Alcatel-Lucent Application Partner Program Inter-Working Report

Partner: Novalink
Application type: Paging - Alarm Notification
Application name: Nova Alert
Alcatel-Lucent Platform: OmniPCX Enterprise™

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

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Certification overview

Date of the certification	September 2013

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Partner's representative	Christoph Hodel

Alcatel-Lucent Communication Platform	OmniPCX Enterprise
Alcatel-Lucent Communication Platform Release	R10.1.1 - J2.603.20.i R11.0 – K1.400.12.d
AAPP member application version	NovaAlert V9.8
Application Category	Event monitoring & Alerting

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Reviewer(s): D Lienhart, R Himmi

Revision History

Edition 1: creation of the document - August 2013

Test results

☐ Passed ☐ Refused ☐ Postponed

☑ 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'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, Alcatel-Lucent 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 Alcatel-Lucent issues a new major release of such Alcatel-Lucent 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 limits of the Technical support*

3 Limits of the Technical support

Technical support will be provided only in case of a valid InterWorking Report (see chapter 2 "Validity of the InterWorking Report) and in the scope of the features which have been certified. That scope is defined by the InterWorking report via the tests cases which have been performed, the conditions and the perimeter of the testing as well as the observed limitations. All this being documented in the IWR. 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 Alcatel-Lucent.

For any request outside the scope of this IWR, Alcatel-Lucent offers the "On Demand Diagnostic" service where assistance will be provided against payment.

For more details, 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 Alcatel-Lucent is included in the solution between the certified Alcatel-Lucent and AAPP member products such as a Session Border Controller or a firewall for example, Alcatel-Lucent will consider that situation as to that where no IWR exists. Alcatel-Lucent will handle this situation accordingly (for more details, please refer to Appendix F "AAPP Escalation Process").

4 Application Information

Application family:	Alarm-, Evacuation- and Messaging-Server
Application commercial name:	NovaAlert ™
Application version:	9.8
Interface type:	SIP Trunk + Paging

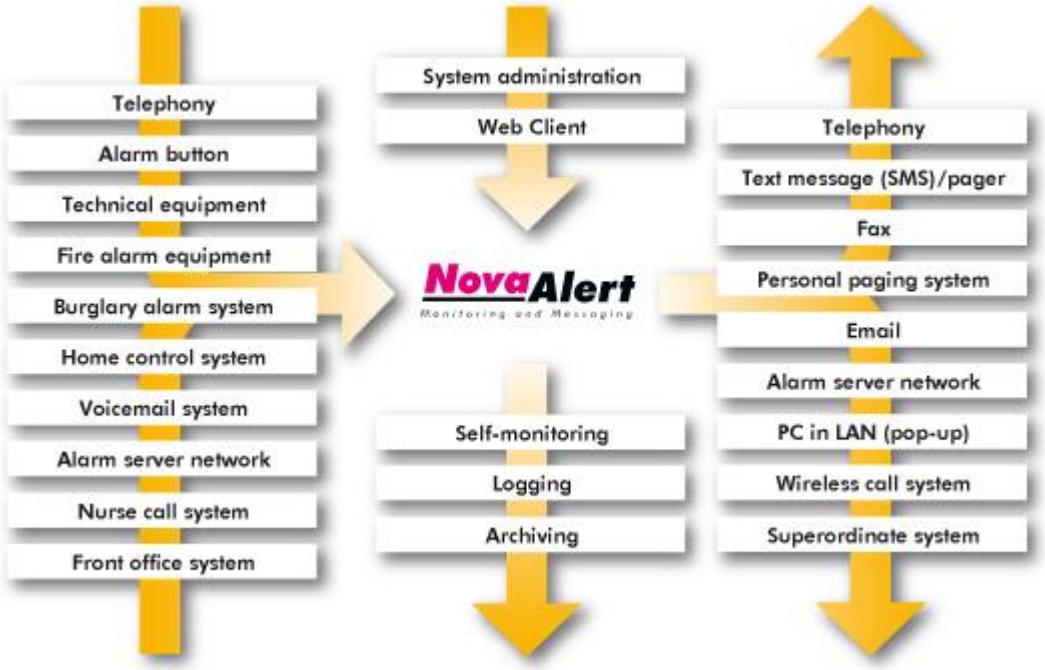
Brief Application Description:

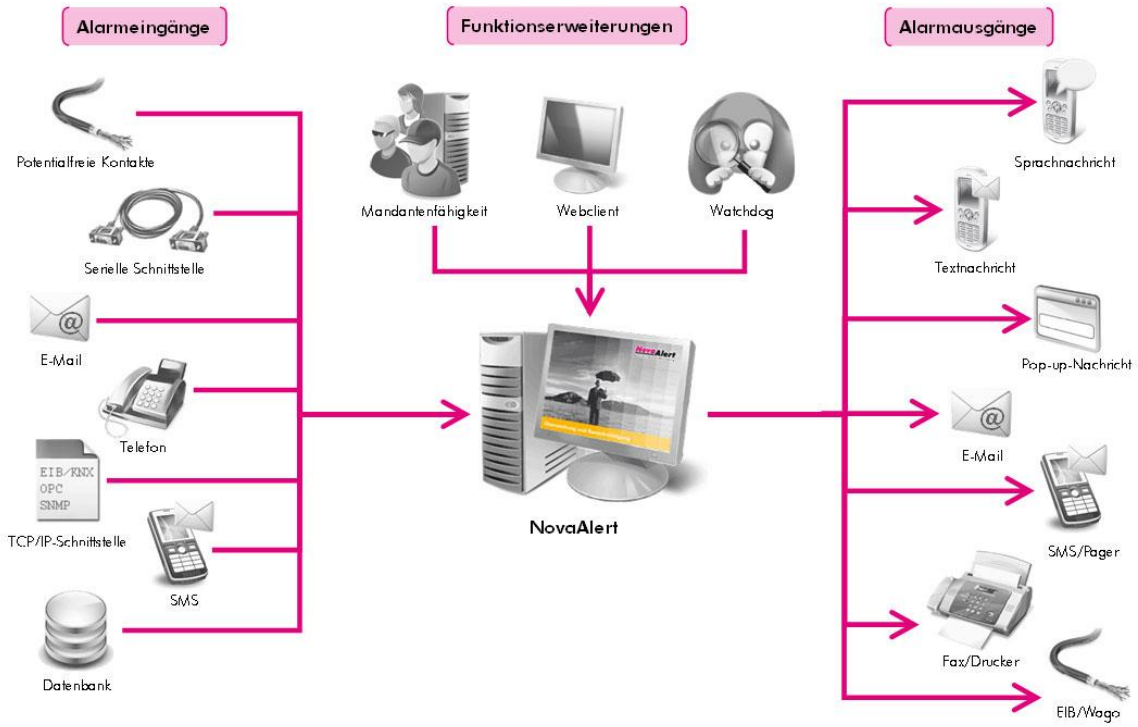
NovaAlert on NovaBox is a PC-resident application which is used in a health care, hotel or industrial environment for alerting, messaging or information services. NovaLink NovaAlert on NovaBox can react to external alarm stimuli which indicate the existence of an emergency situation by informing affected persons of the situation.

Alarms can be triggered from various possible input sources including manual input via Web browser, serial interfaces, potential free contacts, SNMP, etc. “Direct” alarms can also be defined which allow alarms to be input and triggered via telephone calls.

Once an alarm has been triggered, the medium selected when the alarm was configured is used to deliver the alarm. Possible delivery interfaces include phone calls (including conferences), E-Mail, Pager, SMS, Fax, etc. Multiple recipients can be configured for an alarm, thus possibly creating multiple simultaneous telephone calls.

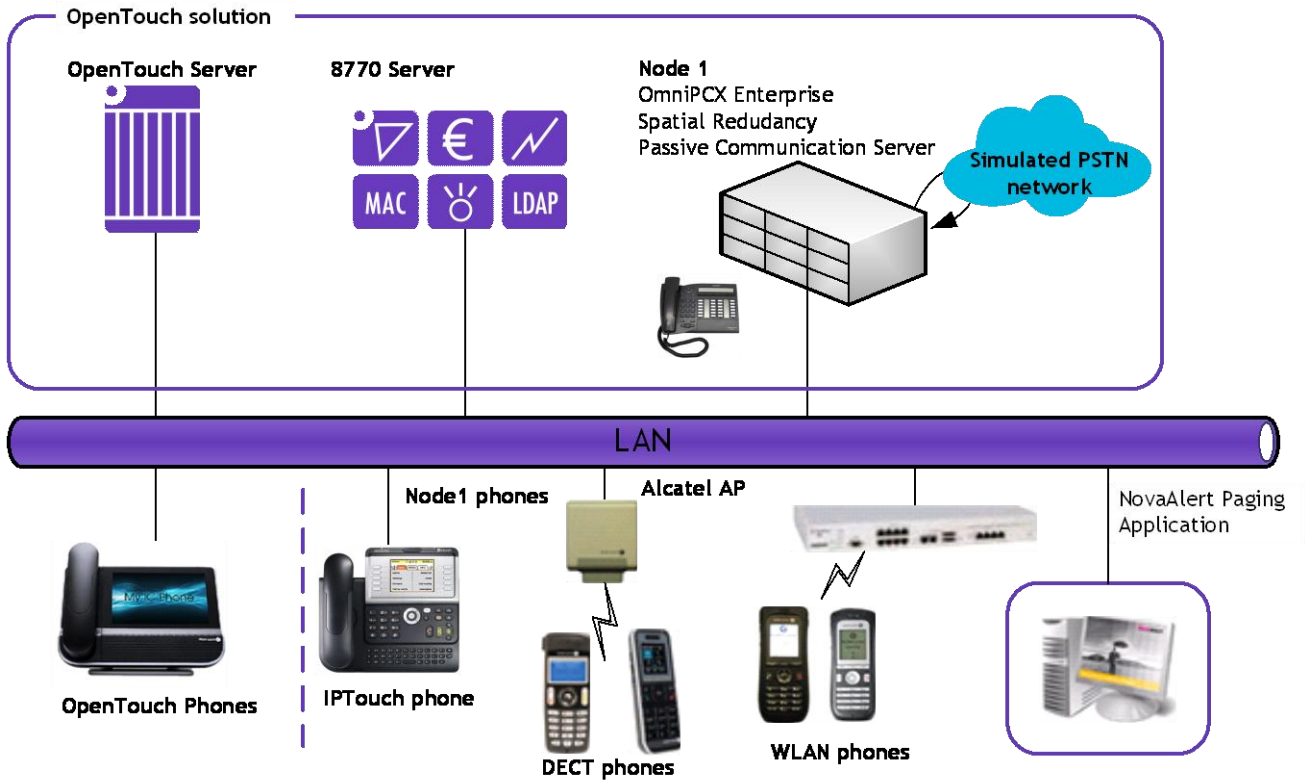
NovaLink NovaAlert on NovaBox supports a wide range of interfaces for input and output, where telephony is the one most commonly used for alarming.





