Technical Bulletin

Title	Nortel PMS pass-through
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DuVoice Versions	5.10 and above

Table of Contents

Audience

Who this document is for.

Overview

This Document is intended for nortel PBX programmers to allow them proper programing steps to setup the Nortel for DuVoice PMS pass-through where the DuVoice will receive data from the PMS and pass it through to the Nortel PMS port.

PMSI Host Cabling Connections

Because every individual hospitality site may have custom cabling requirements, the interface between the DV Server , PBX, and PMS is customer provided equipment. The inter-connection cables can be sourced from a variety of OEM vendors. The one constant will be the cabling connection for the DV Server.**NOTE:**Customers must supply their own PMS RS232 cables

DV Server PMSI Connections

The DV Server has two serial connection points: 1. DV Server to the PMS and 2. DV Server to the Meridian 2: Pre-Site Preparation Nortel Networks Hospitality Messaging Server 400 -*17*- Installation and Configuration Guide Depending on the placements and distance requirements, the customer must follow specifications relative to both the Meridian 1 and Property Management System for proper integration. This includes: protocol requirements, pin-outs, and distance limitations.

Note: The Meridian 1 and/or the PMS may require line drivers for distance over 50 feet, line drivers are

CPE equipment as well.

DV Server PMSI Cabling Specifications

The following tables provide the cabling requirements from the DV Server ports to the Hotel PMS port as well as the Meridian 1 PMS port. Note 1: PMSI cabling must follow the guidelines for specification covered in the Meridian 1 installation manual for shielding, distance limitations, and grounding requirements.

PBX Programming

Program PMSI Port

A PMS port is needed to allow the DuVoice server to communicate with the switch to do functions like check in, check out, and COS/COR change. To check the status of the TTY ports before programming PMS port:

>ld 37
.stat
TTY 0 ENL
TTY 1 ENL
TTY 2 ENL
TTY 8 DIS

disable the TTY port

First you must disable the TTY port , otherwise the PBX would not allow it to be set as PMS:

.dis tty 1 (example)

Program the PMSI port for Opt11C, follow these steps:

>ld 17
PT2000
MARP NOT ACTIVATED
REQ chg
TYPE adan
ADAN new tty 1
TTY_TYPE sdi
CAB 00
CARD 00
PORT 1
DES pms
BPS 2400
BITL 8
STOP 1
PARY NONE
FLOW NO
USER BGD PMS
CUST 00

Program PMSI port for Opt81C,

please follow the steps below:

>ld 17
REQ chg
TYPE adan
ADAN new tty 12 (example)

CTYP xsdi - this is a 4-port SDI Paddle Board. Baud Rate and Port Mode (DCE/DTE) are set on the board. Set it to DTE – this would require a straight cable only without a Null Modem.

GRP 0
DNUM 12
DES pms
FLOW No
USER bgd pms
CUST 0
XSM No
ADAN DATA SAVED
ADAN

Now enable the TTY port

>ld 37
.enl tty 1 (example)

confirm that the TTY port has been set as PMS:

.stat
TTY 0 ENL
TTY 1 ENL DES pms
TTY 2 ENL
TTY 8 DIS

Other Required Settings

This is to ensure that the correct PCML settings as well as PMS Type are used
Please follow the settings below:

>ld 22
REQ prt
TYPE parm
PARM
LPIB 96
HPIB 16
500B 16
NCR 500
MGCR NULL

CSQI 020
CSQO 020
TUBO NO
CFWS NO
PCML mu/a (depending on region: NA/CALA – mu; EMEA/APAC – a)
ALRM YES
ERRM ERR BUG AUD
DTRB 100
TMRK 128
FCDR OLD
PCDR NO
TPO NO
TSO NO
CLID NO
DUR5 NO
MLDN YES
MARP NO
FRPT NEFR
DCUS NULL
MSCL 255
PMSI
MANU PMS1
PMCR 20
PORT 1
XTMR 0
PTMR 1
NDIS 20
OCAC NO
MTRO MR
SBA_ADM_INS 001
SBA_USER 010
BCAP SPEECH
NORTEL_BRAND NO
CLNP YES

