
Meridian 1

What's New for X11 Release 25.3x and CP PII Software Upgrade

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Revision history

December 2000

Issue 1.00, Standard for Generic X11 Release 25.3x.

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Introduction

About this document

This document describes the features introduced with Meridian 1 X11 Release 25.3x Software. The features include:

- Corporate Directory application
- CP PII Software Upgrade
- Option 11C with IP Connectivity

X11 Release 25.3x features are supported on Meridian 1 Options 11C, 51C, 61C, 81, and 81C systems.

Corporate Directory application

The Corporate Directory application is described in feature module format.

The feature module contains the following information:

- Feature description
- Operating parameters
- Feature implementation
- Feature operation

CP PII Software Upgrade

Use the CP PII Software Upgrade section to:

- perform a software update within X11 release 25
- add new features
- modify Incremental Software Management (ISM) limits

Option 11C with IP Connectivity

The Option 11C with IP Connectivity section describes:

- Option 11C with IP Connectivity
- Survivable IP Expansion Cabinets
- Voice Distribution over Campus Data Network
- Support of Option 11C Mini Cabinetry
- Package Requirements

Corporate Directory

Content List

This section contains information on the following topics:

Reference List	9
Feature Description	9
Operating parameters	10
Feature implementation	11
Feature operation	13

Reference List

The following is a reference for this section:

M3900 Series Meridian Digital Telephones Description, Installation and Administration (553-3001-216)

Feature Description

The M3903 and M3904 telephones provide access from the telephone to a corporate wide directory. The Corporate Directory is accessed through the Applications Key. The Corporate Directory allows users to:

- search by name
- view additional information on each entry
- dial from the Corporate Directory
- copy and paste an entry into the Personal Directory (M3904)
- view an alphabetical listing of entries by using the last names (system generated)

Note: When names are copied to the Personal Directory (M3904) the names are listed by first name.

- the system administrator to configure Meridian Administration Tools (MAT) to download the directory database manually or automatically to the system

Operating parameters

The user must have an M3903 or M3904 telephone to support the Corporate Directory feature. To access the Corporate Directory from the telephone, the user must have the Corporate Directory class-of-service enabled.

When the Corporate Directory is being updated with new data, the user cannot access the Corporate Directory. The user exits the Corporate Directory by pressing the Quit Key or the Applications Key.

The MAT Corporate Directory utility gathers data from the MAT databases and downloads it to the Meridian 1 system. To use the Corporate Directory utility, MAT 6.6 or later must be installed.

Feature implementation

LD 11 – Configure the Server-based Application Corporate Directory for a M3903 set.

Prompt	Response	Description
REQ:	CHG	Change current data.
TYPE:	3903	Add Corporate Directory feature to a M3903 set
...
CLS	ADD	Automatic Digit Display
	(VCE)	Voice Terminal DTA = Data Terminal
	FLXA	Flexible Voice/Data Allowed Deny Flexible voice/data (FLXD) is the default Class of Service must be VCE, FLXA if telephone is equipped with the optional Analog Terminal Adapter.
	CRPA	Corporate Directory Allowed Deny Corporate Directory (CRPD) is the default.
...

LD 11 – Configure the Server-based Application Corporate Directory for a M3904 set.

Prompt	Response	Description
REQ:	CHG	Change current data.
TYPE:	3904	Add Corporate Directory feature to a M3904 set.
...
CLS	ADD (VCE) FLXA CRPA	Automatic Digit Display Voice Terminal DTA = Data Terminal Flexible Voice/Data Allowed Deny Flexible voice/data (FLXD) is the default Class of Service must be VCE, FLXA if telephone is equipped with the optional Analog Terminal Adapter. Corporate Directory Allowed Deny Corporate Directory (CRPD) is the default.
...

Feature operation

To initiate a call within the Corporate Directory, using the first available DN, follow these steps:

- 1 Access the Corporate Directory using the **Applications** key.
- 2 Select a Corporate Directory entry.
- 3 Press the **Dial** soft key.

To initiate a call within the Corporate Directory using a pre-selected DN, follow these steps:

- 1 Pre-select a DN before or after entering the Corporate Directory. Pre-selecting a DN is accomplished by lifting the handset, selecting a DN key or by using Transfer or Conference if on an existing call.
- 2 Access the Corporate Directory using the **Applications** key.
- 3 Select a Corporate Directory entry.
- 4 Press the **Dial** soft key.

Refer to the *M3900 Series Meridian Digital Telephones Description, Installation and Administration* (553-3001-216) for specific key functions.

