



Application Partner Program Inter-Working Report

Partner: Linkcom

Application type: GSM / SIP Gateway

Application name: LinkGate SIP



The product and version listed have been tested with the Alcatel-Lucent Communication Server and the version specified hereinafter. The tests concern only the inter-working between the Application Partner product and the Alcatel-Lucent Communication platforms. The inter-working report is valid until the Application Partner issues a new version of such product (incorporating new features or functionality), or until Alcatel-Lucent issues a new version of such Alcatel-Lucent product (incorporating new features or functionality), whichever first occurs.

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Tests identification

Date of the tests	November 2010	
Alcatel-Lucent's representative	Olivier Koenig	
Partner's representative	Alexis Jenecourt	
<u>'</u>		
Alcatel-Lucent Communication Platform (OmniPCX 4400/Enterprise, OmniTouch, OmniPCX Office,)	OmniPCX Office	
Alcatel-Lucent compatibility release	R8.0/030.002	
Partner's application version	LinkGate SIP v1.42	
Environment (if it has a sense)	□ ACD ■ Business	
Author(s): O.Koenig Reviewer(s): History: 1. Edition 1: 01/11/2010 : Creation of document		
Test results		
☐ Passed ☐ Refused	□ Postponed	
✓ Passed with restrictions		
Refer to the section 4 for a summary of the test results.		



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TABLE OF CONTENTS

1	IN	FRODUCTION	5
2	: AP	PLICATION INFORMATION	6
3	TE	STS ENVIRONMENT	7
	3.1	GENERAL ARCHITECTURE	7
4	SU	MMARY OF TEST RESULTS	8
	4.1 4.2 4.3 4.4	SUMMARY OF MAIN FUNCTIONS SUPPORTED SUMMARY OF PROBLEMS SUMMARY OF LIMITATIONS NOTES, REMARKS	8 8
5	TE	ST PROCEDURE	9
	5.1 5.2	TEST TEMPLATE	
6	TE	ST RESULTS	10
	6.1	TEST PROCEDURE	10
A	PPEN	DIX A : APPLICATION DESCRIPTION	12
		DIX B: ALCATEL-LUCENT COMMUNICATION PLATFORM: CONFIGURATION REMENTS	14
A	PPEN	DIX C: PARTNER ESCALATION PROCESS	15
A	PPEN	DIX D: AAPP PROGRAM, DOCUMENTATION AND TECHNICAL ASSISTANCE	16
		DIX E: ALCATEL-LUCENT ESCALATION PROCESS IN CASE OF PROBLEM WITH A FIED EXTERNAL APPLICATION (REFERENCED IN THE AAPP)	20



1 Introduction

The goal of these tests is to qualify an external application as an Alliance & Application Partner Program solution for the Alcatel-Lucent Communication Platform.

The scope of the tests is the interoperability of the application with the Alcatel-Lucent Communication Platform. It covers a basic or complex inter-working to ensure that services requested by the application and provided by the Communication Platform (and/or conversely) are properly completed.

These tests do not verify the functional achievement of the application as well as they do not cover load capacity checks, race conditions and generally speaking any real customer's site conditions.

Note: This interworking report does not cover mass provisioning and/or remote device management of the partner device.



2 Application information

Application type : GSM / SIP Gateway

Application commercial name: LinkGate SIP

Application version: Firmware 1.42

Interface type: SIP / ethernet

Interface version (if relevant):

Brief application description:

Linkcom completes its range of GSM gateway integrating SIP protocol. Featuring the same functionalities as our analog and digital gateways, the LINK GATE SIP completes the Gateway range with IP SIP: with its IP connectivity, it feets naturally all new generation of IPBX/SIP solutions.

The LinkGate SIP is connected to the IPBX by SIP trunks. In case of incoming call on the GSM module, the Link Gate SIP will convert it in SIP and transfer it to the SIP server (IPBX). For an outgoing call, the Link Gate SIP processes a GSM call when SIP call is received over IP addresses.

