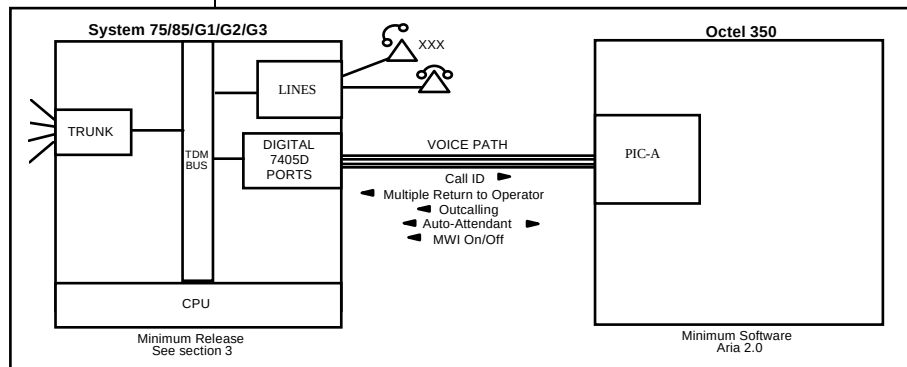


Avaya System75/85, Definity G1/G2/G3 and Prologix Digital Set Emulation



The PIC-A emulates digital 7405D
telephone sets

1.0 METHOD OF INTEGRATION

With digital set emulation integration, Virtual Telephone Interface Card's (PIC-A's) within the Octel system emulate the 7405D display sets of the PBX. When a call is sent to a hunt group consisting of PIC-A ports, the display is read and provides the call information to the Octel system. The call is then answered with the appropriate greeting. Message-waiting notification is set and canceled by PIC-A ports using the Leave-Word Calling functionality of the PBX.

2.0 OCTEL ORDERING INFORMATION

- PIC-A - Each card supports 12 ports
- Set Emulation Software feature (Feature Bit 33)
- RS232 Integrations feature (Feature bit 34)
- In-band Integrations feature (Feature Bit 35)
- Disk Drives

3.0 PBX HARDWARE REQUIREMENTS

- 4-Wire Digital channel, one per Octel port.

NOTE: Avaya OMD strongly recommends using the newer TN754B or TN754C circuit packs, as the earlier versions of TN754 circuit

PBX hardware requirements

packs may cause integration problems. On Avaya System 85 PBX's, do not use SN270 circuit packs, as those have been known to cause problems as well. SN270B circuit packs have been used successfully in installations. See Section 8.7 for more details

- 25-pair, right-angle, male-Amphenol cables, one per PIC-A

3.1 PBX SOFTWARE REQUIREMENTS

- Supported Software:

Avaya System 75 - R1V1 or Greater

Avaya System 85 - R2V1 or Greater

Avaya Definity G1, G2, G3I, G3r and Prologix:

- V1, V2, V3, V4, V5, V6, V7, V8

- For G3s and G3vs: Voicemail Application Software
- For Definity G3V4 - G3V6 software and Prologix: SA7608 Special Application package (also referred to as "Green Feature")

In cases where we are looking to support both a 7405ND and 7434ND on one G3, Release 9.5 is the minimal release but requires Load 129 of that release.

4.0 SUPPORTED FEATURES

- Call Coverage to personal greeting
 - All Calls
 - RNA
 - Busy
- Station forward to personal greeting
 - All Calls
- Message Waiting Indicator
 - audible (Optional PBX feature)
 - visual
- Direct Call
- Reply to message left by internal party in Telephone Answering
- Multiple Return-to-Operator
- Outcalling, Paging
- Networking
- Automated Attendant
- ANI
- Call Sender

Supported integration
features

- Multiple Personal Greetings
 - RNA
 - Busy

5.0 CONFIGURING THE PBX

Although detailed administration procedures are provided, a general overview of the administration requirements is given below. Refer to this list if you are installing a system on new or non-standard software releases.

Avaya 7405D Digital Telephone

- Two call appearances on the first buttons.
- A D401A display module must be administered, as the Octel ports emulate its functionality.
- The D401A must have the “Normal” feature assigned to display button one.
- Assign newly configured extensions to a UCD/ACD group.

Coverage Paths

- Create a coverage path which contains the Octel Hunt Group number as the coverage point.

Subscriber Setup

- Assign the newly created coverage path to each subscriber.
- Place the subscriber’s complete extension number somewhere in the first 15 characters of the name field.

AVAYA SYSTEM 75/G1 CONFIGURATION

The screens shown in this section are taken from an Avaya System 75 administration terminal. **Boldface** fields indicate where required information must be entered. Some parameters may not appear on all software releases. Below is an example of configuration of a 7405D channel used to support an Octel port.

