Technical Report 1311

SIP Trunk Certification with M-net

OpenScape Voice V9 and OpenScape SBC V9

Customer Solution Lab Munich

Version 1.1 – 2018-06-22

Customer Solution Lab

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1. Document Overview

1.1. Executive Summary

This document describes the test setup, configuration and test results of the certification test of the SIP Provider M-net in an OpenScape Voice V9 and OpenScape SBC V9 environment performed in the Customer Solution Lab in Munich.

The SIP Provider M-net has successfully passed the interoperability test with OpenScape Voice V9 and OpenScape SBC V9 for the tested features described below.

Please take note of the issues found during the initial test and the results and findings of additional tests in cooperation with M-net, as described in chapter 2.Issues.

Due to the half way issue, the tests were stopped in February 2018 until a solution was available. Unfortunately a working solution was only usable from 19 June 2018.

At the request of M-net a separate test list from M-net was executed before the interoperability test started. Please find the test list attached in Customer Specific Tests.

G.722 is not offered by M-net but M-net recommends setting the codec order on our side to G.722, G.711 and G.729.

Due to issues with G.729, M-net deactivated G.729 during the test time.
Also sending and receiving of faxes with T.38 were not supported from M-net at the moment.
Therefore no G.729 and T.38 tests were done.

The tested features are:

- Basic Call
- Basic Call Extended
- Special Basic Call
- Hold/Toggle
- Call Forward
- Call Transfer
- Conference
- Fax and DTMF
- OpenScape Voice Features

1.2. Test result summary

Customer Solution Lab

SIP Trunk Test

Connectivity

Test Group	OK	NOK	Blocked	Not Supported	Skipped
1. Basic Call	10	0	0	2	1
2. Basic Call Extended	7	1	0	1	0
3. Special Basic Call	5	0	0	1	6
4. Hold/Toggle	5	0	0	0	0
5. Call forward	12	2	0	4	0
6. Call transfer	9	0	0	0	0
7. Conference	2	0	0	0	0
8. Fax and DTMF	6	0	0	4	5
9. OpenScape Voice Features	4	0	0	0	5
Sum	60	3	0	12	17
Percentage	65,2 %	3,3 %	0 %	13,0 %	18,5 %

Display

Test Group	OK	NOK	Blocked	Not Supported	Skipped
1. Basic Call	10	0	0	2	1
2. Basic Call Extended	7	1	0	1	0
3. Special Basic Call	5	0	0	1	6
4. Hold/Toggle	5	0	0	0	0
5. Call forward	12	2	0	4	0
6. Call transfer	7	2	0	0	0
7. Conference	2	0	0	0	0
8. Fax and DTMF	6	0	0	4	5
9. OpenScape Voice Features	3	1	0	0	5
Sum	57	6	0	12	17
Percentage	62,0 %	6,5 %	0 %	13,0 %	18,5 %

OK = Passed
NOK = Failed
Blocked = cannot be tested because of a bug
Not supported = to be tested feature is not supported
Skipped = no plan to test or other reason (see description)

1.2.1. Reference to other Documents

Title	Documents and Locations
Unify Configuration and Administration Documentation for OpenScape Voice V9	Several documents http://apps.g-dms.com:8081/edoku/jsp/searchresult_v2.jsp?edokutype=&search_mode=product&product=OpenScape Voice&product_version_main=9&product_version_sub=&search_term_type=all&term=&sort_result=title&docclass=&language=&checkdate=&lang=de
Unify Configuration and Administration Documentation for OpenScape SBC V9	Several documents http://apps.g-dms.com:8081/edoku/jsp/searchresult_v2.jsp?edokutype=&search_mode=product&product=OpenScape SBC&product_version_main=9&product_version_sub=&search_term_type=all&term=&sort_result=title&docclass=&language=&checkdate=&lang=de
Unify Configuration and Administration Documentation for OpenScape UC V9	Several documents http://apps.g-dms.com:8081/edoku/jsp/searchresult_v2.jsp?edokutype=&search_mode=product&product=OpenScape UC Application&product_version_main=9&product_version_sub=&search_term_type=all&term=&sort_result=title&docclass=&language=&checkdate=&lang=de
Unify Configuration and Administration Documentation for OpenStages V3	Several documents http://apps.g-dms.com:8081/edoku/jsp/searchresult_v2.jsp?edokutype=&search_mode=product&product=OpenStage 40 SIP&product_version_main=3&product_version_sub=&search_term_type=all&term=&sort_result=title&docclass=&language=&checkdate=&lang=de
Unify Configuration and Administration Documentation for Mediatrix 4102S	Several documents http://wiki.unify.com/images/9/9b/ http://wiki.media5corp.com/wiki/index.php?title=Installation_Guides

2. Issues

The following lists the found issues on M-net devices:

Tickets Number	Product	Found in Version	Solved in Version	Description
unknown				Uncommon "Contact" in „Session Progress“. M-net System sends uncommon Hex-Characters. E.G.: Contact: <sip:fe3cd79864d5e119cff5d7e47909627e@business.mnet-voip.de:5061;transport=tls;user=phone>
unknown				The provider only sends a busy tone in case of a busy external extension. Only after 30 Sec. the call is canceled from provider with a Bye.
2050673	SBC	V4.1.40_SU15		If an incoming call is transferred to another internal extension the REINVITE to M-net system is answered with a 200 OK with a wrong and needless P-Asserted-Identity "P-Asserted-Identity: sip:+498930908080@business.mnet-voip.de"
unknown				Due to issues with G.729, M-net deactivated G.729 during the test phase.

The following lists the found and solved issue on Unify devices:

ICTS / CQ Tickets Number	Product	Found in Version	Solved in Version	Description
SBC-2793	SBC	V9 R3.01.00	V9 R3.26.01	Half way call after hold or mute over 30 minutes and the same half way in case of longer outgoing calls. Only in case of outgoing calls. (Half way after third re-invite from provider.) **With V9 R3.26.01 the issue cannot be reproduced.**

Due to the half way issue, the tests were stopped in February 2018 until a solution was available. Unfortunately a working solution was only usable from 19 June 2018.

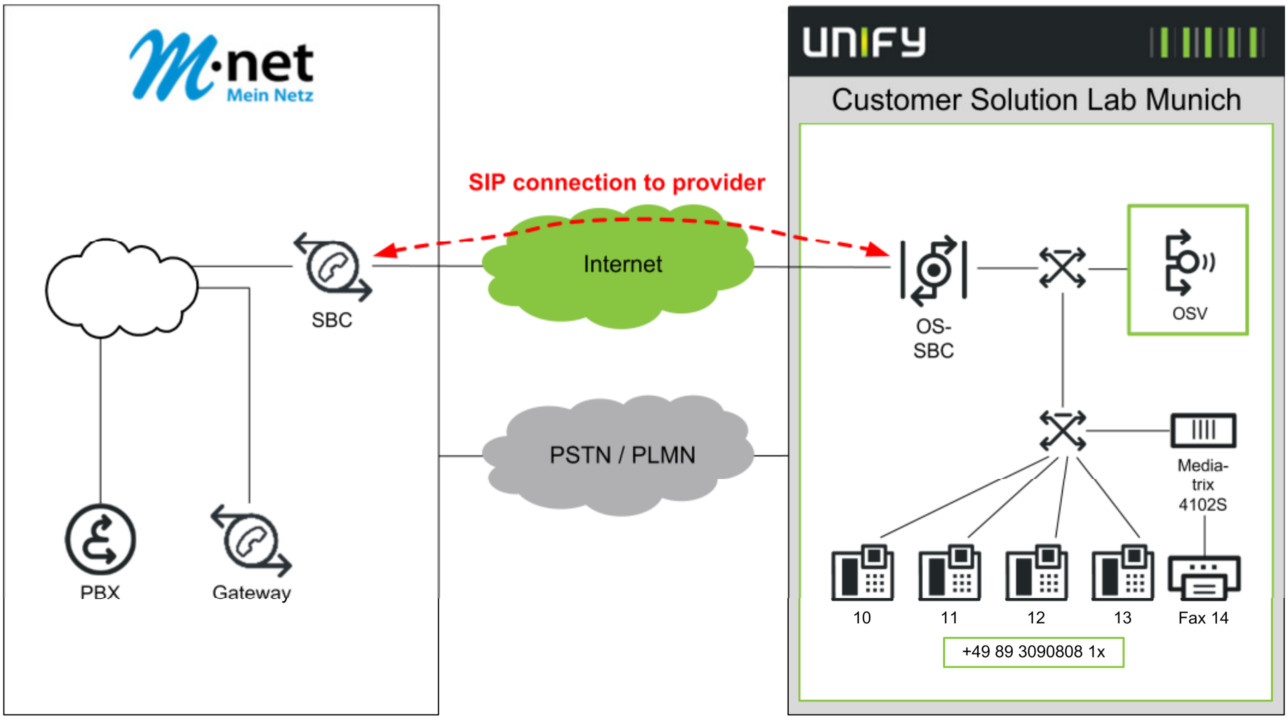
3. Change Requests

No Change requests necessary.

Tickets Number	Product	Found in Version	Solved in Version	Description

5. Network Plan

Unify test configuration for M-net SIP trunk test



6. Test Setup

6.1. Setup M-net

- Registration and authentication to M-net SBC was required.
- The used telephone number format was E.164 international with leading '+' in both directions.
- Call encryption TLS and SRTP was used on WAN side.
- Usually M-net only supports Codec G.711 and G.729.
- G.729 was deactivated on M-net side during the test phase.
- Fax T.38 is not supported from M-net at the moment.

