



Nortel Communication Server 1000

Planning the Network-wide Upgrade

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Revision History

May 2007

Standard 01.01. This document is issued to support Communication Server 1000 Release 5.0. This document contains information previously contained in the following legacy document, now retired: Planning the Network Wide Upgrade Guide (553-3001-206). No new content has been added for Communication Server 1000 Release 5.0. All references to Communication Server 1000 Release 4.5 are applicable to Communication Server 1000 Release 5.0.

4 Revision History

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About this document

This document is a global document. Contact your system supplier or your Nortel representative to verify that the hardware and software described are supported in your area.

Subject

This document includes the following information:

- provides the necessary information for a network administrator to plan a total network upgrade
- identifies the software releases required for the upgrade

Note on legacy products and releases

This NTP contains information about systems, components, and features that are compatible with Nortel Communication Server 1000 Release 4.5 software. For more information on legacy products and releases, click the **Technical Documentation** link under **Support & Training** on the Nortel home page:

www.nortel.com

Applicable systems

This document applies to the following systems:

- Communication Server 1000M Half Group (CS 1000M HG)
- Communication Server 1000M Single Group (CS 1000M SG)
- Communication Server 1000M Multi Group (CS 1000M MG)
- Communication Server 1000E (CS 1000E)
- Meridian 1 PBX 11C Chassis
- Meridian 1 PBX 11C Cabinet
- Meridian 1 PBX 51C
- Meridian 1 PBX 61C
- Meridian 1 PBX 81

- Meridian 1 PBX 81C

Note: When upgrading software, memory upgrades may be required on the Signaling Server, the Call Server, or both.

System migration

When particular Meridian 1 systems are upgraded to run CS 1000 Release 4.5 software and configured to include a Signaling Server, they become CS 1000M systems. [Table 1 "Meridian 1 systems to CS 1000M systems" \(page 8\)](#) lists each Meridian 1 system that supports an upgrade path to a CS 1000M system.

Table 1
Meridian 1 systems to CS 1000M systems

This Meridian 1 system...	Maps to this CS 1000M system
Meridian 1 PBX 51C	CS 1000M Half Group
Meridian 1 PBX 61C	CS 1000M Single Group
Meridian 1 PBX 81	CS 1000M Multi Group
Meridian 1 PBX 81C	CS 1000M Multi Group

For more information, see one or more of the following NTPs:

- *Meridian 1 Small System Software-only Upgrade (NN43011-459)*
- *CS 1000M and Meridian 1 Large System Upgrades Overview (NN43021-458)*
- *Communication Server 1000S: Upgrade Procedures (553-3031-258)*
- *Communication Server 1000E Upgrades (NN43041-458)*

Intended audience

This document is intended for individuals responsible for planning a network upgrade.

Conventions

Terminology

In this document, the following systems are referred to generically as "system":

- Communication Server 1000M (CS 1000M)
- Communication Server 1000E (CS 1000E)
- Meridian 1

The following systems are referred to generically as "Small System":

- Meridian 1 PBX 11C Chassis
- Meridian 1 PBX 11C Cabinet

The following systems are referred to generically as "Large System":

- Communication Server 1000M Half Group (CS 1000M HG)
- Communication Server 1000M Single Group (CS 1000M SG)
- Communication Server 1000M Multi Group (CS 1000M MG)
- Meridian 1 PBX 51C
- Meridian 1 PBX 61C
- Meridian 1 PBX 81
- Meridian 1 PBX 81C

Related information

This section lists information sources that relate to this document.

NTPs

The following NTPs are referenced in this document:

- *Product Compatibility Reference (NN43001-256)*
- *Dialing Plans Reference (NN43001-283)*
- *IP Peer Networking Installation and Commissioning (NN43001-313)*
- *Branch Office Installation and Commissioning (NN43001-314)*
- *Telephony Manager 3.1 Installation and Commissioning (NN43050-300)*
- *System Management Reference (NN43001-600)*
- *Emergency Services Access Fundamentals (NN43001-613)*
- *IP Trunk Fundamentals (NN43001-563)*
- *Telephones and Consoles Fundamentals (NN43001-567)*
- *ISDN Primary Rate Interface Fundamentals (NN43001-569)*
- *Basic Network Feature Fundamentals (NN43001-579)*
- *Meridian 1 Small System Software-only Upgrade (NN43011-459)*
- *CS 1000M and Meridian 1 Large System Upgrades Overview (NN43021-458)*
- *Communication Server 1000S: Upgrade Procedures (553-3031-258)*
- *Communication Server 1000E Upgrades (NN43041-458)*