- ☐ Configure one 7405D channel per Octel port in the same fashion as illustrated in Tables 1, 2, and 3:

STATION		Page 1 of 3
Extension: 2121		
Type: 7405D	Lock Messages? n	COR:1
Port: 01C0704	Security Code:	COS:1
Name: VOICEMAIL	Coverage Path:	
FEATURE OPTIONS		
LWC Reception: none		Coverage Msg Retrieval? n
LWC Activation? y		Data Restriction? y
Redirect Notification? n		Idle Appearance Preference? n
Bridged Call Alerting? n		Restrict Last Appearance? y
701A Data Module? n		F401A Feature Module? n
D401A Display Module? y		C401A Coverage Module? n
ABBREVIATED DIALING		
List1:	List2:	List3:
BUTTON ASSIGNMENTS		
1: call-appr	6:	
2: call-appr	7:	
3:	8:	
4:	9:	
5:	10:	

Table 1 - 7405D Telephone administration, Page 1of 3

After configuring Page 1, make sure all Feature Keys are left blank, as shown below:

STATION		Page 2 of 3
FEATURE BUTTON ASSIGNMENTS		
1:	13:	
2:	14:	
3:	15:	
4:	16:	
5:	17:	
6:	18:	
7:	19:	
8:	20:	
9:	21:	
10:	22:	
11:	23:	
12:	24:	

Table 2 - 7405 telephone administration, Page 2 of 3

After programming the Feature Button Assignments screen, configure the Display Button Assignments as shown in Table 3 below:

STATION	Page 3 of 3
DISPLAY BUTTON ASSIGNMENTS	
1:	normal
2:	
3:	
4:	
5:	
6:	
7:	

Table 3 - 7405 telephone administration, Pg. 3 of 3

- ☐ After configuring all necessary 7405D channels, create a Hunt Group (**Group Type: ucd; Queue: Y; Queue Length: 15**), and assign all the newly created 7405D extensions to it. The Group Extension will be the Octel System Access number. Assign a name to this group, making sure it does not contain any numeric characters. Octel recommends assigning the name "VOICEMAIL". If using dedicated ports for message waiting operation, do not include extensions assigned to those ports into the Hunt Group.
- ☐ Configure a Coverage Path. A coverage path forwards calls to another telephone if the individual does not answer or is busy. Placing Octel's Hunt Group number in the coverage path assures that all unanswered and busy calls are sent to voicemail.
- ☐ The final requirement for PBX administration is at the subscriber level. This consists of two parts: name field administration and the assignment of a coverage path. As stated before, **in order for a telephone set to be Integrated, the complete extension number must appear in the first 15 characters of the subscriber's name field**. The field can contain up to 15 characters; therefore, abbreviations may be necessary. For example:

Smith,J.507 or 507.J,Smith

After configuring the name field, make sure to assign the newly created coverage path to subscribers' stations.

- ☐ All users stations with message-waiting indicators must be programmed with:

LWC Reception: MSA SPE (AP SPE for R1V3)

Single line stations should have "Message Indication:" LED.

Configuring the Avaya Definity G3 and Prologix

AT&T DEFINITY G3 AND PROLOGIX CONFIGURATION

The screens shown in this section are taken from an Avaya Definity G3 administration terminal. **Boldface** fields indicate where required information must be entered. Some parameters may not appear on all software releases. Below is an example of configuration of a 7405D channel used to support an Octel port.

- ☐ Configure one 7405D (or 7405ND, if applicable) channel per Octel port in the same fashion as illustrated in Tables 4, 5, 6 and 7:

display station 52410		STATION		Page 1 of 5
Extension: 52410	BCC: 0	Lock Messages? n	TN: 1	
Type: 7405D		Security Code:	COR: 1	
Port: 01C0506		Coverage Path:	COS: 1	
Name: VOICEMAIL				
FEATURE OPTIONS				
LWC Reception: none		Auto Select Any Idle Appearance? n		
LWC Activation? y		Coverage Msg Retrieval? y		
CDR Privacy? n		Auto Answer: none		
Redirect Notification? y		Data Restriction? n		
Per Button Ring Control? n		Idle Appearance Preference? n		
Bridged Call Alerting? n				
Active Station Ringing: single		Restrict Last Appearance? y		
Data Module? n		Feature Module? n		
Display Module? y		Coverage Module? n		
AUDIX Name:				
Messaging Server Name:		Disp Client Redir? n		
Display Language: english		Select Last Used Appearance? n		
Message Lamp Ext: 52410				

Table 4 - 7405D (7405ND, if applicable) Telephone administration, Pg. 1 of 5

display station 52410		STATION		Page 2 of 5
SITE DATA				
Room:		Headset? n		
Jack:		Speaker? n		
Cable:		Mounting: d		
Floor:		Cord Length: 0		
Building:		Set Color:		
ABBREVIATED DIALING				
List1:	List2:	List3:		
BUTTON ASSIGNMENTS				
1: call-appr	6:			
2: call-appr	7:			
3:	8:			
4:	9:			
5:	10:			

