

ILEXIA SIP Certification Offering

Converged Unified Communications Laboratory

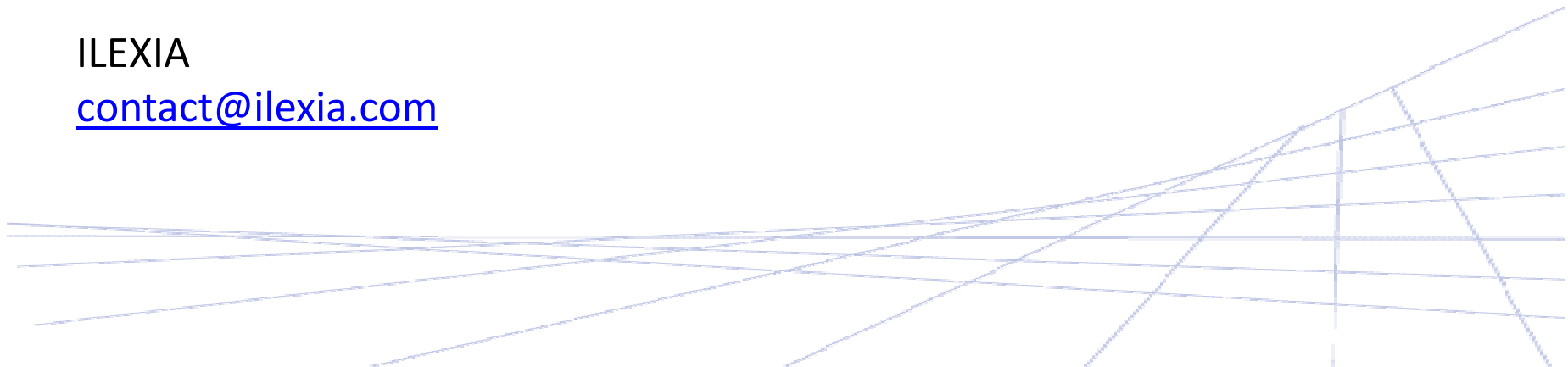
Mastering Convergence of Information System

<p>Système d'information Outils de diagnostic/simulation</p> <ul style="list-style-type: none"> • Serveurs DHCP, DNS • Base de données LDAP, SQL • Serveur de fichiers TFTP, FTP • Serveur de messagerie • Serveur d'Authentification • Autorité de Certification • Analyseurs de protocole • Générateur de trafic (SIP, RPNIS, QSIG, H.225, SIP, MGCP, RTP, G711, G723, G722...) 	<p>Softswitch Business Trunking, MultiplePlay et Centrex IP</p> <p>COMVERSE CCS SIEMENS Open Scope Voice 8000</p>	<p>Serveurs Applicatifs</p> <p>UNISYS Microsoft TServer/SIP Server Office Communication Server 2007 IBM Sametime CISCO VideoStreaming</p>			
<p>Postes SIP</p> <p>Aastra Tandberg Polycom Cisco Linksys Lg-Nortel Siemens Doro Depaape Thomson</p>	<p>Session Border Controller</p> <p>COMVERSE SIPsters inSight NetXls VPN MPLS ILEXIA</p>	<p>Passerelles VoIP Opérateurs, Entreprises, Grand Public</p> <p>CISCO Voice Gateway 5350 AudioCodes Mediant 2000 Ques.com Passerelle GSM - Q400 EXTEL Passerelle Dect/Wifi AASTR A Passerelle Dect sur IP</p>			
<p>Solutions OpenSource</p> <ul style="list-style-type: none"> • Asterisk • Sip Express Router • Brocade • OpenIMS • SugarCRM 	<p>Infrastructure LAN/MAN</p> <p>NORTEL Switch Router PP8600 ES460 POE CISCO Catalyst3750 POE Catalyst 3560 POE Routers 2821, 2611, 2621, 2651XM</p>				
<p>NORTEL Communication Server 1000 SCS 500</p>	<p>Alcatel-Lucent OmniPCX Enterprise, MyC OmniPCX Office</p>	<p>SIEMENS Hipath 2100, 3100, HiPath 8000</p>	<p>AASTR A NaXapan C, NC5500 Telephony Web Portal</p>	<p>AVAYA Communication Manager S8500/G650 et S8300/G350</p>	<p>CISCO Cisco Unified Communication Manager CUCM Express, Unity, CUPS</p>



