AC logo

Sip Phone Server (SPS) & Ascom DECT Base Station Interoperability Test Plan

9 January 2013

Copyright © 2013 AUDIOCODES Ltd. All Rights Reserved.

**Notice**

* The information contained in this document is subject to change without notice.
* AUDIOCODES makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.
* AUDIOCODES shall not be liable for any errors contained herein, or for incidental or consequential damages in connection with the furnishing, performance or use of this material.

**Document Terms of Use**

* The information contained herein is confidential and proprietary to AudioCodes Ltd. (“AUDIOCODES”).
* All proprietary and intellectual property rights in or to such information are and will remain the exclusive property of AUDIOCODES.
* The information contained herein is furnished on a confidential basis, and for review only by you and solely for the purpose of evaluating your interest in acquiring or licensing any of AUDIOCODES’s product(s).
* In the absence of AUDIOCODES's prior written consent, distribution of this document to any person other than to your employees who have a need to know for the purpose stated above, any reproduction of this document in whole or in part, or the use hereof for any purpose other than the limited purpose set forth above, are prohibited and unauthorized.
* By acceptance of this document, you agree to abide by these provisions.
* If you do not agree, you must return this document to AUDIOCODES and you are not authorized to use or to disclose its contents in any way or manner.

|  | **Name** | **Title** | **Signature** | **Date** |
| --- | --- | --- | --- | --- |
| Originated by: | Anatoly Kapustian | Interoperability Engineer |  | 20/12/2012 |
| Approved by: |  |  |  |  |

**Revision/Update History**

| **Revision** | **Update** | **Date** | **Reason** | **Originated by** | **Approved by** |
| --- | --- | --- | --- | --- | --- |
| Rev. 1 |  |  |  |  |  |
| Rev. 2 |  | 28/01/2013 | Additions | AnatolyK |  |

**Reasons and Details of Current Revision/Update**

| **Revision** | **Reason** | **Items Effected** |
| --- | --- | --- |
| Rev.2 | DTMF, MWI and Calls using desktop dialer tests were added |  |
|  |  |  |
|  |  |  |

**Table of Contents**

[1 Introducing SPS Test Plan 7](#_Toc347155399)

[1.1 Objective 7](#_Toc347155400)

[1.2 Test Environment 7](#_Toc347155401)

[1.2.1 SPS Components 7](#_Toc347155402)

[1.2.2 Third Party Components 7](#_Toc347155403)

[1.2.3 Laboratory Topology 8](#_Toc347155404)

[1.3 Contact Information 8](#_Toc347155405)

[1.4 Test Summary 9](#_Toc347155406)

[1.4.1 Summary of Results & Open Issues 10](#_Toc347155407)

[1.5 Conventions 11](#_Toc347155408)

[2 Test Case List 12](#_Toc347155409)

[2.1 Basic Calls 12](#_Toc347155410)

[2.1.1 Calls from Lync to DECT 12](#_Toc347155411)

[2.1.1.1 Call from Lync to DECT, answer by DECT 12](#_Toc347155412)

[2.1.1.1.1 Lync user A dial Number 12](#_Toc347155413)

[2.1.1.1.2 Lync user A1 dial User Name 13](#_Toc347155414)

[2.1.1.2 Call from Lync to DECT, not answer 13](#_Toc347155415)

[2.1.1.3 Call from Lync to DECT, answer by Lync 14](#_Toc347155416)

[2.1.1.4 Call from Lync to DECT using desktop phone dialer 14](#_Toc347155417)

[2.1.1.5 Calls from DECT to Lync 14](#_Toc347155418)

[2.1.1.6 Calls from DECT to Lync – 12 minuts call 15](#_Toc347155419)

[2.1.2 Calls from DECT to DECT 15](#_Toc347155420)

[2.1.2.1 Call from DECT to DECT, answer in DECT 15](#_Toc347155421)

[2.1.2.2 Call from DECT to DECT, not answer 15](#_Toc347155422)

[2.1.3 Call from PSTN to DECT/Lync 16](#_Toc347155423)

[2.1.3.1 User answer in DECT 16](#_Toc347155424)

[2.1.3.2 User answer in Lync user 16](#_Toc347155425)

[2.1.3.3 User not answer to call, and call back from DECT 16](#_Toc347155426)

[2.1.4 Call from DECT to PSTN 17](#_Toc347155427)

[2.1.5 Call from Lync to PSTN using desktop phone dialer 17](#_Toc347155428)

[2.1.6 Basic Call, DTMF 18](#_Toc347155429)

[2.1.6.1 Basic Call with Inband DTMF 18](#_Toc347155430)

[2.1.6.2 Basic Call, DTMF sent through RTP (RFC2833) 18](#_Toc347155431)

[2.1.6.3 Basic Call, DTMF sent over signaling channel (SIP INFO) 19](#_Toc347155432)

[2.2 Hold 20](#_Toc347155433)

[2.2.1 Hold/Resume call from DECT when remote side is DECT or Lync 20](#_Toc347155434)

[2.2.1.1 Hold/Resume call from DECT when remote side is Lync user 20](#_Toc347155435)

[2.2.1.2 Hold/Resume call from DECT when remote side is DECT user 20](#_Toc347155436)

[2.2.1.3 DECT that initiate the call, disconnected the call during the hold 20](#_Toc347155437)

[2.2.1.4 Called party disconnect the call during the hold 21](#_Toc347155438)

[2.2.1.5 Hold/Resume call from DECT, Hold for 180 econds 21](#_Toc347155439)

[2.2.2 Hold/Resume call from Lync when remote side is DECT 21](#_Toc347155440)

[2.2.2.1 Hold/Resume call from Lync when remote side is DECT user 21](#_Toc347155441)

[2.2.2.2 Lync user that initiate the call, disconnect the call during the hold 22](#_Toc347155442)

[2.2.2.3 Called party disconnect the call during the hold 22](#_Toc347155443)

[2.2.3 Able to get 2 calls and switch between them by using hold and resume 22](#_Toc347155444)

[2.2.3.1 Switch between the call on DECT side 22](#_Toc347155445)

[2.2.3.2 Switch between the call in Lync side 23](#_Toc347155446)

[2.2.3.3 Call to PSTN – Switch between the call on DECT side 24](#_Toc347155447)

[2.3 Call Waiting 25](#_Toc347155448)

[2.3.1 Call waiting tone 25](#_Toc347155449)

[2.3.1.1 Call waiting in DECT side 25](#_Toc347155450)

[2.3.1.2 Call waiting in Lync side 25](#_Toc347155451)

[2.3.1.3 Call waiting from PSTN in DECT side 25](#_Toc347155452)

