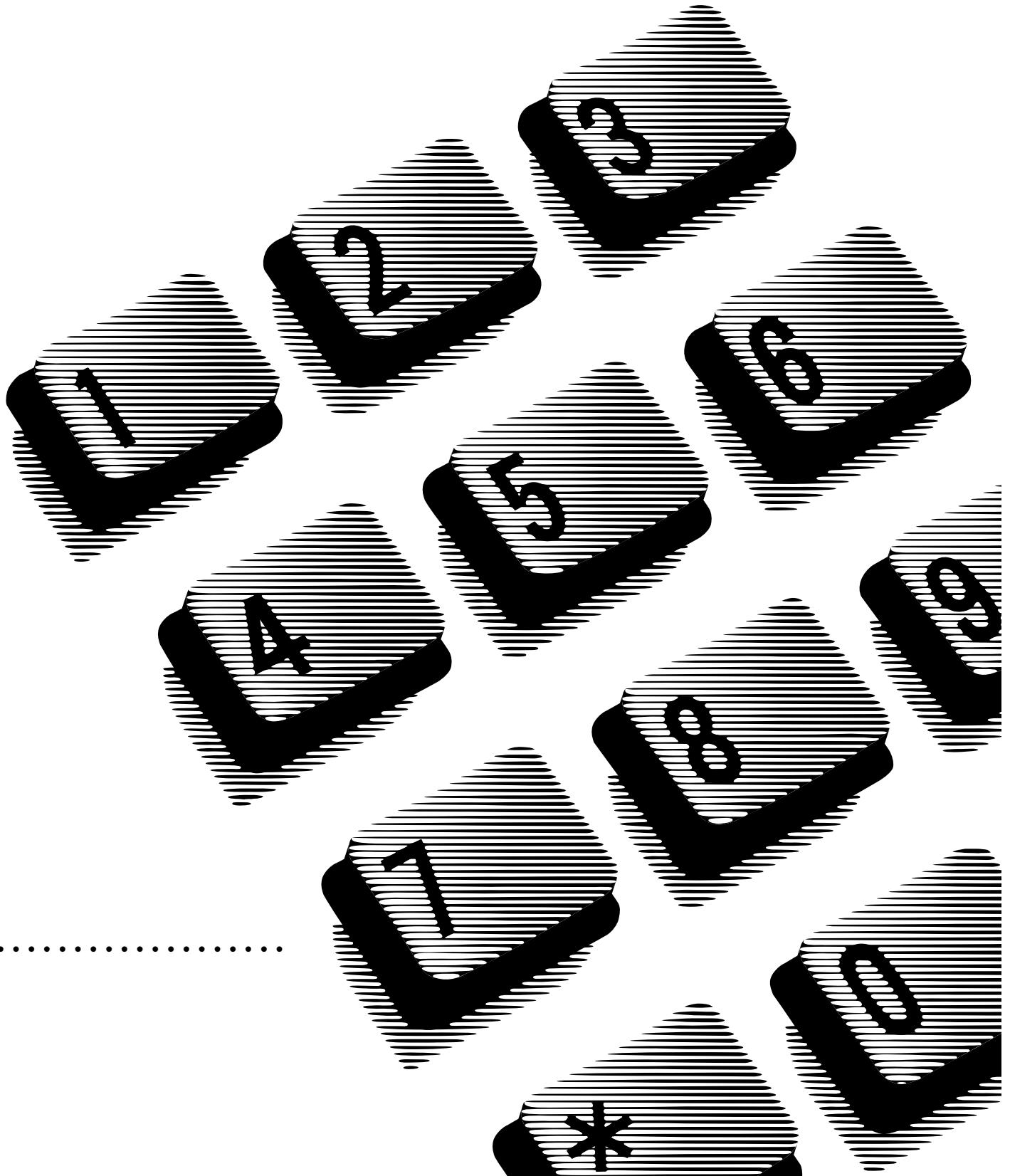

NORTEL NORSTAR

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Norstar Voice Mail 4.0 Software Upgrade Guide



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Regulatory information

The Norstar Applications Module generates radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Part 15 of the FCC rules and CSA specification C108.8, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case users will be required, at their own expense, to take whatever measures necessary to correct the interference.

This apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations for the Canadian Department of Communications.

**CAUTION**

The Norstar Applications Module contains fragile electronic parts.
DO NOT DROP OR BUMP THE MODULE.

Repair facilities

In the event of equipment malfunction, all repairs will be performed by Northern Telecom or by one of its authorized dealers.

In the USA	In Canada
Northern Telecom Inc. Nashville Repair and Distribution Center 640 Massman Drive Nashville, TN 37210	Northern Telecom Canada Ltd. 30 Norelco Drive Weston, ON M9L 2X6
Attn: RA# Tel: (615) 883-9220	Tel: (416) 744-5201 Fax: (416) 744-5227

Note: You receive an RA# when you call the repair center in Nashville. This number should appear on the package of any and all parts sent to this location for repair.

Upgrade introduction

The Norstar Voice Mail 4.0 Software Upgrade can be performed on any Norstar Voice Mail system installed on either a Norstar Applications Module (NAM) or a Norstar Applications Module II (NAM II).

Upgrading to Norstar Voice Mail 4.0 is divided into four parts:

- Checking the size of the hard disk drive
- Installing a new hard disk drive (if required)
- Entering the Norstar Voice Mail 4.0 Security Key Code.
- Upgrading the system software to Norstar Voice Mail 4.0.

The Software Upgrade can only be installed on a system that is equipped with a 540 MB hard disk drive or larger. If your system is equipped with a 270 MB hard disk drive, the hard disk drive must be replaced before attempting the upgrade. For more information on checking the size of the hard disk drive, refer to "[Checking the size of the NAM hard disk drive](#)" on page 5.

The Norstar Voice Mail 4.0 Security Key Code **must** be enabled before attempting to perform the Software Upgrade. The Norstar Voice Mail 4.0 Security Key Code prepares the NAM for the Software Upgrade procedure.

The Norstar Voice Mail 4.0 Software Upgrade can be done from a Norstar two-line display telephone.

The Software Upgrade **cannot** be performed from a monitor and keyboard connected to the NAM. If your system has a monitor package installed, ignore any commands or prompts that appear on the screen.

This guide is intended for the person performing the Software Upgrade.

Upgrade Overview

The person performing the Software Upgrade is required to:

- check the size of the hard disk drive
- back up the Norstar Voice Mail programming and NAM capabilities file
- install a new hard disk drive (if required)
- complete the Upgrade Information Sheet
- call the Norstar Key Code Access Line for your Norstar Voice Mail 4.0 Security Key Code
- insert the **Norstar Voice Mail 4.0 Security Key Code Installation diskette** as described in the instructions that follow
- check the current Norstar Voice Mail software version
- connect a CD-ROM drive to the NAM
- insert and remove the CD-ROM disk and floppy diskette as described in the instructions that follow
- reboot the system when required
- check the Norstar Voice Mail software version after the upgrade
- test the Norstar Voice Mail system
- reset and re-initialize the Norstar Voice Mail system, if required
- update the Cintech Dial-by-Name (DBN), if required

Items required for the upgrade

Check to ensure you have the following items that are not included with this guide:

- Norstar Voice Mail 4.0 CD-ROM** disk
- floppy diskette labelled **Norstar Voice Mail 4.0 Upgrade Boot Diskette**
- floppy diskette labelled **Norstar Voice Mail 4.0 Security Key Code Installation diskette**
- the appropriate **Norstar Modular DR5** or **Norstar-PLUS Installation Guide**
- CD-ROM Drive kit
- new or reformatted diskettes
- Dial-by-Name installation diskette (update if required)

