## Alcatel-Lucent Application Partner Program Inter-Working Report

## Partner: Duvoice Application type: Hospitality Application name: PMS/ External Voicemail Alcatel-Lucent Enterprise Platform: OmniPCX Enterprise

## DuVoIce

The product and release listed have been tested with the Alcatel-Lucent Enterprise Communication Platform and the release specified hereinafter. The tests concern only the inter-working between the AAPP member's product and the Alcatel-Lucent Enterprise Communication Platform. The inter-working report is valid until the AAPP member's product issues a new major release of such product (incorporating new features or functionality), or until ALE International issues a new major release of such Alcatel-Lucent Enterprise product (incorporating new features or functionalities), whichever first occurs.

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## Certification overview

| Date of the certification | March 2016 |
| :--- | :--- |


| ALE International representative | Frank Gadot |
| :--- | :--- |
| AAPP member representative |  |


| Alcatel-Lucent Enterprise <br> Communication Platform | OmniPCX Enterprise |
| :--- | :--- |
| Alcatel-Lucent Enterprise <br> Communication Platform Release | R 11.2 L2.300.25c |
| AAPP member application version | Duvoice PMS 1.0 <br> Duvoice Voicemail server <br> 5.20 |
| Application Category | Hospitality dedicated software <br> Cooisissez un élément. |

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## Revision History

Edition 1: creation of the document - January 2016

## Test results

```
\Gamma Passed ■ Refused }\square\mathrm{ Postponed
V Passed with restrictions
```

Refer to the section 6 for a summary of the test results.

## IWR validity extension

None

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## 1 Introduction

This document is the result of the certification tests performed between the AAPP member's application and Alcatel-Lucent Enterprise's platform.

It certifies proper inter-working with the AAPP member's application.
Information contained in this document is believed to be accurate and reliable at the time of printing. However, due to ongoing product improvements and revisions, ALE International cannot guarantee accuracy of printed material after the date of certification nor can it accept responsibility for errors or omissions. Updates to this document can be viewed on:

- the Technical Support page of the Enterprise Business Portal (https://businessportal.alcatel-lucent.com) in the Application Partner Interworking Reports corner (restricted to Business Partners)
- the Application Partner portal (https://applicationpartner.alcatel-lucent.com) with free access.


## 2 Validity of the InterWorking Report

This InterWorking report specifies the products and releases which have been certified.
This inter-working report is valid unless specified until the AAPP member issues a new major release of such product (incorporating new features or functionalities), or until ALE International issues a new major release of such Alcatel-Lucent Enterprise product (incorporating new features or functionalities), whichever first occurs.

A new release is identified as following:

- a "Major Release" is any x. enumerated release. Example Product 1.0 is a major product release.
- a "Minor Release" is any x.y enumerated release. Example Product 1.1 is a minor product release

The validity of the InterWorking report can be extended to upper major releases, if for example the interface didn't evolve, or to other products of the same family range. Please refer to the "IWR validity extension" chapter at the beginning of the report.

Note: The InterWorking report becomes automatically obsolete when the mentioned product releases are end of life.

## 3 Limits of the Technical support

For certified AAPP applications, Technical support will be provided within the scope of the features which have been certified in the InterWorking report. The scope is defined by the InterWorking report via the tests cases which have been performed, the conditions and the perimeter of the testing and identified limitations. All those details are documented in the IWR. The Business Partner must verify an InterWorking Report (see above "Validity of the InterWorking Report) is valid and that the deployment follows all recommendations and prerequisites described in the InterWorking Report.

The certification does not verify the functional achievement of the AAPP member's application as well as it does not cover load capacity checks, race conditions and generally speaking any real customer's site conditions.

Any possible issue will require first to be addressed and analyzed by the AAPP member before being escalated to ALE International. Access to technical support by the Business Partner requires a valid ALE maintenance contract

For details on all cases (3 $3^{\text {rd }}$ party application certified or not, request outside the scope of this IWR, etc.), please refer to Appendix F "AAPP Escalation Process".

### 3.1 Case of additional Third party applications

In case at a customer site an additional third party application NOT provided by ALE International is included in the solution between the certified Alcatel-Lucent Enterprise and AAPP member products such as a Session Border Controller or a firewall for example, ALE International will consider that situation as to that where no IWR exists. ALE International will handle this situation accordingly (for more details, please refer to Appendix F "AAPP Escalation Process").

## 4 Application information

## Application commercial name: <br> Duvoice PMS / External Voicemail server

Application version:
Interface version (if relevant):
Interface type:
$1.0 / 5.20$

AHL (Alcatel Hotel Link) or TCP/IP / SIP for voicemail

Alcatel Hotel Link (AHL) is a proprietary protocol on V24 or TCP/IP and designed to interface hospitality applications (hotels, hospitals, cruise ships ...).

## Brief application description:

This application is defined as a "Front Office Computer" also called PMS (Property Management System)

| PMS |  |
| :--- | :--- |
| Room management | $\checkmark$ |
| Check-in/out | $\checkmark$ |
| Room status | $\checkmark$ |
| Wake-up | NA |
| Re-initialization request | $\checkmark$ |

## Features for hotel and hospitality applications

5 Digit extension is a requirement from partner application. They support only 5 digit extension.
OXE can be setup in ROOM MANAGEMENT and guest management mode with room \& guest manual mapping in OXE.

Check in (only from PMS) + Voicemail box opening.
Check out (only from PMS) + Voicemail box closing
Room modification (only from PMS)

- Name (only from PMS)
- Language (only from PMS)

Room status (only from PABX)

## Interacting with OmniPCX Enterprise :

The application interacts with the OmniPCX Enterprise via TCP/IP AHL interfaces to manage hotel guest phone, real time billing of guest telephone call charges, wake up to the hotel Front Office System.

## External Voicemail

| Voicemail |  |
| :--- | :--- |
| Voicemail access using <br> Trunk group | $\checkmark$ |
| Voicemail Use | $\checkmark$ |
| Message waiting <br> indication | $\checkmark$ |

## 5 Test environment

Figure 1 Test environment


### 5.1 Hardware configuration

One server for PMS application
One pc for Interface connection

- OmniPCX Entreprise:

| $\circ$ | CS (Call Server Processing Unit) |
| :--- | :--- |
| $\circ$ | GD (Gateway driver processing Unit |
| $\circ$ | PRA T2 (ISDN Access) |
| $\circ$ | MIX 2/4/4 (ISDN T0, digital \& analog interfaces) |
| $\circ$ | UA digital and analog sets |

- AHL interface:
- TCP/IP
- Voicemail interface
- SIP

| OXE for Room management |  |
| :--- | :--- |
| OXE 1 IP address | 10.9.224.238 |
| Domain name | Node1.proservtesting.com |
| Voicemail No | 8000 |
| Attendant No | 0 |
| OXE Extension Details used for test |  |
| Rooms extension | 10001 to 10004 |


| OXE for Guest management |  |
| :--- | :--- |
| OXE 1 IP address | 10.9 .224 .241 |
| Domain name | Node4.proservtesting.com |
| Voicemail No | 8000 |
| Attendant No | 0 |
| OXE Extension Details used for test |  |
| Room number | $11601,11602,11603$ |
| GPIN numbers | $11611,11612,11613$ |
| Room $\leftrightarrows$ GPIN extension Static |  |
| Links. | $11601 \leftrightarrows 11611$ |
|  | $11602 \leftrightarrows 11612$ |
| External Voicemail Server IP | $10001 \leftarrow \rightarrow 11613$ |

