Meridian 1

Option 11C Compact

General Release Bulletin

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Revision history

February 1998	**Issue 1.0 Standard**	**Option 11C Compact Introduction**
June 1998	**Issue 1.01 Standard**	**PBX X27 software update to 1.01**
November 1998	**Issue 1.10 Standard**	**Option 11C Compact Hospitality Introduction**
January 1999	**Issue 2.0 Standard**	**PBX X27 Release 2.0**

Introduction

This document provides an overview of the features introduced on Option 11C Compact Release 2 which are being taken from the Meridian 1 Generic X11 Release 23.35 software product. It describes the new features and enhancements offered in this release.

X27 release 2 is introduced to offer updated software feature content on the Option 11C Compact product line for the North American market.

This document provides a product overview of Software Delivery Mechanism, and upgrade procedures in the Appendices.

For more details on feature installation and operation, hardware upgrade procedures, refer to the Option 11C Compact Nortel Networks Publications (NTPs).

For details on the Meridian Mail Compact Option, the Central Answering Position feature, the Autoconfiguration feature, Model Sets and Administration Sets, as well as installation and operation, please refer to the Nortel Networks (NTPs) provided with the Option 11C Compact.

IMPORTANT

Please read all included advisements, requirements, and enhancements prior to loading this software.

Chapter 1 - System Advisements

This document provides the advisements specific to Option 11C Compact X27 2.00 for North America.

Systems Supported

Generic X27 Release 2 supports the following machine types:

— Meridian 1 Option 11C Compact. This document includes information applicable to Option 11C Compact systems only, for all other Meridian 1 systems, please refer to Generic X11 Release 2 General Release Bulletin PLM23-01 and Nortel Publications (NTPs).

CAUTION

Please read this important message

Upgrade from Generic X27 Release 1

When **upgrading from Release 1 to Release 2** or higher, you **MUST** use the SYSLOAD method of upgrading shown below and described in the Option 11C Compact NTPs (Please see the Upgrade Procedures). Upgrading from Release 1 to a higher Release cannot be achieved properly using the Overlay 143 UPGRADE command.

However, when upgrading from Release 2 to a higher release or up-issue of Release 2, both methods (UPGRADE command or SYSLOAD) can be used. When using the SYSLOAD method, service on the entire system is typically disrupted for 20 to 30 minutes.

These two methods (UPGRADE or SYSLOAD) are fully documented in the Option 11C Compact Planning, Installation, Fault Clearing and CCBR Guide.

SYSLOAD Method : (see next page)

When upgrading from Release 1 to Release 2 or higher, you MUST use the SYSLOAD method of upgrading described in the Option 11C Compact NTPs (Please see the Upgrade Procedures).

Upgrading from Release 1 to a higher Release cannot be achieved properly using the Overlay 143 UPGRADE command. You MUST use the SYSLOAD method of upgrading described below.

SYSLOAD Method:

This method invokes the software installation menu during a SYSLOAD.

1. Invoke a system reload (SYSLOAD) by setting the circuit breaker on the front of the power supply to OFF then to ON.

2. During the SYSLOAD, the following prompt will appear: *** To invoke install setup program from PCMCIA enter CONTROL-I***. At this point, hold down the "control" key and press the "I" key.

3. Upgrade the system through menu item 2 "System Upgrade".

If the “UPGRADE” method is attempted, an invalid keycode message will be displayed. If this occurs, reinitiate using the above **“SYSLOAD”** method.

System Hardware

No new hardware is being introduced on the base Option 11C Compact with the introduction of X11 Release 2.

Conversion

Please note the upgrade method restriction from Release 1 systems as noted in the Caution box above.

The Option 11C Compact system offers a menu driven installation and upgrade method. Please refer to the Option 11C Compact Installation Guide for additional information.

CAUTION

Please read the Option 11C Compact NTPs thoroughly before performing any hardware/software conversions. All conversion procedures should be strictly followed step-by-step.

To avoid static discharge, wear a properly connected anti-static wrist strap when working on the Meridian 1 equipment.

CAUTION

In order to support the new Flash daughterboard NTDK81AA, the Boot Code on the active SSC does not need to be updated.

Software Flash Daughterboard

A new version of the Software Flash Daughterboard, NTDK81AA, was introduced with X27 Release 1.01. This has an additional 8 Megabytes of program store memory (making 32 MB, plus 8 MB for the File System), but is otherwise a direct replacement for the NTDK21AA. The new board is used for new system shipments since the release of 1.01, but the NTDK21AA can continue to be used with the newer software.

The NTDK21AA will operate with either release 1 or release 2.

With X11 Release 2, or later, software, either the NTDK81AA or the NTDK21AA can be used and either one can replace the other in the field.

The new board NTDK81AA requires the following:

- Release 1.01or later software.

System Security

Nortel strongly recommends changing the default system passwords for both Meridian 1 and Meridian Mail systems during initial installation. These passwords should be changed again when the system is placed in active service. These actions will help deter unauthorized system access which can result in toll fraud or system abuse.

For more information, please refer to the Sales and Marketing Bulletin #807G, or the System Security Management NTP (553-3001-302).

Audit Routine

As in the case of previous software releases, it is recommended that the Audit routine (Overlay 44) be specified as the background diagnostic to optimize the system capability to deal with call processing anomalies, especially in large line size and high traffic configurations.

Electronic Software Delivery

Internet software delivery is currently available for the Option 11C Compact in North America only. The downloading of software is only necessary when re-programming a PCMCIA card to update a current Option 11C Compact system. When ordering a PCMCIA card for the first time, it will be sent pre-programmed with the current market release of software. This same card can be used for future upgrades of software by using the Option 11C Compact Internet Software Download process, details of which are found in document P0866881.

The software download process is required to take compressed software from the Internet and download it to your PC for duplication. In addition to the duplication configuration listed above, the following is required:

- Internet software and an Internet Service Provider.
- Registration with Nortel to access the software Home Page (registration process is detailed in Product Bulletin 97046).

Meridian Configurator

Meridian Configurator is being modified for Release 2 and will be available concurrent with the product release.

Basic Configuration

With X27 Release 1 and later, the “Basic Configuration” data option includes default data such as XPECs, Superloops, and other default data blocks. It doesn’t include Model sets, routes, TN’s etc. For complete default data including model sets etc., choose the Pre-Configured data option.

Use of BKO command in LD 43

The BKO command is used to backup the customer data to an external data card (blank PCMCIA card) located in the slot “B” on the CPU faceplate.

Warning: If the pre-programmed software PCMCIA card is used during BKO operation, then the card cannot be used to install software.

Meridian Mail Password Suppression

Meridian Mail Password Suppression, supported with Release 1 provides a new AML message which prevents a Meridian Mail user's log on password from being echoed on a set's display. Meridian Mail Release 11 is required. No new software package is introduced by this feature but Meridian Mail requires the existing package Call ID (CALL ID) package # 247. In addition the following packages are also required: Digit Display (DDSP) package # 19, Command Status Link (CSL) package #77 and Basic ACD (BACD) package # 40. All Option 11C Compact package sets support this feature.

M2008HF (Handsfree) Sets

This functionality provides the capability to configure/install M2008HF with handsfree. This means M2008HF sets can/should be equipped with the handsfree feature. To turn on the feature on the set, enable the class of service HFA (handsfree allowed) in Overlay 11. Sites equipped with MAT Release 3 and later can be patched to support this operation. Sites with MAT Release 3 and below must upgrade to MAT Release 4.02 or later. Please contact your Technical Assistance Center for insertion of the patch.

Software Patches

There is one manufactured patch required on X27 Release 2.0 software. (Refer to PRS# BV81656 - Noise on Dialtone in Option 11C Compact cabinet 1 when CO is absent).

Other patches (if any) which need to be installed must be placed in the following directory on drive C: c:/u/patch

All Option 11C Compact patch files exist in the Global Patch Database. All patch files for the 11C should be placed in the following directory: c:/u/patch. There are 5 ways to get a patch file into this directory.

1 Patches can be downloaded to the switch by FTP over an ethernet connection.

2 Patches can be downloaded to the switch by FTP over a serial line using SLIP.

3 Patches can be downloaded to the switch by FTP over a serial line using PPP.

4 Program the patch file onto a PCMCIA card. Install the PCMCIA card in drive a. In PDT, copy the patch file from the PCMCIA card to the c drive. e.g.: cp a:newpatch.p c:/u/patch/newpatch.p

5 Patches can be downloaded to the switch using XMODEM file transfer over a serial line.

The following is the description of the PDT commands to **perform a file transfer using the XMODEM protocol**.

rx - command for receiving a file

sx - command for sending a file

To use rx, PDT Level 1 or Level 2 password login is required. To use sx, PDT Level 2 password login is required. This is done for security purposes so that you can't get any data out of the system unless you know the PDT Level 2 password.

To transfer a file from a PC/workstation to the switch

pdt> rx [path/]filename.ext

You then enter the appropriate commands to invoke xmodem file transfer on the PC/workstation

To transfer a file from the switch

pdt> sx [path/]filename.ext

Enter the appropriate commands to invoke xmodem file transfer on the PC/workstation. For binary files (e.g., patch files and database files), please ensure that the files are transferred in binary mode. When the transfer is completed, a transmission summary is displayed and the PDT prompt is shown.

total packets: 20
number of retries: 0

receive timeouts: 1
system errors: 0
unknown characters: 0
transfer cancelled: 0
packets received out of sequence: 0
packets with corrupted sequence: 0
packets failed checksum/crc check: 0
incomplete packets: 0
duplicate packets: 0

The following is an **example in a unix environment**:

Use tip to connect to the switch (if you telnet to the switch you can't use umodem).