Precautions

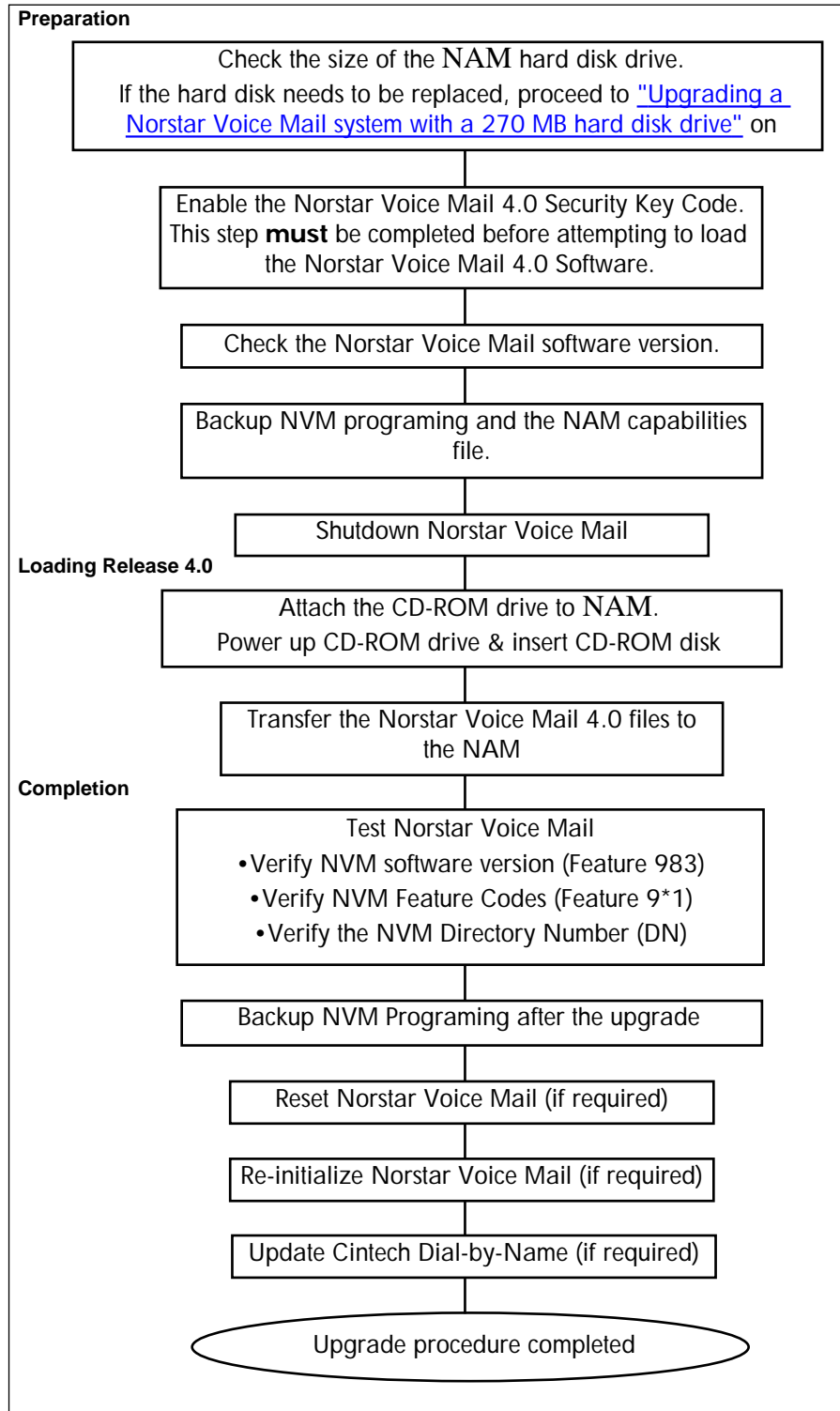
- If possible, delete saved voice messages before performing the upgrade process to allow sufficient storage space for the upgrade.
- It is strongly recommended that you back up the Norstar Voice Mail programing and the NAM capabilities file before performing the upgrade.
- Ensure that you place the CD-ROM drive horizontally on a stable, level surface. Attempting to use the CD-ROM drive on its end, sitting vertically, may damage the CD-ROM disk and the CD-ROM drive. Do not move the CD-ROM drive while it is in use. Do not handle the unlabeled side of the CD-ROM disk.
- During the upgrade procedure you will hear audible tones which indicate either progress of the upgrade or errors requiring action. To determine audible message meanings, refer to "[Troubleshooting the upgrade](#)" on page 35.

**Caution**

If you have a monitor and keyboard connected to the NAM, ignore any messages or requests for input that appear on the screen. The upgrade process loads Norstar Voice Mail 4.0 automatically.

Norstar Voice Mail 4.0 Software Upgrade Overview

Figure 1 Preparing, loading and testing Release 4.0



Checking the size of the NAM hard disk drive

The Software Upgrade can only be installed on a system that is equipped with 540 MB hard disk drive or larger. If your system is equipped with a 270 MB hard disk drive, the hard disk drive must be replaced before attempting the upgrade. If you attempt to upgrade a system with a 270 MB hard disk drive, the upgrade will fail.

To check the size of the hard disk drive:

1. Press .

2. Enter the default password (ACCESS2).

3. Press ADMIN.

4. Press NEXT until the display shows:

5. Press SHOW.

6. Press SIZE to display the Norstar Voice Mail system hard disk size.

7. If the display shows **263872kb**, you have a 270 MB hard disk drive. The hard disk drive must be replaced before attempting the upgrade. For more information on replacing the hard disk drive, refer to "[Removing and replacing the hard disk drive](#)" on page 22.

8. Press to end this session.

Enabling the Norstar Voice Mail 4.0 Security Key Code



The Norstar Voice Mail 4.0 Software Upgrade can only be installed on a system that is equipped with a 540 MB hard disk drive or larger. If your system is equipped with a 270 MB hard disk drive, the hard disk drive must be replaced before attempting the upgrade. For more information on checking the size of the hard disk drive, refer to "[Checking the size of the NAM hard disk drive](#)" on page 5.

Before you enable the Norstar Voice Mail Security Key Code on the NAM, you must:

- determine your **internal** Norstar Voice Mail system serial number
- complete the "[Upgrade Information Sheet](#)" on page 37
- call the Norstar Key Code Access Line for your software Security Key Code
- record the software Security Key Code on the Upgrade Information Sheet
- insert the **Norstar Voice Mail 4.0 Security Key Code Installation diskette** into the floppy diskette drive of the NAM.

Determining your internal Norstar Voice Mail system serial number

Each Norstar Voice Mail system is identified by a unique internal serial number. You must have this number written down on the Upgrade Information Sheet before you call for your Security Key Code.

To view the internal serial number:

1. Press .

2. Enter the default password (ACCESS2).

3. Press ADMIN .

4. Press NEXT until the display shows:

5. Press SHOW to display the Norstar Voice Mail system serial number.

6. After you have recorded the serial number, press OK . Press to end this session.

Getting your Norstar Voice Mail 4.0 Security Key Code

After you have completed the "[Upgrade Information Sheet](#)" on page 37, you are ready to phone the Norstar Key Code Access Line. Keep the Upgrade Information Sheet in front of you and dial 1-800-684-5825.

When you are given the Security Key Code, ensure you write it down in the space provided on the Upgrade Information Sheet.

Entering the Norstar Voice Mail 4.0 Security Key Code

Before the Norstar Voice Mail 4.0 Security Key Code can be entered, the files on the **Norstar Voice Mail 4.0 Security Key Code Installation diskette** must be copied on to the hard disk drive of the NAM.

To enable the Norstar Voice Mail 4.0 Security Key Code:

1. Insert the **Norstar Voice Mail 4.0 Security Key Code Installation diskette** in the floppy diskette drive of the NAM.

