:

CM 1D14>1085>0, Sets Terminal type to Standard SIP station

CM 1D15>1085>05, Sets terminal type to Standard SIP station

Data Assignment for Standard SIP Terminal with Register

Figure 4-14 PS/Standard SIP Station Configuration Settings

The screenshot shows the 'System Data' configuration window for a Standard SIP Station. The 'PS/Standard SIP Station No.' is set to 1085. The '32: Standard SIP station Authentication' setting is highlighted with a red box and set to '15(Def.): Allowed'. Other settings include '01: Subline PS No. to each Primary PS station', '14: Terminal type', '15: Terminal type [For PCS]', '16: Primary/Subline', '20: PS Operation Data Download (Only Display) [For PCS]', '20: PS Operation Data Download [For PCS]', '21: PS-ID [For PCS]', and '22: PS Location Search with no ringing'.

Step 1 Enter the Standard SIP Station Number. Click **Read** to get the current settings. See [Figure 4-14](#).

Step 2 Set command 1D32 to 15 for registration.

Step 3 Click **Apply**.

Command line example:

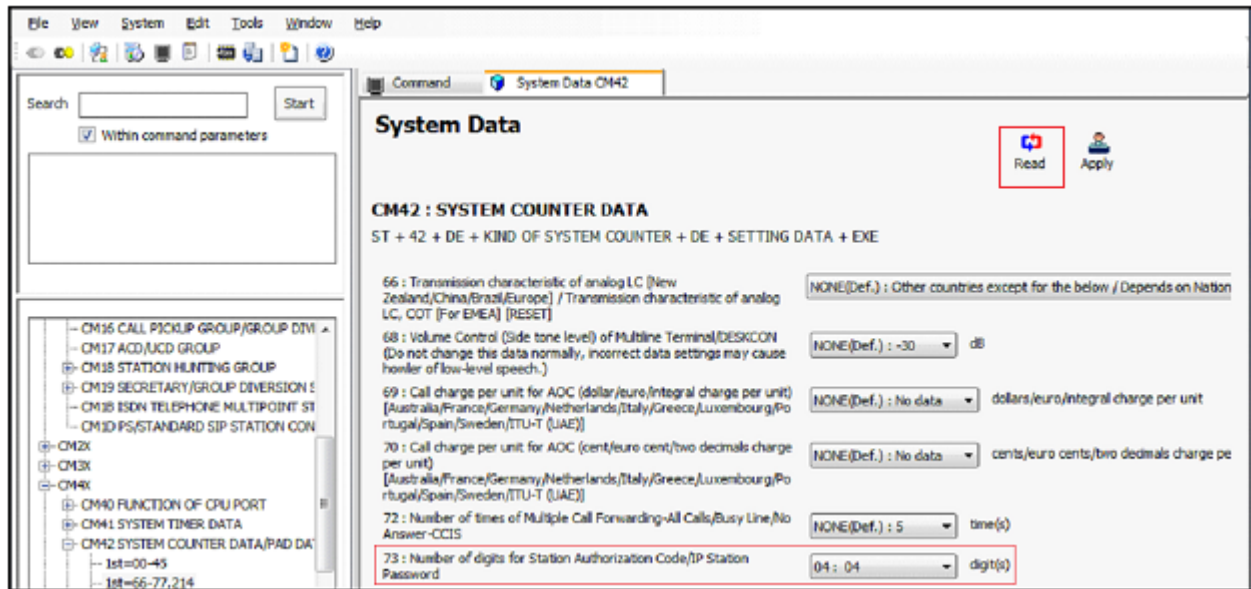
CM 1D32>1085>15, set this for each Standard SIP station.



NOTE

This setting is required for registration.

Figure 4-15 CM42 System Counter Data Settings



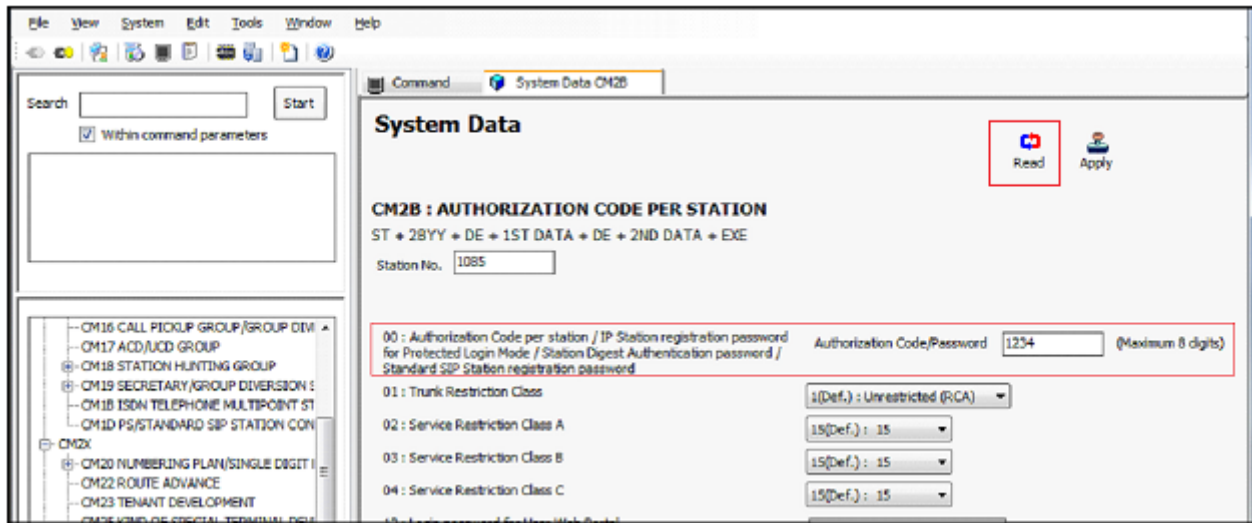
Step 1 Click **Read** to get the current settings. See [Figure 4-15](#).

