Alcatel-Lucent Application Partner Program Inter-Working Report

Partner: Aurenz GmbH
Application type: Metering
Application name: AlwinPro and Anna4
Alcatel-Lucent Platform: OmniPCX Office

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.

ALCATEL-LUCENT MAKES NO REPRESENTATIONS, WARRANTIES OR CONDITIONS WITH RESPECT TO THE APPLICATION PARTNER PRODUCT. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, ALCATEL-LUCENT HEREBY EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS, WARRANTIES OR CONDITIONS OF ANY NATURE WHATSOEVER AS TO THE APPLICATION PARTNER PRODUCT INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY, NON INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE AND ALCATEL-LUCENT FURTHER SHALL HAVE NO LIABILITY TO APPLICATION PARTNER OR ANY OTHER PARTY ARISING FROM OR RELATED IN ANY MANNER TO THIS CERTIFICATE.

Tests identification

Date of the tests	June 2011

Alcatel-Lucent's representative	Jean-Charles Bernard
Partner's representative	Thorsten Schwegmann

Alcatel-Lucent Communication Platform (OmniPCX 4400/Enterprise, OmniTouch, OmniPCX Office, ...)	OmniPCX Office
Alcatel-Lucent compatibility release	R8.0 / 040.001
Partner's application version	AlwinPro Version 7.0.01 Anna4 Version 7.0.01

Environment (if it has a sense)	☐ ACD ☐ Business

Author(s): Jean-Charles Bernard
Reviewer(s): Rachid Himmi, Denis Lienhart

Historic

Edition 1: creation of the document – *June 2011*

Test results

☑ Passed ☐ Refused ☐ Postponed

☐ Passed with restrictions

Refer to the section 4 for a summary of the test results.

Company Contact Information

(Information provided by the partner)

Company Name:	Aurenz GmbH
Address 1:	Hans Boeckler Str. 29
Address 2:	
City:	Kirchheim Teck
State:	
Zip:	73230
Country:	Germany
Country Code:	49
Phone:	+49 7021 73888 -0
Fax:	+49 7021 73888-30
Web Address:	http://www.aurenz.de
E-mail:	info@aurenz.de

TABLE OF CONTENTS

1 Introduction

The goal of these tests is to qualify an external application as an Alcatel-Lucent 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.

Rules to follow to execute the tests and fill the features tables:
For every test, it's important to verify if the result of the feature executed on the Call Accounting Application takes into consideration the execution or failure of the metering information by analysing the result received.

2 Application information

Application type: *Metering*

Application commercial name: AlwinPro and Anna4

Application version: Version 7.0.01

Interface type: NMC, V24, SOAP XML

Interface version (if relevant): 2

Brief application description:

AlwinPro is a 32-bit Windows application for call accounting and billing. AlwinPro enables a multiplicity of analyses in different representational forms.

Anna4 is a 32-bit Windows application for analyzing call data (stored in tickets). The main features are cost management, quality management and traffic analysis.

AlwinPro & Anna4 highlights in the overview

- Data acquisition takes place on a standard hard disk.
- 100 000 calls can be stored on 100 MB disk space
- Pre-defined report can be programmed
- Integrated Web server for reporting over web browser
- Binding of one or several telecommunications systems
- Analyses according to innumerable criteria adjustable
- Extensive data security definitions to the protection of user and communication data
- Graphic form generator for the organization of analyses
- Detail analyses, sum analyses, email dispatch and export of communication data

