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 Network Manager's Guide for MERLIN MAGIX Integrated System PBX Driver Release 2.0, © 2001 by Avaya, Inc.

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Overview

The four features that define hospitality applications on the DV2000 are 1) specialized guest mailboxes, Integration with Property Management Systems (PMS), 3) integration with the Magix through the CTI link, and hospitality specific reporting items.

Guest Mailboxes

The hospitality application on DV2000 is built around specialized mailboxes created especially for guest room functionality.

Specifically, there are two types of guest mailbox; Guest and Extended Stay. Following are some of the features inherent in these mailbox types.

	Guest	Extended Stay
Record mailbox greeting	No	Yes
Change m ailbox password	No	No
Save reviewed messages	Yes	Yes
Archive messages	No	No
Set wake-up calls	Yes	Yes

Two **model mailboxes** have been created for you: **993–Guest** and **994–Extended Stay**. When adding either type of mailbox, it is crucial that you copy these model mailboxes rather than create them from scratch yourself. Specific settings in call routing, scheduled events, and message notification control specialized mailbox functions in these mailboxes.



PMS Integration

DV2000 uses a serial interface to connect with most PMS systems. To set-up the integration, you must select the correct PMS system and configure the communication parameters to match those of the PMS system

1. To open the PMS integration status s creen - go to **Programs->DV2000Hospitality->PMS**.

💐 DuVoic	e PMS Integration			_ 🗆	×
<u>F</u> ile <u>E</u> dit	<u>⊻</u> iew <u>S</u> erial <u>A</u> ctions <u>H</u>	elp			
	🖻 💽 🖉 📰 🏢				
Date	Time	Dir	Packet	Log	
12/7/01	9:53:22 AM	ln	ICHKIN 110IT	Valid packet	
12/7/01	9:53:25 AM	In	ICHKIN 110IT	Checkin 110 succeeded	
12/7/01	9:53:25 AM	Out	I	ACK	
12/7/01	9:53:49 AM	In	ICHKOUT 1091	Valid packet	
12/7/01	9:53:49 AM	Qut	I	ACK	
12/7/01	9:53:50 AM	In	ICHKOUT 1091	Checkout 109 succeeded	
•			<u>\</u>		\mathbf{F}
			Connected	PMS 1 COM 3 9600 8N1	

2. Click on the Options button to access Options Screen.

, Options			×
General		Port Settings	
Working Directory C:\VMData\Reports\Hospita PMS Integration MSI	ity		
	conto 1 c		Capad

3. From the drop down menu, select the PMS system you wish to integrate with.

	, Options			×
1	G	ieneral	Port S	ettings
 4. In the Port Settings field set the appropriate Baud Rate Data Rate Data Bits Parity Stop Bits Buffer Size Handshaking Refer to your PMS manufacturer for details on the appropriate settings for your PMS system. 	COM Port Baud Rate Data Bits Parity Stop Bits	2 V 9600 V 8 V N V 1 V	Buffer Size (KB) 1	024 💌
		Apply	<u>0</u> K	Cancel



CTI Link

System Requirements

The following hardware and software components are required to support the DV2000 CTI link with the MERLIN MAGIX PBX:

- MERLIN MAGIX Integrated System, Release 1.0 or later.
- MERLIN MAGIX switch configured to Hybrid/PBX mode.
- An MLX port board installed in the switch (if it is an 008 MLX or 408 GS/LS-ID-MLX module with firmware version 29—or firmware version 42 with application version 24 then the board must be replaced with the appropriate version or updated via flash card update).
- The CTI Link uses one port on the MLX board; this port cannot be a potential operator port or console programming port. Valid ports are:
 - o On the 008 MLX and 408 GS/LS -ID MLX boards: ports 2-4 and 6-8.
 - o On the 016 MLX boards: ports 2-4, 6-8, 10-12 and 14-16.
- If the MLX port board for the CTI link is in slot 1 of the MERLIN MAGIX, you will need to use WinSPM to administer the CTI link.
- Wire installation must conform to the SYSTIMAX® Structured Connectivity Solutions (SCS) requirements:
 - If the DV2000 is connected remotely to the switch, use a discrete, 4-pair, CAT3 or higher level wire for the ISDN link from the switch to the DV2000. The connecting block must be installed within 7 feet of the DV2000. Use the provided (black) cable to connect the ISDN card in the DV2000 to the connecting block.
 - If the DV2000 is located near the switch, use the provided (black) cable to connect directly from the CTI port on the switch to the ISDN card in the DV2000.
- If the DV2000 is to be connected to a network, a static IP address must be assigned to the system's network card. You will need to provide this IP address to the Tserver software running on the DV2000, as discussed in the DV2000 Installation section, below.



