



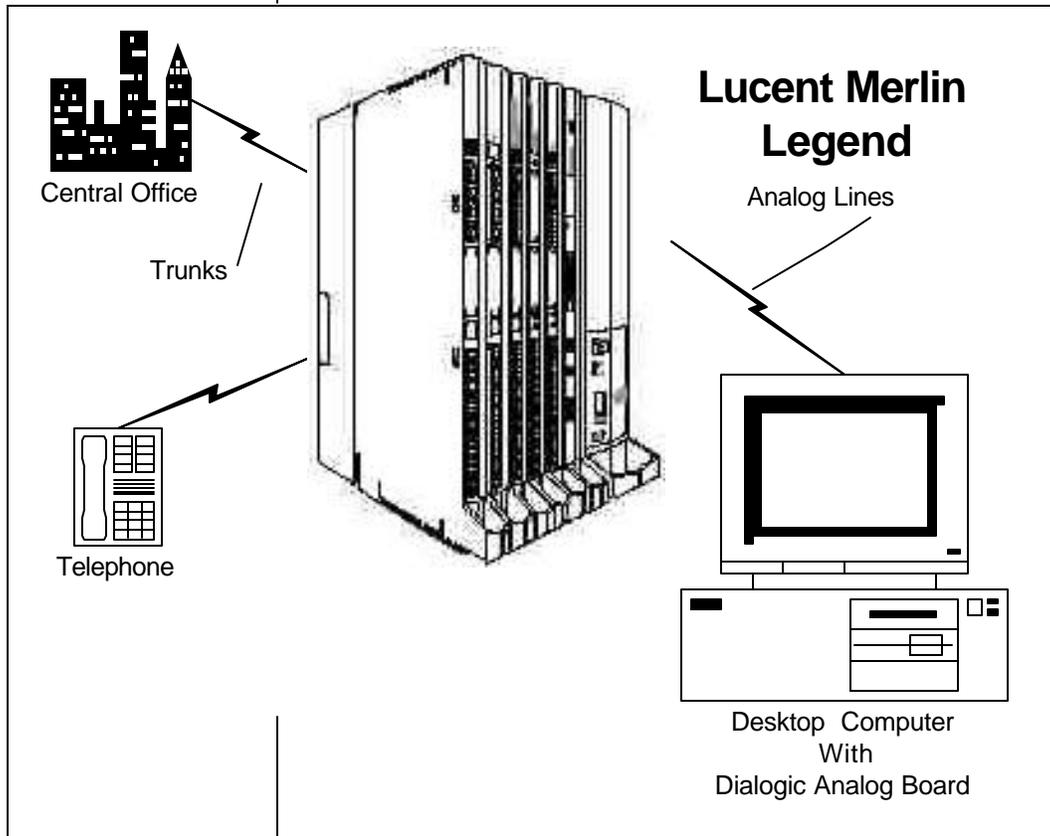
Octel® 50

Messaging Server

Configuration Note 77005

Lucent Merlin Legend™

Revised 1/24/00



Inband signaling is
used for integration

Supported Voice Processing
Module

1.0 METHOD OF INTEGRATION

Inband signaling is used for integration. Call forward to personal greeting is achieved via DTMF signals passed from the Lucent Legend to the Octel 50 family of products. Message waiting indicators are set and canceled by dialing a feature access code followed by the extension number. A hook-flash followed by the extension transfers the caller to the operator.

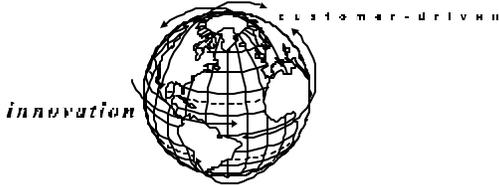
1.1 SUPPORTED VOICE PROCESSING MODULE

The Octel 50 is a Year 2000 (Y2K) compliant, PC based, enhanced voice messaging product release intended to replace the Smooth Operator, Smooth Operator Lite and Cooperator product lines.