Table 5 - 7405D (7405ND, if applicable) Telephone administration, Pg. 2 of 5

display station 52410		STATION		Page 3 of 5
FEATURE BUTTON ASSIGNMENTS				
1:	13:			
2:	14:			
3:	15:			
4:	16:			
5:	17:			
6:	18:			
7:	19:			
8:	20:			
9:	21:			
10:	22:			
11:	23:			
12:	24:			

Table 6 - 7405D (7405ND, if applicable) Telephone administration, Pg. 3 of 5

display station 52410	STATION	Page 4 of 5
DISPLAY BUTTON ASSIGNMENTS		
1:	normal	
2:		
3:		
4:		
5:		
6:		
7:		

Table 7 - 7405D (7405ND, if applicable) Telephone administration, Pg 4 of 5

- ☐ Make sure that the Class of Service (COS) assigned to the 7405D sets has feature “**Client Room**” set to “n”.
- ☐ After configuring all necessary 7405D channels, create an Hunt Group (**Group Type: ucd; Queue: Y; Queue Length: 15**), and assign all the newly created 7405D extensions to it. The Group Extension will be the Octel System Access number. If configuring this group as an ACD, you must set parameter "Auto Available Split" to "Yes", so that the ACD agents (the Octel ports) will automatically login to the ACD group without the need to manually log them in using the ACD Login Access Code. Assign a name to this group, making sure it does not contain any numeric characters. Octel recommends assigning the name “VOICEMAIL”. If using dedicated ports for message waiting operation, do not include extensions assigned to those ports into the Hunt Group.
- ☐ Configure a Coverage Path. A coverage path forwards calls to another telephone if the individual does not answer or is busy. Placing Octel’s Hunt Group number in the coverage path assures that all unanswered and busy calls are sent to voicemail.
- ☐ The final requirement for PBX administration is at the subscriber level. This consists of two parts: name field administration and the assignment of a coverage path. As stated before, **in order for a telephone set to be Integrated, the complete extension number must appear in the first 15 characters of the subscriber’s name field.** The field can contain up to 15 characters; therefore, abbreviations may be necessary. For example:

Smith,J.507 or 507.J,Smith

After configuring the name field, make sure to assign the newly created coverage path to subscribers’ stations.

NOTE: G3 Version 4 software introduced a new terminal type used for special applications, the 7405ND. If this terminal type is supported on your PBX (it is part of Special Applications package SA7608, also known as the “Green Feature”), by configuring the digital channels supporting the Octel ports as 7405ND ports, including extension numbers as part of the name field is not required. If your site is going to be implementing this, changes to the Set Emulation Call Table Setups must be made to

fully support all integration features. Contact Octel Technical Support to have those changes made to your system. Using the 7405ND terminal type for Octel 350's supporting VDN applications configured to "route" callers to mailboxes on the Octel Overture server will experience integration problems, unless the Vector programming associated with those VDN applications is configured with "messaging split" (or "messaging skill" if EAS is used) steps instead of "route to" steps. In order for the G3 to allow the use of "messaging split" or "messaging skill" steps, the Octel UCD/ACD group must be configured as "Message Center: msa". This field is located on page 2 of the Hunt Group Programming Form.

- ☐ All users stations with message-waiting indicators must be programmed with:

LWC Reception: MSA-SPE (SPE on G3r)

Single line stations should have "Message Indication:" LED.

AVAYA SYSTEM 85/G2 CONFIGURATION

Although the configuration of lines and ports on Avaya System 85/G2 PBX's resembles the Avaya System 75/G1/G3, it is achieved in a different manner. PIC-A's are used in exactly the same way on the System 85 as they are used on the System 75, although administration techniques differ.

- ☐ Configure one 7405D digital channel per Octel port as follows:

Create one extension number for each 7405D channel:

PROC 000 WORD 1

Field 1 - XXXX	Extension number of Port
Field 7 - XX	Class of Service

NOTE: Extension Class of Service assigned to these extensions must have "ACD Member", "Call Hold", "Leave Word Calling Originate", and "Conference Three Party/Transfer" enabled. Also, make sure "ACD Queue Display" is disabled, as it will interfere with integration.

Remaining Fields should remain untouched. Repeat for all extensions.

Next, configure the 7405D using the multiple appearance set procedure. This procedure should be repeated for each of the 7405D channels to be used with the Octel ports:

PROC 051 WORD 1

Field 1-5 - XXXXXX	Terminal Equipment Location of the Digital Port
Field 6 - 45	Type Code of 7405D telephone set
Field 7 - 5	Size Code of 7405D telephone
Field 8 - -	Unassigned

Configuring the Avaya System 85/G2

Field 9 - 1	Display
Field 10- 2	Originating Line is Prime
Field 11- 0	Terminating Line is None
Field 12- 0	Lock Not Available
Field 13- -	Unassigned
Field 14- 0	LWC Global Retrieval Not Allowed

Next, assign the extensions created for each 7405D channel to each of the two line appearances on the 7405D set using the multi appearance set line appearance procedure:

PROC 052 WORD 1

Field 1-5 - XXXXXX	Terminal Equipment Location of the Digital Port
Field 6 - 0	Device Type is Basic Unit
Field 7 - 03	Point to Member (Button 3)
Field 8 - XXXX	Extension Number assigned in PROC 000
Field 9 - 01	Point to Extension Appearance
Field 10- 1	Line Type is Prime Line
Field 11- 1	Enable Alert
Field 12- 1	Is Home Terminal
Field 13- 0	Not Originate-Only

In order to configure Button 4 (second line appearance), repeat this procedure for the same Terminal Equipment Location, except that Field 7 now is set to 04 (Button 4), Field 10 is set to 0 (No Prime Line), and Field 13 is set to 1 (Originate-Only) to restrict the last appearance for use with Leave Word Calling.

