

Test Report

Detailed End Point IVT Test Plan and Report for Cisco Unified Communications Manager 12.5 and Ascom Myco 3



Test Date/ Result (Completed by Cisco or Authorized Test House)	09/10/19 - PASS
Partner Product Name	Мусо3
Partner Product Type	SIP Endpoint, Myco 3 WiFi
Partner Product Version #	1.2.1
Cisco Product Name	СИСМ
Cisco Product Version	12.5
API/Protocol(s) Used	SIP
Date Testing Completed	September 09, 2019
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Pre-Testing Information

The purpose of this section is to gather information about the 3rd party Solution Partner Program (SPP) product being submitted for Interoperability Verification Testing (IVT) in support of receiving a Cisco Compatibility logo. The information collected in this section will be used to complete customization of test plan for the product integration with Cisco product(s).

This section must be completed thoroughly to ensure that products features and requirements are properly understood and reflected appropriately in the test plan. *The limits stated in this questionnaire will be tested. Anything (limits, functionality, interfaces) not reported in this document will not be supported.*

Complete all sections with tekVizion.

This document will be reviewed for content, completeness and appropriate integration methods by Cisco and will not be submitted for test plan generation or test scheduling until approval. This process generally takes about 10 business days, though can be more or less dependent on complexity and current demand.

IVT Pre-requisites

The following prerequisites must be complete prior to submitting a request for testing:

- 1) Approved application in SPP for the product pairing being submitted for test.
- a) Product Pairing = Cisco Product Major Version + Partner Product Major Version
- b) Cisco Product Major Version must be generally available
- c) Partner Product Major Version must be generally available

2. Any use of Cisco Intellectual Property (proprietary protocols or interface methods) must have been approved by Cisco and have appropriate agreements in place. This is not appliEPle to standard published integration methods. Questions regarding interface methods should be directed to Developer Services or your Cisco Partner Manager.

Submission Instructions

Provide the requested information on the following pages for the product being submitted for Interoperability Verification Testing (IVT).

Complete Current Test Request Information, Product Category, and Product Description for all product pairings (Cisco Product + Program Member Product) being submitted. Only requests with all required sections completed

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1 Interoperability Verification Testing (IVT) Overview

1.1 Interoperability Verification Testing Requirement

Successful completion of Endpoint / USB Accessory IVT is required for Partner Products to be designated as "Cisco Compatible" and for Partner Products to be listed in the Cisco Solution Marketplace.

1.2 IVT Objectives

The IVT program's objective is to provide verification that 3rd party Partner product(s) meet the following criteria:

- Successfully Integrate and scale as defined by Cisco design guides and 3rd party product specifications
- Install and functionally operate/perform as indicated in collateral and specifications (from integration perspective only)
- Successfully integrate with Cisco products while <u>not adversely affecting</u> Cisco product operation or the integrated solution.
- Use only supported integration methods. Supported integration methods (API's and protocols) can be found on the DevNet web site: <u>https://developer.cisco.com/site/collaboration/overview.gsp</u>

1.3 IVT Focus

Testing is focused on integration points of Partner products and Cisco products, not on the Partner product itself, to ensure quality integrations between 3rd party products and Cisco products.

Test categories include:

- Installation and connectivity of partner product
- Validation of integrated features between Cisco product and partner product
- Negative testing (connectivity failure, redundancy, recovery)
- · Performance and load testing of integration points/functionality, using a subset of functional test scenarios

2 Instructions

Provide the requested information on the following pages for the product being submitted for Interoperability Verification Testing (IVT).

- Complete Current Test Request Information, Product Category, and Product Description for all product pairings (Cisco Product + Program Partner Product) being submitted. Only requests with all required sections completed will be accepted. Failure to provide this information will result in the request being denied.
- 2. Submission:
 - a) Access your <u>Developer Dashboard</u>, go to the Registered Products Tab and select "Actions" and "Add New IVT Request" next to the product to be submitted for IVT
 - b) Upload this document to the IVT Request, failure to upload this document will result in an incomplete request
 - c) Save using filename: <COMPANY_PRODUCT_VX_X+CISCO_PRODUCT_VX_X>.doc Example Filename: CiscoSystems_FASTAPP_V1_1+CIscoProduct_1_0.doc

Click on link below for detailed instructions: http://solutionpartner.cisco.com/documents/8974369/0/DeveloperPartnerGuide.pdf

Help or questions related to SPP Portal, listings or application status::solutionpartnerprogram-support@cisco.com

General Questions: Contact your Cisco representative or send email to ivt_questions@cisco.com

3 Product and Testing Information

3.1 IVT Request info here

IVT Request ID: 5614

Cisco Technology: Collaboration - Unified Communications Call Control

Cisco Product and Version: Cisco Unified Communications Manager 12.5

4 Test Set Up and Tools

This section refers to the product test tools that have been used during the development testing of the product being submitted for IVT

Question	Response
What if any commercial test tools are used in the development and test of this product	
Can these tools and test scripts for these products be made available to support IVT	
Are there proprietary test tools that could be made available to support IVT	

5 Product Platform Description

In the table below, provide specific details on the platform/server that your product resides. If your application is an appliance, it will need to be onsite for testing; otherwise, a VM will be provided for your installation of OS and application.

	Minimum Configuration Server Requirements	Maximum Configuration Server Requirements	OS and Version
CPU	N/A	N/A	N/A
Disk	N/A	N/A	N/A
Memory	N/A	N/A	N/A
Max Users supported	N/A	N/A	N/A

5.1 Product Deployment Description

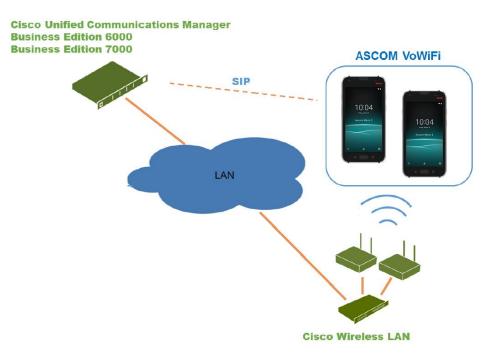
Provide the following information about the product and integration. Each of the items below is **required in order to proceed with test scheduling**.

5.2 Product Description

The Ascom Myco 3 smartphone works with supported apps to bridge digital information gaps—making it easier to communicate, coordinate and execute time-sensitive activities. A professional-grade Android[™] mobile device, the Ascom Myco 3 helps streamline workflows, support faster responses and deliver context-rich information to mobile personnel.

With its HD 5" touchscreen, the Ascom Myco 3 offers an easy user interface for managing calls, alerts, photos, messages, scores, waveforms and other critical information. A true hot-swap battery helps ensure constant operation throughout long shifts. And its Android 8.1 OS and Google™ certifications give access to the world's largest ecosystem of apps.

5.3 Product Integration Diagram



5.4 Product Integrated Use Cases

Barcode scanning: secure verification of patient IDs when administering medications.

Enabling clinicians to access and share lab results, images, requests and alerts while on the go.

Communicate and coordinate effectively. Requests, messages, alerts and tasks go directly to assigned recipients.

6 Test Plan

6.1 Introduction

This document is the detailed Interoperability Verification Test Plan and Report for Cisco Unified Communications Manager and Endpoint/USB Accessory partner product.

6.2 Entry Criteria

Before testing can begin 3rd party partner shall run this entire test plan in their lab and verify the results. If there are any test cases not supported, not applicable or are not successful, the partner should consult with IVT program team. Once testing has been initiated, the device under test is considered frozen for compatibility testing purposes. No software/firmware load can be changed during the testing period. However, configuration can be modified to accommodate testing.