To transfer a patch to the switch:

in PDT
cd c:/u/patch
rx newpatch.p
When the system prompts “Ready to receive...”, invoke local command mode by typing ~C (tilde C) and issue the umodem (s)end (b)inary command.

~C (tilde C to enter local command)
umodem -sb ~mydir/patches/newpatch.p

To transfer a file to the workstation

in PDT
cd to directory e.g. c:/p/sl1
sx direct.rec
When the system prompts “Ready to send...”, invoke local command mode by typing ~C (tilde C) and issue the umodem (r)eceive (b)inary command.

~C (tilde C to enter local command)
umodem -rb ~mydir/backup/direct.rec
The following is an **example in a PC/Window 95 environment**:

Use the HyperTerminal application to dial up to the switch.

To transfer a patch to the switch

in PDT

cd c:/u/patch

rx newpatch.p

When the system prompts “Ready to receive...”, invoke file transfer on the PC side using the (T)ransfer pull-down menu and selecting the (S)end File option. Select the file to be sent and select XMODEM as the Protocol. Then start the transfer on the PC side.

To transfer a file to the PC

in PDT

cd to directory e.g. c:/p/sl1

sx direct.rec

When the system prompts “Ready to send...”, invoke file transfer on the PC side using the (T)ransfer pull-down menu and selecting the (R)eceive File option. Select or create a file to be received as and select XMODEM as the Protocol. Then start the transfer on the PC side.

Patch Installation Steps:

1) In PDT use the pload command to load the patches. To make sure that these patches remain in service you must enter the pload command without the patch name. It will then prompt you for the patch name and ask the following questions:

Days patch vulnerable to sysload [3] - set this to 0

In-service initialize threshold [5] - enter a carriage return

In-service days to monitor inits [7] - set this to 0

2) After using the pload command use the pins command to put the patches in service

Meridian Mail Compact Option Advisements

It is essential that this section be read before installing or upgrading a Meridian Mail Compact Option system.

Meridian Mail Release 12.12 Compact Option

This release allows an upgrade from MM11.19 Compact Option to MM12.12. No change will be required on the hardware for the General Business customers. The Compact Hospitality package is available starting with MM12.12. The necessary hardware is included in this package.

Any Compact Installations, which is using MM11.19 and wants to take advantage of the features supported on MM12.12 must upgrade. If a Meridian Mail Compact Option is using MM11.19 and wants the Remote Notification (Outcalling) or Enterprise Networking supporting up to 150 sites; it must be upgraded to MM12.12 which will automatically enable those features as part of the key codes.

Hardware Requirements

The following lists the hardware requirements for the Compact General Business customers and the Hospitality customers.

Compact	Application	Product	Description	Release
X27 Rls. 2.0	General Business	NTMW02AB	68K Processor Pack	01
		NTMW03AA	Digital Voice Processor	03
		NTAK30DB /(QCA7015C	External Tandberg Tape Drive U.S. (optional)	--
			External Tandberg Tape Drive Can. (optional)	--
		A0766888	Medalist Pro ST34520N 4.5GB Disk Drive	--
		A0728841	Citizen GSX-190IF Serial Printer	or
		A0654974	(optional) or DEC LA30N printer	--
X27 Rls. 2.0	Hospitality	All of above		
		NTMW50AA	RSM Module	TBD
		NTMW51AA	RSM Cable, 4 ft.	TBD
		NTMW55AA	GAC Cable, 40 ft.	TBD
		A0383526	DEC 520 Terminal	--
		NTND93AA	PMSI Cable (optional).	

Installation and Modification Advisements

Hard Disk Drive and Voice Card Daughterboard

The hard disk drive (NTDK74AB) and the 4-port voice card daughterboard (NTMW03AA DSP) are packaged separately to protect these parts from damages during product shipment from the warehouse to the site. These parts need to be mounted on the Mail CPU Card (NTMW02AB) before the software can be loaded. Please note that the hard disk drive should be screwed on the bracket before the daughterboard is snapped into position. This will allow enough clearance of the screwing task without the blockage of the daughterboard. After these parts are mounted, they are adjacent to each other. Two screws on the hard disk drive bracket will touch the PCB (Printed Circuit Board) edge of the voice card daughterboard. There is no electrical impact to the product.

*Note: For details re Meridian Mail Hard Disk Drive Changes (NTDK74AA 2GB to NTDK74AB 4.5GB) see Product Bulletin PB-98107

Mail CPU Faceplate LEDs:

There are 2 LEDs on the faceplate: a green LED (ACT) and an amber LED (HDD).

NTMW02AB pack in stock will have one end of the 2-inch LED Jumper Wire attached to the P4 connector on the board. (i.e., the red wire is connected to the side marked with '+' (positive) of the P4 connector). However, the installer in the field will need to connect the other end of the wire to the hard disk drive after he installed the hard disk to the NTMW02 board. The method is as follows: the red wire (positive) goes to pin 14, and the black wire (negative) goes to pin 13.

Test the faceplate LEDs by plugging in the circuit pack in its cabinet location. It will take approximately 10 seconds after Meridian Mail Compact Option is reset for the hard disk to be accessed and the HDD faceplate LED to light.

At bootup, the green LED will light up for about half-a-second and then go off. After the internal hardware diagnostics is complete, this green LED will stay on if all of the Mail CPU Card hardware passes its test. A flashing green LED indicates that some hardware is in faulty condition. Typically this fault can be cleared away by tightening the connection of the SCSI drive and/or the hard disk drive; or by replacing the hard disk drive, if necessary.

The amber LED (HDD) will light whenever the hard disk drive is being accessed.

Tandberg Tape Drive

Tape Drive Termination

The external Tandberg tape drive for Compact Option systems (labeled Panther 2000-SE) already contains internal termination. Therefore, if an external terminator plug is supplied in the tape drive kit, it should NOT be installed since double termination may cause problems with the Compact Option system operation. In case of difficulties, check also the jumper setting of J5 of the hard disk drive. SCSI Terminator should be Disabled.

Refer to the Stopping Compact Option for Maintenance section later in this document or the Site Planning and Installation.

SCSI Cable Ground Wire

The SCSI cable for the Tape Drive has a small ground wire with a spade connector attached to it. The ground wire is used for extra ground capability as the NTMW02AB Mail CPU Card is already grounded inside. The NTMW02AB Mail CPU Card is equipped with a small ground lug on the faceplate of the CPU Card. One can attach the spade connector to the ground lug on the faceplate of the NTMW02AB Card.

After completing system operations

After every system operation your system should be booted to full service. Prior to booting, the following items must be checked on the Option 11C Compact PBX:

1. The time is set properly.

2. The virtual agents are in idle state.

3. The corresponding link is in autosetup

Disk MTBF

The NTPs indicate that mean time between failure of disk drives is estimated to be 8 years or greater. This failure rate is based on electrical failures and therefore not conclusive with regard to disk drive life expectancy. Users should expect to replace disks within 5 years.

BV66656 Modified fields of diagnostic port in Tools level

The diagnostic port baud rate should not be allowed to be modified in the Tools level Data Port Configuration screen. The only baud rate that is supported by the port is 2400 baud. If the baud rate is set to any other value the information printed to the console will be unreadable. Users should not set the rate to any other value but 2400 baud.

BV67331 Backup Status does not reflect reality

When a second backup is performed to a backup tape and the tape label is a different name than the first backup tape only the backup status of the first tape is displayed.

Dialing Translations Advisements

The following diagram and examples show the parts of a DN. This is especially relevant to the Dialing Translations section where it is important to understand the structure of a DN and how its parts get translated by Meridian Mail.

DN Format

Y C NPA NXX XXXX

WhereY is the network dialing prefix that is used to access the public network. Examples are 9, 8, and 6.

C is the country code.

NPA is the Numbering Plan Area (or area/city code).

NXX is the exchange code.

XXXX is the local number.

DNs do not have to include all of these parts. For example, local DNs will not include a country code or area code.

Examples

6-1-416-555-2323

9-1-215-444-1234

6-333-4532

Networking Capacity

The Networking Sites have been upgraded from 10 to 150 on Compact Option. This number of sites is supported on all Meridian Mail platforms.

General Administrative Advisements

Warning: If the remote maintenance terminal is used for remote admin. It is essential to return service to the console before disconnecting. If this procedure is NOT followed, further access to that port is inhibited until a reboot is performed.

Warning: If the terminal appears to 'freeze', that is, it does not respond to keyboard input, try selecting Clear COMM from the terminal's SETUP screen. If this option is not present Resetting the terminal or powering it down and up may help. Ensure that the terminal baud rate is correct.

Warning: When performing a backup on a Viper tape drive, the drive indicator does not always go off when the backup write operations are completed for that tape cartridge. Please rely on messages on the MMI screen to indicate completed tape operation.

Warning: Multiple Appearance DNs are not supported.

Warning: During a system reboot, there is a 6124 SEER 'Time-out waiting for node to load ...'. The system will load with no problem. The SEER does not have any system impact, all diagnostics have completed.

Option 11C Compact switch Interaction Advisements

External CLID

This is only an issue for systems using ESN.

WARNING: Due to an PBX interaction problem the Calling Line ID feature does not work for all scenarios. The 'Reply' or 'Call Sender' may result in a message or a call to an invalid or incorrect DN.