Step 2 CM 42>73>sets number of digits for Password.

Command line example:

CM 42>73>04, this sets password length to 4 digits.

Figure 4-16 CM2B Authorization Code Per Station Settings



Step 1 Enter the Standard SIP Station Number. Click **Read** to get the current settings. See [Figure 4-16](#).

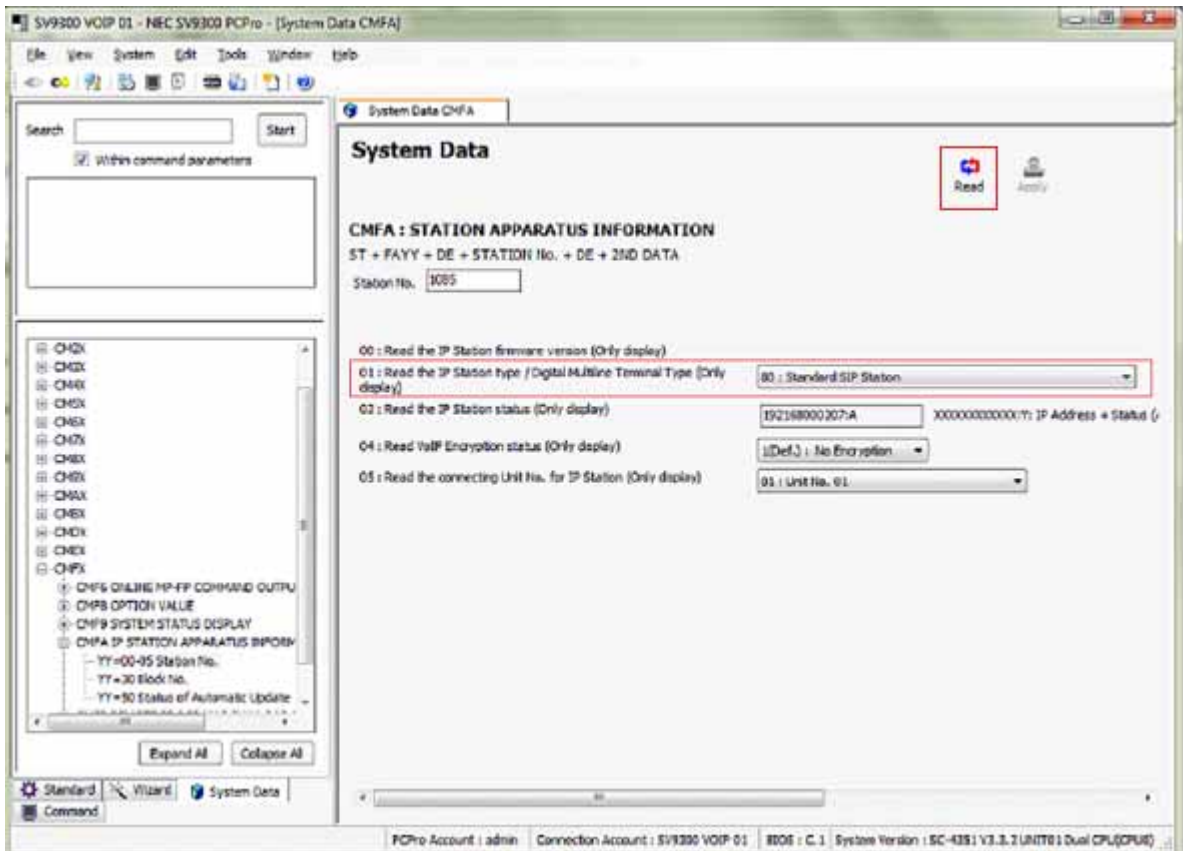
Step 2 CM 2B00 assigns password to the extension.

Step 3 2B00>1085>1234, sets password to 1234 for extension 1085.

Command line example:

CM 2B00>1085>1234, sets password to 1234

Figure 4-17 CMFA Station Apparatus Information Settings



Step 1 Enter the Standard SIP station number. Click **Read** to get the current settings. See [Figure 4-17](#).