6.2. Hardware/Software releases

HW / SW	SW / Release
M-net - Call Feature Server	V9.3.20_SU8
M-net - Session Boarder Controller	V4.1.40_SU15
OpenScape Voice	V9 R2.24.1
OpenScape SBC	V9 R3.26.01
Brother Fax 2920 on Mediatrix 4102	Mediatrix Dgw 2.0.34.627
OpenStage 40 Phones	V3 R5.8.0
OpenStage 60 Phones	V3 R5.8.0

The tests were executed in the customer Solution Test Lab in Munich - test environment of CSL9 and Lab4.

6.3. Network Integration Data

IP Addresses used:

IP address	DNS Domain Name	Remark
62.216.220.1 62.216.222.1	business.mnet-voip.de	M-net SBC WAN Media address
88.217.204.70 192.168.57.15		OpenScape SBC WAN OpenScape SBC LAN
192.168.163.22		OpenScape Voice V9
192.168.113.165		OpenScape Media Server
192.168.115.14 192.168.32.11		DNS- and Timeserver
192.168.153.233		OpenStage 40 +49 89 3090808 10
192.168.153.238		OpenStage 60 +49 89 3090808 11
192.168.153.226		OpenStage 40 +49 89 3090808 12
192.168.153.227		Mediatrix 4102 with Brother Fax 2920 +49 89 3090808 14

7. Configuration

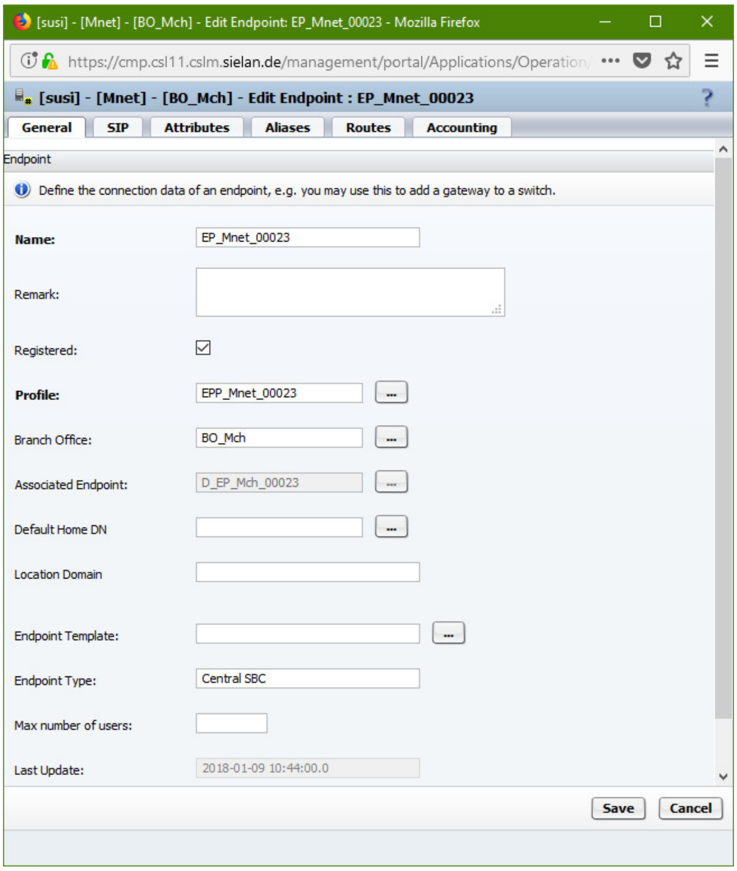
7.1. Configuration of M-net environment

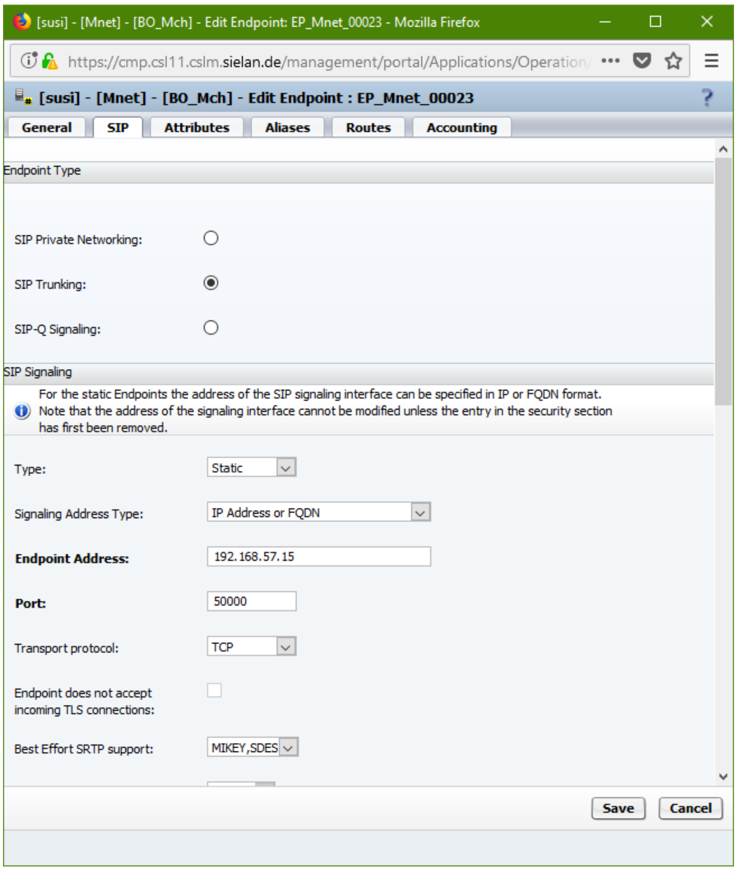
No configuration information available.

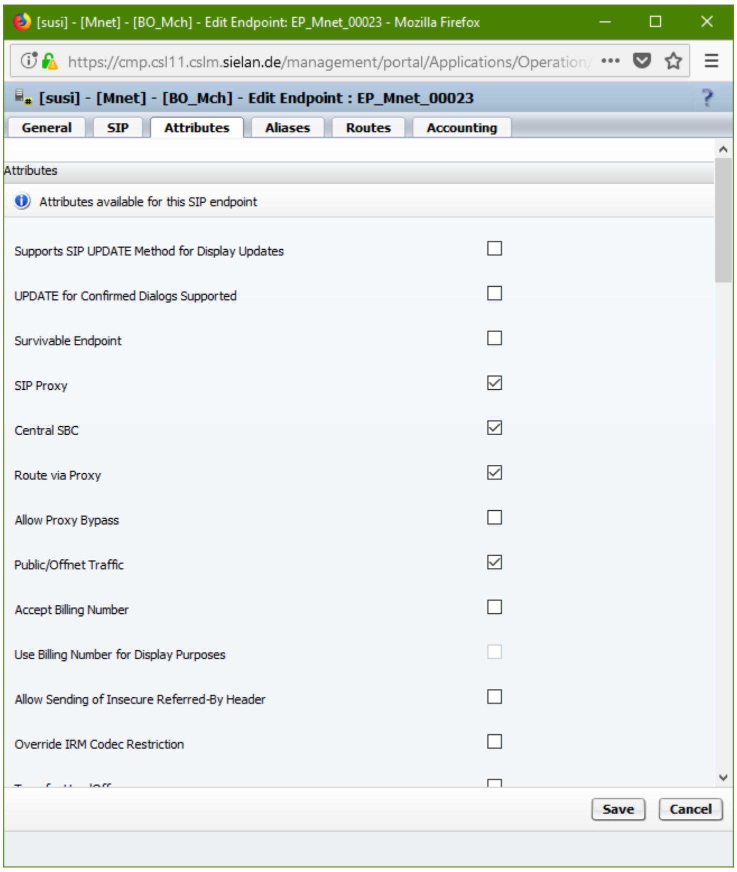
7.2. Configuration of OpenScape Voice endpoint

The OpenScape Voice has a standard configuration with German settings (e.g. numbering plan, dial plan, tones, language settings, ...).