Disclaimer: Configuration Notes are designed to be a general guide reflecting Octel Communications Corporation, a subsidiary of Lucent Technologies Inc., experience configuring its systems. The information contained in this note is based on knowledge available at the time of publication and is subject to change without notice. Please understand that you may experience a problem not detailed in a Configuration Note. If so, please notify Sales Design Support Center (SDSC) at (888) 297-4700, and if appropriate we will include it in our next revision. Lucent Technologies accepts no responsibility for errors or omissions contained herein.

Ordering Information

Octel 50 integration will support
16 ports.



PBX hardware requirements

Lucent Merlin Legend Software
Requirements

Additional Material Requirements

2.0 ORDERING INFORMATION

This integration supports up to 16 Octel 50 ports. For installed systems that have port capacities above 16 ports contact your CAG representative for the proper solution.

- Voice Boards supported:
 - Dialogic DIALOG/4™
- Optional Fax Boards supported:
 - Brooktrout TR114 Series Universal Port™
- Optional Remote Service
 - External Modem

3.0 PBX HARDWARE REQUIREMENTS

- One single line port for each Octel 50 port. This may be provided by
 - 016 tip/ring module (with Release 4 software). Each 016 TR module provides 16 analog ports and four touch tone receivers (TTRs).
- or*
- 012 station card. Each 012 station card provides 12 analog ports and two touch tone receivers (TTRs). There are two types of 012 cards as follows:
 - 106-767-379 without Ring Generator. If this is type provided there must also be one 105-213-201 External Ring Generator.
 - 107-108-698 with Ring Generator.

Note: A TTR is needed by an analog port whenever DTMFs are being processed. The number of TTRs is dependent on the number of analog ports and the loading of those ports. A good estimation is 0.75 TTRs per port for a moderately loaded system. Additional TTRs may be provided by using PEC code 400 line. Four additional TTRs are provided on each PEC code 400 line card.

3.1 LUCENT MERLIN LEGEND SOFTWARE REQUIREMENTS

- Revision 1, 2, 3 or 4

3.2 ADDITIONAL MATERIAL REQUIREMENTS

- One RJ-14 jack with 4-conductor line cord for every two Octel 50 ports
- One analog line for remote service access
- One RJ-11 Jack for above and 2-conductor modular telephone cord.
- If FaxMail is installed.

- One analog line per FAX port.
- One RJ-11 Jack for every Brooktrout TR-114 fax port along with 4-conductor modular telephone cords.



4.0 SUPPORTED FEATURES

[✓] Items are supported

System Forward to Personal Greeting		Message Waiting	
All Calls	[]	LCD Display	[]
Ring/no answer	[✓]	LED	[✓]
Busy	[✓]	Lamp	[]
Busy/No Answer	[]	Audible / Stutter Dial Tone	[]
Do Not Disturb	[]	Multiple Return to Operator	[✓]
Station Forward to Personal Greeting		Direct Call	[✓]
All Calls	[✓]	Auto Attendant	[✓]
Ring/no answer	[]	Outcalling	[✓]
Busy	[]	Personal Greeting of Original-Called Party	
Busy/No Answer	[]	Multiple Call Forward	[]
Do Not Disturb	[]	Double Call Forward	[]
Flexible Forwarding		Call Coverage	[✓]
Forward to No Answer Greeting	[]	Intercom Paging	[]
Forward to Busy Greeting	[]	Supervised Transfers	
Intercom/CO Forwarding	[]	Call Screening	[✓]
		Call Queuing	[✓]
		Intercom Paging ¹	[✓]
		Record Telephone Conversation	[]

¹See Section 7.4

4.1 DISCONNECT TYPE

Disconnect is detected when the switch returns internal dialtone. For proper external disconnect supervision, Ground start or Supervised Loop start CO lines are recommended. (See Note section 7.2)

5.0 CONFIGURING THE LUCENT LEGEND

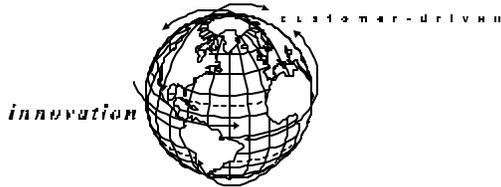
Before you begin programming, it is recommended that a hard copy of the customer database be obtained to verify existing programming.