### 5.2 Software configuration

- Alcatel-Lucent Enterprise Communication Platform: OmniPCX Enterprise R11.2(L2.300.25c )
- Partner Application : Duvoice PMS 1.0

Duvoice Voicemail serve DV500 v5.2

Enterprise

## 6 Summary of test results

### 6.1 Summary of main functions supported

## PMS

| Features |  <br> tested | Comments |
| :--- | :--- | :--- |
| GUEST MANAGEMENT | OK | Static links between <br> guest and room <br> extensions was done <br> to support guest <br> management mode of <br> OXE. |
| ROOM MANAGEMENT | OK |  |
| ROOM STATUS | OK |  |
| MODIFICATION (Room or Guest) | OK |  |
| WAKE-UP events | NA | NOT IMPLEMENTED <br> BY PMS |
| CALL TICKETS (SMDR) | NA | NOT IMPLEMENTED <br> BY PMS |
| DATA TRANSFER | NOT IMPLEMENTED <br> BY PMS |  |
| VOICE MAIL attribution | NA | NOT IMPLEMENTED <br> BY PMS |
| VOICE MAIL events | NA | NOT IMPLEMENTED <br> BY PMS |
| REINITIALIZATION | OK | Only Full Reinitalization <br> s implemented |
| SPATIAL REDUNDANCY | NA | NOT IMPLEMENTED <br> BY PMS |

## Voicemail server

| Features |  <br> tested | Comments |
| :--- | :---: | :---: |
| SIP Option | OK |  |
| SIP Authentication / SIP Register | OK |  |
| SIP Voice Mail Use | OK |  |
| SIP Voice Mail Link failure | OK |  |

### 6.2 Summary of problems

- Voicemail is not cleared once the user is checked out from the room. This issue is because we tested both PMS and voicemail as separate entities. If both are combined entities this issue will not occur.


### 6.3 Summary of limitations PMS

- Partial Re-initialization is not supported by the application.


## Voicemail Server

- There is a delay of 5 seconds for the message LED to turn off after the message is consulted.


### 6.4 Notes, remarks

$\Rightarrow$ Re-Initialization happens when the application connects to OXE.
$\Rightarrow$ The PMS sends check-in only with room number.
$\Rightarrow$ Room status management is done with 4 digit maid code.
$\Rightarrow 5$ Digit extension type selected for hotel frame.
$\Rightarrow$ The external voicemail server extension is configured in the GPIN in the OXE.

### 6.4.1 Related to OXE configuration

$\Rightarrow$ Application works in room mode only. But to make it work with the guest management mode we statically created link between guest ID (GPIN) and room extension
$\Rightarrow$ Multi occupancy type is "Static per room". When you put STATIC PER ROOM, it simulates room management via AHL , but OXE stays in guest mode internally.

## 7 Test Result Template

The results are presented as indicated in the example below：

| Test Case Id | Test Case | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Test case 1 <br> －Action <br> －Expected result | $\square$ | 区 | $\square$ |  |
| 2 | Test case 2 <br> －Action <br> －Expected result | $\square$ | 区 | $\square$ | The application waits for PBX timer or phone set hangs up |
| 3 | Test case 3 <br> －Action <br> －Expected result | 区 | $\square$ | $\square$ | Relevant only if the CTI interface is a direct CSTA link |
| 4 | Test case 4 <br> －Action <br> －Expected result | $\square$ | $\square$ | 区 | No indication，no error message |
| $\cdots$ | ．．． | $\square$ | $\square$ | $\square$ |  |

Test Case Id：a feature testing may comprise multiple steps depending on its complexity．Each step has to be completed successfully in order to conform to the test．
Test Case：describes the test case with the detail of the main steps to be executed the and the expected result
N／A：when checked，means the test case is not applicable in the scope of the application OK：when checked，means the test case performs as expected
NOK：when checked，means the test case has failed．In that case，describe in the field＂Comment＂ the reason for the failure and the reference number of the issue either on ALE International side or on AAPP member side
Comment：to be filled in with any relevant comment．Mandatory in case a test has failed especially the reference number of the issue．

## 8 Test Results

## 8．1 TCP／IP connection and Keep－alive mechanism <br> （Mandatory）

| Test Case Id | Test Case | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CNX101 | PMS connects to PBX over TCP／IP <br> PMS send TCP packet containing ＠FFFF <br> ＞PBX send back ACK | $\square$ | 】 | $\square$ |  |
| CNX102 | PMS sends keep－alive to PBX <br> PMS sends frame \＄FFFF every 30 seconds <br> ＞PBX do not answer with Ack | $\square$ | 】 | $\square$ |  |
| CNX103 | PBX send keep－alive to PMS <br> ＞PBX sends frame \＄xxxx to PMS，with xxxx equal to node number，every 30 seconds <br> PMS do not answer with Ack | $\square$ | 】 | $\square$ |  |
| Result | Connection and Supervision of TCP／IP link． | $\square$ | 区 | $\square$ |  |

To check the correct connection and supervision of link，you have to trace it on the Pbx side using the following procedure：
－Modify the management of computer link
a．use mgr or 8770
b．go to Application／Hotel／down／computer link
c．for parameter＂LINF Parameter＂set the value＂－a＂（minus and a）
d．then on mtcl prompt＞enter the command＂traced＂．
－In tracing，you＇ll find the following＂sentences＂to show the connection from PMS and the keep－ alive from both sides：
＞Connection from PMS（acked by Pbx）
－＞MASTER ：read from EXT APP＂（STX）＠FFFF（ETX）＂／／Pbx read from computer ling the connection frame．
－＞MASTER write to node FFFFFFFF＂（ACK）＂／／Pbx write to computer link the Ack frame to send to PMS．
$>$ Keep－alive from Pbx to PMS（not to be acked）
－＞MASTER write to node FFFFFFFF＂（STX）\＄0002（ETX）＂／／Pbx write to computer link the frame for keep－alive，here this PBX is node 0002.
＞Keep－alive from PMS to PBX（not to be acked）
－＞MASTER ：read from EXT APP＂（STX）\＄FFFF（ETX）＂／／PBX read the keep－alive of PMS．

## 8．2 PMS $\rightarrow$ PBX－Check in with Room Extension

（mandatory in case of Room management）

| $\begin{gathered} \text { Test } \\ \text { Case } \\ \text { Id } \\ \hline \end{gathered}$ | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIR101 | Generate a check－in without PWD | Reply＝I with Room extension and PWD | $\square$ | 区 | $\square$ |  |
| CIR102 | Generate a check－in with PWD <br> （PWD sent by the PMS） |  | 囚 | $\square$ | $\square$ |  |
| CIR103 | Generate a check－in with an invalid Room Extension | Reply＝INV JG | $\square$ | 【 | $\square$ |  |
| CIR104 | Generate a check－in with an already checked－in Room extension | Reply＝INV JA | $\square$ | 区 | $\square$ |  |
| CIR105 | Generate a check－in with deposit | Reply＝1 | 凹 | $\square$ | $\square$ |  |
| CIR106 | Generate a check－in with V．I． P．status |  | $\square$ | 【 | $\square$ |  |
| CIR107 | Generate a check－in with language parameter |  | $\square$ | 区 | $\square$ |  |
| CIR108 | Generate a check－in with wake－up call time |  | $\boxtimes$ | $\square$ | $\square$ |  |
| CIR109 | Generate a check－in with Direct Output Restrictions |  | $\square$ | 【 | $\square$ |  |
| Result | CHECK－IN with ROOM EXTENSION |  | $\square$ | 区 | $\square$ |  |