Step 2 Confirm the Standard SIP Terminal is active by command FA01, FA02.



NOTE

This is a read only command.

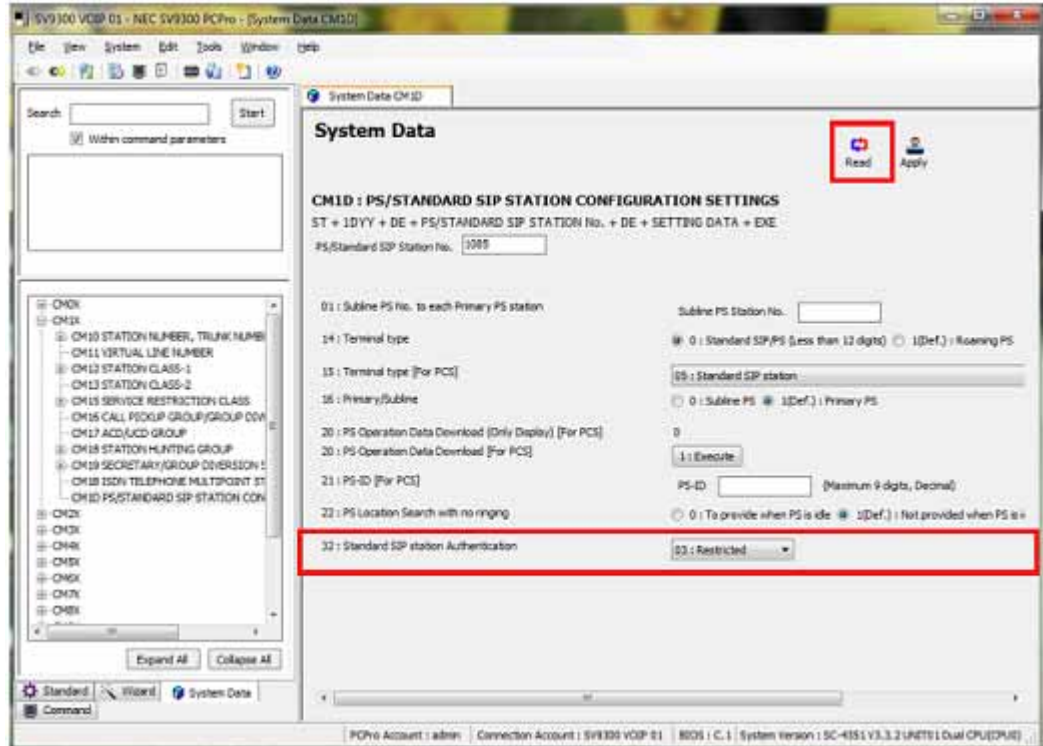
Command line Example:

FA01>1085>80, this shows that station 1085 is a Standard SIP Terminal.

FA02>1085>192168000207:A, this shows the terminal is Active on IP address 192.168.0.207

Data Assignment for Standard SIP Terminal without Register

Figure 4-18 SIP Converter Data Assignment (4)



Step 1 Turn off Standard SIP Authentication. Click **Read** to get the current settings. See [Figure 4-18](#).

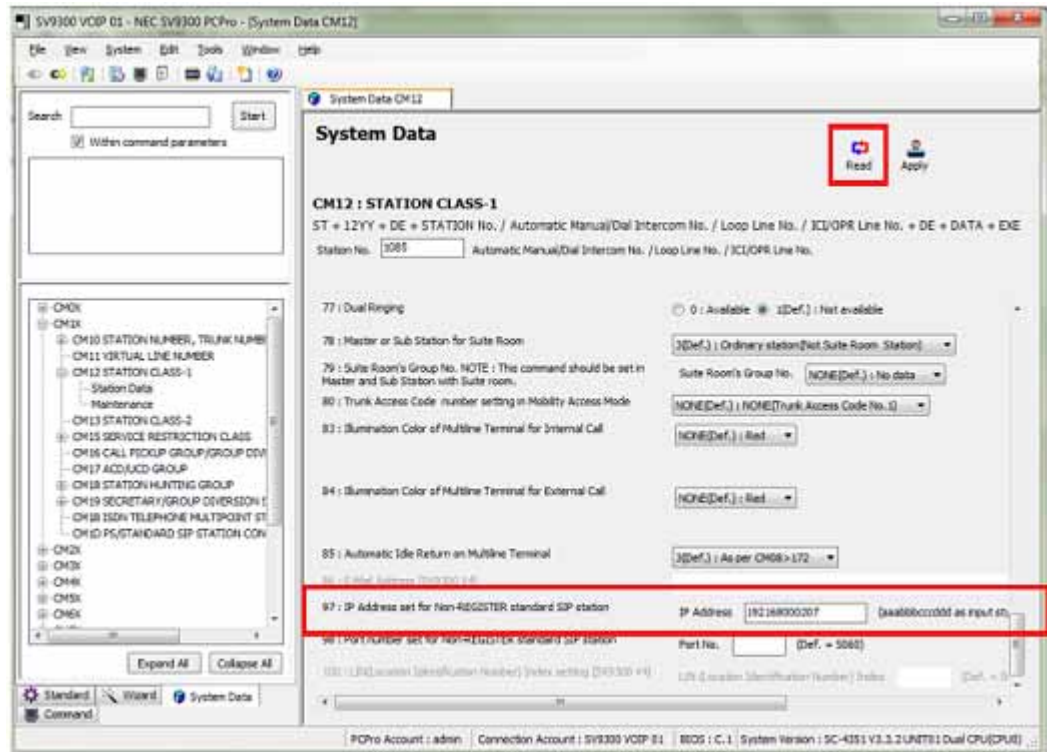
Step 2 Set command 1D32 to 03 for restricted.

