

Author: R&D/Em

**Test Report:
ECOTEL VoIP, ISDN2-2 und ISDN2-1**

Date: 30.
November
2007

Realisation Date

Date	Test Location	Test Personnel
Dec 11, 2007	Aastra DeTeWe, Berlin, Zeughofstrasse 1	Vierling Communication GmbH: Bernhard Emmert bernhard.emmert@vierling.de +49 9194-97243 Aastra DeTeWe: Ronald Karaskiewicz

Overview

Test Objects	Description	Software Version
PABX	Aastra- TeDeWe OpenCom 1010 SW-Version: R1.289.13.3.1 Release: 8.09/	
ECOTEL® ISDN2-1 ECOTEL® ISDN2-2 ECOTEL® VoIP	<p>ECOTEL® ISDN provides reliable, cost-effective connections between GSM and ISDN networks.</p> <p>ECOTEL® VoIP provides reliable, cost-effective connections between IP, GSM and ISDN networks.</p> <p>The number of GSM channels is scalable in steps of two up to a total of eight, and the GSM modules are compatible with all types of GSM networks (GSM 850/900/1800/1900/R).</p> <p>ECOTEL® ISDN/VoIP offers a built-in antenna splitter which ensures easy installation with a maximum of two antennas.</p> <p>The gateway can simultaneously route up to four ISDN calls to GSM or IP and vice versa.</p> <p>The gateway can simultaneously route up to eight IP calls to GSM and vice versa.</p> <p>Potential applications range from integration into an existing VoIP infrastructure and connecting of mobile offices all the way to distributed installations with multiple gateways and common configuration software.</p> <p>Manufacturer: Vierling Communications GmbH Pretzfelderstraße 21 D-91320 Ebermannstadt</p>	V4.7.13

Test Strategy

Issue	Description	
Test Goal	The main goal of this testing is to test - the external interfaces - the system failure/recovery behavior - the main functionality of this component within the system as a whole	
Test intensity	Scope of the tests are: - Verification of the correct behavior - Restart behavior - Reaction in critical situations	

Configuration

Issue	Description	
ECOTEL® VoIP	Configuration of ECOTEL was done by Vierling Communications GmbH staff. Vierling Communications GmbH staff attended the certification test.	
PABX	Aastra- TeDeWe OpenCom 1010 Tested with OpenCom 1010 SW-Version: TXL40.46 Release: 4.46	

Test Results Summary

Device	Description	
	ECOTEL® VoIP is ready for link to OpenCom	
Problems	None	
Restictions	None	

Test Results in Detail

Ecotel connected to external S0 trunk

Test Procedure	Description	Test Result
	Ecotel is set up in NT-PtP mode	PABX as TE-PtP at L1/L2/L3
Pull the connection cable and put it back again	The whole system returns to normal operating mode without manual interferences	ok
Soft restart of Ecotel	The whole system returns to normal operating mode without manual interferences	ok
Hard restart of Ecotel	The whole system returns to normal operating mode without manual interferences	ok
Soft restart of PABX	The whole system returns to normal operating mode without manual interferences	ok
Hard restart of PABX	The whole system returns to normal operating mode without manual interferences	ok
System phone outgoing call	PABX subscriber towards GSM callee via Ecotel	ok (135)
Analog phone outgoing call	PABX subscriber towards GSM callee via Ecotel	ok (122)
ISDN phone outgoing call	PABX subscriber towards GSM callee via Ecotel	na
VoIP phone outgoing call	PABX subscriber towards GSM callee via Ecotel	na
CLIR	Calling party number may be suppressed	ok
PABX subscriber redirected	Call between a PABX user and a GSM callee via Ecotel is established	ok
PABX subscriber makes an enquiry towards a PABX subscriber	Call between a PABX user and a GSM callee via Ecotel is established; using PABX features the GSM callee via Ecotel is receiving hold information	ok
PABX subscriber makes an enquiry towards an external callee	Call between a PABX user and a GSM callee via Ecotel is established; using PABX features the GSM callee via Ecotel is receiving hold information	ok
DTMF detection at Ecotel	Call between a PABX user and Ecotel is established; post-dialing is used	na
Release timeout without DTMF-suffix dialing	Call between a PABX user and Ecotel is established but without post-dialing	na
3 party conference (2 internal PBX; 1 external Ecotel)	Using conferencing facility of PABX	ok
3 party conference (1 internal PBX; 2 external Ecotel)	Using conferencing facility of PABX	ok
PABX clock from public network (S0)	Connections have to be free from any distortions; Ecotel L1/L2/L3:NT/NT/NT	PABX as Amtsport
(S2M)	Ecotel L1/L2/L3:NT/NT/NT	ok; no synchronisation to PABX necessary frameslips every second herable
(S2M)	Ecotel L1/L2/L3:TE/NT/NT	-> Querverbindung (Festverbindung Schicht 1 Master) PABX Layer L1/L2/L3:NT/TE/TE ok; synchronisation to PABX