In MM12 COMPACT OPTION, Meridian Mail captures the CLID for external (off-switch or off-net) callers as provided by the M1 switch. Meridian Mail receives the CLID (over the AML) and transforms it into a dilable DN. This allows the receiver of the message to send a message to the caller using the REPLY command or call the caller directly using the CALL SENDER command.

For proper operation of REPLY or CALL SENDER to external CLIDs, the network must be set up such that ALL CALLS STAY ON THE ESN NETWORK or that all calls stay on the public network. If the customer's network allows calls to be routed on either ESN and/or the public network (e.g., if the customer wants to route calls to the public network when no more ESN trunks are available), the CLID received by Meridian Mail may not always be accurate, making the REPLY and CALL SENDER commands inoperable for those messages.

The Meridian Mail relies on the M1 to suppress the CLID when appropriate.

Password Display Suppression

The Password digits may not be suppressed on the display due to the following limitations:

1. Due to the potential time lag in Meridian Mail and Meridian 1 processing of the digit suppression and disable digit suppression commands, there will be situations where one or more password digits will be displayed. There will also be situations where command digits that are entered immediately after the login password will be suppressed. These situations may occur when the Meridian 1 or Meridian Mail are under peak load and the user has not delayed before and after entering their password. When a user is in an environment where security is an issue, suppression of the complete password can be ensured by waiting for the 'Password?" prompt to be played.

2. Password display suppression of an external call logging on to Meridian Mail is not supported. The local switch has no control on the password display suppression capability of external calls.

3. Password display suppression of an attendant who logs on to Meridian Mail is not supported.

4. The Meridian 1 processes the password display suppression AML message only if the local set is supported and has a display. Sets not supported because they do not have displays include: 500/2500 sets. M2009, M2112, M2018, M2006, M2016TSG. Attendant sets may have displays but are not supported.

5. In a conference call, if a party other than the one who directly called Meridian Mail enters the password, all digits will be displayed.

6. If a conference call is established by a set during the login process, then subsequent password digits will be echoed to the screen.

Stopping Compact Option for Maintenance Procedures

Before working on the Compact Option hardware, software or attaching the tape drive to the SCSI faceplate connector, you must courtesy down the system. This allows anyone using Compact Option to finish their session before the system is brought down. During this time, no users are allowed to log on to Compact Option, and calls are directed to the Compact Option attendant.

Courtesying down the system

Log on to Compact Option at the system administrator's terminal.

From the Main Menu, choose

"5 System Status and Maintenance."Æ"1 System Status."

Press the <Courtesy Down System> softkey.

At the prompt, Do you want to courtesy down the system?,

press the up arrow key to choose Yes, and press <Return>.

The display charts the progress of the courtesy down. Hardware locations are put out of service as users finish their sessions. System Status displays "CourtesyDown" when the process is complete.

Disable the data ports for the console and the AML.

At this point, Compact Option can be worked on, an external tape drive can be attached to the mail card, and other cards can be added or replaced.

Resetting Compact Option

Compact Option does not start automatically; you must reset it manually by pressing the reset button on the Compact Option card face. Press the reset under the following circumstance:

· whenever you courtesy down Compact Option to perform System Installation and Modification with the Install/data tape or to perform troubleshooting and maintenance procedures

Resetting mail

Press the reset button on the Compact Option card.

From the Main Menu, choose "5 System Status and Maintenance."Æ"1 System Status."

Press the [Activate System] softkey.

Enable the data ports for the console and the AML.

Enter **AX** <Return> to view the Compact Option screen.

Do you have a Tandberg tape drive?

If yes, ensure that the tape drive's power is on.

If no, continue.

Wait until the system has loaded and the logon screen is displayed (approximately four minutes).

Restarting Compact Option after turning off the Option 11C Compact Switch

Compact Option loads automatically when the Compact Option Switch is turned on, but you must complete the following steps to restore Compact Option :

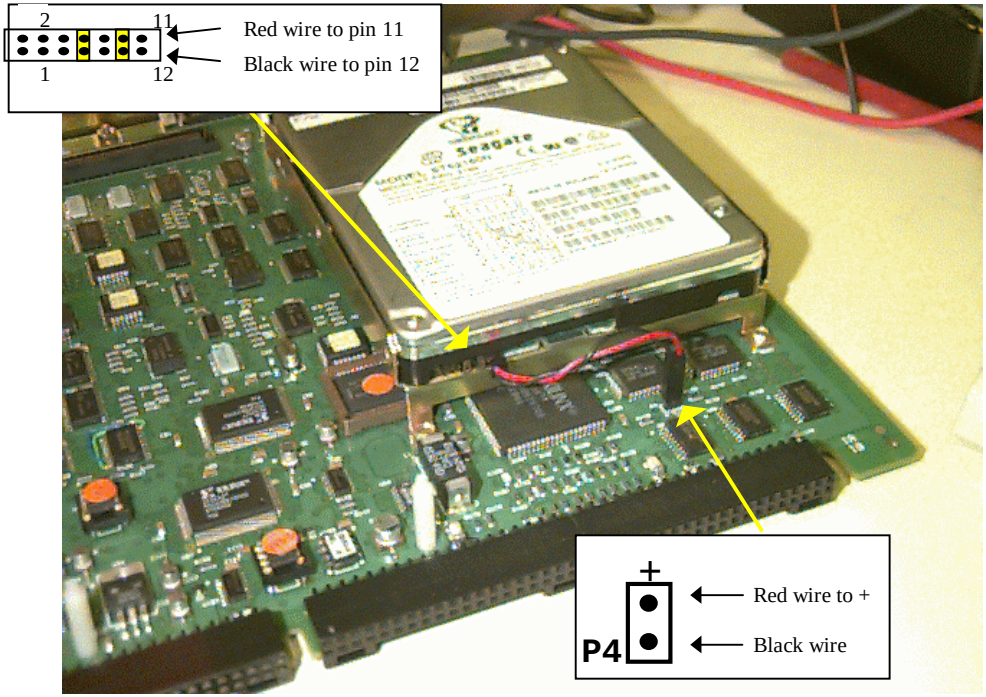
Log on to Compact Option at the system administrator's terminal.

Enter the correct time and date when prompted. Compact Option cannot start until these values are entered.

Enabling and disabling the console and AML data ports

Compact Option uses two data ports on the Option 11C Compact switch: port 8 is used by the system administration terminal, and port 9 is used as an Application Module Link (AML).

You must enable these ports before turning Compact Option on, and disable them before turning Compact Option off. The procedures you follow depend on the release number of the Option 11C Compact software running on your switch.



Enabling the console and the AML data ports

Log on to the Option 11C Compact Switch.

At the > prompt, enter the following:

LD 48 <Return>.

ENL AML 9 ACMS <Return> to establish the link on port 9.

Enter * * * * .

Connecting The External Tape Drive

Before connecting the external tape drive to the SCSI port on the faceplate the following steps should be followed:

1. Courtesy down the Compact Option as described above.

2. Reset the mail as described above.

3. Attach the SCSI cable to the SCSI connector. The ground wire of the SCSI cable can be connected to the power supply by loosening one of the screws on the power supply faceplate and attaching the ground wire.

4. Perform the tape operation.

5. When the tape procedure is complete, press the Reset button on the mail faceplate and disconnect the tape drive SCSI cable and ground wire..

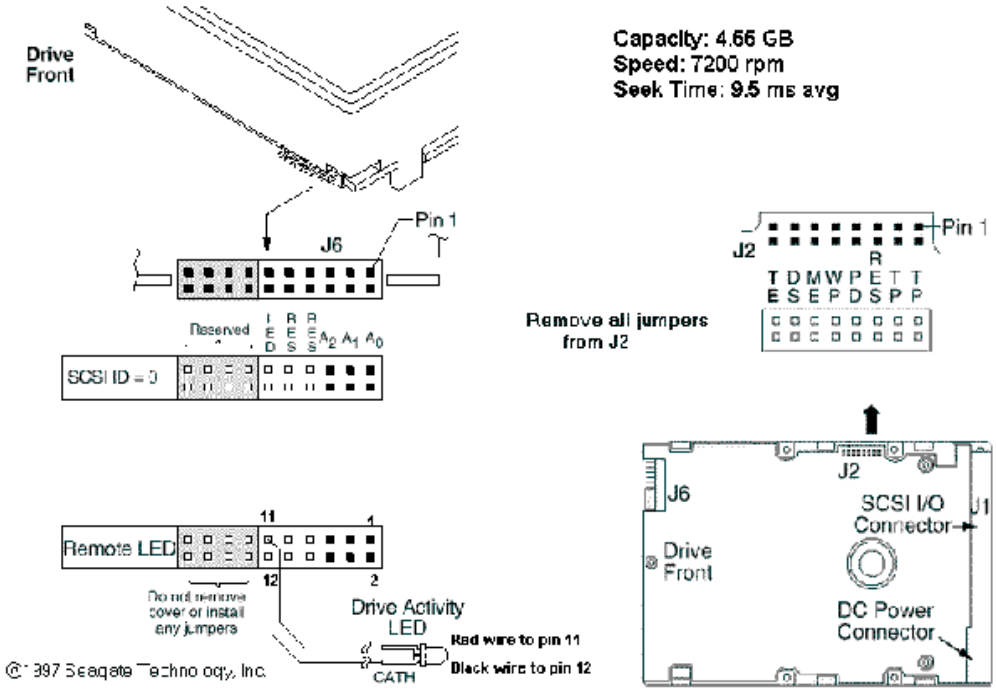
6. Bring the mail back into operation.