ILEXIA

contact@ilexia.com



Agenda

- **Context and Needs identified by ILEXIA**
- **Testing and Certification Offering**
 - ILEXIA proposal
 - Our services
 - Quote Proposals
 - ILEXIA Converged Unified Communication Laboratory
 - Certified Equipment and Our Customers
 - Telecom Equipments ILEXIA can make available and functionality usually certified
 - ILEXIA Offer benefits
 - Testing Activities (included in the scope of our proposal)
 - Documentation Activities (included in the scope of our proposal)
 - Certification References
- **ILEXIA – Other services**
 - **Consulting offering**
 - **Training Offering**
- **Unique ILEXIA expertise and positioning**

ILEXIA : Bureau d'étude Nouvelle génération

8 years of expertise on IP telephony & Unified Communications

Network & Telecom Manufacturers	Service Provider (Centrex, Business Trunking)	Local communities	Enterprises (Mid to Large)
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Testing & Certification	Consulting	Trainings Workshops
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Postes SIP <ul style="list-style-type: none"> Aastra Tandberg Polycom Cisco Linksys Lg-Nortel Siemens Avaya Doro Depiape Thomson Hitachi Nokia 	Session Border Controller <ul style="list-style-type: none"> inGate SIParators NeoXbc 	Passerelles VoIP Opérateurs, Entreprises, Grand Public <ul style="list-style-type: none"> CISCO Voice Gateway 5350 Mediant 2000 Passerelle GSM - Q460 Passerelle Dec/WiFi Passerelle DECT sur IP 			
Solutions OpenSource <ul style="list-style-type: none"> Asterisk SIP Express Router OpenBMS SuperCRM 	Infrastructure LAN/MAN <ul style="list-style-type: none"> NORTEL Switch Router PP8600 ES460 POE CISCO Catalyst 3750/3560 POE SIEMENS Contrôleurs mxr-2 ROCKWELL Borne WiFi Mp422 ROUTERS 2821, 2851XM 				
NORTEL Communication Server 1000 SCS 500	Alcatel-Lucent OmniPCX Enterprise, MyIC OmniPCX Office	SIEMENS Hipath 2030, 3300, Hipath 8000	AASTRA NetXpan 0, NCB 5000 Telephony Web Portal	AVAYA Communication Manager 38500/G650 et 58300/G350	CISCO Cisco Unified Communication Manager CUCM Express, Unity, CUPS



IP telephony and Unified Communications Facilities LAB

Testing and Certification Offering

ILEXIA proposal

- Our proposal consist in :
 - assisting SIP provider on complex SIP interoperability testing sessions between IPBX (used in Customers premises) and Service provider platform (made up of softswitches, Session Border Controller and VoIP gateways)
 - providing Service Provider with all the human resources to carry out interoperability certification activities
 - As an option ILEXIA could also provide Service Provider the equipment to test including:
 - Main IPBXs system or Application servers (such as IBM Lotus Sametime, Sametime User Telephony, Microsoft OCS 2007)
 - Gateway such as Audiocodes, NET, ...
- Our Interoperability engineers
 - Have practical experience of certification projects
 - Maintain their technical expertise in analyzing interoperability situations on many IPBX systems and Service provider platforms such as :
 - IP PBX such as Avaya Communication Manager, Cisco Unified Communication manager, Aastra 5000, Alcatel-Lucent OmniPcx Enterprise, Microsoft OCS 2007, Siemens Opens Scape UC,...
 - VoIP gateways such as OneAccess, Mediatrix, Audiocodes, Quescom
 - Service platform including Hipath 8000, Comverse, AcmePacket,....
 - Remain up to date on both IP technology and equipment using our Converged Unified Communication laboratory