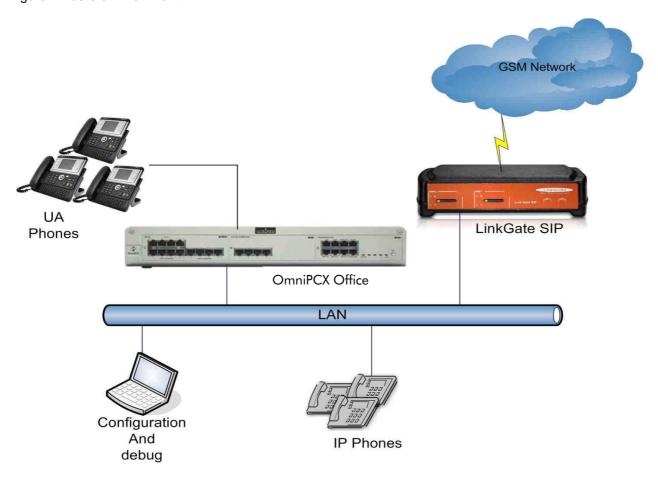


3 Tests environment

3.1 General architecture

The tests are performed on the Alcatel-Lucent TSS Applications International platform in the following environment:

Figure 1 Tests environment



Alcatel-Lucent OmniPCX Office:

• name: wmcti

IP address: 192.168.100.71Software version: R800/030.02

Client application platform:

name: AAPP_CLIENT
IP address: 192.168.100.72
Hardware configuration: v1

Software version: v1.42



4 Summary of test results

4.1 Summary of main functions supported

Features	Satus	comments
Initialization	OK	
IP setting	OK	
SIP setting	OK	
Voice over IP and RTP codec support	OK	
Outgoing Call by GSM module 1	OK	
Incoming Call by GSM module 1	OK	
Management of the voice mail by	OK	
outgoingcall on GSM module 1		
Management of the voice mail by	NOK	Problem of the linkcom : RTP events have a
incoming call on GSM module 1		« 0 » timestamp.
Management of hold and transfer	OK	

4.2 Summary of problems

There is a bug on the Linkcom, when the GSM gateway sends to OXO a RTP Event (DTMF). The RTP event has always a "0" timestamp ---> OXO does not accept that.

4.3 Summary of limitations

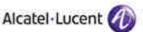
DTMF limitations:

If you make an incoming call on GSM module 2, you cannot manage your voicemail or auto attendant by DTMF. It is possible only on GSM module 1.

There are no problem for outgoing call by GSM module 1 and 2.

4.4 Notes, remarks

The LinkGate SIP is configured in P2P mode (see the manual). The tests have only been performed on the first GSM access of the box.



5 Test Procedure

5.1 Test template

Step	Action	N/A	Result	Origin of the problem	Comment

Step: a test may comprise multiple steps depending on its complexity. Each step has to be completed successfully in order to conform to the test. Step 0 when present represents the initial state for all the following steps.

Action: describes which action to realize in order to set-up the conditions of the test.

N/A: the step within this test is not applicable to this application. This has to be filled in only if the test is checked as mandatory in the applicability box. In that case, the column comment must indicate the reason of the non-applicability (e.g.: service not supported).

Result: describes the result of the test from an external point of view. If it is positive, it describes which application's trigger was checked. If it is negative, it describes as precisely as possible the problem.

Origin of the problem: this column has to be filled in when a problem occurs during the test. It must contain a high level evaluation of the localization of the responsibility: Alcatel-Lucent or the Partner.

Comment: this column has to be filled in when a problem occurs during the test. It must contain a high level evaluation of the localization of the responsibility: Alcatel-Lucent or the Partner.

it is not intended during this test session to debug and fix problems.

5.2 Result template

The results table must be formatted as indicated in the example below:

Step	Action	Result	Comment
1	. action 1	OK	
2	. action 2	OK	The application waits for PBX timer or phone set hangs up
3	. action 3	OK	
4	. action 4		Relevant only if the CTI interface is a direct CSTA link
5	. action 5	NOK	No indication, no error message