5 Test environment

Figure 1 **Test environment**



5.1 Hardware configuration

- **OmniPCX Entreprise**:
  - CS (Call Server Processing Unit)
  - GD (Gateway driver processing Unit
  - OpenTouch Server
  - 8770 Server
  - PRA T2 (ISDN Access)
  - Alcatel AP
  - MIX 2/4/4 (ISDN T0, digital & analog interfaces)
  - Dect 400, 8232, 300, SIP and IPTouch sets
  - WLAN 8118/8128 sets

5.2 Software configuration

- **Alcatel-Lucent Communication Platform**: OmniPCX Enterprise R10.1.1 (J2.603.20.i)**,** R11.0 - k1.400.12.d
- **Partner Application**: NovaAlert 9.8 on NovaBox X200 Appliance

6 Summary of test results

6.1 Summary of main functions supported

6.1.1 Paging interface

Function	Status
Sending an normal alarm	OK
Sending an urgent alarm	OK
Sending a discrete alarm	N/A
Acknowledge alarm management	OK
Delete of alarm	N/A

6.1.2 Generic SIP calls

Features Generic SIP calls from NovaAlert → OXE sets	Global status
SIP Authentication & Registrar	N/A
SIP call set-up and call release	OK
SIP calls to various Idle phones	OK
SIP call to various busy phones	OK
SIP calls to DECT sets out of radio range	OK
SIP calls to forwarded phone	OK
SIP calls to phone that is forwarded to voice mail	OK
SIP call to phone in immediate call forwarding to external destination	OK
SIP call to Out of Service phone	OK

6.1.3 Conference call through NovaAlert

Features Conferencing through NovaAlert	Global status
Conference setup by application	OK

6.2 Summary of problems

None

6.3 Summary of limitations

- There is no authentication supported by the application for the SIP calls. Hence it is not configured in the OXE.
- The OPTION message is not supported.
- The application is not supporting the discrete alarm.
- The application is not able to delete the sent alarm.
- There is no provision to give two IP addresses of the servers in the Paging interface of the application.

6.4 Notes, remarks

None

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** • Action • Expected result	☐	☒	☐	
2	**Test case 2** • Action • Expected result	☐	☒	☐	The application waits for PBX timer or phone set hangs up
3	**Test case 3** • Action • Expected result	☒	☐	☐	Relevant only if the CTI interface is a direct CSTA link
4	**Test case 4** • Action • Expected result	☐	☐	☒	No indication, no error message
…	**…**	☐	☐	☐	

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 Alcatel-Lucent side or on Application Partner 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 using the SIP Trunk interface

A SIP trunk is established between the OmniPCX Enterprise and NovaAlert Application (alarm server).

Note: TPA stands for Third party Application: NovaAlert server in these tests.

8.1 Generic SIP calls tests

8.1.1 SIP Options

The “Option” SIP message is used by the proxy or the end-point server to check the link status by “keep Alive” messages.
The OXE SIP External Gateway has a manageable timer (from 0= no Option, to 32000).

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**SIP Options from Application to OXE** Application sends a SIP options request Alcatel OmniPCX Enterprise responds with a proper answer 200-OK.	☒	☐	☐	The application instead sends ping request from the SIP Stack to the OXE.
2.	**SIP Options from OXE to Application** Alcatel OmniPCX Enterprise sends a SIP options request Application responds with a proper answer 200-OK.	☒	☐	☐	

8.1.2 SIP Authentication and Registrar

OXE SIP External Gateway configured with “minimal authentication = digest”.

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**SIP Trunk with authentication:** - Setup the application in trunk mode with authentication - Setup Alcatel-Lucent OXE for Incoming accordingly (see Annex) - Generate a test call from TPA Web interface. - Check that the call is accepted, that the phone rings and that a voice message is played.	☒	☐	☐	Authentication is not available in the TPA.
2.	**SIP Trunk with authentication:** -- Setup the application in trunk mode with authentication - Setup Alcatel-Lucent OXE for Outgoing accordingly(see Annex) - Generate an alarm from DECT500, - Check that the call is accepted and TPA sends the 200-OK.	☒	☐	☐	
3.	**SIP Trunk without authentication:** - Setup the application in trunk mode without authentication - Setup Alcatel-Lucent OXE accordingly(see Annex) - Generate a test call from TPA Web interface. - Check that the call is accepted, that the phone rings and that a voice message is played.	☐	☒	☐	The call is placed to the extension 13501 and the alarm message is played.
4.	**SIP Registration from TPA** - Setup the application in trunk mode with SIP registration - Setup Alcatel-Lucent OXE accordingly(see Annex)	☒	☐	☐	

Test Case Id	Test Case	N/A	OK	NOK	Comment
	- Check that the Register is correctly sent by TPA to OXE.				

8.1.3 SIP call set-up and call release

Test Case Id	Test Case	N/A	OK	NOK	Comment
1	**SIP call to phone and release from PBX** - Generate a call from TPA to phone - Answer the call - Release the call after a few seconds from the phone - Check that a BYE and 200-OK are sent on the SIP signalization.	☐	☒	☐	The disconnection is proper with SIP BYE and 200 OK.
2	**SIP call to phone and release from TPA** - Generate a call from TPA to a phone - Answer the call - Wait until call is released by TPA - Check that a BYE and 200-OK are sent on the SIP signalization.	☐	☒	☐	
3	**SIP call to phone that does no answer** - Generate a call from TPA to a phone - Do not answer the call - Wait until call is released by TPA, - Check that a CANCEL and 200-OK are sent on the SIP signalization.	☐	☒	☐	

8.1.4 SIP calls to various idle phones

Test Case:

- Hand set is in idle mode
- To send a call, generate a test call from the TPA
- Accept the call

Expected result:

- call is accepted by PBX phone,
- The text message of the application is used as caller identifier and displayed (16 characters),
- On answer a voice message is played by TPA then release of the call.

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Call to DECT400 in idle state** Test on Alcatel Lucent DECT 400 Test Case defined above Expected result defined above	☐	☒	☐	TPA called 13502
2.	**Call to DECT500 in idle state** Test on Alcatel Lucent Mobile DECT 500 Test Case defined above Expected result defined above	☐	☒	☐	TPA called 13500
3.	**Call to DECT8232 in idle state** Test on Alcatel Lucent Mobile DECT 8232 Test Case defined above Expected result defined above	☐	☒	☐	TPA called 13500
4.	**Call to IPTouch serie 8 in idle state** Test on Alcatel Lucent IP Touch Test Case defined above Expected result defined above	☐	☒	☐	TPA called 13500

Test Case Id	Test Case	N/A	OK	NOK	Comment
5.	**Call to UA set in idle state** Test on Alcatel Lucent digital phone Test Case defined above Expected result defined above	☐	☒	☐	TPA called 13507
6.	**Call to Analog Phone in idle state** Test on Alcatel Lucent Analog phone Test Case defined above Expected result defined above	☐	☒	☐	TPA called 13508
7.	**Call to MyIC Phone 8082 (SIP phone)** Test on MyIC Phone Test Case defined above Expected result defined above	☐	☒	☐	TPA called 13510
8.	**Call to Generic SIP Phone** Test on Generic SIP phone Test Case defined above Expected result defined above	☐	☒	☐	TPA called 13509
9.	**Call to WLAN 8118** Test on Alcatel-Lucent WLAN 8118 Test Case defined above Expected result defined above	☐	☒	☐	TPA called 13504
10.	**Call to WLAN 8128** Test on Alcatel-Lucent WLAN 8128 Test Case defined above Expected result defined above	☐	☒	☐	TPA called 13505

8.1.5 SIP call to various busy phones.

Test Case:

- Phone is in communication.
- To send a call, generate a test call from the TPA

Expected result:

- According to the phone configuration in OXE, behaviors are different:
- call is rejected if the phone is busy:

the phone is set with "Camp On" protected in "Features" options

- TPA logs call is rejected

Test Case Id	Test Case	N/A	OK	NOK	Comment
1	**Call to busy IBS-DECT300** Test on Alcatel Lucent DECT 200 Test Case defined above Expected result defined above	☐	☒	☐	TPA calls 1276 the busy set and the log of the application says the called user number has changed and it is busy.
2	**Call to busy IBS-DECT400** Test on Alcatel Lucent DECT 400 Test Case defined above Expected result defined above	☐	☒	☐	TPA calls 1273
3	**Call to busy IBS-DECT500 (GAP)** Test on Alcatel Lucent Mobile 500 Test Case defined above Expected result defined above	☐	☒	☐	TPA calls 1270
4	**Call to busy IBS-DECT8232** Test on Alcatel Lucent Mobile 8232 Test Case defined above Expected result defined above	☐	☒	☐	TPA calls 1271
5	**Call to busy IPTouch serie 8** Test on Alcatel Lucent IP Touch 4068 Test Case defined above Expected result defined above	☐	☒	☐	TPA calls 1274
6	**Call to busy IP-DECT400 (AGAP over SIP)** Test on Alcatel Lucent Mobile 500 Test Case defined above Expected result defined above	☐	☒	☐	TPA calls 13502
7	**Call to busy IP-DECT500 (SIP Extension)** Test on Alcatel Lucent Mobile 500 Test Case defined above Expected result defined above	☐	☒	☐	TPA calls 13500
8	**Call to busy UA set** Test on Alcatel Lucent Numeric phone Test Case defined above Expected result defined above	☐	☒	☐	
9	**Call to busy Analog Phone** Test on Alcatel Lucent Analog phone Test Case defined above Expected result defined above	☐	☒	☐	
10	**Call to busy MyIC Phone 8082** Test on 8232 My Ic Phone Test Case defined above Expected result defined above	☐	☒	☐	
11	**Call to busy SIP SoftPhone** Test on Generic SIP phone Test Case defined above Expected result defined above	☐	☒	☐	
11	**Call to busy WLAN 8118** Test on Alcatel-Lucent WLAN 8118 Test Case defined above Expected result defined above	☐	☒	☐	
12	**Call to busy WLAN 8128** Test on Alcatel-Lucent WLAN 8128 Test Case defined above	☐	☒	☐	

Test Case Id	Test Case	N/A	OK	NOK	Comment
	Expected result defined above				

8.1.6 SIP calls to IBS Dect sets out of Radio Range.

Test Case:

- Dect coverage is provided by IBS base stations
- Hand Set is in idle mode, out of range
- To send a call, generate a test call from the TPA

Expected result:

- call is rejected
- TPA logs the call rejection reason

Tests were done by powering-off the Dect handsets.

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Call to DECT400 out of radio range** Test on Alcatel Lucent DECT 400 Test Case defined above Expected result defined above	☐	☒	☐	TPA called the sets which are out of radio range set and the application log shows it is out of range.
2.	**Call to DECT8232 out of radio range** Test on Alcatel Lucent DECT 8232 Test Case defined above Expected result defined above	☐	☒	☐	
3.	**Call to DECT500 out of radio range** Test on Alcatel Lucent Mobile DECT 500 Test Case defined above Expected result defined above	☐	☒	☐	

8.1.7 SIP calls to IP-Dect sets out of Radio Range.

Test Case:

- Dect coverage is provided by IP-Dect base stations
- Hand Set is in idle mode, out of range
- To send a call, generate a test call from the TPA

Expected result:

- call is rejected
- TPA logs the call rejection reason

Test was done by powering-off the Dect handsets.

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Call to DECT400 out of radio range** Test on Alcatel Lucent DECT 300 Test Case defined above Expected result defined above	☐	☒	☐	TPA called the sets which are out of radio range set and the application log shows it is out of range.
2.	**Call to DECT8232 out of radio range** Test on Alcatel Lucent DECT 8232 Test Case defined above Expected result defined above	☐	☒	☐	
3.	**Call to DECT500 out of radio range** Test on Alcatel Lucent Mobile DECT 500 Test Case defined above Expected result defined above	☐	☒	☐	

8.1.8 SIP calls to OT 8118/8128 out of coverage

Test Case:

- Hand Set is in idle mode, out of range
- To send a call, generate a test call from the TPA

Expected result:

- call is rejected
- TPA logs the call rejection reason

Tests were done by powering-off the OT 8118/8128 handsets.