## 8．3 PMS $\leftarrow$ PBX－Check－in with Room number with static Guest Management（with Static allocation on PBX）

（mandatory in case of Guest management）

| Test Case Id | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIC201 | Generate a check－in without PWD | $\begin{aligned} & \text { Reply= I } \\ & \text { with PWD } \end{aligned}$ | $\square$ | 区 | $\square$ | The password PWD is proposed by the PBX |
| CIC202 | Generate a check－in with PWD （PWD sent by the PMS） | Reply $=1$ | 囚 | $\square$ | $\square$ |  |
| CIC203 | Generate a check－in with an invalid room extension | Reply $=$ INV JG | $\square$ | 区 | $\square$ |  |
| CIC204 | Generate a check－in with Status PBX ：No DID Number available | Reply＝INV JG | 】 | $\square$ | $\square$ |  |
| CIC205 | Generate a check－in with deposit | Reply $=1$ | 区 | $\square$ | $\square$ |  |
| CIC206 | Generate a check－in with V．I．P． status | Reply $=1$ | $\square$ | 区 | $\square$ |  |
| CIC207 | Generate a check－in with language parameter | Reply $=1$ | $\square$ | 】 | $\square$ |  |
| CIC208 | Generate a check－in with wake－ up call time | Reply $=1$ | 凹 | $\square$ | $\square$ | Not supported by the PMS |
| CIC209 | Generate a check－in with Direct Output Restrictions（Class of service） | Reply $=1$ | $\square$ | 区 | $\square$ |  |
| CIC210 | Generate a check－in followed by an allocation with an invalid room extension | Reply $=$ BR | 囚 | $\square$ | $\square$ |  |
| CIC211 | Generate a check－in with voice mail attribution | Reply $=1$ | 囚 | $\square$ | $\square$ | Voicemail needs to be mapped to guest／room number statically． |
| Result | CHECK－IN WITH GUEST NUMBER |  | $\square$ | 区 | $\square$ |  |

## 8．4 PMS $\leftarrow$ PBX－ALLOCATION of room extension to a Guest

## （Mandatory in case of Guest management）

Since the allocation was done statically，we skipped this tests．The GPIN and the room number is mapped manually for making the PMS work in Guest management mode．

The static link is created

| $\begin{gathered} \text { Test } \\ \text { Case } \\ \text { Id } \\ \hline \end{gathered}$ | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALL101 | Allocation of a GUEST to an extension with room state $=$ room cleaned |  | 囚 | $\square$ | $\square$ |  |
| ALL102 | Allocation of a GUEST to an extension with room state＝ room to be cleaned for a new guest or the same guest <br> a）Execute（PBX initialisation）． <br> b）Refuse（PBX initialisation）． | a）execute with Reply＝INV AO b）Refuse with Reply＝INV BO | $\boxtimes$ | $\square$ | $\square$ |  |
| ALL103 | Allocation of a GUEST to an extension with a GUEST NUMBER out of range（it doesn＇t exist） | Reply＝INV BG | $\boxtimes$ | $\square$ | $\square$ |  |
| ALL104 | Allocation of a GUEST to an extension with a GUEST NUMBER not checked－in． | Reply＝INV BA | $\boxtimes$ | $\square$ | $\square$ |  |
| ALL105 | Allocation of a GUEST to an extension with overbooking：a） With overbooking authorization on PBX．B）With no overbooking authorization on PBX． | a）execute with Reply＝INV AO b）Refuse with Reply＝INV BU | 囚 | $\square$ | $\square$ |  |
| ALL106 | Allocation of a GUEST to an extension which is out of range（ ex：it doesn＇t exist）． | Reply＝INV BR | ® | $\square$ | $\square$ |  |
| ALL107 | Allocation of a GUEST from a ROOM EXTENSION to another ROOM EXTENSION with DID and NONDID Guest numbers affected to both ROOMS． |  | ® | $\square$ | $\square$ |  |
| ALL108 | Allocation of a GUEST to a dynamic suite extension）． |  | ® | $\square$ | $\square$ |  |
| ALL109 | Retire a GUEST of a ROOM EXTENSION |  | 『 | $\square$ | $\square$ |  |
| Result | ALLOCATION of room extension to Guest |  | ® | $\square$ | $\square$ |  |

Enterprise

## 8．5 PMS $\rightarrow$ PBX－Modification of Guest or Room configuration （mandatory in case of Guest management）

| Test Case Id | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MOC102 | Modification of GUEST with NEW PWD（only for Guest） |  | 区 | $\square$ | $\square$ |  |
| MOC103 | Modification of GUEST with an invalid GPIN（only for Guest） | Reply＝INV NG | 区 | $\square$ | $\square$ |  |
| MOC104 | Modification with an no checked－ in GPIN（only for Guest） | Reply＝INV NA | 区 | $\square$ | $\square$ |  |
| MOC107 | Generate a chek－in with GPIN and an unavailable PWD（only for Guest） | Reply＝INV NP | 区 | $\square$ | $\square$ |  |
| MOC108 | Modification with deposit |  | 区 | $\square$ | $\square$ |  |
| MOC109 | Modification of V．I．P．status |  | $\square$ | 】 | $\square$ |  |
| MOC110 | Modification of language parameter |  | $\square$ | 】 | $\square$ |  |
| MOC111 | Programmation on wake－up call time |  | 囚 | $\square$ | $\square$ | it sends the WU order to the PBX one hour before the WU time |
| MOC112 | Modification and delation wake－ up call time |  | 】 | $\square$ | $\square$ |  |
| MOC113 | Wake－up call not answered |  | 】 | $\square$ | $\square$ |  |
| MOC114 | Modification of Class of service |  | ® | $\square$ | $\square$ |  |
| MOC115 | Programation on wake－up call time from phone set |  | 】 | $\square$ | $\square$ |  |
| MOC116 | Modification of message waiting status <br> （Switch on the LED message） |  | 】 | $\square$ | $\square$ |  |
| MOC117 | Modification of the name |  | $\square$ | 】 | $\square$ |  |
| MOC118 | Modification in DND state |  | $\square$ | 区 | $\square$ |  |
| Result | MODIFICATION of GUEST／ROOM configuration |  | $\square$ | 】 | $\square$ |  |

