NORTEL NETWORKS™

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Meridian 1 System Software - Introducing Generic X11 Release 25

Nortel Networks is pleased to introduce Meridian 1 Generic X11 Release 25 software, the latest in the progressive evolution of releases designed to provide both increased system functionality as well as new and enhanced features to increase end user productivity. Nortel Networks expands on its Evergreen Philosophy by providing additional avenues of growth via increased real time capacity and a 60% increase in port capacity. These significant enhancements are accomplished with the availability of an Intel Pentium Processor used in the Call Processor PII (CPPII) that is now available in Meridian 1 Option 81C. With a 320,000 Busy Hour Call Completion (BHCC) rating it far surpasses the processing capabilities of all major competitors. The additional port capacity is achieved using the dual fiber rings (based on a subset of Sonet OC12c protocol) of the Fiber Network Fabric (FNF). This bandwidth enhancement provides for three additional Network Groups (now totaling eight) for growth up to 16,000 ports with the added benefit of providing a non-blocking and redundant environment between Network Groups.

New Meridian 1 customers can be assured that adding more productive as well as complex applications over the life of the system will not force them into a larger or additional platforms. Established Meridian 1 customers can continue to benefit from the cost effective and linear growth they have come to expect from the best investment in the telecommunications community.

Nortel Networks again demonstrates its awareness of the importance of a productive desktop with enhancements to the most powerful voice terminals in the industry: the M3900 Series Meridian Digital Telephone. The M3900 already possess the largest display screens in the PBX arena and new features such as Context Sensitive Soft Keys, Set to Set Messaging and Corporate Directory make them even more efficient. As simple as the M3900 is to use they represent a significant administrative effort in a telecommunications system just because of their sheer numbers. Release 25 allows for easiest terminal administration and upgrades with the use of Flash Download and Virtual Office

Meridian 1 continues its industry leading efforts in convergence with increased capacity (now 24 ports) of the ISDN ITG 2.0 Trunk card. As the name implies it also enhances Networking capabilities by its ISDN functionality. The cost of voice and fax traffic is even further decreased using a customers in-place data network while at the same time providing a one company appearance to customers. Voice quality is not compromised because calls can be rerouted over the PSTN in case of IP network congestion. Again, Meridian 1 takes advantage of convergence technology and enhances the competitive positioning of our customers.

This bulletin contains the following information for North America (U.S. and Canada):

- Release 25 Overview
- Description of New Features and Enhancements
- Competitive Overview
- System Requirements
- Ordering/Availability
- Software Packaging - U.S.
- Software Packaging - Canada
- Documentation
- Sales Collateral

Release 25 Overview

Capacity Expansion

- Call Processor PII *
- Fiber Network Fabric **
- D-Channel Expansion

Desktop

- M3900 Series Meridian Digital Telephones Enhancements

Flash Download, Context Sensitive Soft Keys, Display-Based Expansion Module, Set-to-Set Messaging, Corporate Directory* and Virtual Office*.

System Administration

- Inventory Reporting Phase II
- Meridian Administration Tools (MAT) 6.6
- Optivity Telephony Manager 1.0 (OTM 1.0 will GA after X11Release 25)

Networking

- ITG 2.0 with ISDN
- Private to Public CLID Conversion

FCC Compliance

- 10/20 Digit ANI on 911 Calls

Descriptions of New Features and Enhancements

Capacity Expansion

Call Processor PII (CP PII)

CP PII provides scalability, revenue generation opportunities for the customer and investment protection. The Call Processor PII increases the Option 81C busy hour call completion (320,000 BHCC) capacity beyond target competition and supports up to 1,200 complex Symposium Call Center Server (SCCS) agents (20+ skill sets). It allows for future Meridian and/or intensive Symposium product enhancements that can utilize the inherent higher capacity potential of CP PII. Revenue generation opportunities for the customer are available with deployment of real-time intensive high value applications' solutions (now supportable in larger configurations with CP PII). It also provides investment protection to support significant growth and change of customer enterprise with upgrades and the flexibility to evolve with valued architectural attributes of Meridian 1 supported by CP PII (commercial, scalable, reliable and secure).

It delivers "future ready" real-time capacity required for Symposium Call Center enhancements as well as increased network terminations (8 network groups) and other application products that require additional real-time support. It adopts an industry standard embedded compute platform that permits rapid development and market deployment. It also delivers real-time processing capacity to support business

growth in the customer enterprise – expansion in ports and traffic (Fiber Network Fabric) as well as significant increase in the number of complex Call Center agents. It minimizes changes to existing Office Administration and Maintenance. It employs off-the-shelf components for migration to an open data model. Call Processor PII continues the evolution of Meridian 1 Call Processors to meet customer demand for open, scalable, real-time processing capacity.

* Under Controlled Release. Please refer to the individual Sales and Marketing Bulletin for this product for the General Availability time frame or contact your Nortel Networks Sales Representative for general availability.

Fiber Network Fabric

Fiber Network Fabric provides increased network capacity and extends the protection of customer investments by allowing incremental upgrade paths to network capacity and avoids maintenance costs of multiple switches. It supports up to 8 Network Groups and thus provides a 60% increase in port capacity, from 10,000 ports to 16,000 ports without the cost of adding a second switch. It provides also for a 60% increase in trunk capacity for large Call Centers and Tandem switches and eliminates the contention for inter-network junctors. It is fully compatible with all current Network, CPU and Applications equipment. It is a simple card change and software upgrade. It continues to provide existing support of the existing inter-group architecture.