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Call to WLAN 8118 out of radio range** Test on Alcatel Lucent WLAN 8118 set Test Case defined above Expected result defined above	☐	☒	☐	TPA called the WLAN sets which are out of radio range set and the application log shows it is out of range.
2.	**Call to WLAN 8128 out of radio range** Test on Alcatel Lucent WLAN 8118 set Test Case defined above Expected result defined above	☐	☒	☐	

8.1.9 SIP calls to forwarded phones are DECT sets.

Test Case :

- Phone is in idle state, call forwarding is configured,
- To send a call, generate a test call from the TPA,
- Accept the call on the forwarding destination

Expected result:

- call is forwarded to the target phone
- the following behavior should be the same depending on the target phone state

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Call to IPTouch serie 8** Test on Alcatel Lucent IPTouch Serie 8 Test Case defined above Expected result defined above	☐	☒	☐	TPA called 1274 and the call is properly forwarded to the target extension.
2.	**Call to IBS-DECT500 in GAP Mode** Test on Alcatel Lucent DECT500 Test Case defined above Expected result defined above	☐	☒	☐	
3.	**Call to IP-DECT500 in SIP Extension Mode** Test on Alcatel Lucent DECT500 Test Case defined above Expected result defined above	☐	☒	☐	
4.	**Call to IBS-DECT400** Test on Alcatel Lucent DECT400 Test Case defined above Expected result defined above	☐	☒	☐	
5.	**Call to MyIC Phone** Test on Alcatel Lucent MyIC Phone Test Case defined above Expected result defined above	☐	☒	☐	

8.1.10 SIP calls to phones that are forwarded to voice mail.

Test Case:

- Phone is in idle mode, immediate call forwarding to voice mail is configured
- To send a call, generate a test call from the TPA
- accept the call on the forwarding destination; which is another terminal

Expected result:

- call forwarded to the target voice mail
- the following behavior should the same depending on the target phone state

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Call to IPTouch serie 8** Test on IPTouch 4038 Test Case defined above Expected result defined above	☐	☒	☐	TPA called 1274 and the call is properly forwarded to the target extension.

8.1.11 SIP call to phone in immediate call forwarding to external destination

Test Case:

- Phone is in idle mode, call forwarding is configured
- To send a call, generate a test call from the TPA
- accept the call on the forwarding destination; which is an external destination

Expected result:

- call forwarded to the target voice mail
- the following behavior should the same depending on the target phone state

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Call to IPTouch serie 8 forwarded to public mobile** Test on Alcatel Lucent IP Touch 4038 fwd to external. Test Case defined above Expected result defined above	☐	☒	☐	TPA called 1274 and the call is properly forwarded to the target extension.

8.1.12 SIP call to out of service phone

Test Case:

- Phone is out of service
- To send a call, generate a test call from the TPA

Expected result:

- call is rejected
- TPA logs call as rejected

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Call to IPTouch serie 8 out of service** Test on Alcatel Lucent IPTouch 4038 Test Case defined above Expected result defined above	☐	☒	☐	TPA called and log shows the extension is out of service.

8.2 Conferencing through NovaAlert

The NovaAlert server can call one correspondant when the alarm is triggered.
The conferencing concern only 2 correspondants: the called phone configured in alarming server and the alarm set that is connected.
In our configuration based on Virtual Machine, the maximum number of DSP (RTP connections) is 16 that is to say 8 “conferences”.

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Set-up conference between a phone and a paged set from application:** • Release first by phone • Check that all is released	☐	☒	☐	The conference is properly established and also disconnected properly.
2.	**Set-up conference between a phone and a paged set from application:** • Release first by paged set (ie Dect or IPT) • Check that all is released	☐	☒	☐	
3.	**Set-up conference between a phone and a paged set from application:** • Release first by application • Check that all is released	☐	☒	☐	

8.3 High availability configurations

To be adapted depending on what is supported by NovaAlert

8.3.1 Spatial Redundancy Com Server

Initial state is Com Server 1 is active and seen as Main and Com Server 2 is in stand-by.
Alarm server NovaAlert has IP address 10.200.4.2
Com Server 1 is CPU-A has IP address 10.1.8.2 and his Main IP address is 10.1.8.1
Com Server 2 is CPU-B has IP address 10.10.10.51 and his Main IP address is 10.10.10.50
The OXE is addressed with FQDN node1slash.etesting.com configured in DNS External server with DNS Delegation (node1slash.etesting.com → 10.1.8.1 or 10.10.10.50)
NovaAlert server has the configuration of its "Trunk SIP avec Authentication" with "Address IP PABX: node1slash.etesting.com".
The DNS switch-over mechanism of NovaAlert was based on type SRV and has been modified in order to use the type A and no caching as OXE works with TTL=0 for DNS queries.
Tests are done with IBS-DECT because the IP-DECT is not yet operational with spatial redundancy.

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Manual switch-over to Main 2** - Main Com Server is 10.1.8.1 (CPU-A) and Sby Com server is 10.10.10.50 (CPU-B) - PCS is inactive. - Generate alarm in central and remote area	☐	☒	☐	The alarm is properly generated and played in the extensions.
2.	**Manual switch-over to Main 2** - Main Com Server is 10.1.8.1 (CPU-A) - Do manual switch-over with "bascul" or shutdown - Main Com Server is now 10.10.10.50 (CPU-B) - Generate an alarm from DECT500.	☐	☒	☐	TPA is properly connected to main server 10.10.10.50 after the switchover from the main 10.1.8.1 to standby 10.10.10.50.
3.	**Manual switch-over to Main 1** - Main Com Server is 10.10.10.50 (CPU-B) - Do manual switch-over with "bascul" - Main Com Server is now 10.1.8.1 (CPU-A) - Generate an alarm from DECT400 and 500.	☐	☒	☐	
4.	**Switch-over due to Network failure** - Main Com Server is 10.1.8.1 (CPU-A) - Disconnect the LAN cable on CPU-A - Main Com Server is now 10.10.10.50 (CPU-B) - Generate an alarm from DECT400 and 500 - When reconnecting cable, you'll have dual Main configuration. - Com server CPU-A will reboot.	☐	☒	☐	

Note: During switch-over the Racks or Gateway drivers stays operational and calls are maintained. Only the SIP trunks (External SIP gw) are restarted on the new Main com server.

8.3.2 Passive Com Server Configuration

The Passive Com Server has the same database as the redundant Com Servers (CPU-A and CPU-B) as this is copied every day from Main CS to PCS.
In case changes were done, do a “pcscopy” from Main CS to update the PCS with the latest database.
The command “pcsview” will show you the PCS configurations currently existing in your system.
DNS Delegation could not be used to reach the PCS as it do not have the internal name resolver activated.

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Switch-over to PCS** - Main Com Server is 10.1.8.1 (CPU-A) and Stand-By Com Server is 10.10.10.50 (CPU-B) - PCS is 10.10.11.150 and is inactive - Shutdown both Com servers (shutdown –h) - All gateways and terminals will stop operation - Gateway rack 4 (GD board in IP Domain 6 secured) will reboot to connect to PCS. - IBS connected on UA Board of this rack will run properely - Generate an alarm from DECT500 in the secured GD.	☐	☒	☐	TPA is properly connected to PCS sever. The alarms are properly played.
2.	**Switch-back to CS Main** - PCS is 10.10.11.150 and is active - CS Main is back and active - All gateways and terminals will start working - Gateway rack 4 (GD board in IP Domain 6 secured) will reboot to connect to CS Main. - PCS will reboot - Generate an alarm from any DECT400/500 - Check that it is sent by CS Main and alarm call from server goes also to CS Main and not anymore to PCS IP.	☐	☒	☐	.

9 Test Results using the Paging interface

9.1 Connectivity and set-up

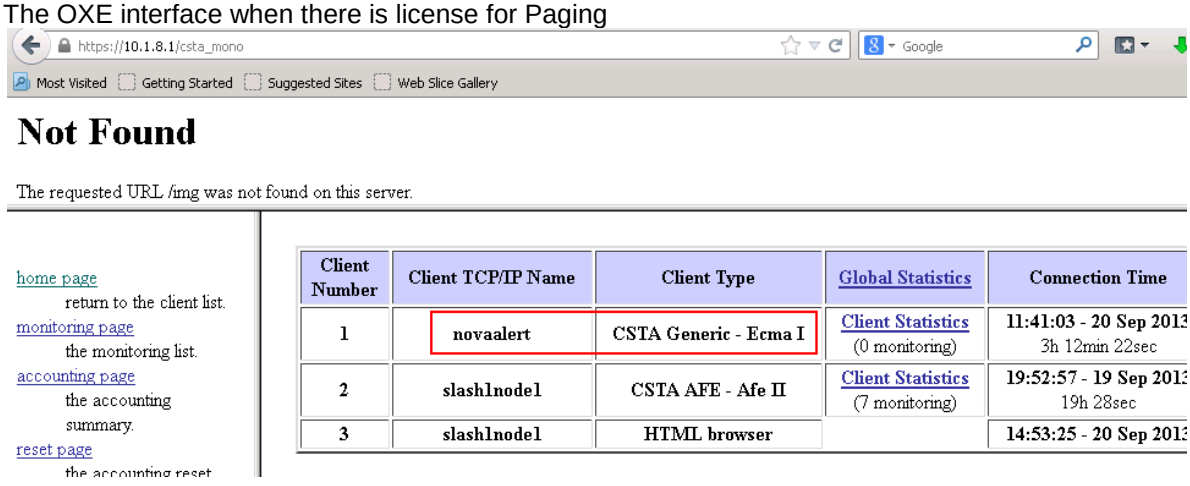
9.1.1 Test objectives

These tests shall verify that the different components are properly connected and can communicate together (the external application and the Alcatel Communication Platform are connected and the interface link is operational).

9.1.2 Test procedure

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Application connection** • Connect the application using IP link • checks if there are incident messages using « incvisu » command • Check using the http interface of the cstamono (port 2555) that the application is connected • Check that only one CSTA link is used.	☐	☒	☐	The CSTA link established is only one,
2.	**Notification test** • Application sends Normal alarm without ack to check.	☐	☒	☐	

The OXE interface when there is license for Paging



9.2 Defence / recovery

9.2.1 Test objectives

Check how will react the application in case of a PBX reboot, switch-over or link failure…

9.2.2 Test procedure

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**IP disconnection** • Disconnect the IP interface between the OXE and the application server. • Verify that CSTA link is broken	☐	☒	☐	There is no CSTA link established when the IP link is disconnected.
2.	**Application send alarm** • Use the application to send an message • Expected result should be error message and try to reconnect	☐	☒	☐	Yes the TPA cannot send alarm messages.
3.	**Connect back the IP link** • Reconnect the IP interface, and check if the application is connected again. • Check if the application reconnect the CSTA link • Check if the previously message is sent to the OXE	☐	☒	☐	

9.3 Licence tests

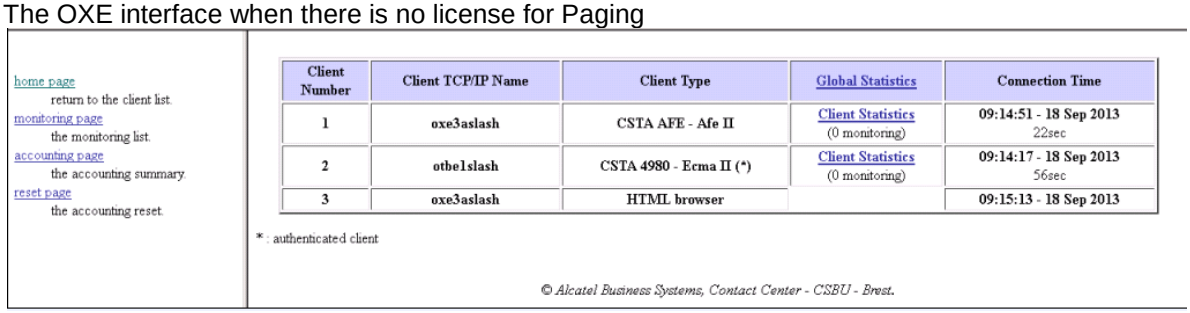
9.3.1 Test objectives

These tests shall verify that the application is working using the following rules: If the Notification Server lock on the OXE is strictly less than 50, the link is broken, and the application stops. If the Notification Server lock on the OXE is more or equal than 50, the application runs.