## 8．6 PBX $\rightarrow$ PMS－Room status change

（optional）

| Test Case Id | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STAT101 | Room status message with maid identification code |  | $\square$ | 区 | $\square$ | OK |
| STAT102 | Room status message without maid identification code |  | $\square$ | 区 | $\square$ | Status $1 \& 2$ only are managed by the application （If different from 1：To be cleaned） |
| STAT103 | Room status message with different status managed by the PMS： <br> Ex：Maid arrives in the room， room has be cleaned for a new guest or the same guest etc．．．． |  | $\square$ | 区 | $\square$ |  |
| Result | ROOM STATUS change |  | $\square$ | 】 | $\square$ |  |

Note ：to perform a Room status change，enter the prefix followed by a digit between 0 and 9 and release the line．

## 8．7 PBX $\rightarrow$ PMS－Wake Up events （optional）

| Test Case Id | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WUP101 | Wake－up message with normal answer from PMS |  | 凹 | $\square$ | $\square$ |  |
| WUP102 | Wake－up message with no answer |  | 囚 | $\square$ | $\square$ |  |
| WUP103 | Wake－up message with busy line |  | 凹 | $\square$ | $\square$ |  |
| WUP104 | Wake－up message with out of order line |  | 区 | $\square$ | $\square$ |  |
| WUP105 | Wake－up message with cancellation |  | 囚 | $\square$ | $\square$ |  |
| WUP106 | Wake－up message generated by programming from a phone set |  | 囚 | $\square$ | $\square$ |  |
| WUP107 | Wake－up message generated by modification from a phone set |  | 区 | $\square$ | $\square$ |  |
| WUP108 | Wake－up cancellation generated by modification message from a phone set |  | 凹 | $\square$ | $\square$ |  |
| Result | WAKE－UP events |  | 凹 | $\square$ | $\square$ |  |

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## 8．8 PBX $\rightarrow$ PMS－Management of Call Tickets（Station Message Detail Recording） <br> （Mandatory）Extended call ticket（frame K）／Reduced ticket（frame J）

| $\begin{aligned} & \hline \text { Test } \\ & \text { Case } \end{aligned}$ | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CAT101 | SMDR message of a charged outgoing call with pulses and costs <br> Call done on room extension |  | 凹 | $\square$ | $\square$ | Pulses＝OK <br> Cost＝OK <br> Duration＝OK |
| CAT102 | SMDR message of a charged outgoing call with pulses or cost． Call done on booth extension． |  | 区 | $\square$ | $\square$ | $\begin{aligned} & \hline \text { Pulses = OK } \\ & \text { Cost = OK } \\ & \text { Duration = OK } \\ & \hline \end{aligned}$ |
| CAT104 | SMDR message of a transfered outgoing call from room to room with pulses |  | 凹 | $\square$ | $\square$ |  |
| CAT105 | SMDR message of a transfered outgoing call from an ADMIN extension to a GUEST with pulses or cost |  | 凹 | $\square$ | $\square$ |  |
| CAT106 | SMDR message of a non charged outgoing call（Call not answered） |  | 凹 | $\square$ | $\square$ |  |
| CAT107 | SMDR message of an incoming call |  | 区 | $\square$ | $\square$ |  |
| CAT108 | SMDR message of a transfered incoming call |  | 区 | $\square$ | $\square$ |  |
| CAT110 | Management SMDR messages for a Guest number |  | 区 | $\square$ | $\square$ |  |
| CAT110 | SMDR message of a transferred outgoing call from ROOM1 to ROOM2 which is forwarded on mail box |  | 凹 | $\square$ | $\square$ |  |
| Result | Management of CALL TICKETS： |  | 凹 | $\square$ | $\square$ |  |

## 8．9 PBX $\rightarrow$ PMS－Data Transfer Management（Mini－Bar）

 （optional）| Test Case Id | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DAT101 | Generates a DATA TRANSFER message by MiniBar prefix and with informations in data field． |  | 囚 | $\square$ | $\square$ | $\begin{aligned} & \hline \text { MAXI } 6 \text { DIGITS PER } \\ & \text { ITEM } \\ & 1 \text { ITEM PER MESSAGE } \end{aligned}$ |
| DAT102 | Generates DATA TRANSFER messages by MiniBar prefix with more than 20 characters in data field ．It＇s possible by generating a \＃character，that permits to send immediatly a first DATA TRANSFER message followed by an other one with the rest of the character |  | 区 | $\square$ | $\square$ |  |
| DAT103 | If more than one code is used，do the same tests for each code． |  | 囚 | $\square$ | $\square$ |  |
| Result | DATA TRANSFER Management |  | 囚 | $\square$ | $\square$ |  |

## 8．10 PMS $\rightarrow$ PBX－Interrogation management followed by PBX $\rightarrow$ PMS－Guest Telephone Account （optional）

| Test Case Id | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INT101 | Asks for the GUEST or ROOM EXTENSION telephone accounts． |  | 囚 | $\square$ | $\square$ |  |
| INT102 | Asks for the GUEST or ROOM EXTENSION telephone accounts with GUEST Number or ROOM EXTENSION out of range． | Reply＝INV RG | 囚 | $\square$ | $\square$ |  |
| INT103 | Asks for the GUEST or ROOM EXTENSION telephone accounts with GUEST Number or ROOM EXTENSION not checked－in． | Reply＝INV RA | 囚 | $\square$ | $\square$ |  |
| INT104 | Asks for the GUEST or ROOM EXTENSION telephone accounts． <br> Verify the management of Cost， Total Deposit and Guest balance． |  | 囚 | $\square$ | $\square$ |  |
| Result | INTERROGATION management followed by Guest Telephone Account． |  | 】 | $\square$ | $\square$ |  |

## 8．11 PMS $\rightarrow$ PBX－Voice mail attribution（F records）

（optional）Type of Omni Message：A4645

## Duvoice uses its own application

| Test Case Id | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VAT101 | Open a GUEST voice mail box |  | 区 | $\square$ | $\square$ |  |
| VAT102 | Open a ROOM extension voice mail box |  | 区 | $\square$ | $\square$ |  |
| VAT103 | Open a voice mail box on GUEST number out of range | Reply＝INV WG | 区 | $\square$ | $\square$ |  |
| VAT104 | Open a voice mail box on ROOM extension out of range | Reply＝INV WG | 区 | $\square$ | $\square$ |  |
| VAT105 | Open a voice mail box on GUEST number non checked－in | Reply＝INV WA | இ | $\square$ | $\square$ |  |
| VAT106 | Open a voice mail box on ROOM extension not checked in | Reply＝INV WA | 区 | $\square$ | $\square$ |  |
| VAT107 | Open a voice mail box on GUEST number with no more mail box available on PBX （this test is performed after the mail box is full） | Reply＝INV WX | 区 | $\square$ | $\square$ |  |
| VAT108 | Open a voice mail box on ROOM EXTENSION with no more mail box available on PBX （this test is performed after the mail box is full） | Reply＝INV WX | 囚 | $\square$ | $\square$ |  |
| VAT109 | Open a voice mail box on GUEST with voice mail out of range or not linked on PBX （This test is performed by removing the directory voice mail number from hotel management） | Reply＝INV WV | 区 | $\square$ | $\square$ |  |
| VAT 110 | Open a voice mail box on ROOM EXTENSION with voice mail out of range or not linked on PBX （This test is performed by removing the directory voice mail number from hotel management） | Reply＝INV WV | 区 | $\square$ | $\square$ |  |
| VAT 111 | Open a voice mail box on GUEST number which already owns a mail box | Reply＝INV WZ | 区 | $\square$ | $\square$ |  |
| VAT 112 | Open a voice mail box on ROOM extension which already owns a mail box | Reply＝INV WZ | 区 | $\square$ | $\square$ |  |
| VAT 113 | Open a voice mail box on GUEST number by generating a false code in action field． | Reply＝INV WJ | 区 | $\square$ | $\square$ |  |
| VAT 114 | Open a voice mail box on ROOM EXTENSION by generating a false code in action field． | Reply＝INV WJ | 区 | $\square$ | $\square$ |  |
| VAT 115 | Open a voice mail box on GUEST number by generating a false code identification in the message | Reply＝INV WK | 区 | $\square$ | $\square$ |  |