6.3 Exit Criteria

To be deemed certified as configured, the devices under test should have zero severity 1 and severity 2 defects and up to two severity 3 defects.

If a severity 1 or 2 failure occurs, irrespective of whom is responsible for the problem (Cisco or the 3rd party product), the testing is considered unsuccessful.

	Delete Gevenity I	
Severity		Description
1	Catastrophic	Common circumstance causes the entire system or a major subsystem to stop working affects other areas/devices no workaround
2	Severe	Important functions are unusable does not affect other areas/devices no workaround
3	Moderate	Very unusual circumstances cause failure minor feature doesn't work at all there's a low impact workaround

Table 1. Defect Severity Level

If any tests fail, the configuration will be verified to resolve the issue. If the issue cannot be resolved, the tester will attempt to continue testing if possible. If the testing is blocked due to this issue, then testing is considered complete and the devices under test will not receive a Compatibility Logo.

The following procedures are followed when testing fails:

 Preliminary analysis is made to determine the source of the problem. If the problem is related to a device under test, then the problem is reported to that partner. If the problem is deemed Cisco related, the problem will be reported to Cisco, but the partner is responsible to open a case with Cisco Developer Services. Partner should provide the Developer Services case number to the test team so they can document it in the report.

- If testing can continue past this failure, the other test cases will be tested and verified for pass or fail. If the testing cannot progress past this problem, testing will be halted and a final test report submitted to Partner and Cisco.
- · All problems and resolutions encountered during testing are documented in the final test report
- If a severity 1 failure occurs, irrespective of whom is responsible for the problem (Cisco or the 3rd party product), the testing is considered unsuccessful.

Any deviations of the test execution or problem acceptance are documented in the test report. The Cisco approval process may increase/decrease the severity level of the defect after the test cycle if considered **necessary**.

7 Executive Summary

Short summary of the test effort, summarizing the lab findings during testing.

The following summarizes results:

- Test Case Failures:
 - o None
- Features Not Supported:
 - EP-5 Functional Test: SIP URI
 - EP-6 Functional Test: SIP URI
 - o EP-14 Functional Test: Conference Call
 - o EP-15 Functional Test: Call Park
 - EP-16 Functional Test: Call Park Reversion
 - o EP:18 Functional Test: Direct Transfer
 - EP-19 Functional Test: Automated CDR Creation
 - EP-20 Functional Test: Meet-Me
 - EP-21 Functional Test: Callback
 - o EP-22 Functional Test: Barge
 - EP-23 Functional Test: cBarge
 - EP-24 Functional Test: Shared Line Hold/Resume
 - EP-27 Functional Test: Video Endpoints
 - EP-33 Functional Test: Join Across Line
 - EP-34 Functional Test: Hotline
 - EP-35 Functional Test: Group Pickup
 - EP-36 Functional Test: Do Not Disturb (DND)
 - EP-37 Functional Test: Do Not Disturb (DND)
 - EP-38 Functional Test: iDivert
 - o EP-39 Functional Test: CFA & iDivert
 - EP-44 Functional Test: Mobile Voice Access (MVA)

- EP-45 Functional Test: Enterprise Feature Access (EFA)
- EP-64 Basic call features using Expressway
- Test Cases that are Not Applicable:
 - o EP-28 Functional Test: Extension Mobility
 - EP-40 Functional Test: Malicious Call
 - o EP-41 Functional Test: Mobile Connect
 - o EP-42 Functional Test: Mobile Connect
 - EP-43 Functional Test: Mobile Connect
 - o EP-52 Miscellaneous Test: DUT display features
 - EP-56 Functional Test: Multiple Lines
- Test Cases that were Not Executed:
 - o None
- Observations:
 - DUT uses Android OS, ergo Speed Dial is done through configuring contacts as 'Favorites' instead of applying a DN to a line/number.
 - o DUT is 3rd Party, so MOH doesn't operate when putting Cisco phones on hold.
 - When DUT is registered with secondary proxy, DUT will occasionally un-authenticate and attempt to reregister to primary proxy. Should primary fail, DUT re-attempts registration with secondary proxy.

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8 Testing Details

8.1 Items Tested

Features that are specific in this section are the high level categories the testing will focus on.

- 3rd Party installation, configuration and validation
- Security Requirements
- Functional testing of the various features interfacing through the 3rd party product to the Cisco product
- Negative tests in relation to service outages, restarts, bad files etc.

8.2 Items Not Tested

Features that are specific to the internals of the 3rd party product or any features not listed will not be tested.

8.3 Assumptions

• Interoperability of 3rd party products – Testing will cover only features in 3rd party products that result in events to and/or from the Cisco product.

8.4 Administration, Testing and Debugging tools

Tools used/required – Identify any tools required by 3rd party (partner under test). Also add Trace and Debug settings here.

Product Name Version Type Purpose		Units	Notes							
Test Tools										
Remote Phone Control 4.2 Phone Tool Controls Physical IP Phones remotely										
			3rd Party Tools							
Wireshark	Vireshark 1.12.7 Packet Analyzer		Records data traversing the network.	1						
	Debug Tools									
N/A N/A N/A		N/A	N/A							

Table 2. Administration, Testing and Debugging Tools

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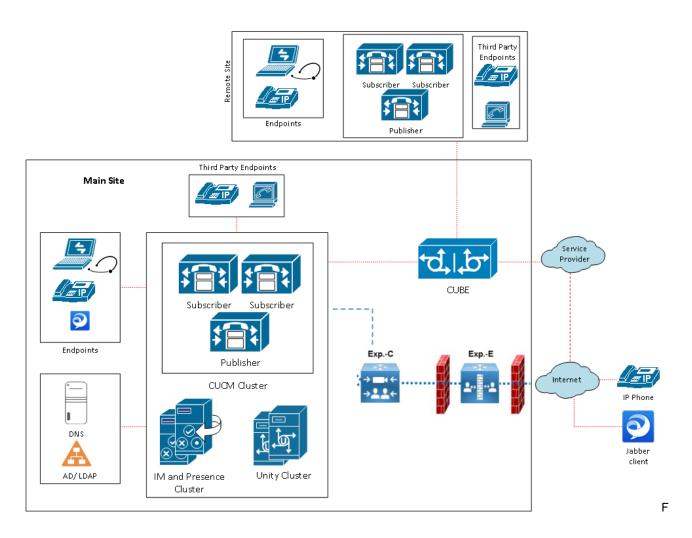
8.5 Equipment Requirements

Table below identifies all equipment/versions used in this IVT.

Product	Version	Units	Description			
CUCM	10.5	2 PUB & 2 SUB	HQ & Branch CUCM Clusters			
CUPS	10.0	1	Cisco Presence Server			
CUC	10.0	1	Cisco Unity Connection			
Mediasense	10.0	1	Cisco Mediasense			
Cisco 2811	12.4	2	PSTN Gateways			
IP Phones	9.4.2	5	6941,79XX, 8851, 8861, 8945, 8961,9951,9971,DX650			
Phoneview	N/A	1	Remote Phone Control Server (RPC)			
DUT(s)	1.2.1	3 or more	VoIP Cellular Device			

 Table 3.
 Sandbox Topology Components

8.6 Lab Network Topology



8.7 Test Case Result Reporting

Table 4. Test Results Legend

Result	Description
Pass (P)	The test case passed with no exceptions
Fail (F)	The test case failed – details of the failure are noted in the Comments column
N/A	The test case is not applicable to the product under test. Provide justification in the "Comments" column.
N/S	Not supported. While the feature tested by this test case generally would be considered a standard feature for this product category, this specific product (or this specific release) does not support the feature.
N/T	Not tested. The feature is supported by the product under test, but external factors (lab configuration, e.g.) prevented execution of the test. Justification must be provided in the Comments column.
Blocked (B)	Other test case failures prevented the execution of this test. Reference the failed test case in the "Comments" column.