6 Test Results

6.1 Test procedure

Step	Action	N/A	Result	Origin of the problem	Comment
1	IP Setting		OK		See configuration details in annex
2	SIP setting		OK		See configuration details in annex
2A	Create a sip trunk for GSM module 1 (IP1) on OXO		OK		See configuration details in annex
3	Setting on sip gateway the extension called for incoming call (for GSM module 1): subscriber number 100		OK		The DDI number 7100 as subscriber call in OXO
3B	Setting on sip gateway the extension called for incoming call (for GSM module 1): Operator number 9		OK		The DDI number 7100 as Operator call in OXO
3C	Setting on sip gateway the extension called for incoming call (for GSM module 1): Group number 501		OK		The DDI number 7100 as group call in OXO
3D	Incoming & answered call cleared by GSM module		OK		
3E	Incoming & answered call cleared by OXO		OK		
3F	Incoming call not answered - check callers repertory - check recall on oxo		OK		
4A	 Outgoing call by GSM module 1 – to ISDN and answered 		OK		Clip OK
4B	- Outgoing call by GSM module 1 to GSM and answered		OK		Clip OK
4C	- Outgoingcall by GSM module 1 and released by caller		OK		
4D	- Outgoingcall by GSM module 1 and released by callee		OK		

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		Alcater Eocent	
5A	Management of a voice mail or auto attendant by outgoing call on GSM module 1	OK	Could be possible to navigate in an OXO voice mail on a remote system and in the Orange menu of the GSM
5B	Management of a voice mail or auto attendant by incoming call on GSM module 1	NOK	Problem of the linkcom: RTP events have a « 0 » timestamp.
6A	Incoming call to OXO, put on hold and retrieved.	OK	
6B	Incoming call to OXO, and transferred to another internal extension	OK	



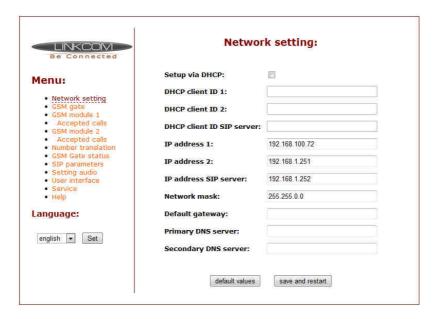
Appendix A: Application description

Configure LinkGate SIP using web interface

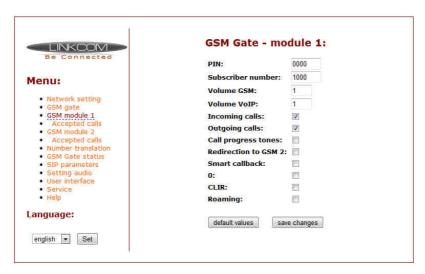
Networks configuration

The default IP address is 192.168.1.250 with mask 255.255.0.0.

- 1. Open a web browser
- 2. Enter the LinkGate SIP IP address in the address bar.
- 3. Enter the login "admin" and the password "1234"
- 4. The starting page is a network setting :
- 5. Configure the local IP parameters :



Click on "GSM module 1" menu:



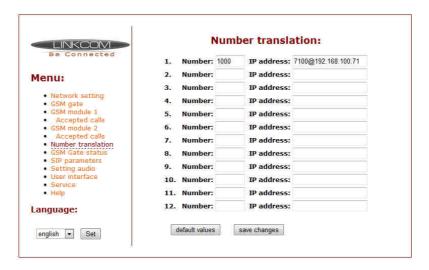
Choose a "Subscriber number" for Module 1 (1000 in our example)



Number translation

Click on "Number translation" menu

Enter the Subscriber number and the associated destination URI For example: Number 1000 = IP address 7100@192.168.100.71



SIP configuration

Click on "SIP parameter" menu Choose "Send DTMF according to RFC2833"





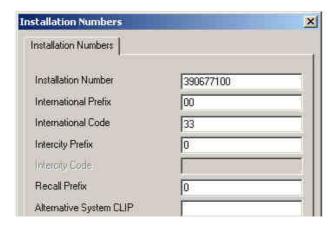
Appendix B: Alcatel-Lucent Communication Platform: configuration requirements

Configure OmniPCX Office using OMC

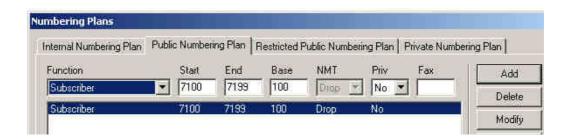
Hereafter are only described the specific to SIP configuration parameters

Installation number

Configure the system installation number (example of a French system) the system installation number (example of a French system).