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CD-ROM

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Planning the network-wide upgrade

Contents

This chapter contains information on the following topics:

- "Introduction" (page 11)
- "Peer nodes and Network Routing Service (NRS)" (page 11)
- "Software requirements" (page 12)
 - "Main and branch office running the same release" (page 12)
 - "Main and branch office running different releases" (page 12)
 - "Main office requirements" (page 15)
 - "Branch office requirements" (page 16)

- "Release comparison summary" (page 19)
- "Upgrading the network" (page 23)
 - "System management" (page 23)
 - "NRS" (page 23)
 - "Auxiliary systems/applications upgrades" (page 25)
 - "Node upgrades" (page 25)
 - "Branch office upgrade" (page 25)
 - "M3900 digital telephones firmware upgrade" (page 25)

Introduction

This section describes which combinations of mixed software are allowed in a network running Communication Server (CS) 1000 Release 4.5. Mixed situations are likely to occur temporarily as the upgrade progresses.

Peer nodes and Network Routing Service (NRS)

Nodes running Succession 3.0 software, CS 1000 Release 4.0, and CS1000 Release 4.5 software can operate together in a mixed network. The Network Routing Service (NRS) can be on any node, or on any standalone

Signaling Server, whether running Succession Release 3.0 software, CS 1000 Release 4.0, or CS 1000 Release 4.5 software. However, a Primary, Alternate, and Failsafe NRS must be part of the same release if data synchronization is required.

Note: Communication Server for Enterprise (CSE) 1000 Release 2.0 Gatekeepers do not support nodes running CS 1000 Release 4.0 software or higher. The NRS must run the same software release as the corresponding node.

Additionally, Succession 2.0 software can temporarily run elsewhere in the network. This is required to support customers who are currently running a network of systems running Succession 3.0 software, and who want to add one node running CS 1000 Release 4.5 software. However, Succession 3.0 software nodes must be upgraded as soon as practical. Legend:

Blue conditional text: Branch Office Release 4.5

Magenta: Text from Nancy Tomlinson

Underline/Red: Original 206 information

Software requirements

This section describes the relative software versions required in the main office and branch office locations. The actual software packaging requirements are given in "[Main office requirements](#)" (page 15) and "[Branch office requirements](#)" (page 16).

Main and branch office running the same release

Normally, the main office and associated branch office run the same software release.

However, a branch office location can be running an earlier software release than that running at the main office. This situation is discussed in the next section.

Main and branch office running different releases

It is recommended that the software release on the branch office always match the software release on the main office. However, it is possible for the main office Call Server and the MG 1000B Core to have different software releases, as long as the main office is running a release that is higher than or equal to that of the branch office. In addition, it is possible to have branch offices running different software releases.

When CS 1000 Release 4.0 was introduced, the mixed software policy stated that if the main office Call Server was on CS 1000 Release 4.0, the branch offices could run on CS 1000 Release 4.0 or Succession 3.0 software. With the introduction of CS 1000 Release 4.5, our policy is such that if a main office Call Server is running CS 1000 Release 4.5, the branch

office can run CS 1000 Release 4.5, CS 1000 Release 4.0, or Succession 3.0 software. Similarly, with the introduction of CS 1000 Release 5.0 program, our policy will be if the main office Call Server is running CS 1000 Release 5.0, the branch office can run on CS 1000 Release 5.0, CS 1000 Release 4.5, or CS 1000 Release 4.0.

Take into consideration planning your upgrade with this mixed software policy. For example, when CS 1000 Release 5.0 is current, if the main office is running CS 1000 Release 4.5 and its associated branch offices are still running Succession 3.0 software and the customer want to upgrade their main office to CS 1000 Release 5.0, customers must ensure their branch offices are at CS 1000 Release 4.5 or CS 1000 Release 4.0 prior to upgrading the main office to CS 1000 Release 5.0 to ensure a supported configuration during the upgrade period.

Note 1: Both the Call Server and Signaling Server in the main office must run the same release of software.