Step 3 Click **Apply**.

Command line example:

CM 1D32>1085>03, set this for each Standard SIP station.

Figure 4-19 Data Assignment for Standard SIP Terminal without Register (1)



Step 1 Enter the terminal station number. Click **Read** to get the current settings. See Figure 4-19.

Step 2 Scroll down to CM 1297, enter the IP address of the NMC.

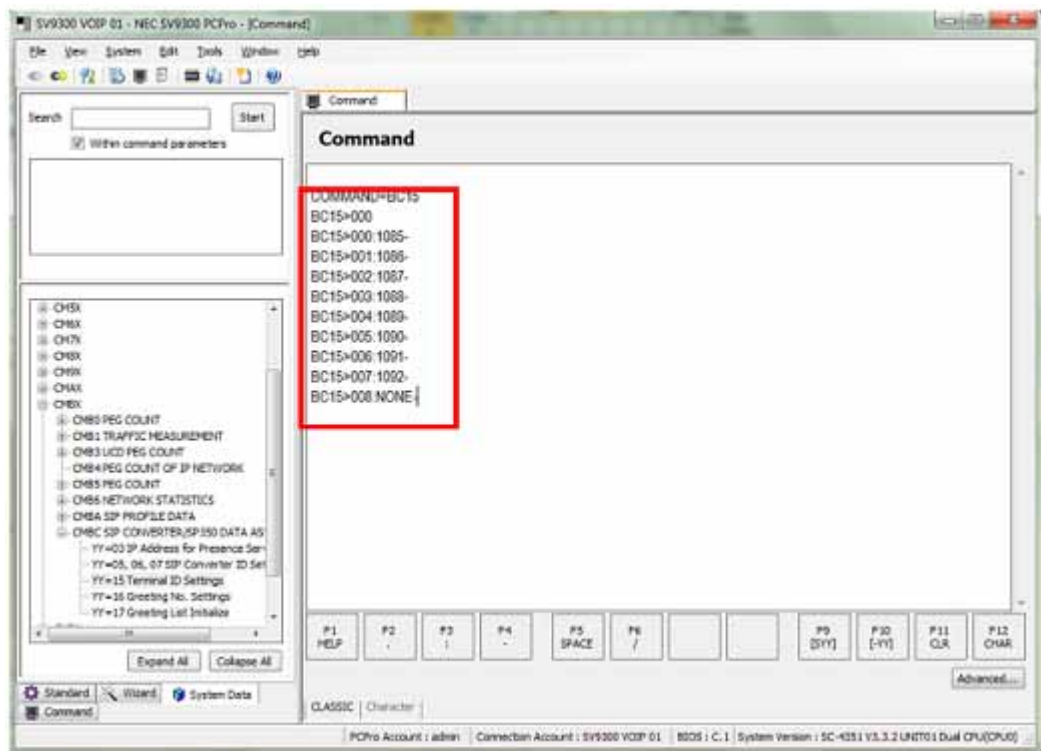
Step 3 Click **Apply**.

Command line example:

CM 1297>1085>192168000207, this assigns the IP address to the terminal.

- IP address assignment is a 12 digit entry.

Figure 4-20 Data Assignment for Standard SIP Terminal without Register (2)



- Step 1** Assign the Standard SIP Terminal ID without Register. This programming is done in Command Mode.
- Step 2** Enter CM BC15 and enter 000, this is the first Terminal ID.
- Step 3** Continue until all stations are assigned.
- Step 4** Enter the Standard SIP terminal Station number.
- Step 5** Click **Apply**.

Command line example:

CM BC15>000>1085, this assigns the Terminal ID to the station number.

