NEC NEAX 2400 with Serial MCI Integration

Requirements

The NEC NEAX 2400 with serial MCI integration

Phone System

• One of the following NEAX 2400 phone systems with serial MCI:

Table 1-1 NEAX 2400 Specifications	
Phone System	**Software Version**
IMX	All software versions
IMG and SIM (IMG and SIM phone systems may require upgrading to a high-density system to support MCI.)	5200 or later
MMG and UMG	4200 version 5 or later

• One IOC serial port for the MCI data link connected to a serial port (COM1 is the default) on the Voice mail server with a PH-68 two-port cable and an RS-232C CA-1 cable.

• MCI feature II installed according to the NEC documentation for the phone system.

• One or more of the following station ports (analog) set up as voice messaging ports and connected to the voice cards in the Voice mail server.

Integration Description

The NEAX 2400 serial MCI integration uses a data link, which consists of an RS-232 serial cable connecting the IOC port in the phone system to the Voice mail server. The voice messaging lines from the phone system connect to the analog voice cards in the Voice mail server. The following illustrations show the required connections.

The phone system sends the following information through the data link:

• The extension of the called party

• The reason for the forward (the extension is busy, does not answer, or is set to forward all calls)

• The extension of the calling party (for internal calls) or the phone number of the calling party (if it is an external call and the system uses caller ID)

Voice mail uses this information to answer the call appropriately. For example, a call forwarded to Voice mail is answered with the personal greeting of the subscriber. If the phone system routes the call to Voice mail without this information, Voice mail answers with the opening greeting.

Integration Features

The NEC NEAX 2400 serial MCI integration with Voice mail provides the following features:

Call forward to personal greeting	When an incoming call is routed to an unanswered or busy extension, the call is forwarded to the voice mail of the subscriber. The caller then hears the personal greeting of the subscriber and can leave a message.
Caller ID	Voice mail receives caller ID information from the phone system (if available). This information appears in the subject line of the message in the desktop messaging application.
Easy message access	A subscriber can retrieve messages without entering an ID. Voice mail identifies a subscriber based on the extension from which the call originated. A password may be required.

Identified subscriber messaging	Voice mail automatically identifies a subscriber who leaves a message during a forwarded internal call, based on the extension from which the call originated.
Message waiting indication	When a message is waiting for a subscriber, Voice mail notifies the phone system to activate the message waiting indicator (MWI) on the subscriber's extension (a lamp or a stutter dial tone).

Programming the Phone System

1. Specify the Universal Call Distribution (UCD) group for the voice messaging system ports based on the type of voice messaging ports:

Assign each analog circuit an extension number, then add each of the numbers to the UCD group.

Make sure that the phone system sends calls only to Voice mail voice ports in the UCD group that are set to Answer Calls on the System > Ports page in the Voice mail Administrator. Calls sent to a voice port not set to Answer Calls cannot be answered by Voice mail. And, if certain voice cards are installed, the call will not be dropped, but the port remains unavailable for use until the Voice mail server is restarted.

Program the phone to forward calls to the UCD pilot number when:

• The extension is busy

• The call is not answered

2. Use the AIOC command to set up the RS-232 serial data port connected to Voice mail as follows:

• 9600 baud

• 8 data bits

• 1 stop bit

• No parity

3. Use the AUCD command to program the phone system to send UCD call information to MCI. Assign a value of "0" to the "MCI Data Transfer" field for the appropriate tenant and UCD pilot numbers.

Use the programming system data table to program the ASYD settings. Each bit is part of a hexadecimal number displayed in the ASYD settings. Convert the hexadecimal number to binary to determine the individual settings.

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2. Use the AIOC command to set up the RS-232 serial data port connected to Voice mail as follows:

• 9600 baud

• 8 data bits

• 1 stop bit

• No parity

3. Use the AUCD command to program the phone system to send UCD call information to MCI. Assign a value of "0" to the "MCI Data Transfer" field for the appropriate tenant and UCD pilot numbers.

Use the programming system data table to program the ASYD settings. Each bit is part of a hexadecimal number displayed in the ASYD settings. Convert the hexadecimal number to binary to determine the individual settings.

Table 1-6 Programming System Data

System	Index	Bit	Value	Description
1	17	b4	1	Release (blind) transfer to attendant console
	28	b0-4	0	Guard timer not required
		b5	1	MWI controlled by MCI

	Index	Bit	Value	Description
	29	b1-7	0/1	No/Yes: Assign I/O port for MCI output Port 1 = b1, port 2 = b2, and so on
	34	b1-4	0	Set output to no parity and 1 stop bit
	60	b3	0	UCD queuing required
	63	b0	1	Release transfer for stations in service
	69	b0	1	No recall, execute call forwarding on no answer
	70	b0	1	Called number display, when forwarding to attendant console
	77	b2	0	MWI refresh required
	78	b0	1	Calling number display enabled
		b1	1	Called station status display enabled
	238	b0-7	0	Lamp flash rate
	246	b3	0	MCI expansion set to normal
	400	b2	1	Calling number information sent to MCI
2	6	b0	1	MCI in service when terminating to a UCD group
	7	b1	0	MCI out of service when terminating to attendant console

Step 6 Use the programming system data local data table to program the ASYDL settings. Each bit is part of a hexadecimal number displayed in the ASYDL settings. Convert the hexadecimal number to binary to determine the individual settings.

Table 1-7 Programming System Data Local Data

System	Index	Bit	Value	Description
1	641	b1	0/1	0/1: MCI/IMX station number/phone number
	832	b0-7	00-FD	Assign the FPC of the node connected to MC
	833	b0	0	IOC serial interface enabled for MCI
		b1	0	0/1: ICS/IMX format

For more information, refer to the NEC documentation for the phone system.