Note 2: A main office running Succession 3.0 or CS 1000 Release 4.0 software does not support a branch office running CS 1000 Release 4.5 software.

Note 3: If the NRS at the branch office is also the Alternate NRS in the network, then both it and the Primary NRS must be running the same software release.

For information on upgrading an existing main office and associated its branch offices, refer to *Branch Office Installation and Commissioning (NN43001-314)*.

Features in mixed-software configuration

Feature operation of IP Phone users in Normal Mode is the feature set on the main office. IP Phone users in Local Mode use the feature set on the branch office. Users of analog and digital devices always use the feature set on the branch office.

However, be advised that if the branch office is running a lower release of software than the main office, features involving interaction between the main office and the branch office will not function for the branch office IP Phone users. For example, if the main office is on CS 1000 Release 4.5 and the branch office is on CS 1000 Release 4.0 or Succession 3.0, the Active Call Failover feature and the Enhanced UNISTim Firmware download feature will not operate for the branch office IP Phone users since these features are not supported on earlier releases. In this case, the branch office would need to be upgraded to CS 1000 Release 4.5 to support these features.

Adding a branch office to an existing network

For customers wanting to add a branch office to their existing network, with the introduction of CS 1000 Release 4.5, customers will still be allowed to order a branch office running Succession 3.0 software only if their main office is running Succession 3.0 software. They will also be permitted to order a branch office running on CS 1000 Release 4.0 if the main office is running CS 1000 Release 4.0. With the introduction of CS 1000 Release 5.0, customers will be allowed to order a branch office running CS 1000 Release 4.0 if their main office is running CS 1000 Release 4.0. They will also be permitted to order a branch office running CS 1000 Release 4.5 if their main office is running CS 1000 Release 4.5. However, they will no longer be permitted to order a branch office running on Succession 3.0.

It is possible for the main office Call Server and the MG 1000B Core to have different software releases, as long as the main office is running a release that is higher than or equal to that of the branch office. In addition, it is possible to have branch offices running different software releases (Succession 3.0 Software, CS 1000 Release 4.0, or CS 1000 Release 4.5) associated with a single CS 1000 Release 4.5 main office Call Server.

With CS 1000 Release 4.5 and ongoing, the Main (N) to Branch policy is that software versions N-2 are supported on a permanent basis. There are no temporary policies (for example, N-3 is not supported). This span of N-2 covers any software release, whether it is a major or a minor release. With this policy, the Main must always be higher than or equal to the Branch. The MG 1000B cannot be a higher software release than the Main. With the N-2 ongoing policy, the following combinations are supported: if the Main is on Release 4.5, the MG 1000B can be at Release 3.0, 4.0, or 4.5. By supporting the N-2 policy, customers should be at N-1 by the time the next software release comes out to ensure a supported configuration during the upgrade and to avoid having to do a two-step upgrade.

Note 1: Both the Call Server and Signaling Server in an office must run the same release of software. The main office must always run CS 1000 Release 4.5 on the Call Server and the Signaling Server.

Note 2: A main office running Succession 3.0 or CS 1000 Release 4.0 Software does not support a branch office running CS 1000 Release 4.5 software.

Note 3: If the NRS at the branch office is also the Alternate NRS in the network, then both it and the Primary NRS must be running the same release of software.

Main office requirements

The branch office feature requires the following at the main office:

- CS 1000 hardware, running Succession 3.0, CS 1000 Release 4.0, or CS 1000 Release 4.5.

Note: If the main office is running Succession 3.0, some of the functions described in this document may not apply.

- IP Peer H.323 Trunk (H323_VTRK) package 399. This package is required to support H.323 functionality. Package 184 is included with package 399.
- The main office must have a software Service Level of 2 or higher to work with the branch office.

The main office requires the following software packages to support the specified Basic Network features. Refer to *Basic Network Feature Fundamentals (NN43001-579)* for more information on these features.

- Network Call Back Queuing (MCBQ) package 38. This package is required for SRG IP Phones to invoke any queuing feature or Ringback When Free feature.
- Network Speed Call (NSC) package 39. This package is required for SRG IP Phones to invoke the Network Speed Call feature.

The main office requires the following software packages to support the specified ISDN Primary Rate Interface features. Refer to *ISDN Primary Rate Interface Fundamentals (NN43001-569)* for more information on these features.