CP PII Software Upgrade

Content List

This section contains information on the following topics:

Reference List	15
Description	15
Perform parallel reload	16
Back out of a system software upgrade	31

Reference List

The following are references for this section:

- *Call Processor PII/Fiber Network Guide System and Software Upgrade Guide (P0914248)*
- *Call Processor PII Description, Installation and Administration Guide (P0914249)*

Description

The latest release of X11 system software is shipped with new Meridian 1 systems.

Task summary

- 1 “Perform parallel reload” on page 16.
- 2 “Back out of a system software upgrade” on page 31.

To better understand the process, read through the instructions before you begin and refer to the *Call Processor PII Description, Installation and Administration Guide (P0914249)*.

Perform parallel reload

You must install X11 software on both Core hard drives. Follow the tasks below in order to complete the installation.

Note: To complete these procedures, the system must be working and connected to a terminal.

Back up current data

- 1 Load the Equipment Data Dump Program (LD 43). At the prompt, enter
LD 43 Load the program.
- 2 When "EDD000" appears on the terminal, enter
EDD Begin the data dump.
- 3 When "DATABASE BACKUP COMPLETE" or "DATADUMP COMPLETE" appears on the terminal, enter
******** Exit the program.

CAUTION

If the data dump is not successful, do not continue; contact your technical support organization. Correct any data dump problem before you continue.

Check the status of the hardware

- 1 Load LD 137 to check the status of the hard disks.
LD 137
STAT Get the status of the hard disks.
TEST CMDU Perform hard and floppy disk test.
- 2 Load LD 135 and check the status of the CPs, CNIs and memories.
LD 135
STAT CPU Get the status of both CPs and memory.
STAT CNI Get the status of all configured CNIs.

Check that Core 0 is active

Check that Core 0 is active.

If Core 1 is active, make Core 0 active:

LD 135

STAT CPU	Get the status of the CPUs.
SCPU	Switch to Core 0 (if necessary).

Split the Cores

From the active side, split the cores:

LD 135

SPLIT	Enter Split on the active core.
****	Exit program.

The system is now in split mode.

Install the software on Core/Net 1

- 1 Install the CD-ROM into the CD-ROM drive in the MMDU:
 - a Press the button on the CD-ROM drive to open the CD-ROM disk holder.
 - b Place the CD-ROM disk into the holder with the disk label facing up. Use the four tabs to secure the CD-ROM drive.
 - c Press the button to close the CD-ROM disk holder.
Do not push the holder in by hand.

Note: If the CD-ROM is not in the CD-ROM drive, the installation will not continue. Insert the CD-ROM to continue.

- 2 Place the CP PII Install floppy disk into the MMDU floppy drive.

Note: If a problem is detected during the system verification. Install stops, prints an error message, and aborts the installation. If the verification is not successful, do not continue; contact your technical support organization.

- 3 Press the RESET button on CP PII. Before the install menu runs, the system validates hard disk partitioning which takes about five minutes. The screen displays:
Testing partition 0
0 percent done...1 percent done.....99 percent done....100 percent done
Testing partition 1
0 percent done...1 percent done.....99 percent done....100 percent done
Testing partition 2
0 percent done...1 percent done.....99 percent done....100 percent done completed!
Disk physical checking is completed!
There are 3 partitions in disk 0:
The size of partition 0 of disk 0 is XX MB
The size of partition 0 of disk 0 is XX MB
The size of partition 0 of disk 0 is XX MB
Disk partitions and sectors checking is completed!
- 4 From the terminal, press <cr> to start the software installation.
- 5 When prompted, remove the CP PII Install Program diskette and insert the Keycode diskette.
<a> Continue with keycode validation.
<y> Confirm that the keycode matches the CD-ROM release.
- 6 When the screen displays the Install Menu, select the following options in sequence when you are prompted to do so:
<a> Install software.
<a> Verify that the CD-ROM is now in drive.
The Installation Status Summary screen appears that lists the options to be installed.
<y> Start Installation.
<a> Continue with Upgrade.

- 7 Select a PSDL file to install. The PSDL file contains the loadware for all downloadable cards in the system and loadware for M3900 series sets.