Configure the DV2000

To configure the DV2000 system, run the System Configuration program. Enter the password if prompted to do so; the default password is DuVoice. The Duvoice service must be stopped prior to changing any hospitality controls or pbx related items. please review the below stop start procedure

Using the DuVoice **Activity Monitor** program to stop and start the system, the program is located on the start button and will auto start on reboots of the DV Server. To begin click **Service** and Choose **Stop** then wait until the activity light on the bottom left corner turns from green to red. Then, to restart the system, click **Service** and **Start**. Once the status light on bottom left corner turns green, the system will be running and you can click OK to close the Server Control application.
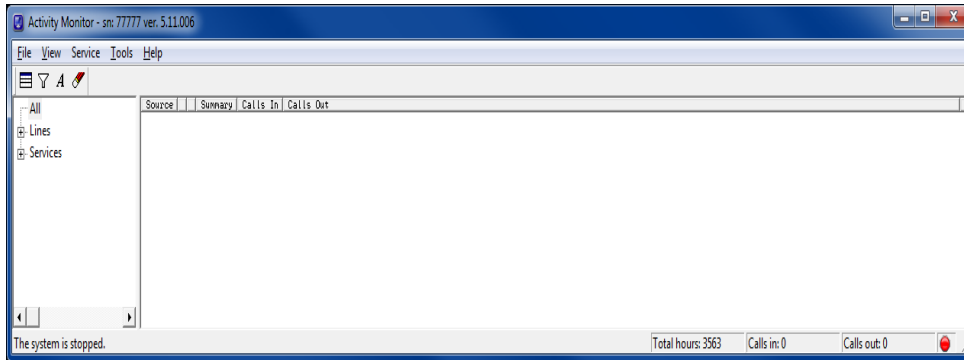
Configure the Nortel Port in DuVoice