- Network Attendant Service (NAS) package 159. This package is required for analog (500/2500-type) telephones in the branch office to access attendant services when the attendant is configured on the main office.
- Network Message Services (NMS) package 175. This package is required for analog (500/2500-type) telephones in the branch office to share the voicemail system in the main office. For any configurations using centralized Call Pilot on the main office with one or more branch offices in separate time zones, the NMS package is required at the main office for the branch IP Phones.

Optional features

- Network Alternate Route Selection (NARS) package 58. Refer to *Basic Network Feature Fundamentals (NN43001-579)*.

- Overlap Signaling (OVLP) package 184. This package is optional; it is required for overlap signaling. It is packaged with H.323 Virtual Trunk (H323_VTRK) package 399 (Release 4.0 and Release 4.5).
- Emergency Services Access (ESA) package 329. This package is optional; it is required only to receive 911/ESA features in North American and some Caribbean and Latin American (CALA) markets. Refer to *Emergency Services Access Fundamentals (NN43001-613)*.
- Virtual Office (VIRTUAL_OFFICE) package 382 and M3900 Phase III Virtual Office Enhancement (VIR_OFF_ENH) package 387. These packages are optional; they are required only for Virtual Office functionality.
- Network Signaling (NSIG) package 37. This package is optional for SRG IP Phones to access set-based Network Class of Service (NCOS) features.
- Adaptive Network Bandwidth Management package 407.
- Alternate Routing for Network Bandwidth Management
- SIP Gateway and Converged Desktop (SIP) package 406. This package is optional; it is required to support SIP functionality.

Branch office requirements

The Branch Office feature requires the hardware. Refer to *Branch Office Installation and Commissioning (NN43001-314)* for specific hardware requirements. The MG 1000B SSC also requires the following software packages:

- Command Status Link (CSL) package 77
- Integrated Services Digital Network (ISDN) package 145
- Flexible Numbering Plan (FNP) software package 160. Refer to *Dialing Plans Reference (NN43001-283)*
- Overlap Signaling (OVLP) package 184. This package is required only if overlap signaling is to be implemented in the branch office. Refer to *IP Peer Networking Installation and Commissioning (NN43001-313)*.
- Enhanced ACD Routing (EAR) package 214
- Enhanced Call Trace (ECT) package 215
- Emergency Services Access (ESA) package 329
- Virtual Office (VIRTUAL_OFFICE) package 382 and M3900 Phase III Virtual Office Enhancement (VIR_OFF_ENH) package 387. These packages are optional; they are required only for Virtual Office functionality.
- BMG package 390

- IP Peer H.323 Trunk (H323_VTRK) package 399. This package is optional; it is required for H.323 functionality. The packaging for package 399 also includes package 184.

Note: These packages are automatically enabled in the branch office software.

The Branch Office feature also requires the SIP Gateway and Converged Desktop (SIP) package 406 for SIP. This package may or may not be automatically enabled in the branch office software, depending on the region in which the software is used.

When using Set-Based Installation at the MG 1000B, install the following:

- Set Relocation (SR) package 53
- Flexible Feature Code (FFC) package 139
- Automatic Installation (AINS) package 200

The feature packages listed above are automatically enabled in the branch office software.

If the main office is equipped with Location Code Expansion (LOCX) package 400, the branch office must also have this package. Refer to *ISDN Primary Rate Interface Fundamentals (NN43001-569)*.

Note: The key codes used to install software at the branch office differ from those used to install software at the main office.

Main and branch offices

This section describes the existing rules for software release compatibility between main and branch offices. It is possible for a main office Call Server and the branch office MG 1000B to temporarily have different software releases, if the main office is running the newest release (CS 1000 Release 4.0 software). For example, a branch office may run a different software release than that (2.0 / 3.0 / 4.0) associated with a CS 1000 Release 4.0 main office Call Server.

By allowing this mixed software operation, customers do not have to upgrade their entire network of branch offices in order to add a single additional branch office running CS 1000 Release 4.0 software. This permits the network upgrade to be scheduled over a longer period. The main office Call Server must be running the highest available release of software. Issues within a release are considered equivalent, (for example, CS 1000 Release 4.0 and 4.1, if and when issue 4.1 becomes available, could be used for the main office).