Select one of the six psdl files

- <1> Global 10 Languages <default>
- <2> Western Europe 10 Languages
- <3> Eastern Europe 10 Languages
- <4> North America 6 Languages
- <5> Rls xx up-issue where xx = current version
- <6> North America 6 Languages:

The languages contained in each selection are outlined as follows:

- 1 English, French, German, Spanish, Swedish, Italian, Norwegian, Brazilian, Portuguese, Finnish, Japanese Katakana.
- 2 English, French, German, Spanish, Swedish, Norwegian, Danish, Finnish, Italian, Brazilian Portuguese.
- 3 English, French, German, Dutch, Polish, Czech, Hungarian, Russian, Latvian, Turkish.
- 4 English, Spanish, French, Brazilian Portuguese, Japanese Katakana, German.
- 5 English, French, German, Spanish, Swedish, Italian, Norwegian, Portuguese, Finnish, Japanese Katakana.
- 6 English, French, German, Spanish, Brazilian Portuguese, Japanese Katakana.

- 8 Continue with ROM upgrade when prompted.
Select a database to install.
- <cr> Enter carriage return to continue.
 - <a> Continue with CP BOOTROM installation.
 - <a> Install the CP BOOTROM from hard disk.
 - <a> Start installation.
 - <a> Continue with ROM upgrade.
- The Installation Status Summary screen appears. Verify that CD to disk, disk to ROM, and CP-BOOTROM were installed.
- <cr> Continue.
 - <q> Quit.
Remove any diskettes and the CD-ROM from the MMDU drives.
 - <y> Confirm quit.
 - <a> Reboot the system.
- 9 The system automatically performs a sysload: several message appear on the system terminal. Wait for "DONE" and then "INI" message to display before you continue.
- While the sysload is being performed, database conversion occurs.
- Verify that the following message appears on the system terminal:
- DATA CONVERSION**
X11 RELEASE 25.XX TO RELEASE 25.XX
- 10 Confirm that X11 release 25 software is installed and is working on Core/Net 1:
- LD 135** Load the program.
 - STAT CPU** Display the CPU status.
 - STAT CNI** Display the cCNI status.

Check for peripheral software download

Use LD 22 and print the Target peripheral software version. (You printed the Source peripheral software version during the pre-conversion procedure.)

If there is a difference between the Source and Target peripheral software version, a forced download occurs during initialization when coming out of parallel reload. System initialization will take longer and established calls on IPE will be dropped.

LD 22

REQ	Print.
TYPE	PSWV.
ISSP	Print issue and release.
TID	Print Tape ID.
SLLP	Print System and patch information. Print auxiliary ID.
****	Exit program.

Transfer call processing from Core/Net 0 to Core/Net 1

CAUTION

The following procedure to transfer call processing can cause service interruptions.

Time your procedure to minimize the effect of any breaks in service.

From Core/Net 0, the active side, transfer call processing to Core/Net 1:

LD 135	Load the program.
CUTOVR	The inactive CP become active.

Call processing is now switched from Core/Net 0 to Core/Net 1.

Test Core/Net 1

Test Call Processing. This includes, but is not limited to the following:

- 1 Check for dial tone.
- 2 Make internal, external, and network calls.
- 3 Check attendant console activity.
- 4 Check DID trunks.
- 5 Check any auxiliary processors.

Note: From this point forward you are upgrading Core/Net 0 with new software.

Install software on Core/Net 0

- 1 Install the CD-ROM into the CD-ROM drive in the MMDU:
 - a Press the button on the CD-ROM drive to open the CD-ROM disk holder.
 - b Place the CD-ROM disk into the holder with the disk label facing up.
 - c Press the button again to close the CD-ROM disk holder.
Do not push the holder in by hand.

Note: If the CD-ROM is not in the CD-ROM drive, the installation will not continue. Insert the CD-ROM to continue.

- 2 Place the CP PII Install floppy disk into the MMDU floppy drive.

Note: If a problem is detected during the system verification, Install stops, prints an error message, and aborts the installation. If the verification is not successful, do not continue; contact your technical support organization.

- 3 Press the manual RESET button on the CP PII card faceplate. Before the install menu runs, the system validates hard disk partitioning which takes about five minutes. The screen displays:
Testing partition 0
0 percent done...1 percent done ...99 percent done....100 percent done
Testing partition 1
0 percent done...1 percent done...99 percent done...100 percent done
Testing partition 2
0 percent done...1 percent done.....99 percent done....100 percent completed!
Disk physical checking is completed!
There are 3 partitions in disk 0:
The size of partition 0 of disk 0 is XX MB
The size of partition 0 of disk 0 is XX MB
The size of partition 0 of disk 0 is XX MB
Disk partitions and sectors checking is competed!
- 4 At the terminal, press <cr> to start the software installation.
- 5 When prompted, remove the CP PII Install Program diskette and insert the Keycode diskette.
<a> Continue with keycode validation
<y> Confirm that the keycode matches the CD-ROM release
- 6 When the screen displays the Install Menu, select the following options in sequence when you are prompted to do so:
<a> Install software.
<a> Verify that the CD-ROM is now in drive.
The Installation Status Summary screen appears that lists the options to be installed.
<y> Start Installation.
<a> Continue with Upgrade.