**CP PII and FNF will be introduced April 17th as mutually exclusive until Q2 2000 when they will become configurable in combination on the same system. Please contact your Nortel Networks Sales Representative for market availability of these features on the same system.

D-Channel Expansion

The D-Channel Expansion feature provides increased network capacity and increased digital trunking capabilities. It increases the total number of logical D-Channel (DCH) applications in the system from 64 to 255 for Options 51C – 81C and increases the number of physical I/O addresses allowable for D-Channel only applications to 16 per network group. The feature allows more physical I/O addresses to be used for other I/O devices e.g. QPC841, since the DDCH and MSDL (with DCH applications only) can share the same addresses as long as they reside in separate network groups.

Desktop

M3900 Series Meridian Digital Telephones Enhancements

The M3900 Series Enhancements enhances the M3900 Series with new features/services. These include Flash Download, Context Sensitive Soft Keys, Display-Based Expansion Module, Set-to-Set Messaging, Corporate Directory and Virtual Office. These features are not yet available on the M3905.

Flash Download
Flash Download enables a firmware upgrade without replacing the sets in the field. Download can be invoked for one or all M3900 terminals. The terminals can be activated locally or remotely. Downloads can be performed via set type, TN or DN range or time of day. The new firmware will be made available via CD ROMS for Options 51C-81C and for Option 11C the firmware will be delivered via PCMCIA media.

Context Sensitive Soft Keys
Context Sensitive Soft Keys improves productivity, providing quick access to features and services when you need them. It supports 15 soft keys common Call Processing features equivalent to the M2317 set.

Display-Based Expansion Module

The Display-Based Expansion Module expands the number of lines and features available using self-labeling soft keys. It is a hardware module containing 8 soft labeled keys for DNs or features. The DBA's page key allows 3 pages of 8 features to be programmed per page for a total of 24 keys. Decreases desktop footprint while providing access to more features and line appearances.

Set-to-Set Messaging
Set-to-Set messaging improves person-to-person communication by allowing users to create a message that will be displayed on the incoming caller's M3903 or M3904 display. It provides a way for the user to specify a Set-to-Set Message for callers to the telephone. The user turns the feature ON/OFF and edits the Set-to-Set Message via the "Applications" key.

Corporate Directory
Corporate Directory increases productivity, helping users to find names and numbers quickly with dial-by-name simplicity. It provides users with a look-up and dial-by-name capability interfacing to an LDAP-compatible directory.

* Note: Corporate Directory will be in a Controlled Release status and will not be Generally Available until a later date. Please refer to the individual Sales and Marketing Bulletin for this product for the General Availability time frame or contact your Nortel Networks Sales Representative for general availability.

Virtual Office
Virtual office maximizes the use of office space and desktop equipment for hotelling or hot desk applications by conveniently displaying the features and services assigned to each individual. Virtual Office provides the capability for the user to login to a designated set and be provided with their own custom profile.

* Note: Virtual Office will be in a Controlled Release status and will not be Generally Available until a later date. Please refer to the individual Sales and Marketing Bulletin for this product for the General Availability time frame or contact your Nortel Networks Sales Representative for general availability.

Networking

ISDN ITG 2.0 Trunk
ISDN ITG 2.0 Trunk extends ISDN functionality such as Calling Line ID and Name Display to customers. ISDN ITG 2.0 Trunk adds ISDN functionality to the Voice Over IP (VoIP) portfolio for both large and small systems and provides a 24 port card configuration that allows 24 simultaneous calls. Selectable standard voice compression rates are G.711, G.729B, G.729AB and G.723.1. Enables the use of MCDN networking features over IP for both large and small systems and initially Q.Sig networking features over IP for large systems.

Private to Public CLID Conversion
Private to Public CLID Conversion leverages competitiveness among other vendor's offering correct CLID information to the destination during hop off scenarios. It allows the correct CLID information to be displayed at the terminating set should the call leave the Private Network due to network congestion. This applies to ESN networks and is applicable to such interfaces as DMS100, DMS250, #4, #5 ESS, S100 and NI-2 TR-1268 interfaces.

System Administration

Inventory Reporting Phase II
Inventory Reporting Phase II saves system administration time and improves inventory reporting accuracy. It provides for additional cards for the inventory report listing that were not included in Phase I (Release 24). It may be invoked by Overlay 117 or by MAT 6.6.

Meridian Administration Tools (MAT) 6.6

MAT has been updated to support all of the features and enhancements available in Release 25.

Optivity Telephony Manager 1.0

OTM 1.0 supports Generic X11 Release 25.10 and associated features.   Optivity represents a single integrated management platform where the health of the entire enterprise can be monitored. It provides remote alarm notification and browser based administration as well as switch inventory. OTM 1.0 will not work with MAT 6.6

OTM 1.0 will be Generally Available after X11 Release 25

Optivity Telephony Manager (OTM) Station Fast Synch

OTM Station Fast Synch allows the system administrator to address station synchronizations on an individual basis.

FCC Compliance

10/20 digit ANI on 911 Calls
10/20 Digit ANI on 911 Calls handles any number of valid Numbering Plan Areas within a single Public Safety Answering Point (PSAP) through the 10 digit ANI. 10/20 Digit ANI on 911 calls accurately identifies the physical location of a wireless caller dialing 9-1-1 by using the 20 digit ANI (10 digits for ANI Calling Number Station number and 10 digits for wireless caller's location). The feature accepts 10 digit Automatic Number Identification (ANI) for wireline 9-1-1 calls and 20 digit ANI for wireless calls.