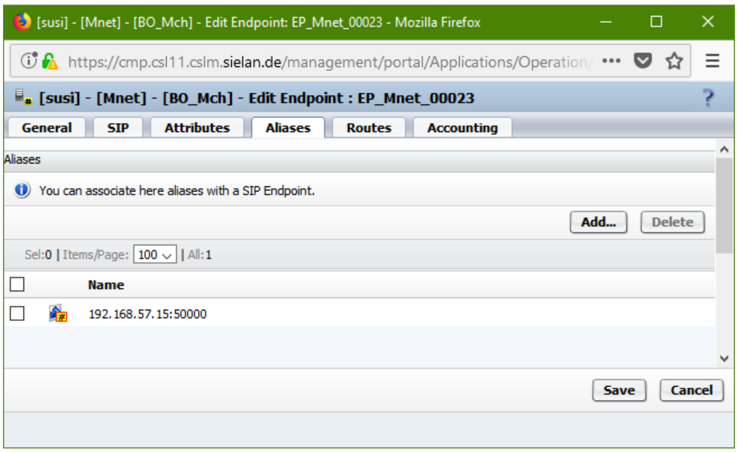
Configuration of the SBC endpoint in OSV (example for SBC):







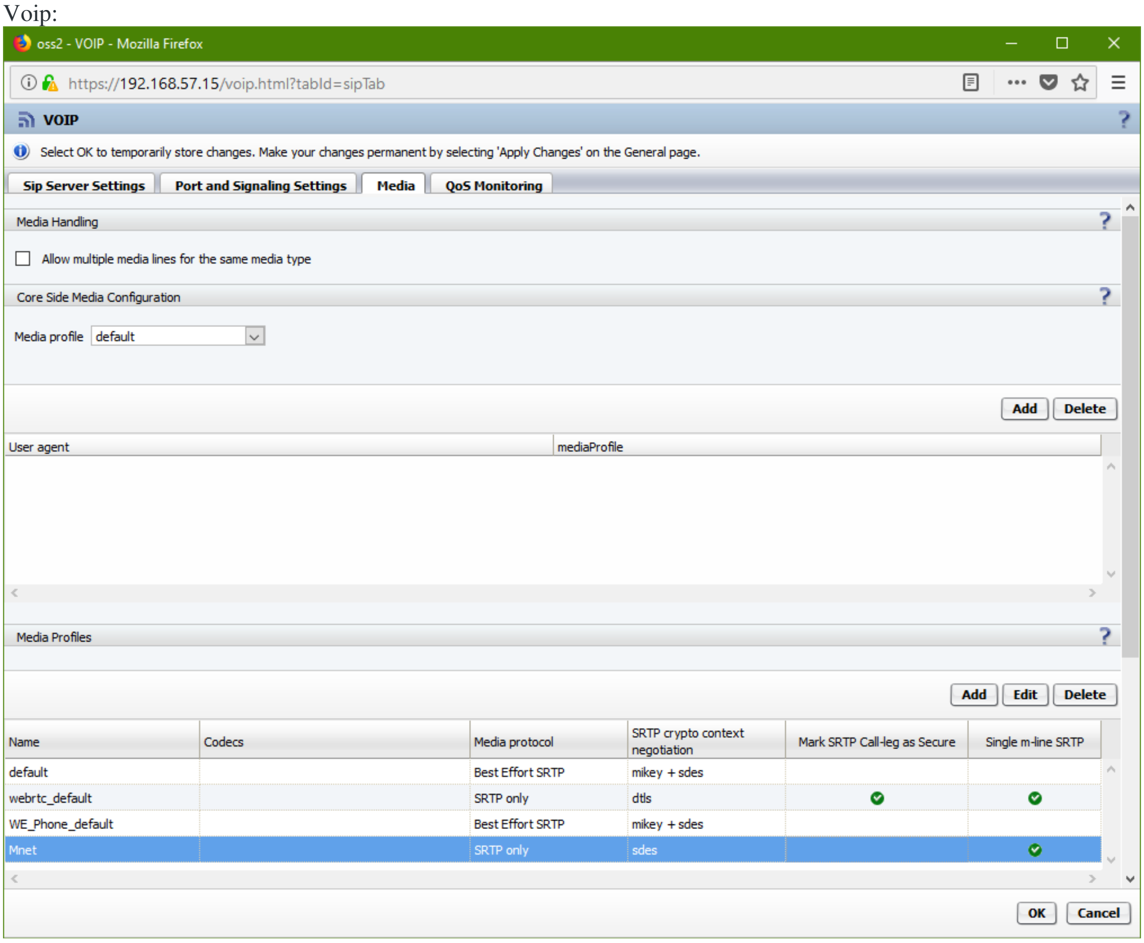
Additionally, the following endpoint Attributes are set (not included in screen shot above):
Send International Numbers in Global Number Format (GNF) and Enable Session Timer



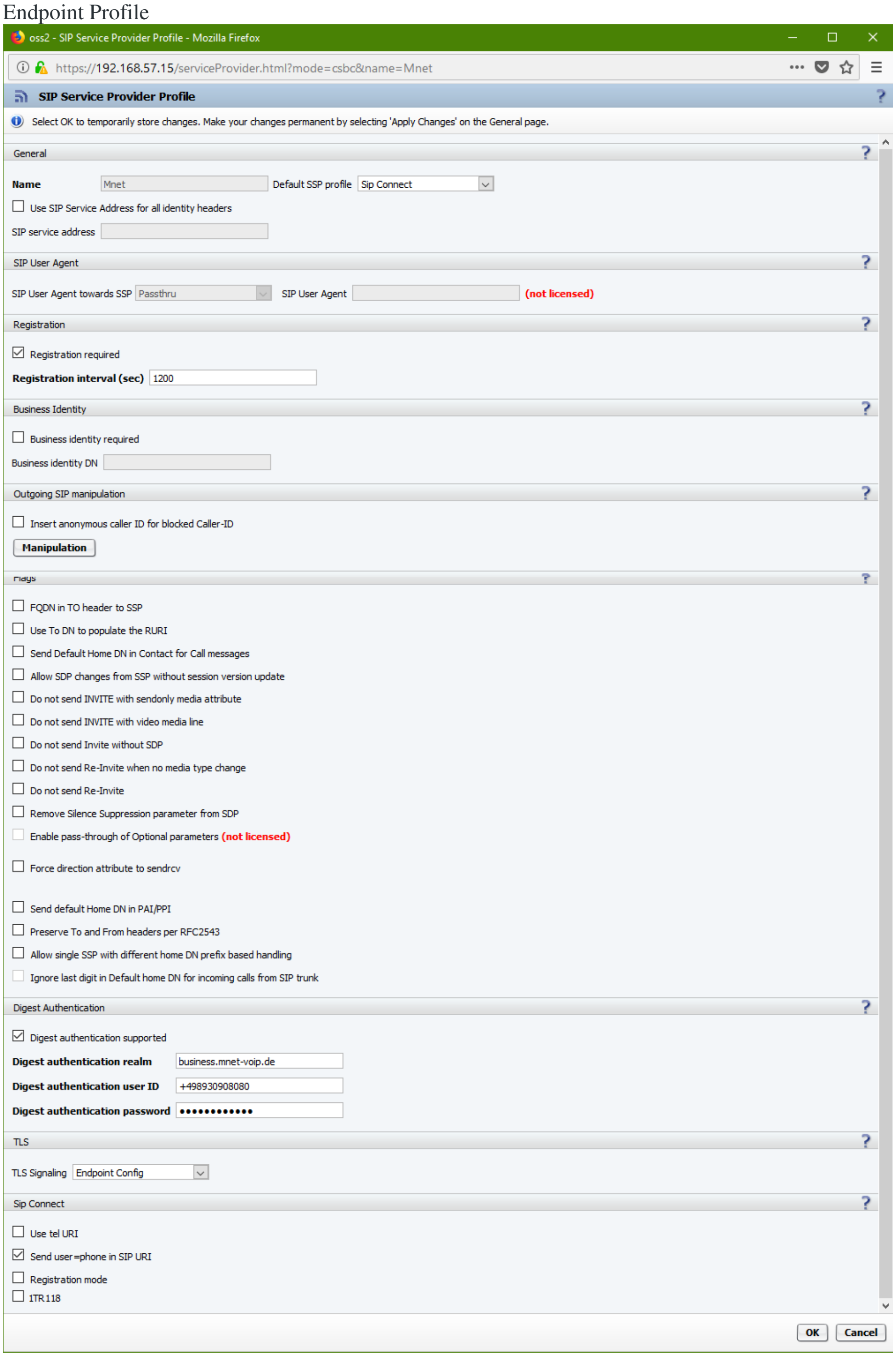
7.3. Configuration of the OpenScape SBC

The SIP Trunk has a standard configuration with the following settings for M-net.
Example SBC:

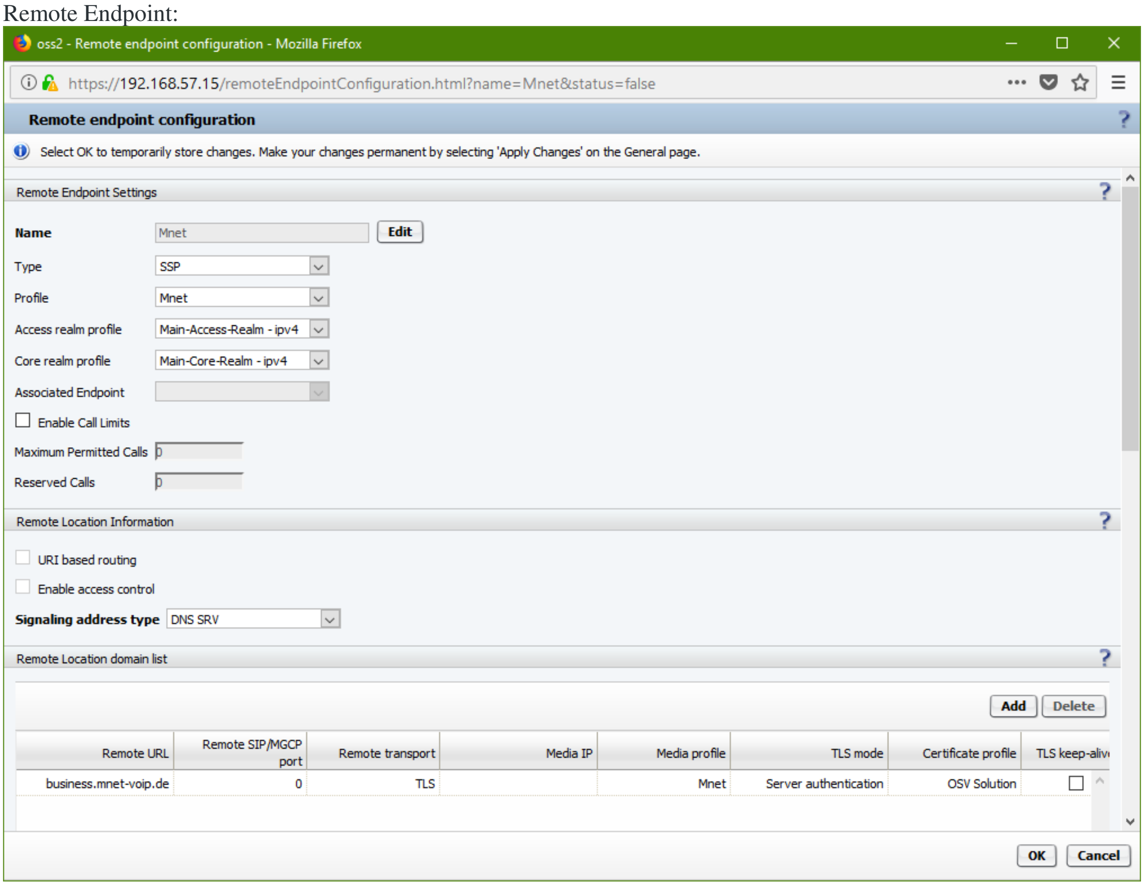
Voip:



Endpoint Profile



Remote Endpoint:



Configurations file SBC:

oss2-oss-config_4_20 180109T095052.xml

7.4. Configuration of the phones

As requested from M-net the codec settings were G.722, G.711 and G.729.

All internal connections were done with TLS and RTP.

7.5. SSP_Settings_Form_-_OSV-OSS—SSP

M-net_SSP_Settings_ Form_-_OSV-OSS--SS

7.6. Example for an In- and Outbound Call

7.6.1. Inbound Call SIP INVITE

No.	Time	Source	Destination	Protocol	Length	Info
1	10:18:53,305537	62.216.220.1	88.217.204.70	SIP/SDP	1083	Request: INVITE sip:+4989309080810@88.217.204.70;transport=tls |
2	10:18:53,307710	88.217.204.70	62.216.220.1	SIP	491	Status: 100 Trying |
3	10:18:53,707590	88.217.204.70	62.216.220.1	SIP	705	Status: 180 Ringing |
4	10:18:55,180434	88.217.204.70	62.216.220.1	SIP/SDP	1175	Status: 200 OK |
5	10:18:55,187594	62.216.220.1	88.217.204.70	SIP	645	Request: ACK sip:+4989309080810@88.217.204.70:5061;transport=tls |
6	10:18:59,263139	62.216.220.1	88.217.204.70	SIP	601	Request: BYE sip:+4989309080810@88.217.204.70:5061;transport=tls |
7	10:18:59,300632	88.217.204.70	62.216.220.1	SIP	627	Status: 200 OK |

7.6.2. Outbound Call SIP INVITE

No.	Time	Source	Destination	Protocol	Length	Info
1	10:12:59,635846	88.217.204.70	62.216.220.1	SIP/SDP	1413	Request: INVITE sip:+498944234199904@business.mnet-voip.de;user=phone |
2	10:12:59,639025	62.216.220.1	88.217.204.70	SIP	457	Status: 100 Trying |
3	10:12:59,644779	62.216.220.1	88.217.204.70	SIP	680	Status: 401 Unauthorized |
4	10:12:59,644857	88.217.204.70	62.216.220.1	SIP	543	Request: ACK sip:+498944234199904@business.mnet-voip.de;user=phone |
5	10:12:59,711242	88.217.204.70	62.216.220.1	SIP/SDP	1693	Request: INVITE sip:+498944234199904@business.mnet-voip.de;user=phone |
6	10:12:59,714540	62.216.220.1	88.217.204.70	SIP	457	Status: 100 Trying |
7	10:13:00,533804	62.216.220.1	88.217.204.70	SIP/SDP	879	Status: 183 Session Progress |
8	10:13:02,153104	62.216.220.1	88.217.204.70	SIP/SDP	1325	Status: 200 OK |
9	10:13:02,208579	88.217.204.70	62.216.220.1	SIP	654	Request: ACK sip:d16a6674e975311d36b239b33273f379@business.mnet-voip.de:5061;transport=tls |
10	10:13:06,561707	62.216.220.1	88.217.204.70	SIP	551	Request: BYE sip:+4989309080810@88.217.204.70:5061;user=phone |
11	10:13:06,600549	88.217.204.70	62.216.220.1	SIP	580	Status: 200 OK |

8. Test List

8.1. Basic Call

Ref #	Test	Expected Result	Call successful? (OK/NOK/Not Supported/Blocked/Skipped)	Display correct? (OK/NOK)	Remarks	tested by
01-01	01-01 BC AB1 A calls B = check display on B side B answers = check display on A side Verify speech path in both directions A clears call = both parties idle again	The display on the phones A and B shows the connected party as dialable phone number. When A clears the call both parties return to idle state.	OK	OK	+4989309080810 (A) +498944234199904 (B) 01-01.pcap	HP
01-02	01-02 BC AB2 A calls B = check display on B side B answers = check display on A side Verify speech path in both directions B clears call = both parties idle again	The display on the phones A and B shows the connected party as dialable phone number. When B clears the call both parties return to idle state.	OK	OK	+4989309080810 (A) +498944234199904 (B) 01-02.pcap	HP
01-03	01-03 BC BA1 B calls A = check display on A side A answers = check display on B side Verify speech path in both directions A clears call = both parties idle again	The display on A and B shows the connected party as dialable phone number. When A clears the call both parties return to idle state.	OK	OK	+4989309080810 (A) +498944234199904 (B) 01-03.pcap	HP
01-04	01-04 BC BA2 B calls A = check display on A side A answers = check display on B side Verify speech path in both directions B clears call = both parties idle again	The display on A and B shows the connected party as dialable phone number. When B clears the call both parties return to idle state.	OK	OK	+4989309080810 (A) +498944234199904 (B) 01-04.pcap	HP

01-05	01-05 BC AB CELL Party B is a cell phone subscriber A calls B = check display on B side B answers = check display on A side Verify speech path in both directions B clears call = both parties idle again	The display on A and B shows the connected party as dialable phone number. When B clears the call both parties return to idle state.	OK	OK	+4989309080810 (A) +4915110835193 (B) 01-05.pcap	HP
01-06	01-06 BC BA CELL Party B is a cell phone subscriber B calls A = check display on A side A answers = check display on B side Verify speech path in both directions A clears call = both parties idle again	The display on A and B shows the connected party as dialable phone number. When A clears the call both parties return to idle state.	OK	OK	+4989309080810 (A) +4915110835193 (B) 01-06.pcap	HP
01-07	01-07 BC AB International Party B is an international subscriber (located in another country) A calls B = check ringback tone on A B answers = check display on A side Verify speech path in both directions B clears call = both parties idle again	The display on A and B shows the connected party as dialable phone number. When B clears the call both parties return to idle state.	Not Supported	Not Supported	+4989309080810 (A) +302108189627 (B) 01-07.pcap No international calls allowed on M-Net test SIP-Trunk. A corresponding announcement is played back	HP
01-08	01-08 BC AB International CELL Party B is an international cell phone subscriber (located in another country) A calls B = check ringback tone on A B answers = check display on A side Verify speech path in both directions B clears call = both parties idle again	The display on A and B shows the connected party. When B clears the call both parties return to idle state.	Not Supported	Not Supported	+4989309080810 (A) +306973840366 (B) 01-08.pcap No international calls allowed on M-Net test SIP-Trunk. A corresponding announcement is played back	HP
01-09	01-09 BC AB Long Duration Call A calls B = check display on B side B answers = check display on A side Verify speech path in both directions Wait 4 Hours, check speech path A clears call = both parties idle again	The connection and speech path exists after 4 hours.	OK	OK	+4989309080811 (A) +4989700732788 (B) 01-09_new_OK.pcap	HP

01-10	01-10 BC BA Long Duration Call B calls A = check display on A side A answers = check display on B side Verify speech path in both directions Wait 4 Hours, check speech path B clears call = both parties idle again	The connection and speech path exists after 4 hours.	OK	OK	+4989309080810 (A) +498944234199904 (B) 01-10_Start.pcap 01-10_Ende.pcap	HP
01-11	01-11 BC AB Mute A calls B = check display on B side B answers = check display on A side Verify speech path in both directions Mute call on both ends Wait 30 minutes Verify speech path in both directions again A clears call = both parties idle again	The phones A and B are still connected and muted after 30 minutes. After unmuting the call the speech path is reestablished between the phones.	OK	OK	+498930908081 (A) +498944234199904 (B) 01-11_new_OK.pcap	HP
01-12	01-12 BC A1A2 Party A1 calls A2 via SIP Trunk A1 calls A2 = check displays and ringback tone A2 answers = check displays again Verify speech path in both directions A2 clears call = both parties idle again	When connected on A1 is displayed A2's phone number and on A2 is displayed A1's phone number. There is a speech path between the phones.	Skipped	Skipped	Dial out and dial in on the same SIP trunk to the own number is not intended for cost reasons.	HP
01-13	01-13 BC Emergency Call A calls emergency number (I.E. 911 for the US or 112 for EU) Call center answers, speech path in both directions A clears call	The callee must see the calling phone number on the phone display.	OK	OK	+4989309080811 (A) 112 (B) 1-13_Notruf112.pcap	HP