9 Test Cases

This section details the tests that will be performed during the testing period. Partner is responsible for identifying any features or functions not supported covered in the test cases prior to start of testing

9.1 Endpoint IVT Workflow & Test Case Mapping

Test Work Flow Sections	Test Case #	Total Tests	A/M
Endpoint Registration & Validation (Step 1 & 2)	EP-1	1	М
Functional Tests (Step 3)	EP-2 → EP-45	44	М
Negative Tests (Step 4)	EP-46 → EP-50	5	М
Miscellaneous Tests (Step 5)	EP-51→ EP-56	6	М
Basic Call Features using Expressway (Step 6)	EP-57→ EP-65	9	М

9.2 Integration Test

Test is focused on ensuring that the 3rd party product (DUT) is registered with Call Manager successfully

Test Case #	EP-1	Category	Connect→Validate					F	RFC_Sta	andard	Y
Objective	Verify 3rd party	endpoints (D	UT) are registered in Ca			lly		-			
 Local CUCM (Remote CUCI CUCM Admin 	Cluster → NPA-NX M Cluster → NPA-	(X→ 410-444 NXX→322-23 os://X.X.X.X.8	34-XXXX 443 (X.X.X.X= CUCM-P)							
	Test P	rocedure		Ex	pected Results						
Test Procedure 1. Connect two DUT(s) in local CUCM cluster 2. Connect one DUT in remote CUCM cluster 3. Run "Step1_Endpoint Registration" cmd to register DUT(s) 4. Run "Utility_Device_Status" cmd to check registration status 5. Go off-hook on DUT(s) to check for dial tone 6. Go to DUT(s) settings to verify network and load information 7. In local CUCM cluster, change DN of DUT(s) to 7100 & 7101 with device pool⇒ep_pool 8. In remote CUCM cluster, change DN of DUT to 8000 9. Assign all DUT(s) a softkey template of "SIP_EP_User" 10. Associate end users to DUT(s) as follows: Device⇒Phone⇒Line⇒Associate End Users > DUT:7100→dutuser01 > DUT:8000→rdutuser01					 Expected Results DUT(s) goes through CUCM auto-registration process CUCM Administration .GUI display the DUT(s) DUT(s) are in "Registered" state DUT(s) have a DN assigned Dial tone played when phone goes off-hook DUT(s) network data is correct: (VLAN, DNS, DHCP, TFTP, CUCM) DUT(s) Phone Load version is correct DUT(s) DN changed to proceed with test cases DUT(s) softkey template updated to "SIP_EP_User" Users associated to DUT(s) respectively 						
 local CUCM C To register en 	Cluster	• CUCM clust	register endpoints to <mark>er, manually enter the</mark>								
	Те	est Results:	Comments			Р	F	N/A	N/S	N/T	В
DUT is 3 rd pa			doesn't support s figurations.	peci	fic softkey	X					

9.3 Entrance Tests

Tests will be focused on features and the operational behavior of the 3rd party product (DUT) to ensure it corresponds to its design specifications.

Test Case #	EP-2	Category	Entrance Test: Ir	ntra-Clu	ster Calls	RFC_Standard Y									
Objective Verify intra-cluster calls between DUT, SCCP and SIP endpoints															
Pre-Test Conditions															
	Inch RDP→Option cess RPC Server v to remotely control	ack on an RD ns → Local Re via RDP I IP Phones :1	P Session for a P0 sources → Setting		on this comput	er `	efer to	Lab	Guide	for inst	ructions)			
	Test Procedure Expected Results														
 1. 7100 dials 7101→7101 answers→7100 on-hook after 30s 2. 7101 dials 1000→Select 1000 and answer call using RPC 3. Select "Headphone" icon 4. Enter "Play:AreYouThere.raw" & hit "Send" on the Command Line 5. 7101 speaks "Testing1234"→1000 on-hook after 60s 6. Repeat steps 2-5 with Calling DN:2000 & Called DN;7100 7. Repeat steps 2-5 with Calling DN:2000 & Called DN;2000 8. Calling & Called party release calls alternatively 9. Retrieve CDR from CUCM 10. Check Calling, Called, Duration, Origination & Termination Cause Codes 4. calls establish with 2-way audio path Calling and Called Parties hear ring-back and ring tone DUT receives Caller ID Phone on RPC displays "monitoring active" message with T100 & 7101 hear "Are you There" 1000 & 2000 hear "Testing 1234" Audio for RPC phones heard on pc running Phoneview 4 calls terminate normally 4 CDR(s) retrieved Selected fields in CDR(s) match table 										with					
CDR field					Call 1	Ca	12		Call	4	Cal	15			
callingPartyNumb	ber				7100	71	01		710	1	200	00			
OriginalCalledPa	rtyNumber				7101	10	00		200	0	71(00			
finalCalledPartyN	lumber				7101	10	00		200	0	71(00			
origCause_Value	origCause_Value 16 0 16 0														
destCause_Value	destCause_Value 0 16 0 16									6					
duration					30	6	0		60		6)			
	Те	est Results: (Comments			P		-	N/A	N/S	N/T	В			
						X									

Note:

- In RPC Tool, if any of the Phones used in test case is in un-registered state, use any available registered IP Phones. Phone displays without a DN assigned are un-registered.
- Refer to Lab Guide for instructions on:
 - CDR Retrieval from CUCM
 - Phoneview User Guide
 - 4 2-Way Audio Path Validation

9.4 Features and Services

Test Case #	EP-3 Category Functional Test: Inter-Cluster Call RFC_Standard Y												
Objective Verify inter-cluster calls between DUT(s), SCCP and SIP endpoints Pre-Test Conditions													
			Pre-	Test Cond	litions								
Remote CUC	DUT(s):7100 & 7 M → DUT:8000; S to remotely contro	CCP:5200; SI											
	Test Pr	rocedure			Expected Result	S							
 7100 dials 234 7101 dials 234 Select "Headpl Enter "Play:Are 7101 speaks " Repeat steps 2 Calling & Calle Retrieve CDR Check Calling, Cause Codes 	PC	 3 calls establis Calling and Ca DUT receives Phone on RPO symbol 7100 & 8000 H 5200 & 6200 H Audio for RPO 3 calls termina 3 CDR(s) retring Selected fields 	alled Pa Caller II C display near "Are pear "Tes phones ate norm eved	arties hea D ys "mon e you Th sting 12 s heard o ally	ar ring-b nitoring a nere" 34" on PC ru	oack and	nessage	e with					
	Te	est Results: C	omments			Р	F	N/A	N/S	N/T	В		
						Χ							