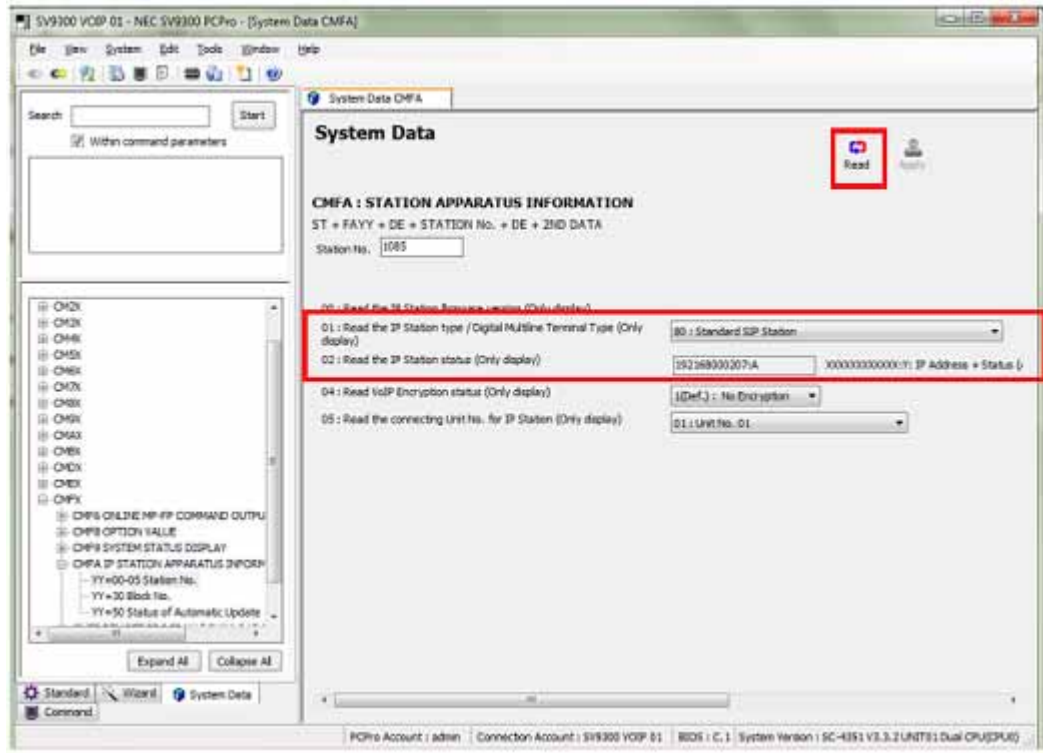
CM BC15>001>1086, this assigns the Terminal ID to the station number.



NOTE

The SV9300 must be reset in order for the change to take effect.

Figure 4-21 Standard SIP Station Connection Status



Step 1 Enter the Standard SIP Terminal station number. Click **Read** to get the current settings.

Step 2 Confirm the Standard SIP Terminal is active by command FA01, FA02.



This is a read only command.

Command line Example:

FA01>1085>80, this shows that station 1085 is a Standard SIP Terminal.

FA02>1085>192168000207:A, this shows the terminal is Active on IP address 192.168.0.207.

SV9100 Integration Programming

The following steps are to be performed within SV9100 Web Pro or PC Pro. This will setup the SV9100 to support the NMC XMP Conference as well as other IP telephones. These instructions assume the correct IP and Resource licenses have already been uploaded to the system and that the default Standard SIP port (5070) and Payload (20ms) are used.

For this example extension 3101 – 3108 and department group 3 are used. These can be changed as needed for the actual installation system.

- For the slot the SVRU2 is installed in set 90-61-01 to 3 (Server Blade). This is done so the slot is populated in Web Pro and PC Pro.
- Set PRG 99-01-60 to 1 (On), this is for answer supervision messaging to standard SIP extensions.

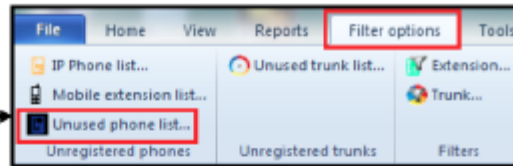
Note both of these setting changes must be made via telephone programming.

If using PC Pro connect to the SV9100 and download the current database.

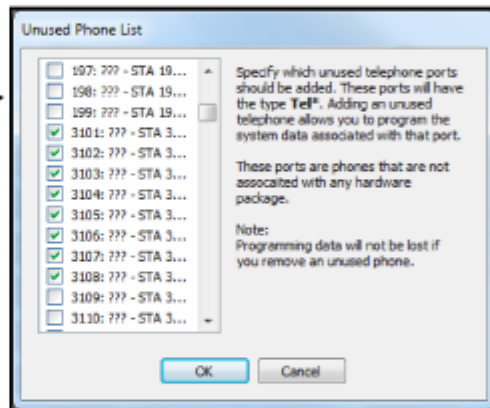
If needed, go to PRG 11-02-01 to set the desired extension numbers to be used for the NMC XMP Conference extensions.

| Station Port | Extension |
|--------------|-----------------------------------|
| 308 | <input type="text" value="3101"/> |
| 301 | <input type="text" value="3102"/> |
| 302 | <input type="text" value="3103"/> |
| 303 | <input type="text" value="3104"/> |
| 304 | <input type="text" value="3105"/> |
| 305 | <input type="text" value="3106"/> |
| 306 | <input type="text" value="3107"/> |
| 307 | <input type="text" value="3108"/> |

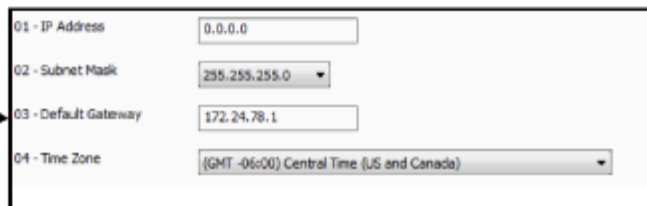
From the main PC Pro menu go to Filter Options -> Unused Phone List.