8.2. Basic Call Extended

Ref #	Test	Expected Result	Call successful? (OK/NOK/Not Supported/Blocked/Skipped)	Display correct? (OK/NOK)	Remarks	tested by
02-01	02-01 BC AB no reply A calls B = check display on B side B does not answer = wait for timeout by provider Verify the call is properly cleared on both sides	After timeout by provider the call is cleared by provider.	OK	OK	+4989309080812 (A) +498944234199901 (B) After 2 Minutes the OSV send an Bye and finished the call. 02-01.pcap	HP
02-02	02-02 BC BA no reply B calls A = check display on B side A does not answer = wait for timeout by provider Verify the call is properly cleared on both sides	After timeout by provider, B hears an indication that A didn't accept the call within a given time period. The call is cleared finally.	OK	OK	+4989309080812 (A) +498944234199901 (B) After 2 Minutes the provider sends a cancel and finished the call. 02-02.pcap	HP
02-03	02-03 BC AB busy A calls busy B = check busy tone/display on A Verify the call is properly cleared	The call is properly cleared after A hear/see a busy indication.	NOK	NOK	+4989309080812 (A) +498944234199904 (B) The provider sends only the busy tone and no busy indication in SIP. Only after 30 Sec. the Provider sends a Bye. See also chapter 2.Issues. 02-03.pcap	HP
02-04	02-04 BC BA busy B calls busy A = check busy tone/display on B Verify the call is properly cleared	The call is properly cleared after B hear/see a busy indication.	OK	OK	+4989309080812 (A) +498944234199904 (B) 02-04.pcap	HP
02-05	02-05 BC AB reject A calls B = check display on B side B does reject call Verify the call is properly cleared on both sides	A hears a reject tone or a "call cannot completed" announcement and the call is cleared finally.	OK	OK	+4989309080812 (A) +4989700721358 (B) Call is canceled with "480 Temporarily Unavailable" from Provider side. 02-05.pcap	HP
02-06	02-06 BC BA reject B calls A = check display on A side A does reject call Verify the call is properly cleared on both sides	The call is cleared after rejection.	OK	OK	+4989309080812 (A) +4989700721358 (B) 02-06.pcap	HP

02-07	02-07 BC AB CLIR A with CLIR calls B = check display on B side B answers = check display on A side Verify speech path in both directions A clears call = both parties idle again	B don't see A's phone number.	OK	OK	+4989309080811 (A) +498944234199904 (B) 02-07.pcap	HP
02-08	02-08 BC BA CLIR B with CLIR calls A = check display on A side A answers = check display on B side Verify speech path in both directions A clears call = both parties idle again	A don't see B's phone number.	OK	OK	+4989309080811 (A) +498944234199904 (B) 02-08.pcap	HP
02-09	02-09 BC AB invalid CLIP A has invalid CLIP (Incomplete digits/ Wrong digits) A calls B = check display on B side (displays default CLI) is call goes through B answers = check display on A side Verify speech path in both directions A clears call = both parties idle again	Either a valid CLIP of A must be displayed on B's phone for A, or the call is refused.	Not Supported	Not Supported	+4989309080811 (A) +498944234199904 (B) Due to "Clip no screening" the entered number is displayed on B. 02-09.pcap	HP

8.3. Special Basic Call

Ref #	Test	Expected Result	Call successful? (OK/NOK/Not Supported/Blocked/Skipped)	Display correct? (OK/NOK)	Remarks	tested by
03-01	03-01 BC AB codec negotiation A has low bandwidth preferred (G.729-0723 high priority, G.711-0722 low priority) B has high quality preferred (G.711-0722 high priority, G.729-0723 low priority) A calls B = check codec proposal B answers = check codec selected A clears call	The SIP provider answers in the codec proposal list with one codec from A's codec proposal as highest priority. This codec will be used by both phones.	Skipped	Skipped	G.722 is not offered by M-Net but M-Net recommends to set our side to G.722, G.711 and G.729. According to Mr. Wagner is at the moment only G.711 possible. See also chapter 2.Issues.	
03-02	03-02 BC BA codec negotiation A has low bandwidth preferred (G.729-0723 high priority, G.711-0722 low priority) B has high quality preferred (G.711-0722 high priority, G.729-0723 low priority) B calls A = check codec proposal A answers = check codec selected B clears call	A answers in the codec proposal list with one codec from the SIP providers codec proposal with highest priority. This codec will be used by both phones.	Skipped	Skipped	According to Mr. Wagner is at the moment only G.711 possible. See also chapter 2.Issues.	
03-03	03-03 BC AB G.722 Enable G.722 and set it as high priority on A and B A calls B = check codec proposal B answers = check codec selected B clears call	The SIP provider answers in the codec proposal list with one codec from A's codec proposal with highest priority. This codec will be used by both phones.	Skipped	Skipped	According to Mr. Wagner is at the moment only G.711 possible. See also chapter 2.Issues.	
03-04	03-04 BC BA G.722 Enable G.722 and set it as high priority on A and B B calls A = check codec proposal A answers = check codec selected A clears call	A answers in the codec proposal list with one codec from the SIP providers codec proposal as highest priority. This codec will be used by both phones.	Skipped	Skipped	According to Mr. Wagner is at the moment only G.711 possible. See also chapter 2.Issues.	

03-05	03-05 BC AB incompatible codec A has low bandwidth only (G.729-0723) B has high quality only (G.711-0722) A calls B = check codec proposal If the call is now released, the provider does not interwork codec's, check for proper call clearing. If B is ringing: B answers = check codec selected Verify speech path in both directions	Either B answers with '488 Not acceptable here', or the SIP provider offers a codec which phone A also supports. This codec is used then by both phones.	Skipped	Skipped	According to Mr. Wagner is at the moment only G.711 possible. See also chapter 2.Issues.	
03-06	03-06 BC BA incompatible codec A has low bandwidth only (G.729-0723) B has high quality only (G.711-0722) B calls A = check codec proposal If the call is now released, the provider does not interwork codec's, check for proper call clearing. If A is ringing: A answers = check codec selected Verify speech path in both directions	Either A answers with 488 Not acceptable here, or the SIP provider offers a codec for phone B which phone A also supports. This codec is used then by both phones.	Skipped	Skipped	According to Mr. Wagner is at the moment only G.711 possible. See also chapter 2.Issues.	
03-07	03-07 BC AB session timer Enable session timer on OpenScape Voice A calls B B answers Let the call active until the session timer was two times refreshed by OpenScape Voice B clears call	When the Session Timer is activated on Voice, Voice acts as refresher of the session. After half of session timer period Voice sends a re-INVITE to B.	OK	OK	+4989309080810 (A) +498944234199904 (B) 03-07.pcap M-net sends the REINVITES in case of outgoing call.	HP
03-08	03-08 BC BA session timer Enable session timer on OpenScape Voice B calls A B answers Let the call active until the session timer was two times refreshed by the provider A clears call	After half of session timer period Voice sends a re-INVITE to B.	OK	OK	+4989309080810 (A) +498944234199904 (B) 03-08.pcap M-net sends the REINVITES in case of incoming call.	HP

03-09	03-09 BC A to invalid B A calls invalid number = verify proper announcement (or SIP cause) Verify that the call is released properly -If you hear an announcement/tone, check if the payload is sent before connect (183 progress)	A hears an announcement 'call cannot completed at this time' or tone and the call is cleared finally.	OK	OK	+4989309080810 (A) +498999999999 (B) 03-09.pcap A gets corresponding announcement.	HP
03-10	03-10 BC announcement after connect A calls switched off cell phone = A hears announcement after connect Clear call	A hears announcement after connecting to a voice box.	OK	OK	+4989309080810 (A) +4915110835193 (B) 03-10.pcap	HP
03-11	03-11 BC announcement before connect A calls conference bridge = A hears announcement before connect Clear call	A hears announcement before connecting to conference bridge.	OK	OK	+4989309080810 (A) +49700711355 (B)	HP
03-12	03-12 BC Provider Voicemail This test case assumes that a provider voicemail (VM) service is available B has VM box on the provider VM server A calls VM server from B A hears VM announcement – depending on functionality, A should be automatically forwarded to the voicemail box and a PIN is requested then. A enters PIN – A is logged into VM box root menu A browses VM menu using keypad A clears call		Not Supported	Not Supported	No Provider Voicemail available	HP

8.4. Hold / Toggle

Ref #	Test	Expected Result	Call successful? (OK/NOK/Not Supported/Blocked/Skipped)	Display correct? (OK/NOK)	Remarks	tested by
04-01	04-01 Hold A Establish call A-B A put B in hold = verify MoH (hold indication if possible) on B A retrieve B = verify speech path A-B (display back to normal call if possible) Clear call	B receives MoH when A put B in hold. When A retrieves B, the speech path between both phones is established.	OK	OK	+4989309080811 (A) +498944234199901 (B) 04-01.pcap	HP
04-02	04-02 Hold B Establish call A-B B put A in hold = verify MoH (hold indication if possible) on A B retrieve A = verify speech path A-B (display back to normal call if possible) Clear call	A receives MoH when B put A in hold. When B retrieves A, the speech path between both phones is established.	OK	OK	+4989309080811 (A) +498944234199901 (B) 04-02.pcap	HP
04-03	04-03 Toggle A Establish call A-B1 A put B1 in hold = verify MoH (hold indication if possible) on B1 A calls B2 B2 answers = verify speech path A toggles between B1 and B2 several times = verify MoH (hold indication if possible) on held party and speech path (display) on active party. Clear call	When A put B1 in hold, B1 hears MoH. When A toggles between B1 and B2, the held phone hears MoH and the active party has speech path.	OK	OK	+4989309080811 (A) +498944234199901 (B1) +498944234199902 (B2) 04-03.pcap	HP