- 7 Select a PSDL file to install. The PSDL file contains the loadware for all downloadable cards in the system and loadware for M3900 series sets.

Select one of the six psdl files

- <1> Global 10 Languages <default>
- <2> Western Europe 10 Languages
- <3> Eastern Europe 10 Languages
- <4> North America 6 Languages
- <5> Rls xx up-issue where xx = current version
- <6> North America 6 Languages:

The languages contained in each selection are outlined as follows:

- 1 English, French, German, Spanish, Swedish, Italian, Norwegian, Brazilian, Portuguese, Finnish, Japanese Katakana.
- 2 English, French, German, Spanish, Swedish, Norwegian, Danish, Finnish, Italian, Brazilian Portuguese.
- 3 English, French, German, Dutch, Polish, Czech, Hungarian, Russian, Latvian, Turkish.
- 4 English, Spanish, French, Brazilian Portuguese, Japanese Katakana, German.
- 5 English, French, German, Spanish, Swedish, Italian, Norwegian, Portuguese, Finnish, Japanese Katakana.
- 6 English, French, German, Spanish, Brazilian Portuguese, Japanese Katakana.

- 8 Continue with ROM upgrade when prompted.
Select a database to install.
- <cr> Enter carriage return to continue.
 - <a> Continue with CP BOOTROM installation.
 - <a> Install the CP BOOTROM from hard disk.
 - <a> Start installation.
 - <a> Continue with ROM upgrade.
- The Installation Status Summary screen appears. Verify that CD to disk, disk to ROM, and CP-BOOTROM were installed.
- <cr> Continue.
 - <q> Quit (remove any diskettes and the CD-ROM from the MMDU drives).
 - <y> Confirm quit.
 - <a> Reboot the system.
- 9 The system automatically performs a sysload: several message appear on the system terminal. Wait for "DONE" and then "INI" message to display before you continue.
- While the sysload is being performed, database conversion occurs.
- Verify that the following message appears on the system terminal:
- DATA CONVERSION**
X11 RELEASE 25.XX TO RELEASE 25.XX
- 10 Confirm that X11 Release 25 software is installed and is working on Core/Net 1:
- LD 135** Load the program.
 - STAT CPU** Display the CPU status.
 - STAT CNI** Display the cCNI status.

Check for peripheral software download

Use LD 22 to print the Target peripheral software version. (You printed the Source peripheral software version during the pre-conversion procedure.)

If there is a difference between the Source and Target peripheral software version, a forced download occurs during initialization when coming out of parallel reload. System initialization will take longer and established calls on IPE will be dropped.

LD 22

REQ	PRT
TYPE	PSWV
ISSP	Print issue and release.
TID	Print Tape ID.
SLLP	Print System and patch information.
	Print auxiliary ID.
****	Exit program.

Enable system redundancy

From the active CPU, Core/Net 1, enable redundancy:

LD 135

JOIN Synchronize the memory and drives.

Test Core/Net 1 and Core/Net 0

From the active CPU, Core/Net 1, perform these tests:

1 Perform a redundancy sanity test using the following sequence:

LD 135

STAT CNI c s Get status of cCNI cards.

STAT CPU Get status of CPU and memory.

TEST CPU Test the CP PII card in both Core/Nets.

TEST CNI c s Test each cCNI card (core, slot).

STAT SUTL Get status of System Utility (main and Transition) cards.

TEST SUTL Test the System Utility (main and Transition) cards.

TEST IPB Test the Inter Processor Bus

TEST LCD Test the LCDs.

TEST LED Test the LEDs.

2 Test system redundancy:

LD 137

TEST RDUN Test redundancy.

DATA RDUN

TEST CMDU Test the MMDU card.