Select the NMC XMP Conference Center extensions to use.



Set 10-12-01 to 0.0.0.0.
 Set 10-12-03 to the default gateway provided by the network administrator.
 Set 10-12-04 to the local time zone.



Set 10-12-09 to the static IP address for the SV9100 provided by the network administrator.

Set 10-12-10 to the subnet mask provided by the network administrator.

09 - IPL IP Address

10 - IPL Subnet Mask

Assign the number of licensed VoIP resources to the CPU slot. In PRG 10-54-01 for slot 1 enter license code 5103. In PRG 10-54-02 for slot 1 enter the appropriate number of 5103 licenses.

| License | Code | Quantity | License | Code | Quantity |
|---------|------|----------|---------|------|----------|
| 01 | 5103 | 196 | 09 | | 0 |
| 02 | | 0 | 10 | | 0 |
| 03 | | 0 | 11 | | 0 |
| 04 | | 0 | 12 | | 0 |
| 05 | | 0 | 13 | | 0 |
| 06 | | 0 | 14 | | 0 |
| 07 | | 0 | 15 | | 0 |
| 08 | | 0 | 16 | | 0 |

Value should be in the range 0 to 256

Set the department group pilot for the NMC XMP Conference extensions in 11-07-01.
 For this example department group 3 is used. Never use department group 1 as that is the default group for all extensions.

| Department Group | Pilot |
|------------------|----------------------------------|
| 01 | <input type="text"/> |
| 02 | <input type="text"/> |
| 03 | <input type="text" value="100"/> |
| 04 | <input type="text"/> |
| 05 | <input type="text"/> |
| 06 | <input type="text"/> |
| 07 | <input type="text"/> |
| 08 | <input type="text"/> |

If there are any analog trunks in the system in 14-02-23 set them to 0 (Wait Caller ID).

23 - Caller ID Receiving Method

In 15-03-03 set all NMC XMP Conference extensions to 1 (Special) to enable in call DTMF signaling.

01 - Signaling Type

03 - Terminal Type

In 15-05-18 allow all NMC XMP Conference extensions for IP Duplication.

18 - IP duplication allow node

If the NMC XMP Conference will be deployed in a CCISoIP network system set 15-05-50 to off for the NMC XMP extensions.

50 - Peer to Peer Mode

In 16-02-01 put all NMC XMP Conference extensions in a Department group, for this example 3 is used, and set the priority for each extension.

| ICM Extension | Department Group | Priority Order |
|---------------|--------------------------------|--------------------------------|
| 3101 | <input type="text" value="1"/> | <input type="text" value="1"/> |
| 3102 | <input type="text" value="1"/> | <input type="text" value="2"/> |
| 3103 | <input type="text" value="1"/> | <input type="text" value="3"/> |
| 3104 | <input type="text" value="1"/> | <input type="text" value="4"/> |
| 3105 | <input type="text" value="1"/> | <input type="text" value="5"/> |
| 3106 | <input type="text" value="1"/> | <input type="text" value="6"/> |
| 3107 | <input type="text" value="1"/> | <input type="text" value="7"/> |
| 3108 | <input type="text" value="1"/> | <input type="text" value="8"/> |

In PRG 84-34-01 for Type 4 (SIP Extensions) Profile 1 set DTMF Relay to 1 (RFC2833)
 In PRG 84-34-02 for Type 4 (SIP Extensions) Profile 1 set DTMF Payload to 101.

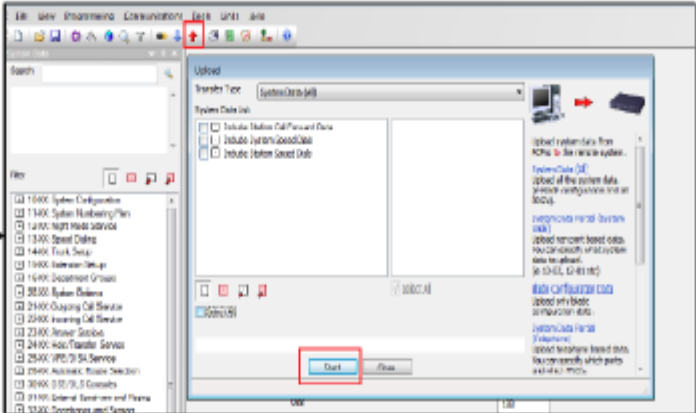
| | Profile 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------------------|-----------|--------|--------|--------|--------|--------|
| 01 - DTMF Relay Mode | RFC2833 | Double | Double | Double | Double | Double |
| 02 - DTMF Payload Number | 101 | 101 | 101 | 101 | 101 | 101 |
| 03 - DTMF Detection Type | 1 | 2 | 3 | 4 | 5 | 6 |
| 04 - DTMF Transfer Type | 1 | 2 | 3 | 4 | 5 | 6 |
| 05 - DTMF Release/hold/Release Type | 1 | 2 | 3 | 4 | 5 | 6 |

This is a screen shot of the back page of the PRG.