The features available to IP Phone users in Normal mode is the feature set on the main office. In Local mode, the IP Phones use the feature set of the branch office. Analog (500/2500-type) or digital telephones always use the feature set of the branch office.

If the main office Call Server is running CS 1000 Release 4.0 software, the following rules apply:

- Branch offices can run CS 1000 Release 4.0 or Succession Release 3.0 Software permanently
- The branch office can temporarily run CSE 1000 Release 2.0 software. This is required to support customers who are currently running a network of CSE 1000 Release 2.0 branch systems, and who want to add one branch (running CS 1000 Release 4.0 software).
- A mix of CSE 1000 Release 2.0, Succession Release 3.0, and CS 1000 Release 4.0 branch offices is not allowed at any time.

If the main office Call Server is running Succession Release 3.0 Software, the following rules apply:

- Branch offices can only run Succession Release 3.0 Software on a permanent basis. No permanently mixed software configurations are allowed.
- The branch office can temporarily run CSE 1000 Release 2.0 software. This is required to support customers who are currently running a network of CSE 1000 Release 2.0 branch systems, and who want to add one branch (running Succession Release 3.0 Software). It enables customers to migrate the network gradually.
- Branch offices cannot run CS 1000 Release 4.0 software or later.

If the main office Call Server is running CSE 1000 Release 2.0 software, the following rule applies:

- Branch offices can only run Succession Release 2 software. No mixed software configurations are allowed.

IP Phones do not download software from the main office. IP Phones download their software from the branch office. Therefore, an IP Phone running firmware for Succession Release 3.0 can be connected to a main office running CS 1000 Release 4.0. For further information on branch office, refer to *Branch Office Installation and Commissioning (NN43001-314)*.

CS 1000 Release 4.5 compatibility matrix

For compatible applications that operate with Release 4.5 software, obtain the Release 4.5 Product Bulletin or contact your Nortel distributor before upgrading. Compatibility information is also available to distributor partners through the Partner Information Center at www.nortel.com

Refer to *Product Compatibility Reference (NN43001-256)* for information on card compatibility.

Release comparison summary

Consult your documentation for compatibility matrices which apply to earlier versions of software to ensure that any upgrades of the auxiliary processors remain compatible with the versions of software in your network. Ensure that compatible applications are always running during the upgrade process, unless service interruptions are acceptable.

Table 2
Release comparison summary

Auxiliary Processors	Succession Release 3.0	CS 1000 Release 4.0
Attendant consoles		
PC Attendant Console	1.2.x	1.2.x
M2250 Attendant Console	Supported	Supported
SMILE	2.3.x	2.3.x
Digital telephones		
M39xx	F/W version shipped with Release 3.0	F/W version shipped with Release 4.0
Meridian Modular Telephones (M2xxx)	Supported	Supported
ITG-P and Media Cards		
IP Line	3.1	4.0
IP Trunk	3.00.53, 3.01.22, 3.01.60 (Will resolve with Signaling Server 2.10.81, 2.11.03, 4.00.xx.)	3.01.22, 3.01.60 (Will resolve with Signaling Server 2.11.03, 4.00.xx.)
System management		
Optivity Telephony Manager (OTM)	OTM 2.1 and OTM 2.2	OTM 2.2
Element Manager	Part of core Signaling Server software	Part of core Signaling Server software
Messaging		
CallPilot	1.07 (with Service Update 4), 2.0 Used on Platforms: 201i, 702t, 703t, 1001rp, 1002rp versions	1.07 (with Service Update 4), 2.0, 2.5 Used on Platforms: 201i, 702t, 703t, 1001rp, 1002rp versions
HMS 400	1.0	1.0

