

Switch Requirements and Administration for the Nortel Norstar Switch

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Overview

This chapter provides information on requirements for the following:

- Switch software
- Hardware
- Administration for integration of the Nortel Norstar range of key telephone systems with the Lucent™ INTUITY™ system



NOTE:

The information in this chapter does not apply to the Norstar ICS switch.

Purpose

The purpose of this chapter is to help Lucent technicians administer the Norstar KTS so that the switch and the Lucent INTUITY system can be integrated successfully.



NOTE:

The switch administrator is responsible for performing the switch administration. However, Lucent technicians and the switch administrator must cooperate to ensure that the appropriate administration is completed.

Lucent INTUITY Features Supported by the Nortel Norstar Switch

[Table 3-1](#) lists the Lucent Intuity system features supported by Nortel Norstar.

Table 3-1. Features of the Lucent INTUITY System

Feature	Details
Call Coverage	<ul style="list-style-type: none">■ The distinction between busy and no answer is not supported.■ All calls that are redirected to the Lucent INTUITY system are be treated as external calls. Therefore, only one greeting message can be activated for internal and external calls.
Transfers	<ul style="list-style-type: none">■ Only analog transfers to valid extensions are supported.■ The transfer time is in the range of 5–8 seconds.■ To avoid a period of silence during the call transfer, turn on the music-on-hold switch.
Disconnect	<ul style="list-style-type: none">■ The Lucent INTUITY system disconnects when it listens to the appropriate tone (busy in Europe).■ The disconnect time is approximately 4–6 seconds.■ The switch must be programmed to send the disconnect code as ‘**9’ to the Lucent INTUITY system upon disconnect. This will ensure a faster disconnect rate.
Voice Mail Access	<ul style="list-style-type: none">■ Direct voice mail access from the dedicated sets is supported.■ Stations equipped with voice mail button can be programmed to pass the calling party number so that subscribers calling from the station are not required to dial their extension number to log in.■ subscribers are required to dial # before they enter the password.
Auto Attendant	<ul style="list-style-type: none">■ Direct inward dialing (DID) calls may require proper switch translation and routing setup.

Table 3-1. Features of the Lucent INTUITY System

Feature	Details
Networking	<ul style="list-style-type: none">Only TCP/IP, AMIS analog networking or low-speed digital networking are supported.
Leave Word Calling (LWC)	<ul style="list-style-type: none">LWC is not supported by the Lucent INTUITY system behind the Nortel Norstar switch.
Message Waiting Indicator (MWI) updates	<ul style="list-style-type: none">Audible, visual, and lamp MWI updates are supported only on digital stations.The Nortel Norstar switch uses the same channel to turn on and off the MWI lamp. If this channel is busy, the MWI updates may be delayed.

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Hardware and Software Specifications

[Table 3-2](#) shows the hardware and software specifications for the Nortel Norstar switch.

Table 3-2. Hardware and Software Specification

Units	Details
Interface type	Tip/Ring
Integration type	Inband
Lucent INTUITY system protocol	Voice Mail Interface (VMI)
Switch model/release	DR 3 to DR 6
Required switch packages	Release 10 version 6.0 and later
Switch hardware options required	OneVMI interface unit for every two Lucent INTUITY ports
Lucent INTUITY system requirements	<ul style="list-style-type: none">Lucent INTUITY system Release 4.44.4 or later platform softwareINTUITY AUDIX® Release 4.4 or later softwareSwitch Integration software

Setting the Nortel Norstar Switch

To ensure the smooth integration with the Lucent INTUITY system, you must modify settings on the Nortel Norstar switch.

NOTE:

You must program the prefix code, transfer code, and disconnect code. These steps are not optional.

The following are procedures to set the Nortel Norstar switch. Consult the Nortel Norstar switch documentation or the switch administrator for more information.