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| VAT 116 | Open a voice mail box on ROOM EXTENSION by generating a false code identification in the message | Reply＝INV WK | 区 | $\square$ | $\square$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VAT 117 | Close a GUEST voice mail box |  | 区 | $\square$ | $\square$ |  |
| VAT118 | Close a ROOM extension voice mail box |  | 囚 | $\square$ | $\square$ | Only during the CO |
| VAT119 | Close a GUEST voice mail box which is working at this moment | Reply＝INV WW | 区 | $\square$ | $\square$ |  |
| VAT120 | Close a ROOM extension voice mail box which is working at the moment | Reply＝INV WW | 区 | $\square$ | $\square$ |  |
| VAT121 | Close a GUEST voice mail box which has not consulted messages | Reply＝INV WM | 区 | $\square$ | $\square$ |  |
| VAT122 | Close a ROOM extension voice mail box which has not consulted messages | Reply＝WM <br> （The PBX must always Execute（Check－out if voice mail＝True ） because the PMS does not take account the Reply record） | 区 | $\square$ | $\square$ |  |
| Result | VOICE MAIL Attribution |  | 凹 | $\square$ | $\square$ |  |

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## 8．12 PBX $\rightarrow$ PMS Voice mail events

（optional）Type of Omni Message ：A4645

| Test Case Id | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VEV101 | Voice mail event after box is becoming empty． |  | 区 | $\square$ | $\square$ |  |
| VEV102 | Voice mail event after a message has been deposited in an empty mail box． |  | 区 | $\square$ | $\square$ |  |
| VEV103 | Voice mail event after a message has been deposited in an non empty mail box． |  | 区 | $\square$ | $\square$ |  |
| VEV104 | Voice mail event after a message deposit generates an overflow state．． |  | 区 | $\square$ | $\square$ |  |
| VEV105 | Voice mail event on a non allocated GUEST Number after a message has been deposited in an empty mail box．． |  | 区 | $\square$ | $\square$ |  |
| VEV106 | Voice mail event on a non allocated GUEST Number after a message has been deposited in an non empty mail box．． |  | 区 | $\square$ | $\square$ |  |
| VEV107 | Voice mail event on a non allocated GUEST： <br> －Allocate the GUEST． <br> －Listen messages and remove them． |  | 凹 | $\square$ | $\square$ |  |
| VEV108 | Listen messages on a non empty mail box after checking out the Room extension |  | 凹 | $\square$ | $\square$ |  |
| VEV109 | Check－in a guest or room extension which mail box isn＇t empty． |  | 区 | $\square$ | $\square$ |  |
| Result | VOICE MAIL events |  | 区 | $\square$ | $\square$ |  |

## 8．13 PMS $\rightarrow$ PBX－DYNAMIC SUITES

（optional，relevant only in case of Guest management）

| $\begin{gathered} \text { Test } \\ \text { Case } \\ \text { Id } \\ \hline \end{gathered}$ | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUl101 | Create a suite with managing extension and moved slave extension |  | 囚 | $\square$ | $\square$ |  |
| SUl102 | Create a suite with managing extension and moved first level suite extension |  | 凹 | $\square$ | $\square$ |  |
| SUl103 | Create a suite with an out of range managing extension and moved slave extension | Reply INV SG | 囚 | $\square$ | $\square$ |  |
| SUl104 | Create a suite with a managing extension and a moved slave extension out of range | Reply INV SR | 囚 | $\square$ | $\square$ |  |
| SUl105 | Create a suite with managing extension already in a suite | Reply INV SU | 凹 | $\square$ | $\square$ |  |
| SUl106 | Allocate GUEST number to a suite |  | 囚 | $\square$ | $\square$ |  |
| SUl107 | Substract a slaved extension from the suite |  | 囚 | $\square$ | $\square$ |  |
| SUl108 | Substract a slaved extension which doesn＇t belong to the suite from the suite | Reply INV SU | 凹 | $\square$ | $\square$ |  |
| SUl109 | Allocate a guest to a slave extension | Reply INV SU | ® | $\square$ | $\square$ |  |
| Result | DYNAMIC SUITES |  | 凹 | $\square$ | $\square$ |  |

## 8．14 PMS $\rightarrow$ PBX－Check－out with Guest Management

（mandatory in case of Guest management）
Du Voice PMS always manges only with room number．Even for guest management we used static allocation and used only room number for checkin．So we are skipping this part．

| Test Case Id | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COC101 | Check－out of a guest Number |  | 区 | $\square$ | $\square$ |  |
| COC102 | Check－out of a guest which room line is busy ． <br> PBX configuration：execute the command． | Reply $=$ OL | 】 | $\square$ | $\square$ |  |
| COC103 | Check－out of a guest which room line is busy． <br> PBX configuration：refuse the command． | Reply $=$ PL | 】 | $\square$ | $\square$ |  |
| COC104 | Check－out of a guest with not consulted messages in the associated voice mail box ． PBX configuration：execute the command． | Reply $=$ OM | 】 | $\square$ | $\square$ |  |
| COC105 | Check－out of a guest with not consulted messages in the associated voice mail box ． PBX configuration：refuse the command． | Reply $=$ PM | 区 | $\square$ | $\square$ |  |
| COC106 | Check Out of an invalid guest Number | Reply $=$ PG | இ | $\square$ | $\square$ |  |
| COC107 | Check－out of a Not checked in guest Number | Reply $=$ PA | 区 | $\square$ | $\square$ |  |
| COC108 | Check out with no guest in room | Reply＝PU | 】 | $\square$ | $\square$ |  |
| COC109 | Verify metering bills by checking out a guest number |  | 】 | $\square$ | $\square$ |  |
| COC110 | Verify metering bills by checking out a guest number which was transferred from one room to another room and called from each of them． |  | ® | $\square$ | $\square$ |  |
| COC111 | Verify metering bills by checking out a guest number which called from a booth extension |  | ® | $\square$ | $\square$ |  |
| COC112 | Check Out of a GUEST which is not allocated to a ROOM． |  | ® | $\square$ | $\square$ |  |
| Result | CHECK－OUT OF GUEST NUMBER |  | 】 | $\square$ | $\square$ |  |

### 8.15 PMS $\rightarrow$ PBX - Check out with Room/Guest Management

(mandatory in case of Room management)
Even for guest management Duvoice PMS manages only with room numbers, so we performed the same tests in both OXE room and guest management.