Auxiliary Processors	Succession Release 3.0	CS 1000 Release 4.0
CallPilot Mini	1.5, 1.5A, 1.5B, 1.5C, 1.5D Small Systems only	1.5, 1.5A, 1.5B, 1.5C, 1.5D Small Systems only
Meridian Mail Modular Option EC	12.12-13.14	12.12-13.14
Meridian Mail Enhanced Card Option	12.12-13.14	12.12-13.14
Meridian Mail Reporter R2.X	Not dependent on core software	Not dependent on core software
Wireless		
Companion	3.xx -7.xx (7.xx required for Enhanced Capacity)	3.xx -7.xx (7.xx required for Enhanced Capacity)
Voice over Internet Protocol (VoIP)		
Meridian DECT (DMC4/DMC8 version)	451000.xx / 470001.xx – software embedded on IPE card	451000.xx / 470001.xx – software embedded on IPE card
VoIP – 802.11 Wireless IP Gateway with Symbol	Application supported on ITG Pentium only 1.1x	Application supported on ITG-P 24-port card 1.19, 1.20
IP Phone 2001	Not supported	Firmware version shipped with Release 4.0
IP Phone 2002	Firmware version shipped with Release 3.0	Firmware version shipped with Release 4.0
IP Phone 2004	Firmware version shipped with Release 3.0	Firmware version shipped with Release 4.0
IP Phone 2002 Phase II	Not supported	Firmware version shipped with Release 4.0
IP Phone 2004 Phase II	Not supported	Firmware version shipped with Release 4.0
IP SoftPhone 2050	Firmware version shipped with SR3.0	Firmware version shipped with Release 4.0
WLAN Handset 2210/2211	Not supported	Firmware Release 97.039
IP Telephony Manager 2245	174.007	174.007
Remote office portfolio		
Remote Office 9150	1.3.1, 1.3.4, 1.4.x, 1.5.x	1.4.x, 1.5.x
Remote Office 9110/9115/ IP Adaptor	1.3.1, 1.3.4, 1.4.x, 1.5.x	1.4.x, 1.5.x

Auxiliary Processors	Succession Release 3.0	CS 1000 Release 4.0
Meridian Home Office MHO-II	1.18 Not supported with M3900 Phase III	1.18 Not supported with M3900 Phase III
Mini Carrier Remote	Supported	Supported
Carrier Remote	Supported	Supported
Fiber I	Supported	Supported
Fiber II	Supported	Supported
Remote Peripheral Equipment (RPE)	Not supported	Not supported
Retired call center applications		
Meridian MAX (any platform)	(9.2, 9.3), 10.x	Not supported
Network Administration Center (NAC)	Not supported - End of Life Last release - 2.5	Not supported
Meridian Customer Controlled Routing (MCCR)	Not supported - End of Life Last release - 3B, 3C	Not supported
Meridian Link (Mlink)	Not supported - End of Life Last release - 5, 5C	Not supported
Symposium Link	Not supported	Not supported
Symposium Desktop TAPI Service Provider for Meridian Communicator Adapter (MCA)	Not supported - End of Life Last release - 1.x - 2.x	Not supported
Meridian Link & MCCR Co-residency	Not supported	Not supported
Symposium Call Center and CTI applications		
Symposium Telephone Application Programming Interface (TAPI) Service Provider	2.3.1, 3.0	3.0
Symposium Agent	2.3	2.3
Symposium Agent Greeting	2.0	2.0
Nortel Remote Agent Observe	1.0	1.0
Meridian Link Services (MLS)	4.2	5.0

Auxiliary Processors	Succession Release 3.0	CS 1000 Release 4.0
Symposium Express Call Center (SECC)	4.2	4.2
Symposium Call Center Server (SCCS) Note: Includes Symposium Web Client	4.0, 4.2, 5.0	4.2, 5.0
Symposium Web Centre Portal (SWCP)	4	4.0
CTI.next (Nortel Networks Communications Control Toolkit)	5.0	5.0
IVR applications		
Periphonics IVR (VPS/is)	5.x	5.x
Periphonics Integrated Package for Meridian Link (IPML) – VPS/is and MPS	2.0.x, 2.1	2.0.4, 2.0.5, 2.1
Periphonics Multimedia Processing Server (MPS) 100	1.0, 2.1	1.0, 2.1
Periphonics Multimedia Processing Server - MPS 500, MPS 1000	2.1	2.1
Periphonics Integrated Package for Meridian Link (IPML) – MPS 500, MPS 1000	2.1	2.1
Business communication manager		
Business Communications Manager	3.5	3.5, 3.6
Survivable remote gateway	1.0	1.0
NNIXX portfolio		
Integrated Call Assistant	1.05 and above	1.5
Nortel Networks Integrated Conference Bridge (NNICB)	2.1x, 3.xx	2.1, 3.0x, 4.0
Integrated Recorded Announcer	2.0.16 and above	2.0.16 and above
Nortel Networks Integrated Personal Call Director	1.0.3 and above	1.0.3 and above, 2.0
Hospitality Integrated Voice Services	1.17	1.17

Auxiliary Processors	Succession Release 3.0	CS 1000 Release 4.0
MCS 5100		
MCS 5100	1.1	2.0, 3.0
Communication Server 2000		
CS 2000	SN06.2	Not supported
CS 2100	SE06.2	Not supported

Upgrading the network

When planning a network-wide upgrade, first migrate the components that are network-wide resources, then update the individual nodes.