Additional disk drive and printer information

This section covers changes and additions to the Meridian Mail Compact Option documentation.

Note: Presently only the ST34520N Hard Disk Drive (4.5Gb) is supported for Compact Option Mail.

Settings for the SEAGATE Medalist Pro ST34520N Hard Disk Drive



LED Jumper Wire

The LED Jumper Wire is a 2-in-1 twisted-pair wire about 2 inches long. It has a 2x1 connector on one end and a 2x2 connector on the other. For the market release version of the Mail CPU Card, the 2x2 connector is connected to J5 of the Hard Disk Drive. The red wire (positive) goes to pin 11, and the black wire (negative) goes to pin 12. The 2x1 connector is connected to the P4 connector on the motherboard such that the red wire goes to the side marked with "+" (positive). The following picture shows the connection of the LED Jumper Wire.

Printer

Printers are not shipped with the Compact Option system but may be ordered separately. A user can use either the Citizen Serial Printer Model GSX-190IF. DEC printer model LA30N Companion Printer is also supported.

Citizen GSX-190IF Serial printer

The Citizen GSX-190IF printer (A0728841) (ordered optionally) is set to the serial mode by default for Meridian Mail. It supports speeds from 150 through 9600 baud, and it can use XON/XOFF and DTR protocols. The package for the printer comes with the following:

· Ribbon cassette

· User's manual

· Paper extension (paper guide)

· Terminal connection cable (A0376171)

· Six step quick start note

· North American power cord

Journal Advisements

IMPORTANT CUSTOMER ORDER INFORMATION:

The correct **Hotel name** and **telephone number** must be specified when the customer orders the Option 11C Compact Hospitality marketing package (NTKS1010) or when ordering the Journal package (NTKS1012) separately in order to obtain accurate Rate Tables.

It is also very important to include the long distance carrier and time of day discount information with customer orders, otherwise Rate Tables cannot be generated. The long distance carrier provides all the cost information necessary to create the Rate Tables. The customer must specify one long distance carrier. If no long distance carrier is specified, a default carrier will be chosen.

In addition, if time of day discounts are used, the Rate Tables need to reflect this information. The customer needs to choose one of the two options: **Yes** (time-of-day discounts) or **No**. The time of day discounts relate to different rates charged to guests depending on when the phone call is made. Some hotels choose to have this feature and others do not depending on their customer policies. There is no additional charge for time of day discounts.

Listed below are helpful tips for managing the Journal application:

· The PC running Journal cannot be used as a GAC terminal.

· A printer must be configured on the personal computer even though it is not required to be physically attached.

· Programming extensions on the switch does not create the telephone extensions in the Journal application.

· Among the COM ports on the PC, the CDR Interface application defaults to COM 1 and the PMSI Link application and Journal External Posting application default to COM 2. Please note that the COM port setting can be changed.

· The COM port setting for the PC CDR port can be changed through the Communications menu in the Journal application. To change the COM port settings for the PC PMSI Link port, access the PMSI2PBX.ini file in the Windows directory, using a text editor such as Notepad. The COM port setting for the Journal External Posting port can be changed from the Interface Menu within the application.

· THE PC CDR port defaults to the appropriate baud rate 1200, bit length, parity and stop bit at 7 e 1. The PBX CDR port should also be configured 7 e 1.

· The PC PMSI port must be set at 1200 baud rate, 7 bit length, even parity and one stop bit. This can be done using the PMSI2PBX.ini file in the Windows directory. Please note the PBX PMSI port should be configured as 8 bit length, no parity and one stop bit and the protocol setup on the PBX must be PMS3.

Registrar Advisements

The Registrar Front Desk Operations application available for Meridian 1 Hospitality environments is orderable separately. This application has been removed from the Advanced Hospitality Communications Package (NTKS1011) in the February 22, 1999 Price books.

Please refer to the important customer information in the Journal Advisements section which is also required when ordering the Registrar marketing package.

Listed below are helpful tips for managing the Registrar application:

· Registrar can only function with the Journal Call Accounting package loaded.

· The PC running Registrar cannot be used as a GAC terminal.

· The PC PMSI port must be set at 1200 baud rate, 7 bit length, even parity and one stop bit. This can be done using the PMSI2PBX.ini file in the Windows directory. However, the PBX PMSI port must be configured as 8 bit length, no parity and one stop bit and the protocol setup on the PBX must be PMS3.

· In order for the Called Party Name Display (CPND) feature to function properly with Registrar, the CPND length must be changed from overlay 95 default of 13 characters to 27 characters.

· The Dialing Privileges feature in Registrar (Allow all calls vs. Restricted Access) requires the PBX software feature Control Class of Service to be configured for the function to operate properly.

· The PBX software Flexible Feature Code must be configured with Room Status Codes before the guests room status is reflected accurately in Registrar.

· The PBX Auto Wake-Up feature and trunks must be configured on the PBX for the Registrar set Wake-Up feature to operate.

· Prior to archiving, deleting, or restoring Call Records, Transaction Data, system data, or Rate Tables, close the Registrar and PMSI Link applications.

· A dot matrix printer is not recommended to be used with Registrar. A Windows compatible full page print capable printer like a laser or bubble jet printer is recommended.

Chapter 2 - Documentation

Option 11C Compact Release 2 Customer Documentation Package

Table 1: Contents of Option 11C Compact Customer Documentation -English Base Package - Coil (NTMW43BA A0765552)

This package is included in 11C Compact Base System Packages (NTKS1001, NTKS1010, NTKS1020, NTKS1030). The guides are also orderable as loose item orders.

Title	English
Planning, Installation, Fault Clearing and CCBR Guide	P0890123
Central Answering Position Guide	P0890125
Set Based Administration Guide	P0872785
X27 Software Input/Output Guides	P0890121
Customer Documentation CD-ROM	NTMW42CA

Table 2: Contents of Option 11C Compact Customer Documentation French Base Package - Coil (No Charge Order Code with 11C Compact Base System Package orders: NTKS1025 or NTMW48AA as individual order.

Title	French
Planning, Installation, Fault Clearing and CCBR Guide	P0879759
Central Answering Position Guide	P0879764
Software Input/Output Guides	P0879781
Set Based Administration Guide	P0879767
M/Mail Compact Option System Admin Guide	P0879757
M/Mail Compact Option User Guide Package	NTKF03AB A0741807

Option 11C Compact Release 2 documentation on CDROM

The Customer Documentation CD-ROM will be received in the documentation package included in the base system packages (NTKS1001, NTKS1010, NTKS1020, NTKS1030) and may also be ordered using the following code:

Product Order Code: NTMW42CA CPC: A0765554

Customer CD-ROM includes the following NTP's:

- Option 11C Compact Documentation Package which includes:
  - •X27 Software Input/Output Guide/System Messages
  - •Planning, Installation, Fault Clearing and CCBR Guide
  - •Set-Based Administration Guide
  - •Multi-line CAP Guide
- X27 Software Features Guides (Input/Output Guide and System Messages Guide)

- 1.5Mb DTI/PRI Guide
- Technical Reference Guide
- Features and Services Guides (Books 1 and 2)
- Meridian Mail Compact Option System Administration Guide
- Meridian Mail Compact Option Reference Guide
- Journal User Guide
- Registrar User Guide
- Network Message Service Reference Guide
- 11C Compact MAT 6 Intro Guide.

The following describes the new documentation codes for Option 11C Compact Release 2 for North American (English & French) versions.

Documentation Structure

Documentation is packaged as:

- Customer Documentation package
- Optional documents

Optional Documents

Table 3: Optional Documents English/French - Coil
Some of the following guides are included in 11C Compact packages. See your Price Manual for details.

Title	English	French
Technical Reference Guide	P0885216	P0879768
1.5 Mb DTI/PRI Guide	P0872788	P0879762
Features and Services Guide	P0890122	P0879761
Meridian Mail Compact Option System Administration Guide	P0873717	P0879757
Meridian Mail Voice Messaging User Guide Package	NT1F94AA A0720837	NTKF03AB A0741807
MAT 6 Option 11C Compact Introduction Guide	P0890124	P0879772
Meridian Mail Guest Cards (15/pkg)	P0885221	N/A
Journal User Guide	P0885219	P0885166
Registrar User Guide	P0885220	N/A
cont'd next page		

Table 3: Optional Documents English/French - Coil
Some of the following guides are included in 11C Compact packages. See your Price Manual for details.

Meridian Mail Compact Option Reference Guide	P0885222	N/A
Network Message Service Reference Guide	P0884766	N/A
Meridian Mail Compact Option HVS Implementation Guide	P0875899	N/A
Meridian Mail HVS GAC Guide/Voice Messaging Guide	P0875900	N/A
Meridian Mail Enterprise Networking Installation and Administration	P0875913	N/A
Meridian Mail System Administration Tools Guide	P0875922	N/A
Meridian Mail Maintenance Messages (SEERS) Reference Guide	P0875905	N/A
Meridian Mail Rls 12 Documentation Suite CD-ROM	NT5F98AA A0721747	N/A
Meridian Mail Voice Service Application Guide	P0875899	N/A
Meridian Mail System Installation and Modification Guide	P0875922	N/A

Chapter 3 - Features Overview

This section provides a summary of the new features and enhancements included in X27 Release 2 on the Option 11C Compact . For more information on these features, refer to the documents listed under “Document References.”