NOTE:

The extension of the VMI unit and the extension connected to Channel 0 on the Lucent INTUITY system side is the INTUITY AUDIX number subscribers dial to access their voice mail messages on the system.

1. Change each of the voice mail extensions to forward (on busy) to the next extension on the Lucent INTUITY system.

For example, if the extensions assigned to Channel 0 to Channel 3 on the Lucent INTUITY system are extension 300, extension 301, extension 302, and extension 303, respectively, you must program extension 300 for call forward busy to extension 301.

You must, in turn, program extension 301 for call forward busy to extension 302, extension 302 for call forward busy to extension 303, and extension 303 for call forward busy back to extension 300.

2. For each voice mail subscriber, set the CFB and the call forward no answer to the voice mail extension.
3. Program Feature 901 as:
 - a. Set the disconnect code to **9
 - b. Set the prefix code to #02#

NOTE:

The INTUITY AUDIX application requires a minimum extension length of 3-digits. Therefore, if the Nortel Norstar switch is set up to have a 2-digit dial plan, the entries must be programmed. If the Lucent INTUITY system is set up to have system subscribers from 300–399, make the following entries:

1. Set the Prefix code to #02#3
2. Set the transfer code to L*703

NOTE:

Consult your Nortel Norstar switch documentation or switch administrator for additional information.

Translation Code

A translation code is the setting used by the VMI and the Nortel Norstar switch to ensure compatibility with the voice mail device.



NOTE:

No two translation codes can be the same.

Determining Translation Codes

The VMI uses translation codes to interpret the command codes from the INTUITY AUDIX application to the Nortel Norstar switch.

The following procedure explains how to determine the command codes for each feature of the INTUITY AUDIX application:

For the VMI to interface with the INTUITY AUDIX application, the translation codes must match the command codes.

The VMI can be programmed to match the command codes of the INTUITY AUDIX application.

The following procedure explains how to program the VMI:

1. Enter **Feature** **9** **X** **X**

The system displays the VMI Administration screen.

2. Press **NEXT** until the display shows the Feature Table screen.
3. Press **SHOW** until the display shows the Send Message screen.
4. Press **CHANGE** until the display shows the Send Message for Change screen.
5. Enter the command code.



NOTE:

Use the dialpad to enter characters 1 to 9, * and #. Press **SHIFT** and **NEXT** to enter special characters A,B,C,D and Link.

6. Press **NEXT**.

The system displays the Cancel Message Screen.

7. Press **NEXT**.

The system displays the Transfer Screen.

8. Press **NEXT**.

The system displays the Prefix Screen.

9. Press **CHANGE**.

10. Enter **#02#** for the new prefix code.

11. Press **NEXT**.

The system displays the Disconnect Screen.

12. Press **CHANGE**.

13. Enter ****9** for the new Disconnect code.



NOTE:

The default code is the dial tone code.

14. Press **NEXT**.

The system displays the Feature Table Screen.

15. Press **Rls** to end this session.

Default Translation Codes

These codes must be programmed to match the command codes of the voice mail device.



NOTE:

The first code character of the Send message, Cancel message, and Transfer Translation codes defaults to Link. The first code character of the Prefix and Disconnect code do not default to Link.

A translation code can have a maximum of seven digits.

These digits can be a combination of the following characters:

- The numbers 0 to 9
- The letters A-D
- The symbols * and #

[Table 3-3](#) shows the default translation codes.

Table 3-3. Default Translation Codes

Code Name	Default Code	Additional Information
Send Message	LNK * 1 DN	Used to notify subscribers of new mail in their mailbox
Cancel Message	LNK # 1 DN	Used to cancel message notification
Transfer	LNK * 7 0 DN	Sent to the VMI to transfer a call This is a blind transfer.
Prefix	**9	Used to indicate that an incoming call to the voice mail device is forwarded
Disconnect	#02#	Used to indicate line disconnection The VMI translation code is programmable as the fourth column or extended DTMF tone.

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