9.3.2 Test procedure

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Try to connect with wrong license** • Put a Notification Server lock of 10 or 0 in OXE, and run the application. • Try to send a message using the application. • Verify that the alarm is not sent • Verify that the CSTA link is not established	☐	☒	☐	The application is not connected when the license is 0 in OXE.

The OXE interface when there is no license for Paging



9.4 Functional Tests in an IBS-DECT environment

9.4.1 Sending alarms

These tests shall verify that the application is able to send urgent and normal alarms

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Normal Alarm Without Ack sent to Dect8232** • Send a normal alarm without ack "0" • Verify that the alarm is received on phone	☐	☒	☐	
2.	**Normal Alarm With Ack sent to Dect400** • Send a normal alarm with ack "1" • Verify that the alarm is received on phone	☐	☒	☐	
3.	**Urgent Alarm Without Ack sent to Wlan8128 or 8118** • Send a urgent alarm without ack "2" • Verify that the alarm is received on phone	☐	☒	☐	
4.	**Urgent Alarm With Ack sent to IP Touch 4068** • Send a urgent alarm with ack "3" • Verify that the alarm is received on phone	☐	☒	☐	
5.	**Normal SndCall alarm to Dect400** • Send a normal discrete alarm code "4" • Verify that the alarm is received on phone	☒	☐	☐	
6.	**Urgent SndCall Alarm to Dect8232** • Send an urgent discrete alarm code "5" • Verify that the alarm is received on phone	☒	☐	☐	
7.	**Delete an Alarm from Application** • Send an alarm with ack to any type of set • Delete this alarm and check it has been removed	☒	☐	☐	

Note:

PagingRequestType

ActiveAlarmCall value	**"0"**	*- to send an alarm (text message)*
StopAlarmCall value	**"1"**	*- to delete a previous alarms*
AskSotwarePack value	**"2"**	*- to get current licenses*
ActiveSndCall value	**"3"**	*- to send a discrete alarm*

PagingPriority

NormalNoAck value	**"0"**
NormalAck value	**"1"**
UrgentNoAck value	**"2"**
UrgentAck value	**"3"**
NormalSndCall value	**"4"**
UrgentSndCall value	**"5"**

9.4.2 Acknowledgement of alarms

These tests shall verify that the application is able to manage acknowledgement of an alarm.

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Normal Alarm to Wlan8118/8128** • Send a normal alarm • Read the alarm and acknowledge it. Check status read in the application	☐	☒	☐	
2.	**Normal Alarm to Out Of Service IPT Phone** • Send a normal alarm to a phone out of service • Verify that the application display that the phone is out of service	☐	☒	☐	
3.	**Normal Alarm to Out Of Coverage DECT phone** • Send a normal alarm to a phone out of coverage • Verify that the application display that the phone is out of coverage	☐	☒	☐	
4.	**Normal Alarm to phone number without NS right.** • Send a normal alarm to a phone without the Notification Server right. • Verify that the application displays the error	☐	☒	☐	
5.	**Normal alarm to phone with 8 messages stored** • Send a normal alarm to a phone which alarm list is full • Verify that the alarm is received on phone	☐	☒	☐	

PagingState protocol values:

Alert value	"0"	- the message is stored (ringing state)
Process value	"1"	- the message is read or acknowledged
OutOfCoverage value	"2"	- the destination is out of radio coverage
OutOfservice value	"4"	- the destination is out of service
Undefined value	"5"	- destination not declared as a NS device
NoAlert value	"6"	- the alarm cannot be deposit
SPNoser value	"7"	- used for licenses validation

9.5 Functional Tests in an IP-DECT environment

Reminder: The DECT phones with GAP only don't support Notification paging feature, like DECT500, in TDM IBS-DECT or IP-DECT environments.

9.5.1 Sending alarms

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Normal Alarm Without Ack sent to Dect8232** • Send a normal alarm without ack "0" • Verify that the alarm is received on phone	☐	☒	☐	
2.	**Normal Alarm With Ack sent to Dect400** • Send a normal alarm with ack "1" • Verify that the alarm is received on phone	☐	☒	☐	
3.	**Urgent Alarm Without Ack sent to Wlan8128 or 8118** • Send a urgent alarm without ack "2" • Verify that the alarm is received on phone	☐	☒	☐	
4.	**Urgent Alarm With Ack sent to IP Touch 4068** • Send a urgent alarm with ack "3" • Verify that the alarm is received on phone	☐	☒	☐	
5.	**Normal SndCall alarm to Dect400** • Send a normal discrete alarm code "4" • Verify that the alarm is received on phone	☒	☐	☐	
6.	**Urgent SndCall Alarm to Dect8232** • Send an urgent discrete alarm code "5" • Verify that the alarm is received on phone	☒	☐	☐	
7.	**Delete an Alarm from Application** • Send an alarm with ack to any type of set • Delete this alarm and check it has been removed	☒	☐	☐	

9.5.2 Acknowledgement of alarms

These tests shall verify that the application is able to manage acknowledgement of an alarm.

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Normal Alarm to Wlan8118/8128** • Send a normal alarm • Read the alarm and acknowledge it. Check status read in the application	☐	☒	☐	
2.	**Normal Alarm to Out Of Service IPT Phone** • Send a normal alarm to a phone out of service • Verify that the application display that the phone is out of service	☐	☒	☐	
3.	**Normal Alarm to Out Of Coverage DECT phone** • Send a normal alarm to a phone out of coverage • Verify that the application display that the phone is out of coverage	☐	☒	☐	
4.	**Normal Alarm to phone number without NS right.** • Send a normal alarm to a phone without the Notification Server right. • Verify that the application displays the error	☐	☒	☐	
5.	**Normal alarm to phone with 8 messages stored** • Send a normal alarm to a phone which alarm list is full • Verify that the alarm is received on phone	☐	☒	☐	

9.6 Duplication and Robustness

9.6.1 Test Objectives

Check how the system will react in case of a CPU reboot, switchover or link failure etc.
The test system is configured with spatial redundancy (duplicate call servers on two different IP subnetworks).

Spatial redundancy can be configured in two ways:

“Alternate Proxy method”: Specify both CS MAIN addresses as primary and alternative proxy respectively. Requires that on non availability of primary proxy, secondary proxy is used. Requires ability to accept incoming calls from secondary proxy.

“DNS method”: Do not specify a proxy address, only SIP domain. Specify the CS MAIN addresses as first and second DNS server, respectively. Requires that (at least on non availability of current proxy) a new DNS request is issued for every message. Only MAIN CS will respond. Requires ability to accept incoming calls from secondary CS when it becomes new MAIN.

For each configuration, check:

Can new outgoing calls be made immediately after switchover?
Are existing calls maintained after switchover?
Are incoming calls (from new MAIN CS) accepted immediately after switchover?
Can existing call be modified (transfer, hang-up, etc.) after switchover?
Check if a session that has been started before switchover is maintained after switchover, i.e. does the new MAIN CS send session updates and is this accepted by the client?

9.6.2 Test Results

Test Case Id	Test Case	N/A	OK	NOK	Comment
1.	**Application connects to Main CS using IP@** • Spatial redundancy, using "Alternate Proxy method" • Switchover to standby call server. • Verify that the application reconnect the CSTA link • Verify that SIP calls are working	☒	☐	☐	There is no provision in the application to give the Alternate server IP address in the paging interface.
2.	**Application connects to Main CS via DNS query** • Spatial redundancy, using "DNS method" • Switchover to standby call server. • Verify that the application reconnect the CSTA link • Verify that SIP calls are working	☐	☒	☐	
3.	**Application connects to PCS** • Switchover to Passive Call Server (IP link to main/stdby call servers down) • Verify that the application reconnect the CSTA link • Verify that the **SIP calls** are still working	☒	☐	☐	There is no provision in the application to give the PCS IP address in the paging interface.

10 Appendix A: Partner Application Description

Alert triggering via

- Alarm contacts integrated in server (digital)
- Alarm contacts via LAN (digital and analogue)
- Serial interfaces
- Internal and external telephone calls
- OPC interface
- Input to the alert server
- Input to any PC in the network (Web Client)
- Pre-programmed alert instructions /watchdog protection
- Receiving of e-mails (SMTP)
- Receiving of pager messages
- SNMP (Simple Network Management Protocol)
- TCP/IP (network – LAN/WAN)
- EIB/KNX

- Control systems for machines
- Databases
- WebSphere MQ

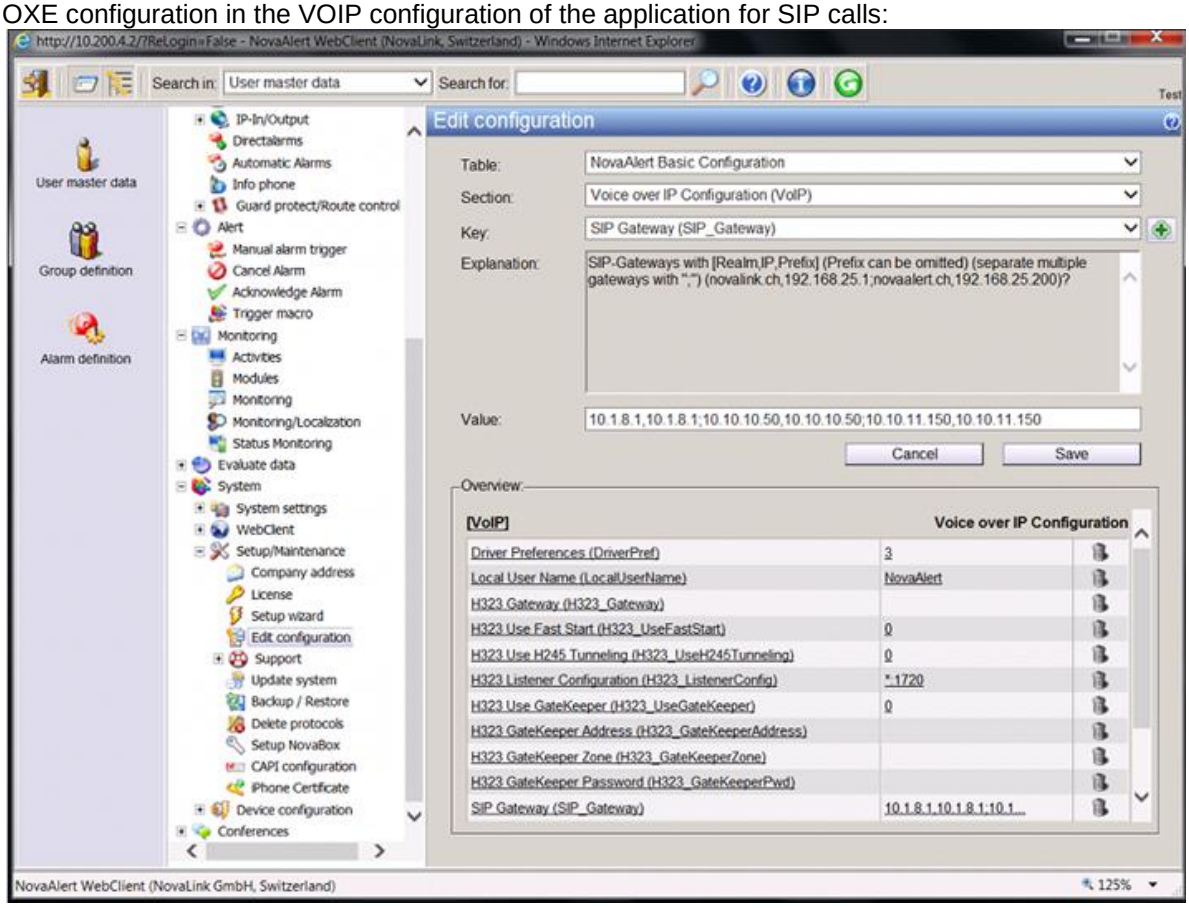
Alerting to

- Internal/external landlines
- Display of mobile phones via paging
- SMS (short message service)
- Personal paging system (PPS)
- E-mail
- Fax
- Cordless telephones
- GSM (mobile phone)
- Pager
- Serial interface
- PC via pop-upmessage