Release 25 Competitive Overview

Following is a comparison of three traditional competitors: Definity ECS, Siemens Hicom 300E and the NEAX 2400 IMX

Call Processor PII (CP PII)
The throughput gained using the Pentium II processor is extraordinary: 320,000 BHCC.   Competitors compare as follows:
- Meridian 1 Option 81C / CP PII: 320,000 BHCC

- Definity ECS G3R: 100,000 BHCC
- Siemens Hicom 300E Model 80EP: 75,000 BHCC
- NEAX 2400 IMX (above 18,000 ports): 112,000 BHCC

The significant advantage of this processing power is providing the ability to add applications during the life of the product that would otherwise bog down a lessor processor. Also, CP PII allows for a 60 % capacity increase of the Option 81C to 16,000 ports. This added power takes on that much more significance when you consider the Meridian 1 using distributed processing further reducing the load on the CPU. Other systems such as the Definity ECS G3R claim more ultimate capacity, however, once applications are added this capacity is reduced dramatically and more closely resembles that of the Option 81C.

Fiber Network Fabric (FNF)
The immediate advantage of Fiber Network Fabric is providing port capacity up to 16,000 ports which is a 60% increase over the previous 10,000 port capacity of the Option 81C. However, there is another performance element that provides a competitive advantage and that is the standard redundancy of the Sonet ring that merges the Network Groups as well as the non-blocking aspect between Network Groups.

Lucent's Definity G3R uses a Center Stage Switch (CSS) to provide connectivity between their EPNs (stacks of port carriers that can address over 2200 ports). While the connecting medium can be redundant it is optional and a very expensive option that Lucent would rather not quote if possible. Even in a redundant format the CSS has the potential for blocking between EPNs.

In order for Siemens to address over 4700 lines they have to network multiple Hicom 300Es with the now added burden of multiple data bases to administer and upgrade as well as the huge potential of traffic congestion between PBXs. Even if they engineer the links between multiple PBXs for proper traffic flow it is hardware intensive all without the benefit of redundant busses between the PBXs (in this case the stand-alone PBX being akin to our Network Groups).

NECs NEAX 2400 reaches it's UMG (24,000 ports) capacity by essentially tying together four 6000 port PBXx using an Internode Switch Module (INSM) as a means of providing communications between the PBXs. Even though the INSM can be redundant it is a significant single point of failure that if, in fact, it did falter all intra-group traffic would cease to exist.

M3900 Series Meridian Digital Telephones
Even thought this outstanding desktop productivity tool was introduced with Release 24B it is worth pointing out the advantages of the concept of this product. There have been terminal families that have provided good modularity from the perspective of easily installing add-on modules to in-place desktops. There have also been products that provide a level of feature navigating using small display screens. The M3900 Series is the first family of desktop terminals that takes both these concepts to a much higher level.
The plug in modules are just that: plug in and very easily field upgradable. The modules are also very competitively priced. The Context Sensitive Soft Keys are not a new concept. However, never before have soft keys been associated with such large displays providing a much high level of efficiency than any other product family.

No other desktop device provides for such easy administration. Self labeling soft keys are unique to the M3900 series and software downloadable firmware provides for the most economical manner for upgrades than any other product available. When a customer takes into consideration that their terminals are the most exposed component of a telecommunications system the M3900 provides a most significant competitive advantage.

Competitive Terminals Display Capacity
Defintiy ECS 6400 Series: 2 x 24
Siemens Optiset E: 2 x 24

NEAX Dterm Series E: 3 x 24

Even the most basic display set in the M3900 family (M3902) has a 2 x 24 display equaling Definity and Siemens Hicoms best offering. The mid-range M3903 has a 3 x 24 display surpassing any Definity and Siemens offering and equaling NECs best offering. And of course the M3904 with its 5 x 24 display far surpasses anything in the PBX marketplace.

ISDN ITG 2.0 Trunk
At this time only the Definity has a similar product. However, it appears not to have ISDN functionality!

System Upgrade Notes

The Pentium processor that is the heart of CPPII provides tremendous processing speeds. So much so that the messaging between the processor and peripherals is such that pre-IPE equipment cannot interpret it fast enough. This results in lost messages that in turn result in slower dial tone access and occasional missed feature access. However, no such problems exist with the technologically current IPE platform. Therefore, in order to take advantage of the benefits of CPPII a migration from EPE to IPE is necessary. EPE is enabled to be supported in a CPPII environment. In addition to the productivity enhancements inherent in this migration there is the added benefit of decreased switchroom footprint and the future proof nature of IPE technology.

Even though the Motorola 68060 and 68060E processors do not possess the horsepower of the new CPPII processor nevertheless they are quite powerful and generate significantly fast message streams. This results in similar desktop performance concerns as they exist with CPPII although not to the same degree. The EPE in question are cards that plug into PE and EPE shelves (cards that are 1 1/2" spacing). Some phone sets, such as SL1 sets (QSUXXX), may have to be replaced in this migration. Connections from Networking Equipment to Meridian Mail and Digital Trunk/Primary Rate Interface are not impacted by this requirement and remain supported on X11 Release 25.