Testing and Certification Offering

Our Services

- Interoperability Campaign between ToIP/VoIP equipments (SIP, H323, MGCP, H248, ISDN , SS7, ...) on pre-defined scenarios
 - Basic call
 - DTMF handling
 - Music On Hold and retrieve
 - Forward
 - Transfer
 - Conference
 - ...
- Validation campaign reproducing customer environment.
- Integration test to deploy VOIP solution in customer Network.
- Helping customers to define their offer and the scope of their services
- Design business model by carefully analyzing the value chain and defining appropriate service bundles.
- Designing Redundancy Testing



Testing and Certification Offering

Quote Proposals – Two options



- Option 1: All included certification package
 - One SIP Interoperability certification of one IPBX/Communication server with Service Provider Business Trunking offer
 - Pricing for one “SIP Interoperability certification”:
 - Under request from Service Provider
 - Deliverables:
 - Certification test plan, certification test report and ILEXIA Certificate « SIP interoperability certified »
 - Materials provided by ILEXIA (optionnal)
 - IPBX, IP Phones, Proxies, SBCs, gateways,...
- Option 2 : “Interoperability engineer” in Service Provider premises
 - During a period of time (e.g. 1 month, 3 months or more)

Testing and Certification Offering

ILEXIA Converged Unified Communication Laboratory



- Main IP-PBX
- SBCs
- Softswitchs
- IP Phones
- Proxy
- VoIP Gateway
- Application server
- IVR
- Voice Mail
- OpenSource
- Diagnostic Tools
- Servers Farm

Système d'Information
Outils de diagnostic/simulation

- Serveurs DHCP, DNS
- Base de données LDAP, SQL
- Serveur de fichiers TFTP, FTP
- Serveur de messagerie
- Serveur d'Authentification
- Autorité de Certification
- Analyseurs de protocole
- Générateur de trafic (ISUP, RNIS, QSIG, H323, SIP, MGCP, RTP, G711, G729, G722,...)

Softswitch
Business Trunking, MultiplePlay et Centrex IP

COMVERSE CCS SIEMENS Open Scape Voice 8000

Serveurs Applicatifs

GENESYS Server/SIP Server
Microsoft Office Communication Server 2007
IBM Sametime
CISCO VideoStreaming

Postes SIP

Aastra Tandberg Polycom Cisco
Linksys Lg-Nortel Siemens
Doro Depaape Thomson

Session Border Controller

COMVERSE SIParators inGate NeoXbc

Passerelles VoIP
Opérateurs, Entreprises, Grand Public

CISCO Voice Gateway 5350
AudioCodes Mediant 2000
QuesCom Passerelle GSM - Q400
ZyXEL Passerelle Dect/Wifi
AASTR A Passerelle DECT sur IP

VPN MPLS ILEXIA

Infrastructure LAN/MAN

NORTEL Switch Router PP8600 ES460 POE CISCO Catalyst 3750 POE Catalyst 3560 POE CISCO Routers 2821, 2611, 2621, 2651XM

Solutions OpenSource

- Asterisk
- Sip Express Router
- Brekeke
- OpenIMS
- SugarCRM

NORTEL Communication Server 1000 SCS 500
Alcatel-Lucent OmniPCX Enterprise, MyIC OmniPCX Office
SIEMENS Hipath 2100, 3100, Hipath 8000
AASTR NeXspan C, NCS5000 Telephony Web Portal
AVAYA Communication Manager S8500/G650 et S8300/G350
CISCO Cisco Unified Communication Manager CUCM Express, Unity, CUPS

Testing and Certification Offering

Certified Equipment and Our Customers



- ToIP System and Solution ILEXIA certification scope
 - IP PBX
 - Service Provider solution
 - Session Border Controller
 - SIP Proxy and Back-To-Back User Agents
 - IP Phones
 - VoIP Gateway
 - IVR
 - Unified Communication system
- Our customers:
 - Telecom manufacturers
 - Operators
 - ITSP
 - Large Companies