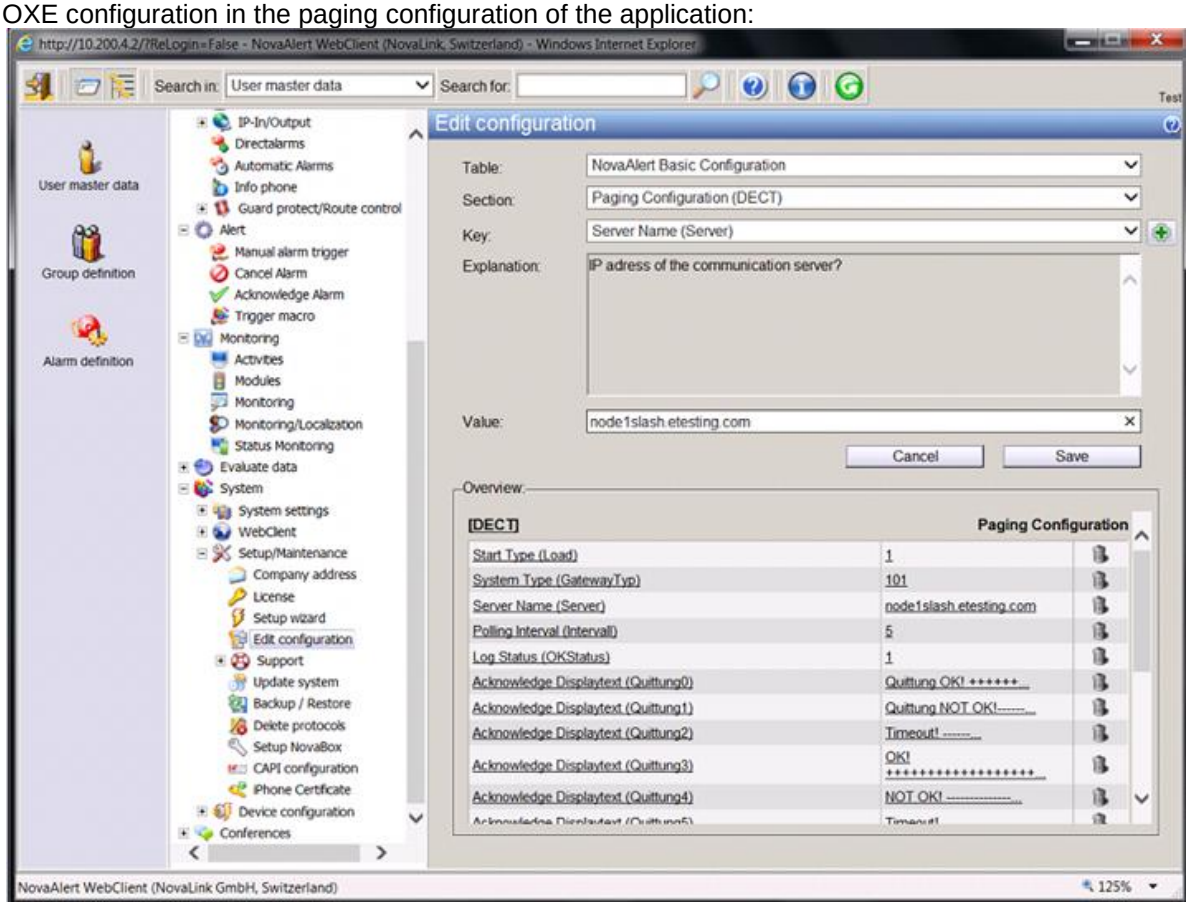
Digital and analogue outputs

11 Appendix B: Partner Application: Configuration Requirements

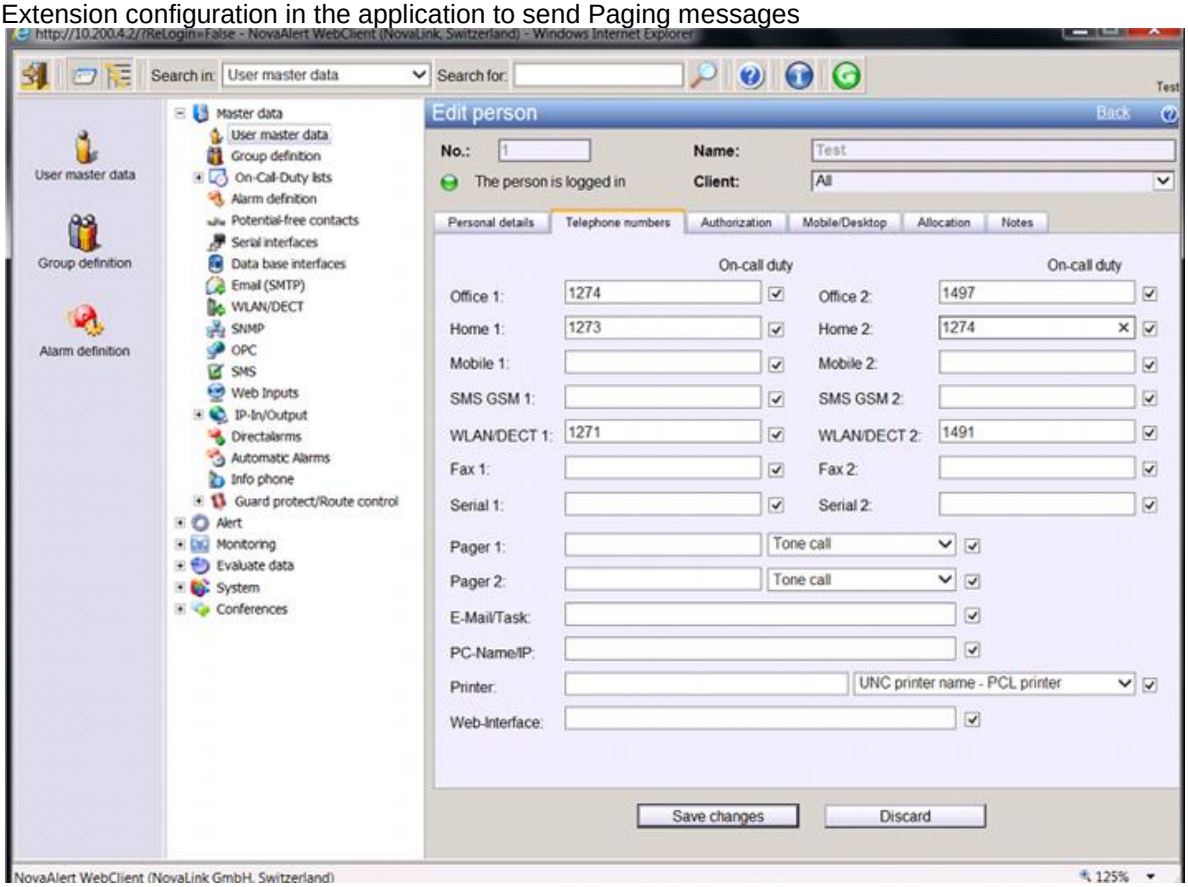
OXE configuration in the VOIP configuration of the application for SIP calls:



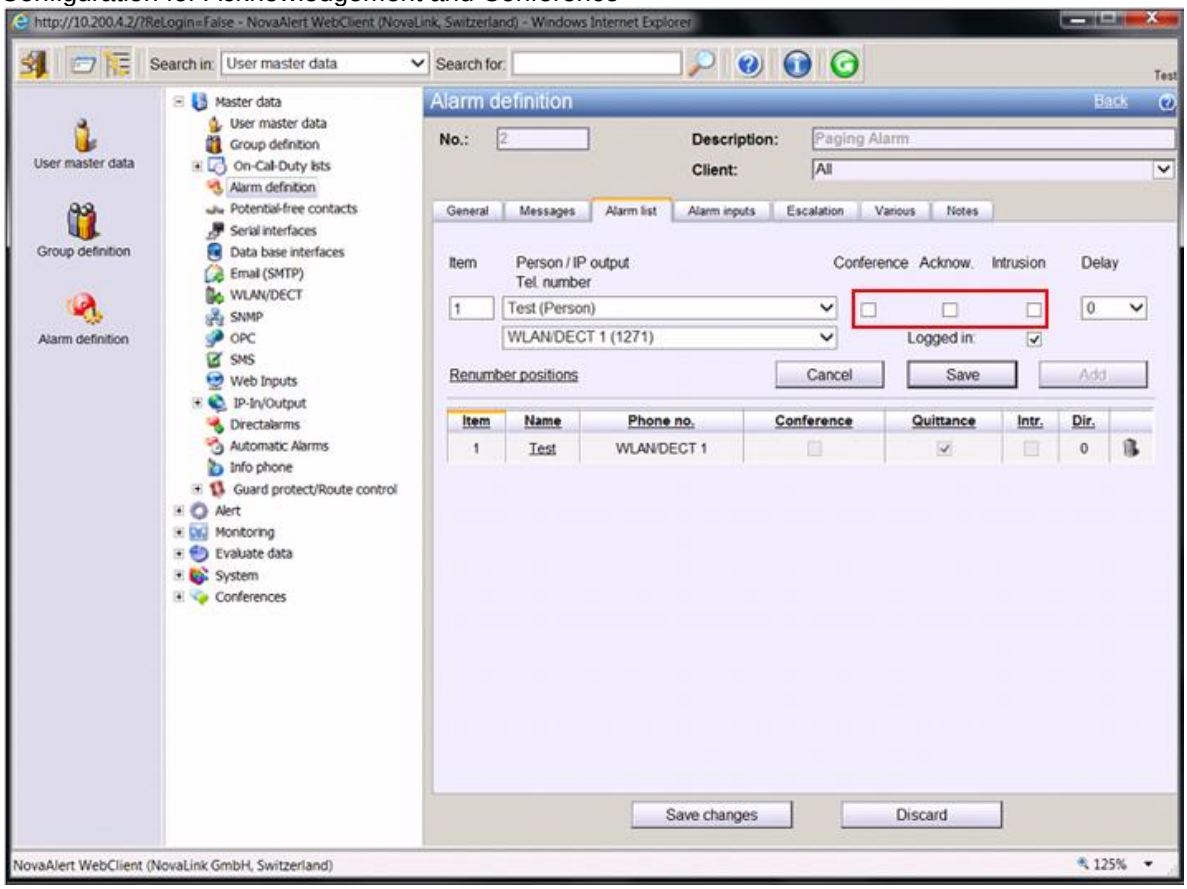
OXE configuration in the paging configuration of the application:



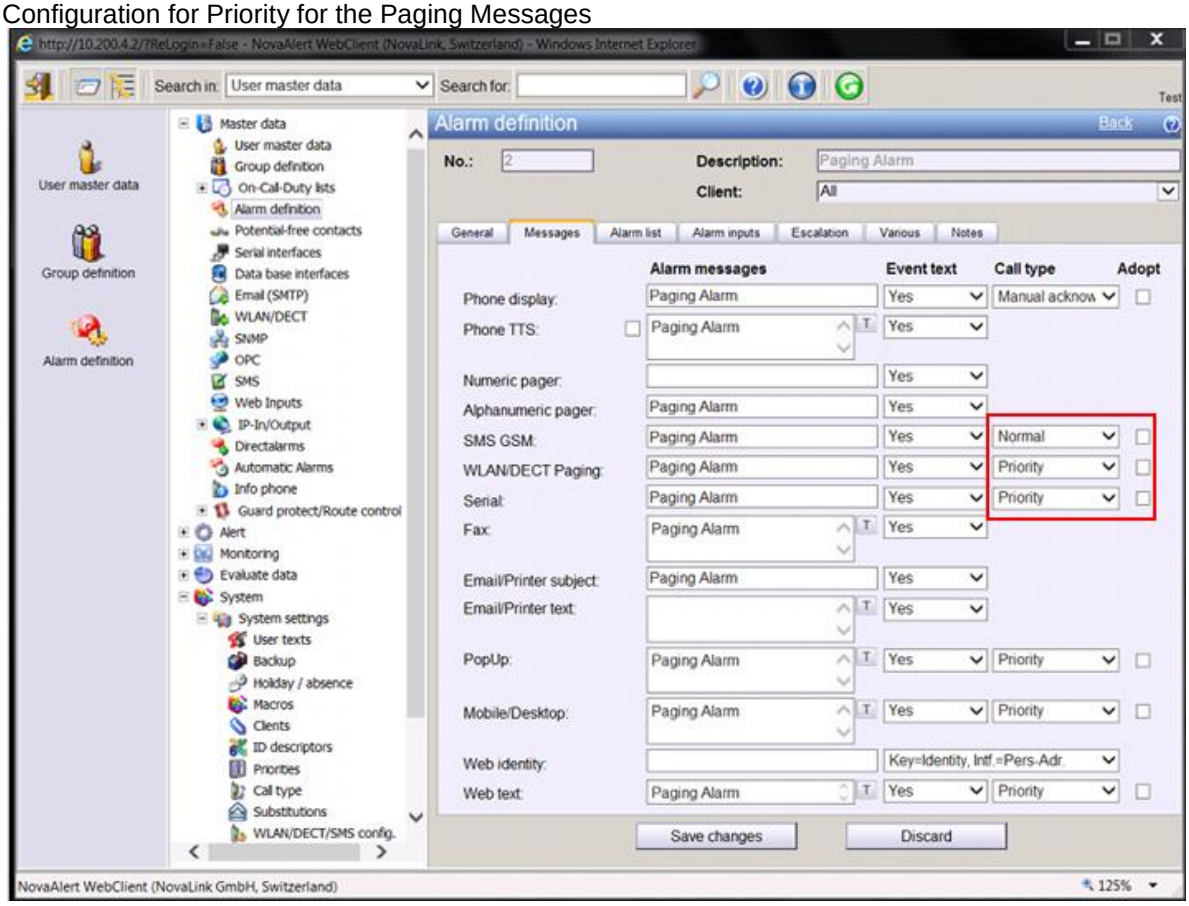
Extension configuration in the application to send Paging messages



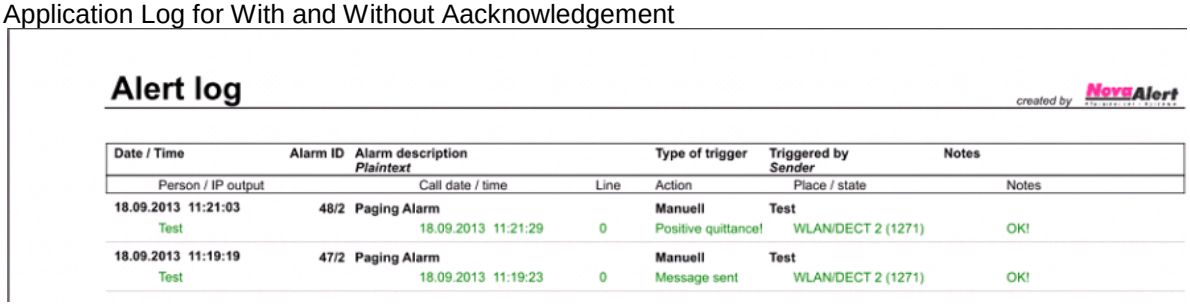
Configuration for Acknowledgement and Conference



Configuration for Priority for the Paging Messages



Application Log for With and Without Aacknowledgement

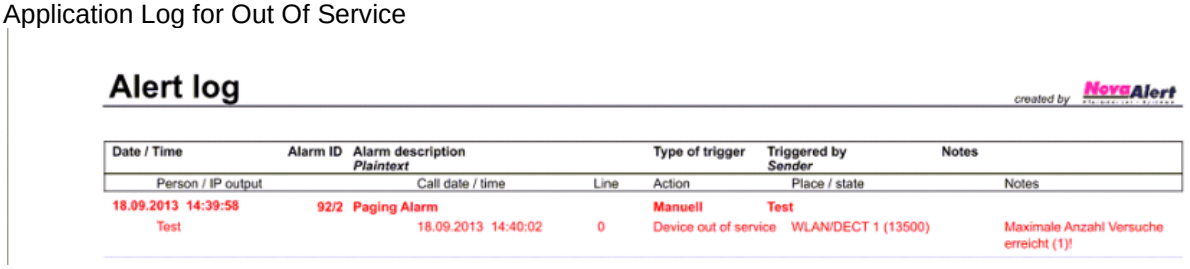


Alert log

created by NovaAlert

Date / Time	Alarm ID	Alarm description *Plaintext*		Type of trigger	Triggered by *Sender*	Notes
Person / IP output		Call date / time	Line	Action	Place / state	Notes
18.09.2013 11:21:03	48/2	Paging Alarm		Manuell	Test	
Test		18.09.2013 11:21:29	0	Positive quittance!	WLAN/DECT 2 (1271)	OK!
18.09.2013 11:19:19	47/2	Paging Alarm		Manuell	Test	
Test		18.09.2013 11:19:23	0	Message sent	WLAN/DECT 2 (1271)	OK!

Application Log for Out Of Service



Alert log

created by NovaAlert

Date / Time	Alarm ID	Alarm description *Plaintext*		Type of trigger	Triggered by *Sender*	Notes
Person / IP output		Call date / time	Line	Action	Place / state	Notes
18.09.2013 14:39:58	92/2	Paging Alarm		Manuell	Test	
Test		18.09.2013 14:40:02	0	Device out of service	WLAN/DECT 1 (13500)	Maximale Anzahl Versuche erreicht (1)!

Application Log for Out Of Range

Alert log

created by NovaAlert

Date / Time	Alarm ID	Alarm description *Plaintext*		Type of trigger	Triggered by *Sender*	Notes
Person / IP output		Call date / time	Line	Action	Place / state	Notes
18.09.2013 14:50:11	96/2	Paging Alarm		Manuell	Test	
Test		18.09.2013 14:50:12	0	Device out of range	WLAN/DECT 1 (13500)	Maximale Anzahl Versuche erreicht (1)!

Application Log for Non-Paging device

Alert log

created by NovaAlert

Date / Time	Alarm ID	Alarm description *Plaintext*		Type of trigger	Triggered by *Sender*	Notes
Person / IP output		Call date / time	Line	Action	Place / state	Notes
18.09.2013 12:02:48	69/2	Paging Alarm		Manuell	Test	
Test		18.09.2013 12:02:50	0	Wrong number	WLAN/DECT 2 (1497)	Maximale Anzahl Versuche erreicht (1)!

Application Log for Busy Extensions

Alert log

created by NovaAlert

Date / Time	Alarm ID	Alarm description *Plaintext*		Type of trigger	Triggered by *Sender*	Notes
Person / IP output		Call date / time	Line	Action	Place / state	Notes
18.09.2013 15:22:50	119/1	Test SIP Alarm		Manuell	Test	
Test		18.09.2013 15:23:04	4	The call number of the called member has changed (22)	1276	Maximale Anzahl Versuche erreicht (1)!
18.09.2013 15:22:43	118/1	Test SIP Alarm		Manuell	Test	
Test		18.09.2013 15:23:02	3	The call number of the called member has changed (22)	1273	Maximale Anzahl Versuche erreicht (1)!
18.09.2013 15:22:07	117/1	Test SIP Alarm		Manuell	Test	
Test		18.09.2013 15:22:22	2	The call number of the called member has changed (22)	1271	Maximale Anzahl Versuche erreicht (1)!
18.09.2013 15:20:34	116/1	Test SIP Alarm		Manuell	Test	
Test		18.09.2013 15:20:36	4	Busy	1501	Maximale Anzahl Versuche erreicht (1)!

12 Appendix C: Alcatel-Lucent Communication Platform: Configuration Requirements

Sip Trunk Configuration:

```
Review/Modify: Trunk Groups

            Node Number (reserved) : 101
                    Trunk Group ID : 2

                  Trunk Group Type + T2
                  Trunk Group Name : NovaAlert
             UTF-8 Trunk Group Name : ----------------------------------------
             Number Compatible With : -1
                     Remote Network : 13
                Shared Trunk Group + False
                  Special Services + Nothing
                       Node number : 1
               Transcom Trunk Group + False
          Auto.reserv.by Attendant + False
          Overflow trunk group No. : -1
                    Tone on seizure + False
                Private Trunk Group + True
                Q931 Signal variant + ABC-F
                 SS7 Signal variant + No variant
          Number Of Digits To Send : 10
            Channel selection type + Quantified
Auto.DTMF dialing on outgoing call + NO
                  T2 Specification + SIP
 Homogenous network for direct RTP + NO
                Public Network COS  : 31
                   DID transcoding + False
          Can support UUS in SETUP + True
        Associated Ext SIP gateway : -1

                           Implicit Priority

                  Activation mode : 0
                   Priority Level : 0

                        Preempter + NO
    Incoming calls Restriction COS : 10
    Outgoing calls Restriction COS : 10
            Callee number mpt1343  + NO
                  Overlap dialing + YES
            Call diversion in ISDN + NO
```