- 3** Switch Cores and test the other side (Core/Net 0)
- LD 135**
- SCPU** Switch cores.
- TEST CPU** Test the inactive Core/Net.
- STAT CNI c s** Get status of cCNI (both main and Transition) cards.
- TEST CNI c s** Test cCNI (both main and Transition) cards.
- STAT SUTL** Get status of System Utility card.
- TEST SUTL** Test System Util card.
- TEST IPB** Test Inter Processor Bus.
- TEST LCD** Test LCDs.
- TEST LED** Test LEDs
-
- 4** Clear the display and minor alarms on both Cores.
- CDSP** Clear the displays on the Cores.
- CMAJ** Clear major alarms.
- CMIN ALL** Clear minor alarms.
-
- 5** Get the status of the Cores, CNIs, and memory.
- STAT CPU** Get the status of both Cores and redundancy
- STAT CNI c s** Get the status of all configured cCNIs (both main and Transition) cards.
- ****** Exit program.

Perform a data dump

- 1 Load the LD 43. At the prompt, enter
LD 43 Load the program
- 2 Insert a floppy disk into the MMDU to capture the backup.
- 3 When "EDD000" appears on the terminal, enter
EDD Begin the data dump
- 4 When "DATABASE BACKUP COMPLETE" or "DATADUMP COMPLETE" appears on the terminal, enter

CAUTION

If the data dump is not successful, do not continue; contact your technical support organization. Correct any data dump problem before you continue.

The parallel reload procedure is complete.

Back out of a system software upgrade

To back out of a system software upgrade once it is in the redundant mode running CP PII, split the cores and install the old release of software. Perform the following procedures in order.

Split the Cores

From the active side, split the cores:

LD 135	Load the program.
SPLIT	Enter Split on the active core.
	Allow the former active side to INIT before continuing.
****	Exit the program.

The system is now in split mode.

Install the software on Core/Net 1

Install the old release of software:

- 1 Install the CD-ROM into the CD-ROM drive in the MMDU:
 - a Press the button on the CD-ROM drive to open the CD-ROM disk holder.
 - b Place the CD-ROM disk into the holder with the disk label facing up. Use the four tabs to secure the CD-ROM drive.
 - c Press the button again to close the CD-ROM disk holder.
Do not push the holder in by hand.

Note: If the CD-ROM is not in the CD-ROM drive, the installation will not continue. Insert the CD-ROM to continue.

- 2 Place the Install floppy disk with the old software release into the MMDU floppy drive.

Note: If a problem is detected during the system verification, install stops, prints an error message, and aborts the installation. If the verification is not successful, do not continue; contact your technical support organization.

- 3 Press the manual RESET button on the CP PII card faceplate. Before the install menu runs, the system validates hard disk partitioning which takes about five minutes. The screen displays:
Testing partition 0
0 percent done ...1 percent done ...99 percent done....100 percent done
Testing partition 1
0 percent done ...1 percent done ...99 percent done....100 percent done
Testing partition 2
0 percent done ...1 percent done ...99 percent done....100 percent completed!
Disk physical checking is completed!
There are 3 partitions in disk 0:
The size of partition 0 of disk 0 is XX MB
The size of partition 0 of disk 0 is XX MB
The size of partition 0 of disk 0 is XX MB
Disk partitions and sectors checking is competed!
- 4 At the terminal, press <cr> to start the software installation.
- 5 When prompted, remove the Install Program diskette and insert the Keycode diskette.
<a> Continue with keycode validation.
<y> Confirm that the keycode matches the CD-ROM release.
- 6 When the screen displays the Install Menu, select the following options in sequence when you are prompted to do so:
<a> Install software.
<a> Verify that the CD-ROM is now in drive.
The Installation Status Summary screen appears that lists the options to be installed.
<y> Start Installation.
<a> Continue with Upgrade.

- 7 Select a PSDL file to install. The PSDL file contains the loadware for all downloadable cards in the system and loadware for M3900 series sets.

Select one of the six psdl files

- <1> Global 10 Languages <default>
- <2> Western Europe 10 Languages
- <3> Eastern Europe 10 Languages
- <4> North America 6 Languages
- <5> Rls xx up-issue where xx = current version
- <6> North America 6 Languages:

The languages contained in each selection are outlined as follows:

- 1 English, French, German, Spanish, Swedish, Italian, Norwegian, Brazilian, Portuguese, Finnish, Japanese Katakana.
- 2 English, French, German, Spanish, Swedish, Norwegian, Danish, Finnish, Italian, Brazilian Portuguese.
- 3 English, French, German, Dutch, Polish, Czech, Hungarian, Russian, Latvian, Turkish.
- 4 English, Spanish, French, Brazilian Portuguese, Japanese Katakana, German.
- 5 English, French, German, Spanish, Swedish, Italian, Norwegian, Portuguese, Finnish, Japanese Katakana.
- 6 English, French, German, Spanish, Brazilian Portuguese, Japanese Katakana.