Note: Assignment of extensions has two elements, Send and Receive. Sender extensions can only be assigned to either an extension or a group. Extensions used as Receiver can be assigned in multiple groups. An extension number, once assigned to a Calling Group or Line/Pool, is committed as a Sender. This extension, however, can be used as a Receiver in other groups.

5.1 LUCENT LEGEND SYSTEM PROGRAMMING

Refer to the Programming section in the Lucent Legend manual for information on entering, saving, and exiting database programming.

Programming PBX system
 parameters



The Legend system must be configured as a hybrid/PBX. This programming must be done when the system is idle. In addition, this programming will cause the system to restart when you are finished. Therefore, choose an appropriate time for this procedure.

From the System Programming Menu

Select **System**

Select **Mode**

Select **Hybrid/PBX**

Press <Enter> to save.

At this point the system will restart as noted above. To continue programming, re-enter system programming.

Program the Voice Mail System/Automated Attendant Options as follows:

From the System Programming Menu

Select **AuxEquip**

Select **VMS/AA**

From the VMS/AA screen, select **TransferRtn**. This parameter, Transfer Return, represents the number of rings before calls transferred by the System are sent to a designated backup position. Set it to "0" to disable this feature. If supervised transfers are used, this parameter should either be disabled or set higher than the Max Rings in the Mailbox Class of Service.

The default value for Transfer Return is 4. To modify this parameter, erase the current setting, using the **Drop** key. Enter the desired value and press **Enter**.

From the VMS/AA screen, select **TT Duration**. This parameter should be set to 75 (milliseconds). If it is not, erase the current setting, using the **Drop** key and enter **75**. Press **Enter** to save your entry.

From the VMS/AA screen, select **TT Interval**. This parameter should be set to 50 (milliseconds). If it is not, erase the current setting, using the **Drop** key and enter **50**. Press **Enter** to save your entry.

Press **Exit** twice to return to the System Programming menu.

5.2 CONFIGURING THE SYSTEM PORTS

Create Calling Group for Octel 50

From the System Programming Menu

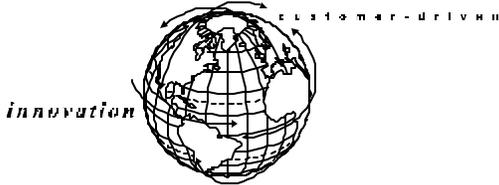
Select **Extensions**

Press More to display second page

Select **Group Calling**

Select **Hunt Type**

All references to Octel 50 pertain to
the entire family of products



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the entire family of products

Enter the extension number to be assigned to the Calling Group

Select **Circular**

Select Exit

Return to Group Calling Menu

Select **Members**

Enter extension number just assigned above

Select Enter

Note: An Octel 50 port can only belong to one calling group. A QCC cannot be a member of a calling group.

At Enter Group Members Prompt:

Specify first Octel 50 port extension number. If extension numbers are sequential press the next key to add next System port. If ports are not sequential, press enter to add next extension number. Repeat until all System ports have been added.

Select Exit

Return to Group Calling Menu

Set up Group Type for Octel 50 calling group (this instructs Legend to send mailbox ID information)

Press More to display second page

Select **Group Type**

Enter extension number of the Octel 50 calling group

Press Enter

Select **Integ VMI**

Press Enter to Save

Press Enter twice to return to Extensions Menu

Program Octel 50 as the Call Coverage target

Press More to display second page

Select **Group Coverage**

Enter a number (1 - 30) as coverage group number for System

When prompted for extension numbers, enter extension number assigned to Octel 50 calling group

Press Enter to Save

Press Enter twice to return to System Programming Menu

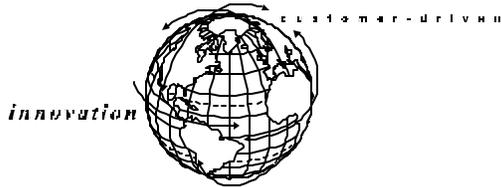
Program Group Coverage Delay Interval

Select **Options**

Press More to display second page

Select **Group Coverage Delay Interval**

Select **Number of Rings (1 - 9**



Press Enter to Save

To assign trunks to ring directly to Octel 50

Select **Extensions**

Press More to display second page

Select **Group Calling**

Select **Line/Pool** (See Note: Section 7.3)

Enter Octel 50 calling group extension number

Press Enter

At "Enter Line/Pool numbers" prompt identify line or pool of lines you want Octel 50 to answer

Note: Incoming calls on each line/trunk or pool can be directed to only one calling group.