Public Numbering Plan



ARS table



SIP Public Numbering format





Appendix C: Partner escalation process

In case of problem please contact:

Alexis Jenecourt

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Tel: +33 1 40 83 13 13 (France)

For more update information on Linkcom LinkGate SIP & contact: http://www.lincom.fr



Appendix D: AAPP program, documentation and technical assistance

Alliance & Application Partner Program (AAPP)

Complete e-business solutions at your disposal

The Alliance & 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 Alliance & 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 Alliance & 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, ...

Web site

If registered Alliance & Application Partner, you can access the AAPP website at this URL: http://applicationpartner.alcatel-lucent.com

Alcatel-Lucent.com

You can access the Alcatel-Lucent website at this URL: https://businessportal.alcatel-lucent.com/



Alcatel-Lucent documentation

Alliance & Application Partner Program (AAPP)

If registered Alliance & Application Partner, you can access the current AAPP documentation at this URL:

http://applicationpartner.alcatel-lucent.com

Alcatel-Lucent Business Partner Program (ABPP)

The Alcatel-Lucent Business Partner Program is designed to empower and maximize the business of the Partners. In addition, it enables them to help their customers successfully maximize their telecom investment through optimum deployment and proper configuration of Alcatel-Lucent's solutions. Alcatel-Lucent Partners also receive the added benefit of rapid, highly qualified service and support as well as world class training. Alcatel-Lucent will work closely with Business Partners to provide top quality design, delivery, and support of the very best solutions for your customers. The Business Partner Program is designed around a flexible and scalable framework so each Partner can identify the exact support they need. So, depending on your specific requirements you can quickly become a 'Certified', 'Expert' or 'Premium' Business Partner with one of the world leaders in the communications industry.

If registered Alcatel-Lucent Business Partners, you can access to an exciting on-line resource centre with a wealth of information on all product lines at this URL: https://businessportal.alcatel-lucent.com/



Technical assistance

In order to guide you in your purchasing decisions and provide you with assistance for updating our Communication Server and Networking Infrastructure products and for commercial development, Alcatel-Lucent has created the **SUPPORT CENTER**. The **SUPPORT CENTER** is responsible for the management and routing of all your requests. It includes **e-Support** and a **Contact Centre** reserved for registered Alliance & Application Partner and Alcatel-Lucent Business Partners.

The **Contact Centre** is open 24 hours a day; 7 days a week and is available in 5 languages. This Call Centre has a team of 15 people and handles 10; 000 requests per month.

- e-Support from the Alliance & Application Partner Web site (if registered Alliance & 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/
- e-mail: Ebg_Global_Supportcenter@alcatel-lucent.com
- Fax number: +33(0)3 69 20 85 85
- Telephone numbers:

Alcatel-Lucent Business Partners Contact Center:

0 811 900 110 France: French agent Austria: 0 810 810 012 German agent Denmark: 70 11 21 09 English agent Germany: 0 1 803 000 680 German agent Ireland: 1 890 925 039 **English agent** Italy: 848 800 389 Italian agent UK: 0 845 601 4101 **English agent** Spain: 901 120 085 Spanish agent 0 844 850 588 German agent Switzerland:

For other countries:

English answer : + 33 (0)3 88 55 69 04
French answer : + 33 (0)3 88 55 69 02
German answer : + 33 (0)3 88 55 69 03
Spanish answer : + 33 (0)3 88 55 69 06



Alcatel-Lucent training

Technological innovative cycles are quickening and your customers are more and more demanding regarding the quality of services. In order to meet these requirements, you have to invest in skills: a key success factor for services.

If registered Alcatel-Lucent Business Partners, you can access to the training part at this URL: https://businessportal.alcatel-lucent.com/ and then click the *Training* link.

Our vision of learning services is described in the **Services Portfolio section**. The **Certification section** gives you some statistics and details on how training curricula are designed to match certification levels.

All updated training curricula and assessment tools are available in the **Curricula & Catalogues section**.

The **Schedule section** is regularly updated to show forthcoming training sessions over the world. The **How to Enrol section** provides you with the registration procedure and the Alcatel-Lucent University Customer Service list of contacts world wide.