[2.4 Forward 26](#_Toc347155453)

[2.4.1 Unconditional forward from the DECT to another DECT/Lync 26](#_Toc347155454)

[2.4.1.1 Forward from DECT 26](#_Toc347155455)

[2.4.1.2 Forward from Lync to DECT 26](#_Toc347155456)

[2.4.1.3 Forward from DECT to PSTN 27](#_Toc347155457)

[2.4.1.4 Forward from Lync to PSTN 27](#_Toc347155458)

[2.5 Transfer 28](#_Toc347155459)

[2.5.1 Blind Transfer 28](#_Toc347155460)

[2.5.1.1 Call from DECT B1 to DECT A1. DECT A1 Transfer the call to IPP C1 28](#_Toc347155461)

[2.5.1.2 Call from IPP C1 to DECT B1. DECT B1 Transfer the call to Lync A 28](#_Toc347155462)

[2.5.1.3 Call from Lync A to DECT B1. DECT B1 Transfer the call to 🡪IPP C1 29](#_Toc347155463)

[2.5.1.4 Call from DECT B1 to DECT A1. DECT A1 Transfer the call to PSTN 29](#_Toc347155464)

[2.5.1.5 Call from DECT B1 to Lyn A. Lync A Transfer the call to PSTN 29](#_Toc347155465)

[2.5.1.6 Call from PSTN to DECT A1. DECT A1 Transfer the call to DECT B1 30](#_Toc347155466)

[2.5.1.7 Call from PSTN to Lync A. Lync A Transfer the call to DECT B1 30](#_Toc347155467)

[2.5.2 Consulting Transfer 31](#_Toc347155468)

[2.5.2.1 Call from DECT A1 to DECT B1. DECT B1 Transfer the call to IPP C1 31](#_Toc347155469)

[2.5.2.2 Call from IPP C1 to DECT B1. DECT B1 Transfer the call to Lync A 31](#_Toc347155470)

[2.5.2.3 Call from Lync A to DECT B1. DECT B1 Transfer the call to IPP C1 32](#_Toc347155471)

[2.5.2.4 Call from DECT B1 to DECT A1. DECT A1 Transfer the call to PSTN 32](#_Toc347155472)

[2.5.2.5 Call from DECT B1 to Lync A. Lync A Transfer the call to PSTN 33](#_Toc347155473)

[2.5.2.6 Call from PSTN to DECT A1. DECT A1 Transfer the call to DECT B1 33](#_Toc347155474)

[2.5.2.7 Call from PSTN to Lync A. Lync A Transfer the call to DECT B1 34](#_Toc347155475)

[2.6 3-Way Call 35](#_Toc347155476)

[2.6.1 DECT A1🡪 DECT B1🡪 IPP C1 35](#_Toc347155477)

[2.6.2 DECT A1🡪 DECT B1🡪 Lync C 36](#_Toc347155478)

[2.6.3 DECT A1🡪 Lync B 🡪 IPP C1 37](#_Toc347155479)

[2.6.4 DECT A1 🡪 Lync B 🡪 Lync C 38](#_Toc347155480)

[2.6.5 Lync A🡪 DECT B1 🡪 IPP C1 39](#_Toc347155481)

[2.6.6 Lync A🡪 DECT B1 🡪 PSTN 40](#_Toc347155482)

[2.7 Message Waiting Indication (MWI) 41](#_Toc347155483)

[2.7.1 Message Waiting Indication (MWI) 41](#_Toc347155484)

[2.8 Presence Test 42](#_Toc347155485)

[2.8.1 Call status 42](#_Toc347155486)

[2.8.2 Manual Presence update 43](#_Toc347155487)

[2.9 Directory 44](#_Toc347155488)

[Appendix A: SPS Presence 45](#_Toc347155489)

# Introducing SPS Test Plan

## Objective

## Test Environment

Table 1-1 and Table 1-2 describe all devices comprising in test environment.

### SPS Components

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Product** | **IP Address** | **Final Version Tested** |
| **1** | AudioCodes M1k with MSBG modules | 10.15.21.15 | 6.60A.010.006 |
| **2** | Windows 2008 Server with SPS | 10.15.21.12 | 2.43.1 |

**Table 1-1: AudioCodes SPS Components**

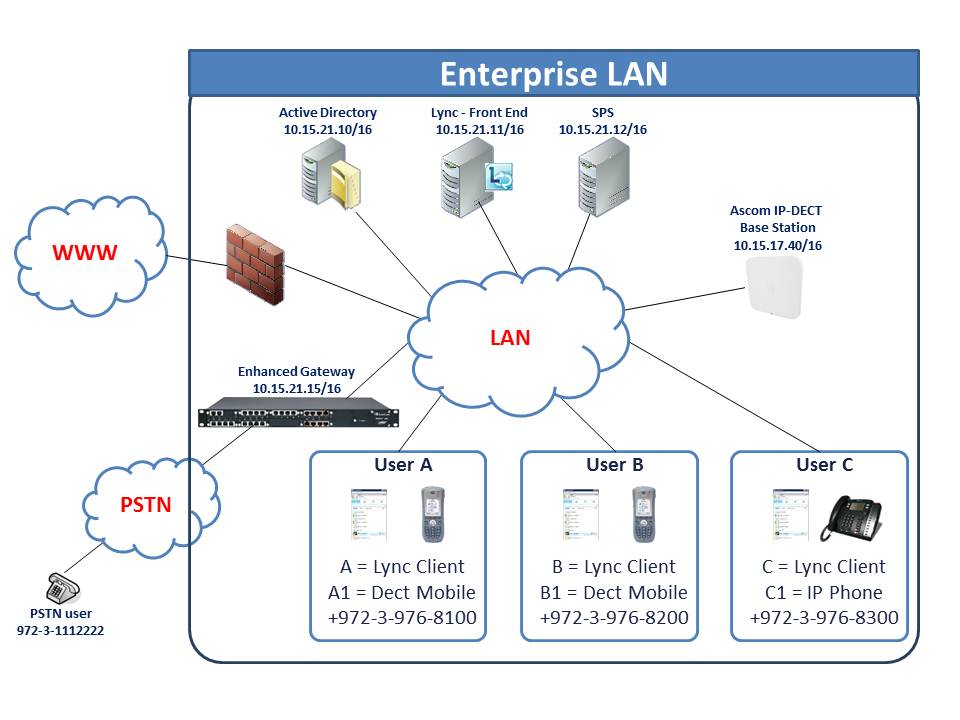
### Third Party Components

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Company & Product** | **IP Address** | **Final Version Tested** |
| **1** | Ascom IP-DECT Base Station (IPBS2) | 10.15.17.40 | 5.1.8 |
| **2** | PC with Lync Client | 10.15.7.7 | 4.0.7577.253 |
| **3** | Active directory (DCS) | 10.15.21.10 | Windows Sever 2008 R2 – Enterprise |
| **4** | Lync – Front End to which the SPS will be connected | 10.15.21.11 | 4.0.7577.0 |

**Table 1-2: Third Party Components**

### Laboratory Topology

Figure 1-1 shows the layout of the test environment.