Language supported : German and English used in Germany and Austria

Figure 1 **Global architecture**

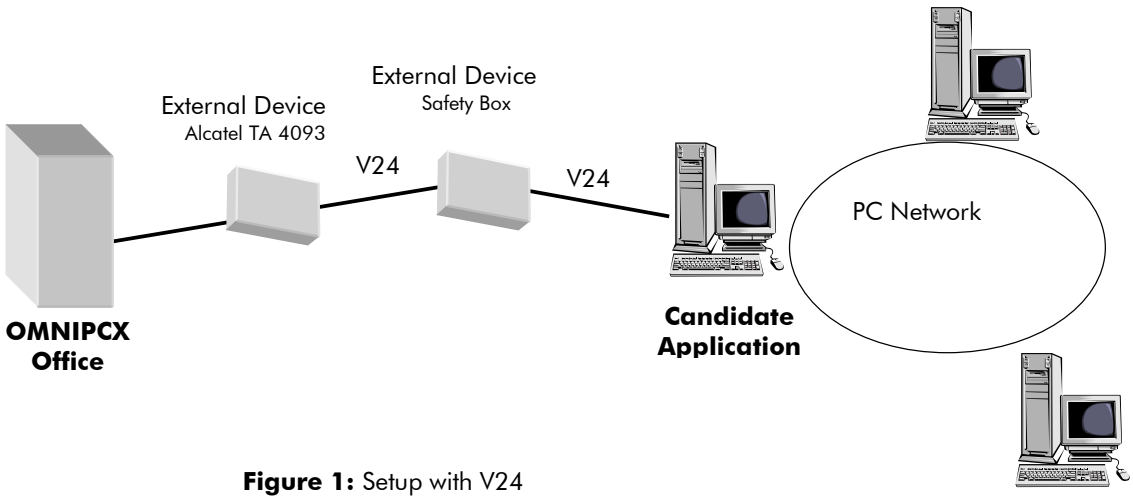


Figure 1: Setup with V24

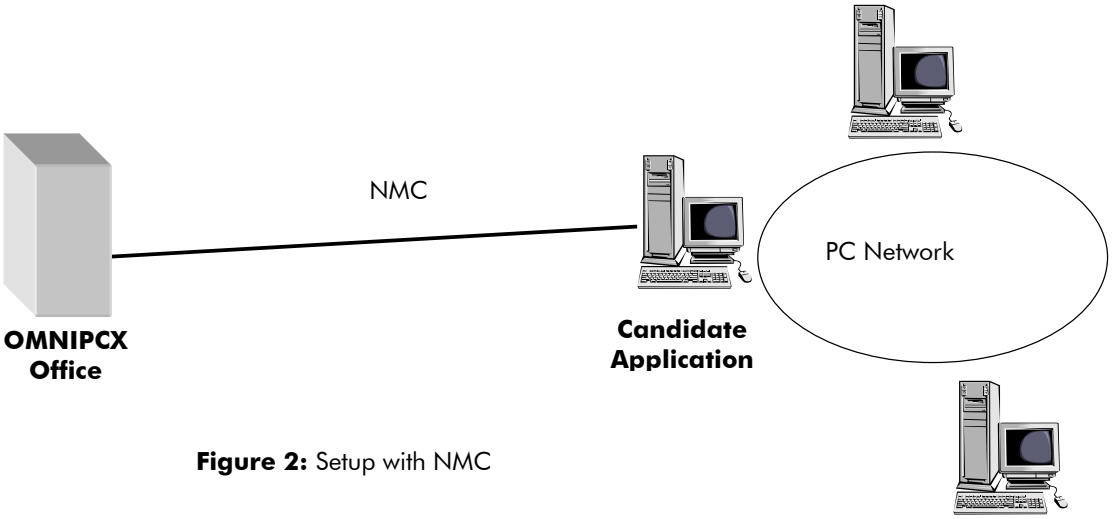


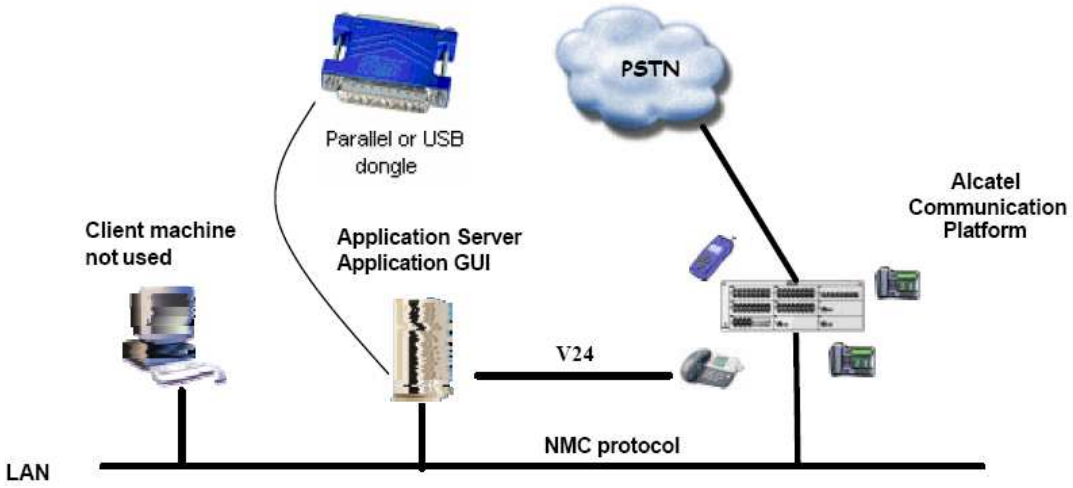
Figure 2: Setup with NMC

3 Tests environment

3.1 Actual general architecture

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

Figure 2 **Tests environment**



Alcatel Communication Platform:

- **name**: OXO
- **IP address**: 192.168.92.246

Application server -

OLD (Driver):

- **name**: Alcatel
- **domain**: WORKGROUP
- **IP address**: 192.168.92.200

Partner Application:

- **name**: Alwin Pro Hotel
- **domain**: WORKGROUP
- **IP address:** 192.168.92.205

3.2 Hardware configuration

- **Alcatel Communication Platform**: Omni PCX Office - ISDN T0, UA and Z
- interfaces, digital and analogues sets.

3.3 Software configuration

- **Alcatel Communication Platform**:
  - OmniPCX Office: R8.0

  - NMC

4 Summary of test results

4.1 Summary of main functions supported

The scope of the tests was to verify the correct inter-working of the call charging computing application AlwinPro and Anna4 with the Alcatel OmniPCX Office system connected via NMC or V24.
It has to be tested that the tickets of Alcatel OmniPCX Office system are correctly transferred to the call charging computing and traffic analysis applications and are processed properly within the applications.

Connectivity and setup	**pass**
Appointment tickets	**n/s**
Print non-answered IC calls tickets	**pass**
Masking 4 lasts digits	**pass**
Ticket buffer	**pass**
Management of CALL TICKETS	**Pass (check test for detailed information)**
Disruption of the link	**pass**

4.2 Summary of problems

None

4.3 Summary of limitations

Following features are not supported:

- Appointment tickets

4.4 Notes, remarks

None

5 Legends

Legend of the following features tables :

Ref.	Description	Expected	Result	Comments

- Ref. column :
  contains the unique reference of the test

- Description column :
  contains the description of the test executed

- Expected column :
  indicates the value constant expected from the test

- Result column :
  indicates whether the test succeeded (1) or not (0)

- Comments column :
  contains the comments related to the conditions and the result of this test

6 Tests Scenarios (MoIP)

6.1 Client Application connection check

Ref.	Description		Expected	Result	Comments
CIC101	Configure the use of a Proxy	Login			
		Password			
CIC102	Configure HTTPS Proxy port 443 or 30443	Port 443		OK	
		Port 30443		**OK**	
CIC103	Configure different OXO IP addresses	192.168.92.246	**192.168.92.246**	OK	
		10.1.3.23	10.1.3.23		
CIC104	Configure the Symbolic name of OXO (DNS)	IACCESS			
CIC105	Configure the URL of the CAP web server	192.168.92.246		N/T	
		10.1.3.23			
CIC106	Configure different Administrator passwords	8 chars. Max.		OK	
CIC107	Client **must** accept auto certificate	Yes/No	**Yes**	**OK**	
CIC108	HTTPS + persistent connection (HTTP 1.1)	Yes/No	Yes	**OK**	
CIC109	Client **must** accept HTTP cookies	Yes/No	Yes	**OK**	
Result	**Client Application connection**			**Pass**	

6.2 PBX MoIP ---> CMS (Appointment tickets)

Ref.	Description	Expected	Result	Comments
AOC101	Generate an appointment *Activation* ticket	*Activation* ticket	N/S	
AOC102	Generate an appointment *Cancellation* ticket	*Cancellation* ticket	**N/S**	
AOC103	Generate an appointment *Failed* ticket	*Failed* ticket	**N/S**	
AOC104	Generate an appointment *Complete* ticket	*Complete* ticket	**N/S**	
Result	**Appointment tickets configuration**		**N/S**	

6.3 PBX MoIP ---> CMS (Print non-answered IC calls tickets)

Ref.	Description	Expected	Result	Comments
MOC101	Check the "print non-answered IC calls" parameter. Make a non-answered IC call	A ticket is printed for the non-answered call	**OK**	
MOC102	Check the "print non-answered IC calls" parameter. Make an answered IC call	A ticket is printed for the answered call	**OK**	
MOC102	UNcheck the "print non-answered IC calls" parameter and make a non-answered IC call	No ticket is printed for the non- answered call	**OK**	

MOC103	UNcheck the "print non-answered IC calls" parameter.and make an answered IC call	A ticket is printed for the answered call	**OK**	
Result	**Print non-answered IC calls configuration**		**Pass**	

6.4 PBX MoIP ---> CMS (Masking 4 lasts digits)

Ref.	Description	Expected	Result	Comments
STAT101	Check the "Masking 4 lasts digits" parameter. Make a call	The last 4 digits are masked.	OK	
STAT102	UNcheck the "Masking 4 lasts digits" parameter. Make a call	The last 4 digits are displayed.	**OK**	
Result	**Mask last 4 digits**		**Pass**	Aurenz's recommandations is to use application's options.