Switch Configuration

Assuming the MERLIN MAGIX PBX meets the minimum requirements outlined in the previous section, use the following procedures to configure the CTI link for use with the DV2000:

- 1. Configure the MERLIN MAGIX into the **Hybrid/PBX** mode if you have not already done so.
- 2. Select an eligible MLX port to use as the CTI link port. In addition to the criteria listed in the previous section, you must make sure that no other device is plugged into the port while it is being administered.
- 3. Access System Maintenance and "busy out" the slot that contains the MLX board with the port to be used for the CTI link. The CTI link cannot be set up unless the slot is "busied out."

Note: If CTI link port is on the MLX board in slot 1, you will need to use WinSPM to administer the CTI link.

- 4. Access **System Programming**. Select **Auxiliary Equipment**, then select the **CTI Link** option. This option will allow you to add or delete CTI link ports. Enter the extension of the port you selected for the CTI link and then choose Enter.
 - 1. If any of the restrictions have not be met, the system will not allow you to proceed further.
 - 2. If the link is successfully added, go back to the CTI Link screen and choose the **INSPECT** option. The system will display a list of all CTI Link ports; if the list is correct, continue to the next step.
- 5. Access System Maintenance again and put the slot back into service. Check its status to make sure it is active.

The CTI Link port should now be active.

DV2000 Installation

After you have successfully configured the MERLIN MAGIX Integrated System to set up the CTI link port, and have installed any necessary wiring to facilitate connecting the DV2000 to the MERLIN MAGIX (for both voice mail ports and the CTI link port), review the following steps to ensure the CTI link is up and active on the DV2000 side.



Connecting to an Existing Network

The DV2000 CTI software requires that a *static IP address* be assigned to the network interface card (NIC) installed in the DV2000 system. This IP address comes preset by the manufacturer prior to shipping. If you change this address in order to connect and integrate the DV2000 with your in-house network, you must notify the Tserver software on the DV2000 of the new address using the following procedure:

- 1. Select Start->Programs->TSAPI Telephony Services->TSAPI Telephony Services Controller.
- 2. From the main screen, click on Advanced.

🕷 TSAPI Telephony Services Controller 📃 🗖 🗙
Status
Telephony Services State: RUNNING
Start <u>Stop</u> <u>R</u> efresh
Startup Automatically Start Telephony Services On Server <u>B</u> oot
Recovery
Ad <u>v</u> anced
Close

3. From the Advanced screen, click on Change IP Address.

SAPI Telephony Services Advanced	Functions	×
Current IP Address used by TSAPI Telephony Services:	192.168.11.99 Change IP <u>A</u> ddress	Telephony Server Logging Service
To uninstall TSAPI Telephony Services from the Service Manager press the Uninstall Services button	<u>Uninstall Services</u>	Stop



Connecting to an Existing Network (continued)

4. From the drop-down box, select the new IP address, then Click on OK. Click on OK again to return to the main screen, then exit the program.

Select a New IP Address	×
Select a new IP address	
▼ 192.168.11.98 OK Cancel	

- 5. You may also need to change the IP address in the TSLIB.INI file. To do this, select **Start->Programs>TS Win32 Client->Edit TSLIB.INI**.
- The TSLIB.INI file will open in Notepad. Under the [Telephony Servers] section, find a line similar to the one shown in the figure below. If the IP address shown does not match your new IP address, change it and then save the file. DO NOT CHANGE THE PART AFTER THE EQUAL SIGN. Exit Notepad.



You have now successfully changed the IP address. You may need to shutdown and restart the system (if you did not already do so when you changed the IP address of the NIC).



Verifying the Link Status

After you have connected the ISDN card to the CTI link port on the MERLIN MAGIX using the included black cable, you will want to confirm that the link is up and active. Use the following procedure to do this:

- 1. Select Start->Programs->MERLIN MAGIX Win32 Client->MERLIN MAGIX Driver Administration.
- 2. In the Known MMPD Tlinks dialog box, select the Tlink to administrate from the list box (it may already be selected) and click OK.