Testing and Certification Offering

Telecom Equipments ILEXIA can make available and functionality usually certified

Equipments available in ILEXIA LABORATORY for interoperability certification

Aastra 5000

Aastra 800

Aastra Unified Communication Platform (UCP)

Alcatel OmniPCX Enterprise

Alcatel OmniPCX Office

Avaya / Nortel Communication Server 1000

Avaya S8500 Communication Manager

Asterisk

Audiocodes gateways

Cisco Unified Communication Manager

Cisco Unified Presence Server

Cisco Unity Messaging System

Cisco Unified Communication Manager Express

Cisco UC500

Comverse NeoXBC

Comverse IMS softswitch

Cycos MRS

IBM Sametime and Sametime Unified Telephony

Ingate SIParator

Microsoft Open Communication Server 2007

NET VX Voice Exchange gateway

OneAccess Gateway

Siemens HiPath 8000

SIP Express Router

Siemens Open Scope (Voice, Video,...)

Functionality usually certified

Registration process

Basic call (incoming and outgoing)

OnHold/ Resume

Speed Call List

Missed, received and placed call list

Multi-line

Multiple lines appearance

Music on Hold

Management DTMF (access to voice servers)

Name Display

Call Transfer with and without consultation

Forwarding (all types)

Voicemail (storage, consultation, notification)

Message Waiting indication

Conference

Fax handling (T38, T30)

Distinctive ringing (internal and external call)

Call admission control

Audio codec selection (G729, G711 and G722)

Video codec selection (H261 and H263)

Hot Desking

Call park

Campon

Click to call

Management of potential situations of failure (failure to VPN access, network and service platform)



Testing and Certification Offering

ILEXIA Offer benefits

- Offer all inclusive (equipment, services and resources)
- A rapid response to requests for certification
- Customers (Service provider or manufacturers) assistance from design phase until general availability
- Expertise Field on interoperability certification
- A recognized know-how
- Very competitive pricing
- Latest software/hardware available



Testing and Certification Offering

Testing Activities



- Managing the « Interoperability Testing » (IOT) Project
 - Coordination of testing sessions between the different IOT actors
- Building Lab tests
 - Implementing the “System Under Test” (SUT) into a Unified Communication Customer/Lab test environment
- Producing Certification test plans based on
 - Target customer environments
 - Test plans from our various test campaigns
- Organizing and executing IOT test plan
 - Executing and recording all tests cases (trace signaling and RTP)
 - Updating test files (with reference to the traces produced)
- Organizing and executing the patches tests plan
 - Patches fixing the tests failed
- Organize and conduct test sessions for non-regression

Testing and Certification Offering

Documentation



- Producing/updating the test report
 - Writing of test results with a quantitative and qualitative feedback
 - The analysis of cases of misconduct, the development of diagnostic defects and making recommendations for resolution in accordance with the SIP standards
 - Updating the test report including test results of patch
- Organizing IOT outcomes presentation
- Produce a guide for integrating the “system under test” into the solution
 - Architecture, components, scenarios and call flows
 - Configuration Tips and checklist of actions to be completed in order to integrate the System under test into the customer environments
- Producing a troubleshooting guide to be provided to “SUT” team support and its partners containing the following points:
 - Description of possible faults (“SUT” local networks, access router, xDSL, call servers, IP phones...)
 - Description of procedures for Diagnosis, the possible resolutions and the reports of failure to be provided to the right support level
- Producing the ILEXIA certificate “Interoperability Certified”

Testing and Certification Offering

Certification References

- Orange Business Services
- Comptel
- Hub telecom
- 9 Telecom
- Phone System
- Consort Netcom
- Eircom
- Depaepe
- Castel
- Nortel
- Alcatel-Lucent
- LG-Nortel
- LG-Ericsson
- Tandberg
- Alcatel Lucent
- Microsoft OCS 2007 / Lync
- Aastra