****

**Figure 1-1: Test Lab Environment**

Dect phones (Dect Mobile) are connected to the IP network by Base Station that located in the enterprise LAN. The Dect Mobiles are registered to SPS server which connect them to Microsoft Lync environment. Each user in the network have two Lync devices: Lync Soft Client and Dect Mobile or IP-Phone.

## Contact Information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Company** | **Name** | **Email** | **Telephone** |
| 1 | AudioCodess | Anatoly Kapustian | [anatoly.kapustian@audiocodes.com](mailto:anatoly.kapustian@audiocodes.com) |  |
| 2 |  |  |  |  |

## Test Summary

Table 1-3 below summarize test results according to following criteria:

FAIL= Test Failed.   
The tested feature is supported by all parties’ devices and the appropriate configuration was performed, but the test failed due to (for example: proprietary implementation of the feature by the third party).

N/T = Not Tested.   
The feature is supported by all parties’ devices according to product specifications, but the scenario was not run due to (for example: scope constraints, etc).

N/S = Not Supported.   
The feature presently is not supported by one of the parties’ devices, but future support is possible.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Section** | **PASS** | **FAIL** | **N/T Or N/S** | **# Issues** |
| Basic Calls | 17 |  |  |  |
| Hold | 11 |  |  |  |
| Call Waiting | 3 |  |  |  |
| Forward | 4 |  |  |  |
| Transfer | 14 |  |  |  |
| 3-Way Call | 2 |  | 4 |  |
| Presence Test | 1 |  | 1 |  |
| Directory | 1 |  |  |  |
| **TOTAL:** | **53** |  | **5** |  |

**Table 1-3: Test Summary**

### Summary of Results & Open Issues

* Indicate which test scenarios failed:   
  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Not supported (N/S) scenarios:
  + 3-Way Call Not Supported
  + Call Status Not Supported
* List any unusual or unwanted behavior:
  + In Consulting Transfer Tests, Display was not updated with   
    new Call Party information after performing transfer.
* General notes:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Conventions

Complete the column ‘Refers to’ in Table 1-4. If your interoperability test requires it, add more conventions (for example, Third Party Phone 2) define what they refer to.

|  |  |  |
| --- | --- | --- |
|  | **Convention** | **Refers to** |
| 1 | VM | Voicemail Application |
| 2 | Lync | Microsoft Lync Agent |
| 3 | DECT | Dect Mobile |
| 4 | IPP | IP Phone |
| 5 | PSTN | PSTN phone number |
| 6 | A | Lync User 8100 |
| 7 | B | Lync User 8200 |
| 8 | C | Lync User 8300 |
| 9 | A1 | DECT1 8100 |
| 10 | B1 | DECT2 8200 |
| 11 | C1 | IPP3 8300 |

**Table 1-4: Conventions**

**A** – is Lync user that allocate to DECT A1 user in SPS

**A1** – is DECT user that allocate to Lync user 8100

**B** – is Lync user that allocate to DECT B1user in SPS

**B1** – is DECT user that allocate to Lync user 8200

**C** – is Lync user that allocate to IPP C1 user in SPS

**C1** – is IPP that allocate to Lync user 8300

# Test Case List

## Basic Calls

The purpose of this section is to verify that basic calls can be originated and terminated by SPS and Lync

### Calls from Lync to DECT

Prerequisite:

* Lync: define 3 users in the Lync with enterprise voice permission
* SPS: define 3 extensions in the SPS that allocated to the Lync users

#### Call from Lync to DECT, answer by DECT

##### Lync user A dial Number

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1  by dialing number (8200) | B1 ringing  Verify that DECT display that call arrive from A | Pass |  |
| 2 | Answer to the call via DECT B1 | Verify that call connected well with 2 way voice (incoming and outgoing ) | Pass |  |
| 3 | Disconnect the call from DECT (B1) | Call disconnected | Pass | 21111.pcap |

##### Lync user A1 dial User Name

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 by dialing user name | B1 ringing.  Verify that DECT display that call arrive from A | Pass |  |
| 2 | Answer to the call via DECT B1 | Verify that call connected well with 2 way voice (incoming and outgoing ) | Pass |  |
| 3 | Disconnect the call from Lync (A) | Call disconnected | Pass | 21112.pcap |

#### Call from Lync to DECT, not answer

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 | B1 ringing | Pass |  |
| 2 | Wait until no answer timer expire | DECT stop to ring  In the DECT display missing call from A | Pass |  |
| 3 | Call back to user A from DECT B1  Chose the number from miss call list | Verify that right number display in the miss call list.  Verify that call arrive to A | Pass | 2112.pcap |

#### Call from Lync to DECT, answer by Lync

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 | B and B1 ringing in parallel. | Pass |  |
| 2 | Answer by the Lync B | Verify that call connected well with 2 way voice (incoming and outgoing ) | Pass | Verify that A display in the miss call list |
| 3 | Disconnect the call from A | Call disconnected | Pass | 2113.pcap |

#### Call from Lync to DECT using desktop phone dialer

SPS Desktop Phone Dialer should be installed for user A.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 using desktop phone dialer | A1 ringing | Pass |  |
| 2 | Pick-up DECT handset of A1 | B1 start ringing |  | Verify ringback tone in A1 before B1 picked-up |
| 3 | Answer by DECT B1 | Verify that call connected well with 2 way voice (incoming and outgoing ) | Pass |  |
| 4 | Disconnect the call from A1 | Call disconnected | Pass | 2114.pcap |

#### Calls from DECT to Lync

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A | A and A1 ringing in parallel. | Pass |  |
| 2 | Answer in A | Call connected | Pass | Verify that call connected with 2 way voice |
| 3 | Disconnect the call from B1 | Verify that call disconnected in B1 and A | Pass | 2115.pcap |

#### Calls from DECT to Lync – 12 minuts call

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A | A and A1 ringing in parallel. | Pass |  |
| 2 | Answer in A | Call connected | Pass | Verify that call connected with 2 way voice |
| 3 | Leave the call open for 12 minuts |  | Pass | Verify that call connected with 2 way voice |
| 4 | Disconnect the call from B1 | Verify that call disconnected in B1 and A1 | Pass | 2116.pcap |