| Test <br> Case <br> Id | Test Case | REPLY message <br> expected from PBX | N/A | OK | NOK |
| :--- | :--- | :--- | :--- | :--- | :--- | Comment

## 8．16 PMS $\rightarrow$ PBX－Night Audit Request

（optional）

| Test <br> Case <br> Id | Test Case | REPLY message <br> expected from PBX | N／A | OK | NOK |
| :--- | :---: | :---: | :---: | :---: | :---: | Comment

8．17 PMS $\rightarrow$ PBX－Reinit Request／／PBX－－＞PMS－Re－init Database
（Recommended）

| Test Case Id | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REI101 | Generate a re－init request for a Guest or a Room extension －Full guest re－init |  | 囚 | $\square$ | $\square$ |  |
| REI102 | Generate a re－init request for a Guest or a Room extension <br> －Partial guest re－init |  | ® | $\square$ | $\square$ |  |
| REI103 | Generate a re－init request for a Guest or a Room extension out of range | Reply $=$ INV TG | ® | $\square$ | $\square$ |  |
| REI104 | Generate a re－init request for a Guest or a Room extension not checked in | Reply $=$ T | 】 | $\square$ | $\square$ |  |
| REI105 | Generate a re－init request for every GUESTS or ROOM extensions checked－in．．：－Full guest re－init． |  | $\square$ | 区 | $\square$ |  |
| REI106 | Generate a re－init request for every GUESTS or ROOM extensions checked－in．．： <br> －Partial guest re－init． |  | 区 | $\square$ | $\square$ |  |
| Result | RE－INIT REQUEST |  | $\square$ | 区 | $\square$ |  |

Note ：the strings send back are the same for a Full guest or a Partial guest re－init．

### 8.18 Spatial Redundancy Com Server

(Optional)

| Test <br> Case <br> Id | Test Case | REPLY message <br> expected from PBX | N/A | OK |
| :--- | :--- | :--- | :--- | :--- |
| SRC101 | Check that management is <br> correct for Spatial <br> Redundancy Com Server <br> configuration. Update should <br> be done on Main and Stand- <br> By Com Server. |  |  | Comment |
|  | Running on MAIN 1 Com <br> Server, switch over to second <br> one by using command <br> "bascul" and check that PMS <br> and PBX still communicate <br> over AHL Link. | $\boxed{y y y y y}$ |  |  |

## 8．19 Disruption of AHL Link

## （Mandatory）

| $\begin{gathered} \text { Test } \\ \text { Case } \\ \text { ld } \\ \hline \end{gathered}$ | Test Case | REPLY message expected from PBX | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DIS101 | Cut the link between PMS interface and the PBX： Generate some events like wake－up and call－tickets on PBX side． <br> Establish the link and verify that the events are taken into consideration on PMS side |  | 囚 | $\square$ | $\square$ | Both Wake up and call tickets are not supported． |
| DIS102 | Cut the link between PMS interface and the PBX： Generate some events like check－in，allocations on PMS side． <br> Establish the link and verify that the events are sent to the PBX． |  | $\square$ | 区 | $\square$ |  |
| DIS103 | Cut the link between PMS interface and the PBX： Generate some events like wake－up and call－tickets on PBX side until the buffer is full． <br> Establish the link and verify that the events are taken into consideration on PMS side |  | $\square$ | 区 | $\square$ |  |
| DIS104 | Power off the PMS interface and generate some events on PBX side．Restart the interface and verify that the events are sent and taken in consideration on the PMS side |  | $\square$ | 区 | $\square$ |  |
| DIS105 | If the PMS is composed with several devices，the same tests has to be done by powering off and restarting separatly the different devices． |  | $\square$ | 区 | $\square$ |  |
| Result | DISRUPTION OF TCP／IP AHL LINK |  | $\square$ | 区 | $\square$ |  |

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## 8．20 External Voicemail server

The External voice mail and PMS are two parts of the Duvoice server． We had to test these components separately．

## 8．20．1 PMS Voice Mail $\leftrightarrow \rightarrow$ PBX－SIP Options（Optional）

| Test Case Id | Test Case | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SOP101 | SIP Options from TPA to OXE <br> －TPA sends a SIP options request， <br> －Alcatel OmniPCX Enterprise responds with a proper answer 200－OK． | $\square$ | 】 | $\square$ |  |
| SOP102 | SIP Options from OXE to TPA <br> －Alcatel OmniPCX Enterprise sends a SIP options request <br> －TPA responds with a proper answer 200－OK． | $\square$ | 囚 | $\square$ |  |
| Result | SIP Option for link monitoring | $\square$ | 凹 | $\square$ |  |

## 8．20．2 PMS Voice Mail $\leftrightarrow$ PBX－SIP Authentication and Registrar

| Test <br> Case <br> Id | Test Case | N／A | OK | NOK | Comment |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | SIP Trunk with authentication TPA to OXE： <br> －Setup TPA in trunk mode with authentication for <br> Outgoing <br> －Setup Alcatel－Lucent OXE for Incoming accordingly <br> SAR101 <br> up call． |  |  |  |  |
|  | －Check that the call is accepted，that the phone rings and <br> that a voice message is played． | $\square$ | $\square$ | $\square$ | $\square$ |

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| Test <br> Case <br> Id | Test Case | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Result | SIP Authentication and Registration | $\square$ | $\square$ | $\boxed{ }$ |  |

## 8．20．3 $\underline{\text { PBX }} \leftarrow \rightarrow$ PMS－SIP Voice mail use

| Test Case Id | Test Case | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SVM101 | Voice mail call from any phone <br> －Direct Call the external SIP Voice mail after it has been configured． <br> －Check the operation． | $\square$ | 囚 | $\square$ | SIP authentication was set to none in all the following test cases． |
| SVM102 | Voice mail routing for a Guest <br> －Check－in a guest with a voice mail attributed by PMS to its embedded Voice Mail． <br> －Call a Guest and follow routing to the external Voice Mail， <br> －Check that message led is switched on． | $\square$ | 区 | $\square$ |  |
| SVM103 | Voice mail routing from external correspondant <br> －Make external incoming call to guest <br> －Call get routed to Voice mail <br> －Leave a message <br> －Message led is switched－on | $\square$ | 区 | $\square$ |  |
| SVM104 | Check MWI Message LED <br> －Guest room extension have his LED on <br> －Read the voice message <br> －Check that the LED is switched off． | $\square$ | 凹 | $\square$ |  |
| SVM105 | Consult voice messages <br> －Guest consult its voice messages by dialling the prefix， <br> －Listen and delete all messages， <br> －Message led is switched off． | $\square$ | 区 | $\square$ |  |
| SVM106 | Close voice mail box while check－out <br> －Leave a message to a guest <br> －Check－out this guest <br> －Led should be cleared． | $\square$ | 凹 | $\square$ |  |
| SVM107 | Check behaviour from guest without voice mail attributed <br> －Try to consult voice mail from a guest without rights | $\square$ | 凹 | $\square$ |  |


|  | There should be an error voice <br> prompt． |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Result | SIP VOICE MAIL used in Hospitality | $\square$ | $\boxtimes$ | $\square$ |  |