Repeat this procedure for each of the 7405D channels, making sure the appropriate extension number is programmed for values 03 and 04 (Button 3 and 4) in Field 7 each time.

Assign the "Normal Mode" feature to the first button of the digital display:

PROC 054 WORD 4

Field 1-5 - XXXXXX	Terminal Equipment Location of 7405 Digital Port
Field 6 - 3	Device Type (Display Module)
Field 7 - 01	Point to First Feature Button
Field 8 - 00	Normal Feature Button Code

Repeat this step for all 7405D channels.

The screens shown below are taken from an Avaya Definity G2 administration terminal. **Boldface** fields indicate where required information must be entered. Some parameters may not appear on all software releases. Below is an example of configuration of a 7405D channel used to support an Octel port.

```

ENHANCED MODE - PROCEDURE: 051, WORD: 1
MULTIAPPEARANCE TERMINAL AND DATA MODULE TRANSLATION

TERMINAL EQUIPMENT LOCATION
1. Module: 1
2. Cabinet: 0
3. Carrier: C
4. Slot: 3
5. Circuit: 6
12. Lock/Unlock Available: 0 No
13. Keyboard Dialing: - N/A
14. LWC Global Retrieval: 0 No
15. Terminal Alarming: - N/A
16. BRI TEI: ---
17. ISDN Advantage: 0 Disabled

TERMINAL OR DATA MODULE TYPE
6. Terminal Type: 45 7405D
7. Option: 5 Terminal, display

PHYSICAL TYPE
8. Data: - Not assigned
9. Display: 0 Integrated display

PREFERENCE
10. Origination: 2 Prime line
11. Termination: 0 None

```

Table 8 - 7405D administration on Avaya Definity G2 with System Management

```

ENHANCED MODE - PROCEDURE: 052, WORD: 1
MULTIAPPEARANCE TERMINAL/DATA MODULE - LINE APPEARANCE

TERMINAL EQUIPMENT LOCATION
1. Module: 1
2. Cabinet: 0
3. Carrier: C
4. Slot: 3
5. Circuit: 6
6. Device Type: 0 Basic set
7. Member (button): 1
EXTENSION APPEARANCE ID
8. Extension: ----
9. Line Appearance: --

10. Line Type: -
11. Ringing Type: -
12. Home Terminal: -
13. Originating Only: -
14. SAC Group: -

DISPLAY ONLY
15. Button Type: 6 Hold (054w3)

```

Table 9 - 7405D administration on Avaya Definity G2 with System Management

```

ENHANCED MODE - PROCEDURE: 052, WORD: 1
MULTIAPPEARANCE TERMINAL/DATA MODULE - LINE APPEARANCE

TERMINAL EQUIPMENT LOCATION
1. Module: 1
2. Cabinet: 0
3. Carrier: C
4. Slot: 3
5. Circuit: 6
6. Device Type: 0 Basic set
7. Member (button): 2
EXTENSION APPEARANCE ID
8. Extension: ----
9. Line Appearance: --

10. Line Type: -
11. Ringing Type: -
12. Home Terminal: -
13. Originating Only: -
14. SAC Group: -

DISPLAY ONLY
15. Button Type: 0 Unassigned

```

Table 10 - 7405D administration on Avaya Definity G2 with System Management

```

ENHANCED MODE - PROCEDURE: 052, WORD: 1
MULTIAPPEARANCE TERMINAL/DATA MODULE - LINE APPEARANCE

TERMINAL EQUIPMENT LOCATION
1. Module: 1
2. Cabinet: 0
3. Carrier: C
4. Slot: 3
5. Circuit: 6
6. Device Type: 0 Basic set
7. Member (button): 3
EXTENSION APPEARANCE ID
8. Extension: 40082
9. Line Appearance: 1

10. Line Type: 1 Prime line
11. Ringing Type: 1 Ringing
12. Home Terminal: 1 Yes
13. Originating Only: 0 No
14. SAC Group: 0 No

DISPLAY ONLY
15. Button Type: 1 Line appearance (052w1)