Test Case #	EP-4	Category	Functional Tes	st: Off-Net (Calls				F	RFC_Sta	andard	Y
Objective	Verify basic call	s between DU	T(s) and PSTN	endpoints								
			Pre-T	est Condit	tions							
 Remote CUC PSTN: 210-22 	 → DUT(s):7100 & M → DUT:8000; 22-5400 (SIP); to remotely control 	·	e:2102225401;									
	Test P	Procedure			Expe	ected Resu	lts					
 Select "Headp Enter "Play:Ard 7100 speaks " Repeat steps1 DN:94104447" Retrieve CDR Check Calling, Cause Codes 	eYouThere.raw" a Testing1234" →2′ -4 with Calling DN	nd hit "Send" 102225400 on I:2102225400 er Origination &	on the Comma -hook after 60s & Called Termination	nd Line	 C F 7 2 A 2 2 	Calls estab calling and C UUT receives hone on RF symbol 100225400 .udio for RP Calls termin CDR(s) ret ielected field	Called P s Caller PC displa hears "A hears " C phone nate nor rieved	Parties h ID ays "mo re you 1 Festing es heard mally	ear ring onitoring There" 1234" I on PC	-back ar active" running	messag	je with
	Te	est Results: C	Comments		<u>u</u>		Р	F	N/A	N/S	N/T	В

	V			
	^			

Test Case #	EP-5	Category	Functional Test	st: SIP UF	રા				RF	C_Stan	dard	Y
Objective	Dbjective Verify intra-cluster SIP URI calls between DUT and SIP endpoints									<u>II</u>		
	<u>.</u>			est Cond								
 Configure Sp Der Der Der Der RPC is used Note: Provision I 1. 7100 hits Spect 2. 7101 goes on- 3. 2000 hits Spect 4. 2000 goes on- 5. 7101 hits Spect 6. 7101 goes on-	ed Dial button 3 → hook after 30s ed Dial button 3 → hook after 30s ed Dial button 3 →	n 3 for 7100, 7 00→Add new 01→Add new 00→Add new 01 P Phones: 2 ge: Device→P 0cedure 7101 answers >7100 answers 2000 answers	101, 2000: SD→ <u>dutuser02</u> SD→ <u>dutuser01</u> 2000; hone→DN→Lind	2@abc.inc 2abc.inc 1@abc.inc 1@abc.inc	<mark>c</mark> on both field on both fields <u>c</u> on both field	ds provisio sults ceives C ablish w ninate n etrieveo	Caller IC Caller IC ith 2 wa	a End L	o ser Pag		<u>nc</u>);	
Cause Codes	Called, Duration,	Chighlation a	renningdon									
	T	est Results: (Comments				Р	F	N/A	N/S	N/T	В
DUT doesn'	t support mal	king calls v dialin		, only s	supports d	igit				X		

Test Case #	EP-6	Category	Functional Test: SIP URI	RFC_Standard	Υ
Objective	Verify inter-clust	ter SIP URI ca	alls between DUT and SIP endpoints		
			Pre-Test Conditions		
 Remote CUCI Configure Spectrum Dev Dev Dev Dev 	M→ DÙT : <mark>8000 ((</mark> ed Dial on button ice→Phone→710 ice→Phone→710	JRI: r <u>dutuser(</u> 3 for 7100, 7 00→Add new 01→Add new 00→Add new	SD→rdutuser01@abc.inc on both fields SD→rcuser20@abc.inc on both fields SD→dutuser01@abc.inc on both fields		

Note: Provision URI on device page: Device→Phone→DN→Line→URI (Known bug if provisioned via End User Page)

Test Procedure	Expected Results						
 7100 hits Speed Dial button 3→8000 answers 8000 goes on-hook after 30s 7101 hits Speed Dial button 3→6200 answers 6200 goes on-hook after 30s 6200 hits Speed Dial button 3→7100 answers 7100 goes on-hook after 30s Retrieve CDR from CUCM Server Check Calling, Called, Duration, Origination & Termination Cause Codes 	 DUT(s) receive Ca 3 calls establish w 3 calls terminate r 3 CDR(s) retrieved Selected fields in the selected fields	rith 2 w Iormally d	ay audio y				
Test Results: Comments		Р	F	N/A	N/S	N/T	В
DUT doesn't support making calls with SIP URI, on dialing.	ly supports digit				X		

Test Case #	EP-7	Category	Functional Test: CFA	RFC_Standard	Y
Objective	Verify "CFA" ca	lls between [UT(s), SCCP, SIP and PSTN endpoints		
	<u>.</u>		Pre-Test Conditions		
 Remote CUC PSTN: 210-2: Enable CFA f Dev <	or DN(s): /ice→Phone→71(/ice→Phone→710 /ice→Phone→800 /ice→Phone→520 /ice→Phone→210	CCP:5200; S 00 - CFA - 11 01 - CFA - 22 00 - CFA - 62 00 - CFA - 42 00 - CFA - 22 00 - CFA - 22 02225400 - 9	IP:6200; 000 (SCCP) 348000 (DUT) 200 (SIP) 147101 (DUT)		

	Expected Results						
 7100 dials 7101→2638 answers→7100 on-hook after 30s 2638 dials 4447100→2635 answers→2635 on-hook after 30s 7101 dials 2638→6200 answers→7101 on-hook after 30s 7101 dials 2634→2638 answers 7100 dials 5200→7100 on-hook - hears busy tone 7101 goes on-hook 7101 goes on-hook 7101 goes on-hook after 30s PSTN goes on-hook after 30s PSTN0 dials 7101→2638 answers 2638 goes on-hook after 30s PSTN0 dials 7101→2638 answers 2638 goes on-hook after 30 secs Retrieve CDR from CUCM Check Calling, Called, Duration, Origination & Termination Cause Codes Note: Upon test completion, remove "CFA" feature for devices highlighted in yellow before proceeding to next test case CUCM Administration GUI: Device→Phone→DN→Line→Call Forward All →Destination→blank	 "CFA" phones dia Call forward to 80 Call establish bet Call terminate noi Call forward to 10 Call establish bet Call forward to 80 Call establish bet Call forward to 71 Call forward to 71 Call forward to 710 Call forward to 71 Call forward to 71 Call establish bet Call forward to 71 Call forward to 71 Call forward to 71 Call forward to 80 Call terminate noi Call forward to 80 Call terminate noi Call forward to 80 Call terminate noi 	00 and ween 7 mally 00 and ween 8 mally 00 and ween 7 mally 00 and tone an inate n 00 and 00 and 222540 mally 00 and	phone 100 & 8 phone 000 & 1 phone 101 & 6 phone 101 & 8(phone d releas ormally phone 101 & 7' phone 0 & 80(rings 000 with rings 200 with rings 200 with rings returns se call rings 100 with 200 with 2	n 2-way n 2-way n 2-way 2-way a busy tor 2-way a	audio audio audio ne audio	
Test Results: Comments	<u>.</u>	Р	F	N/A	N/S	N/T	В
		X	1	1			

Test Case #	EP-8	Category	Functional Test: CFNA	RFC_Standard	Y
Objective	Verify "CFNA"	calls between	DUT(s), SCCP and SIP endpoints		
			Pre-Test Conditions		
Remote CUC		CCP:5200 SI	P:6200; <mark>N(s)</mark> Device→Phone→DN→Line→Voicemail→No ^N	1; Busy Trigger → 1;	
▷ De▷ De	vice→Phone→71 vice→Phone→71 vice→Phone→80	01 → CFNA→	2348000 (DÚT)		