## 8．20．4 Disruption of SIP Voice Mail Link （Mandatory）

| Test Case Id | Test Case | N／A | OK | NOK | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DSV101 | Cut the Ethernet link PMS－PBX <br> －Try to call directly or follow an overflow to voice mail <br> －Check that caller has the right information． | $\square$ | 区 | $\square$ |  |
| DSV102 | Stop the voice mail service in TPA <br> －Stop the Voice mail service into application <br> －check calls directly and overflowed to voice mail | $\square$ | 】 | $\square$ |  |
| Result | DISRUPTION OF SIP External Voice Mail Link | $\square$ | 】 | $\square$ |  |

## 9 Appendix A : AAPP member's Application description Windows based hospitality software which

 provides guest and staff messaging, wake up calls and a property management interface as well as auto attendant and minibar refill options.
## 10 Appendix B: Configuration requirements of the AAPP member's application

## Hardware Requirements:

Processor: 2.0Ghz Dual core Intel or higher
Memory: 4GB minimum up to 8 ports, $8 G B$ or more for systems with greater than 8 ports.
Networking Gigabit capable Ethernet and network
Motherboard: CHIP Set Yes High Precision Event Timer (HPET) support. Chipsets Intel ICH6 to ICH10 and the 631X/632X I/O Control Hub and NVIDIA nForce4 and nForce5 chipsets.
Storage: 20GB for install, 1GB for every 80hrs of extra audio storage.
DB9 COM port for every serial integration.

## OS Requirements:

Windows 7 64bit
Windows 2008 Server 64bit R2

The screenshots are only for Voicemail server.


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## 11 Appendix C: Alcatel-Lucent Enterprise Communication Platform: configuration requirements

### 11.1 Communication platform configuration

The Management can be done with our unified network management tool called OmniVista 8770 using a graphincal user interface.

## Application $\rightarrow$ Hotel



The CPU address has to be the IP address of the PC in which PMS application is running

## Application $\rightarrow$ Hotel $\rightarrow$ Computer Link



User creation during Hotel management

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SMDR Tickets management.


## Guest management.

Du Voice supports only room mangement. So inorder to simulate room management with guest numbers, we selected static Per room in multi Occupancy mode and created static link between room and GPIN numbers.

Guest management.

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- I] K2 signailing iransiator
- © Inter-Node Links
- $9 \times 25$
- 9 DATA
- Applications
- ロ1
- 1 Accounting
- Accounting
- Accounting Cost
- A Accounting Period
- 9 Extern Management Logs
- $\square$ ACD $/ C C D$
- $O$ CCD
- 1 Hotel

- (1) Numeric Parameter O1 DND without sec Non-affected Roo Multiple Occupan Room Set Reinitia Quest name in Pr Suite Wake-up TyI



## Room creation



## Guest creation

- 116024255255255 IPT0 $\rightarrow \square 11611 \quad 4255255255$ ANAL
- 116124255255255 ANAL
- 11613 4255 255255 ANAL
- 11701 Room 142552552
- 11702 Room 242552552 2
- 11703 Room 342552552 :
- 11704 Room 442552552
- 11705 Room 542552552
- $1170611706 \quad 45264$ ANAL
- 117071170745265 ANAL
- $1170811708 \quad 45266$ ANAL
- 117091170945267 ANAL
- 118014255255255 ANAL
- 118024255255255 ANAL
- 118034255255255 ANAL
- 118044255255255 ANAL
- $11805 \quad 4255255255$ ANAL
- 11901 MGSSIP 14255255
$\rightarrow$ D 11902 MGS SIP $24255255^{\circ}$


Enterprise
Static Link creation between Room and GPIN.


## Multi ocupancy mode.



Checkin should always be done with Room number for Du-voice application.

### 11.2 AHL Link configuration tips

- To take into account the modifications made to the AHL configuration, ahltcp has to be restarted. To do this, use the command "dhs3-init -R AHLTCP"
- If the AHL Computer Link uses IP protocol, it has to be configured as Master and the CPU address that has to be defined is the Call Server Main IP address.
- If the management mode has to be changed from "Guest" to "Room" :
- Check out every guests (possibility to have the list with the hotmenu command)
- Delete every guests declared in the Users
- Change all the Room Users for "Administrative" and "Normal" (this has to be done at the same time)
- Change the management mode in Application / Hotel
- Then change back the users to "room".


### 11.3 Voice mail configuration tips

The management of OmniPCX Enterprise could be done using the "terminal" console (direct V24 or telnet/ssh) then use the "mgr" command to define all setting with a text interface. Or the management could be done using the OT8770 Network Management System with a Graphical User Interface.
The test of this external Voice Mail was done in the hospitality context, therefore the telephone sets used to handle this service were Guest/Patient.

The Rooms extensions were 10001 to 10005.
The Guests/Patient numbers: DID\# 11801 to 11803


Guest extension


- The hotel feature has to be done accordingly.

Enterprise




We tested the PMS and the voicemail setup at separately. But in the field both the PMS and Voice mail server should have the IP address.

## SIP gateway of the OXE



SIP trunk 101 was created for the External SIP gateway


Remote network is configured as 8


## Second level of the trunk



We have to configure the Ext SIP gateway and trunk group link in the Network table 8 The Network Number was set into the Trunk Group and will be used to make routing of calls to SIP trunking.

## Alcatel-Lucent <br> Enterprise

- Here we see that it makes the link with Network Routing table 8


SIP external gateway Configuration


## SIP Authentication

| SIP External Gateway ID Outgoing Password | $6$ |
| :---: | :---: |
| Incoming username | 8000 |
| Incoming Password | ** |
| RFC 3325 supported by the distant | V |
| DNS type | DNSA |
| SIP DNS1 IP Address | 10.9.224.241 |
| SIP DNS2 IP Address |  |
| SDP in 18 x | $\Gamma$ |
| Minimal authentication method | SIP Digest |
| INFO method for remote extension | 1 |
| To EMS | ᄃ |
| SRTP | RTP only |
| Ignore inactivelblack hole | ᄃ |



| SIP External Gateway ID | 6 |
| :--- | :--- |
| FAX Procedure Type | T38 only |
| Type of codec negotiation | Default |
| DNS SRVICall retry on busy server | NO |
| Unattended Transfer for RSI | NO |
| Redirection functionality | NO |
| Attended Transfer | YES |
| Send BYE on REFER | NO |
| Support Redirection response | YES |
| OPTIONS required | NO |
| Support UTF8 characters set | NO |
| Support CSTA User-to-User | ReqURI |
| DDI destination number | Not Supported |
| Video Support Profile |  |

Finally the External Voicemail server referring to the external SIP gateway that we configured.



### 11.4 SIP Link configuration tips

- If need to restart the wjhole SIP process of the Com Server, you need to use the command "dhs3-init -R SIPMOTOR" and all SIP gateways will be restarted.
- The tracing is done with command "motortrace 3" to set the level of traces then command "traced" to display tracing (warning if you have AHL tracing it will be too verbose to be useable).
- Use Wireshark to make ethernet captures of all packets then filter with "sip".