 An upgrade from EPE to IPE may not be necessary if the following configuration issues are addressed:

- Alter the scenario where Multiple Appearance Directory Numbers (MADN) appear on telephones on the same digital line card. Another words spread out the MADNs over multiple digital line cards.
- Group Call configurations where the target sets also appear on the same digital line card should also be disseminated over multiple digital line cards.
- Reduce the length of Calling Party Name Display. It has been determined that the longer the name the more real time resources are affected.
- Numbering schemes where Directory Number Expansion is used.

If the above engineering guidelines cannot be met Nortel Networks encourages the EPE be migrated to IPE prior to an X11 Release 25 Upgrade. Where EPE to IPE upgrades due to the implementation of more powerful processors are necessary Nortel Networks is providing a very attractive upgrade program noticeably more aggressive than previous programs of this ilk.

Release 25 System Requirements

Option 51C – 81C

X11 Release 25 is supported on Meridian 1 Option 11C, Option 11C Mini, Options 51C, 61C, 81 and 81C. The Option 51C, 61C, 81 and 81C systems can be equipped with the existing Motorola 68040 (NT9D19), 68060 (NT5D10) or 68060E (NT5D03) commercial processors as well as Call Processor PII (for Option 81C only).

The minimum memory requirements are given in the table below for supported Call Processors:

Release 25 Minimum Memory Requirements for 68040, 68060, 68060E

System Type	Minimum Memory Flash	Minimum DRAM	Minimum Total Memory
Options 51C/61C	32 MB	48 MB	80 MB
Options 81/81C on 68060/68060E based systems with 5 or less Network Groups, or Option 81C on 68040	32 MB	64 MB	96 MB
Options 81/81C on 68060/68060E based systems with 6 or more Network Groups	32 MB	80 MB	112 MB

Call Processor 68060E is available for Options 51C, 61C, 81, 81C in a 128 MB (64 Flash, 64 DRAM) or 160 MB (64 Flash, 96 DRAM) configuration. Call Processor PII is only available in a 128 MB configuration for Option 81C systems after the GA date. Option 81C new systems will only ship with the Call Processor PII commencing after the GA date for Call Processor PII. Option 51C/61C systems will ship with the Call Processor 68060E. For hardware upgrades that require or elect Call Processor upgrades, Call Processor 68060E is available for Options 51C – 81C (and Call Processor PII for Option 81C only).

Suggested memory configurations for Call Processor upgrades to 68060E are as follows:

Available 68060E Call Processor Configurations in Release 25:

System Type Applicability	Flash Memory	DRAM Memory	Total Memory
51C/61C	64 MB	64 MB	128 MB
81/81C (with or without Fiber Network Fabric)	64 MB	96 MB	160 MB

The only supported media for Options 51C, 61C, 81, 81C is CD-ROM. This means that Release 25 requires an IODU/C (NT5D61) or cPCI Multi-Media Disk Unit (NT4N43). The cPCI is automatically included with the Call Processor PII on an Option 81C.

Option 11C

The Option 11C Small System Controller, NTDK20CA or higher must be equipped with the NTTK13AA Software Daughterboard. An existing Option 11C system equipped with a System Controller Card NTDK20AB can be upgraded to an NTDK20CA with a field upgrade kit NTDK19AA. The field upgrade kit is less expensive than replacing the complete controller card. An Option 11C system upgrading to Release 25 must replace its NTDK21 (32 MB) or NTDK81 (40 MB) based Software Daughterboard, with an NTTK13AA (48 MB) Software Daughterboard.

Option 11C Mini

The supported Call Processor Card for Option 11C Mini is NTDK97BA (no memory upgrade needed).

Auxiliary Processor Alignment

Auxiliary Processor	Compatibility (Release)
Call Pilot	1.x
Companion	3.xx - 7.xx (7.xx required for Enhanced Capacity)
Companion DECT	45000302 or later (not downloaded from Meridian)
Meridian Mail	9.66, 10.11, 11.xx – 13.xx
Meridian Mail Card Option	9.66, 10.11, 11.xx – 13.xx
ACD-D and ACD MAX	N/A [a] (Not Y2K compliant, must upgrade to Meridian MAX, Symposium Call Center Server or equivalent by Dec. 31, 1999).
Meridian MAX	6.3, 7.5, 8.7, 9.2, 9.3 [a]
Meridian Customer Controlled Routing	3B, 3C [a]
Meridian Link	5, 5C [a]
Network Administration Center	2.5 [a]
C-PLUS (base) – LAN Key – Performer	3.11 – 1.0 – 1.0 and later
Meridian Administration Tools (MAT)	6.6x and later (Windows 95/98/NT V4 Workstation)
Meridian 911	1.x – 2.x
Optivity Telephony Manager (OTM)	1.0x and later
Symposium Messenger	3.x – 4.0

Symposium Multimedia Conference	4, 5
Symposium Communicator	1.x – 2.0
Symposium Fast Call / Fast View (Windows Only)	1.x
Symposium TAPI Service Provider	2.x
Symposium Desktop TAPI Service Provider for MCA (Meridian Communicator Adapter)	1.x – 2.x
Symposium Call Manager	4.x – 5.x
Symposium Agent	1.x – 2.x
Symposium Express Call Center	1.0
Symposium Call Center Server	1.x, 3.x
Symposium Integrated Interactive Voice Response	2.2 [a]
Symposium Open Interactive Voice Response	4.0 [a]

[a] No X11 dependency.