### Calls from DECT to DECT

#### Call from DECT to DECT, answer in DECT

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A and A1 ringing in parallel. | Pass |  |
| 2 | Answer in A1 | Call connected | Pass | Verify that call connected well with 2 way voice |
| 3 | Disconnect the call from A1 | Call disconnected | Pass | 2121.pcap |

#### Call from DECT to DECT, not answer

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A and A1 ringing in parallel. | Pass |  |
| 2 | Wait until no answer timer expire | DECT A1 and OC A stop to ringing | Pass | Verify that B1 display in the miss call list |
| 3 | Call back to user B1 from miss call list that display in DECT A1 | B1 ringing. | Pass |  |
| 4 | Disconnect the call from B1 | A1 stop ringing | Pass | 2122.pcap |

### Call from PSTN to DECT/Lync

#### User answer in DECT

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from PSTN phone to A1 | A and A1 ringing in parallel. | Pass |  |
| 2 | Answer in A1 | Call connected | Pass | Verify that call connected well with 2 way voice |
| 3 | Disconnect the call from A1 | Verify that call disconnected | Pass | 2131.pcap |

#### User answer in Lync user

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from PSTN phone to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A | Verify that call connected well with 2 way voice | Pass | Verify that PSTN phone display in the miss call list |
| 3 | Disconnect the call from A | Call disconnected | Pass | 2132.pcap |

#### User not answer to call, and call back from DECT

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from PSTN number to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Wait until no answer timer expire | Miss call display in DECT and Lync | Pass |  |
| 3 | Call back from DECT to the number that displayed in the miss call list | Call arrive to PSTN phone | Pass |  |
| 4 | Answer in the PSTN phone | Call connected | Pass | Verify that call connected well |
| 5 | Disconnect the call from the DECT |  | Pass | 2133.pcap |

### Call from DECT to PSTN

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A1 to PSTN number | Call arrive to PSTN phone | Pass |  |
| 2 | Answer in the PSTN phone | Call connected | Pass |  |
| 3 | Disconnect the call from PSTN phone | Call disconnected | Pass | 214.pcap |

### Call from Lync to PSTN using desktop phone dialer

SPS Desktop Phone Dialer should be installed for user A.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to PSTN number using desktop phone dialer | A1 ringing | Pass |  |
| 2 | Pick-up DECT handset of A1 | PSTN phone start ringing |  | Verify ringback tone in A1 before PSTN phone picked-up |
| 3 | Answer in the PSTN phone | Verify that call connected well with 2 way voice (incoming and outgoing ) | Pass |  |
| 4 | Disconnect the call from A1 | Call disconnected | Pass | 215.pcap |

### Basic Call, DTMF

The rurpose of this section to verify that DECT user can send DTMF signals in deifferent ways.

#### Basic Call with Inband DTMF

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | On ‘DECT -> Master’ page, enable ‘**Send Inband DTMF**’ parameter |  |  |  |
| 2 | Make call from A1 to external number with digit collect capability |  | Pass |  |
| 3 | Following instructions, press appropriated digits | Verify that DTMF digits are correctly assembled | Pass | Verify that DTMF digits being sent inbound RTP |
| 4 | Disconnect the call from A1 | Call disconnected | Pass | 2161.pcap |

#### Basic Call, DTMF sent through RTP (RFC2833)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | On ‘DECT -> Master’ page, enable ‘**Allow DTMF Through RTP**’ parameter |  |  |  |
| 2 | Make call from A1 to external number with digit collect capability |  | Pass |  |
| 3 | Following instructions, press appropriated digits | Verify that DTMF digits are correctly assembled | Pass | Verify that DTMF digits being sent as RTP payload (RTP Events) |
| 4 | Disconnect the call from A1 | Call disconnected | Pass | 2162.pcap |

#### Basic Call, DTMF sent over signaling channel (SIP INFO)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | On ‘DECT -> Master’ page, **uncheck all** DTMF parameters |  |  |  |
| 2 | Make call from A1 to external number with digit collect capability |  | Pass |  |
| 3 | Following instructions, press appropriated digits | Verify that DTMF digits are correctly assembled | Pass | Verify that DTMF digits being sent over signaling channel (SIP INFO) |
| 4 | Disconnect the call from A1 | Call disconnected | Pass | 2163.pcap |

## Hold

### Hold/Resume call from DECT when remote side is DECT or Lync

#### Hold/Resume call from DECT when remote side is Lync user

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A | Call connected | Pass |  |
| 3 | Press hold in B1 | A hear the music on hold | Pass |  |
| 4 | Resume the call from B1 | Call connected between B1 and A | Pass | 2211.pcap |

#### Hold/Resume call from DECT when remote side is DECT user

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A1 | Call connected | Pass |  |
| 3 | Press hold in B1 | A1 hear the music on hold | Pass |  |
| 4 | Resume the call from B1 | Call connected between B1 and A1 | Pass | 2212.pcap |

#### DECT that initiate the call, disconnected the call during the hold

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A1 | Call connected | Pass |  |
| 3 | Press hold in B1 | A1 hear the music on hold | Pass |  |
| 4 | Disconnect the call from B1 | Call disconnected between B1 to A1 | Pass | 2213.pcap |

#### Called party disconnect the call during the hold

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A1 | Call connected | Pass |  |
| 3 | Press hold in B1 | A1 hear the music on hold | Pass |  |
| 4 | Disconnect the call from A1 | Call disconnected between B1 to A1 | Pass | 2214.pcap |

#### Hold/Resume call from DECT, Hold for 180 econds

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A1 | Call connected | Pass |  |
| 3 | Press hold in B1 | A hear the music on hold | Pass |  |
| 4 | Leave the call in Hold for 180 Seconds |  | Pass |  |
|  | Resume the call from B1 | Call connected between B1 and A | Pass | 2215.pcap |

### Hold/Resume call from Lync when remote side is DECT

#### Hold/Resume call from Lync when remote side is DECT user

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 | B1 ringing | Pass |  |
| 2 | Answer in B1 | Call connected between A to B1 | Pass |  |
| 3 | Press hold in A | B1 hear the music on hold | Fail | Lync not play music to remote site |
| 4 | Resume the call from A | Call connected again between A to B1 | Pass |  |
| 5 | Disconnect the call from A | Call disconnected between A to B1 | Pass | 2221.pcap |