```

Table 11 - 7405D administration on Avaya Definity G2 with System Management

```

ENHANCED MODE - PROCEDURE: 052, WORD: 1
MULTIAPPEARANCE TERMINAL/DATA MODULE - LINE APPEARANCE

TERMINAL EQUIPMENT LOCATION          DEVICE ID
1. Module: 1                        6. Device Type: 0 Basic set
2. Cabinet: 0                      7. Member (button): 4
3. Carrier: C                      EXTENSION APPEARANCE ID
4. Slot: 3                        8. Extension: 40082
5. Circuit: 6                     9. Line Appearance: 2

10. Line Type: 0 No prime line
11. Ringing Type: 1 Ringing
12. Home Terminal: 1 Yes
13. Originating Only: 1 Yes
14. SAC Group: 0 No

DISPLAY ONLY
15. Button Type: 1 Line appearance (052w1)

```

Table 12 - 7405D administration on Avaya G2 with System Management

```

ENHANCED MODE - PROCEDURE: 054, WORD: 4
MULTIAPPEARANCE TERMINAL - DISPLAY BUTTONS

TERMINAL EQUIPMENT LOCATION
1. Module: 1
2. Cabinet: 0
3. Carrier: C
4. Slot: 3
5. Circuit: 6

DEVICE ID
6. Device Type: 3 Display module
7. Member (button): 1

8. Display Feature Button Type: 0 Normal

DISPLAY ONLY
9. Button Type: 21 Display features (054w4)

```

Table 13 - 7405D administration on Avaya G2 with System Management

- ☐ Create an ACD Group and assign all the 7405D channels as members of the ACD Group (called EUCD in some software releases). ACD programming varies between software releases. Please refer to the Avaya Administration Manual or your Avaya Service Technician for information on how to program it. When configuring the ACD group, make sure the "Auto Available" feature is set to "Yes", as this parameter, when enabled, will automatically login the ACD agents (Octel ports), without the need to manually log them in using the ACD Login Access Code. Assign a name to this group, making sure it does not contain any numeric characters. Octel recommends assigning the name "VOICEMAIL". If using dedicated ports for message waiting operation, do not include extensions assigned to those ports into the Hunt Group.
- ☐ Create Coverage Path to be assigned to subscribers' stations:

PROC 011 WORD 1

Field 1 - XXXX	Coverage Path Group Number
Field 2 - 0	Cover on Active - None
Field 3 - 3	Cover on Busy - All Types of Calls
Field 4 - 0	Do Not Cover All Calls
Field 5 - 3	Cover on Did not Answer - All Types of Calls

Field 6 - 3	Cover on Third Ring
Field 7 - 1	Coverage Point is an ACD Group
Field 8 - 1	Coverage Point Number
Field 9 - XXXX	ACD Group Number

- ☐ The final requirement for PBX administration is at the subscriber level. This consists of two parts: name field administration and the assignment of a coverage path. As stated before, **in order for a telephone set to be Integrated, the complete extension number must appear in the first 15 characters of the subscriber's name field.** The field can contain up to 15 characters; therefore, abbreviations may be necessary. For example:

Smith,J.507 or 507.J,Smith

After configuring the name field, make sure to assign the newly created coverage path to subscribers' stations.

6.0 CONFIGURING THE OCTEL 350

- ☐ Menu 0 - First Time Setup
 - AT&T System 85 Special Message Waiting: Y

NOTE: When using this feature, make sure that Menu 1.2 field "Time of Day to Refresh Message Waiting" is left blank. Also, do not use COS feature "AT&T Message Waiting" for mailboxes configured for "Message Waiting Allowed: Y".

- ☐ Menu 1.1 - System Parameters
 - Type of Switch connected to: F - PBX Integration Device / AT&T 85
 - Number of Digits in Extension used for Outcalling and ECP:
 - Number of Digits in Extension used for Message Waiting: 4 or 5
 - Sender ID Used for Telephone Answering Messages: 2 - Calling Party, If Known
- ☐ Menu 4.1 - Port Configuration
 - Extension/Phone No.: Extension number of digital channel
 - Line Type: 145

NOTE: Although it is not an absolute requirement, Octel recommends dedicating ports for MWI. If port(s) are not dedicated for MWI operation, Message Waiting Indication may be delayed. All other entries are customer application specific. If dedicating port(s) for MWI, set "M" column in Menu 4.1 to "Y", and all other tasks to "N". Station forward-all calls those extensions to the Octel hunt group pilot number. This step will prevent the MWI port from being accessed by subscribers using the Message Retrieval - Return Call feature.