6.5 PBX MoIP---> CMS (Ticket buffer)

Ref.	Description	Expected	Result	Comments
WUP101	**Step 1.** Generate some calls without an active CMS session, **Step 2.** Open a CMS session and verify all tickets previously generated are collected by the CMS	All generated tickets are collected	OK	
Result	**Ticket buffer**		**Pass**	

6.6 PBX MoIP ---> CMS (Management of CALL TICKETS: Station Message Detail Records)

The following tests have been complied with a view to checking the CMS applications ability to read each of the different fields of the XML metering output. They are not a test of the applications ability to process the collected metering output data . The 'Grey' field of of each Test indicates the field of the metering Information under test .

6.6.1 Station Message Detail Records

Test 1 : Outgoing call from extn . 100 to external no. 3699 for 38 sec. duration using **Manual dialing** and currency EUR

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		A	100	David Parsonsley	Outgoing	N	001	2006-06-27	13:42:00	00:00:38	0	ST	A	3699	M	00:00:00	0.00	M	2	EUR

		Result	Comment
Result	Test 1 - Management of CALL TICKETS: Station Message Detail Recording.	Pass	

Test 2 : Outgoing call from extn . 128 to external no. 13013699 for 38 sec. duration using Redial dial

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		A	128	David Parsonsley	Outgoing	N	001	2006-06-27	13:42:00	00:00:38	0	ST	A	13013699	I	00:00:00	0.00	M	2	EUR

		Result	Comment
Result	**Test 2 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	Not managed by application

Test 3 : Outgoing call from extn . 128 to external no. 13013699 for 38 sec. Duration using Speed dialing

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		A	128	David Parsonsley	Outgoing	N	001	2006-06-27	13:42:00	00:00:38	0	ST	A	13013699	R	00:00:00	0.00	M	2	EUR

		Result	Comment
Result	**Test 3- Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	Not managed by application

Test 4 : Basic call : **Incoming call** to extn . **128** from external no. **00390677142** (ring duration 3 seconds and call duration 38 seconds)

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.	128	A	128	David Parsonsley	Incoming	N	001	2006-06-27	15:35:00	00:00:38	0	ST	A	00390677142	M	00:00:03	0.00	M	2	EUR

		Result	Comment
Result	**Test 4 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 5 :External diversion cancellation : Extn. 128 **cancels** **divert** to 00390677142

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		A	128	David Parsonsley	FacilityCancellation			2006-06-27	15:35:00	00:00:38	0	**	R	00390677142	M	00:00:03	0.00	M	2	EUR

		Result	Comment
Result	**Test 5 - Management of CALL TICKETS: Station Message Detail Recording.**	**pass**	

Test 6 : Call to external diverted extension : local call to 220 and **call** is **external diverted** to 00390677142

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		A	220	David Parsonsley	OutgoingDiverted	N	001	2006-06-27	15:35:00	00:00:38	0	ST	RA	00390677142	M	00:00:03	0.00	M	2	EUR

		Result	Comment
Result	**Test 6 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 7 : Outgoing call from **ISDN T0**

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		A	128	David Parsonsley	OutgoingDiverted	N	001	2006-06-27	15:35:00	00:00:38	0	ST	A	0039067714 2	M	00:00:03	0.00	M	2	EUR

		Result	Comment
Result	**Test 7 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	**Trunk type not checked**

Test 8 : Outgoing call from **ISDN T2**

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		A	128	David Parsonsley	Outgoing	P	001	2006-06-27	15:35:00	00:00:38	0	ST	A	0039067714 2	M	00:00:03	0.00	M	2	EUR

		Result	Comment
Result	**Test 8 - Management of CALL TICKETS: Station Message Detail Recording.**	**Not Tested**	T2 was not available for tests

Test 9 : Outgoing call from **Analogue trunk**

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		A	128	David Parsonsley	Outgoing	L	001	2006-06-27	15:35:00	00:00:38	0	ST	A	00390677142	M	00:00:03	0.00	M	2	EUR

		Result	Comment
Result	Test 9 - Management of CALL TICKETS: Station Message Detail Recording.	Pass	Trunk type not checked

Test 10 : Incoming call from **IP trunk (I28 node 2 calls in 200 ' Fred jones' node 1)**

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.	220	A	200	Fred Jones	IncomingPrivate	V	001	2006-06-27	15:35:00	00:00:38	0	ST	A	128	M	00:00:03	0.00	P	1	EUR

		Result	Comment
Result	Test 10 - Management of CALL TICKETS: Station Message Detail Recording.	Pass	

Test 11 : Outgoing call via **IP trunk (220 ' David Jones 'node 1 calls 100 node 2)**

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		A	220	David Jones	OutgoingTransferPrivate	V	001	2006-06-27	15:35:00	00:00:38	0	ST	X	100	M	00:00:03	0.00	M	1	ERU

		Result	Comment
Result	**Test 11 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 12 : Break out call via **IP trunk (128 David Anderson node 2 calls 0390677142 via ISDN trunk belonging to node 1)**

(Two tickets are generated)

1st Ticket .

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency

Call	Alcatel Telecom.		G		David Anderson	BreakOut	N	001	2006-06-27	15:35:00	00:00:38	0	ST	ST	00390677142	M	00:00:00	0.00	M		ERU

2nd Ticket .

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		G		David Anderson	BreakIn	V	001	2006-06-27	15:35:00	00:00:38	0	ST		128	M	00:00:00	0.00	M		ERU

		Result	Comment
Result	**Test 12 - Management of CALL TICKETS: Station Message Detail Recording.**	**Not supported**	outgoing call metering tickets are recorded but not assigned to caller . ticket is assigned to 99999999 and has to be assigned to 128 manually

Test 13 : **Outgoing call with** Cost **and** currency CHF

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency

Call	Alcatel Telecom.		A	128	David Parsonsley	Outgoing	N	001	2006-06-27	15:35:00	00:00:38	0	ST	A	0039067142	M	00:00:03	2.50	M	2	CHF

		Result	Comment
Result	**Test 13 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	Neither the currency or cost fields are taken into account by the application . The currecny used and cost are defined in the application itself .