Test Procedure	Expected Results
1. 7100 dials 7101→7101 does not answer→8000 answers 2. 7100 goes on-hook after 30s 3. 8000 dials 4447100→7100 does not answer→1000 answers 4. 1000 goes on-hook after 30s 5. 7101 dials 2348000→8000 does not answer→6200 answers 6. 7101 goes on-hook after 30s 7.7101 dials 2000→2000 does not answer→8000 does not answe 8. 6200 answers call 9. 8000 dials 5200→5200 does not answer→7101 does not answe 10. 8000 goes on-hook - hears busy tone 11. 6200 goes on-hook - hears busy tone 11. 6200 goes on-hook 12. Retrieve CDR from CUCM 13. Check Calling, Called, Duration, Origination & Termination Cause Codes Note: Upon test completion, remove "CFNA" feature for devices highlighted in yellow before proceeding to next test case CUCM Administration GUI: Device→Phone→DN→Line→CFNA→Destination→blank	 Call forward to 8000 after ring timeout Call establish between 7100 & 8000 with 2-way audio Call terminate normally Call forward to 1000 after ring timeout Call establish between 8000 & 1000 with 2-way audio Call terminate normally Call forward to 6200 after ring timeout Call establish between 7101 & 6200 with 2-way audio Call terminate normally Call forward to 6200 after ring timeout Call establish between 7101 & 6200 with 2-way audio Call terminate normally Call establish between 7101 & 6200 with 2-way audio Call establish between 7101 & 6200 with 2-way audio Call establish between 7101 & 6200 with 2-way audio Call establish between 7101 & 6200 with 2-way audio Call forward to 6200 after ring timeout Call establish between 7101 & 6200 with 2-way audio Call terminate normally 8000 hears busy tone and terminate call Call on 6200 terminate normally Call forward to 7100 after ring timeout Call establish between 7101 & 7100 with 2-way audio Call terminate normally Call forward to 8000 after ring timeout Call forward to 8000 after ring timeout S cDR(s) retrieved Selected fields in CDR(s) match calls
Test Results: Comments	P F N/A N/S N/T

Test Case #	EP-9	Category	Functional Test: CFB	RFC_Standard	Y					
Objective	Objective Verify "CFB" calls between DUT(s), SCCP and SIP endpoints									
	Pre-Test Conditions									
Remote CUC	DUT(s):7100 & 3 M →DUT:8000; S Call Waiting disa or DN(s):	CCP:5200; S	IP:6200;							

Test Procedure 1. 1000 dials 7101→7101 answers 2. 7100 dials 7101→8000 answers→7100 on-hook after 30s 3. 5200 dials 8000→8000 answers 4. 7100 dials 7101→7100 on-hook – hears busy tone 5. 5200 goes on-hook 6. 7100 dials 1000→8000 answers→7100 on-hook after 30s 7. 7101 goes on-hook 8. 2000 dials 1000→8000 answers 9. 5200 dials 8000→8000 answers 10. 7101 dials 1000→7101 on-hook – hears busy tone 11. 1000 goes on-hook 12. 1000 dials 6200→6200 answers 13. 7100 dials 2346200→7101 answers→7101 on-hook after 30s 14. 2000 dials 7101→7101 answers 15. 7100 dials 2346200→7100 goes on-hook – hears busy tone 16. 2000 & 6200 goes on-hook 17. 7100 dials 2346200→7100 goes on-hook –hears busy tone 16. 2000 & 6200 goes on-hook 17. Retrieve CDR from CUCM 18. Check Calling, Called, Duration, origination & termination cause codes matches the calls	 Expected Results Call establish between 1000 & 7101 with 2-way audio Call forward to 8000 and phone rings Call establish between 7100 & 8000 with 2-way audio 7100 terminate call Call establish between 5200 & 8000 with 2-way audio 7100 hears busy tone and release call 5200 terminate call Call forward to 8000 and phone rings Call establish between 7100 & 8000 with 2-way audio 7100 hears busy tone and release call S200 terminate call Call establish between 7100 & 8000 with 2-way audio 7101 terminate call Call establish between 2000 & 1000 with 2-way audio Call establish between 5200 & 8000 with 2-way audio Call establish between 5200 & 8000 with 2-way audio Call establish between 1000 & 6200 with 2-way audio Call establish between 7100 & 7101 with 2-way audio Call establish between 7100 & 7101 with 2-way audio Call establish between 7100 & 7101 with 2-way audio T101 terminate call Call establish between 7100 & 7101 with 2-way audio Call establish between 7100 & 7101 with 2-way audio T101 terminate call Call establish between 7100 & 7101 with 2-way audio 					
Upon test completion, remove "CFB" feature for devices highlighted in yellow before proceeding to next test case CUCM Administration GUI: Device→Phone→DN→Line→CFB→Destination→blank	 2000 & 6200 terminate call Call establish between 2000 & 7100 with 2-way audio 2000 & 7101 terminate call 12 CDR(s) retrieved Selected fields in CDR(s) match calls 					

Test Case #	EP-10	Category	Functional Test: Hold & Resume	RFC_Standard	Y
Objective	Verify "Hold & R	tesume" calls	between DUT(s), SIP, SCCP and PSTN endpoints		

Pre-Test Co	nditions
 Local CUCM→DUT(s):7100 & 7101; SCCP:1000; SIP:2000; Remote CUCM →DUT:8000; SCCP:5200; PSTN:210-222-5400; Remove all CFA, CFNA & CFB settings on DN(s) used in previous t Call Waiting enabled on all DN(s) Device→Phone→DN→Line→Ca RPC is used to remotely control IP Phones: 1000, 2000, 210222540 	ıll Waiting→Max Calls→4; Busy Trigger→2;
 1. 7100 dials 7101→7101 answers→ 7100 hits "Hold" after 20s 2. 7100 hits "Resume" after 20s→7100 on-hook after 30s 3. 7100 dials 2638→2638 answers 4. 5200 dials 444-7100→7100 answers incoming call→2638 on-hold 5. 7100 hits "Resume" after 60s→7100 on-hook after 30s 6. 7100 dials 7101→7101 answers→7100 hits "Hold" after 30s 7. 7100 dials 5200→5200 answers→5200 on-hook after 30s 8. 7101 goes on-hook after 30s 9. 7101 dials 7100→7100 answers→7101 hits "Hold" after 30s 10. 7100 goes on-hook 10s later while call is on-hold 11. 7101 goes-hook 12. Repeat steps 1-2 for SCCP. Replace 7101 with 1000 13. Repeat steps 1-2 for SIP. Replace 7100 with 2000 14. Repeat steps 1-2 for SIP. Replace 7101 with 92102225400 15. Retrieve CDR from CUCM 16. Check Calling, Called, Duration, Origination & Termination Cause Codes 	 Call establish between 7100 & 7101 with 2-way audio 7101 is On-Hold (MOH) Call resume between 7100 & 7101 Call terminate normally Call establish between 7100 & 8000 with 2-way audio 8000 is On-Hold (MOH) Call establish between 7100 & 5200 with 2-way audio Call on 5200 terminated normally Call resume between 7100 & 8000 with 2-way audio Call resume between 7100 & 5200 with 2-way audio Call establish between 7100 & 7101 with 2-way audio Call establish between 7100 & 7101 with 2-way audio Call establish between 7100 & 5200 with 2-way audio Call establish between 7100 & 5200 with 2-way audio Call establish between 7100 & 5200 with 2-way audio Call establish between 7100 & 5200 with 2-way audio Call establish between 7100 & 5200 with 2-way audio Call establish between 7100 & 5200 with 2-way audio T101 is On-Hold (MOH) Call resume between 7100 & 7101 with 2-way audio Call resume between 7100 & 7101 with 2-way audio Call resume between 7100 & 7101 with 2-way audio Call resume between 7100 & 7101 with 2-way audio Call resume between 7100 & 7101 with 2-way audio Call resume between 7101 & 7100 with 2-way audio Call establish between 7101 & 7100 with 2-way audio Call establish between 7101 & 7100 with 2-way audio Call establish between 7101 & 7100 with 2-way audio T100 is On-Hold (MOH) T100 terminate call during active hold 9 CDR(s) retrieved Selected fields in CDR(s) match calls
Test Results: Comments	P F N/A N/S N/T B
	X