04-04	04-04 Toggle B Establish call A1-B B put A1 in hold = verify MoH (hold indication if possible) on A1 B calls A2 A2 answers = verify speech path B toggles between A1 and A2 several times = verify MoH (hold indication if possible) on held party and speech path (display) on active party. Clear call	When B put A1 in hold, A1 hears MoH. When B toggles between A1 and A2, the held phone hears MoH and the active party has speech path.	OK	OK	+4989309080811 (A1) +4989309080812 (A2) +498944234199901 (B) 04-04.pcap	HP
04-05	04-05 Toggle A1 Establish call A1-B A1 put B in hold = verify MoH (hold indication if possible) on B A1 calls A2 A2 answers = verify speech path A1 toggles between B and A2 several times = verify MoH (hold indication if possible) on held party and speech path (display) on active party. Clear call	When A1 put B in hold, B hears MoH. When A1 toggles between A2 and B, the held phone hears MoH and the active party has speech path.	OK	OK	+4989309080811 (A1) +4989309080812 (A2) +498944234199901 (B) 04-05.pcap	HP

8.5. Call forward

Ref #	Test	Expected Result	Call successful? (OK/NOK/Not Supported/Blocked/Skipped)	Display correct? (OK/NOK)	Remarks	tested by
05-01	05-01 CFU A1/A2 A1 has CFU to A2 B calls A1 = verify A2 is ringing A2 answers = check speech path and display on both parties Clear call	The call to A1 is forwarded immediately to A2. On B is displayed A1's phone number and on A2 is displayed B's phone number.	OK	OK	+4989309080811 (A1) +4989309080812 (A2) +498944234199901 (B) 05-01.pcap	HP
05-02	05-02 CFU A/B2 A has CFU to B2 B1 calls A = verify B2 is ringing B2 answers = check speech path and display on both parties Clear call	The call to A is forwarded immediately to B2. B1 shows A phone number and B2 shows B1's phone number.	OK	OK	+4989309080811 (A) +498944234199901 (B1) +498944234199902 (B2) 05-02.pcap	HP
05-03	05-03 CFU A/B2 BUSY A has CFU to busy B2 B1 calls A = B1 receives busy tone	The call to A is forwarded immediately to B2. B1 receives a busy tone. On B1 is displayed A's phone number. The call is cleared afterwards.	NOK	NOK	+4989309080811 (A) +498944234199901 (B1) +498944234199902 (B2) 05-03.pcap The provider sends only the busy tone and no busy indication in SIP. Only after 30 Sec. the Provider sends a Bye. See also chapter 2.Issues.	HP
05-04	05-04 CFU B1/B2 B1 has CFU to B2 A calls B1 = verify B2 is ringing B2 answers = check speech path and display on both parties Clear call	The call to B1 is forwarded immediately to B2. On A is displayed B1's phone number and B2 displays A's phone number.	OK	OK	+4989309080811 (A) +498944234199901 (B1) +498944234199902 (B2) 05-04.pcap	HP

05-05	05-05 CFU B/A2 B has CFU to A2 A1 calls B = verify A2 is ringing A2 answers = check speech path and display on both parties Clear call	The call to B is forwarded immediately to A2. On A1 is displayed B 's phone number and on A2 is displayed A1's phone number.	OK	OK	+4989309080811 (A1) +4989309080812 (A2) +498944234199901 (B) 05-05.pcap	HP
05-06	05-06 CFU A/B2 Cell A has CFU to B2 = B2 is a Cell phone B1 calls A = verify B2 is ringing B2 answers = check speech path and display on both parties Clear call	The call to A is forwarded immediately to B2. On B1 is displayed A phone number and on B2 is displayed A's number.	OK	OK	+4989309080811 (A) +498944234199901 (B1) +4915110835193 (B2) 05-06.pcap	HP
05-07	05-07 CFU B1/B2 Cell B1 has CFU to B2 = B2 is a Cell phone A calls B1 = verify B2 is ringing B2 answers = check speech path and display on both parties Clear call	The call to B1 is forwarded immediately to B2. On A is displayed B1's phone number and on B2 is displayed A's phone number.	OK	OK	+4989309080811 (A) +498944234199901 (B1) +4915110835193 (B2) 05-07.pcap	HP
05-08	05-08 CFB A1/A2 A1 has CFB to A2 A1 is busy B calls A1 = verify A2 is ringing A2 answers = check speech path and display on both parties Clear call	The call to A1 is forwarded on busy to A2. On B is displayed A1's phone number and on A2 is displayed B's phone number.	OK	OK	+4989309080811 (A1) +4989309080812 (A2) +498944234199901 (B) 05-08.pcap	HP
05-09	05-09 CFB B1/B2 B1 has CFB to B2 B1 is busy A calls B1 = verify B2 is ringing B2 answers = check speech path and display on both parties Clear call	The call to B1 is forwarded on busy to B2. On A is displayed B1's phone number and on B2 is displayed A's phone number.	OK	OK	+4989309080811 (A) +498944234199901 (B1) +498944234199902 (B2) 05-09.pcap	HP

05-10	05-10 CFNR A1/A2 A1 has CFNR to A2 B calls A1 = verify A1 is ringing A1 does not answer = verify call is forwarded to A2 A2 answers = check speech path and display on both parties Clear call	When the call to A1 is forwarded on no reply to A2, on B is displayed A1's phone number and on A2 is displayed B's phone number.	OK	OK	+4989309080811 (A1) +4989309080812 (A2) +498944234199901 (B) 05-10.pcap	HP
05-11	05-11 CFNR B1/B2 B1 has CFNR to B2 A calls B1 = verify B1 is ringing B1 does not answer = verify call is forwarded to B2 B2 answers = check speech path and display on both parties Clear call	When the call to B1 is forwarded on no reply to B2, on A is displayed B1's phone number and on B2 is displayed A's phone number.	OK	OK	+4989309080811 (A) +498944234199901 (B1) +498944234199902 (B2) 05-11.pcap	HP
05-12	05-12 CFNR A/B2 Busy A has CFNR to busy B2 B1 calls A = verify A is ringing A does not answer = verify call is forwarded to B2 - B1 receives busy tone	When the call to A is forwarded on no reply to busy B2, B1 hears a busy tone. On B1 is displayed A's phone number. The call is cleared afterwards.	NOK	NOK	+4989309080811 (A) +498944234199901 (B1) +498944234199902 (B2) 05-12.pcap The provider sends only the busy tone and no busy indication in SIP. Only after 30 Sec. the Provider sends a Bye. See also chapter 2.Issues.	HP
05-13	05-13 Call deflect A/B2 B1 calls A = A is ringing A selects call deflect and dials B2 = verify call is deflected to B2, A stops ringing B2 answers = check speech path and display on both parties Clear call	When the call is deflected, on B1 is displayed A's phone number and on B2 is displayed B1's phone number.	OK	OK	+4989309080811 (A) +498944234199901 (B1) +498944234199902 (B2) 05-13.pcap	HP
05-14	05-14 Call deflect B1/B2 A calls B1 = B1 is ringing B1 selects call deflect and dials B2 = verify call is forwarded to B2, B1 stops ringing B2 answers = check speech path and display on both parties Clear call	When the call is deflected, on A is displayed B1's phone number and on B2 is displayed A's phone number.	OK	OK	+4989309080811 (A) +498944234191915 (B1) +498944234199902 (B2) 05-14.pcap	HP

05-15	05-15 Provider Voicemail_CF1 This test case assumes that a provider voicemail (VM) service is available B1 has VM box on the provider VM server B1 sets CF to VM server A2 calls B1 A2 is connected to B1's VM box A2 leaves message A2 clears call VM server sends MWI B1 shows MWI in phone display B1 answers MWI – B1 is connected to VM Box B1 enters PIN B1 retrieves A2's voice message B1 deletes A2's voice message – VM server sends MWI B1's phone clears MWI indication B1 clears call		Not Supported	Not Supported	No Provider Voicemail available	HP
05-16	05-16 Provider Voicemail_CFNR1 This test case assumes that a provider voicemail (VM) service is available B1 has VM box on the provider VM server B1 sets CFNR to VM server A2 calls B1 B1 does not answer - A2 is connected to B1's VM box A2 leaves message A2 clears call VM server sends MWI B1 shows MWI in phone display B1 answers MWI – B1 is connected to VM Box B1 enters PIN B1 retrieves A2's voice message B1 deletes A2's voice message – VM server sends MWI B1's phone clears MWI indication B1 clears call		Not Supported	Not Supported	No Provider Voicemail available	HP