2. Press .

3. Enter the default password (ACCESS2).

4. Press ADMIN.

5. Press NEXT until the display shows:

6. Press SHOW.

7. Press INSTL. While the files from the **Norstar Voice Mail 4.0 Security Key Code Installation diskette** are being copied to the NAM's hard disk drive, the display changes to show:

8. When the files finish copying, the display shows:

9. Enter the default password (**ADDKEY).

10. Press SHOW.

1. Enter new key
QUIT NEXT OK

11. Press OK .

>
QUIT RETRY OK

12. Enter your Norstar Voice Mail 4.0 Security Key Code and press OK . Press RETRY if you want to re-enter your Norstar Voice Mail 4.0 Security Key Code.

1. Enter new key
QUIT NEXT OK

13. The Security Key Code upgrade is successful if this display is shown.
Press QUIT or Rls to end this programing session.

Checking the Norstar Voice Mail software version

You may want to check the version of software your Norstar Voice Mail system is running before starting the upgrade. Record the software version number before the upgrade and then compare it to the version after the upgrade is completed.

To check the Norstar Voice Mail software version:

1. Press Feature 9 8 3 .

Log:
QUIT RETRY OK

2. Enter the System Coordinator's mailbox number (12, 102, 1002, 10002, 100002 or 1000002, whichever matches the DN length), and the System Coordinator's password, then press OK .

Admin
MBOX AA OTHR

3. Press 9 .

NUM x.x.xx
OK

4. Record the version number that appears on the display and press OK .

5. Press Rls to end this programing session.

Backing up Norstar Voice Mail programming

As a precaution, it is strongly recommended that the Norstar Voice Mail programming be backed up before performing an upgrade. Before you begin, make sure you have a sufficient number of formatted floppy disks to complete the backup. The number of disks required will vary between 1 and 15, depending on the number of mailboxes and greetings on the system. It is also a good idea to label the disks numerically. Labeling the disks enables you to insert the disks in the correct order if you have to perform a restore procedure.

All backed up data is stored in special backup files on the floppy disks. These files are named STBCKUP.001, STBCKUP.002 and so on. The last disk in a backup has a LASTDISK file written on it. This file is used to notify Norstar Voice Mail that the restore process is complete.

The back up takes about 2 minutes per disk.

To back up a Norstar Voice Mail system:

1. Press .

```
Log:
QUIT  RETRY  OK
```

2. Enter the System Coordinator Mailbox number and password, then press OK .

```
Admin
MBOX  AA  OTHR
```

3. Press .

```
Backup
QUIT          CONT
```

4. Press CONT .

```
Calls Completing
```

5. The display will show when calls are still active.

Note: Before the backup procedure can begin, all Norstar Voice Mail channels must be idle. Norstar Voice Mail automatically disables each channel as it becomes idle.

```
Insert disk 1
QUIT          OK
```

6. Insert the appropriate diskette into the Floppy diskette drive of the NAM, then press OK .

```
Backing up <x>
QUIT
```

7. The display continues to prompt for more disks until the backup is complete. When the backup is complete, the system prompts for the first disk again to run a self test. This test ensures that all the files have been backed up. If the test is successful, the display changes to show:

Backup Complete
OK

8. Press OK .

9. Press Rls to end this programing session.

A backup can take several minutes, depending on the number of mailboxes, greeting, and the amount of other information stored on the hard disk drive.

Note: If there is a power interruption during the backup, you must start the backup again.

Backing up the NAM capabilities file

If you are upgrading an existing Norstar Voice Mail system, it is strongly recommended that the system's capabilities file be backed up before performing the upgrade. If a hard disk failure occurs, the capabilities file must be restored along with Norstar Voice Mail programing.

When you perform a backup of the Norstar Voice Mail programing, you should also back up the capabilities file SEKUR. The SEKUR file contains all upgrade and capability information about your Norstar Voice Mail system, including the number of voice and FAX channels, if the FAX option is enabled and if the AMIS option is enabled. The SEKUR file must be restored along with Norstar Voice Mail programing if a hard disk failure occurs.

If this file is lost and your hard disk drive fails, all upgrades made to your Norstar Voice Mail system is lost.

Note: Before you begin, ensure you have a blank high density formatted 1.44 MB 3.5" floppy disk. Label the disk **SEKUR/Capabilities File**.

To back up the capabilities file:

1. Press Feature 9 1 5 .

Password: RETRY

2. Enter the default password 2 2 2 3 7 7 2 (ACCESS2).

ACCESS Server
BACK NEXT ADMIN

3. Press ADMIN .

A. Prt queue mgr
QUIT NEXT SHOW

4. Press NEXT until the display shows:

E. Bckp/Rstr
QUIT NEXT SHOW

5. Press SHOW .

Backup & Restore
QUIT BCKP RSTR

6. Press BCKP .

7. Insert the formatted floppy diskette into the floppy disk drive on the NAM and press OK .
8. Press OK .
9. Press Rls to end this ACCESS session.

After you have completed backing up the capabilities file, make sure you store the floppy diskette in a safe place.

Shutting down Norstar Voice Mail

A shutdown is done from a Norstar two-line display telephone.

Performing a graceful shutdown is a precautionary measure. A shutdown allows Norstar Voice Mail to save and close its files before the power is removed.

To shutdown the Norstar Voice Mail system:

1. Press Feature 9 1 5 .
2. Enter the default password 2 2 2 3 7 7 2 (ACCESS2).
3. Press NEXT .
4. Press SHOW .
5. Press GRACE .
6. Press YES . Press NO if you want to stop the shutdown.

The Norstar Voice Mail system has completed its shutdown when you hear a very fast series of tones descending in pitch. When you hear the tones, you can unplug the power to the module.

Loading the Norstar Voice Mail 4.0 software

Before you load the Norstar Voice Mail 4.0 software, you must attach the CD-ROM.

Attaching the CD-ROM to the NAM

The CD-ROM drive is attached to the NAM using a parallel cable that attaches to the NAM parallel port. Ports are located at the bottom of the NAM and are accessed through the cable trough.

Figure 2 Module external points of connection for the earlier NAMs and NAM II

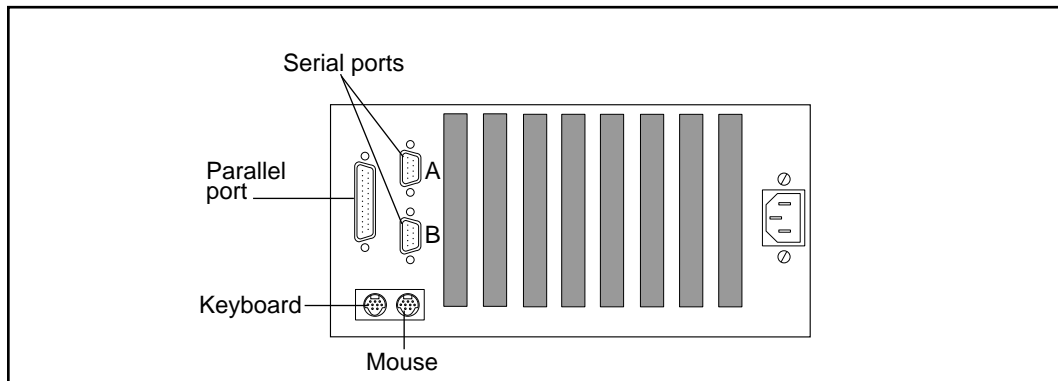
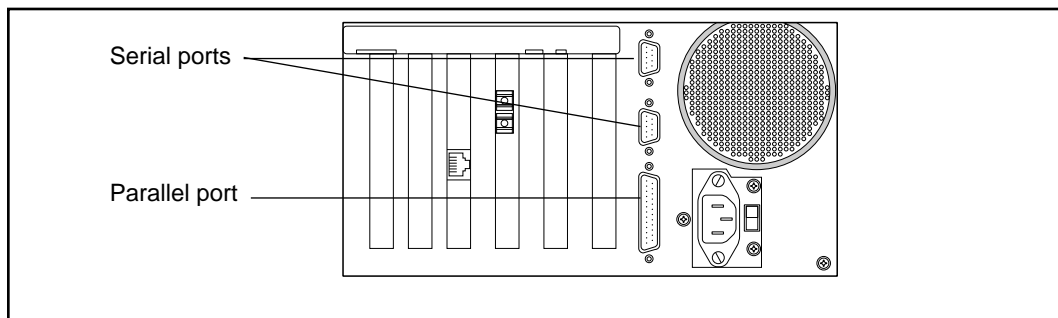


Figure 3 Module external points of connection for the new NAM



To attach the CD-ROM drive to the NAM:

1. Connect the end of the parallel cable to the connector on the CD-ROM drive labeled "COMPUTER".
2. Connect the other end of the cable to the NAM parallel port.
3. Connect the AC adapter power plug into the rear of the CD-ROM drive and plug the other end into the AC outlet.