## 12 Appendix D: AAPP member's escalation

process: For normal installation and technical support contact support@duvoice.com 425-250-2393 24 hours a day 7 days a week. A support ticket will automatically be assigned with a voice mail message, email or phone call to tech support. For escalation mark any support communictions urgent. After hours calls (voice messages) marked urgent will be returned within 60 minutes. For further escalation contact Jon Dulude jdulude@duvoice.com 425-284-4420 and mark message as urgent.

## 13 Appendix E: AAPP program

### 13.1 Alcatel-Lucent Application Partner Program (AAPP)

The Application Partner Program is designed to support companies that develop communication applications for the enterprise market, based on Alcatel-Lucent Enterprise's product family. The program provides tools and support for developing, verifying and promoting compliant third-party applications that complement Alcatel-Lucent Enterprise's product family. ALE International facilitates market access for compliant applications.

The Alcatel-Lucent Application Partner Program (AAPP) has two main objectives:

- Provide easy interfacing for Alcatel-Lucent Enterprise communication products: Alcatel-Lucent Enterprise's communication products for the enterprise market include infrastructure elements, platforms and software suites. To ensure easy integration, the AAPP provides a full array of standards-based application programming interfaces and fullydocumented proprietary interfaces. Together, these enable third-party applications to benefit fully from the potential of Alcatel-Lucent Enterprise products.
- Test and verify a comprehensive range of third-party applications: to ensure proper inter-working, ALE International tests and verifies selected third-party applications that complement its portfolio. Successful candidates, which are labelled AlcatelLucent Enterprise Compliant Application, come from every area of voice and data communications.

The Alcatel-Lucent Application Partner Program covers a wide array of third-party applications/products designed for voice-centric and data-centric networks in the enterprise market, including terminals, communication applications, mobility, management, security, etc.

Enterprise

## Web site

The Application Partner Portal is a website dedicated to the AAPP program and where the InterWorking Reports can be consulted. Its access is free at http://applicationpartner.alcatel-lucent.com


### 13.2 Enterprise.Alcatel-Lucent.com

You can access the Alcatel-Lucent Enterprise website at this URL: http://www.enterprise.alcatellucent.com/

## 14 Appendix F: AAPP Escalation process

### 14.1 Introduction

The purpose of this appendix is to define the escalation process to be applied by the ALE International Business Partners when facing a problem with the solution certified in this document.

The principle is that ALE International Technical Support will be subject to the existence of a valid InterWorking Report within the limits defined in the chapter "Limits of the Technical support".

In case technical support is granted, ALE International and the Application Partner, are engaged as following:

(*) The Application Partner Business Partner can be a Third-Party company or the ALE International Business Partner itself

### 14.2 Escalation in case of a valid Inter-Working Report

The InterWorking Report describes the test cases which have been performed, the conditions of the testing and the observed limitations.

This defines the scope of what has been certified.
If the issue is in the scope of the IWR, both parties, ALE International and the Application Partner, are engaged:

Case 1: the responsibility can be established 100\% on ALE International side. In that case, the problem must be escalated by the ALE Business Partner to the ALE International Support Center using the standard process: open a ticket (eService Request eSR)

Case 2: the responsibility can be established $100 \%$ on Application Partner side. In that case, the problem must be escalated directly to the Application Partner by opening a ticket through the Partner Hotline. In general, the process to be applied for the Application Partner is described in the IWR.

Case 3: the responsibility can not be established.
In that case the following process applies:
> The Application Partner shall be contacted first by the Business Partner (responsible for the application, see figure in previous page) for an analysis of the problem.
> The ALE International Business Partner will escalate the problem to the ALE International Support Center only if the Application Partner has demonstrated with traces a problem on the ALE International side or if the Application Partner (not the Business Partner) needs the involvement of ALE International

In that case, the ALE International Business Partner must provide the reference of the Case Number on the Application Partner side. The Application Partner must provide to ALE International the results of its investigations, traces, etc, related to this Case Number.

ALE International reserves the right to close the case opened on his side if the investigations made on the Application Partner side are insufficient or do not exist.

Note: Known problems or remarks mentioned in the IWR will not be taken into account.
For any issue reported by a Business Partner outside the scope of the IWR, ALE International offers the "On Demand Diagnostic" service where ALE International will provide 8 hours assistance against payment.

IMPORTANT NOTE 1: The possibility to configure the Alcatel-Lucent Enterprise PBX with ACTIS quotation tool in order to interwork with an external application is not the guarantee of the availability and the support of the solution. The reference remains the existence of a valid InterWorking Report.

Please check the availability of the Inter-Working Report on the AAPP (URL:
https://private.applicationpartner.alcatel-lucent.com) or Enterprise Business Portal (Url: Enterprise Business Portal) web sites.

IMPORTANT NOTE 2: Involvement of the ALE International Business Partner is mandatory, the access to the Alcatel-Lucent Enterprise platform (remote access, login/password) being the Business Partner responsibility.

### 14.3 Escalation in all other cases

For non-certified AAPP applications, no valid InterWorking Report is available and the integrator is expected to troubleshoot the issue. If the ALE Business Partner finds out the reported issue is maybe due to one of the Alcatel-Lucent Enterprise solutions, the ALE Business Partner opens a ticket with ALE International Support and shares all trouble shooting information and conclusions that shows a need for ALE International to analyze.

Access to technical support requires a valid ALE maintenance contract and the most recent maintenance software revision deployed on site. The resolution of those non-AAPP solutions cases is based on best effort and there is no commitment to fix or enhance the licensed Alcatel-Lucent Enterprise software.

For information, for non-certified AAPP applications and if the ALE Business Partner is not able to find out the issues, ALE International offers an "On Demand Diagnostic" service where assistance will be provided for a fee.

### 14.4 Technical support access

The ALE International Support Center is open 24 hours a day; 7 days a week:

- e-Support from the Application Partner Web site (if registered Alcatel-Lucent Application Partner): http://applicationpartner.alcatel-lucent.com
- e-Support from the ALE International Business Partners Web site (if registered Alcatel-Lucent Enterprise Business Partners): https://businessportal2.alcatel-lucent.com click under "Contact us" the eService Request link
- e-mail: Ebg Global Supportcenter@al-enterprise.com
- Fax number: +33(0)3 69208585
- Telephone numbers:

ALE International Business Partners Support Center for countries:

| Country | Supported language | Toll free number |
| :---: | :---: | :---: |
| France | French | +800-00200100 |
| Belgium |  |  |
| Luxembourg |  |  |
| Germany | German |  |
| Austria |  |  |
| Switzerland |  |  |
| United Kingdom | English |  |
| Italy |  |  |
| Australia |  |  |
| Denmark |  |  |
| Ireland |  |  |
| Netherlands |  |  |
| South Africa |  |  |
| Norway |  |  |
| Poland |  |  |
| Sweden |  |  |
| Czech Republic |  |  |
| Estonia |  |  |
| Finland |  |  |
| Greece |  |  |
| Slovakia |  |  |
| Portugal |  |  |
| Spain | Spanish |  |

For other countries:

| English answer: | +16503852193 |
| :--- | :--- |
| French answer: | +16503852196 |
| German answer: | +16503852197 |
| Spanish answer: | +16503852198 |

END OF DOCUMENT


[^0]:    SIP credentials