It is recommended that you upgrade your network components in the following order:

1. System management
2. NRS
3. Auxiliary systems/applications
4. Nodes
5. Branch offices
6. M3900 digital telephone firmware upgrade (if necessary)

System management

Ensure that the network management application can successfully control all nodes on the old and new software releases. Refer to *System Management Reference (NN43001-600)* for more information.

For CS 1000 Release 4.5, OTM 2.2 or higher must be installed. See *Telephony Manager 3.1 Installation and Commissioning (NN43050-300)* for procedures on upgrading OTM.

H.323 Gatekeeper database migration

To migrate an H.323 Gatekeeper database to a Communication Server 1000 (CS 1000) Release 4.5 Network Routing Service (NRS) database, see *Signaling Server: Installation and Configuration (553-3001-212)*.

NRS

In order to support new features, the NRS must be running the latest software release. In most cases, if the entire network is being upgraded, upgrade the NRS first.

It is possible to operate CS 1000 Release 4.5 nodes with CS 1000 Release 4.0 if the upgrade logistics require this. However, note that the NRS must normally be the same software release as the Alternate NRS in order to synchronize the databases.

The NRS can operate in two modes: stand-alone or co-located. A stand-alone and a co-located NRS are handled differently during a network upgrade. If the NRS is co-located, the entire node must be upgraded.

Upgrading with a stand-alone NRS

Follow these steps if the NRS is stand-alone:

Step	Action
1	Separate the NRS nodes so that they do not automatically synchronize.
2	Separate any Failsafe NRS.
3	Upgrade the Primary NRS.
4	Upgrade the Alternate NRS.
5	Resynchronize the Primary and Alternate NRS.

—End—

Upgrading with a co-located NRS

Follow these steps if the NRS is co-located:

Step	Action
1	Separate the NRS nodes so that they do not automatically synchronize.
2	Separate any Failsafe NRS.
3	Upgrade the entire node.
4	Resynchronize the Primary and Alternate NRS when both are running the same new software releases.

—End—

Auxiliary systems/applications upgrades

If there are any nodes connected to the network running auxiliary systems or applications, the software version must be compared to the compatibility matrix for the most recent software release. If required, an upgrade must be performed.

For further information, refer .

Node upgrades

Nodes can be upgraded in any order, as long as the conditions are met as described in "[Peer nodes and Network Routing Service \(NRS\)](#)" (page 11). Upgrade each node completely before proceeding to the next node.

Nodes that can be updated early in the process include:

- nodes that include an NRS
- nodes that include a network resource such as CallPilot or Symposium
- nodes that act as a main office to one or more branch offices

It is recommended that any connected applications are upgraded before any node at the Call Server, while respecting the compatibility. However, making this decision depends on the required functionality, service up-time, and compatibility of the application with other nodes.

For information on upgrading a node, refer to *Meridian 1 Small System Software-only Upgrade (NN43011-459)*, *CS 1000M and Meridian 1 Large System Upgrades Overview (NN43021-458)*, *Communication Server 1000S: Upgrade Procedures (553-3031-258)*, and *Communication Server 1000E Upgrades (NN43041-458)*.

For information on upgrading MG1000T, which may or may not be independent of CS 1000E, refer to *Communication Server 1000E Upgrades (NN43041-458)*.

Branch office upgrade

For information on upgrading a branch office, refer to *Branch Office Installation and Commissioning (NN43001-314)*.

M3900 digital telephones firmware upgrade

If it is necessary to upgrade the M3900 digital telephones firmware, perform the firmware upgrade after the associated node has been upgraded.

For information on M3900 digital telephone firmware upgrades, refer to *Telephones and Consoles Fundamentals (NN43001-567)*.

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Nortel Communication Server 1000

Planning the Network-wide Upgrade

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