Test 14 : Outgoing **Voice call**

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.		A	123	David Parsonsley	Outgoing	N	001	2006-06-27	15:35:00	00:00:38	0	ST	A	0039067142	M	00:00:03	00.0	M	2	EUR

		Result	Comment
Result	**Test 14 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 15 : Outgoing **Data call**

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency

Call	Alcatel Telecom.		A	123	David Parsonsley	Outging	N	001	2006-06-27	15:35:00	00:00:38	0	T+	A	00390677142	M	00:00:03	00.0	M	2	EUR

		Result	Comment
Result	**Test 15 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 16 : Incoming transferred call : External **Attendant call** to Operator (etn.220) who makes a **Supervised transfers** to extn.221

- Note: 2 tickets are generated

(1st ticket)

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency
Call	Alcatel Telecom.	9	A	220	Operator	Incoming	N	001	2006-06-27	18:02:00	00:00:48	0	ST	A	00390677142	M	00:00:02	00.0	M	2	EUR

(2nd ticket)

Call Type	Company	Initial User	User Type	UserID	Sub. Name	Comm. Type	Trunk Type	Trunk ID	Date	Time	Duration	Taxes	Service	Add_ Service	Dialed Number	Dialing Mode	Ring Duration	Cost	Carrier	NodeID	Currency

Call	Alcatel Telecom.	9	A	221	Fred	Incoming teanster	N	001	2006-06-27	18:03:00	00:00:16	0	ST	X	0039067142	M	00:00:00	00.0	M	2	EUR

		Result	Comment
Result	**Test 16 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

6.7 DISRUPTION OF THE LINK

Ref.	Description	Expected	Result	Comments
DIS101	Cut the ethernet link between CMS application interface and the OmniPCX Office. Generate some SMDR tickets like wake-up and call-tickets on OmniPCX Office side. Re-establish the link and verify that the events are taken into account on the CMS .	Buffered tickets should be collected	Pass	
DIS102	Power off the CMS interface (i.e. Power down the PC) and generate some events from the OmniPCX Office side. Restart the interface and verify that the events are sent and taken in consideration on the CMS side	Buffered tickets should be collected	Pass	
DIS103	If the CMS link is composed of several	Buffered	Pass	

	devices do the same tests by powering off and restarting separately the different devices.	tickets should be collected		
DIS104	Warm reset the OmniPCX Office and attempt a connection by the CMS . Verify the fail messages and all buffered SMDR are collected by the CMS when the OmniPCX is restarted	Buffered tickets should be collected	Pass	
Result	**Disruption of the metering over IP link**		**Pass**	

7 Tests Scenarios (V24)

7.1 Client Application connection check

Step	Action / Requirement	N/A	Result	Origin of the problem	Comment
1	V24 Configuration		OK		
2	CDR monitoring		OK		Shows all CDRs from/to PBX

7.2 PBX ---> CMS (Print non-answered IC calls tickets)

Ref.	Description	Expected	Result	Comments
MOC101	Check the "print non-answered IC calls" parameter. Make a non-answered IC call	A ticket is printed for the non-answered call	**OK**	

MOC102	Check the "print non-answered IC calls" parameter. Make an answered IC call	A ticket is printed for the answered call	**OK**	
MOC102	UNcheck the "print non-answered IC calls" parameter and make a non-answered IC call	No ticket is printed for the non- answered call	**OK**	
MOC103	UNcheck the "print non-answered IC calls" parameter.and make an answered IC call	A ticket is printed for the answered call	**OK**	
Result	**Print non-answered IC calls configuration**		**Pass**	

7.3 PBX ---> CMS (Masking 4 lasts digits)

Ref.	Description	Expected	Result	Comments
STAT101	Check the "Masking 4 lasts digits" parameter. Make a call	The last 4 digits are masked.	OK	
STAT102	UNcheck the "Masking 4 lasts digits" parameter. Make a call	The last 4 digits are displayed.	**OK**	
Result	**Mask last 4 digits**		**Pass**	Aurenz's recommendations is to use application's options.

7.4 PBX ---> CMS

Ref.	Description	Expected	Result	Comments
WUP101	**Step 1.** Generate some calls without an active CMS session,	All generated tickets are collected	OK	

	Step 2. Open a CMS session and verify all tickets previously generated are collected by the CMS			
Result	**Ticket buffer**		**Pass**	

7.5 PBX ---> CMS (Management of CALL TICKETS: Station Message Detail Records)

The following tests have been complied with a view to checking the CMS applications ability to read each of the different fields of metering output.
They are not a test of the applications ability to process the collected metering output data

7.5.1 Station Message Detail Records

Test 1 : Outgoing call from extn . 100 to external no. 3699 for 38 sec. duration using **Manual dialing** and currency EUR

		Result	**Comment**
Result	**Test 1 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 2 : Outgoing call from extn . 128 to external no. 13013699 for 38 sec. duration using Redial dial

		Result	**Comment**
Result	**Test 2 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	Not managed by application (“I” in trace)

Test 3 : Outgoing call from extn . 128 to external no. 13013699 for 38 sec. Duration using Speed dialing

		Result	**Comment**
Result	**Test 3- Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	Not managed by application (“R” in trace)

Test 4 : Basic call : **Incoming call** to extn . **128** from external no. **00390677142** (ring duration 3 seconds and call duration 38 seconds)

		Result	Comment
Result	**Test 4 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 5 :External diversion cancellation : Extn. 128 **cancels** **divert** to 00390677142

		Result	Comment
Result	**Test 5 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	Not sent by OXO

Test 6 : Call to external diverted extension : local call to 220 and **call** is **external diverted** to 00390677142

		Result	Comment
Result	**Test 6 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 7 : Outgoing call from **ISDN T0**

		Result	Comment
Result	**Test 7 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 8 : Outgoing call from **ISDN T2**

		Result	Comment
Result	**Test 8 - Management of CALL TICKETS: Station Message Detail Recording.**	**Not Tested**	T2 was not available for tests

Test 9 : Outgoing call from **Analogue trunk**

		Result	Comment
Result	**Test 9 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 10 : Incoming call from **IP trunk (I28 node 2 calls in 200 ' Fred jones' node 1)**

		Result	Comment
Result	**Test 10 - Management of CALL TICKETS: Station Message Detail Recording.**		**See as internet call with duration ,waiting for a status (from Aurenz)**

Test 11 : Outgoing call via **IP trunk (220 ' David Jones 'node 1 calls 100 node 2)**

		Result	Comment
Result	**Test 11 - Management of CALL TICKETS: Station Message Detail Recording.**		**See as internet call with duration ,waiting for a status (from Aurenz)**

Test 12 : Break out call via **IP trunk (128 David Anderson node 2 calls 0390677142 via ISDN trunk belonging to node 1)**

		Result	Comment
Result	**Test 12 - Management of CALL TICKETS: Station Message Detail Recording.**	**Not supported**	One call without caller id , dummy id (99999999) is used for caller

Test 13 : **Outgoing call with** Cost **and** currency CHF

		Result	Comment
Result	**Test 13 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	Neither the currency or cost fields are taken into account by the application . The currency used and cost are defined in the application itself .