**CAUTION**

Place the CD-ROM drive horizontally on a stable, level surface. Attempting to use the CD-ROM drive on its end, sitting vertically, may damage the CD-ROM disk and the CD-ROM drive.

4. Press the eject button to open the CD-ROM tray. Place the **Norstar Voice Mail 4.0 CD-ROM disk**, label-side up, in the CD-ROM tray, then close the drive tray. Do not move the drive unit while in use. Do not touch the unlabeled side of the CD-ROM disk.

Transferring the Norstar Voice Mail 4.0 software to the NAM

1. Insert **Norstar Voice Mail 4.0 Upgrade Boot Diskette** into the floppy diskette drive of the NAM.
2. Restore power to the NAM.
3. Transferring the required files to the hard drive of the NAM takes approximately 25 to 45 minutes. When the files have been successfully loaded, a sequence of audible tones are repeated indefinitely.

**CAUTION**

Ensure the CD-ROM drive is connected to the NAM and the Norstar Voice Mail 4.0 disk is in the drive. For more information, refer to ["Attaching the CD-ROM to the NAM"](#) on page 12.

4. Disconnect power to the NAM.
5. Remove the **Norstar Voice Mail 4.0 Upgrade Boot Diskette** from the floppy diskette drive of the NAM.
6. Remove the CD-ROM disk from the CD-ROM drive. Power down the CD-ROM drive and disconnect from the NAM.
7. Wait approximately 30 seconds, then restore power. It takes the NAM several minutes to boot. When this process is complete, the NAM plays a brief musical tune.
8. To complete the upgrade process, proceed to ["Testing Norstar Voice Mail"](#) on page 14.

Note: This process may cause Dial-by-Name (DBN) to fail to load after the system is rebooted. To resolve this problem, refer to ["Updating Citech Dial-by-Name"](#) on page 17.

Testing Norstar Voice Mail

After you have completed the upgrade you must test the Norstar Voice Mail 4.0 software to make sure it is functioning.

These steps assume the Norstar Voice Mail default Feature Codes are in effect. If you enter 9 8 3 and receive an **Inactive feature** or a non-Norstar Voice Mail message, the default Feature Codes are not in effect.

Verifying the Norstar Voice Mail 4.0 software version

Determine the Norstar Voice Mail 4.0 software version. The new Norstar Voice Mail 4.0 software version should be: **NUM 4.X.XX**. The software release (rel) number is located on the **Norstar Voice Mail 4.0 Upgrade Boot Diskette**.

For information on determining the Norstar Voice Mail software version, refer to ["Checking the Norstar Voice Mail software version"](#) on page 8.

Verifying the Norstar Voice Mail Feature codes

To verify the Feature Code availability:

1. From a Norstar two-line display telephone, press 9 * 1 . The display shows: **Leave msg:** and the Feature Code.
2. To view the next Feature Code, press **NEXT** . The display shows the next Feature Code display prompt and number.
3. Continue pressing **NEXT** to view all the Feature Codes.

Verifying the Norstar Voice Mail Directory Number (DN)

1. From a Norstar telephone, enter 9 8 5 to determine the Norstar Voice Mail DN.
2. From a Norstar telephone, dial the Norstar Voice Mail DN. Verify the call is answered and the telephone prompt shows: **Log:** or **Pswd:**

Backing up Norstar Voice Mail programing after the upgrade

For system security, perform a backup of the Norstar Voice Mail programing and the capabilities file after completing the upgrade process. For more information on backing up the Norstar Voice Mail programing and the capabilities file. Refer to ["Backing up Norstar Voice Mail programing"](#) on page 9 and ["Backing up the NAM capabilities file"](#) on page 10.

Resetting Norstar Voice Mail

Resetting Norstar Voice Mail is usually done if the customer wants to return the Norstar Voice Mail system to its original default values. After the system is reset, you must re-initialize the software.



CAUTION

If you reset and re-initialize the system you lose all previous Norstar Voice Mail programming.

To reset Norstar Voice Mail:

1. Press .

```
Log:
QUIT  RETRY  OK
```

2. Enter the System Coordinator Mailbox number and password, then press OK .

Note: If you are resetting Norstar Voice Mail before you have performed the initial set up, you must enter the default password 0000.

```
Admin
MBOX  AA  OTHR
```

3. Press .

```
Pswd:
RETRY  OK
```

4. Enter (REINSTALL) and press OK .

```
Reset database?
YES  NO
```

5. Press YES . The system begins to reset. The display continues to change to show:

```
Resetting...
```

```
System ready
```

```
Exit
```

You are now ready to re-initialize Norstar Voice Mail. Refer to "[Re-initializing Norstar Voice Mail](#)" on page 16.

Note: If you attempt to access any Norstar Voice Mail features before the system reset is complete, the display shows: `Inactive feature` .

Re-initializing Norstar Voice Mail

You are **not** be able to load the other languages even if you re-initialize Norstar Voice Mail.

To re-initialize Norstar Voice Mail:

1. Press .

Pswd:
RETRY

2. Enter the installer password
(CONFIG) and press OK.

Bilingual?
YES NO

3. Press YES.

Primary lang?
ENG SPA

4. Press ENG. Press SPA if you want Spanish as the primary language.

Group lists? Y
CHNG NEXT

5. Press NEXT to enable System Group Lists. Press CHNG to disable the System Group Lists.

Leading digit:9
CHNG NEXT

6. Press NEXT to accept the leading digit. Press CHNG to enter a different leading digit.

The System Group List leading digit can be any number from 0 to 9. The Special Mailbox numbers automatically begin with 1, so if you select a Group List leading digit of 1, the Special Mailbox numbers will begin with 2. For example, the System Coordinator Mailbox would be 22.

System config
RETRY

7. Press OK to complete the initialization. Press RETRY to change the system configuration. The display continues to change to show:

Configuring...

System ready

Exit

The system is now initialized and ready for use.

Updating Cintech Dial-by-Name

The methods used to upgrade the system software may cause Dial-by-Name (DBN) to fail to load after the system is rebooted. To resolve this problem, follow the steps below. All customer data associated with DBN will be retained, including phone books, phone book entries, and so on.

1. Place the original DBN floppy diskette in the NAM's floppy disk drive.

2. Press .

```

Password:
          RETRY
  
```

3. Enter the default password (ACCESS2).

```

ACCESS Server
BACK  NEXT  ADMIN
  
```

4. Press ADMIN.

```

A. Prt queue mgr
QUIT  NEXT  SHOW
  
```

5. Press NEXT until the display shows:

```

H. Appl Install
QUIT  NEXT  SHOW
  
```

6. Press SHOW.

```

Insert floppy
QUIT          INSTL
  
```

7. Press INSTL. The system will start loading DBN. When the installation is complete, the display will show:

```

DBN Started
  
```

8. Remove the DBN floppy diskette from the NAM's floppy disk drive.

9. Press .

```

Name:
      SHOW      10+
  
```

10. If this display does not appear, contact your technical support representative for further instructions.

11. Press to end this programing session.

Upgrading a Norstar Voice Mail system with a 270 MB hard disk drive

2

The Norstar Voice Mail 4.0 Software Upgrade can only be installed on a system that is equipped with a 540 MB hard disk drive or larger. If your system is equipped with a 270 MB hard disk drive, the hard disk drive must be replaced before attempting the upgrade.