Test Case #	EP-11	Category	Functional	Test: Call	Waiting			RF	C_Stan	dard	Y
Objective	Verify Call Waiti	ng calls betwe	een DUT(s),	SIP and S	CCP endpoints						
			Pr	e-Test Co	nditions						
Remote CUCI Call Waiting e RPC is used t 1. 7100 dials 710	o remotely control Test Pro 1→7101 answers -7100→7100 answ hook after 30s	CCP:5200; SI s): Device→P I IP Phones: 1 ocedure wers incoming	P:6200; Phone → DN- 000, 2000, 9	→ Line → Ca	 Expected Results Call establish b 7100 notified of 7100 answers i 	etween 7 incoming ncoming	100 & 7 g call (to	- 101 with	,	audio	
5. 1000 goes on-f 6. 7100 goes on-f 7. 7100 dials 1000 8. 2000 dials 7100 9. 2000 goes on-f 10. 7100 goes on	hook after 30s hook after 60s $0 \rightarrow 7100$ answers $0 \rightarrow 7100$ answers hook after 30s -hook after 60s $4-7101 \rightarrow 7101$ ans -hook after 60s -hook after 30s from CUCM g, Called, Duration	incoming call swers swers incomir	ng call	'n	 7101 is On-Hole Call establish b 7100 & 8000 te Call resume bee 7101 notified of 7101 answers i 7100 is On-Hole Call establish b 7101 & 1000 te Call resume bee 7100 & 7101 te Call establish b 7100 notified of 7100 notified of 7100 notified of 7100 answers i 1000 is On-Hole Call establish b 7100 astablish b 7100 astablish b 7100 astablish b 7100 astablish b 7100 & 2000 te Call establish b 7100 & 1000 te Call establish b 7101 astablish b 7101 notified of 7101 answers i 6200 is On-Hole Call establish b 7101 astablish b 7101 astablish b 7101 & 5200 te Call resume be 6200 & 7101 te 	etween 7 rminate n tween 710 incoming d (MOH) etween 7 rminate n tween 710 rminate n etween 7 incoming d (MOH) etween 7 rminate n tween 710 rminate n tween 710 rminate n etween 7 incoming d (MOH) etween 7 rminate n etween 7 frminate n tween 7 frminate n etween 7 frminate n frminate n	ormally 00 & 710 g call (to call 101 & 10 ormally 00 & 710 ormally 100 & 10 g call (to call 100 & 20 ormally 200 & 700 call (to call 101 & 55 ormally 00 & 710	01 ne /disp 000 with 01 000 with ne /disp 101 with ne /disp 200 with	lay) 2-way 2-way lay) 2-way 2-way 2-way lay)	audio audio audio audio	
					7 CDR(s) retrieSelected fields) match	calls			
	Те	st Results: 0	Comments			Р	F	N/A	N/S	N/T	В
						Х					

Test Case #	EP-12 Category Functional Test: Bli	nd Transfer			RF	C_Stan	dard	Y
Objective	Verify "Blind Transfer" calls between DUT(s), SIP a	and SCCP endpoints						
Remote CUCI PSTN DN: 210 Invalid DN:777 RPC is used to Test Procedure	DUT(s):7100 & 7101; SCCP:1000; SIP:2000; ➔DUT:8000; -222-5400	Expected Results		100.8.7	101 with	2 1021	oudio	
2. 7101 dials 234 3. 8000 goes on-H 4. 7100 dials 710 5. 7100 dials 234 6. 7101 goes on-H 7. 7100 dials 1000 8. 7100 dials 710 9. 1000 goes on-H 10. 7100 dials 200 11. 7100 dials 200 12. 1000 goes on 13. 7101 dials 200 15. 2000 dials 233 16. 7100 goes on 17. Retrieve CDR	8000⇒ 7101 hits "Transfer"⇒7101 is on-hook bok after 60s ⇒7101 answers⇒7100 hits "Transfer" after 30s 7777⇒7100 hits "Transfer"⇒7100 is on-hook bok – hears reorder tone ⇒1000 answers⇒7100 hits "Transfer" after 30s ⇒7100 hits "Transfer"⇒7100 is on-hook bok after 60s 0⇒2000 answers⇒7100 hits "Transfer" after 30s 0⇒2000 answers⇒7100 hits "Transfer" after 30s 0⇒2000 answers⇒7100 hits "Transfer" after 30s 8000⇒8000 answers 0⇒2000 answers⇒2000 hits "Transfer" after 30s -8000⇒2000 hits "Transfer"⇒2000 is on-hook hook - hears busy tone from CUCM ing, Called, Duration, Origination & Termination	 Call establish bett 7100 is On-Hold (7100 blind transfe All calls terminate Call establish bett 7101 is On-Hold (7101 blind transfe 7101 hears reorde All calls terminate Call establish bett 1000 is On-Hold (1000 blind transfe All calls terminate Call establish bett 2000 is On-Hold (2000 blind transfe All calls terminate Call establish bett T100 is On-Hold (7100 blind transfe All calls terminate Call establish bett Call establish bett Call establish bett T100 is On-Hold (T100 blind transfe T100 hears a bus All calls terminate 15 CDR(s) retriev Selected fields in 	MOH) er to 800 normal ween 71 MOH) er to Invær r to Invær er tone normal ween 71 MOH) er to 710 normal ween 71 MOH) er to 800 y tone normal ed CDR(s)	00 with ly 100 & 7 alid DN ly 100 & 1 11 with 100 & 2 100 with 100 & 2 100 & 2 100 & 2 100 & 2 100 & 2 100 & 1 100 & 2 100 & 1 100 & 2 100 & 1 100 & 100 & 1 100 & 100 & 100 & 100 & 100 & 100 & 100 & 100 & 100	2-way a 101 with :7777 000 with 2-way a 000 with 2-way a 000 with 000 with 000 with	audio pa a 2-way udio a 2-way udio pat a 2-way a 2-way a 2-way	th audio audio th audio audio	
	Test Results: Comments		Р	F	N/A	N/S	N/T	В
	invalid DN, call wasn't transferred to I I on call with called party.	OUT. Transfer	X					