		works correctly
PABX clock from public network	Connections have to be free from any distortions; Ecotel is synchronized to PABX Ecotel L1/L2/L3:TE/NT/NT	PABX Layer L1/L2/L3:NT/TE/TE not configurable if PABX uses Amtsport
System phone incoming call	GSM caller via Ecotel towards PABX subscriber	ok
Analog phone incoming call	GSM caller via Ecotel towards PABX subscriber	ok
ISDN phone incoming call	GSM caller via Ecotel towards PABX subscriber	na
VoIP phone incoming call	GSM caller via Ecotel towards PABX subscriber	na
CLIP	Calling party number available	ok
DTMF sending of Ecotel	DTMF signalling transparent towards PABX; DTMF signalling transparent towards Ecotel	ok
External caller makes an enquiry using PABX feature set	using PABX features the GSM caller via Ecotel is able to call a second PABX subscriber	PABX has no mobile extension features
External caller makes an enquiry using Ecotel feature set	Ecotel is sending hold information towards PBX	PABX has no mobile extension features

Ecotel connected to internal S0-Bus

Test Procedure	Description	Test Result
	Ecotel is set up in Te-PtMP mode	Exotic for PABX; not tested
Pull the connection cable and put it back again	The whole system returns to normal operating mode without manual interferences	
Soft restart of Ecotel	The whole system returns to normal operating mode without manual interferences	
Hard restart of Ecotel	The whole system returns to normal operating mode without manual interferences	
Soft restart of PABX	The whole system returns to normal operating mode without manual interferences	
Hard restart of PABX	The whole system returns to normal operating mode without manual interferences	
System phone outgoing call	PABX subscriber towards GSM callee via Ecotel	
Analog phone outgoing call	PABX subscriber towards GSM callee via Ecotel	
ISDN phone outgoing call	PABX subscriber towards GSM callee via Ecotel	
VoIP phone outgoing call	PABX subscriber towards GSM callee via Ecotel	na
CLIR	Calling party number may be suppressed	
PABX subscriber redirected	Call between a PABX user and a GSM callee via Ecotel is established	
PABX subscriber makes an enquiry towards a PABX subscriber	Call between a PABX user and a GSM callee via Ecotel is established; using PABX features the GSM callee via Ecotel is receiving hold information	
PABX subscriber makes an enquiry towards an external callee	Call between a PABX user and a GSM callee via Ecotel is established; using PABX features the GSM callee via Ecotel is receiving hold information	
DTMF detection at Ecotel	Call between a PABX user and Ecotel is established; post-dialing is used	
Release timeout without DTMF-suffix dialing	Call between a PABX user and Ecotel is established but without post-dialing	
3 party conference (2 internal PBX; 1 external Ecotel)	Using conferencing facility of PABX	
3 party conference (1 internal PBX; 2 external Ecotel)	Using conferencing facility of PABX	
CLIP	Calling party number available	
System phone incoming call	GSM caller via Ecotel towards PABX subscriber	
Analog phone incoming call	GSM caller via Ecotel towards PABX subscriber	
ISDN phone incoming call	GSM caller via Ecotel towards PABX subscriber	na
VoIP phone incoming call	GSM caller via Ecotel towards PABX subscriber	na
DTMF sending of Ecotel	DTMF signalling transparent towards PABX; DTMF signalling transparent towards Ecotel	
External caller	using PABX features the GSM caller via Ecotel is	PABX has no mobile extension

makes an enquiry using PABX feature set	able to call a second PABX subscriber	features
External caller makes an enquiry using Ecotel feature set	Ecotel is sending hold information towards PBX	PABX has no mobile extension features