Before you remove and replace the hard disk drive, you **must** back up the Norstar Voice Mail programing and the Norstar Applications Module (NAM) capabilities file.

Backing up the Norstar Voice Mail programing copies:

- System configuration parameters
- Company Greetings
- Mailbox programing
- User Greetings
- Directory Name recordings
- Group Lists
- Dialing Translation information
- CCR information including CCR Trees, CCR Paths and CCR prompts

Backing up the Norstar Voice Mail programing does **not** copy any saved or new messages in the user mailboxes. We recommend warning the users in advance that there messages will be deleted when the upgrade is performed.

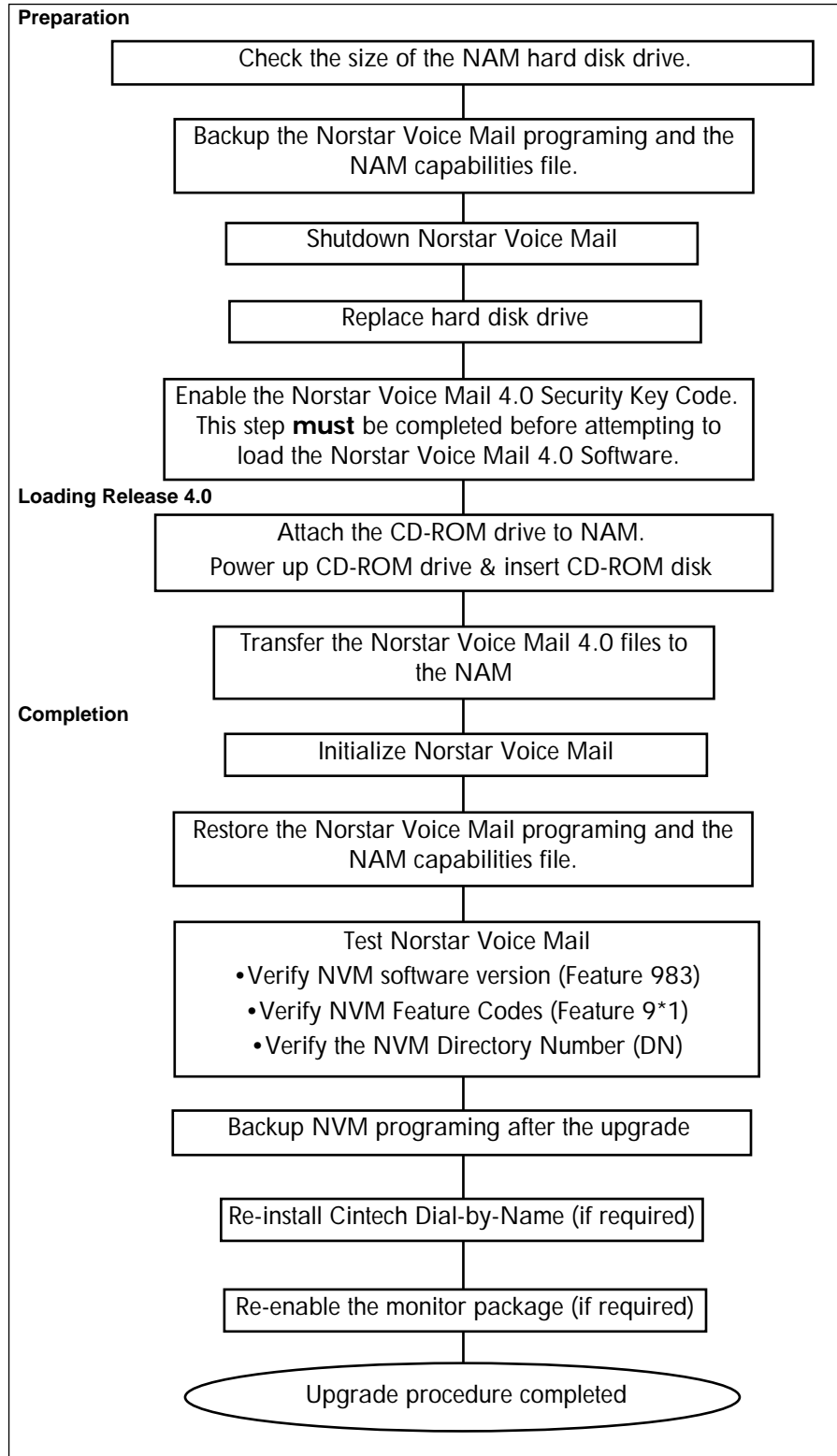
After the hard disk drive is replaced and the Software Upgrade is performed, the Norstar Voice Mail programing and the NAM capabilities file must be restored.

Upgrade Overview

The person replacing the hard disk drive and performing the Software Upgrade is required to:

- check the size of the hard disk drive
- back up the Norstar Voice Mail programming and NAM capabilities file
- install a new hard disk drive
- complete the Upgrade Information Sheet
- call the Norstar Key Code Access Line for your Norstar Voice Mail 4.0 Security Key Code
- connect a CD-ROM drive to the NAM
- insert and remove the CD-ROM disk and floppy diskette as described in the instructions that follow
- reboot the system when required
- initialize the Norstar Voice Mail software
- check the Norstar Voice Mail software version after the upgrade
- restore Norstar Voice Mail programming and NAM capabilities file
- test the Norstar Voice Mail system
- re-enable the monitor package, if required
- re-install the Cintech Dial-by-Name (DBN), if required

Figure 4 Upgrading a Norstar Voice Mail system with a 270 MB hard disk drive



Removing and replacing the hard disk drive

Before removing and replacing the hard disk drive you **must** back up the Norstar Voice Mail programing and the NAM capabilities file. For more information on backing up the Norstar Voice Mail programing, refer to "[Backing up Norstar Voice Mail programing](#)" on page 9. For more information on backing up the NAM capabilities file, refer to "[Backing up the NAM capabilities file](#)" on page 10.

After the hard disk drive is replaced and the Software Upgrade is performed, the Norstar Voice Mail programing and the NAM capabilities file must be restored.



CAUTION

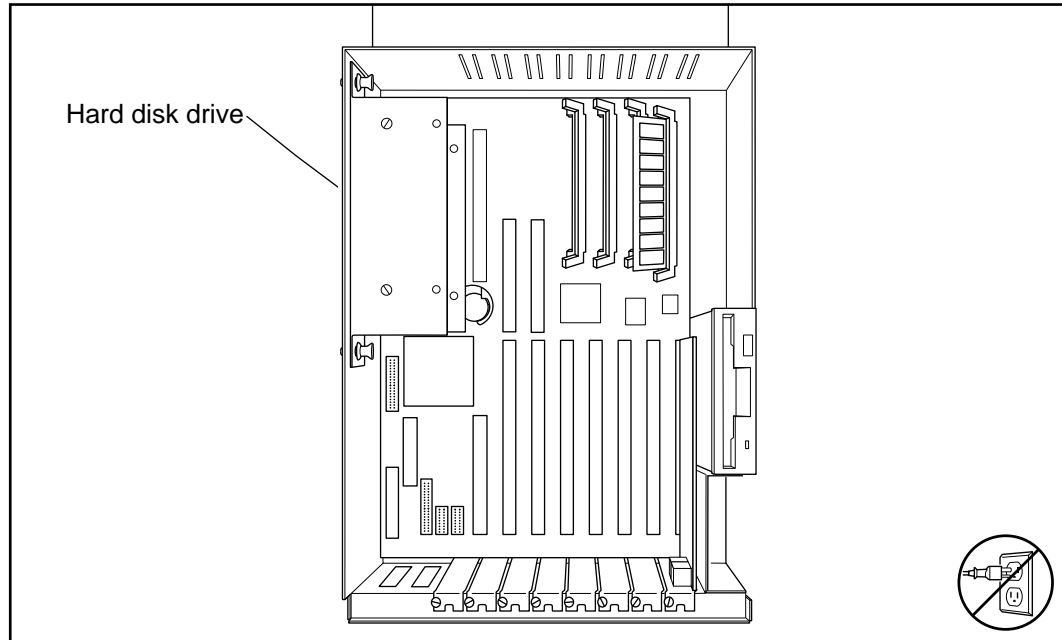
Do not use an electric screwdriver near the hard disk drive. Information on the disk could be lost.