Trunk Status Check:

```
(101)slash1node1> trkstat 2

Thu Sep 19 19:26:08 IST 2013
+=============================================================================+
|   S I P   T R U N K    S T A T E     Trunk group number : 2                  |
|                                      Trunk group name   : NovaAlert         |
|                                      Number of Trunks   : 62                |
+-----------------------------------------------------------------------------+
|   Index :     1    2    3    4    5    6    7    8    9   10   11   12   13 |
|   State :     F    F    F    F    F    F    F    F    F    F    F    F    F |
+-----------------------------------------------------------------------------+
|   Index :    14   15   16   17   18   19   20   21   22   23   24   25   26 |
|   State :     F    F    F    F    F    F    F    F    F    F    F    F    F |
+-----------------------------------------------------------------------------+
|   Index :    27   28   29   30   31   32   33   34   35   36   37   38   39 |
|   State :     F    F    F    F    F    F    F    F    F    F    F    F    F |
+-----------------------------------------------------------------------------+
|   Index :    40   41   42   43   44   45   46   47   48   49   50   51   52 |
|   State :     F    F    F    F    F    F    F    F    F    F    F    F    F |
+-----------------------------------------------------------------------------+
|   Index :    53   54   55   56   57   58   59   60   61   62                |
|   State :     F    F    F    F    F    F    F    F    F    F                |
+-----------------------------------------------------------------------------+
|  F:  Free   |    B: Busy   |   Ct: busy Comp trunk   |  Cl: busy Comp link   |
```

Creation of ARS Route List

```
Review/Modify: ARS Route

            Node Number (reserved) : 101
               Instance (reserved) : 1
               Instance (reserved) : 1
                    ARS Route list : 2
                             Route : 1

                              Name : Alarm
                Trunk Group Source + Route
                        Trunk Group : 2
           No.Digits To Be Removed : 0
                      Digits To Add : ------------------------------
       Numbering Command Tabl. ID : 0
                    VPN Cost Limit : 0
                     Protocol Type + ABC_F
                    NPD identifier : 255
                        Route Type + Public
                    ATM Address ID : -1
                         Preempter + False

                                Quality
```

Creation of Time based Route List

```
Review/Modify: Time-based Route List

            Node Number (reserved) : 101
               Instance (reserved) : 1
               Instance (reserved) : 1
                     ARS Route list : 2
          Time-based Route List ID : 1

                                Time-based Route

          [  Add   ]    [ Remove ]    [  Next  ]    [Previous]

                                Time-based Route

                        Route Number : 1
                   Waiting Cost Limit : -1
                  Stopping Cost Limit : -1
```

Sip External Gateway Configuration:

```
Review/Modify: SIP Ext Gateway

            Node Number (reserved) : 101
               Instance (reserved) : 1
          SIP External Gateway ID : 2

                       Gateway Name : Novaalert
                  SIP Remote domain : 10.200.4.2
                     PCS IP Address : ------------------------------------------------
                    SIP Port Number : 5060
                     Transport type + UDP
                   Belonging Domain : etesting.com
                    Registration ID : ------------------------------------------------
        Registration ID P_Asserted + False
                  Registration timer : 0
                  SIP Outbound Proxy : ------------------------------------------------
                   Supervision timer : 0
                  Trunk group number : 2
                         Pool Number : -1
                     Outgoing realm : ------------------------------------------------
                   Outgoing username : ------------------------------------------------

                   Outgoing Password : --------------------
                             Confirm : --------------------

                   Incoming username : ------------------------------------------------

                   Incoming Password : --------------------
                             Confirm : --------------------

  RFC 3325 supported by the distant + True
                            DNS type + DNS A
                  SIP DNS1 IP Address : ------------------------------------------------
                  SIP DNS2 IP Address : ------------------------------------------------
                           SDP in 18x + True
      Minimal authentication method + SIP None
   INFO method for remote extension + False
                              To EMS + False
                                SRTP + RTP only
```

Status Check for the Application

```
(101)slash1node1> sipextgw -g 2

Mon Sep 23 18:50:20 IST 2013

=============================================================
|       S I P   E X T E R N A L   G A T E W A Y   Nb 2       |
=============================================================
        Gateway Name              : Novaalert
        Gateway Type              : Standard type
        State                     : IN SERVICE
        Belong to pool number     : -1
        Use trunk group number    : 2 (ABC-F)
        Remote domain             : 10.200.4.2
        Port number               : 5060
        Transport                 : UDP
        SRTP                      : RTP only
        Prack                     : NO
        Clir                      : YES
        SIP info enable           : NO
        Authentication method     : NONE
        SDP in 180 messages       : YES
        Payload                   : 97
        Outgoing username         :
        Outgoing password         : *****
        Incoming username         :
        Incoming password         : *****
        Local domain name         : etesting.com
        Local user name           :
        Realm name                :
        Outbound proxy            :
        Supervision timer         : 0
        Registration timer        : 0
        DNS type                  : DNS A
```

Create Prefix to make calls to NovaAlert Application:

```
-Review/Modify: Prefix Plan-

             Node Number (reserved) : 101
                Instance (reserved) : 1
                             Number : 99

                    Prefix Meaning + Routing No.
                    Network Number : 13
      Node Number/ABC-F Trunk Group : 2
                  Number of Digits : 3
      Number With Subaddress (ISDN) + NO
               Default X25 ID.pref. + NO
```

IBS – DECT Configuration:

```
Review/Modify: PWT/DECT System

            Node Number (reserved) : 101
               Instance (reserved) : 1

                  Radio base type + IBS
                     IP Base Type + NO
       Max numb.of paging retransm. : 5
 Rtg. tone for incom. PWT/DECT call + Inactive
                      PLI for CTM : 31
         Default Echo Cancellation + YES
        % of channels in part. rel : 0
       Max % of full unused shells : 50
                        AC System : ----
                  Security level + Identity
               Station Base Type + DECT Europe
        PWT/DECT system generation + 2nd Generation
           DECT Prolonged preamble + YES
   Max Time of unused shell (U=10') : 144
```

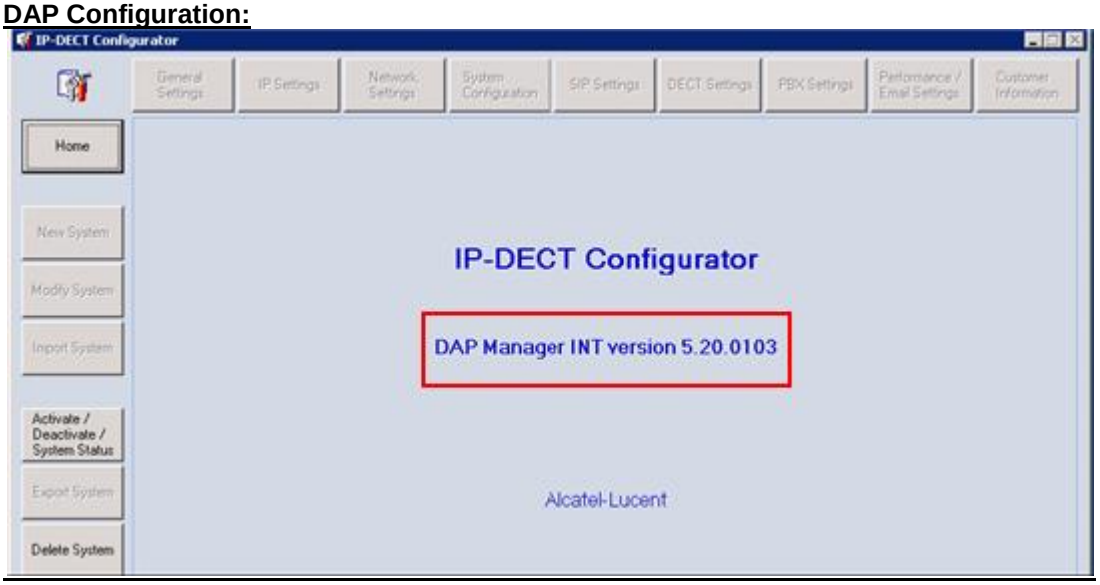
Defining the PARI value:

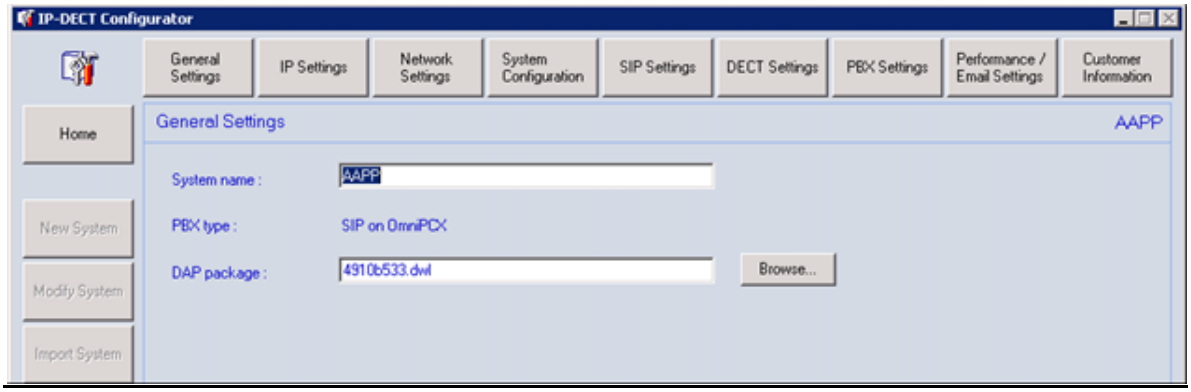
```
Review/Modify: IBS System

            Node Number (reserved) : 101
               Instance (reserved) : 1
               Instance (reserved) : 1

                        PARI Value : 10000000012
                         Area type + 1 area of 256 IBS
          Base station busy trigger : 4
                          Reserved + YES
```

IP-DECT Configuration:

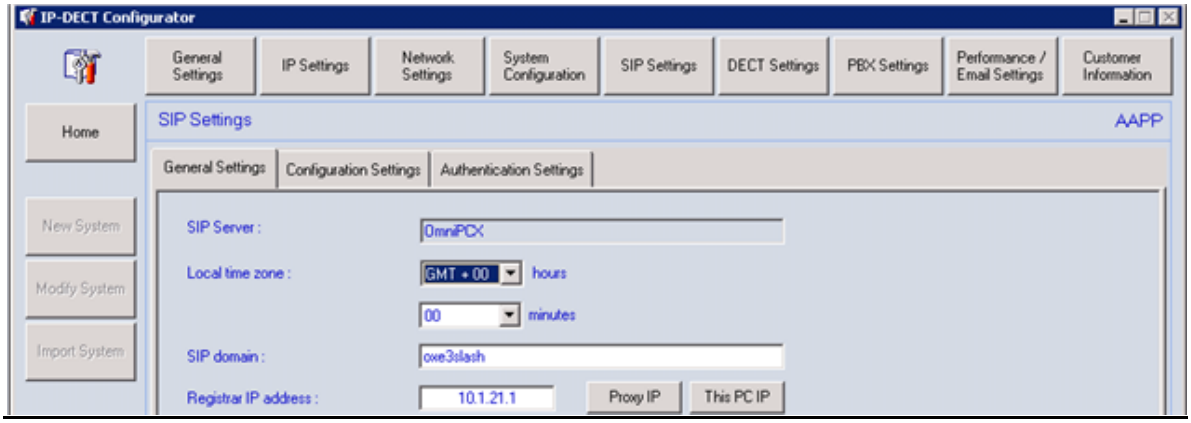
DAP stands for DECT Access Point (Dect base station working with IP protocol).