#### Lync user that initiate the call, disconnect the call during the hold

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 | B1 ringing | Pass |  |
| 2 | Answer in B1 | Call connected between A to B1 | Pass |  |
| 3 | Press hold in A | B1 hear the music on hold | Fail | Lync not play music to remote site |
| 4 | Disconnect the call from A | Call disconnected between A to B1 | Pass | 2222.pcap  Verify that B1 stop to hear the music on hold and call disconnected |

#### Called party disconnect the call during the hold

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 | B1 ringing | Pass |  |
| 2 | Answer in B1 | Call connected between A to B1 | Pass |  |
| 3 | Press hold in A | B1 hear the music on hold | Fail | Lync not play music to remote site |
| 4 | Disconnect the call from B1 | Call disconnected between A to B1 | Pass | 2223.pcap |

### Able to get 2 calls and switch between them by using hold and resume

#### Switch between the call on DECT side

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A1 | Call connected between A1 to B1 | Pass |  |
| 3 | Make additional call from C1 to A1 | A and A1 ringing in parallel  A –display new call  A1-hear call waiting tone and see that call arrive to line 2 | Pass |  |
| 4 | Answer to the call from C1 via A1 | call connected between C1 and A1  B1-hear music on hold | Pass |  |
| 5 | Switch button the calls in A1 | call connected between B1 to A1  C1- hear the music on hold | Pass |  |
| 6 | Disconnect the call between B1 to A1 | Call connected again between A1 to C1 | Pass |  |
| 7 | Disconnect the call from C1 | All the call disconnected | Pass | 2231.pcap |

#### Switch between the call in Lync side

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A | Call connected between B1 to A | Pass |  |
| 3 | Make additional call from C1 to A1 | A and A1 ringing in parallel | Pass |  |
| 4 | Answer to the call from C1 via Lync A | call connected between C1 and A  B1-hear music on hold | Pass |  |
| 5 | Resume the call between B1 to A | call connected between A to B1  C1- hear the music on hold | Pass |  |
| 6 | Disconnect the call between A to B1 | Call connected again between A to C1 | Pass |  |
| 7 | Disconnect the call from C1 | All the call disconnected | Pass | 2232.pcap |

#### Call to PSTN – Switch between the call on DECT side

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A1 to PSTN | PSTN ringing | Pass |  |
| 2 | Answer in PSTN | Call connected between PSTN to A1 | Pass |  |
| 3 | Make additional call from C1 to A1 | C1 ringing in parallel  A –display new call  A1-hear call waiting tone and see that call arrive to line 2 | Pass |  |
| 4 | Answer to the call from C1 via A1 | call connected between C1 and A1  PSTN hear music on hold | Pass |  |
| 5 | Switch button the calls in A1 | call connected between A1 to PSTN  C1- hear the music on hold | Pass |  |
| 6 | Disconnect the call between PSTN to A1 | Call connected again between A1 to C1 | Pass |  |
| 7 | Disconnect the call from C1 | All the call disconnected | Pass | 2233.pcap |

## Call Waiting

### Call waiting tone

#### Call waiting in DECT side

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 | B1 ringing | Pass |  |
| 2 | Answer in B1 | Call connected between A to B1 | Pass |  |
| 3 | Make additional call from C1 to B1 | B ringing  B1 hear the call waiting tone | Pass |  |
| 4 | Answer to the call from B1 | Call connected between B1 and A | Pass | 2311.pcap |

#### Call waiting in Lync side

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A | Call connected between A to B1 | Pass |  |
| 3 | Make additional call from C1 to A | A1 ringing and A hear the call waiting tone | Pass | 2312.pcap |

#### Call waiting from PSTN in DECT side

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A1 to B1 | B1 ringing | Pass |  |
| 2 | Answer in B1 | Call connected between A1 to B1 | Pass |  |
| 3 | Make additional call from PSTN to A1 | A ringing  A1 hear the call waiting tone | Pass | 2313.pcap |

## Forward

### Unconditional forward from the DECT to another DECT/Lync

#### Forward from DECT

**Prerequisite**: Need to configure the DECT with unconditional forward, it can be done via the Web interface of the DECT or via the DECT itself.

**Note:** The 302 message back are sending from the DECT.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | B1 configure to forward the call to A1 | Display in the B1 (on the screen) forward to A1 | Pass |  |
| 2 | Make call from C1 to B1 | A and A1 ringing in parallel | Pass |  |
| 3 | Answer in A | Call connected between C1 to A | Pass | 2411.pcap |

#### Forward from Lync to DECT

**Prerequisite**: need to configure the Lync with unconditional forward:

In the Lync Client setting (Tools🡪Call-Forwarding Settings)

Choose ‘Forward my call to:’ – insert the number that you want forward to.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Configure A to forward the calls to B1 | Display in the Lync Setting | Pass |  |
| 2 | Make call from C1 to A1 | B1 ringing | Pass |  |
| 3 | Answer in B1 | Call connected between C1 to B1 | Pass | 2412.pcap |

#### Forward from DECT to PSTN

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 2 | B1 configure to forward the calls to PSTN | Display in the B1 (on the screen) forward to PSTN | Pass |  |
| 3 | Make call from A1 to B1 | PSTN ringing | Pass |  |
| 4 | Answer in PSTN | Call connected between A1 to PSTN | Pass | 2413.pcap |

#### Forward from Lync to PSTN

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | A configure to forward the call to PSTN | Display in the Lync Setting | Pass |  |
| 2 | Make call from B1 to A1 | PSTN ringing | Pass |  |
| 3 | Answer in PSTN | Call connected between B1 to PSTN | Pass | 2414.pcap |

## Transfer

### Blind Transfer

#### Call from DECT B1 to DECT A1. DECT A1 Transfer the call to IPP C1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A1 | Call connected between A1 to B1 | Pass |  |
| 3 | Make Blind transfer from A1 to C1 | A1 disconnected  C1 Ringing | Pass | Verify that C1 display B1 number |
| 4 | Answer in C1 | Call connected between B1 to C1 | Pass | Validate 2 way voice |
| 5 | Disconnect the call | B1 and C1 disconnected | Pass | 2511.pcap |

#### Call from IPP C1 to DECT B1. DECT B1 Transfer the call to Lync A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from C1 to B1 | B1 ringing | Pass |  |
| 2 | Answer in B1 | Call connected between C1 to B1 | Pass |  |
| 3 | Make Blind transfer from B1 to A | B1 disconnected  A and A1 ringing in parallel | Pass | Verify that A display C1 number |
| 4 | Answer in A | Call connected between C1 to A | Pass | Validate 2 way voice |
| 5 | Disconnect from A | A and C1 disconnected | Pass | 2512.pcap |