Test 14 : Outgoing **Voice call**

		Result	Comment
Result	**Test 14 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 15 : Outgoing **Data call**

		Result	Comment
Result	**Test 15 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	**See as not define**

Test 16 : Incoming transferred call : External **Attendant call** to Operator (etn.220) who makes a **Supervised transfers** to extn.221

- Note: 2 tickets are generated

		Result	Comment
Result	**Test 16 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

7.6 DISRUPTION OF THE LINK

Ref.	Description	Expected	Result	Comments
DIS101	Cut the V24 link between CMS application interface and the OmniPCX Office. Generate some tickets like call-tickets on OmniPCX Office side. Re-establish the link and verify that the events are taken into account on the CMS .	Buffered tickets should be collected	Pass	
DIS102	Power off the CMS interface (i.e. Power down the PC) and generate some events from the OmniPCX Office side. Restart the interface and verify that the events are sent and taken in consideration on the CMS side	Buffered tickets should be collected	Pass	
Result	**Disruption of the metering over IP link**		**Pass**	

8 Tests Scenarios (NMC)

8.1 Client Application connection check

Step	Action / Requirement	N/A	Result	Origin of the problem	Comment
1	MNC Configuration		OK		
2	CDR monitoring		OK		Shows all CDRs from/to PBX

8.2 PBX ---> CMS (Print non-answered IC calls tickets)

Ref.	Description	Expected	Result	Comments
MOC101	Check the "print non-answered IC calls" parameter. Make a non-answered IC call	A ticket is printed for the non-answered call	**OK**	
MOC102	Check the "print non-answered IC calls" parameter. Make an answered IC call	A ticket is printed for the answered call	**OK**	
MOC102	UNcheck the "print non-answered IC calls" parameter and make a non-answered IC call	No ticket is printed for the non- answered call	**OK**	
MOC103	UNcheck the "print non-answered IC calls" parameter.and make an answered IC call	A ticket is printed for the answered call	**OK**	
Result	**Print non-answered IC calls configuration**		**Pass**	

8.3 PBX ---> CMS (Masking 4 lasts digits)

Ref.	Description	Expected	Result	Comments
STAT101	Check the "Masking 4 lasts digits" parameter. Make a call	The last 4 digits are masked.	OK	
STAT102	UNcheck the "Masking 4 lasts digits" parameter. Make a call	The last 4 digits are displayed.	**OK**	
Result	**Mask last 4 digits**		**Pass**	Aurenz's recommandations is to use application's options.

8.4 PBX ---> CMS

Ref.	Description	Expected	Result	Comments
WUP101	**Step 1.** Generate some calls without an active CMS session, **Step 2.** Open a CMS session and verify all tickets previously generated are collected by the CMS	All generated tickets are collected	OK	
Result	**Ticket buffer**		**Pass**	

8.5 PBX ---> CMS (Management of CALL TICKETS: Station Message Detail Records)

The following tests have been complied with a view to checking the CMS applications ability to read each of the different fields of metering output.
They are not a test of the applications ability to process the collected metering output data

8.5.1 Station Message Detail Records

Test 1 : Outgoing call from extn . 100 to external no. 3699 for 38 sec. duration using **Manual dialing** and currency EUR

		Result	Comment
Result	**Test 1 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 2 : Outgoing call from extn . 128 to external no. 13013699 for 38 sec. duration using Redial dial

		Result	Comment
Result	**Test 2 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 3 : Outgoing call from extn . 128 to external no. 13013699 for 38 sec. Duration using Speed dialing

		Result	Comment
Result	**Test 3- Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 4 : Basic call : **Incoming call** to extn . **128** from external no. **00390677142** (ring duration 3 seconds and call duration 38 seconds)

		Result	Comment
Result	**Test 4 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 5 :External diversion cancellation : Extn. 128 **cancels divert** to 00390677142

		Result	Comment
Result	**Test 5 - Management of CALL TICKETS: Station Message Detail Recording.**		No ticket sent by Omnipcx

Test 6 : Call to external diverted extension : local call to 220 and **call** is **external diverted** to 00390677142

		Result	Comment
Result	**Test 6 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 7 : Outgoing call from **ISDN T0**

		Result	Comment
Result	**Test 7 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	**Trunk type not managed**

Test 8 : Outgoing call from **ISDN T2**

		Result	Comment
Result	**Test 8 - Management of CALL TICKETS: Station Message Detail Recording.**	**Not Tested**	T2 was not available for tests

Test 9 : Outgoing call from **Analogue trunk**

		Result	Comment
Result	**Test 9 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	**Trunk type not managed**

Test 10 : Incoming call from **IP trunk (I28 node 2 calls in 200 ' Fred jones' node 1)**

		Result	Comment
Result	**Test 10 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	**Trunk type not managed**

Test 11 : Outgoing call via **IP trunk (220 ' David Jones 'node 1 calls 100 node 2)**

		Result	Comment
Result	**Test 11 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	**Trunk type not managed**

Test 12 : Break out call via **IP trunk (128 David Anderson node 2 calls 0390677142 via ISDN trunk belonging to node 1)**

		Result	Comment
Result	**Test 12 - Management of CALL TICKETS: Station Message Detail Recording.**	**pass**	

Test 13 : **Outgoing call with** Cost

		Result	Comment
Result	**Test 13 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	Neither the currency or cost fields are taken into account by the application . The currency used and cost are defined in the application itself .

Test 14 : Outgoing **Voice call**

		Result	Comment
Result	**Test 14 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

Test 15 : Outgoing **Data call**

		Result	Comment
Result	**Test 15 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	**waiting for a status (from Aurenz)**

Test 16 : Incoming transferred call : External **Attendant call** to Operator (etn.220) who makes a **Supervised transfers** to extn.221

- Note: 2 tickets are generated

		Result	Comment
Result	**Test 16 - Management of CALL TICKETS: Station Message Detail Recording.**	**Pass**	

8.6 DISRUPTION OF THE LINK

Ref.	Description	Expected	Result	Comments
DIS101	Cut the NMC link between CMS application interface and the OmniPCX Office. Generate some tickets like call-tickets on OmniPCX Office side. Re-establish the link and verify that the events are taken into account on the CMS .	Buffered tickets should be collected	Pass	
DIS102	Power off the CMS interface (i.e. Power down the PC) and generate some events from the OmniPCX Office side. Restart the interface and verify that the events are sent and taken in consideration on the CMS side	Buffered tickets should be collected	Pass	
Result	**Disruption of the metering over IP link**		**Pass**	

9 Appendix A : Application description

The *AlwinPro Application* is a 32-bit Windows application for recording and reporting data. The main functionalities are call accounting.
Connecting *AlwinPro* to the OmniPCX Enterprise is possible like shown in figure 1or figure 2. The External Device in Figure 1 is a buffer for up to 8.000 call data records, called “SafetyBox”. The SafetyBox also can be connected to a modem. This allows collecting the records from a distant site.