Configuring the Octel 350

☐ Menu 6.1 - Transfer Dialing Sequences

- Flash On-hook Time: 500 milliseconds
- Pause Time: 500 milliseconds
- Dialing Sequence to Transfer a Call: FN
- Dialing Sequence to Reconnect with a Call -
Ring/No Answer: F
Busy: F

☐ Menu 6.2 - In-Band Integration

- Maximum Time Before First Digit Received: 0 ms
- Dialing Sequence to Activate MWI: XXN (XX= LWC-Activate feature access code as configured in PBX)
- Dialing Sequence to Deactivate MWI: XXN (XX= LWC-Cancel feature access code as configured in PBX)
- Retry Message Waiting on Failed Attempt: Y (*site/traffic specific*)
- Reset Message Waiting on System Boot: Y
- Number of Message Waiting Retry Attempts: 3 (*site/traffic specific*)
- Maximum Response Time For Message-Waiting Confirmation: 500 milliseconds
- Digit Sequence for Direct Calls: Leave Blank
- Digit Sequence for Forward - All Calls: Leave Blank
- Digit Sequence for Forward - RNA/Busy: Leave Blank
- Digit Sequence for Forward - RNA: Leave Blank
- Digit Sequence for Forward - Busy: Leave Blank

NOTE: These may vary from switch to switch, please verify the proper sequences for your installation.

☐ Menu 8/9.1 - Subscriber Mailbox Profile

- Subscriber's Extension: 4 or 5-digit extension number assigned to subscriber's telephone set.
- Message Waiting Allowed: Y only for mailboxes associated with subscribers' telephones that have "LWC reception" enabled. N for mailboxes not associated with subscribers' telephones.

7.0 HARDWARE INSTALLATION

7.1 CONNECTING THE DIGITAL CHANNELS

Each PIC-A supports 12 voice ports. The first port uses the first two pairs of the cable (pins 1, 26; 2, 27); the second port uses the next two pairs of the cable (pins 3, 28; 4, 29), etc. Make sure that cable pairs are not “rolled” when connected from MDF to the Octel system: i.e. Transmit-Tip and Transmit-Ring (TXT and TXR) are connected on the first pair assigned to the port, and Receive-Tip and Receive-Ring (RXT and RXR) are connected on the second pair for that port. Only the first 24 pairs are used. Also, make sure that when connecting voice ports from the PBX to the Octel 350, do not use unprotected outside wiring, as PIC-A’s do not use surge protection hardware.

- Physically connect the lines used for the voice path between the switch and the Octel 350. The voice lines are connected to the switch using customer-supplied male-amphenol cables which terminate on the main backplane on the Octel frames. See *Figures 5 and 6*.

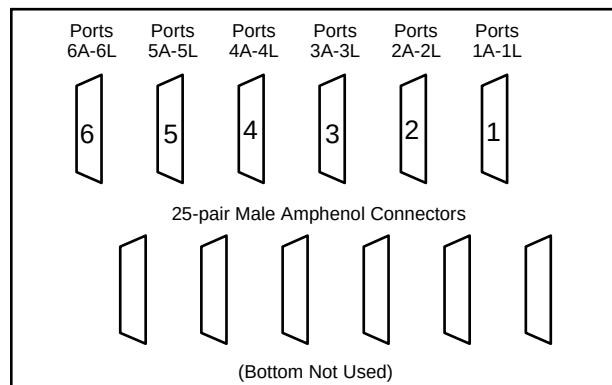


Figure 5. Octel 350 Main Backplane (rearview)
First Frame - PIC-A Connections

Connecting the 7405D channels

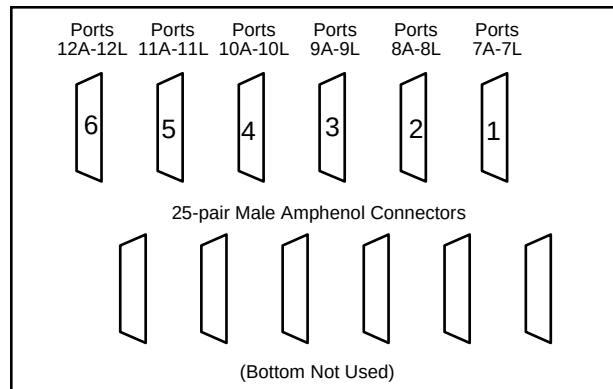


Figure 6. Octel 350 Main Backplane (rearview)
Second Frame - PIC-A Connections

Testing the installation

- ☐ Make sure that, in every line-card group, the first 8 ports of that group are physically connected to the PBX's ports, as any of those channels are used for line-card group synchronization.

7.2 TESTING THE INSTALLATION

- ☐ Create two mailboxes associated with two test extensions. Record a name and personal greeting for each mailbox.
- ☐ Make sure these extensions have been forwarded under busy and no-answer conditions to the Octel 350 pilot number.
- ☐ Using one test extension, call the other test extension. You should hear the personal greeting.
- ☐ Leave a message. Verify that the message waiting indicator turns on.
- ☐ Verify that return-to-operator works properly.
- ☐ Call the Octel 350 from a test extension. You should immediately hear the recorded name and be asked to enter your password.
- ☐ Review the message in the mailbox. Make sure the message waiting indicator turns off. Verify that you can automatically reply to internal telephone-answering messages.

8.0 CONSIDERATIONS

Important notes regarding this integration

- 8.1 Unsupervised transfers require busy-call coverage.** Calls that are blind transferred to stations that are busy and are not call covered will be lost.
- 8.2 Leave Word Calling (LWC) provides message notification.** If the LWC feature is being used by the Octel system *and* other sources (that is message center and station users), then users without display terminals must contact their designated message retriever to determine the source of their message-waiting light.