- 8 Continue with ROM upgrade when prompted.
Select a database to install.
- <cr> Enter carriage return to continue.
 - <a> Continue with CP BOOTROM installation.
 - <a> Install the CP BOOTROM from hard disk.
 - <a> Start installation.
 - <a> Continue with ROM upgrade.
- The Installation Status Summary screen appears. Verify that CD to disk, disk to ROM, and CP-BOOTROM were installed.
- <cr> Continue.
 - <q> Quit.
Remove any diskettes and the CD-ROM from the MMDU drives.
 - <y> Confirm quit.
 - <a> Reboot the system.
- 9 The system automatically performs a sysload: several message appear on the system terminal. Wait for "DONE" and then "INI" message to display before you continue.
- While the sysload is being performed, database conversion occurs.
- Verify that the following message appears on the system terminal:
- DATA CONVERSION**
X11 RELEASE 25.XX TO RELEASE 25.XX
- 10 Confirm that X11 release XX software is installed and working on Core/Net 1:
- LD 135** Load the program.
 - STAT CPU** Display the CPU status.
 - STAT CNI** Display the cCNI status.

Check for peripheral software download

Use LD 22 to print the Target peripheral software version. (You printed the Source peripheral software version during the pre-conversion procedure.)

If there is a difference between the Source and Target peripheral software version, a forced download occurs during initialization when coming out of parallel reload. System initialization will take longer and established calls on IPE will be dropped.

LD 22

REQ	Print.
TYPE	PSWV.
ISSP	Print issue and release.
TID	Print Tape ID.
SLLP	Print System and patch information. Print auxiliary ID.
****	Exit program.

Transfer call processing from Core/Net 0 to Core/Net 1

CAUTION

The following procedure to transfer call processing can cause service interruptions.

Time your procedure to minimize the effect of any breaks in service.

From Core/Net 0, the active side, transfer call processing to Core/Net 1:

LD 135	Load the program.
CUTOVR	The inactive CP become active.

Call processing is now switched from Core/Net 0 to Core/Net 1.

Test Core/Net 1

Test Call Processing. This includes, but is not limited to the following:

- 1 Check for dial tone.
- 2 Make internal, external, and network calls.
- 3 Check attendant console activity.
- 4 Check DID trunks.
- 5 Check any auxiliary processors.

Note: From this point forward you are upgrading Core/Net 0 with new software.

Install software on Core/Net 0

- 1 Install the CD-ROM into the CD-ROM drive in the MMDU:
 - a Press the button on the CD-ROM drive to open the CD-ROM disk holder.
 - b Place the CD-ROM disk into the holder with the disk label showing.
 - c Press the button again to close the CD-ROM disk holder.
Do not push the holder in by hand.

Note: If the CD-ROM is not in the CD-ROM drive, the installation will not continue. Insert the CD-ROM to continue.

- 2 Place the Install floppy disk for the old release of software into the MMDU floppy drive.

Note: If a problem is detected during the system verification, install stops, prints an error message, and aborts the installation. If the verification is not successful, do not continue; contact your technical support organization.

- 3 Press the manual RESET button on the CP PII card faceplate. Before the Install menu runs, the system validates hard disk partitioning which takes about five minutes. The screen displays:
Testing partition 0
0 percent done...1 percent done...99 percent done....100 percent done
Testing partition 1
0 percent done...1 percent done...99 percent done....100 percent done
Testing partition 2
0 percent done...1 percent done...99 percent done....100 percent completed!
Disk physical checking is completed!
There are 3 partitions in disk 0:
The size of partition 0 of disk 0 is XX MB
The size of partition 0 of disk 0 is XX MB
The size of partition 0 of disk 0 is XX MB
Disk partitions and sectors checking is competed!
- 4 At the terminal, press <cr> to start the software installation.
- 5 When prompted, remove the Install Program diskette and insert the Keycode diskette.
<a> Continue with keycode validation
<y> Confirm that the keycode matches the CD-ROM release
- 6 When the screen displays the Install Menu, select the following options in sequence when you are prompted to do so:
<a> Install software.
<a> Verify that the CD-ROM is now in drive.
The Installation Status Summary screen appears that lists the options to be installed.
<y> Start Installation.
<a> Continue with Upgrade.

- 7 Select a PSDL file to install. The PSDL file contains the loadware for all downloadable cards in the system and loadware for M3900 series sets.