Flexible Trunk to Trunk Connections

The Flexible Trunk to Trunk Connections (FTTC) feature provides a way to prevent unauthorized toll charges and the potential for toll fraud on a station basis. This feature is configured via the station class of service.

FTTC provides the following options:

- Trunk to Trunk connections by Transfer or Conference can be allowed or denied based on a station’s class of service.
- Unsupervised conferences can also be controlled.

FTTC, when used in conjunction with Trunk Barring (TBAR - package 132), provides one of the following options:

- Additional set level restrictions to the existing customer level trunk barring.
- Lift the restrictions placed by TBAR based upon the set’s class of service.
- Can control all set based trunk to trunk connections for transfer and conference depending upon the set’s class of service. Additionally, FTTC uses TBAR for all other types of trunk to trunk connections.

FTTC does NOT alter the following limitations:

- Disconnect supervision is still required for transfer and conference as per the existing operation.
- Unless the Trunk to Trunk Connection (Release 1) feature is implemented, two outgoing trunk connections are blocked for transfer and unsupervised conference.
- Except for Transfer and Conference, other call redirection features are not supported.

The FTTC feature is packaged as part of the basic M1 package. FTTC supports all trunk types except service trunks (RAN, PAG, DIC, MUS, AWU, etc.). FTTC does not support attendant console operations.

Configuration:

Table 4: LD 15 Configure Flexible Trunk to Trunk Connections

Prompt	Response	Description
REQ:	NEW	Add new data.
	CHG	Change existing data.
TYPE:	NET	Trunk and network options.
CUST	xx	Customer number.
...		
FTOP	(FRES)	Flexible Trunk to Trunk Connection Options. FTT feature is inactive.
	TBFT	FTT adds new restrictions on connections not barred by TBAR.
	FTTB	FTT lifts TBAR restrictions for routes barred by TBAR. FTT cannot add any new restrictions for non-barred routes.
	FTLY	All set based trunk to trunk connections for Transfer and Conference are controlled by FTT only.

Table 5: LD 10 Flexible Trunk to Trunk Connections for analog (500/2500 type) telephones

Prompt	Response	Description
REQ:	NEW	Add new data.
	CHG	Change existing data.
TYPE:	500	500/2500 type telephone set data block.
TN	l s c u	Terminal number.
	c u	For Option 11C Compact
...		
CLS	(FTTC)	Flexible Trunk to Trunk Connections Conditional (default for new sets).
	FTTU	Flexible Trunk to Trunk Connections Unrestricted (default for existing sets upon software conversion to X27 Release 2).
	FTTR	Flexible Trunk to Trunk Connections Restricted.

Table 6: LD 11 Flexible Trunk to Trunk Connections for Meridian 1 proprietary sets

Prompt	Response	Description
REQ:	NEW	Add new data.
	CHG	Change existing data.
TYPE:	500	500/2500 type telephone set data block.
TN	l s c u	Terminal number.
	c u	For Option 11C Compact
...		
CLS	(FTTC)	Flexible Trunk to Trunk Connections Conditional (default for new sets).
	FTTU	Flexible Trunk to Trunk Connections Unrestricted (default for existing sets upon software conversion to X27 Release 2).
	FTTR	Flexible Trunk to Trunk Connections Restricted.

MAT 5.7, 6.1 and 6.4 Support FTTC

7 Digit DNIS

Currently X27 Release 1 supports 7 digit DNIS. This new feature sends the complete 7 digit DNIS on all affected messages.

This feature is part of an existing package: DNIS (98).

Dual VAS ID

Meridian Mail (MMail) is a product that communicate with M1 via the Application Module Link (AML) where in the ACD Data Block, we associate the MMail ACD DN with MMail through a VAS ID for the corresponding AML. AML is defined per ACD DN basis. Currently, only one VAS ID (for MMail) can be associated to a MMail ACD DN. Hence AML message are communicated only to the MMail for any event on MMail ports. Now it supports Dual VAS ID. There is no application that requires this feature on Option 11C Compact at this time. No new package has been introduced by this feature. The following packages are required:

· BADC (40),

· MWC (46),

· CSL (77),

· ACDA (45),

· IMS (35).

ACD

ACD Agent Login Observe

The ACD Agent Login Observe feature gives a configurable option to allow or disallow the supervisor from observing IDN (non-ACD) calls of the agent set whether the agent is in logged-in or logged-out status. Current operation of Observe allows the supervisor to observe the agent on an IDN call even if the agent is logged out.

The ACD Agent Login Observe feature is configured in overlay 23. The feature does not require new packaging, but the ACD packages 40 and 45 must be enabled to use this feature.

Configuration:

A new prompt is introduced in Overlay 23 to assign the supervisors IDN Observe level:

RAO (NO)/YES/FULL

where NO is the default and allows supervisor to observe any IDN call

YES restricts the supervisor from observing IDN calls when the agent is logged out

FULL restricts the supervisor from observing all IDN calls regardless of whether the agent is logged in or logged out

ACD Return to Queue After No Answer

The ACD Return to Queue After No Answer feature allows the system administrator at the Call Center to define the number of ringing cycles for an ACD DN for which the call continues to ring on an ACD agent. If the call has not been answered within the number of ring cycles defined for the ACD DN, the ACD agent position that did not answer the call is automatically logged out or put in NRD state by the system. The call is then presented to another idle ACD agent. If there is no idle ACD agent, the call is returned to the front of the ACD queue.

The ACD Return to Queue After No Answer feature is implemented to allow a new ring cycle definition, RTQT (Return To Queue After No Answer) on a per ACD DN basis. The RTQT ring cycle can be set from 0 to 50. The new prompt can be modified in overlay 23.

This feature is mutually exclusive with the Call Force feature.

The ACD Return to Queue After No Answer feature is configured in overlay 23. The feature does not require new packaging, but depends on the ACD packages 40 and 45. Also, Digital sets must be equipped with either a MSB or NRD key corresponding to the option set with the RTQO prompt (see configuration details below).

Configuration:

Two new prompts are added to Overlay 23 for the Return to Q on No Answer feature:

RTQT (0), 1-50 <Return to Q timer in ringing cycles>

RTQO (nrd), msb <Return to Q Option>

The RTQT prompt defines the threshold in ringing cycles. If the agent does not answer a call within the RTQT threshold the call will be presented to the next available agent or returned to the ACD queue if there are no available agents.

If the RTQT threshold is exceeded the agent will be placed in either NRD or MSB status as defined by the RTQO prompt.

Network Authorization Code (NaUT) Enhancement

This enhancement was introduced with Release 22.37 software.

The Network Authorization code feature enables selected users to temporarily overrride the access restrictions assigned to a station or trunk. a user can enter an authorization code to access more of the system facilities than would normally be allowed to the particular station or trunk because of the assigned NCOS (Network Class of Service), COS (Class of Service) and TCOS (Trunk group access restriction). The NAUT feature provides up to 20,000 authorization codes of 1 to 14 digits (with Release 13 and later).

Enhanced functionality:

When an Authorization Code is used to place an outgoing call and a conference call is made to a second outgoing call, then an Authorization code is required. This generates CDR for the second call involved.

A new prompt ‘NAUT’ in LD 15 is provided in the FTR_DATA of the Customer Data Block. If the input for ‘NAUT’ is NO, the existing functionality is maintained. If the input for ‘NAUT’ is YES, then the user is prompted for an authorization code entry. LD 21 is also modified to print the new prompt ‘NAUT’.

The user is prompted for an authorization code entry only if the Facility Restriction level associated with the NCOS of the incoming (or two-way) tie trunk is less than the minimum FRL of the route list that NARS, BARS, or CDP would use for the call. In addition, if the user is at a remote switch, the user may be prompted for the authorization code entry if the route is defined in the Route Data Block to prompt for an authorization code entry on incoming NARS, BARS or CDP calls. If using DISA, the user is prompted for the code entry if the FRL of the NCOS assigned to the DISA DN is less that minimum FRL of the route list that NARS, BARS or CDP would use for the call.

- With 'NAUT' set to YES in the Customer Data Block, Authorization code is reprompted for Call Transfer and Conference.
- With 'NAUT' set to YES in the Customer Data Block, Authorization code is reprompted when accessed through the DISA feature.
- With 'NAUT' set to YES and OPT set to Call Forward Forwarding Originating (CFO) in the Customer Data Block, a caller may be prompted for an authorization code entry after a call to a station that forwards the call to NARS, BARS or CDP number.
- With 'NAUT' set to YES and OPT set to Call Forward Forwarding (CFF) in the Customer Data Block, the user will not be prompted for an authorization code on making a call to a station that forwards the call to NARS, BARS or CDP number.
- With 'NAUT' set to YES in the Customer Data Block, CDR is generated for both trunks involved.
- With 'NAUT' set to YES/NO in the Customer Data Block, an attendant is reprompted for an authorization code entry if the FRL required to access a route list for a NARS, BARS or CDP call is greater than the FRL of the attendant's NCOS.

The Network Authorization code will be prompted only if it is configured (in LD 88). Reference BV37132.

NETWORKING

B-Channel Overload Control

This feature will provide the end user a mechanism to define a time delay on ISDN Trunk Routes during overload situations. The overload situations would arise from a high volume traffic coming into the system.

The application for this feature is:

1. Call Centers

· All Agents Busy

· Queue is full

2. All Sets Busy

3. All Trunks Busy

4. M1 to M1 Tandem Situations

There is no new package required for this feature. It requires the existing ISDN package (145).