Known MMPD Tlinks	
Select an MMPD Tlink	
	<u>0</u> K
	<u>C</u> ancel

3. In the Login dialog box, enter "Administrator" as the user and leave the password blank. Press OK to continue.

Login to AVAYA#ML_OAM#OAM#MMTEST	×
Login: Administrator	
Password:	
<u>O</u> K <u>C</u> ancel	



4. From the main menu, select Maint|Tlink Status.

Link Status				×
	– Link 1 – – – – – – – – – – – – – – – – – –	– Link 2 — — — — — — — — — — — — — — — — — —	– Link 3 – – – – – – – – – – – – – – – – – –	– Link 4 – – – – – – – – – – – – – – – – – –
Link Tune:	ISDN			
Switch Name:	MAGIX	UNEQUIPPED	UNEQUIPPED	UNEQUIPPED
Switch Version:	2.1			
No. of Associations:				
CTI Link Message Rate:	0			
Link Status:	online			
Remote Host ID:				
Local Host ID:				
Local Port:				
Switch Gateway Version:				
Switch Connection:	active			
Layer 2 Link Status:	up			
Layer 4 Link Status:	up			
Link Type: Switch Name: Switch Version: No. of Associations: CTI Link Message Rate; Link Status: Remote Host ID: Local Host ID: Local Host ID: Switch Gateway Version: Switch Gateway Version: Layer 2 Link Status: Layer 4 Link Status:	Link 5 UNEQUIPPED	Link 6	Link 7	Link 8 UNEQUIPPED
	<u>B</u> efresh		<u>C</u> lose	

- 5. In the first box (link 1), verify that the:
 - Switch Connection is active
 - Layer 2 Link Status is up
 - Layer 4 Link Status is up
- 6. Select **Maint|Test** to test the link. If it fails, check the wiring and verify the CTI Link administration on the switch.

	_	Results:
ISDN	MAGIX - Link <u>1</u>	online
LAN	UNEQUIPPED - Link 2	
LAN	UNEQUIPPED - Link 3	
LAN	UNEQUIPPED - Link 4	
LAN	UNEQUIPPED - Link 5	
LAN	UNEQUIPPED - Link 6	
LAN	UNEQUIPPED - Link 7	
LAN	UNEQUIPPED - Link 8	



Updating the Security Database

Once the CTI link is up, the final step is to update the Tserver's security database (SDB). The SDB has already been configured prior to shipping. All you need to do is to add all room extensions to the SDB *after* adding them to the DV2000 system first.

Adding Room Mailboxes to the DV2000

- 1. Run Mailbox Administration (Start->Mailbox Administration) using password duvoice in the Enter Password dialog box.
- 2. To create new room mailboxes, use the Right-Click method as described in the DV2000 System Reference Guide. **Do not use the Mailbox**|Create method from the main menu.
 - To add normal guest mailboxes, copy from System Template mailbox 993.
 - To add extended stay guest mailboxes, copy from System Template mailbox 994.

Adding Room Extensions to the SDB

- 1. Select Start->Programs>Misc->BuildSDB.
- 2. When the main program window appears, select File|New.

🐂 Select Roor	ns to Add	×
Room List:	Add to SDB:	<u>Q</u> K <u>C</u> ancel

 In the Select Rooms to Add dialog, highlight all room mailboxes in the Room List listbox and click the > button to move them to the Add to SDB listbox. To select all mailboxes at once, click the >> button. When finished, click OK. The program will generate a text file in the main window.

🛋 BuildSDB		_ [١×
<u>F</u> ile <u>H</u> elp			
FLAT FILE TEMPLATE File Created: 11/21/01 10:26:19 File Name: flattmpl.txt Server Name: MMTEST SDB Software Type: Btrieve SDB Software Version: 9.1.04.0 Dictionary Version: 2.0.0.3			•
INFORM1,16,500,510, INFORM2,Tlink,Tlink Name,** Se	rvice Type **,		
INFORM1,32,600,601,601,601,601,601,601,601,601,601	01,601, pName,Tlink,Tlir	ık,Tlink,Tlink,Tlink,	
INFORM1,64,700,701,701,701,70	01,701,		-
Output file built.	12/6/01	3:39 PM	

- Select File|Save to save the text file. The program will display a message in the status bar when finished. Select File|Exit to close the program.
- 5. Select Start->Programs>TS Win32 Client->Telephony Services Admin.