#### Call from Lync A to DECT B1. DECT B1 Transfer the call to 🡪IPP C1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 | B1 ringing | Pass |  |
| 2 | Answer in B1 | Call connected between A to B1 | Pass |  |
| 3 | Make blind Transfer from B1 to C1 | C and C1 ringing in parallel | Pass | Verify that C1 display A number |
| 4 | Answer in C1 | Call connected between A to C1 | Pass | Validate 2 way voice |
| 5 | Disconnect the call from C1 | A and C1 disconnected | Pass | 2513.pcap |

#### Call from DECT B1 to DECT A1. DECT A1 Transfer the call to PSTN

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A1 ringing | Pass |  |
| 2 | Answer in A1 | Call connected between B1 to A1 | Pass |  |
| 3 | Make Blind transfer from A1 to PSTN | A1 disconnected  PSTN ringing | Pass |  |
| 4 | Answer in PSTN | Call connected between B1 to PSTN | Pass | Validate 2 way voice |
| 5 | Disconnect from PSTN | PSTN and B1 disconnected | Pass | 2514.pcap |

#### Call from DECT B1 to Lyn A. Lync A Transfer the call to PSTN

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A | A ringing | Pass |  |
| 2 | Answer in A | Call connected between B1 to A | Pass |  |
| 3 | Make Blind transfer from A to PSTN | A disconnected  PSTN ringing | Pass |  |
| 4 | Answer in PSTN | Call connected between B1 to PSTN | Pass | Validate 2 way voice |
| 5 | Disconnect from PSTN | PSTN and B1 disconnected | Pass | 2515.pcap |

#### Call from PSTN to DECT A1. DECT A1 Transfer the call to DECT B1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from PSTN to A1 | A1 ringing | Pass |  |
| 2 | Answer in A1 | Call connected between PSTN to A1 | Pass |  |
| 3 | Make Blind transfer from A1 to B1 | A1 disconnected  B1 ringing | Pass | Verify that B1 display PSTN number |
| 4 | Answer in B1 | Call connected between B1 to PSTN | Pass | Validate 2 way voice |
| 5 | Disconnect from B1 | PSTN and B1 disconnected | Pass | 2516.pcap |

#### Call from PSTN to Lync A. Lync A Transfer the call to DECT B1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from PSTN to A | A ringing | Pass |  |
| 2 | Answer in A | Call connected between PSTN to A | Pass |  |
| 3 | Make Blind transfer from A to B1 | A disconnected  B1 ringing | Pass | Verify that B1 display PSTN number |
| 4 | Answer in B1 | Call connected between B1 to PSTN | Pass | Validate 2 way voice |
| 5 | Disconnect from B1 | PSTN and B1 disconnected | Pass | 2517.pcap |

### Consulting Transfer

#### Call from DECT A1 to DECT B1. DECT B1 Transfer the call to IPP C1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A1 to B1 | B and B1 ringing in parallel | Pass |  |
| 2 | Answer in B1 | Call connected between A1 to B1 | Pass |  |
| 3 | Make Consulting Transfer from B1 to C1 | A1 hear music on hold  C and C1 ringing in parallel | Pass | Verify that C1 display B1 number |
| 4 | Answer in C1 | B1 and C1 connected  A1 hear music on hold | Pass | Verify that B1 and C1 connected well with 2 way voice |
| 5 | Press on transfer button on B1 | B1 disconnected  A1 and C1 in call | Pass | Verify that A1 and C1 connected well with 2 way voice |
| 6 | Disconnect the call from A1 | A1 and C1 disconnected | Pass | 2521.pcap |

#### Call from IPP C1 to DECT B1. DECT B1 Transfer the call to Lync A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from C1 to B1 | B and B1 ringing in parallel | Pass |  |
| 2 | Answer in B1 | Call connected between C1 to B1 | Pass |  |
| 3 | Make Consulting Transfer from B1 to A | C1 hear music on hold  A and A1 ringing in parallel | Pass |  |
| 4 | Answer in A | B1 and A connected  C1 hear music on hold | Pass | Verify that B1 and A connected well with 2 way voice |
| 5 | Press on transfer button on B1 | B1 disconnected  C1 and A in call | Pass | Verify that C1 and A connected well with 2 way voice |
| 6 | Disconnect the call from A | C1 and A disconnected | Pass | 2522.pcap |

#### Call from Lync A to DECT B1. DECT B1 Transfer the call to IPP C1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 | B and B1 ringing in parallel | Pass |  |
| 2 | Answer in B1 | Call connected between A to B1 | Pass |  |
| 3 | Make Consulting Transfer from B1 to C1 | A hear music on hold  C and C1 ringing in parallel | Pass |  |
| 4 | Answer in C1 | B1 and C1 connected  A hear music on hold | Pass | Verify that B1 and C1 connected well with 2 way voice |
| 5 | Press on transfer button on B1 | B1 disconnected  A and C1 in call | Pass | Verify that A and C1 connected well with 2 way voice  IPP C1 show B1 connected and not A |
|  | Disconnect the call from C1 | A and C1 disconnected | Pass | 2523.pcap |

#### Call from DECT B1 to DECT A1. DECT A1 Transfer the call to PSTN

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A1 | Call connected between A1 to B1 | Pass |  |
| 3 | Make Consulting Transfer from A1 to PSTN | B1 hear music on hold  PSTN ringing | Pass |  |
| 4 | Answer in PSTN | A1 and PSTN connected  B1 hear music on hold | Pass | Verify that A1 and PSTN connected well with 2 way voice |
| 5 | Press on transfer button on A1 | A1 disconnected  B1 and PSTN in call | Pass | Verify that B1 and PSTN connected well with 2 way voice |
| 6 | Disconnect the call from PSTN | B1 and PSTN disconnected | Pass | 2524.pcap |

#### Call from DECT B1 to Lync A. Lync A Transfer the call to PSTN

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from B1 to A | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A | Call connected between A to B1 | Pass |  |
| 3 | Make Consulting Transfer from A to PSTN | B1 hear music on hold  PSTN ringing | Pass |  |
| 4 | Answer in PSTN | A and PSTN connected  B1 hear music on hold | Pass | Verify that A and PSTN connected well with 2 way voice |
| 5 | Press on transfer button on A | A disconnected  B1 and PSTN in call | Pass | Verify that B1 and PSTN connected well with 2 way voice |
| 6 | Disconnect the call from PSTN | B1 and PSTN disconnected | Pass | 2525.pcap |