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Test Case #	EP-13	Category	Functional Test: Co	onsult Transfer			RF	C_Stan	dard	Y
Objective		Transfer" calls	s between DUT(s), S	IP, SCCP and PSTN end	points					
 Remote CUC PSTN DN: 2⁻ 	→DUT(s):7100 & CM →DUT:8000; 10-222-5400		000; SIP:2000; 1000, 2000, 2102225	;400;						
Test Procedure				Expected Results						
2.7101 dials 234 3.7101 hits "Trar 4.8000 goes on- 5.7100 dials 100 6.7100 dials 710 7.7100 goes on- 8.1000 goes on- 9. 7100 dials 200 10. 7100 dials 10 11. 7100 goes on 12. 1000 goes on 13. 7101 dials 92 14. 7101 hits "Tr 15. 7101 hits "Tr 16. 2102225400 17. Retrieve CD	8000→8000 ans asfer" after 30s→ hook after 60s 0→1000 answers 1→7101 answers hook after 60s 00→2000 answers 00→2000 answers 00→2000 answers 00→2000 answers 00→2000 answers 2102225400→210 ansfer" after 30s→ ansfer" after 30s→ goes on-hook after R from CUCM alling, Called, Dura	wers 7101 is on-hoc →7100 hits "T →7100 hits "T s→7100 hits " s→7100 hits " ors→7100 hits 03335400 answ →7101 dials 71 →7101 is on-ho er 60s	ransfer" after 30s ransfer" after 30s "ransfer" after 30s "Transfer" after 30s "transfer" after 30s wers 00→7100 answers pok	 Call establish betw 7100 is On-Hold (M 7100 consult transf All calls terminate r Call establish betw 1000 is On-Hold (M 1000 consult transf All calls terminate r Call establish betw 2000 is On-Hold (M 2000 is On-Hold (M 2000 is On-Hold (M 2000 is On-Hold (M 2000 consult transf All calls terminate r Call establish betw 2102225400 is On- 2102225400 consult All calls terminate r 12 CDR(s) retrieved Selected fields in C 	IOH) er to 8(normall een 71 IOH) er to 7 normall een 71 IOH) er to 1(normall Hold (N It trans normall d	000 with y 00 & 10 101 with y 00 & 20 000 with y 01 & 21 MOH) fer to 7 [,] y	2-way 00 with 2-way 00 with 2-way 022254	audio pa 2-way a audio pa 2-way a audio pa audio pa	ath udio ath udio ath 2-way a	
	-				Р	-	NI /A	NVO		_
		est Results:	<u>comments</u>		F	F	N/A	N/S	N/T	B

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Test Case #	EP-14	Category	Functional Test:	Confere	nce Call			RF	C_Stan	dard	Y
Objective		ce call betwee	n DUT(s), SIP, S	CCP and	d PSTN endpoints						
Pre-Test Condit	ions										
 Remote CUC PSTN DN: 21 Service parar Media Resou Assign Media RPC remotel 	neter: Drop Ad Ho rce Group (MRG) &	c Conference & Media Reso n → Device Po	→ Never (Defaul burce Group List (bol→ep_pool→Me	ŃRG_L)	ource Group List → I	MRG_I	-				
Test Procedure					Expected Results						
2.7101 dials 234 3.7101 hits "Cor 4.7100 goes on- 5.8000 goes on- 6.7100 dials 710 7.7100 dials 710 8.1000 goes on- 9.7100 goes on- 10.7100 dials 20 11.7100 dials 20 12.7100 hits "Co 13.2000 hits "Co 14.8000 answer 15.2102225400 16.7101 answer 17.2102225400 18.7100 goes or 20.7100 dials 20 21.7100 dials 20 21.7	hook after 30s $1 \rightarrow 7101$ answers $10 \rightarrow 1000$ answers hook after 60s hook after 30s $100 \rightarrow 2000$ answers $102225400 \rightarrow 2102$ $102225400 \rightarrow 2102$ $102225400 \rightarrow 2102$ $100 \rightarrow 2000$ hits "Conf hits "Conference" after 30s $100 \rightarrow 2000$ hits "Conf hook after 30s $100 \rightarrow 2000$ answers $100 \rightarrow 7100$ resume hook after 30s $100 \rightarrow 7100$ resume	ers \Rightarrow 7100 hits " $($ \Rightarrow 7100 hits " $($ \Rightarrow 7100 hits " $($ s 2225400 answ s s s s 2225400 answ s s s s 2225400 answ s s s 2000 dials ference" after after $30s$ 21 its "Conference" er 60s s s s s s s s s	Conference" after Conference" after "Conference" after wers \$ 2348000 30s 02225400 dials 7 ce" after 30s "Conference" afte 1000 answers	30s 30s r 30s 101	 Call establish b 7100 is On-hold 8000 is confere 3 parties in comination of the stabilish of the stabilish b 2000 is On-Hold 2102225400, 80 All 5 parties in comination of the stabilish of the stabil	I (MOH nce-in ference ence.7 tte norr etweer d (MOH 000 & 2 confere 100 & 2 tte norr etweer con-holo up was 100 an- tte norr d	H) e call wi 7101 & 8 mally 17100 & H) 7101 is ence call 2000 lea mally 17100 & d (MOH) s cancel d 2000 l mally	th 3-way 3000 cor 2000 w conferer with 5-v ave conferer 2000 w ed	v audio nect dir vith 2-wa nce-in way aud erence. vith 2-wa	ectly ay audic io 8000 &	7101
Cause Codes											
		est Results: (Comments			Р	F	N/A	N/S	N/T	В

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Test Case #	EP-15	Category	Functional Te	est: Call	Park					RF	C_Stan	dard	N
Objective	Verify "Call Par	k" call for a D	JT(s), SIP, SC	CCP and	d PSTN e	ndpoints							
Remote CUCPSTN DN: 21Call Park Coordinates	>DUT(s):7100 & 7M →DUT:8000;	[⊃] ark → 3001				ed Result							
2. 7100 hits "Parl 3. 7101 dials parl 4. 8000 goes on- 5. 7100 dials 100 6. 1000 hits "Parl 7. 7101 dials parl 8. 7100 goes on- 9. 2000 dials 710 10. 7101 hits "Parl 11. 7100 dials parl 12. 2000 goes or 13. 2102225400 14. 7100 hits the 15. 7100 dials parl 16. 2102225400 17. Retrieve CDF	0→1000 answers k" softkey after 10 c code:3001 after 30 hook after 30s 1→7101 answers ark" softkey after 1 rk code:3001 after h-hook after 30s dials 7100→7100 "Park" softkey after rk code:3001 after goes on-hook & from CUCM alling, Called, Dura	s 20s 20s 0s 20s 20s answers 20s 20s 20s 20s 20s 20s	on & Termina	ition	 8000 7101 Call Call Call T100 T101 Call 	establish is parked picks up establish terminate establish is parked picks up establish is parked picks up establish terminate establish terminate stablish terminate picks up establish terminate picks up establish terminate picks up establish	d parket betwee d parket betwee d parket betwee d parket betwee norm betwee s parket betwee norm betwee norm	ed call een 710 ally een 710 ed call een 710 ally een 200 ed call een 210 een 210 een 210 een 210 een 210 een 710	01 & 80 00 & 10 01 & 71 00 & 71 00 & 20 0222540 00 & 21	00 with 00 with 01 with 00 with 00 & 710 0222540	2-way a 2-way a 2-way a 2-way a audio pa 00 with 2	udio udio udio ath 2-way a	
		st Results: C		U				Р	F	N/A	N/S	N/T	В
	Call Park i	s not impl	emented o	on DUT							X		

cisco						
_						
	Test Case #	EP-16	Category	Functional Test: Ca		RFC_Standard
	Objective		rk Reversion"	call for DUT(s), SIP a	and SCCP endpoints	
-	Remote CUCICall Park CodService Paran	DUT(s):7100 & M →DUT:8000; le: Routing→Call neter: Call Park R	Park → 3001 Reversion Tim			
	Test Procedure				Expected Results	
	1. 7100 dials 234 2. 7100 hits "Park 3. Do not pickup (4. 7100 is ringing	" softkey after 10	s		 Call establish between 7100 & 8000 8000 is parked 7100 picks up parked call) with 2-way audio

- 7100 is parked
- 1000 picks up parked call •
- Call establish between 1000 & 7100 with 2-way audio ٠
- Call terminate normally ٠
- Call establish between 2000 & 7101 with 2-way audio
- 2000 is parked ٠
- 7101 picks up parked call ٠
- Call establish between 7101 & 2000 with 2-way audio •
- Call terminate normally •
- 6 CDR(s) retrieved
- Selected fields in CDR match calls