FNP Package Enhancement

This feature adds an additional level of control of the FNP package (#160) when it is equipped . It disables and enables its functionality at the customer level in Overlay 15.

NI-2 - Call by Call Service Selection

This feature provides enhancements to support the National ISDN-2 (NI-2) Call by Call Service Selection (CBC) which allows the Meridian 1 to access various network services or facilities over any B-Channel on an ISDN PRI connection.

This feature introduces a new package: NI2CDC (334).

Music Broadcast

With the introduction of the Music Broadcast software feature, music can be delivered through connections in core software eliminating the need for conference hardware. Meridian 1 systems equipped with Release 23 will be able to broadcast music to multiple callers from music trunk ports without using conference hardware connections. This feature will deliver up to 1024 music connections per system. This feature is applicable to Music trunk routes only.

Incremental Software Management (music connection limit) will be used with Music Broadcast.

Music broadcast is packaged under the new package MUSBRD (#328).

NPI and TON in CDR Tickets

This feature includes the Numbering Plan Identification (NPI) and the Type Of Number (TON) on the third line of CDR records/tickets when the configuration record parameter CLID is set to YES, when the configuration record parameter FCDR is set to NEW, and when an incoming ISDN trunk is involved in the call.

This feature requires the existing packages requires "New format CDR", FCDR (234), and CLID_CDR_PKG (118).

RAN Broadcast

This software feature will allow many callers (up to 48) within a Meridian 1 system to simultaneously listen to one RAN message without the physical cross-connection of multiple EXUT trunk ports. A single RAN port attached to one EXUT port will be able to broadcast a recorded announcement to many parties. This feature is applicable to RAN trunk routes only.

Broadcast RAN is being developed as an enabler for VPS, but can also be used with external OEM RAN's.

Incremental Software Management (max number of RAN trunk / RAN connection limit) will be used with RAN Broadcast.

RAN broadcast will be packaged under the new package RANBRD (#327).

M911 ENHANCEMENTS

Emergency Services Access

In October 1994, the FCC issued a Notice of Proposed Rulemaking (NPRM), on the subject of PBX compatibility with Enhanced 911 Emergency Services. The intent is to give 911 callers located behind a PBX the same level of 911 service that is currently given to the majority of residences in North America.

This feature addresses this NPRM by:

· Providing the caller's number, name, and location to the PSAP where the call is received. The number, or a number derivable from it, must be able to be called back by the PSAP.

· Permitting callers to obtain access to a PSAP by dialing 911, i.e., without first dialing an Access Code such as "9" to access a trunk to the 911 tandem C.O.

· Providing the capability to alert (but not conference in) a security station, etc. at the location served by the PBX if one is present, so that such security staff can assist in responding to an emergency.

· Providing the capability to update Location Database (ALI) information to keep up with PBX Adds, Moves, and Changes.

· Providing trunk overflow. If all outgoing E911 trunks are disabled, faulty, or otherwise out of service, calls are to overflow onto a normal trunk route, and it is accepted that Enhanced 911 service will not be available. However, if all E911 trunks are traffic busy, then calls should not overflow.

This feature is contained in 3 new packages: ESA (329), ESA_SUPP (330), and ESA_CLMP (331).

· ESA Call Recognition requires ESA (329).

· ESA Calling Terminal Identification requires ESA (329) and ESA_CLMP (331).

· ESA Call Routing requires ESA (329), ESA_SUPP (330), ANI using CAMA trunks (12), and ISDN (145) if outgoing trunks are ISDN.

· On Site Notification requires ESA (329), ESA_SUPP (330), CPDN (95) if the originator's name is not given in the ESA call record or is to be displayed on the OSN set, and ODAS (20) if the ESA call record is to reflect the originator's DES information or originator's DES information is to be displayed on the OSN set.

CUSTOM APPLICATIONS

Meridian 1 Attendant Console Enhancements

The following features describe enhancements to the operation of the Meridian 1 Attendant Console that will allow this product to perform some of the same functions now available on Meridian Digital Telephones.

1. Attendant Console Autoline - Provides secure autodial services to the attendant console via a programmable feature key. Via service change in Overlay 12; when the key is activated the system calls a preprogrammed DN. The preprogrammed DN will remain in effect unless a service change is performed. Changes to the destination number can not be made from the console. The destination may be internal or external to the Meridian 1. The attendant may use this feature for emergencies such as 911 calls.

This functionality is the Base package.

2. Attendant DN/DID - Provides a specific non-key associated DN for each console including the ability to program the DN from the existing DID numbers purchased by the customer. This feature will allow persons paged by an attendant to re-call the specific attendant that has paged them whether they are internal or external to the Meridian 1. The current feature Departmental Listed Directed Number (DLDN) through service change, allows the assignment of a separate DN to each console or group of consoles. The Meridian 1 is capable of having up to 63 consoles. The DLDN feature does not provide enough individual console numbers as the assigned DNs are limited to (4) four or (6) six with Network-Wide Listed Directory Number. When this type of call to an attendant ends up in the attendant queue because the dialed attendant is busy, priority buzzing is given.

This functionality is the Base package.

3. Attendant Emergency Codes (Code Blue) - Provides the ability for an internal/external station to dial an emergency code and access a group of attendants. This call will be presented to each of the attendant consoles in the DLDN group along with a distinctive audible notification, indicating that a code blue call is queued. The attendant can put the present call on hold and answer the code blue call. Multiple ICI types could be programmed for an ICI key.

The existing feature Departmental Listed DN (DLDN) allows a customer within the Meridian 1 system to further subdivide the system into departments with respect to LDNs. Each department consists of a LDN and an associated list of attendants to which the LDN calls are delivered. The DLDN feature is enhanced to provide the code blue functionality. With the new option provided each of the LDN group attendants could be given priority buzzing while the LDN call (emergency/code blue call) is in the attendant queue. Since there are six LDNs (with Network LDN feature), a maximum of six different emergency code DNs are provided. The LDN ICI keys on the attendant console shows the type of emergency call.

This requires the existing package DLDN (#76).

Automatic Set Display

When a call is presented to a busy Business Communication Set (all sets which support digital display), the set will automatically display the CLID and CPND for the new incoming call. The user no longer needs to press the DISPLAY key and the DN key if the busy set has Tandem Digit Display (TDD) Class of Service. The current operation of the Display key remains unchanged.

Automatic Set Display requires the existing package DSET (#88) to display the CLID on a digital set.

Calling Party Privacy Enhancement

The Calling Party Privacy Enhancement (CPPE) feature allows the Meridian 1 to comply with the FCC ruling by providing an option to ignore the CPP Indicator for 800, 888, 900 and 911 call types. The CPPE feature will provide a new route option to honor or ignore the Calling Privacy Indicator on an incoming call received from the North America public ISDN PRI network. If the route option is set to ignore, then the CLID and CPND Indicators are changed from restricted/denied to allowed. However, if the option is set to honor, then the CLID and CPND Indicators are not changed.

The Calling Party Privacy Enhancement feature is packaged under the existing CPP (#301) package.

With 23.30D and later, CPPE has been expanded to support Privacy Indicator Ignored (PII) for TIE routes. The PII prompt will now be offered for TIE routes in overlay 16. Reference: BV71799

Table 7: PII prompt for CPPE

Prompt	Response	Description
PII	Yes, (No)	Privacy Indicator ignored (honored)YES mean CPP Indicator is changed from denied/restricted to allowedNO means CPP Indicator functionality is maintained

CDR on Busy Tone

It is required that a CDR B record for abandoned calls shall now be generated on incoming calls when the call is terminated on a set in busy condition and/or busy tone is generated by M1 to the calling party. Please note that sometimes the M1 will provide Busy Tone to the user (some analog trunks) and sometimes the PSTN will provide the Busy Tone (digital trunks).

The Time To Answer field (TTA) shall indicate the Busy Condition via the letter "B" in the existing position for the call redirection identifier in the TTA field (presently used for Ringing and Non- Ringing indication).

All incoming calls will be supported: internal, tie and trunk calls.

There is no new package required for this feature. It requires "New format CDR", FCDR (#234).

Electronic Brandlining

Electronic Brandlining is a portion of the M1 terminal brandlining initiative to aid our distributors in raising their own brandline awareness. It will provide the distributor's name on the second line of the Aries display when the set is in the idle state. The distributor's name will be customized by entering up to 24 characters on a system-wide level under password protection.

In North America, if this feature is not enabled NORTEL will appear on the second line of the display when the set is in idle. In other countries, the display will be as it is today.

Appropriate Aries set display firmware is required for this feature.

This does not introduce a new package and is included in the basic X11 system software.

Individual Hold Enhancement

Currently, for a customer with the Individual Hold option allowed, when more than one single line Directory Number (DN) of the same Multiple Appearance Directory Number (MADN) is active on a call and one user puts the call on hold, normal hold (winking) is indicated at the user's telephone only. A slow flicker is shown at all other appearances of the same MADN, thus appearing to give a "false hold" indication.

With the Individual Hold enhancement, which is provided on a customer basis, the feature will allow lamps to remain steadily lit on all other appearances when one user puts the call on hold. This is implemented via the "lamp option". This feature is applicable to all PBX, SL-1 sets, Aries, M2317 and M3000 sets. Note that PBX sets are not equipped with lamps, thus in a MADN environment, there will be no lamp indication. The current functionality will be retained if the lamp option is denied.