Order Availability

All new software orders received on or after April 17, 2000 for Meridian 1 software in Canada and the U.S. will be shipped with Generic X11 Release 25.10 software for Options 11C, 11C Mini, 51C, 61C, 81 and 81C. All software orders received prior to April 17, 2000 will not automatically switch over to Release 25 software. To change orders from Release 24 to Release 25, please contact your Nortel Networks Customer Service Representative.

For Option 51 – 81 and Options 51C – 81C, Release 25 direct conversion is supported from:

- X11 Release 19
- X11 Release 20
- X11 Release 21
- X11 Release 22
- X11 Release 23
- X11 Release 24

In addition to the above, for Option 11Cs, direct conversion to Release 25 is also supported from:

- X11 Release 16

- X11 Release 18

- X11 Release 20

- X11 Release 21

- X11 Release 22

- X11 Release 23

- X11 Release 24

New Software Order Codes

The following are the new software order codes for Release 25 that will be available in conjunction with the April 17, 2000 product catalogs:

Order Management Systems will block features 368, 381 and 382.

Option 11C Software Packaging: U.S. and Canada

As with past software releases supporting Option 11C, the release upgrade code remains the same. Customers wishing to upgrade their software releases from 22, 23 or 24 to Release 25 must order the following code. Note that the feature set owned does not change. For   example, an Option 11C customer using Release 24 General Business Package will order the Software Upgrade code to upgrade to Release 25 General Business Package.

Description	New Order Code (US)	New Order Code (Canada)
Software Upgrade from Release 22/23/24 to Release 25	NTSF8712	NTSF8714

Option 11C Software Packaging: U.S. and Canada

Additions to General Business Package: Option 11C and Option 11C Mini (U.S. & Canada)

Description	Enhancement to/ New Option #	US Order Code	Canadian Order Code
M3900 series Meridian Digital Telephones Set-to-Set Messaging	380	NTSF8020 NTSF8011	NTSF8001 NTSF8011
Inventory Reporting Phase II	0	NTSF8020 NTSF8011	NTSF8001 NTSF8011

Additions to Enhanced Business Package: Option 11C and Option 11C Mini (U.S. & Canada)

Enhanced business package includes all of the General Business features plus the following:

Description	Enhancement to/ New Option #	U.S. Order Code	Canada Order Code
D-Channel Expansion	222	NTSF8021 NTSF8012	NTSF8002 NTSF8012
Private to Public CLID Conversion	145, 146, 154	NTSF8021 NTSF8012	NTSF8002 NTSF8012
Meridian ITG 2.0 with ISDN	145	NTSF8021 NTSF8012	NTSF8002 NTSF8012

Separately Orderable Package for U.S. and Canada

Corporate Directory	381	NTSF 8519*
Virtual Office	382	NTSF 8519*

* Under Controlled Release. Please refer to the individual Sales and Marketing Bulletin for this product for the General Availability time frame or contact your Nortel Networks Sales Representative for general availability.

Additions to Enterprise Business Package: Option 11C and Option 11C Mini (U.S. & Canada)

Enterprise Business Package includes all of the Enhanced Business features plus the following:

Description	Enhancement to/New Option#	U.S. Order Code	Canada Order Code
Meridian ITG 2.0 with ISDN	147	NTSF8022 NTSF8013	NTSF8003 NTSF8013
10/20 Digit ANI on 911 Calls	249	NTSF8022 NTSF8013	NTSF8003 NTSF8013

Additions to NAS / VNS Package:

Option 11C and Option 11C Mini (U.S.): NTSF8023/NTSF8014

Option 11C and Option 11C Mini (Canada): NTSF8004/NTSF8014

NAS/VNS business package includes all of the Enterprise Business features.

Option 51C- 81C Software Packaging (U.S.)

Additions to Base Software Package

Description	Enhancement to/ New Option #	Enhancement to/New Order Code
M3900 series Meridian Digital Telephones Set-to-Set Messaging	380	SW0000L
D-Channel Expansion	222	SW0000L
Inventory Reporting Phase II	0	SW0000L

Additions to Existing Optional Software Packages

Description	Enhancement to/ New	Enhancement to/New

	Option #	Order Code
Private to Public CLID Conversion	145, 146	SW0051B
Meridian ITG 2.0 with ISDN	145, 147	SW0051B
10/20 Digit ANI on 911 Calls	249	SW0229D

New Optional Software Packages

Description	New Option #	New Order Code/CPC	Prerequisites
Fiber Network	<u>365</u>	NTS103AA/A0786640	SW0000L
Call Processor PII	<u>368</u> and 299 are necessary in combination	NTS101AA/A0786638	SW0000L, SW0013A
Corporate Directory, Virtual Office	381* , 382 *	NTS102AA/A0786639	SW0000L

*   Under Controlled Release. Please refer to the individual Sales and Marketing Bulletin for this product for the General Availability time frame or contact your Nortel Networks Sales Representative for general availability.

Option 51C- 81C Software Packaging (Canada)

Enhancements to Existing Software Packages

The following Release 25 features are enhancements to existing features. All order codes for these features will remain the same as in Release 24.