5.3 CONFIGURING PORTS TO OUTCALL (REL 3.1 AND ABOVE)

The default settings on the Lucent Merlin Legend, software versions 3.1 and higher, restrict outdialing from Group Types programmed as Integ VMI. If the customer desires outdialing access for the Voice Mail system, (for Beeper notification, etc..) program the ports to outdial as follows.

Set the Octel 50 ports restriction level to allow outdialing.

Select **System Programming**

Select **Extensions**

Select **Restriction**

Enter the first Octel 50 port to be used for outdialing

Select **Enter**

Select **Unrestricted**

Select **Enter**

Repeat until all the Octel 50 ports that you require for outdialing have been changed.

NEXT:

Set the ARS Restriction to allow outdialing.

Select **System Programming**

Select **Extensions**

Select **ARS Restrict**

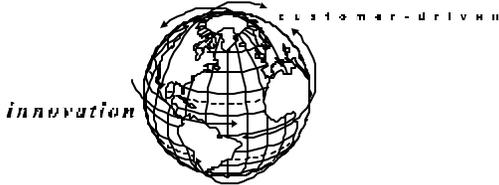
Enter the first Octel 50 port to be used for outdialing

Select **Enter**

The current ARS Restriction level will be displayed.

The restriction level should be a 3 or higher to allow for unrestricted outdialing.

All references to Octel 50 pertain to the entire family of products



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Octel 50 Configuration

To change restriction level:

Select **Backspace**

Enter **3** (from the dial pad)

Select **Enter**

Repeat until all the Octel 50 ports that you require for outdialing have been changed.

5.4 CONFIGURING THE SUBSCRIBER STATIONS

Set up a coverage group for extending call to Octel 50

Select **System Programming**

Select **Extensions**

Press More to display second page

Select **Group Cover**

Enter Group Number

Select **Enter**

Dial Extension Number

Select **Enter**

Repeat until all subscriber extensions have been added

Press exit twice

Select **System Programming**

Select **Options**

Press More to display second page

Select **Cover Delay**

Dial number of rings

Select **Enter**

Select **Exit**

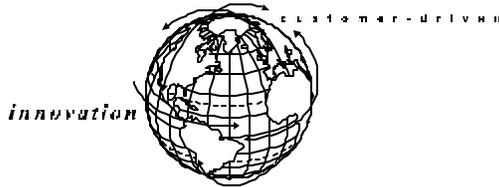
6.0 CONFIGURING OCTEL 50

During the install process, run the Integrator program and choose the Lucent Merlin Legend switch. The Integrator will place appropriate feature codes into the Octel 50 Setup. The integrator inserts the following codes with three digit extensions assumed. Adjust to match site requirements.

Outside Line Access Code	9,
Off Hook Delay (OFFHDLY)	25
Hook Flash Interval (FLINTVL)	50
DTMF Tone Length (TONELEN)	8

Transfer, Paging and Screening Parameters

Custom Transfer Code	&,XDR
Intercom Paging Code	&,C3799N See Section
Transfer Release Code when Busy	&,&



Transfer Release Code when No Answer	&,&
Call Screening Release Code when Busy	&,&
Call Screening Release Code when No Answer	&,&
Call Screening Release Code when Reject	&,&
Call Screening Release Code When Transfer	&,&
Release Code for Intercom Paging	&,&

Message Waiting Parameters

Permit Message Waiting Lights	Enabled
Message Waiting Light Prefix ON	#53
Message Waiting Light Prefix OFF	##*53