To configure the port number used to connect with the Meridian, select Features Hospitality from the main menu, as shown in the figure below:
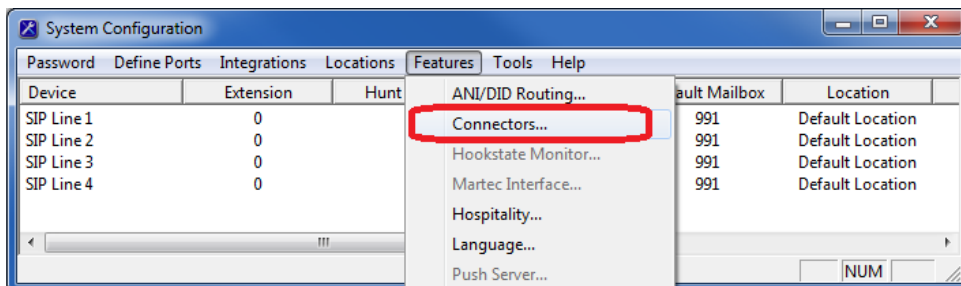
This will open the Connectors dialog, shown below. On the left pane, click on the PMS Pass-through option and set **Nortel** as your PBX and choose the connection type **Serial** as shown in the below picture
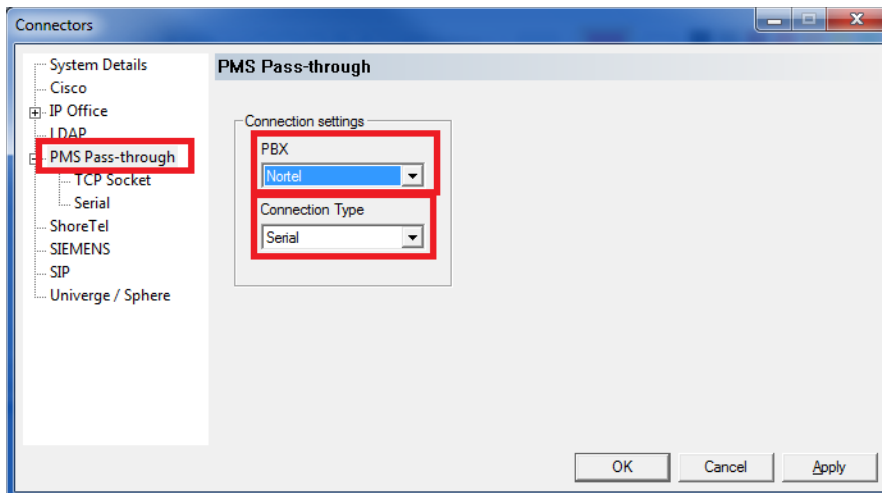
Next go to the serial setting under the PMS Pass-through once you have completed the above settings. the descriptions of the setting are listed after the below screenshot.
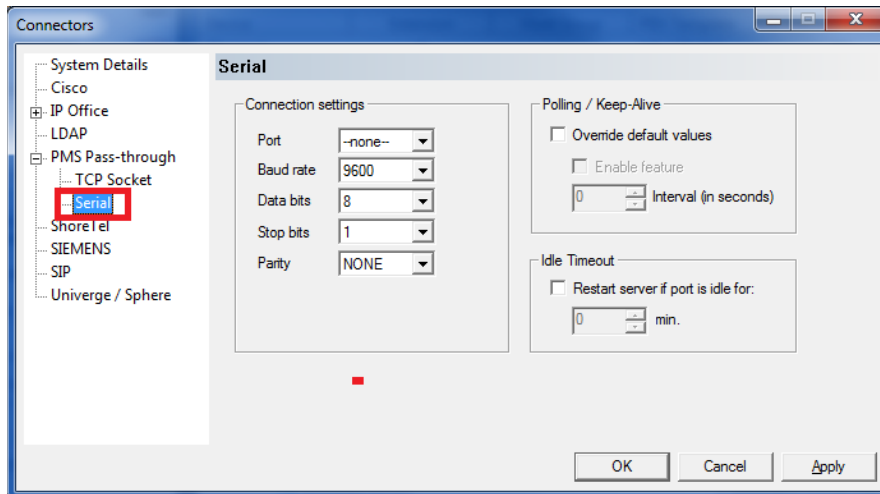
Connection Settings:These settings the define the serial port to use and how it should be configured.

- **Port:** Select the COM port to use. If set to *--none--*, the connection is effectively disabled. If the PMS connection to the DV2000/DV4 is also serial, make sure you select a different, valid COM port for this connection.
- **Baud rate:**Select the baud rate expected by the Mitel PBX. The default value is 9600 baud.
- **Data bits:**Select the number of data bits expected by the Mitel PBX. Valid values are 5, 6, 7, or 8. The default value is 8.
- **Stop bits:** Select the number of stop bits expected by the Mitel PBX. Valid values are 1 or 2. The default value is 1.
- **Parity:**Select the parity type expected by the Mitel PBX. Valid values are: None, Odd, Even, Mark or Space. The default value is None.
- **Polling / Keep Alive:** These settings define whether to override the default keep alive behavior. For the Mitel PBX type, the default behavior is to not send keep alive packets to the switch but to accept such packets *from* the PBX if they are sent.
- **Override default values:**To override the default keep alive values, check this box. To use the default values, uncheck the box.
- **Enable feature:**If you enable the override option, then use this check box to determine whether the DV2000/DV4 will send keep alive packets to the PBX. To enable polling, check the box; to disable it, uncheck the box.
- **Interval (in seconds):**Set the number of seconds that may pass with no communication activity before the DV2000/DV4 will send a keep alive (polling) packet to the PBX. The minimum value is 10 seconds (a value of 0 is shown when the feature is disabled).
- **Idle Timeout:**The idle timeout settings control whether the DV2000/DV4 will shutdown and restart the server application that communicates with the PBX if the link is idle for more than a set period of time, on the assumption that the link may have fallen into a bad state and needs to be re-established. This should only be enabled if either the PBX or the DV2000/DV4 are sending keep alive (polling) packets at regular intervals and can therefore know that there is a problem with the link.
- **Restart server if port is idle:**Check this box if you want the DV2000/DV4 to shutdown and restart the server that controls the connection to the PBX whenever the link is idle for more than the specified number of minutes. Do not enable this feature unless either the PBX or the DV2000/DV4 is sending keep alive packets.
- **Interval value:**Set the number of minutes the serial link can be idle before the system will assume there is a problem and shutdown and restart the server. The value is display as 0 if the feature is disabled.