Removing the hard disk drive

To remove the hard disk drive:

1. Shutdown the NAM. For more information, refer to "[Shutting down Norstar Voice Mail](#)" on page 11.
2. Remove the NAM power cord from the AC outlet.
3. Ground yourself by attaching one end of the grounding strap to your wrist and the other end to a grounded metal surface.
4. Open the module door. The door may be locked. To unlock the door, use a screwdriver to turn the lock in the bottom-right corner of the door. Turn the lock 90° counterclockwise until the screwdriver slot is vertical.
5. Remove the two screws holding the front cover to the module. The screws are located along the top of the front cover.
6. Slide the front cover out from the module.

Figure 5 Hard disk drive location

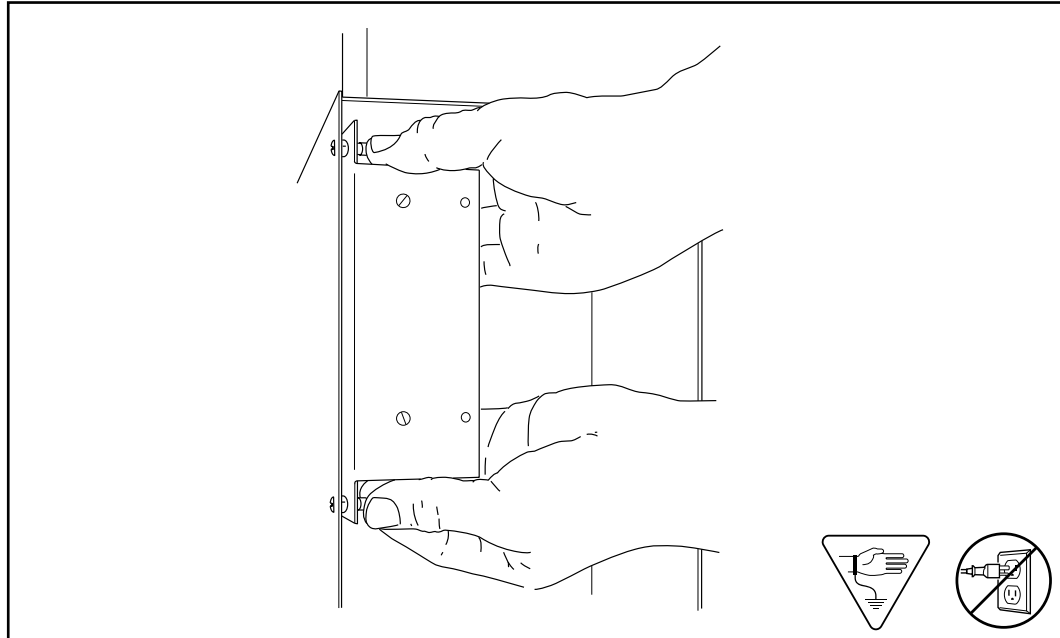


7. Disconnect the power supply wiring and ribbon cable from the hard disk drive. If another hard disk drive is installed, its wiring and cabling must also be disconnected.
8. The hard disk drives are held by a bracket attached to the module wall. Undo the two nylon fasteners at the top and bottom of the bracket by grasping each fastener and gently pulling it away from the module wall. The fastener moves out from the module wall, but remains attached to the bracket.

**CAUTION**

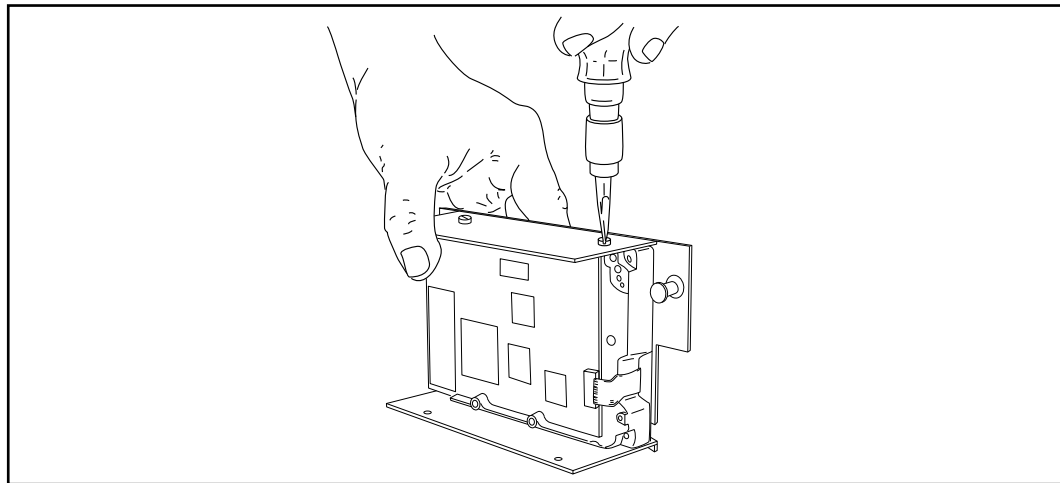
Ensure the hard disk drive bracket does not fall onto the module components.

Figure 6 Removing the hard disk drive mounting bracket



9. Lift the bracket out of the module.
10. Remove the four screws that fasten the hard disk drive to the bracket. Two screws are located on each side of the hard disk drive.
11. Pull the hard disk drive out from the bracket.

Figure 7 Removing the hard disk drive from bracket



CAUTION

Shock can damage the hard disk. Do not drop or bump the hard disk drive.

If you are returning the disk drive to a Nortel repair facility, package it carefully in the box that the replacement disk drive came in. If you do not have the original box, package the drive in another box with plenty of shock-absorbing material.

Installing a new hard disk drive

Before you can install a new hard disk drive, you must remove the hard disk drive bracket from the NAM. When you are replacing the hard disk drive, you must also remove the existing hard disk from the disk drive bracket.

To install a new hard disk drive:

1. Fasten the hard disk drive to the bracket. The hard drive must be positioned with the bottom of the hard disk drive (the side with the exposed electronic connectors) facing down and into the module. Refer to [Figure 5](#) on page 23 for the location of the hard disk drive.
2. Insert the tongues on the bracket into the holes in the module wall.
3. Press the bracket firmly against the module wall so each of the nylon fasteners partly goes through the holes in the module wall.
4. Press each nylon fastener through the hole in the module wall until the fastener snaps shut.
5. Connect the hard disk power supply wiring and ribbon cable. The connector at the end of the ribbon cable is used for the primary hard disk drive.

Note: All connectors are keyed or shaped so they cannot be inserted backwards. If you cannot push a connector in easily, do not force it.

6. If your system has Norstar Voice Mail FAX enabled, you must follow steps 7 to 9 to re-enable the FAX software. If your system **does not** have Norstar Voice Mail FAX enabled, proceed to step 10.
7. Insert the **FXENABLE** diskette that came with Norstar Voice Mail FAX into the floppy disk drive.
8. Plug in the module and wait for the NAM to boot from the disk. This should take approximately three minutes.
9. Once all disk activity has ceased and the light on the floppy disk drive has gone out, unplug the NAM and remove the **FXENABLE** diskette from the floppy disk drive. The FAX software is now re-enabled.
10. Replace the front cover. Insert the tongues on the bottom of the front cover into the module slots.
11. Fasten the two screws holding the front cover to the module.

12. Close the module door.
13. Plug the power cord into the AC outlet.

Enabling the Norstar Voice Mail 4.0 Security Key Code

After you have installed the new hard disk drive, you must enable the Norstar Voice Mail 4.0 Security Key Code. Refer to "[Enabling the Norstar Voice Mail 4.0 Security Key Code](#)" on page 6.