Inband Parameters

Total Number of DID Digits	15
DID Terminating Character	*
Seconds to Wait for DID	2
Location of Inband Signaling Code	1
Number of Milliseconds to Wait for Digits	500
Code for Go to Voice Mail	#03#
Start at End of String for Go to Voice Mail	Disabled
Location of Mailbox Number for Go to Voice Mail	5
Code for Immediate Subscriber Login to Mailbox	#00#
Start at End of String for Immediate Login	Disabled
Location of Mailbox Number for Immediate Login	5
Start at End of String for Default Code	Enabled
Location of Mailbox Number for Default Code	3

Note --Code for Go to Voice Mail - The Lucent Merlin Legend will send either a #02# or a #03# for a code to go to Voice Mail depending on whether a call is internal or external, Ring no Answer or Busy. For this reason we chose to use one of these codes (the #03#) as the Code to go to Voice Mail and use the Default code, in system setup, to send calls to Voice Mail when the other code (#02#) is received.

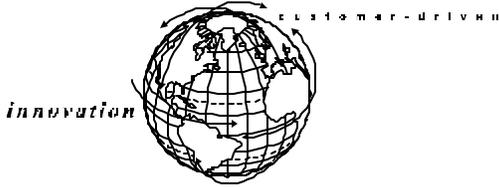
Note: Verify these dialing sequences for your PBX

7.0 CONSIDERATIONS/ALTERNATIVES

The following items should be considered, below:

- Transfers
- Disconnect Types
- Line/Pool Considerations
- Intercom Paging
- Calling Group Log Out
- Trunk to Trunk Transfers

Important notes concerning this
 integration



7.1 TRANSFER RELEASE

Internal calls transferred by Octel 50 do not follow a coverage path, they will forward to the console after the number of rings designated in the Transfer Release parameter. If this parameter is not set, internal transfers will ring no answer.

If the Octel 50 is programmed to execute a supervised transfer, Handsfree Announce must be disabled. If call forwarding is on at the station, ensure that it is for Ring/No Answer only, and that the ring timer is greater than the Maximum Rings for the mailbox.

7.2 DISCONNECT TYPES

The Lucent Merlin Legend does not provide consistent disconnect signaling. As a result, it may be necessary for the Voice Mail system to disconnect on silence. Caller prompting and subscriber training is recommended to encourage both callers and subscribers to exit the system completely when finished.

7.3 LINE/POOL CONSIDERATIONS

DID trunks/lines cannot be grouped in pools. Loop-start lines are automatically placed in pools; you must manually remove them if the line is to be used for paging loudspeakers, Music on Hold, or maintenance alarms.

A QCC cannot be a member of a Line/Pool.

7.4 INTERCOM PAGING

The Lucent Merlin Legend will support either Intercom paging, (over the telephone speakers), or External Paging, (over a loud speaker).

This integration is set up with the codes for Intercom Paging.

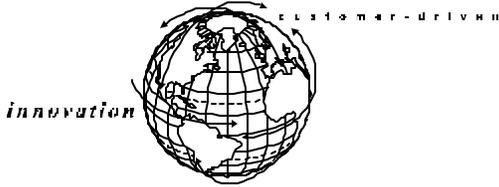
If you wish to use External Paging, you must edit the Intercom Paging code as follows:

&C5#98xxNR xx = the trunk number of the paging trunk port.

7.5 CALLING GROUP LOG OUT

If the Lucent Merlin Legend loses power, or the Voice Mail System is shut down for a period of time, the Voice Mail Calling group will log itself out and not direct calls to the Voice Mail. To expedite the re-login of the Calling Group you must dial each Octel 50 port individually and enter #44.

For example, if Octel 50 ports are numbered 320 through 323, then dial 320 from a station set followed by #44; repeat for 321, 322, and 323.



7.6 TRUNK TO TRUNK TRANSFERS

If your application calls for the Octel 50 to transfer an external caller to an outside telephone number, you must allow Trunk to Trunk transfers on the Octel 50 ports.

Select **System Programming**

Select **Extensions**

Press More to display the second page

Press More again to display the third page

Select **Trk Transfer**

Enter the Octel 50 port extension numbers.

Select **Enter**

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Brooktrout TR114 Series Universal Port™ registered trademark of Brooktrout Technology™ A
BROOKTROUT COMPANY

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