Description	Enhancement to Package
Private to Public CLID Conversion	145, 146
Meridian ITG 2.0 with ISDN	145, 147

Updates to Existing Base Packages: Opt 51C - 81C (Canada)

Description	Current Order Number	New Order Number
R25 Basic Software (Opt 51C)	S0005935	S0005980
R25 Basic Software (Opt 61C)	S0005938	S0005981
R25 Basic Software (Opt 81/81C)	S0005941	S0005982
R25 Basic Software (Opt 81C CP PII)		S0000536
R25 PBX Features (Opt 51C)	S0005936	S0005983
R25 PBX Features (Opt 61C)	S0005939	S0005984
R25 PBX Features (Opt 81/81C)	S0005942	S0005985

R25 PBX Features (Opt 81C CP PII)		S0000537

The following new features will be added to <u>all</u> PBX Features Packages:

Description	Added to Package
Inventory Reporting Phase II	0

The following new features will be added to <u>all</u> Business Features Packages:

Description	Added to Package
M3900 series Meridian Digital Telephones Set-to-Set Messaging	<u>380</u>

Description	Current Order Number	New Order Number
R25 Business Features Package (Opt 51C)	S0005937	S0005986 Add 87(Tone and Digit Switch)
R25 Business Features Package (Opt 61C)	S0005940	S0005987 Add 87(Tone and Digit Switch)
R25 Business Features Package (Opt 81/81C)	S0005943	S0005988 Add 87(Tone and Digit Switch)
R25 Business Features Package (Opt 81C CP PII)		S0000539 (Content same as S0005988)

New Software Packages

Description	Mnem.	New Option #	New Order Number	Chargeable Prereqs	Non-Chargeable Prereqs
Fiber Network (81/81C)	FIBER_NETWORK	<u>365</u>	S0005974	Option 81/81C	

				system only	
Call Processor PII	CPP_CNI	368 * necessary in combination with 299	S0005976	299, Option 81C only	
M3900 Series Digital Telephones Set-to-Set Messaging (51C)	STS_MGS	380	S0000668		88, 170
M3900 Series Digital Telephones Set-to-Set Messaging (61C)	STS_MGS	380	S0000669		88, 170
M3900 Series Digital Telephones Set-to-Set Messaging (81/81C)	STS_MGS	380	S0000670		88, 170
Corporate Directory (51C), Virtual Office	CDIR, VIRTUAL_ OFFICE	381, * 382 *	S0005977		88, 170
Corporate Directory (61C), Virtual Office	CDIR, VIRTUAL_ OFFICE	381, * 382 *	S0005978		88, 170
Corporate Directory (81/81C), Virtual Office	CDIR, VIRTUAL_ OFFICE	381, * 382 *	S0005979		88, 170
Meridian 911 (51C) (Includes Meridian 911, Call Waiting Notification, 10/20 Digit ANI on 911 calls)	M911, CWNT, M911_ENH	224, 225, 249	S0005998	41, 45, 214	7, 17, 19, 40, 44, 111, 153, 234, 247
Meridian 911 (61C) (Includes Meridian 911, Call Waiting Notification, 10/20 Digit ANI on 911 calls)	M911, CWNT, M911_ENH	224, 225, 249	S0005999	41, 45, 214	7, 17, 19, 40, 44, 111, 153, 234, 247
Meridian 911 (81/81C) (Includes Meridian 911, Call Waiting Notification, 10/20 Digit ANI on 911 calls)	M911, CWNT, M911_ENH	224, 225, 249	S0000535	41, 45, 214	7, 17, 19, 40, 44, 111, 153, 234, 247

Updated Software Upgrade Features Packages

Description	Current Order Number	New Order Number
Software Upgrade Features Package (SL-1A, M, MS, S, ST, 21/21E to Option 51C)	S0005944	S0005989
Software Upgrade Features Package (SL-1 S, SN, M, MS, ST 21/21E to 61C)	S0005945	S0005990
Software Upgrade Features Package (SL-1 L, LE, N, NT, VLE, XL, 61 to Option 61C)	S0005946	S0005991
Software Upgrade Features Package (Option 61 to 61C)	S0005947	S0005992
Software Upgrade Features Package (Option 51C to 61C)	S0005948	S0005993
Software Upgrade Features Package (Option 81 to 81C)	S0005949	S0005994
Software Upgrade Features Package (Option 81 to 81C CP PII)		S0000542

Software Upgrade Features Package (Option 81C to 81C CP PII)		S0000663
Software Upgrade Features Package (SL-1 L/LE/N/NT/Option 61 to 81C)	S0005950	S0005995
Software Upgrade Features Package (Option 61 to 81C CP PII)		S0000664
Software Upgrade Features Package (SL-1 VLE/XL/XN/XT/Option 71 to 81C)	S0005951	S0005996
Software Upgrade Features Package (SL-1 VLE/XL/XN/XT/Option 71 to 81C CP PII)		S0000550
Software Upgrade Features Package (SL-1 L, LE, N to 81C CP PII)		S0000665
Software Upgrade Features Package (Option 61C to 81C)	S0005952	S0005997
Software Upgrade Features Package (Option 61C to 81C CP PII)		S0000652

Software Upgrade Packages

CPC	Product Code	Description
A0786175	NT9C66FI	Software Upgrade Package (Opt 51C Existing to Current)
A0786176	NT9C67FI	Software Upgrade Package (Opt 61C Existing to Current)
A0786177	NT9C74FI	Software Upgrade Package (Opt 81/81C Existing to Current)
A0786472	NT9C97AA	Software Upgrade Package (Opt 81C CP PII Existing to Current)

Software Upgrade Only Destination Codes
When doing a software upgrade only to R25 specify one of the following destination codes to indicate the correct Call Processor.