Upgrading the software to Norstar Voice Mail 4.0



The Norstar Voice Mail 4.0 Security Key Code must be enabled before attempting to perform the Norstar Voice Mail 4.0 Software Upgrade. Refer to "[Enabling the Norstar Voice Mail 4.0 Security Key Code](#)" on page 6.

Upgrading to Norstar Voice Mail 4.0 requires the following procedure:

- shutting down Norstar Voice Mail
- attaching the CD-ROM unit to the NAM
- loading Norstar Voice Mail 4.0

Precautions

- Ensure that you place the CD-ROM drive horizontally on a stable, level surface. Attempting to use the CD-ROM drive on its end, sitting vertically, may damage the CD-ROM disk and the CD-ROM drive. Do not move the CD-ROM drive while it is in use. Do not handle the unlabeled side of the CD-ROM disk.
- During the upgrade procedure you hear audible tones which indicate either progress of the upgrade or errors requiring action. To determine audible message meanings, refer to "[Troubleshooting the upgrade](#)" on page 35.



Caution

If you have a monitor and keyboard connected to the NAM, ignore any messages or requests for input that appear on the screen. The upgrade process loads Norstar Voice Mail 4.0 automatically.

Loading the Norstar Voice Mail 4.0 software

1. Shut down the Norstar Voice Mail system. Refer to "[Shutting down Norstar Voice Mail](#)" on page 11.
2. Attach the CD-ROM to the NAM and insert the **Norstar Voice Mail 4.0 CD-ROM** into the CD-ROM tray. Refer to "[Attaching the CD-ROM to the NAM](#)" on page 12.
3. Insert **Norstar Voice Mail 4.0 Upgrade Boot Diskette** in the floppy diskette drive of the NAM.
4. Restore power to the NAM.
5. Transferring the required files to the hard drive of the NAM takes approximately 25 to 45 minutes. When the files are successfully loaded, a sequence of audible tones is repeated indefinitely.

**CAUTION**

Ensure the CD-ROM drive is connected to the NAM and the Norstar Voice Mail 4.0 disk is in the drive. For more information, refer to "[Attaching the CD-ROM to the NAM](#)" on page 12.

6. Disconnect power to the NAM.
7. Remove the **Norstar Voice Mail 4.0 Upgrade Boot Diskette** from the floppy diskette drive of the NAM.
8. Remove the CD-ROM disk from the CD-ROM drive. Power down the CD-ROM drive and disconnect from the NAM.
9. Wait approximately 30 seconds, then restore power. It takes the NAM several minutes to boot. When this process is complete, the NAM plays a brief musical tune.
10. To complete the upgrade process, restart the NAM, then proceed to "[Initializing Norstar Voice Mail](#)" on page 28.

Initializing Norstar Voice Mail

You must initialize the Norstar Voice Mail 4.0 software before you can restore the Norstar Voice Mail programming.

To initialize the Norstar Voice Mail software:

1. Press .

Pswd: RETRY	<input type="text" value="OK"/>
----------------	---------------------------------

2. Enter the installer password (CONFIG) and press OK.

First lang? ENG SPA FRE

3. Press ENG.

Note: After you accept the two languages, the other languages are deleted. You will not be able to load the other languages even if you re-initialize Norstar Voice Mail.

Eng lang? CDN US

4. Press US. To select Canadian English, press CDN. There are two differences between the US English and Canadian English voice prompts. In US English, is referred to as “pound” and is pronounced “zee”. In Canadian English, is referred to as “number sign” and is pronounced “zed”.

Second lang? FRE SPA

5. Press SPA. To select French as the Second Language, press FRE.

1:ENG-US 2:SPA RETRY	<input type="text" value="OK"/>
-------------------------	---------------------------------

6. Press OK to accept the two languages. Press RETRY to change the languages.

Note: Make sure the two languages shown on this display are the languages you want to keep before you accept the language choice. After you accept these two languages, the other languages are deleted. You will not be able to load the other languages even if you re-initialize Norstar Voice Mail.

Bilingual? YES NO

7. Press YES.

Primary lang? ENG SPA

8. Press ENG. Press SPA if you want Spanish as the primary language.

Group lists? Y
CHNG OK

9. Press **OK** to enable System Group Lists. Press **CHNG** to disable the System Group Lists.

Note: The System Group List leading digit can be any number from 0 to 9. The Special Mailbox numbers automatically begin with 1, so if you select a Group List leading digit of 1, the Special Mailbox numbers begin with 2. For example, the System Coordinator Mailbox would be 22.

Glist lead dig:9
CHNG OK

10. Press **OK** to accept the leading digit. Press **CHNG** to enter a different leading digit.

System config
RETRY OK

11. Press **OK** to complete the initialization. Press **RETRY** to change the system configuration. The display continues to change to show:

Configuring...

System ready

Exit

The system is now initialized and ready to have the Norstar Voice Mail programing and NAM capabilities file restored.

Restoring the Norstar Voice Mail programming

After the Norstar Voice Mail 4.0 software has been initialized, you can restore your old Norstar Voice Mail configuration and programming to the replacement drive. If your Norstar Voice Mail system is operating in a multiple applications scenario, you must restore applications in the same order in which they were backed up.

To restore a Norstar Voice Mail system:

1. Press .

```
Log:
QUIT  RETRY  OK
```

2. Enter the System Coordinator Mailbox number and password and press OK .

```
Admin
MBOX  AA  OTHR
```

3. Press .

```
Restore
QUIT  CONT
```

4. Press CONT .

```
Confirm restore?
QUIT  OK
```

5. Press OK . All Norstar Voice Mail programming data is erased before the restore begins.

If calls are still active, the display shows:

```
Calls completing
```

Before the restore procedure can begin, all Norstar Voice Mail channels must be idle. Norstar Voice Mail automatically disables each channel as it becomes idle. The display then shows:

```
Insert disk <x>
QUIT  OK
```

6. Insert the appropriate disk and press OK .

```
Restoring <x>
QUIT
```

7. The display continues to prompt for more disks until the restore is complete. When the restore is complete, the display shows:

```
Restore complete
OK
```

8. Press OK . Press to end this programming session.

Restoring the NAM capabilities file

The NAM capabilities file (SEKUR file) contains all upgrade and capability information about your Norstar Voice Mail system and must be restored along with Norstar Voice Mail programming. If this file is not restored, all upgrades made to your Norstar Voice Mail system are lost.

When you restore the SEKUR file you must make sure you are restoring the most recent backup.

To restore the NAM capabilities file:

1. Press .

2. Enter the ACCESS password. The default password is ACCESS2 (2223772).

3. Press ADMIN .

4. Press NEXT until the display shows:

5. Press SHOW .

6. Press RSTR .

7. Insert the backup disk and press OK .

When complete the display shows:

8. Press OK . Press to end this programming session.

Testing the Norstar Voice Mail software

After you have completed the upgrade you must test the Norstar Voice Mail 4.0 software to make sure it is functioning. Refer to "[Testing the Norstar Voice Mail software](#)" on page 32.

Backing up Norstar Voice Mail programming after the upgrade

For system security, perform a backup of the Norstar Voice Mail programming and the capabilities file after completing the upgrade process. For more information on backing up the Norstar Voice Mail programming and the capabilities file, refer to "[Backing up Norstar Voice Mail programming](#)" on page 9 and "[Backing up the NAM capabilities file](#)" on page 10.

Re-installing Cintech Dial-by-Name

The methods used to upgrade the system software will may cause Dial-by-Name (DBN) to fail to load after the system is rebooted. To re-install the Dial-by-Name (DBN), refer to "[Updating Cintech Dial-by-Name](#)" on page 17.

Re-enabling the monitor, keyboard and mouse

If you have a monitor, keyboard and mouse attached to your system, you must re-enable the monitor after the upgrade.