6. In the Open Tserver dialog, click OK to connect to the selected Tserver (there should only be one option).

Open Tserve	er	×
<u>T</u> server:		
MMTEST	•	(OK)
		Cancel
		Help
<u>L</u> ogin:	DUVOICE	

- 7. Select Admin|Bulk Admin|Update SDB... to open the Update SDB dialog.
- 8. Click on the **Advanced** tab.

🌆 Update SDB - MMTEST	_ 🗆 ×
Basic Advanced	
Convert Simple File to Flat File	
Convert <u>F</u> lat File to SDB	
Flat File <u>N</u> ame: flatsdb.txt	
OK Cancel Apply	Help

- 9. Uncheck the Convert Simple File to Flat File option.
- 10. Click OK.
- 11. In the left pane of the main window, click on Devices. If the update worked, the right pane should now display a device entry for each room extension you selected in the BuildSDB program (step 3).



🔩 Telephony Services Administrator 32-bit - Mmtest						
<u>File Admin View Window H</u> elp						
	🛯 🛋 🖻 🖂 🖻	• * * * * *	N ?			
🏣 MMTEST Devices			_ 🗆 🗵			
SDB Users Worktops Devices Tlinks Tlink Groups Admin Access Groups	Device ID 딸 107 딸 108 딸 109 딸 110	Tlink Group Any Tlink Any Tlink Any Tlink Any Tlink	Device Ty PHONE PHONE PHONE PHONE			
	•		Þ			
, For Help, press F1						

12. Select File|Exit to close the program.

You should now be ready to test the PMS Integration. If the program is not already running, select **Start->Programs->Dv2000->PMS Integration** to launch it. You may also select **Start->Programs->Dv2000->Room Status Monitor** to launch the Room Status Monitor program, which will allow you to track the current status of all rooms in the system.



Hospitality Reporting

Two key reports for the Hospitality application are the Wake-up Call Report and the Room Status Report. Both of these reports are available at **Programs->DV2000Hospitality->Report Utility**.

🗊 DV2000 Wakeup Rej	oort Utility					ı ×
<u>F</u> ile <u>E</u> dit <u>W</u> indow <u>H</u> elp						
	4					
🗿 Global Report - [Uni	itled]					
Date/Time	Room	ID #	Call #	Result	Action	
12/05/2001 19:08	107	0001	4	RNA	reschedule per template	
12/05/2001 19:07	107	0001	3	RNA	reschedule per template	
12/05/2001 19:06	107	0001	2	RNA	reschedule per template	
12/05/2001 19:05	107	0001	1	RNA	reschedule per template	
12/05/2001 18:59	107	0001			scheduled: 12/05/2001 19:05	
11						
P						

Wakeup Report Utility

<u>File Edit View H</u> elp					
Room Status Pho	ne Class	Voice Msgs	Next Wakeup	Last Wakeup	
107 In On	Extended Stay	0		12/05/2001 1	9:08 [RNA]
108 Out Off	Guest	0			
109 Out Off	Guest	0			
110 In On	Guest	0			
111 Out Off	Guest	0			
112 Out Off	Guest	0			
113 Out Off	Guest	0			
114 Out Off	Guest	0			
115 Out Off	Guest	0			
116 Out Off	Guest	0			
117 Out Off	Guest	0			
118 Out Off	Guest	0			
119 Out Off	Guest	0			
120 Out Off	Guest	0			
121 Out Off	Guest	0			
122 Out Off	Guest	0			
123 Out Off	Guest	0			
124 Out Off	Guest	0			
125 Out Off	Guest	0			
126 Out Off	Guest	0			
127 Out Off	Guest	0			
128 Out Off	Guest	0			
129 Out Off	Guest	0			
130 Out Off	Guest	0			
131 Out Off	Guest	0			
132 Out Off	Guest	0			
133 Out Off	Guest	0			
134 Out Off	Guest	0			
135 Out Off	Guest	0			
136 Out Off	Guest	0			▼
•					•
Data will refresh every 1 min				12/7/01	9:47 AM

DuVoice Room Status Monitor