Destination Codes for Call Processor	Option 51C	Option 61C	Option 81/81C	Option 81C
CP68040	S0000653	S0000654	S0000655	
CP68060	S0000656	S0000657	S0000658	
CP 68060 Enhanced	S0000659	S0000660	S0000661	
CP PII				S0000662

Documentation

Documentation Restructure

The Meridian 1 Customer Documentation Library has been restructured for X11 – Global Release 25 to accomplish the following objectives:

- Simplify the Meridian 1 library by reducing page count by 25% or greater.

- Improve access to content through reference and task summary lists.

- Improve accuracy of content through testing and correction updates.

- Improve durability of the documents through better binding.

Documentation Order Codes

The following tables provide a complete list of the documents that can be ordered for Meridian 1 – X11 Global Release 25 Customer Documentation.

Meridian 1-X11 Global Release 25 Customer Documentation Order Codes

Publication Title	PEC Code	CPC Code
Meridian 1 Reference Library Options 11C-81C (CD-ROM)	NTLH01AA	A0804745
Large System (Binders)		
Meridian 1 Reference Library contains Meridian 1 X11 Release 25.0x Library Navigator (P0912432), NTLH03AA – NTLH06AA, and NTLH08AA – NTLH14AA	NTLH02AA	A0804744
Meridian 1 X11 Release 25.0x Planning and Engineering	NTLH03AA	A0804746
Meridian 1 X11 Release 25.0x System Installation and Maintenance	NTLH04AA	A0804747
Meridian 1 X11 Release 25.0x Upgrade and Conversion Procedures	NTLH05AA	A0804748
Meridian 1 X11 Release 25.0x Remote Services Products Guide	NTLH06AA	A0804749
Publication Title	**PEC Code**	**CPC Code**
Meridian 1 X11 Release 25.0x Software Feature Guide	NTLH08AA	A0804751
Meridian 1 X11 Release 25.0x Software Input/Output Guide	NTLH09AA	A0804753
Meridian 1 X11 Release 25.0x Software System Management	NTLH10AA	A0804757
Meridian 1 X11 Release 25.0x Networking	NTLH11AA	A0804767
Meridian 1 X11 Release 25.0x Meridian Data Services	NTLH12AA	A0804771
Meridian 1 X11 Release 25.0x Automatic Call Distribution	NTLH13AA	A0804775
Meridian 1 X11 Release 25.0x Hospitality	NTLH14AA	A0804777

Large System Optional Documents (Binders)

Meridian 1 X11 Release 25.0x DPNSS1	NTKF79AA	A0788073
Meridian 1 X11 Release 25.0x DASS2	NTKF92AA	A0788088

Large System (Coil)		
Meridian 1 X11 Release 25.0x Library Navigator	N/A	P0912432
Meridian 1 X11 Release 25.0x **Call Processor PII with IGS Reference Library** Includes Call Processor PII Description, Installation and Administration Guide (P0905705) Call Processor PII Systems and Software Upgrade Guide (P0905706)	NTLH15AA	A0807555
Meridian 1 X11 Release 25.0x Fiber Network Fabric Reference Guide	NT5F37AA	A0786998
Large System Introductory Task Guides (Coil)		
Meridian 1 X11 Task System Programming Guide	N/A	P0906780
Meridian 1 X11 Task Basic Telecom Management Guide	N/A	P0906781
Meridian 1 X11 Task Network Planning Guide	N/A	P0906782
Meridian 1 X11 Task Fault Clearing Guide	N/A	P0906779
All Systems (Coil)	**PEC Code**	**CPC Code**
Meridian 1 X11 Release 25.0x Input/Output Administration Guide	N/A	P0910777
Meridian 1 X11 Release 25.0x Input/Output Maintenance Guide	N/A	P0910775
Meridian 1 X11 Release 25.0x Input/Output System Messages Guide	N/A	P0910776
Meridian 1 X11 Release 25.0x Meridian1 Guide for the UK, Options 11C-81C	N/A	P0912437
Meridian 1 X11 Release 25.0x System Security Management	N/A	P0913527

Data Sheets		
Meridian 1 X11 Release 25.0x Global Data Sheets	N/A	P0907149
Stand-alone Guides (Coil)	**PEC Code**	**CPC Code**
Meridian 1 X11 Release 25.0x Fiber Network Fabric Reference Guide	NT5F37AA	A0786998
Meridian 1 X11 Release 25.0x Call Processor PII Description, Installation and Administration Guide	N/A	P0905705
Meridian 1 X11 Release 25.0x Call Processor PII System and Software Upgrade Guide	N/A	P0905706
Meridian 1 X11 Release 25.0x Mini Carrier Remote Description, Installation and Administration	N/A	P0914209
Meridian 1 X11 Release 25.0x NT5D61 IODU/C Reference Guide	N/A	P0912861
Meridian 1 X11 Release 25.0x Call Processor Card Field Memory Upgrade	N/A	P0912862
Meridian 1 X11 Release 25.0x Meridian Integrated Conference Bridge Description, Installation, Administration and Maintenance	N/A	P0912865
Meridian 1 X11 Release 25.0x Meridian Integrated RAN Description, Installation and Operation	N/A	P0912866
Meridian 1 X11 Release 25.0x Meridian Integrated IP Telephony Gateway (ITG) Trunk 1.0 Description, Installation and Operation	N/A	P0912863
Meridian 1 X11 Release 25.0x Meridian Integrated Personal Call Director	N/A	P0914163
Meridian 1 X11 Release 25.0x Meridian Integrated Call Assistant	N/A	P0914162
Publication Title	**PEC Codes**	**CPC Codes**
Meridian 1 X11 Release 25.0x Meridian Integrated IP Telephony Gateway (ITG) Line Card 1.0 IP Telecommuter Description, Installation and Operation	N/A	P0912864
Meridian 1 X11 Release 25.0x Meridian IP Telephony Gateway (ITG) Trunk 2.0 (ISDN Signaling/24-Port) Description, Installation and Maintenance	N/A	P0912540
Meridian 1 X11 Release 25.0x Meridian Branch Voice 1.0 Description, Installation and Operation	N/A	P0912867