- General Architecture:

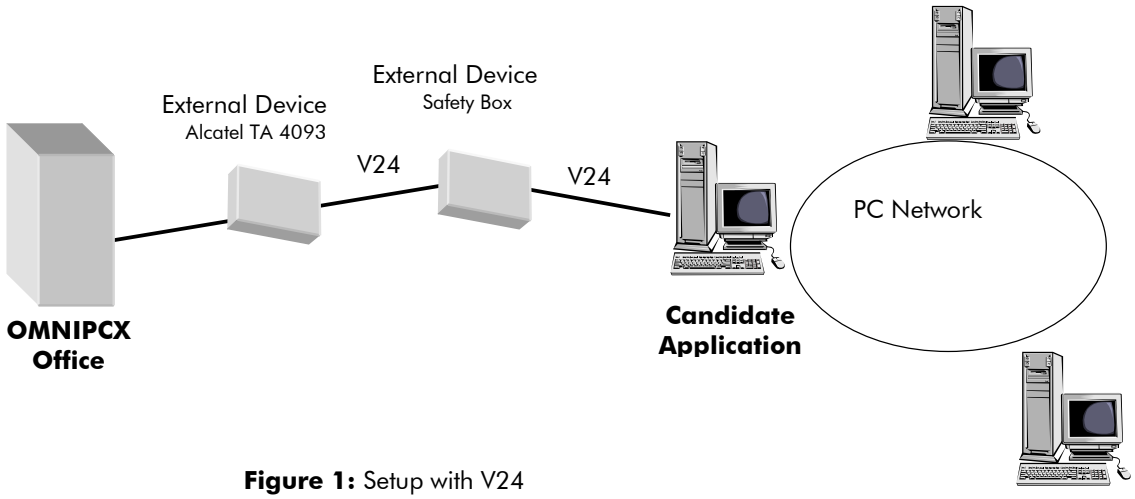


Figure 1: Setup with V24

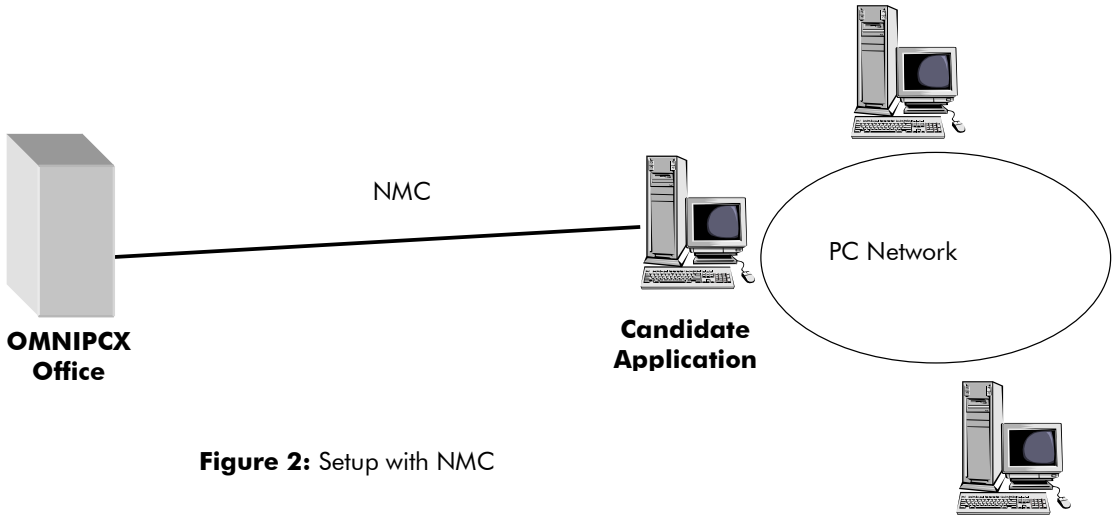


Figure 2: Setup with NMC

- Specific Details:

The portfolio of Aurenz GmbH consists of the products - “AlwinPro”, AlwinPro Hotel/Care and “Anna4”
The applications AlwinPro and Anna4 can be purchased also as Package “Two in One” The data retrieve module of both applications are the same.

Application Features are:

Features AlwinPro

- E-Mail Reporting
- Web-based-Controlling-Software
- Precise cost-calculation using detailed tariff-information from the provider/carrier
- Multi-faceted data-assessment platform, as well as incomparable security
- Completely automatic, unnoticed running in background
- Modular construction, flexible and individually configurable
- Connection to PABX using protocol-interfaces
- Networking Capability
- Multi-user
- Implementation of mobile call data (EDIFACT)
- Send reports as pdf attachment
- Self configuring tool for new scripts

The Software Anna4 that can be combined with the AlwinPro is designed for call analyzing and quality statistics. In general the tool allows you to analyze the costs of telecommunications and the telephone usage and behaviour of the staff. The results are displayed in statistical diagrams, tables and ranking lists. The statistic tool Anna4 makes the telecommunication network transparent and allows optimizing the cost structure in a company.

The maximum number of calls to be processed by the application is mainly limited by the client Hardware.

Product Description Anna4

In general the tool allows customers to analyse the costs of telecommunications in a company and the telephone usage and behaviour of the staff. The software shall provide a guideline for quality improvements and shall highlight shortages of resources (manpower and equipment).
The new Software Anna4 that can be combined with the AlwinPro Software is the latest development from Aurenz and is designed for call analyzing and quality statistics. The results are displayed in statistical diagrams, tables and ranking lists. The data is retrieved from the same data pool than the data for AlwinPro.
The statistic tool Anna4 makes the telecommunication network transparent and allows you to optimise the cost structure in your company.
The three main parts of the analysing and statistic software are:

1. Cost management

Statistics for

- Total phone-costs
- phone-costs of wired network
- phone-costs of mobile network
- Comparison of different carrier
- Hitlists (Ranking of the most expensive calls, or long duration calls etc.)