Set 84-26-01 to the static IP address for the DSP provided by the network administrator.
 If required by the network administrator the RTP and RTCP ports used can be changed here as well.

| | |
|----------------------|--------------|
| 01 - IP Address | 172.24.78.26 |
| 02 - RTP Port | 10020 |
| 03 - RTCP Port | 10021 |
| 12 - Video RTP Port | 20020 |
| 13 - Video RTCP Port | 20021 |

If the changes were made using PC Pro upload the database and disconnect from the system. It is very important you disconnect so the changes are written to the CPU.



If the changes were made using Web Pro return to the **Home** screen and choose **Logout** to exit program mode and write changes. It is very important you exit programming so the changes are written to the CPU.



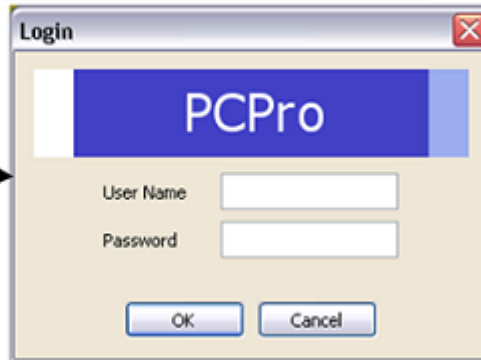
If not already completed a new SIP Extension circuit group for the SV9100 should be created using the extension numbers set in the previous programming steps. Refer to section 2.1 Setting up the MC SIP Extension for more information.

SV8100 Integration Programming

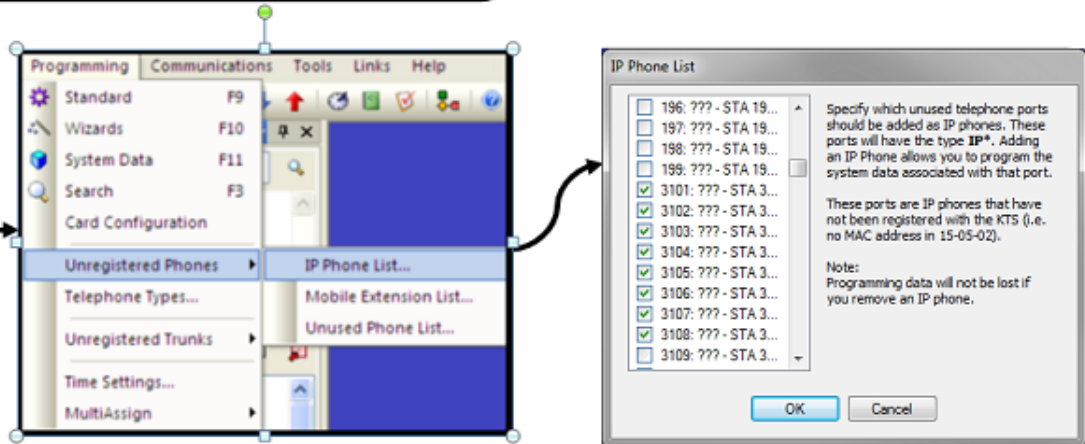
The following steps are to be performed within SV8100 PC Pro. This will setup the system to support the SIP extensions used by the NEC Meeting Center application. These instructions assume the correct licenses have already been uploaded to the system and that the default Standard SIP port (5070) and Payload (20ms) are used.

For this example extension 3101 - 3108 and department group 3 are used. These can be changed as needed for the actual installation system.

Log into PC Pro and download the current database.



Using PC Pro go to **Programming, Unregistered Phones, IP Phone List** and select the NMC Meeting Center extensions you intend to bring online then click OK.



Set 10-12-01 to 0.0.0.0.
 Set 10-12-03 to the default gateway provided by the network administrator.
 Set 10-12-04 to the local time zone.

| | |
|----------------------|--|
| 01 - IP Address | <input type="text" value="0.0.0.0"/> |
| 02 - Subnet Mask | <input type="text" value="255.255.255.0"/> |
| 03 - Default Gateway | <input type="text" value="172.24.78.1"/> |
| 04 - Time Zone | <input type="text" value="(GMT -06:00) Central Time (US and Canada)"/> |

Set 10-12-09 to the static IP address for the SV8100 provided by the network administrator.
Set 10-12-10 to the subnet mask provided by the network administrator.