CAUTION: Users with display terminals must not delete any Octel messages on their display. This allows the Octel system to turn off the message-waiting light when voice messages are reviewed.

8.3 DCS is Avaya's PBX networking package. In a DCS environment, subscribers on the remote nodes may not have the same integration feature functionality as those on the hub node. In general, all integration features are supported. Call Coverage support on the remote nodes is dependent on the type of switch and software as follows:

- If they are on a G3 V2 or higher system, the Remote Call Coverage feature allows coverage to personal greeting for Busy and RNA conditions.
- If they are on a G2, they must call cover to a VDN that routes the call to the hub system. This allows coverage to personal greeting on Busy and RNA conditions. VDN software is an optional package on the G2. Without VDN S/W, they will be limited to station call forwarding All Calls only.
- If they are on a System 75 or G1 system, they are limited to station call forwarding All Calls only.

In all cases MWI is supported to the remote hubs over a DCS network.

Note:

G3i V1 7.0 with DCS is NOT SUPPORTED! The display field is shifted 2 characters on the G3i side. V1 also does not support call Coverage to a VDN.

8.4 Avaya OMD highly recommends that VPM voice ports be distributed among different port cards/shelves on the PBX. This reduces the possibility that a single card/shelf failure will affect a large number of VPM ports. Depending on PBX architecture, performance could also be an issue on some PBX's during high traffic if a large number of calls are being processed on the same card or shelf.

8.5 Avaya Definity G3s and G3vs PBX's require that the Voicemail Application software feature be enabled in order to support message waiting indication. Normally, these two "Low-End" switches can be ordered with two different software packages: Premium Business Package, and Advanced Business Package. The Premium Business Package includes Voicemail Application software; the Advanced Business Package is usually sold without this feature. Voicemail Application software is needed to support Leave Word Calling, as it is used for message waiting activation/deactivation.

- 8.6 Integrations with Avaya System 85 and Definity G2 PBX's will experience long delays in port disconnects.** Both the Avaya System 85 and the Definity G2 PBX's do not provide a positive disconnect signal as indication of calling party disconnect; therefore, Octel ports must rely on silence detection in order to recognize that the calling party has disconnected, resulting in long delays before going back on-hook. This problem can be resolved on System 85 PBX's with software release R2V4N3.2, by installing patch 207. It can also be resolved on Definity G2 PBX's with software release V6 5.0, by installing patch 22. The O350 must be at release 2.03 or newer software. **Whenever those patches are implemented, however, supervised transfers are not supported. Customers not wishing to upgrade PBX and/or O350 software may want to consider a different method of integration (VoiceBridge's) or installing additional ports in order to alleviate this issue.**
- 8.7 Avaya OMD strongly recommends using the TN754B or TN754C circuit packs, as field testing of TN754 circuit packs uncovered problems.** Furthermore, Avaya has recognized problems with TN754 Version 5 to Version 10, and if the use of TN754 circuit packs is an absolute requirement, the circuit pack(s) must be Vintage 11 or higher. It is also been discovered that SN270 circuit packs do not work properly with FLT-A's. Use SN270B circuit packs instead, as those cards have been successfully implemented.
- 8.8 Name fields descriptors of Trunk Groups require that at least one numerical value be entered, regardless of Avaya PBX model type.** Valid examples are: TIE 1, INWATS 2, 800 INWATS, etc. If the name field is left blank, the PBX will by default display the trunk number; this is also satisfactory.
- 8.9 Performing station/board tests may cause port lock-up.** Octel has discovered that if a station/board test is invoked for the DCP ports connected to the Octel system (from Avaya system consoles, test is invoked by entering: "test station XXXX" or "test board XXY"), it may cause port lock-up. This only happens if a call is presented to the port at the same time as the station test is performed. If ports are tested while in idle state, the test will not affect functionality.
- 8.10 Multi-appearance voice terminal** users on AVAYA System 75, Definity G1 and G3 can bridge onto calls that forwarded to the Octel system. A feature called "Temporary Bridged Appearance" allows multi-appearance voice terminal users to "bridge" onto (listen in on) a call that has "Call Covered" and been answered by another station. If the "covering" station is an Octel port, the calling party may inadvertently be "conferenced" by the called party and the Octel port. AVAYA technical documentation indicates this feature is disabled setting the Feature-Related System Parameter "Keep Held SBA at Coverage Point" to "N". Field-testing has shown that setting this

parameter to “N” has no effect on “Temporary Bridged Appearance” for AVAYA System 75, G1 or G3 PBX’s. To disallow “Temporary Bridged Appearance” (AVAYA G3V1 through V3) vectoring software is required. This is accomplished by configuring the Octel ports UCD/ACD group pilot number into a Vector as a “route to” step. You then assign the VDN (configured with “Allow VDN Override: n”) associated with this newly configured Vector as the call coverage point for all subscribers’ stations. For G3V4 and higher, Temporary Bridged Appearance is disabled by setting Feature-Related System Parameter “Prohibit Bridging onto Calls with Data Privacy” to “y”, and configuring the Class of Service assigned to the digital ports connected to the FLT-A’s with “Data Privacy” enabled; then simply enable “Data Restriction” on those same ports.