#### Call from PSTN to DECT A1. DECT A1 Transfer the call to DECT B1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from PSTN to A1 | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A1 | Call connected between A1 to PSTN | Pass |  |
| 3 | Make Consulting Transfer from A1 to B1 | PSTN hear music on hold  B1 ringing | Pass |  |
| 4 | Answer in B1 | A1 and B1 connected  PSTN hear music on hold | Pass | Verify that A1 and B1 connected well with 2 way voice |
| 5 | Press on transfer button on A1 | A1 disconnected  B1 and PSTN in call | Pass | Verify that B1 and PSTN connected well with 2 way voice |
| 6 | Disconnect the call from PSTN | B1 and PSTN disconnected | Pass | 2526.pcap |

#### Call from PSTN to Lync A. Lync A Transfer the call to DECT B1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from PSTN to A | A and A1 ringing in parallel | Pass |  |
| 2 | Answer in A | Call connected between A to PSTN | Pass |  |
| 3 | Make Consulting Transfer from A to B1 | PSTN hear music on hold  B1 ringing | Pass |  |
| 4 | Answer in B1 | A and B1 connected  PSTN hear music on hold | Pass | Verify that A and B1 connected well with 2 way voice |
| 5 | Press on transfer button on A | A disconnected  B1 and PSTN in call | Pass | Verify that B1 and PSTN connected well with 2 way voice |
|  | Disconnect the call from B1 | B1 and PSTN disconnected | Pass | 2527.pcap |

## 3-Way Call

### DECT A1🡪 DECT B1🡪 IPP C1

DECT A1 initiate the 3-way call and disconnect the call.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A1 to B1 | B and B1 ringing in parallel |  |  |
| 2 | Answer in B1 | Call connected between A to B1 |  |  |
| 3 | Make additional call from A1 to C1 | C and C1 ringing in parallel |  |  |
| 4 | Answer in C1 | call connected between A1 to C1  B1 hear music on hold |  |  |
| 5 | Press on A1 on conf button | All the participants need to be connected in same call (A1,B1,C1) |  | Validate 2 way voice between A1, B1 and C1 |
| 6 | Disconnect C1 from the call | C1 disconnected  A1 and B1 in call |  |  |
| 7 | Make additional call from A1 to C1 | C and C1 ringing in parallel |  |  |
| 8 | Answer in C1 | call connected between A1 to C1  B1 hear music on hold |  |  |
| 9 | Press on A1 on conf button | All the participants need to be connected in same call(A1,B1,C1) |  | Validate 2 way voice between A1, B1 and C1 |
| 10 | Disconnect the call from A1 | All the participants disconnected | N/S |  |

### DECT A1🡪 DECT B1🡪 Lync C

DECT A1 initiate the 3-way call and disconnect the call.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A1 to B1 | B and B1 ringing in parallel |  |  |
| 2 | Answer in B1 | Call connected between A to B1 |  |  |
| 3 | Make additional call from A1 to C | C and C1 ringing in parallel |  |  |
| 4 | Answer in C | call connected between A1 to C  B1 hear music on hold |  |  |
| 5 | Press on A1 on conf button | All the participants need to be connected in same call(A1,B1,C) |  | Validate 2 way voice between A1, B1 and C |
| 6 | Disconnect C from the call | C disconnected  A1 and B1 in call |  |  |
| 7 | Make additional call from A1 to C | C and C1 ringing in parallel |  |  |
| 8 | Answer in C | call connected between A1 to C  B1 hear music on hold |  |  |
| 9 | Press on A1 on conf button | All the participants need to be connected in same call (A1,B1,C) |  | Validate 2 way voice between A1, B1 and C |
| 10 | Disconnect the call from A1 | All the participants disconnected | N/S |  |

### DECT A1🡪 Lync B 🡪 IPP C1

DECT A1 initiate the 3-way call and disconnect the call.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A1 to B | B and B1 ringing in parallel |  |  |
| 2 | Answer in B | Call connected between A to B |  |  |
| 3 | Make additional call from A1 to C1 | C and C1 ringing in parallel |  |  |
| 4 | Answer in C1 | call connected between A1 to C1  B hear music on hold |  |  |
| 5 | Press on A1 on conf button | All the participants need to be connected in same call (A1,B,C1) |  | Validate 2 way voice between A1, B and C1 |
| 6 | Disconnect C1 from the call | C1 disconnected  A1 and B in call |  |  |
| 7 | Make additional call from A1 to C1 | C and C1 ringing in parallel |  |  |
| 8 | Answer in C1 | call connected between A1 to C1  B hear music on hold |  |  |
| 9 | Press on A1 on conf button | All the participants need to be connected in same call (A1,B,C1) |  | Validate 2 way voice between A1, B and C1 |
| 10 | Disconnect the call from A1 | All the participants disconnected | N/S |  |

### DECT A1 🡪 Lync B 🡪 Lync C

DECT A1 initiate the 3-way call

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A1 to B1 | B and B1 ringing in parallel |  |  |
| 2 | Answer in B | Call connected between A1 to B |  |  |
| 3 | Make additional call from A1 to C | C and C1 ringing in parallel |  |  |
| 4 | Answer in C | call connected between A1 to C  B hear music on hold |  |  |
| 5 | Press on A1 on conf button | All the participants need to be connected in same call (A1,B,C) |  | Validate 2 way voice between A1, B and C |
| 6 | Disconnect C from the call | C disconnected  A1 and B in call |  |  |
| 7 | Make additional call from A1 to C | C and C1 ringing in parallel |  |  |
| 8 | Answer in C | call connected between A1 to C  B hear music on hold |  |  |
| 9 | Press on A1 on conf button | All the participants need to be connected in same call (A1,B,C) |  | Validate 2 way voice between A1, B1 and C1 |
| 10 | Disconnect the call from A1 | All the participants disconnected | N/S |  |

### Lync A🡪 DECT B1 🡪 IPP C1

Lync A initiate the 3-way call and disconnect the call.