Last but not least, find statistics and reports of what you think about our training services in the **Customer Satisfaction section**.

The Alcatel-Lucent commitment : enabling you to optimise your training investments.

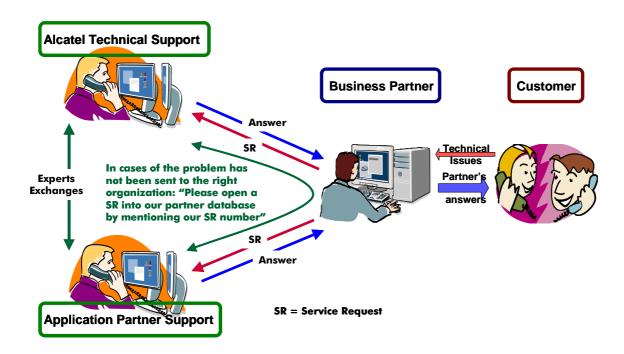


Appendix E: Alcatel-Lucent escalation process in case of problem with a certified external application (referenced in the AAPP)

Introduction

The purpose of this document is to define the split of responsibilities and the escalation process to be applied by the Business Partners when facing a problem with a solution involving an Alcatel-Lucent platform and an external application with a valid Alcatel-Lucent Inter-working report.

As for other Alcatel-Lucent equipment, the Alcatel-Lucent business partner is the only one facing the end-customer for support or maintenance. The Business partner will open cases (service request) either on Alcatel-Lucent side or on Application Partner side depending on the nature of the issue. Expert from both companies will collaborate to provide the best and quickest correction.



General Rules

The following general rules are applied:

Only certified AAPP applications are officially supported by Alcatel-Lucent



- The certification is based on tests suite passed by Alcatel-Lucent and the Application Partner and the result is consigned into an Inter-Working Report (IWR) validated by the two parties.
- The IWR is available on the AAPP Web site.
- Only the major releases of both parties are certified. Certification tests are usually not
 performed for intermediate versions. Only the existence of the IWR in the AAPP Web site
 for the right Alcatel-Lucent release is the guarantee that the application has been
 certified with this Alcatel-Lucent release.
- If the IWR for the Alcatel-Lucent release is not available, Alcatel-Lucent doesn't engage any responsibility. In that case, please contact the central Pre-Sales team.
- The existence of the IWR engages Alcatel-Lucent and the Application Partner. Both parties are engaged, not exclusively Alcatel-Lucent (see the section escalation process).

Warning:

The possibility to configure the Alcatel-Lucent PBX with ACTIS quotation tool in order to interwork with an external application, is not a guarantee of the availability of the solution. Please check the availability of the Inter-Working Report on AAPP web site.



The escalation process

As stated above, the Alcatel-Lucent support will be limited to applications with a valid inter-working report. Known problems or remarks mentioned in the IWR will not be taken into account. In case of problem, the two 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 Business Partner to the Alcatel-Lucent
 Hot-line via the standard process: open a ticket (Service Request –SR)
- Case 2: the responsibility can be established 100% on Application Partner side
 In that case, the problem must be escalated directly to the partner by opening a ticket trough the Partner Hotline. In general, the process to be applied for the partner side is described in the IWR.
- Case 3: the responsibility can not be established In that case the following process applies:
 - 1) The Application Partner shall be contacted first by the Business Partner or the party responsible for that Application for an analysis of the problem. Alcatel-Lucent has to be involved solely if the application partner demonstrate, with traces, after reproduction of the problem, that the defect which has generated the end-user's demand of support is coming from the equipment provided by Alcatel-Lucent or if he needs support of Alcatel-Lucent.
 - 2) The Business partner will escalate the problem to the Alcatel-Lucent Hot-line if the Application Partner has demonstrated a problem on Alcatel-Lucent side or if the Application Partner (not the Business Partner) needs the involvement of Alcatel-Lucent.

In that case, the Business Partner must provide the reference of the Case Number on 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 Application Partner side are insufficient or do no exist.

Note:

Involvement of the Business Partner is mandatory because the access to the Alcatel-Lucent Platform (remote access, login/password) is under the Business Partner responsibility.