Configure the Hospitality Phone Control Settings

To configure the hospitality phone control settings, select Features | Hospitality as shown in the figure below: In the Hospitality dialog, select the Phone Control option in the left pane, as shown in the figure

below:
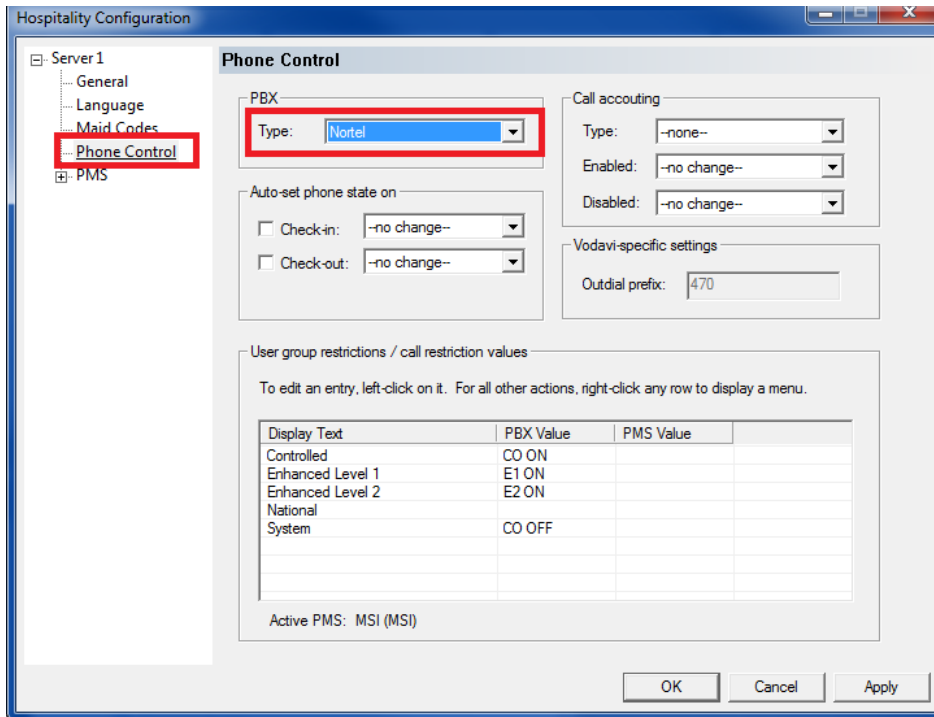
- **PBX Type:** Select **Nortel** as the PBX type, as shown in the figure above. Auto-set phone state on These options allow the DV2000 to automatically assign a phone class of service (COS) at check in and/or at check out. To enable the option, check the checkbox next to the option you wish to enable and then select the COS name from the drop-down box provided. Note that selecting "--no change--" is equivalent to removing the check from the check box.
- **note: You should not enable these settings if the DV2000 is connected to a PMS that will send phone control packets at check in and check out, since one will override the other and may result in the room phone being assigned an incorrect COS.**

The COS options displayed in the drop-down box are configured in the User group restrictions table discussed in the next section.