NOTE: When “Prohibit Bridging onto Call with Data Privacy” is used, the call appearance receiving the call will remain “active” (busy) for the duration of the entire call and cannot be used to receive or initiate calls during that time. This means that digital stations with only one call appearance (such as the 7401 sets) cannot place or receive calls until the party leaving the voicemail message hangs up. To remove the “active” appearance (G3V4 and higher, and Prologix), vectoring software must be implemented. Coverage for the station must go to a local vector pointing to the voice mail pilot number. Only then will the appearance be available for incoming/outgoing calls. The most basic and least expensive Vectoring software package, Automated Attendant Vectoring (PEC Code 1227-AAI or 1227-AAR, depending on switch type).

- 8.11 Supervised transfers to busy stations forwarding back to the Octel system are not supported.** Because of the way Avaya PBX’s handle forwarded calls, the Octel system cannot reliably detect Automated Attendant and return-to-operator transfers that immediately forward back to another Octel port. Octel strongly recommends configuring Automated Attendant and Return-to-Operator applications to perform “unsupervised” transfers. If the Octel system must perform supervised transfers, make sure that in Menu 1.1, field “Number of Rings for On-PBX Calls (Used for ECP)” is configured for less rings that it takes for a call to forward on a ring-no-answer condition. This will allow “supervised” transfers to work properly for stations forwarding under ring-no-answer conditions.
- 8.12 Avaya Definity G3 Digital line self-test can cause errors in the status log upon system reboot.** This self-test causes a momentary interruption on the digital link connecting PIC-A ports to the PBX. This causes the Octel Overture 250 to log “F9” errors in the status log. One error per PIC-A port is logged shortly after system reboot. This self-test feature can be disabled within the PBX; however, the

command to disable this test can only be accessed via “Maintenance” level password.

- 8.13 Subscribers’ station name field configuration may not contain numbers other than the actual subscriber’s extension.** If numbers other than the extension numbers appear within the name descriptors, such as “Comp. Rm1, 3000” or “3000, Conf Rm.2”, calls will not integrate. Furthermore, all internal stations accessing the Octel system (either as direct or forwarded calls) must not have more than one set of numbers within the first 15 characters of the name field, as this will cause loss of call integration. For Avaya G3 PBX’s only, an alternative to this requirement would be to implement the Special Application Package SA7608, which provides the 7405ND functionality. When configured as 7405ND telephone set types, Octel ports will always receive calling/called station extension numbers, not the name descriptor associated with the calling/called station. If your site is going to be implementing this, changes to the Set Emulation Call Table Setups must be made to fully support all integration features. Contact Octel Technical Support to have those changes made to your system. Refer to Section 5.0, page 7, for more information.
- 8.14 PIC-A and other types of TIC’s cannot be mixed within a line-card group.** Although it is possible to install mixed types of Telephone Interface Cards (TIC’s) on the same Octel 350, PIC-A’s cannot be installed within the same line-card group as other TIC’s.
- 8.15 Hybrid telephone sets (7300-series) do not generate DTMF tones when calling internal digital stations.** This prevents subscribers, calling from those telephone sets into PIC-A ports, from accessing their mailboxes. Hybrid telephone sets do generate DTMF tones when completing calls to analog stations and after connecting to outside trunks, however, making it possible for subscribers to access the Octel 350 if the system is equipped with ATIC ports or if subscribers place calls to outside trunks routing back into the Octel system pilot number.
- 8.16 Use of autodial and/or abbreviated dialing buttons to access the Octel 350 is not supported.** The PBX does not output DTMF tones that are part of autodial and/or abbreviated dialing digit strings to digital stations; therefore, using this method to dial into the Octel 350 and automatically input the password will not work.
- 8.17 MSA administration** is required for voice mail hunt groups that are accessed by a “messaging split” vector step. In particular, this functionality is required when a vector on an ECLIPS accesses an Octel Voice Mail system, a Magix centralized voice mail system, or any voice mail system that uses Mode Code integration to turn on Message Waiting lights. For MultiVantage (MV) software V1.1.2 (both the “r” server [formerly G3r] and S8000 series servers use this

software/term) a patch is available to restore the keyword 'msa' back to the Message Center field on the hunt group form. There is no patch for systems earlier MV software versions. MV Version 1.2 restores the 'msa' keyword without the need for a software patch.

CHANGE HISTORY		
Revision	Issue Date	Reason for Change
Version M	10/17/02	Add MSA admin. comment 8.17

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AVAYA

911 Murphy Ranch Road

Milpitas, CA 95035-7912

(408) 577-7000

<http://www.avaya.com>