The Individual Hold enhancement will also provide an additional option to "release" a single line party if the user presses the hold key while another member of the same MADN is still active on the call. This option is referred to as the "Release option". This will be provided on a customer basis and will not be applicable to 500/2500 single line sets, i.e., if the user activates switchhook flash, the call will not be released and the switchhook flash will be ignored. If this option is denied, the current functionality will be retained.

This feature is included in an existing package: Deluxe Call Hold (DHLD - #71).

Pretranslation/System Speed Call Enhancement

Currently, Pretranslation allows a user to create a flexible dialing plan by using Speed Call lists (SCL) as Pretranslation Tables. The dialing capabilities and/or restrictions of each Pretranslation group are defined in Pretranslation Tables. The tables are Speed Call lists modified for Pretranslation. With Pretranslation, only the first dialed digit of a call is pretranslated. Also, the first digit in a SCL entry is pretranslated whether access is via key or "dial access" (i.e., SPRE or FFC) or whether this is a Regular or System Speed Call list.

With System Speed Call/Pretranslation Enhancement, the user will have an option, on a system basis, to disallow pretranslation from occurring on a system speed call list entry when dial accessed via SPRE or FFC. Regular Speed Call and key access functions will not be changed.

This feature requires 2 existing packages: System Speed Call (SSC - 34) and Pretranslation (PXLT - 92).

Selectable Conferee Display and Disconnect

This feature will provide the Aries set user the capability to selectively drop any party that has been added to a conference call. A new type of key (Scroll Key) is required for Aries sets with display that provides the ability to scroll through the conferees active on a conference. When the conferee to be dropped is located, the DN key can be pressed to drop this party and the Release (RLS) key can also be used to abort this operation at any time. Anyone in the conference can disconnect a conferee if equipped with a Scroll key.

A new display during conference will display the number of parties currently active in the conference. This new function is only be applicable to Aries sets with display.

This feature is included in the Base package.

OA&M

Release 2 & MAT 6.4

MAT 6.4 provided with Option 11C Compact supports Release 2 features.

Meridian 1 Network Management for Spectrum

The Open Alarm feature of X11 facilitates the management of Meridian 1 networks from an open network management platform. The Open Alarm feature is used to implement the M1 fault management function on SPECTRUM. SPECTRUM is an open network management platform developed and marketed by Cabletron Systems. The SPECTRUM provides the ability to monitor and maintain voice and data networks. Alarms from Meridian 1 network can be monitored on a single window along with the alarms from the other elements managed as a part of the enterprise network. In addition, fault management functions of MAT 5 are integrated with SPECTRUM to complete alarm management. Using these MAT5 functions, user can view the events for Meridian1, exercise maintenance functions on components of M1, and access overlay commands.

Package #315 is required for Meridian 1 Network Management for Spectrum.

SPECTRUM provides a set of applications assisting the technician and network operations managing an enterprise network effectively.

SpectroPHONE -- SpectroPHONE enables network managers to be notified and respond to alarms remotely via a touch-tone phone. Configuration allows many options including alarm severity and support territory.

Remedy Trouble-Ticketing -- Spectrum is integrated with the Remedy Trouble-Ticketing system to facilitate the creation and automation of problem tracking and resolution.

Spectrum Report Generator -- Spectrum offers many options for report generation using its own report generation tools as well as third-party applications. Reporting tools allow for the creation and customization of reports for statistical and inventory details. Statistical data can be exported as ASCII output to be used by external database products.

Spectrum Alarm Notification Manager -- Spectrum Alarm Notifications Manager is a policy-based alarm filtering tool that can be used in conjunction with other Spectrum applications. It reduces the number of alarms that network managers need to view in order to isolate a network fault.

For more information, refer to Sales and Marketing Bulletin 1105-G.

Chapter 4- Software Packaging

The following table provides a list of the new X11 Release 23 feature packages included in all Option 11C Compact X27 Release 2 feature sets. (Office & Inter-Office Communications, Hospitality Communications, NMS Communications and Small Call Center Communications packages.)

Table 8: Packages introduced with X27 Software Release 2

Package Name	Mnemonic	Package Number
RAN Broadcast	RANBRD	327
Music Broadcast	MUSBRD	328
Emergency Services Access	ESA	329
Emergency Services Access Supplementary	ESA_SUPP	330
Emergency Services Access Calling Number	ESA_CLMP	331
NI-2 Call by Call Service Selection	NI2CBC	334

Table 9: The following table shows the ISM parameters offered with Option 11C Compact feature sets, as well as the packages and enhancements available.

Intentionally Left Blank	ISM PARAMETERS	Compact Office	Compact Inter-Office	Compact Hospitality	Advanced Hospitality	Compact NMS	Small Call Center
	TNS	48	48	80	80	48	48
	AGNT	128	128	128	128	128	128
	ACDN	300	300	300	300	300	300
	AST	0	0	0	0	0	100
	DSL	0	0	0	0	0	0
	LTID	0	0	0	0	0	0
	MOPT	0	0	0	0	0	0
	RAN_CON	12	12	12	12	12	12
	RAN_RTE	9999	9999	9999	9999	9999	9999
	MUS_CON	100	100	100	100	100	100
	BRAND	0	0	0	0	0	0
	Release	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**

Package Number	Package Mnemonic	Package Name	Office Commun. NT MW30CD	Interoffice Commun. NT MW30DD	Hospitality NT MW30ED	Advanced Hospitality NT MW30FD	NMS NT MW30GD	Small Call Center NT MW30HD
0	BASIC	Basic CAll Processing	O	I	H	AH	NMS	CC
1	OPTF	Extended PBX Features	O	I	H	AH	NMS	CC
4	CDR	Call Detail Recording	O	I	H	AH	NMS	CC
5	CTY	CDR on TTY	O	I	H	AH	NMS	CC
7	RAN	Recorded Announcement	O	I	H	AH	NMS	CC
8	TAD	Time and Date	O	I	H	AH	NMS	CC
9	DNDI	Do Not Disturb, Individual	O	I	H	AH	NMS	CC
10	EES	End to End Signalling	O	I	H	AH	NMS	CC
11	INTR	Intercept Treatment	O	I	H	AH	NMS	CC
12	ANI	Automatic Number Identification	O	I	H	AH	NMS	CC
13	ANIR	ANI Route Selection	O	I	H	AH	NMS	CC
14	BRTE	Basic Routing	O	I	H	AH	NMS	CC
16	DNDG	Do Not Disturb, Group	O	I	H	AH	NMS	CC
17	MSB	Make Set Busy	O	I	H	AH	NMS	CC
18	SS25	Special Services for 2500 Sets	O	I	H	AH	NMS	CC
19	DDSP	Digit Display	O	I	H	AH	NMS	CC
20	ODAS	Office Data Administration System	O	I	H	AH	NMS	CC
21	DI	Dial Intercom	O	I	H	AH	NMS	CC
23	CHG	Charge Account for CDR	O	I	H	AH	NMS	CC
24	CAB	Charge Account/Authorization Code	O	I	H	AH	NMS	CC
25	BAUT	Basic Authorization Code	O	I	H	AH	NMS	CC
28	BQUE	Basic Queing	O	I	H	AH	NMS	CC
29	NTRF	Network Traffic Measurement		I			NMS	CC
32	NCOS	Network Class of Service	O	I	H	AH	NMS	CC
33	CPRK	Call Park	O	I	H	AH	NMS	CC
34	SSC	System Speed Call	O	I	H	AH	NMS	CC
35	IMS	Intergrated Messaging System Link	O	I	H	AH	NMS	CC
36	ROA	Recorded Overflow Announcement	O	I	H	AH	NMS	CC
37	NSIG	Network Signalling		I			NMS	CC
39	NSC	Network Speed Call		I			NMS	CC
40	BACD	Basic ACD	O	I	H	AH	NMS	CC
41	ACDB	ACD Pkg B	O	I	H	AH	NMS	CC
42	ACDC	ACD Pkg C	O	I		AH	NMS	CC
43	LMAN	ACD Pkg C2. Load Mngt Reports	O	I		AH	NMS	CC
44	MUS	Music	O	I	H	AH	NMS	CC
45	ACDA	ACD Pkg A	O	I	H	AH	NMS	CC
46	MWC	Message Waiting Center	O	I	H	AH	NMS	CC