- **User group restrictions:** The user group restrictions table is used to map the supported PBX values to the supported PMS values and to provide a text description for each COS. That text is then used wherever a human-readable text description is required, such as in the other dropdown boxes on this dialog and also in the InnDesk web application.
- **Display Text:** Each class of service (or restriction level) you wish to support must have a name (that is, a descriptive word or short phrase) that can be used when displaying the COS in a human-readable format.
- **PMS Value:** The PMS value is typically a digit representing a COS (or call restriction level) as defined by the PMS protocol in use. These values will vary depending on the PMS you are using; consult your PMS documentation or vendor for more details.
- **Default Settings:** Where possible, the DV2000 will suggest a default mapping of PBX to PMS values whenever you change either the PMS or the PBX type.
- **Note: If you change the values and need to go back to the default settings,right-click on the table and select Reset to defaults.**
- **Saving Your Changes:** After you have configured the Connectors and Phone Control settings to

your satisfaction, save your settings by clicking the OK button. To make these settings take effect, you will need to stop and restart the main DV2000 service. You can do this by clicking on the Windows Start button and then selecting All Programs -> DuVoice ->Activity Monitor. This will launch the Activity Monitor

Verifying the Link

Once you have finished configuring both the Nortel and the DV2000 and both systems are up and running with the new configurations, you should first verify that the link has been established. There are several ways you can do this.

On the DV2000

To check if the DV2000 thinks the link is up and running, you need to run the Trace Display application and review the ACMSRVR (ACM server) log file. You can access that program by clicking on the Windows Start button and then selecting All Programs ->DuVoice -> Support -> TraceDisplay.

Select File | Open from the main menu, navigate to the C:\DuVoice\TraceLogs folder and select the log file ACMSRVR.LTT to view the most-recent log data. The figure below shows a typical ACMSRVR log file:
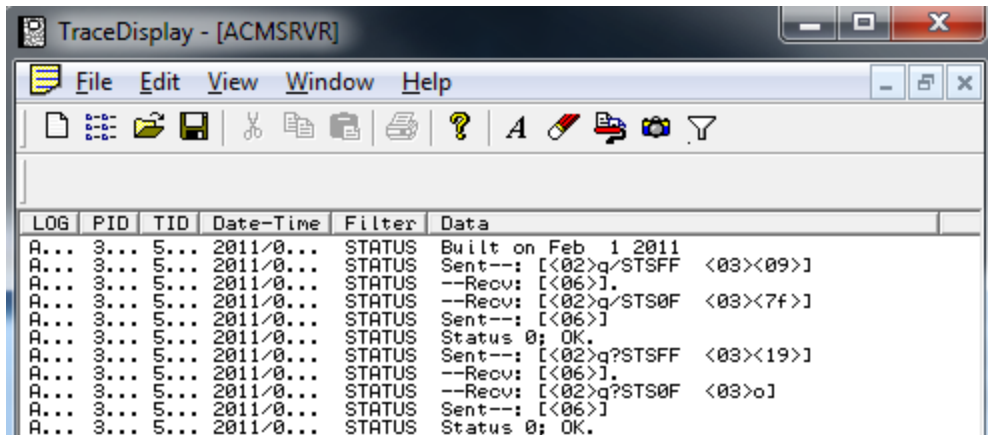
Testing the Protocol

Once the link is successfully established and communicating normally, you can run some tests on the various functions provided by the Nortel PMS protocol and supported by the DV2000.

Testing Check In and Check Out

To test check in and check out functionality, you can either use your PMS or InnDesk. One advantage to using InnDesk to perform the tests is then you are only testing the DV2000-Nortel link and not the PMS-DV2000 link as well.

Check In

To test a check in, open InnDesk and send a check-in for a valid room extension. Check in can include the guest name and language selection as well. verify that the Nortel processed the check in by using the nortel PBX management software or call the phone to see if the name changes on the display of the phone

you're using to call the room

Conclusion

- If the serial Cable is not correctly built and the cable is not pinned out no communications will be possible. this is over 80% of al problems when troubleshooting why it will not connect. here is a link to the Duvoice web manual section on serial cabling http://manual.duvoice.com/idh_dvm_pms_installation.htm

Contact DuVoice Technical support at 425-250-2393 or email support@DuVoice.com for more assistance.