Consulting Offering

- Objective:
 - Guarantee that IP Telephony system is well integrated in the Customer System Information (Network infrastructure, Server Farm, ...)
- Services
 - Assisting large companies in their ToIP Migration project:
 - Auditing existing telecom and network infrastructure
 - Identifying needs and requirements
 - Producing recommendation for migrating
 - ToIP Network design
 - Request for Information, Proposal and Quote editing and dispatching
 - Benchmarking the manufacturers offers
 - Organizing Technology Transfer and End-User Training
 - Providing Complete reports
 - Installation follow-up
- Some ILEXIA references
 - Orange
 - Groupama
 - Airbus
 - Alstom
 - DELL
 - Thomson
 - N9uf Telecom
 - Texa
 - CG13
 - IMA
 - Total
 - ...

Training Offering

- Objectives:
 - Provides state of the art understanding and provide our customer with all the knowledge required when they will decide to launch an IP telephony/Unified Communications projects
- Our training catalogue covers 16 training courses, covering the different ITs manager concerns
 - Companies expectation on Unified Communication system
 - IP telephony expert
 - SIP in details
 - VoIP service provider
 - Security applied on ToIP solution
 - IP Telephony and OpenSource
 - QOS on ToIP solution
 - Data network prerequisites for ToIP Technology
 - ...
- Our courses are built upon:
 - Our experience of complex ToIP Project
 - Our important Lab facilities
 - Our skills on ITs complementary aspect (Data Network, ToIP system, Information system)
- More than 1000 enterprises trained since 8 years
 - DELL
 - France Telecom R&D
 - BNP
 - Alcatel
 - Mairie de Pontault Combault
 - Séminaire « ToIP, quelle perspective pour les PME/PMI »: Chambre de Commerce de Paris
 - Etc.
 - N9uf Telecom
 - Telecom Paris Formation Continue (Formation Inter Entreprise)
 - ALCATEL
 - Gaz de France, SONACOTRA, Avaya, Cisco, Mairie de Nanterre,...
 - Group Tests, CEA, Conseil Général PACA, Orange, Sun Microsystems, Thomson, AVAYA, Groupe SODIAAL, CEGELEC, Groupama, Banque Populaire, Ministère de l'Intérieur...
 - AmecSpie
 - CYCOS
 - ASCOM
 - Altitude Télécom, Aviation Civil

ILEXIA unique expertise and positioning

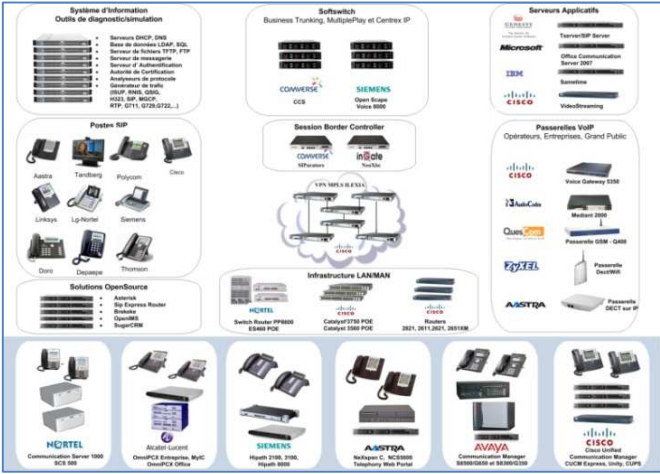
**Unified
Communication
Specialist**

Independance

Global approach

**In depth Product
knowledge**

**Unique
benchmarking
capabilities**



**Market
Knowledge**

**Telecom & Network
Skills**

Validation tests coverage

- IPPBX certification on SIP trunking Service provider
 - Functional scope : Basic Services, Advanced (Transfer, Conference, ...)
 - Average Tests number : between 200 and 500 tests
 - 80 tests per week, Half a day per week for status meeting
 - Whole test between 4 and 6 weeks excluding documentation
- SIP Phone (IPPBX or Centrex)
 - Functional scope : Basic Services, Advanced (Transfer, Conference, ...)
 - Average Tests number : between 80 and 120 tests