09 - IPL IP Address
10 - IPL Subnet Mask

Set the department group pilot for the NMC Meeting Center extensions in 11-07-01.
For this example we use department group 3. Never use department group 1 as that is the default group for all extensions.

| Department Group | Pilot |
|------------------|----------------------------------|
| 01 | <input type="text"/> |
| 02 | <input type="text" value="200"/> |
| 03 | <input type="text" value="250"/> |

Set all trunks in 14-02-23 to 0 (Wait Caller ID).

23 - Caller ID Receiving Method

In 15-03-03 set all NMC Meeting Center extensions to 1 (Special).

03 - Terminal Type Special - Receive DTMF tones after the initial call is setup ▼

In 15-05-18 put all NMC Meeting Center extensions in the same IP Duplication Group. For this example we use group 5.

18 - IP Duplication Allowed Group Group 5 ▼

In 16-02-01 put all NMC Meeting Center extensions in Department group 3 and set the priority for each extension.

| ICM Extension | Department Group | Priority Order |
|---------------|------------------|----------------|
| 3101 | 3 | 1 |
| 3102 | 3 | 2 |
| 3103 | 3 | 3 |
| 3104 | 3 | 4 |
| 3105 | 3 | 5 |
| 3106 | 3 | 6 |
| 3107 | 3 | 7 |
| 3108 | 3 | 8 |

This completes the initial integration of the NEC Meeting Center with the UNIVERGE SV9100/SV8100/SV9300 system. For additional information refer to the online help within the NMC system. Technical certification is required in order for NEC Partners to obtain support from NEC Technical Assistance. Certification training is available within www.myNEClearning.com. Refer to "Training" on page 1-5 for more information.

5

Upgrading NMC Meeting Center

This chapter provides step-by-step procedures to upgrade NMC Meeting Center. Descriptions and procedures are found in the following sections of this chapter.

- Chapter Topics*
- [Description](#)
 - [Online Update](#)
 - [Manual Update](#)

Description

If required, or when updated versions of software are provided, the following steps can be used to upgrade your system. Note before starting an online or manual software update back up the database and save to the local client PC.

The upgrade time will vary depending on the size of the upgrade, and if choosing the online update, the Internet connection speed. The NMC server will be unavailable during the upgrade and will reboot automatically after the update process is complete.

Online Update

If the NMC has access to the Internet it will periodically check for new software. If new software is available the Software Update page will show what new software packages are available.

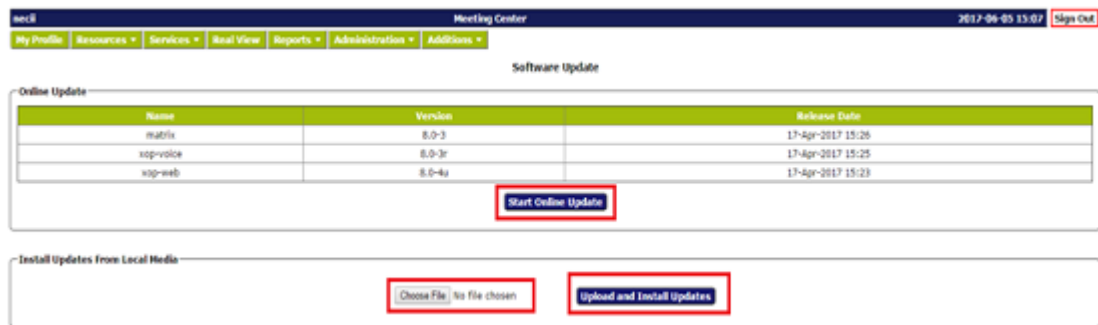
Step 1 Log into NMC web GUI with administrator credentials (admin/admin).

Step 2 Go to **Administration > Software Updates**.

Any available online updates will display in the Online Update window.

Step 3 Click the **Start Online Update** icon to start the upgrade and select **OK** when prompted. See [Figure 5-1](#).

Figure 5-1 NMC Software Update



- Step 4** The update files download from the Internet to the NMC server and the update begins automatically.
- Step 5** The NMC server reboots automatically after the update process is complete.
- Step 6** Go to **Reports > System Status** to verify new software version.

Manual Update

To update manually, download the update file (updates.tgz) file from the NTAC download site (TBD) to the support PC.

- Step 1** Log into NMC web GUI with administrator credentials (admin/admin).
- Step 2** Go to **Administration > Software Updates**.
- Step 3** Click **Choose File** icon and navigate to file location on support PC.
- Step 4** Click the **Upload and Install Updates** icon.

The file is uploaded to the NMC server and the update begins automatically.

- Step 5** The NMC server reboots automatically after the update process is complete.
- Step 6** Go to **Reports > System Status** to verify new software version.

For additional information or support on this NEC Corporation product, contact your NEC Corporate representative.

N E C NEC Corporation

NMC Meeting Center Integration Guide

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