Small Systems (Option 11C and 11C Mini)	PEC Code	CPC Code
Option 11C English Coil Package includes P0910770 - P0910777	NTTK31AB	A0799147
Option 11C Planning and Installation	N/A	P0910770
Option 11C and 11C Mini Fault Clearing Guide	N/A	P0910771
Option 11C and 11C Mini Central Answering Position Guide	N/A	P0910772
Option 11C and 11C Mini Customer Controlled Back-up and Restore Guide	N/A	P0910773
Option 11C and 11C Mini Upgrade Procedures Guide	N/A	P0910774
Meridian 1 X11 Release 25.0x Input/Output Administration Guide	N/A	P0910777
Meridian 1 X11 Release 25.0x Input/Output Maintenance Guide	N/A	P0910775
Meridian 1 X11 Release 25.0x Input/Output System Messages Guide	N/A	P0910776
Option 11C French – Coil Package includes P0910778 - P0910783, P0910786, P0910787	NTTK31BB	A0799148
Option 11C Planning and Installation	N/A	P0910778
Option 11C and 11C Mini Fault Clearing Guide	N/A	P0910779
Option 11C and 11C Mini Central Answering Position Guide	N/A	P0910780
Option 11C and 11C Mini Customer Controlled Back-up and Restore Guide	N/A	P0910781
Option 11C and 11C Mini Upgrade Procedures Guide	N/A	P0910782
Meridian 1 X11 Release 25.0x Input/Output Administration Guide	N/A	P0910787
Meridian 1 X11 Release 25.0x Input/Output Maintenance Guide	N/A	P0910783
Publication Title	**PEC Code**	**CPC Code**
Meridian 1 X11 Release 25.0x Input/Output System Messages Guide	N/A	P0910786
Option 11C Mini English – Coil Package includes P0910771 - P0910777, P0910788	NTKG80CF	A0799343
Option 11C Mini Planning and Installation	N/A	P0910788

Option 11C and 11C Mini Fault Clearing Guide	N/A	P0910771
Option 11C and 11C Mini Central Answering Position Guide	N/A	P0910772
Option 11C and 11C Mini Customer Controlled Back-up and Restore Guide	N/A	P0910773
Option 11C and 11C Mini Upgrade Procedures Guide	N/A	P0910774
Meridian 1 X11 Release 25.0x Input/Output Administration Guide	N/A	P0910777
Meridian 1 X11 Release 25.0x Input/Output Maintenance Guide	N/A	P0910775
Meridian 1 X11 Release 25.0x Input/Output System Messages Guide	N/A	P0910776
Option 11C Mini French – Coil Package includes P0910779 – P0910783, P0910786, P0910787, P0910789	NTHG81CF	A0799344
Option 11C Mini Planning and Installation	N/A	P0910789
Option 11C and 11C Mini Fault Clearing Guide	N/A	P0910779
Option 11C and 11C Mini Central Answering Position Guide	N/A	P0910780
Option 11C and 11C Mini Customer Controlled Back-up and Restore Guide	N/A	P0910781
Option 11C and 11C Mini Upgrade Procedures Guide	N/A	P0910782
Meridian 1 X11 Release 25.0x Input/Output Administration Guide	N/A	P0910787
Meridian 1 X11 Release 25.0x Input/Output Maintenance Guide	N/A	P0910783
Meridian 1 X11 Release 25.0x Input/Output System Messages Guide	N/A	P0910786
Small Systems Optional Documents – Coil		
Option 11C and 11C Mini Technical Reference Guide – English	N/A	P0910790
Option 11C 1.5 MB DTI/BRI – English	N/A	P0910791
Publication Title	**PEC Code**	**CPC Code**
Option 11C 2.0 B DTI/PRI – English	N/A	P0910793
Option 11C ISDN BRI Hardware, Installation and Maintenance – English	N/A	P0910795

Option 11C 1.5 MB DTI/BRI – French	N/A	P0910792
Option 11C 2.0 MB DTI/PRI – French	N/A	P0910794
Option 11C ISDN BRI Hardware, Installation and Maintenance – French	N/A	P0910796
Option 11C Mini Fibre Expansion Package (English) includes P0910788 and P0910797	NTTK38AB	A0799149
Option 11C Mini Planning and Installation Guide	N/A	P0910788
Option 11C and 11C Mini Expansion Guide	N/A	P0910797
Option 11C Mini Fibre Expansion Package (French) includes P0910789 and P0910798	NTTK38BB	A0799152
Option 11C Mini Planning and Installation Guide	N/A	P0910789
Option 11C and 11C Mini Expansion Guide	N/A	P0910798

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Sales Collateral

Contact your Nortel Networks Sales Representative for the latest X11 Release 25 Sales Collateral.

The following Release 25 sales collateral are being developed to support your sales efforts:

Description	Availability	Order Code
Meridian 1 Retain CD	2QTR 00	N/A