2. Quality management

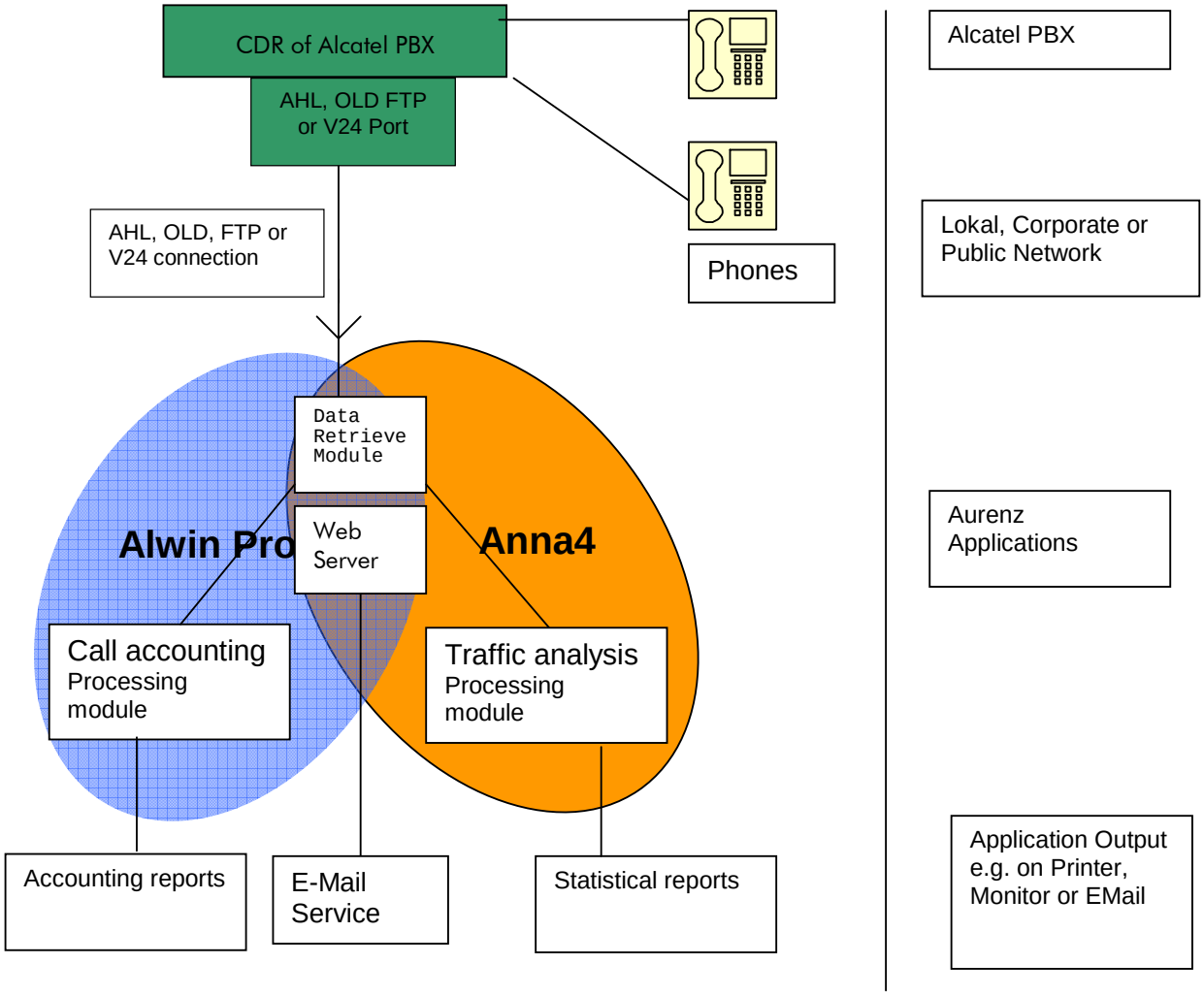
Analysing the

- Phone-behaviour (how many calls are lost due to no answer or occupied)
  - Ring-time assumed calls
  - Ring-time lost calls
- Time dependently comparison of phone-behaviour
  - Monthly comparison (total and percentage)
  - Annually comparison (total and percentage)
  - Comparison of the ring-time
- Ranking of the Top 7 extensions
- Analysis of customer contacts
  - Successful and lost customer contacts
  - Successful contacts (number of calls to be successful)
  - Lost calls (how many tries to get a contact)
  - Geographic distribution of calls
- Customer contacts (time dependent comparison)
  - Monthly comparison (total and percentage)
  - Annually comparison (total and percentage)
  - Daily comparison (total and percentage)
- Evaluation of groups
  - Successful contacts
  - Lost contacts

3. Traffic analysis

Statistics for

- Total traffic (inbound and outbound)
- Traffic outbound/inbound
  - Per day/week/month
- Traffic official/private
  - Per day/week/month
- performance of telephone lines (daily/weekly/monthly)
  - average and maximum
  - number of used lines
- Time at the phone
  - Daily/weekly/monthly



The Data retrieve module is storing all call information and supplies it to the different applications.

The only External Device used is a buffer for up to 8.000 call data records, called “SafetyBox”. The connection is established via simple RS 232 similar to the connection to the PBX. The SafetyBox also can be connected to a modem. This allows to collect the records from a distant site.

10 Appendix B: Alcatel Communication Platform: configuration requirements

IMPORTANT: The OmniPCX Office can run in one of two operating modes :

1) Hotel mode
2) Business mode

The default running mode when the OmniPCX Office is started up is Business mode. To select Hotel mode, perform the following : COLD reset (Note: The Cold reset will also delete all previous programming/configuration). Cold reset the OmniPCX using a Reflexes set via installer session (ie:- Reception set) after the system restarts select Hotel mode in the wizard session which appears on the Reflexes set . The OmniPCX will at the end of the wizard session request to perform a Warm reset. Proceed with the Warm reset after which Hotel mode is implemented . Note : During the wizard session also select the system default language and Voice mails for all sets .

10.1 OmniPCX Office settings :

The OmniPCX Office must be configured using the OMC configuration software as follows:-

Note : For both Hotel and Business mode a 'Call accounting over IP ' OmniPCX software License is required

10.1.1 Business Mode

- Open an OMC session with the OmniPCX Office

  - OMC -> Metering -> Metering -> Metering Printout (Tab) ->Select the following :

    - ☑ External Metering Activation IP
    - ☑ Activation, ☑ Cancellation, ☑ Failed, ☑ Complete
    - ☑ Leased Line printout
    - Enter a name in the 'Company name ' field

  OMC ->Metering->Metering ->Metering Options for Active Currency (Tab)- >Complete the required charge rates and unit threshold fields and select :

    - ☑ During the call and Duration +Units or Duration + Cost (depending on test)

  - Change in ' Debug label ' OpeMetEna ' to equal value 01
  - OMC -> Subscriber/Basestations List -> Set the Metering monitoring level for all sets under test to : All Calls

10.1.2 Hotel Mode

- Open an OMC session with the OmniPCX Office

  o OMC -> System Miscellaneous ->Hotel Parameters :
  - The "Print Check-In/Check-Out Ticket" check box must be checked.

  o OMC -> Metering -> Metering -> Metering Printout (Tab) ->Select the following :

  - ☑ External Metering Activation IP
  - ☑ Activation, ☑ Cancellation, ☑ Failed, ☑ Complete
  - ☑ Leased Line printout
  - Enter a name in the 'Company name ' field

  o OMC ->Metering->Metering ->Metering Options for Active Currency (Tab)->Complete the required charge rates and unit threshold fields for ADMINISTRATION sets and select :

  - ☑ During the call and Duration +Units or Duration + Cost (depending on test)

  o OMC -> Metering-> Hotel Metering for Active Currency (Tab) :

  - ☑ Check the "Print Room Status Ticket at any manual status change"
  - Create a ' Guest Ticket Footnote ' entry
  - Complete the required charge rates and unit threshold fields (VAT etc.)

  o Change in ' Debug label ' OpeMetEna ' to equal value 01

OMC -> Subscriber/Basestations List -> Set the Metering monitoring level for all sets under test to : All Calls 01

11 Appendix C: Partner escalation process

Aurenz GmbH General Contacts

Name	Role	Phone	Email
Mr Thorsten Schwegmann	Project Manager	+49 (0)7021 73888-0	t.schwegmann@aurenz.de
Mr Jochen Kautt	Sales Assistant	+49 (0)7021 73888-0	j.kautt@aurenz.de
Mr Stephan Reber	Support	+49 (0)7021 73888-33	support@aurenz.de

Aurenz GmbH Support Contact Information

Team	Main Location
Phone	+49 (0)7021 73888-33
Fax	+49 (0)7021 73888-30
E-mail	support@aurenz.de
Hours	5x8 support

Service and Support Levels

Support Level	Description
1st	Only available at Aurenz with additional service contract. Otherwise responsibility of our business partners
2nd	Any technical problems of end users and business partners that can not be resolved by the business partner themselves
3rd	Anything not resolved by 2nd level

There is no 1st level support but on request of our business partners or end users a additional software update and/or maintenance contract can be agreed.