To enable the monitor, keyboard and mouse:

1. Press .

Password:
RETRY

2. Enter the ACCESS password. The default password is ACCESS2 (2223772).

Access Server
BACK NEXT ADMIN

3. Press ADMIN .

A. Prt queue mgr
QUIT NEXT SHOW

4. Press NEXT until the display shows G. Monitor Pkg .

G. Monitor Pkg
QUIT NEXT SHOW

5. Press SHOW .

Password:
QUIT RETRY

6. Enter the default password (SVGANEDED).

Monitor?
QUIT ADD REM

7. Press ADD .

Reboot needed

8. Reboot the system from a Norstar telephone. For more information, refer to ["Rebooting the NAM"](#) on page 34.
9. While the system is rebooting, the monitor will go blank. Watch the screen during the reboot. When a small white OS/2 box appears in the top left corner, you must immediately press and at the same time. The flashing white box only appears on the screen for 2 seconds.

Note: If you were unable to press and while the white OS/2 box appeared, cycle the power to the NAM and repeat step 9.
10. When the **Recovery Choices** screen appears on the monitor, press on the keyboard.
11. The monitor, keyboard and mouse are initialized and enabled.

Note: Steps 9 and 10 are part of a first time monitor initialization process. If the monitor, keyboard and mouse are removed from the NAM, only steps 1 through 8 need to be performed to re-enable the monitor package.

Rebooting the NAM

The Reboot option ensures all applications are terminated before a reboot is performed.

Four reboot options are available: Graceful, Quick, Immediate and Scheduled. The Graceful option allows an application to terminate all existing calls before shutting down and restarting. The Quick option only allows 45 seconds for an application to terminate before the reboot, and the Immediate option allows 15 seconds.

When you are rebooting the NAM, you will usually use the Graceful option. However, if the system is not responding to the command, you can speed up the process by changing the option to a Quick Reboot. After 45 seconds a Quick Reboot is performed.

To reboot the NAM:

1. Press .

Password:
RETRY

2. Enter the default password (ACCESS2).

ACCESS Server
BACK NEXT ADMIN

3. Press NEXT until the display shows:

System reboot
BACK NEXT SHOW

4. Press SHOW .

Reboot type
QUIT NEXT GRACE

5. Press GRACE .

Note: Press NEXT to change the shutdown option to QUICK (Quick), IMMED (Immediate) or SCHDL (Scheduled).

Reboot Graceful?
YES NO

6. Press YES .

Note: Press NO if you want to stop the reboot.

Troubleshooting the upgrade

The following tables assist you during the upgrade procedure.

Table 1 explains the meanings of audible messages that are **not** error messages.

Non-error message	Meaning
Series of five ascending tones, repeated indefinitely until the power is removed from the NAM.	Successful Installation.
One, two, three, or four tones approximately three minutes after power up.	One tone for each DVC detected.
Series of very quick descending tones.	NAM has shutdown properly.

Table 1 Non-error messages played during the upgrade process

Refer to Table 2 and Table 3 for error messages, their meanings, and corrective action required.

Error Message	Problem	Corrective Action
A sequence of two descending tones, repeated indefinitely.	A failure occurred during the upgrade. The problem is most likely corrupted data on the NAM.	1. Contact your Norstar Technical Support group for assistance.
A sequence of three descending tones, repeated indefinitely.	The wrong CD-ROM disk is in the CD-ROM drive.	1. Ensure the "Norstar Voice Mail 4.0 CD-ROM disk" is in the CD-ROM drive. 2. Re-attempt the upgrade procedure. 3. A hardware upgrade may be required; contact your Norstar Technical Support group for assistance.
A sequence of four descending tones, repeated indefinitely.	The upgrade was started, but then aborted.	1. Ensure the "Norstar Voice Mail 4.0 CD-ROM disk" is in the CD-ROM drive. 2. Ensure the "Norstar Voice Mail 4.0 Upgrade Boot Diskette" is in the floppy diskette drive of the NAM. 3. Re-attempt the upgrade procedure. 4. Contact your Norstar Technical Support group for assistance.
A sequence of five descending tones, repeated indefinitely.	There is insufficient space on the NAM to perform the upgrade.	1. Delete saved messages from the system. 2. Re-attempt the upgrade procedure. 3. A hardware upgrade may be required, contact your Norstar Technical Support group for assistance.
A sequence of eight descending tones, repeated indefinitely.	Invalid or no Norstar Voice Mail 4.0 Security Key Code entered.	1. Enter the Norstar Voice Mail 4.0 Security Key Code for the system.

Error Message	Problem	Corrective Action
The CD-ROM light goes out after some CD-ROM activity and tones are heard a short time after the starting the upgrade.	The CD-ROM drive is not connected properly, or is not turned on, or the CD-ROM disk is not in the CD-ROM drive.	<ol style="list-style-type: none"> 1. Power down the NAM. 2. Ensure the CD-ROM drive is connected to the NAM, the drive is powered up and placed flat. 3. Re-attempt the upgrade procedure. 4. If the problem persists, contact your Norstar Technical Support group for assistance.

Table 2 Error messages played during upgrade process

Error Message	Problem	Corrective Action
Two tones shortly after powering up the NAM. Voice Mail may not start	The CMOS configuration has been changed	Contact your Norstar Technical Support group for assistance
Three tones after powering up the NAM. Voice Mail will not start	Fatal CMOS configuration error	Contact your Norstar Technical Support group for assistance
Three tones repeated with one second interval after powering up the NAM. Voice Mail will not start	Fatal CMOS configuration error	Contact your Norstar Technical Support group for assistance
No tones occurred after powering up the NAM. Voice Mail will not start	<p>No power to the NAM</p> <p>Fatal hardware error has occurred</p>	<p>Check power at AC outlet and that power cord is firmly seated in NAM power socket</p> <p>Contact your Norstar Technical Support group for assistance</p>

Table 3 Error messages for general problems

Appendix A - Line renumbering

If your Norstar Voice Mail system is connected to a Modular ICS or Compact ICS, and you upgrade the ICS software to version 2.0 or greater, you must renumber the Norstar Voice Mail lines. Line 5 and greater will not be recognized by Norstar Voice Mail systems connected to a Compact ICS. Line 49 and greater will not be recognized by a Norstar Voice Mail system connected to a Modular ICS.

Renumbering the Norstar Voice Mail lines is divided into two parts:

- Running the line renumbering utility
- Resetting the Line Answer status

This appendix provides instruction for performing both parts.

Line renumbering can be done from a Norstar two-line display telephone.

Before you start, ensure you have the **Line Renumbering Utility** diskette.

To run the line renumbering utility:

1. Press .

2. Enter the default password (ACCESS2).

3. Press ADMIN.

4. Press NEXT until the display shows:

5. Press SHOW.

6. Insert the **Line Renumbering Utility** diskette into the floppy disk drive of the Norstar applications server and press INSTL.

7. The display will continue to show progress as the line renumbering utility is running.

All done...

Remove the **Line Renumbering Utility** diskette from the floppy disk drive and press **RLS** .

Resetting the Line Answer status

After the Norstar Voice Mail lines have been renumbered, you must reset the Line Answer status.

To reset Line Answer status:

1. Press **Feature** **9** **8** **2** .

Pswd:
RETRY **OK**

2. Enter the Operator password and press **OK** .

Atdt aval: N
CHNG **NEXT**

3. Press **NEXT** .

Business open: Y
CHNG **NEXT**

4. Press **NEXT** .

Answer lines? Y
CHNG **NEXT**

5. Press **CHNG** .

When Answer Lines is set to **N** the display shows: **Disabling...**

Answer lines? N
CHNG **NEXT**

6. Press **CHNG** .

When Answer Lines is set to **Y** the display shows: **Enabling...**

Answer lines? Y
CHNG **NEXT**

7. Press **RLS** to end this programming session.

The Norstar Voice Mail lines are now renumbered and will be answered as they were programmed.

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