05-17	05-17 Provider Voicemail_CF2 This test case assumes that a provider voicemail (VM) service is available B1 has VM box on the provider VM server B1 sets CF to VM server A calls B1 - A is connected to B1's VM box A leaves message A clears call VM server sends MWI B1 shows MWI in phone display B1 answers MWI – B1 is connected to VM Box B1 enters PIN B1 retrieves A's voice message B1 deletes A's voice message – VM server sends MWI B1's phone clears MWI indication B1 clears call		Not Supported	Not Supported	No Provider Voicemail available	HP
05-18	05-18 Provider Voicemail_CFNR2 B is a cell phone subscriber This test case assumes that a provider voicemail (VM) service is available B1 has VM box on the provider VM server B1 sets CFNR to VM server B calls B1 B1 does not answer - B is connected to B1's VM box B leaves message B clears call VM server sends MWI B1 shows MWI in phone display B1 answers MWI – A is connected to VM Box B1 enters PIN B1 retrieves B's voice message B1 deletes B's voice message – VM server sends MWI B1's phone clears MWI indication B1 clears call		Not Supported	Not Supported	No Provider Voicemail available	HP

8.6. Call transfer

Ref #	Test	Expected Result	Call successful? (OK/NOK/Not Supported/Blocked/Skipped)	Display correct? (OK/NOK)	Remarks	tested by
06-01	06-01 Attended CT A1/A2 Establish call A1-B A1 put B in hold = verify MoH (hold indication if possible) on B A1 calls A2 = A2 is ringing A2 answers A1 transfers call A2 and B connected = check speech path and display on both parties Clear call	B hears MoH when A1 put B in hold. When A1 has transferred the call A2 and B are connected. On B is displayed A1's phone number and on A2 is displayed B's phone number.	OK	OK	+4989309080811 (A1) +4989309080812 (A2) +498944234199901 (B) 06-01.pcap	HP
06-02	06-02 Attended CT A/B2 Establish call A-B1 A put B1 in hold = verify MoH (hold indication if possible) on B1 A calls B2 = B2 is ringing B2 answers A transfers call B1 and B2 connected = check speech path and display on both parties Clear call	B1 hears MoH when A put B1 in hold. When A has transferred the call B1 and B2 are connected. On B1 and B2 is displayed A's phone number.	OK	OK	+4989309080811 (A) +498944234199901 (B1) +498944234199902 (B2) 06-02.pcap	HP

06-03	06-03 Attended CT B1/B2 Establish call A-B1 B1 put A in hold = verify MoH (hold indication if possible) on A B1 calls B2 = B2 is ringing B2 answers B1 transfers call A and B2 connected = check speech path and display on both parties Clear call	After B1 has transferred the call on A and B2 is displayed B1's phone number.	OK	NOK	+498944234199904 (A) +4989309080811 (B1) +4989309080812 (B2) 06-03.pcap REINVITE to M-net system is answered with a wrong P-Asserted-Identity +498930908080 See also chapter 2.Issues.	HP
06-04	06-04 Attended CT B/A2 Establish call A1-B B put A1 in hold = verify MoH (hold indication if possible) on A1 B calls A2 = A2 is ringing A2 answers B transfers call A1 and A2 connected = check speech path and display on both parties Clear call	When B has transferred the call, A1 and A2 are connected. On A1 and A2 is displayed B's phone number.	OK	OK	+4989700721358 (A1) +498944234199904 (A2) +4989309080811 (B) 06-04.pcap	HP
06-05	06-05 Semi attended CT A1/A2 Establish call A1-B A1 put B in hold = verify MoH (hold indication if possible) on B A1 calls A2 = A2 is ringing A1 transfers call before A2 answers = B hears ringback tone now A2 answers A2 and B connected = check speech path and display on both parties Clear call	When A1 has transferred the call, on B is displayed A1's phone number and on A2 is displayed B's phone number.	OK	OK	+4989309080811 (A1) +4989309080812 (A2) +498944234199904 (B) 06-05.pcap	HP

06-06	06-06 Semi attended CT A/B2 Establish call A-B1 A put B1 in hold = verify MoH (hold indication if possible) on B1 A calls B2 = B2 is ringing A transfers call before B2 answers = B1 hears ringback tone now B2 answers B1 and B2 connected = check speech path and display on both parties Clear call	When A1 has transferred the call, on B1 and B2 is displayed A's phone number.	OK	OK	+4989309080811 (A) +498944234199904 (B1) +498944234199902 (B2) 06-06.pcap	HP
06-07	06-07 Semi attended CT B1/B2 Establish call A-B1 B1 put A in hold = verify MoH (hold indication if possible) on A B1 calls B2 = B2 is ringing B1 transfers call before B2 answers = A hears ringback tone now B2 answers B2 and A connected = check speech path and display on both parties Clear call	When B1 has transferred the call, on A and B2 is displayed B1's phone number.	OK	NOK	+498944234199904 (A) +4989309080811 (B1) +4989309080812 (B2) 06-07.pcap REINVITE to M-net system is answered with a wrong P-Asserted-Identity +498930908080 See also chapter 2.Issues.	HP
06-08	06-08 Blind CT A/B2 Establish call A-B1 A selects blind transfer and dials B2 = B2 is ringing, check displays B2 answers = speech path and display on both parties Clear call	After A has transferred the call, on B1 is displayed A's phone number and on B2 is displayed B1's phone number.	OK	OK	+4989309080811 (A) +498944234199904 (B1) +498944234199902 (B2) 06-08.pcap	HP
06-09	06-09 Blind CT B/A2 Establish call A1-B B selects blind transfer and dials A2 = A2 is ringing, check displays A2 answers = speech path and display on both parties Clear call	After B has transferred the call on A1 is displayed B's and on A2 is displayed B's phone number.	OK	OK	+498944234199904 (A1) +498944234199902 (A2) +4989309080811 (B) 06-09.pcap	HP

8.7. Conference

Ref #	Test	Expected Result	Call successful? (OK/NOK/Not Supported/Blocked/Skipped)	Display correct? (OK/NOK)	Remarks	tested by
07-01	07-01 Conference MS A1 has large conference configured Establish call A1-B1 A1 put B1 in hold A1 dials A2 A2 answers A1 selects conference A1 selects hold, dials B2 B2 answers A1 selects add to conference A1, A2, B1 and B2 in conference = check speech path and display on both parties Clear calls	When A1 put B1 in hold, B1 hears MoH. On A1 and A2 is displayed the conference call with it's members. A1, A2, B1 and B2 has speech path with all conference members when in the conference call.	OK	OK	+4989309080811 (A1) +4989309080812 (A2) +498944234199904 (B1) +498944234199902 (B2) 07-01.pcap	HP
07-02	07-02 Conference local A1 has local (phone) conference configured Establish call A1-B A1 put B in hold A1 dials A2 A2 answers A1 selects Conference A1, A2 and B in conference = check speech path and display on both parties Clear calls	When A1 put B in hold, B hears MoH. On A1 is displayed the conference call with it's members. A1, A2 and B has speech path with all conference members when in the conference call.	OK	OK	+4989309080810 (A1) +4989309080812 (A2) +498944234199904 (B) 07-02.pcap	HP

8.8. Fax and DTMF

Ref #	Test	Expected Result	Call successful? (OK/NOK/Not Supported/Blocked/Skipped)	Display correct? (OK/NOK)	Remarks	tested by
08-01	08-01 Fax t.38 AB A and B are represented as Fax machines in this test case A use t.38 for fax calls A calls B B answers Codec change to t.38 is initiated Several pages of documents are sent over the connection A releases automatically the call after all pages are sent	On B is displayed A's fax number and on A is displayed B's fax number. The codec is changed to T.38. B receives the fax document from A and the connection is cleared afterwards.	Not Supported	Not Supported	T.38 is not supported from M-net at the moment.	HP
08-02	08-02 Fax t.38 BA A and B are represented as Fax machines in this test case A and B use t.38 for fax calls B calls A A answers Codec change to t.38 is initiated Several pages of documents are sent over the connection B releases automatically the call after all pages are sent	On A is displayed B's fax number. The codec is changed to T.38. A receives The fax document from B is received on A and the connection is cleared afterwards.	Not Supported	Not Supported	T.38 is not supported from M-net at the moment.	HP

08-03	08-03 Fax G.729 / T.38 AB A and B are represented as Fax machines in this test case A and B have only low bandwidth codec. A calls B B answers = the call is with low bandwidth established (G.729) Codec change to T.38 is initiated Several pages of documents are sent over the connection A releases automatically the call after all pages are sent	Fax machine A establishes a connection to fax machine B. A codec change to T.38 is initiated. On fax machine B is displayed A's fax number. Afterwards the call is released by fax A.	Not Supported	Not Supported	T.38 is not supported from M-net at the moment.	HP
08-04	08-04 Fax G.729 / T.38 BA A and B are represented as Fax machines in this test case A and B have only low bandwidth codec. B calls A A answers = the call is with low bandwidth established (G.729) Codec change to T.38 is initiated Several pages of documents are sent over the connection B releases automatically the call after all pages are sent	Fax machine B establishes a connection to fax machine A. A codec change to T.38 is initiated. On fax machine A is displayed B's fax number. Afterwards the call is released by fax B.	Not Supported	Not Supported	T.38 is not supported from M-net at the moment.	HP
08-05	08-05 Fax G.711 AB AhiBhi A and B are represented as Fax machines in this test case A and B are high-speed (G3+) devices A calls B B answers Several pages of documents are sent over the connection A releases automatically the call after all pages are sent	Fax machine A establishes a connection to fax machine B. On fax machine B is displayed A's fax number. Afterwards the call is released by A.	OK	OK	+4989309080814 Fax (A) +498970071421358 (B) 08-05.pcap	HP