Select one of the six psdl files

- <1> Global 10 Languages <default>
- <2> Western Europe 10 Languages
- <3> Eastern Europe 10 Languages
- <4> North America 6 Languages
- <5> Rls xx up-issue where xx = current version
- <6> North America 6 Languages:

The languages contained in each selection are outlined as follows:

- 1 English, French, German, Spanish, Swedish, Italian, Norwegian, Brazilian, Portuguese, Finnish, Japanese Katakana.
- 2 English, French, German, Spanish, Swedish, Norwegian, Danish, Finnish, Italian, Brazilian Portuguese.
- 3 English, French, German, Dutch, Polish, Czech, Hungarian, Russian, Latvian, Turkish.
- 4 English, Spanish, French, Brazilian Portuguese, Japanese Katakana, German.
- 5 English, French, German, Spanish, Swedish, Italian, Norwegian, Portuguese, Finnish, Japanese Katakana.
- 6 English, French, German, Spanish, Brazilian Portuguese, Japanese Katakana.

- 8 Continue with ROM upgrade when prompted.
Select a database to install.
- <cr> Enter carriage return to continue.
 - <a> Continue with CP BOOTROM installation.
 - <a> Install the CP BOOTROM from hard disk.
 - <a> Start installation.
 - <a> Continue with ROM upgrade.
- The Installation Status Summary screen appears. Verify that CD to disk, disk to ROM, and CP-BOOTROM were installed.
- <cr> Continue.
 - <q> Quit (remove any diskettes and the CD-ROM from the MMDU drives).
 - <y> Confirm quit.
 - <a> Reboot the system.
- 9 The system automatically performs a sysload: several message appear on the system terminal. Wait for "DONE" and then "INI" message to display before you continue.
- While the sysload is being performed, database conversion occurs.
- Verify that the following message appears on the system terminal:
- DATA CONVERSION**
X11 RELEASE 25.XX TO RELEASE 25.XX
- 10 Confirm that X11 release 25.XX software is installed and working on Core/Net 1:
- LD 135** Load the program.
 - STAT CPU** Display the CPU status.
 - STAT CNI** Display the cCNI status.

Check for peripheral software download

Use LD 22 to print the Target peripheral software version. (You printed the Source peripheral software version during the pre-conversion procedure.)

If there is a difference between the Source and Target peripheral software version, a forced download occurs during initialization when coming out of parallel reload. System initialization will take longer and established calls on IPE will be dropped.

LD 22

REQ	PRT
TYPE	PSWV
ISSP	Print issue and release.
TID	Print Tape ID.
SLLP	Print System and patch information.
	Print auxiliary ID.
****	Exit program.

Enable system redundancy

From the active CPU, Core/Net 1, enable redundancy:

LD 135

JOIN Synchronize the memory and drives.

Test Core/Net 1 and Core/Net 0

From the active CPU, Core/Net 1, perform these tests:

1 Perform a redundancy sanity test using the following sequence:

LD 135

STAT CNI c s Get status of cCNI cards.

STAT CPU Get status of CPU and memory.

TEST CPU Test the CP PII card in both Core/Nets.

TEST CNI c s Test each cCNI card (core, slot).

STAT SUTL Get status of System Utility (main and Transition) cards.

TEST SUTL Test the System Utility (main and Transition) cards.

TEST IPB Test the Inter Processor Bus

TEST LCD Test the LCDs.

TEST LED Test the LEDs.

2 Test system redundancy:

LD 137

TEST RDUN Test redundancy.

DATA RDUN

TEST CMDU Test the MMDU card.

- 3** Switch Cores and test the other side (Core/Net 0)
- LD 135**
- SCPU** Switch cores.
- TEST CPU** Test the inactive Core/Net.
- STAT CNI c s** Get status of cCNI (both main and Transition) cards.
- TEST CNI c s** Test cCNI (both main and Transition) cards.
- STAT SUTL** Get status of System Utility card.
- TEST SUTL** Test System Util card.
- TEST IPB** Test Inter Processor Bus.
- TEST LCD** Test LCDs.
- TEST LED** Test LEDs
-
- 4** Clear the display and minor alarms on both Cores.
- CDSP** Clear the displays on the Cores.
- CMAJ** Clear major alarms.
- CMIN ALL** Clear minor alarms.
-
- 5** Get the status of the Cores, CNIs, and memory.
- STAT CPU** Get the status of both Cores and redundancy
- STAT CNI c s** Get the status of all configured cCNIs (both main and Transition) cards.
- ****** Exit program.