Note: Need to configure conf service on LYNC

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 | B and B1 ringing in parallel | Pass |  |
| 2 | Answer in B1 | Call connected between A to B1 | Pass |  |
| 3 | Make additional call from A to C1 | C and C1 ringing in parallel | Pass |  |
| 4 | Answer in C1 | call connected between A to C1  B1 hear music on hold | Pass |  |
| 5 | Make 3 way call from A between C1 and B1 | All the participants need to be connected in same call (A,B1,C1) | Pass | Validate 2 way voice between A, B1 and C1 |
| 6 | Disconnect C1 from the call | C1 disconnected  A1 and B1 in call | Pass |  |
| 7 | Make additional call from A to C1 | C and C1 ringing in parallel | Pass |  |
| 8 | Answer in C1 | call connected between A to C1  B1 hear music on hold | Pass |  |
| 9 | Make 3 way call from A between C1 and B1 | All the participants need to be connected in same call (A,B1,C1) | Pass | Validate 2 way voice between A, B1 and C1 |
| 10 | Disconnect the 3 way call from A | All the participants disconnected | Pass | 265.pcap |

### Lync A🡪 DECT B1 🡪 PSTN

Lync A initiate the 3-way call and disconnect the call.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A to B1 | B and B1 ringing in parallel | Pass |  |
| 2 | Answer in B1 | Call connected between A to B1 | Pass |  |
| 3 | Make additional call from A to PSTN | PSTN | Pass |  |
| 4 | Answer in PSTN | call connected between A to PSTN  B1 hear music on hold | Pass |  |
| 5 | Make 3 way call from A between PSTN and B1 | All the participants need to be connected in same call(A,B1, PSTN) | Pass | Validate 2 way voice between A, B1 and PSTN |
| 6 | Disconnect PSTN from the call | PSTN disconnected  A1 and B1 in call | Pass |  |
| 7 | Make additional call from A to PSTN | PSTN ringing | Pass |  |
| 8 | Answer in PSTN | call connected between A to PSTN  B1 hear music on hold | Pass |  |
| 9 | Make 3 way call from A between PSTN and B1 | All the participants need to be connected in same call (A,B1, PSTN) | Pass | Validate 2 way voice between A, B1 and PSTN |
| 10 | Disconnect the 3 way call from A | All the participants disconnected | Pass | 266.pcap |

## Message Waiting Indication (MWI)

The purpose of this section to verify that the Message Waiting Indication (MWI) on the DECT phone is activated correctly when a new message is stored.

**Prerequisite**:

* Need to configure the Voice Mail setting for the DECT users
* MWI mode should be configured on the IPBS2 (‘DECT -> Supl.Serv.’)

### Message Waiting Indication (MWI)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | Make call from A1 to B1 | B and B1 ringing in parallel | Pass |  |
| 2 | Don’t answer to the call on B1 | Verify that call redirected to the Voice Mail System | Pass |  |
| 3 | Leave the message and hang up the A1 | Message waiting indication is received on both B and B1. Indication should indicate that there is one message waiting. | Pass |  |
| 4 | B1 calls its voice mail inbox and deletes the message left by A1 and hang up. | Message waiting indication on B1’s display should be deleted. | Pass | 271.pcap |

## Presence Test

**Prerequisite**: need to configure the BLF setting in all the IPP with following order:

Led1 - user A1

Led2 - user B1

Led3 - user C1

In all the Lync clients (A,B,C) need to define the contact list with users A,B,C

### Call status

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | **Prerequisite:**  A,B,C Register to Lync  Status=available  A1,B1,C1 Register to SPS |  |  |  |
| 2 | Make call from A1 to B1 | **IPP Status**  A1-led1-red  Led2-red  Led3-green  B1-led1-red  Led2-red  Led3-green  C1-led1-red  Led2-red  Led3-green  **Lync status**  Lync A  A-in call  B-in call  C-available |  |  |
| 3 | Disconnect the call from A1 | A1-led1-green  Led2-green  Led3-green  B1-led1-green  Led2-green  Led3-green  **Lync status**  Lync A  A-available  B- available  C-available |  |  |
| 4 | After 5 minutes of inactivity | A1/A and B1/B state changes to “inactive” |  |  |
| 5 | After 15 additional minutes of inactivity | A1/A and B1/B state changes to “away” | N/S |  |

**Note: See Appendix A for more information regarding SPS presence**

### Manual Presence update

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
|  | A user can manually change presence by dialing special configured number.  Available statuses: Available, Busy, DND (Do Not Disturb), Be right back, Away, Reset status.  Default numbers: \*\*0, \*\*1, \*\*2, \*\*3, \*\*4, \*\*5  \*\*0 🡪 AVAILABLE  \*\*1 🡪 BUSY  \*\*2 🡪 DND  \*\*3 🡪 BE RIGHT BACK  \*\*4 🡪 AWAY  \*\*5 🡪 RESET THE STATUS (CHANGE TO AVAILABLE) | | | |
|  | **Prerequisite:**  A,B,C Register to Lync  Status=available  A1,B1,C1 Register to SPS |  |  |  |
| 1 | dial from A1 \*\*1 | In Lync A,B,C the status change to "Busy" | Pass |  |
| 2 | dial from A1 \*\*2 | In Lync A,B,C the status change to "DND" | Pass |  |
| 3 | dial from A1 \*\*3 | In Lync A,B,C the status change to "Be right back" | Pass |  |
| 4 | dial from A1 \*\*4 | In Lync A,B,C the status change to "Away" | Pass |  |
| 5 | dial from A1 \*\*5 | In Lync A,B,C the status change to "available" | Pass |  |

## Directory

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | Description | Expected Results | Result | Remarks |
| 1 | B1 call to C1 from Local Directory |  | Pass |  |
| 2 | B1 call to PSTN from Local Directory |  | Pass |  |

## Appendix A: SPS Presence

The presence icon represents a user’s availability and willingness to communicate. **Available** is the only state in which a user is both available and willing to communicate. In all other cases, a user is either willing or available to communicate, but not both. For example, a user may be online but not willing to communicate, as is the case when a user has set his or her presence status to **Do Not Disturb.**

A user’s presence status provides contextual information to help others decide if they should try to contact the user and whether to use IM, phone, or e-mail. Presence encourages instant communication when possible, but also provides information about whether a user is in a meeting or out of the office, indicating that instant communication is not possible.

To deliver an accurate representation of a user’s presence status, Microsoft Lync Server 2010 collects input from various sources, including devices, user settings, applications, and user activities, and then aggregates the data into a presence status. The aggregated presence status for a user is exposed as a presence icon in Lync Server 2010 and other presence-aware applications in the 2010 Microsoft Office system, including the Outlook® messaging and collaboration client, SharePoint® technologies, Word, and Excel. The presence icon for a user represents the user’s current availability and willingness to communicate.

SPS conforms to Lync presence behavior by:

* A registered phone initially publishes: Machine state = available, Capabilities = voice only
* After 5 minutes of inactivity, the machine state changes to “inactive”
* After 15 additional minutes of inactivity, the machine state changes to “away”
* At call start SPS publishes:
  + Phone state = busy
  + Machine state = available (!)
* At call end SPS expires the phone state

Example of Lync presence aggregation:

* If a user has both Lync Client and SPS phone, and SPS publishes machine state “away” but user is active on PC, then LYNC publishes “available” status.
* If user has SPS only then LYNC publishes status “away”