DAP Configuration:

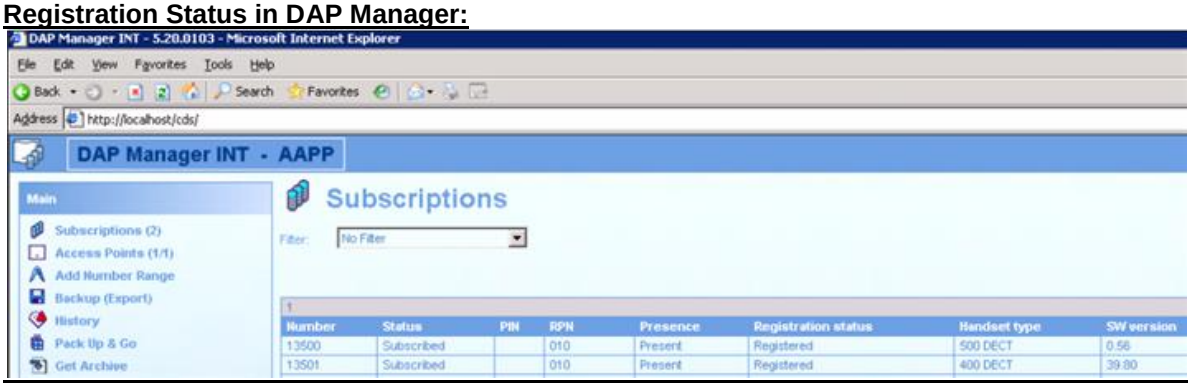




OXE Configuration in DAP Manager



Registration Status in DAP Manager:



User Configuration in OXE

The AGAP DECT sets (Dect 100 to 400 and 8232) are configured as “GAP+” in the OmniPCX Enterprise and can be then seen with the command “dectsets”.

The GAP DECT sets (Dect 500) are configured as “SIP Extension” and will be Registered into the OmniPCX Enterprise (SIP Register is sent by one DAP).

The user should be a mono-line set

```
Review/Modify: Users

            Node Number (reserved) : 101
                  Directory Number : 1271

                   Directory name : D 8232
              Directory First Name : --------------------
              UTF-8 Directory Name : ----------------------------------------
        UTF-8 Directory First Name : ----------------------------------------
                     Location Node : 1
                     Shelf Address : 255
                     Board Address : 255
                 Equipment Address : 255
                          Set Type + GAP +
                     Entity Number : 1
                      Set Function + Default
                      Profile Name : ---------------
                      Key Profiles + None
                Domain Identifier : 0
                       Language ID : 1

                       Secret Code : ****
```

```
Review/Modify: Users

                          Multi-Line Properties

         Automatic Incoming Seizure + False
         Automatic Outgoing Seizure + False
                Selective Filtering + False
              Overflow on no answer + False
                   Overflow on busy + False
             Supervision at off-hook + False
  Automatic Outgoing Seizure for MLA + False

        Access Code to UUS messages + NO
    Phone book Name (Dial by name) : D 8232
              Phone book First Name : --------
    NS Right (Notification server) + YES

                                  Tandem

             Tandem Directory Number : --------
              Main set in the tandem + False
```

Registration Status in OXE:

```
(103)oxe3aslash> dectsets

Thu Sep 19 10:47:59 EDT 2013

================================================================================
Permanent handsets :
================================================================================
IPDECT handsets :
 Neqt=00580  Nbr=13501     IP@=010.200.003.031  MR 300/400  AGAP  V39.80  Ins.
Legacy DECT handsets :
```

13 Appendix D: Application Partner Escalation Process

Normal Contact:

NovaLink GmbH
Business Tower
Zürcherstrasse 310
CH-8500 Frauenfeld
Tel: +41 52 762 66 66
Fax: +41 52 762 66 99
www.novalink.ch
info@novalink.ch

Support Contact:

Tel: +41 52 762 66 77
Fax: +41 52 762 66 99
E-Mail: helpdesk@novalink.ch

Opening hours: Monday to Friday
08.30 am - 12.00 pm
01.30 pm - 05.00 pm
(Fridays to 4.00 pm)

14 Appendix E: AAPP program

14.1 Alcatel-Lucent Application Partner Program (AAPP)

Complete e-business solutions at your disposal

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

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

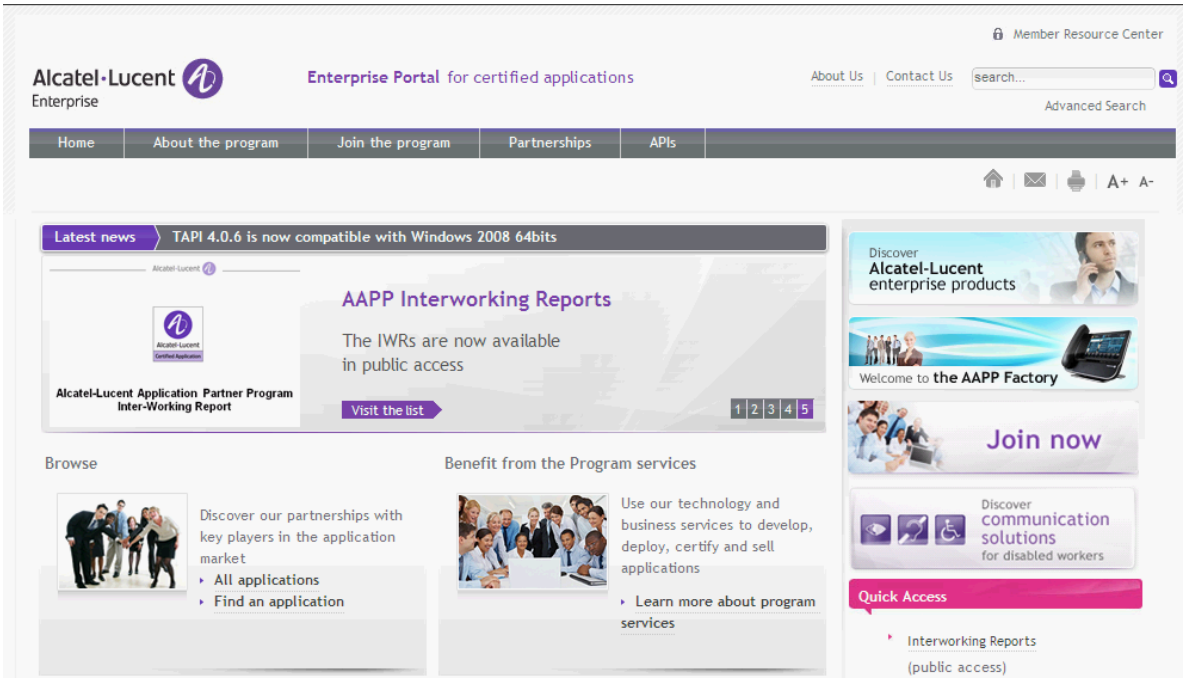
- **Provide easy interfacing for Alcatel-Lucent communication products**: Alcatel-Lucent's communication products for the enterprise market include infrastructure elements, platforms and software suites. To ensure easy integration, the AAPP provides a full array of standards-based application programming interfaces and fully-documented proprietary interfaces. Together, these enable third-party applications to benefit fully from the potential of Alcatel-Lucent products.

- **Test and verify a comprehensive range of third-party applications**: to ensure proper inter-working, Alcatel-Lucent tests and verifies selected third-party applications that complement its portfolio. Successful candidates, which are labelled Alcatel-Lucent 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.

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



14.2 Alcatel-Lucent.com

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

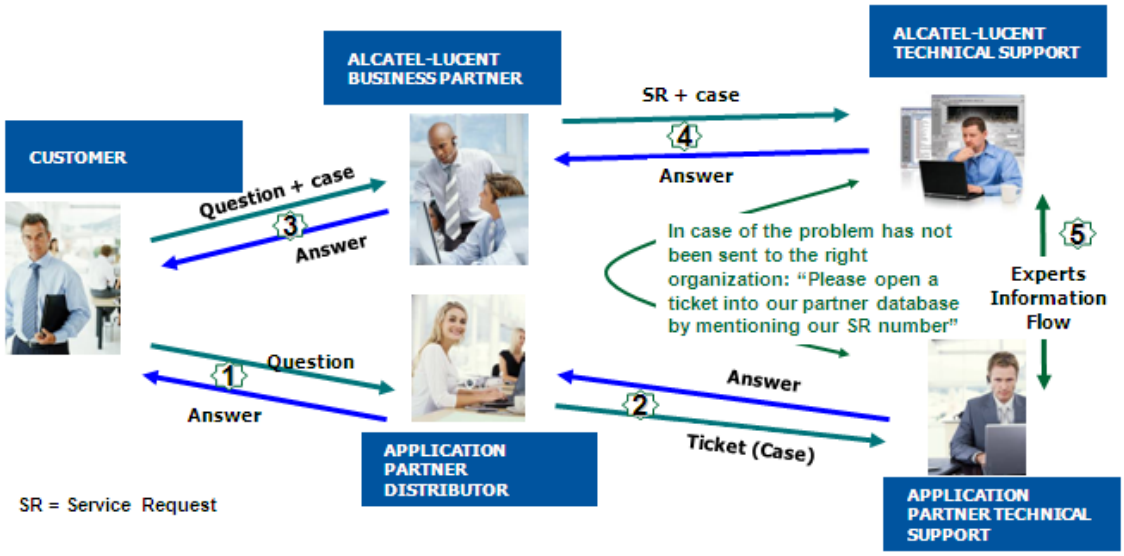
15 Appendix F: AAPP Escalation process

15.1 Introduction

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

The principle is that Alcatel-Lucent 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, Alcatel-Lucent and the Application Partner, are engaged as following:



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

15.2 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, Alcatel-Lucent and the Application Partner, are engaged:

Case 1: the responsibility can be established 100% on Alcatel-Lucent side.
In that case, the problem must be escalated by the ALU Business Partner to the Alcatel-Lucent 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 Alcatel-Lucent Business Partner will escalate the problem to the Alcatel-Lucent Support Center only if the Application Partner has demonstrated with traces a problem on the Alcatel-Lucent side or if the Application Partner (not the Business Partner) needs the involvement of Alcatel-Lucent.

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

Alcatel-Lucent reserves the right to close the case opened on his side if the investigations made on the Application Partner side are insufficient or do no 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, Alcatel-Lucent offers the “On Demand Diagnostic” service where Alcatel-Lucent will provide 8 hours assistance against payment .

IMPORTANT NOTE 1: The possibility to configure the Alcatel-Lucent 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 Alcatel-Lucent Business Partner is mandatory, the access to the Alcatel-Lucent platform (remote access, login/password) being the Business Partner responsibility.

15.3 Escalation in all other cases

These cases can cover following situations:

1. An InterWorking Report exist but is not valid (see Chap **Error! Reference source not found.** “Validity of an Interworking Report”)

2. The 3rd party company is referenced as AAPP participant but there is no official InterWorking Report (no IWR published on the Enterprise Business Portal for Business Partners or on the Alcatel-Lucent Application Partner web site) ,

3. The 3rd party company is NOT referenced as AAPP participant

In all these cases, Alcatel-Lucent offers the “On Demand Diagnostic” service where Alcatel-Lucent will provide 8 hours assistance against payment.

15.4 Technical support access

The Alcatel-Lucent **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 Alcatel-Lucent Business Partners Web site (if registered Alcatel-Lucent Business Partners): https://businessportal.alcatel-lucent.com click under "Let us help you" the *eService Request* link
- e-mail: Ebg_Global_Supportcenter@alcatel-lucent.com
- Fax number: +33(0)3 69 20 85 85
- Telephone numbers:

Alcatel-Lucent 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: + 1 650 385 2193
French answer: + 1 650 385 2196
German answer: + 1 650 385 2197
Spanish answer: + 1 650 385 2198

END OF DOCUMENT