08-06	08-06 Fax G.711 BA BhiAhi A and B are represented as Fax machines in this test case A and B are high-speed (G3+) devices B calls A B answers Several pages of documents are sent over the connection B releases automatically the call after all pages are sent	Fax machine B establishes a connection to fax machine A. A codec change to G.711 is initiated. When transmitting the fax on fax machine A is displayed B's fax number. Afterwards the call is released by fax B.	OK	OK	+4989309080814 Fax (A) +498970071421358 (B) 08-06.pcap	HP
08-07	08-07 Fax G.711 AB AloBhi A and B are represented as Fax machines in this test case A is a low speed (G3) and B is a high-speed (G3+) device A calls B B answers Several pages of documents are sent over the connection A releases automatically the call after all pages are sent	Fax machine A establishes a connection to fax machine B. When transmitting the fax on fax machine B is displayed A's fax number. Afterwards the call is released by fax A.	Skipped	Skipped	No low speed fax available.	HP
08-08	08-08 Fax G.711 BA BloAhi A and B are represented as Fax machines in this test case A is a low speed (G3) and B is a high-speed (G3+) device B calls A A answers = the call is with low bandwidth established Several pages of documents are sent over the connection B releases automatically the call after all pages are sent	Fax machine B establishes a connection to fax machine A. When transmitting the fax on fax machine A is displayed B's fax number. Afterwards the call is released by fax A.	Skipped	Skipped	No high speed fax available.	HP

08-09	08-09 Fax G.711 AB AhiBlo A and B are represented as Fax machines in this test case A is a high-speed (G3+) and B is a low speed (G3) device A calls B B answers Several pages of documents are sent over the connection A releases automatically the call after all pages are sent	Fax machine A establishes a connection to fax machine B. When transmitting the fax on fax machine B is displayed A's fax number. Afterwards the call is released by fax A.	Skipped	Skipped	No low speed fax available.	HP
08-10	08-10 Fax G.711 BA BhiAlo A and B are represented as Fax machines in this test case A is a high-speed (G3+) and B is a low speed (G3) device B calls A A answers = the call is with low bandwidth established Several pages of documents are sent over the connection B releases automatically the call after all pages are sent	Fax machine B establishes a connection to fax machine A. When transmitting the fax on fax machine A is displayed B's fax number. Afterwards the call is released by fax A.	Skipped	Skipped	No low speed fax available.	HP
08-11	08-11 DTMF RFC2833 AB Establish call A-B A dials digits after connect = verify that the digits are sent as own payload type Clear call	When A has called B, the digits entered on phone A are sent to B as own payload type.	OK	OK	+4989309080811 (A) +498970071333 (B) 08-11.pcap	HP
08-12	08-12 DTMF RFC2833 BA Establish call B-A B dials digits after connect = verify that the digits are sent as own payload type Clear call	When B has called A, the digits entered on phone B are sent to A as own payload type.	OK	OK	+4989309080811 (A) +4989700721358 (B) 08-12.pcap	HP

08-13	08-13 DTMF in band AB Disable RFC2833 on both parties (if possible) If possible replace party B by voicemail or anything else with DTMF recognition Establish call A-B A dials digits after connect = verify that the digits are sent as the same payload like the voice Clear call		OK	OK	+4989309080811 (A) +498970071333 (B) 08-13.pcap	HP
08-14	08-14 DTFM in band BA Disable RFC2833 on both parties (if possible) If possible replace party A by voicemail or anything else with DTMF recognition Establish call B-A B dials digits after connect = verify that the digits are sent as the same payload like the voice Clear call		OK	OK	+4989309080811 (A) +4989700721358 (B) 08-13.pcap	HP
08-15	08-15 DTFM RFC2833 before connect Re-Enable RFC2833 on both parties If possible replace party B by voicemail or anything else with DTMF recognition before answer A calls B A gets announcement before connect A dials digits = B recognizes digits (I.E. forwards A to voice mail) B answers = check display on A side Verify speech path in both directions A clears call = both parties idle again		Skipped	Skipped	No system available which is able to receive DTMF before connects.	HP

8.9. OpenScape Voice Features

Ref #	Test	Expected Result	Call successful? (OK/NOK/Not Supported/Blocked/Skipped)	Display correct? (OK/NOK)	Remarks	tested by
09-01	09-01 MLHG (Multi Line Hunt Group) A3 Configure MLHG with parties A1, A2 and A3 B calls MLHG A1 is ringing A2 is ringing = A1 stops ringing A3 is ringing = A2 stops ringing A3 answers = check speech path and display on both parties Clear call	On the ringing or connected phone is displayed B's phone number. On B's phone is displayed the MLGH phone number while ringing or connected.	OK	OK	+4989309080810 (A1) +4989309080811 (A2) +4989309080812 (A3) +4989700721358 (B) 09-01.pcap	HP
09-02	09-02 MLHG (Multi Line Hunt Group) A1 Configure MLHG with parties A1, A2 and A3 B calls MLHG A1 answers = check speech path and display on both parties Clear call	On phone A1 is displayed B's phone number. On B's phone is displayed the MLGH phone number.	OK	OK	+4989309080810 (A1) +4989309080811 (A2) +4989309080812 (A3) +4989700721358 (B) 09-02.pcap	HP
09-03	09-03 Pickup Group A2 Configure Pickup Group with parties A1, A2 and A3 B calls A1 =A1 is ringing, A2 and A3 have display notification A2 picks up call = check speech path and display on both parties Clear call	When A2 picks up the call, A1 stops ringing and display notification on A3 stops. On B is displayed A2's phone number and on A2 is displayed B's phone number.	OK	NOK	+4989309080810 (A1) +4989309080811 (A2) +4989309080812 (A3) +4989700721358 (B) 09-03.pcap After Pickup A1' phone number is displayed on B1 although the A2 number was delivered in P-Asserted	HP

09-04	09-04 Pickup Group A1 Configure Pickup Group with parties A1, A2 and A3 B calls A1 =A1 is ringing, A2 and A3 have display notification A1 answers call = check speech path and display on both parties Clear call	When A1 answers the call, display notification on A2 and A3 ends. B and A1 are connected now.	OK	OK	+4989309080810 (A1) +4989309080811 (A2) +4989309080812 (A3) +4989700721358 (B) 09-04.pcap	HP
09-05	09-05 One Number Service A1(A2)B1 A1 is/has OpenScape UC user A1 OpenScape UC selects A2 as preferred device A1 calls B1 via ODC or OWC = A2 rings A2 answers = B1 rings and shows A1 in Display B1 answers = B1 and A2 connected, but A1 in Display Wait 20 minutes, check speech path regularly Clear call	When connected on B1's phone is displayed A1's phone number and on A2 is displayed B1's phone number. A2 and B1 must be still connected after 20 minutes.	Skipped	Skipped	One Number Service not tested	HP
09-06	09-06 One Number Service A1(B1)A2 A1 is/has OpenScape UC user A1 OpenScape UC selects B1 as preferred device A1 calls A2 via ODC or OWC = B1 rings B1 answers = A2 rings and shows A1 in Display A2 answers = A2 and B1 connected, A2 in B1’s Display Wait 20 minutes, check speech path regularly Clear call	When connected on B1's phone is displayed A2's phone number and on A2's phone is displayed A1's phone number. A2 and B1 must be still connected after 20 minutes.	Skipped	Skipped	One Number Service not tested	HP

09-07	09-07 One Number Service A1(B1)B2 A1 is/has OpenScape UC user A1 OpenScape UC selects B1 as preferred device A1 calls B2 via ODC or OWC = B1 rings B1 answers = B2 rings and shows A1 in Display B2 answers = B2 and B1 connected, B2 in B1's Display Clear call	When connected on B1's phone is displayed B2's phone number and on B2 is displayed A1's phone number.	Skipped	Skipped	One Number Service not tested	HP
09-08	09-08 One Number Service A1(B1)B2 CELL1 A1 is/has OpenScape UC user B1 is of type “cell phone” A1 OpenScape UC selects B1 as preferred device A1 calls B2 via ODC or OWC = B1 rings B1 answers = B2 rings and shows A1 in Display B2 answers = B2 and B1 connected, B2 in B1's Display Wait 20 minutes, check speech path regularly Clear call	When connected on B1's and B2's phone is displayed A1's phone number. B1 and B2 must be still connected after 20 minutes.	Skipped	Skipped	One Number Service not tested	HP
09-09	09-09 One Number Service A1(B1)B2 CELL2 A1 is/has OpenScape UC user B2 is of type “cell phone” A1 OpenScape UC selects B1 as preferred device A1 calls B2 via ODC or OWC = B1 rings B1 answers = B2 rings, shows A1 in Display B2 answers = B2 connected to B1, B2 in B1’s Display Clear call	When connected on B1's phone is displayed B2's phone number and on B2 is displayed A1's phone number.	Skipped	Skipped	One Number Service not tested	HP

8.10. Customer Specific Test List

Customer test list:

UNIFY Testbericht Zertifizierung_Version

About Unify

Unify is the Atos brand for communication and collaboration solutions. At the core of the Atos Digital Workplace portfolio, Unify technology enables organizations of all sizes to transform the way they collaborate, creating a more connected and productive workforce which can dramatically improve team performance, individual engagement and business efficiency.

Unify products represent a strong heritage of technology innovation, reliability and flexibility. Their award-winning intuitive user experience can be delivered through almost any device and in any combination of cloud or on-premise deployment. Augmented by Atos' secure digital platforms, vertical solutions and transformation services, they set the global standard for a rich and reliable collaboration experience that empowers teams to deliver extraordinary results.

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