In most cases the 2nd level support is contacted by e-mail. In general a reply can be expected the following day. If a support request arrives before noon (12:00 CET) there is a high possibility that the reply is send out the same day. Additionally Aurenz GmbH provides phone support (hotline) between 8:00am and 4:00pm from Monday to Friday. The hotline gives only support for technical problems that obviously are not part of the product documentation. Services that are not part of the support contract need to be ordered with the regular conditions and according to our latest price lists. Problems that can not be resolved by second level support are submitted to technical group (internal escalation to development department) of Aurenz GmbH.

12 Appendix D: AAPP program

12.1 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 Allcatel-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, …

Web site

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

12.2 Alcatel-Lucent.com

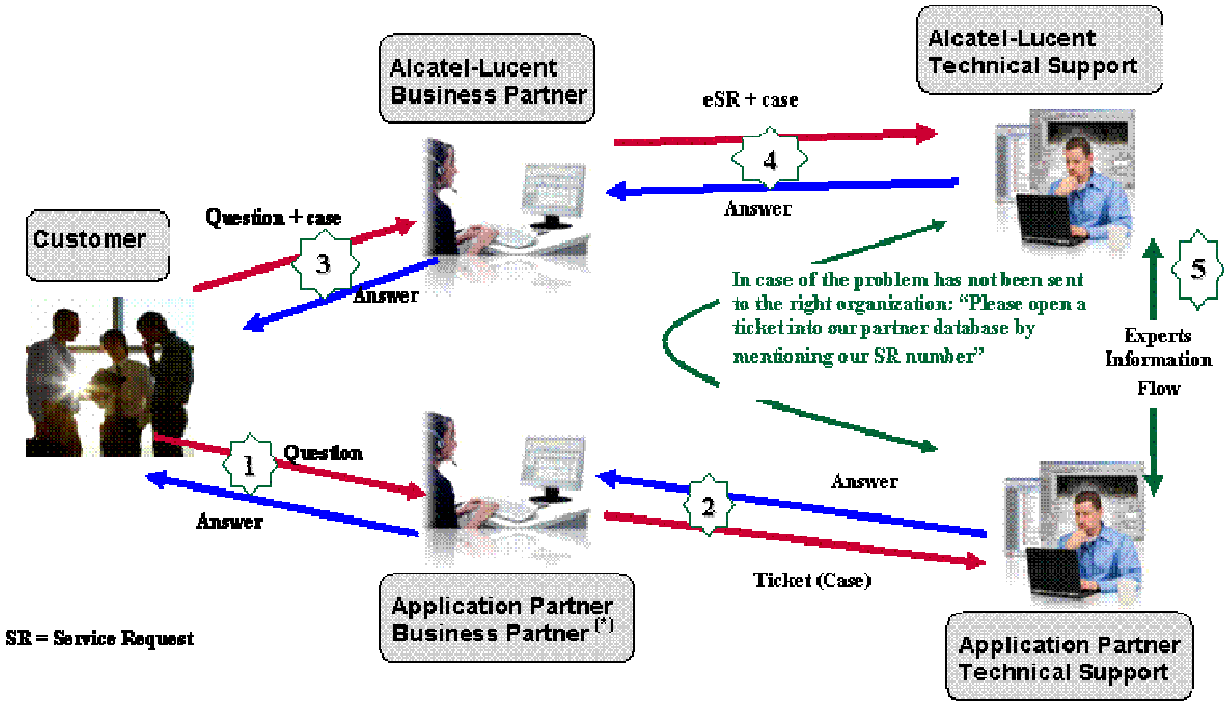
You can access the Alcatel-Lucent website at this URL: http://www.Alcatel-Lucent.com/

13 Appendix E: AAPP Escalation process

13.1 Introduction

The purpose of this appendix is to define the split of responsibilities and the escalation process to be applied by the Alcatel-Lucent Business Partners when facing a problem with a solution involving an Alcatel-Lucent platform and a Third-Party application ***with or without a valid Alcatel-Lucent Inter-Working Report.***

If a problem occurs on an installation involving Alcatel-Lucent platforms and a certified product or application, both parties, Alcatel-Lucent and the Application Partner, are engaged as follows:



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

13.2 Escalation in case of certified application/products

The Alcatel-Lucent support will be limited to applications with a valid Inter-Working Report (IWR). Known problems or remarks mentioned in the IWR will not be taken into account.

A valid IWR means an official IWR exists which is posted on the Alcatel-Lucent Enterprise Business Portal and mentions the same release/version of the software of both parties as those of the current customer installation (Or an official agreement between Alcatel-Lucent and the Third-Party exists to support the customer installation if the release/version doesn't match those mentioned in the latest IWR).

If there is an interworking issue, 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.

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 a guarantee of the availability of the solution. 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.

13.3 Escalation in case of non-certified application/product

If an Alcatel-Lucent Business Partner escalates an issue where a 3rd party application is involved and the following conditions apply:

1. no IWR exist (not available on the Enterprise Business Portal for Business Partners or on the Alcatel-Lucent Application Partner web site) ,

2. Or the 3rd party company is referenced as AAPP participant but with no existing IWR,

3. Or the existing IWR is available but the release/version of the both parties (Alcatel-Lucent and 3rd-party) are not the same than those currently deployed at the customer site (see exception in Note 2).

In this case, the only responsibility of the Alcatel-Lucent Technical Support is to verify that the Alcatel-Lucent platform is correctly installed and configured for a standard use and that the Alcatel-Lucent equipments perform as expected. If that's the case, Alcatel-Lucent will be forced to close the case.

If the Alcatel-Lucent Business Partner, the customer or the 3rd party company need additional and specific involvement from Alcatel-Lucent, there are two options:

- Either request a quote for specific investigation and diagnosis (with no agreement to fix the issue),

- Or the AAPP program process is followed to officially certify the 3rd party application/product.

For both options, just send the request to the AAPP team (by opening an e-SR).

IMPORTANT NOTE 1: Even if the 3rd party company is able to demonstrate the issue is on the Alcatel-Lucent side, there is no obligation from Alcatel-Lucent to fix it (there is no official IWR established between the two parties).

IMPORTANT NOTE 2: For case 3, Alcatel-Lucent and the Third-Party company may decide to provide a document specifying the possible extension of the IWR by mentioning the list of releases/versions officially supported. (Another way is to update an existing IWR with new release/version compatibility).

13.4 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