Perform a data dump

- 1 Load the LD 43. At the prompt, enter
LD 43 Load the program
- 2 When "EDD000" appears on the terminal, enter
EDD Begin the data dump
- 3 When "DATABASE BACKUP COMPLETE" or "DATADUMP
COMPLETE" appears on the terminal, enter

CAUTION

If the data dump is not successful, do not continue; contact your technical support organization. Correct any data dump problem before you continue.

The software backup procedure is complete.

Option 11C with IP Connectivity

Content List

This section contains information on the following topics:

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Reference List

The following are references for this section:

- *Option 11C Planning and Installation* (553-3021-210)
- *Option 11C and 11C Mini Fault Clearing Guide* (553-3011-500)
- *Option 11C and 11C Mini Central Answering Position Guide* (553-3011-320)
- *Option 11C and 11C Mini Customer Controlled Backup and Restore Guide* (553-3011-330)
- *Option 11C and 11C Mini Upgrade Procedures Guide* (553-3021-250)
- *Option 11C Survivability Guide* (P0919734)

Option 11C with IP Connectivity

Option 11C IP Expansion provides IP interconnection between Option 11C main and expansion cabinets. This IP interconnection enables:

- Increased Digital Trunking Capacity
- Survivable Expansion Cabinets
- Voice Distribution over Campus Data Network

The solution is applicable to Option 11C and Option 11C Mini systems.

Increased Digital Trunking/SDI Capacity

This development provides increased networking capacity for the Option 11C and Option 11C Mini systems. Digital trunks can now be supported in any IP Expansion Cabinet or Mini main chassis, when connected via 100BaseT or 100BaseF. A total of 45 digital trunks could be supported on Option 11C, and 15 digital trunks supported on Mini.

The following CE cards can now be supported in IP expansion cabinets/mini main chassis.

- 1.5MB DTI/PRI (NTAK09 with NTAK20, NTAK93 & NTBK51)
- 1.5MB TMDI (NTRB21 with NTAK20)
- 2.0MB DTI (NTAK10 with NTAK20)
- 2.0MB PRI (NTAK79 & NTAK50 with NTAK20, NTAK93 & NTBK51)
- SDI DCH (NTAK02) (Only DCH is supported in the IP Expansion cabinet/chassis. ESDI, AML, TTY are not supported in the Expansion cabinet/chassis.)

IP expansion daughterboards also provides increased SDI/D-channel capacity. Three SDI ports are provided with each IP Expansion chassis and D-channel capacity has been increased, such that a total of 80 D-channels are now supported per system.

Option 11C IP Expansion introduces two types of IP daughterboards:

- 100BaseT IP daughterboard
- 100BaseF IP daughterboard.

These boards are available in single and dual port versions. The dual port IP daughterboard connects to the SSC of a Main cabinet and supports connections to two expansion cabinets, each equipped with an SSC, via IP. The single port IP daughterboard is used at the IP Expansion to provide connectivity back to the Main.

The Option 11C SSC card can accommodate up to two single or dual port IP daughterboards. The IP daughterboards can coexist with either the single port or dual port fibre daughterboards.

Survivable IP Expansion Cabinets

IP Expansion Cabinets can be configured to be survivable in the event of a link failure, or a catastrophic failure of the main cabinet.

Based on the system configuration, if IP connectivity to the main is lost or a manual command is issued, an IP expansion cabinet can enter survival mode in which it acts as a fully functional "Stand-alone" Option 11C.

The number of survivable expansion cabinets allowed on a specific system is controlled via a new ISM parameter, "Survivability", which has a range of 0-4. The default value for this ISM parameter is zero.

Voice Distribution over Campus Data Network

The IP Connectivity of expansion cabinets enables a high capacity, cost effective solution to distribute Option 11C and Mini cabinets over a high performance data network.

Full feature functionality, and non blocking architecture is maintained when Option 11C systems are distributed over high performance data networks. This patented solution delivers the exceptional functionality and reliability of Meridian 1 Option 11C, while delivering the benefits of voice/data convergence.

Support of Option 11C Mini Cabinetry

This aspect of Option 11C IP Expansion allows the software functionality described above to be supported on the Option 11C Mini platform as well as the Option 11C platform.

A mix and match strategy allows a mixture of both Option 11C's and Mini chassis within the same system.

Package Requirements

IP Connectivity is packaged under package number 295. If the IP Expansion package is restricted, IP connectivity between the Main and IP Expansions will be disallowed, regardless of whether or not IP daughterboards are connected to the Main. CE-Mux Expansion is not separately packaged, but is dependent on package number 295.

Meridian 1

What's New for X11 Release 25.3x and CP PII Software Upgrade

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