47	AAB	Automatic Answer Back	O	I	H	AH	NMS	CC
48	GRP	Group Call	O	I	H	AH	NMS	CC
49	NFCR	New Flexable Code Restriction	O	I	H	AH	NMS	CC
50	ACDD	ACD Pkg D						CC
51	LNK	ACD PkgD Auxillary Processor Link	O	I	H	AH	NMS	CC
52	FCA	Forced Charge Account	O	I		AH	NMS	CC
53	SR	Set relocation	O	I	H	AH	NMS	CC
55	HIST	History File	O	I	H	AH	NMS	CC
56	AOP	Attendant Overflow Position	O	I		AH	NMS	CC
57	BARS	Basic Alternate Route Selection	O	I	H	AH	NMS	CC
58	NARS	Network Alternate Route Selection		I			NMS	CC
59	CDP	Coordianted Dialing Plan		I	H	AH	NMS	CC
61	FCBQ	Flexable Call Back Queuing	O	I	H	AH	NMS	CC
63	NAUT	Network Authorization Code		I			NMS	CC
64	SNR	Stored Number Redial	O	I	H	AH	NMS	CC
70	HOT/EHOT	HOT Line Services/Enhanced HOT Line	O	I	H	AH	NMS	CC
71	DHLD	Deluxe Hold	O	I	H	AH	NMS	CC
72	LSEL	Automatic Line Selection	O	I	H	AH	NMS	CC
73	SS5	500 Set Features	O	I	H	AH	NMS	CC
74	DRNG	Distinctive Ringing	O	I	H	AH	NMS	CC
75	PBXI	PBX Interface for DTI/CPI (1.5Mb)	O	I	H	AH	NMS	CC
76	DLDN	Departmental Listed Directory #	O	I		AH	NMS	CC
77	CSL	Command Status Link	O	I	H	AH	NMS	CC
79	OOD	Optional Outpulsing Delay	O	I	H	AH	NMS	CC
80	SCI	Station Category Indication	O	I	H	AH	NMS	CC
81	CCOS	Controlled Class of Service	O	I	H	AH	NMS	CC
83	CDRQ	ACD CDR Queue Record	O	I		AH	NMS	CC
87	FTDS	Fast Tone & Digit Switch	O	I	H	AH	NMS	CC
88	DSET	M2000 Digital Sets	O	I	H	AH	NMS	CC
90	LNR	Last Number Redial	O	I	H	AH	NMS	CC
92	PXLT	Pretranslation	O	I	H	AH	NMS	CC
95	CPND	Call Party Name Display	O	I	H	AH	NMS	CC
98	DNIS	Dialed Number Identification Service	O	I		AH	NMS	CC
99	BGD	Background Terminal Facility			**H**	AH		
100	RMS	Room Status			**H**	AH		
101	MR	PPM / Message Registration			**H**	AH		
102	AWU	Automatic Wake Up			**H**	AH		
103	PMSI	Property Management System Interface			**H**	AH		
107	MCT	Malicious Call Trace	O	I	H	AH	NMS	CC
108	ICDR	Internal CDR	O	I	H	AH	NMS	CC
110	TVS	Trunk Verification from a Station	O	I	H	AH	NMS	CC
111	TOF	ACD Timed Overflow	O	I		AH	NMS	CC
113	IDC	Incoming DID Digit Conversion	O	I	H	AH	NMS	CC
114	AUXS	ACD D Auxillary Security						CC
115	DCP	Direct Call Pickup	O	I	H	AH	NMS	CC
117	CBC	Call by Call Service Selection	O	I	H	AH	NMS	CC
118	CCDR	Calling Line ID in CDR	O	I	H	AH	NMS	CC
119	EMUS	Enhanced Music	O	I	H	AH	NMS	CC
121	SCMP	Station Camp On	O	I	H	AH	NMS	CC
125	FTC	Flexible Tones and Cadences	O	I	H	AH	NMS	CC
127	BKI	Attendant Break In	O	I	H	AH	NMS	CC
132	TBAR	Trunk Barring	O	I	H	AH	NMS	CC
133	ENS	Enhanced Night Service	O	I	H	AH	NMS	CC
139	FFC	Flexible Feature Codes	O	I	H	AH	NMS	CC
140	DCON	M2250 Attendant Console	O	I	H	AH	NMS	CC
141	MPO	Multi-Party Operations	O	I	H	AH	NMS	CC
145	ISDN	ISDN Signalling	O	I		AH	NMS	CC
146	PRA	ISDN 1.5 Mbit PRA	O	I		AH	NMS	CC
148	NTWK	Advanced ISDN Network Services					**NMS**	CC
149	IEC	Inter-Exchange Carrier	O	I	H	AH	NMS	CC
150	DNXP	DN Expansion (7 digit)	O	I	H	AH	NMS	CC
151	CDRE	CDR Expansion (7 digit)	O	I	H	AH	NMS	CC
153	IAP3P	ISDN Application Processor Third Party Vendors						CC
155	ACNT	ACD Activity Code						CC
157	THF	Centrex Switch Hook Flash	O	I	H	AH	NMS	CC
160	FNP	Flexible Numbering Plan		I		AH	NMS	CC
162	SAR	Scheduled Access Restriction	O	I	H	AH	NMS	CC
164	LAPW	Limited Access to Overlays	O	I	H	AH	NMS	CC
167		1.5/2.0 MBit Gateway DTI released PRI deferred	O	I	H	AH	NMS	CC
170	ARIE	Meridian Modular Telephone Sets	O	I	H	AH	NMS	CC
173	ECCS	Enhanced Controlled Class of Service	O	I	H	AH	NMS	CC

174	AAA	Attendant Alternative Answering	O	I	H	AH	NMS	CC
175	NMS	Network Message Service					**NMS**	
178	EOVF	ACD Enhanced Overflow	O	I		AH	NMS	CC
179	HVS	Meridian Hospitality Voice Services			**H**	AH		
180	DKS	Digit Key Signalling	O	I	H	AH	NMS	CC
181	SACP	Semi-Automatic Camp-On	O	I	H	AH	NMS	CC
186	POVR	Priority Override / Forced Camp on	O	I	H	AH	NMS	CC
191	SECL	Series call	O	I	H	AH	NMS	CC
199	ESA PAGE	*Emergency Services Access Pager*	O	I	H	AH	NMS	CC
200	AINS	Automatic Set Based Installation	O	I	H	AH	NMS	CC
203	XPE	Extended Peripherial Equipment	O	I	H	AH	NMS	CC
204	XCT0	Enhanced Conf, TDS, and MFS Card	O	I	H	AH	NMS	CC
205	XCT1	Superloop Administration (LD 97)	O	I	H	AH	NMS	CC
206	MLWU	Multilanguage Wake-Up			**H**	**AH**		
208	HSE	Hospitality Screen Enh-8B			**H**	**AH**		
209	MLS	Meridian Link Server						CC
210	MAID	Maid ID for room status - 8B			**H**	**AH**		
211	MLIO	Multilanuage CPND			**H**	**AH**		
212	VIP	VIP Automatic Wake-Up - 8B			**H**	**AH**		
214	EAR	Enhanced ACD Routing -8B						**CC**
215	CCRC	Customer Controlled Routing - 8B						**CC**
218	IVR	Hold in Queue for IVR - 8B						**CC**
222	MSDL	Multi-Puropse Serial Data Link	O	I	H	AH	NMS	CC
223	FC68	Compliance for DID ANSWER SUPV	O	I	H	AH	NMS	CC
229	SSAC	Station Specific Auth Codes - 20A	O	I		AH	NMS	CC
234	CDR-NEW	New Format CDR - 8B	O	I	H	AH	NMS	CC
242	MUL	*Multi User Login - Not supported Opt 11 - 20A*	O	I	H	AH	NMS	CC
243	FM	Meridian 1 Fault management	O	I	H	AH	NMS	CC
246	**VMB**	***Voice Mail Box - Added for RIs 21B***	O	I	H	AH	NMS	CC
247	CLID	Call ID for Meridian Link - 20A	O	I	H	AH	NMS	CC
251	SCDR	Station Activity Record - 20B	O	I	H	AH	NMS	CC
254	PHTN	Phantom TN Operation - 20A	O	I	H	AH	NMS	CC
256	**ADMINSET**	**Set Based Administration Enhancements**	O	I	H	AH	NMS	CC
258	ATX	Autodial Tandem Transfer - 20A	O	I		AH	NMS	CC
259	CDRX	CDR Enhancements - 20A	O	I	H	AH	NMS	CC
291	NI2	NI-2 TR-1268 PRI Basic Call	O	I		AH	NMS	CC
296	**MAT_PKG**	**Meridian Administration Tools - MI**	O	I	H	AH	NMS	CC
301	CPP	Call Party Privacy (21B)	O	I	H	AH	NMS	CC
310	**CPCI**	**Called Party Control on Internal Calls**	O	I	H	AH	NMS	CC
311	**NGCC**	**Next Generation Call Centre**						**CC**
312	TATO	Trunk Anti-Tromboning Optimized (MSDL only)	O	I		AH	NMS	CC
315	**OPEN_ALARM**	**Open Alarm**	**O**	**I**	**H**	AH	NMS	CC
324	**NGEN**	**New Generation Connectivity**						**CC**
327	RANBRD	RAN Broadcast	O	I	H	AH	NMS	CC
328	MUSBRD	Music Broadcast	O	I	H	AH	NMS	CC
329	ESA	Emergency Services Access	O	I	H	AH	NMS	CC
330	ESA_SUPP	Emergency Services Access		I	H	AH	NMS	CC
331	ESA_CLMP	Emergency Services Access		I	H	AH	NMS	CC
334	CBC_PKG	NI-2 Call by Call Service Selection	O	I		AH	NMS	CC
362	FDID	Flexible DID			**H**	**AH**		

Table 10: The following table shows the feature enhancements to existing packaged feature sets that are automatically available on 11C Compact Release 2. (per above table)

Pkg Number	Description
77	Dual VAS I.D.
0	Console Enhancements
0	Electronic Brandlining (ISM Controlled)
71	Individual Hold Enhancement
34, 92	Pretrans/System Speed Call Enhancement
19, 88, 170	Selectable Conferee Display and Disconnect
19	Automatic Set Display
4, 5, 118, 145, 234	NPI on TON for CDR
63	Network Authorization Code Enhancements
40, 45, 321	ACD Agent Login Observe, ACD return to queue after no answer
71	Individual Call Hold
98	7 Digit DNIS
132	Flexible Trunk Connection
145	B Channel Overload Control
160	FNP Enhancement
234	CDR on Busy Tone
301	Calling Party Enhancement
315	M1 Network Management for Spectrum
310	Calling Party Privacy Enhancements

Meridian 1

Option 11C Compact

General Release Bulletin

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