Cause Codes	Selected fields in C	DR ma	tch calls	6			
Test Results: Comments		Р	F	N/A	N/S	N/T	В
Call Park is not implemented on DU	Т				X		

8. Do not pickup parked call for 60s

11. 2000 dials 7101 → 7101 answers

12. 7101 hits "Park" softkey after 10s

13. Do not pickup parked call for 60s

17. Check the Calling, Called, Duration, Origination & Termination

14. 7101 is ringing → 7101 answers

15. 2000 goes on-hook after 30s

16. Retrieve CDR from CUCM

9. 1000 is ringing→1000 answers

10. 7100 goes on-hook after 30s

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Test Case #	EP-17	Category	Functional Test: Direc	ted Call Park			RFC	_Stand	ard	Ν
Objective	Verify "Assis	ted Directed	Call Park" call between	DUT(s) and SIP endpoir	nts		·			
 Remote CUCM Enterprise Par Directed Call F Add BLF Call I Update Phone Directed Call F 	DUT(s):7100 & 1 →DUT:8000; ameter: BLF Fo Park DN-3011:R Park: Device→E Button Templat	r Call Lists → outing→Dired Device Setting te for all DN(so oned for all (D	tted Call Park→3011 & s→Phone Button Temj)::Device→Phone→DN N(s):Device→Phone→	Retrieval Prefix * blate→Copy template→ I→Phone Button Templ DN→Line 4 BLF→DN:3	ate → B		∙Call Pa	ırk BLF		
3. 2000 goes on-h 4. 7101 dials *301 5. 8000 goes on-h 6. 2003 dials 234- 7. 2003 hits "BLF" 8. 2003 goes on-h 9. 1000 hits dials 10. 1000 goes on- 11. Retrieve CDR	button for Assi ook 1 to retrieve ca ook after 30s 8000→8000 an button for Assi ook '3011 to retrieve hook after 30s from CUCM	sted Directed II when the B swers sted Directed e call when Bl	Call Park after 20s	Expected Results Call establish betw 8000 is parked 7101 retrieves diri Call establish betw Calls terminate no Call establish betw 8000 is parked 1000 retrieves diri Call establish betw Calls terminated r 4 CDR(s) retrieve Selected fields in	ected p ween 8 ormally ween 2 ween 2 ween 1 ormally d	oarked c 000 & 7 003 & 8 oark call 000 & 8 y	all 101 with 000 with 000 with	ם 2-way מ ו 2-way מ	audio audio	
Cause Codes	1	Fest Results:	Comments		Р	F	N/A	N/S	N/T	В
	DUT	has no B	LF field/light.		X					

Test Case #	EP-18	Category	Functional Test: Direct Transfer	RFC_Standard	Ν
Objective	Verify "Direct Ti	ransfer" call fr	om a shared line between DUT(s), SCCP, SIP an	d PSTN endpoints	
Pre-Test Condi	tions				
 Local CUCM 	→DUT(s):7100 &	7101; SCCP:	1000; SIP:2000;		
	→DUT(s):7100 & CM →DUT:8000;	7101; SCCP:	1000; SIP:2000;		
	CM →DÙŤ:8000;	7101; SCCP:′	1000; SIP:2000;		
 Remote CU0 PSTN: 210-2 	CM →DÙŤ:8000;				
 Remote CU0 PSTN: 210-2 DN:1901 (sh 	CM →DUT:8000; 222-5400; ared line) assigned	d to Line 2 on			

 1. 7101 dials 7100→7100 answers 2. 7100 selects shared line:DN:1901 after 30s 3. 1901 dials 234-8000→8000 answers 4. Scroll to 1st call and hit select 5. Scroll to 2nd call and hit select and hit "DirTfr" 6. 1901 goes on-hook 7. 7101 goes on-hook after 30s 8. 7100 dials 7101→7101 answers 9. 7100 selects shared line:DN:1901 after 30s 10. 1901 dials 1000→1000 answers 11. Scroll to 1st call and hit select 12. Scroll to 2nd call and hit select 13. 1901 goes on-hook after 30s 14. 1000 goes on-hook after 30s 15. 8000 dials 444-7100→7100 answers 16. 7100 selects shared line:DN:1901 after 30s 	 Call establish between 1901 & 8000 with 2 way audio 7101 direct transfer to 8000 with 2 way audio 1901 dropped off from call Call terminate normally Call establish between 7100 & 7101 with 2-way audio 7101 On-Hold (MOH) Call establish between 1901 & 1000 with 2 way audio 7101 direct transfer to 1000 with 2 way audio 1901 dropped off from call Call terminate normally Call establish between 1901 & 1000 with 2 way audio 7101 direct transfer to 1000 with 2 way audio 1901 dropped off from call Call terminate normally Call establish between 8000 & 7100 with 2-way audio 8000 is On-Hold (Tone/Silence)
 17. 1901 dials 2000→2000 answers 18. Scroll to 1st call and hit select 19. Scroll to 2nd call and hit select and hit "DirTfr" 20. 1901 goes on-hook 21. 2000 goes on-hook 23. 7100 dials 234-8000 23. 7100 selects shared line:DN:1901 after 30s 24. 1901 dials 92102225400→2102225400 answers 25. Scroll to 1st call and hit select 26. Scroll to 2nd call and hit select and hit "DirTfr" 27. 1901 goes on-hook 28. 8000 goes on-hook 29. Retrieve CDR from CUCM 30. Check the Calling, Called, Duration, Origination & Termination Cause Codes 	Call between 1901 & 2102225400 with 2 way audio 7101 direct transfer to 103335500 with 2 way audio 1901 dropped off from call Call terminate normally
Test Results: Comments	P F N/A N/S N/T B
DUT is 3 rd party device and doesn't support shared	d line. X

Test Case #	EP-19	RFC_Standard	Ν			
Objective Verify joining two "Ad-Hoc Conference" using DUT(s), SIP, SCCP and PSTN endpoints						
Pre-Test Conditi	ons					
Local CUCM-	DUT(s):7100 & 7	7101; SCCP:	1000; SIP:2000;			
 Remote CUCI 	 Remote CUCM → DUT:8000; SCCP:5200; SIP:6200; 					
 PSTN: 210-22 	2-5400;					

Assign Media Resource: System→Device Pool→ep_pool→Media Resource Group List→MRG_L RPC is used to remotely control IP Phones with DN: 1000, 2000, 5200, 6200, 2102225400; Test Procedure **Expected Results** 1. 7100 dials 92102225400 > 2102225400 answers • Call between 7101 & 2102225400 with 2-way audio 2. 7100 hits "Conference" after 30s 2102225400 is On-Hold (Tone/Silence) • 3. 7100 dials 7101→7101 answers→7100 hits "Conference" after 30s • Call establish between 7100 & 7101 with 2-way audio 4. 2000 dials 7101→7101 answers 2nd incoming call All 3 participants join in conference-1 • 5. 2000 hits "Conference" after 20s Call establish between 2000 & 7101 with 2-way audio ٠ 6. 2000 dials 234-8000 → 8000 answers → 2000 hits "Conference" after 20s 7101 is On-Hold (Tone/Silence) ٠ 7. 2000 dials 1000→1000 answers→2000 hits "Conference" after 20s Call establish between 2000 & 8000 with 2-way audio • 8. 7101 selects conference 1 and hits the "Join" softkey ٠ All 3 participants join in conference-2 9. 7101 goes on-hook after 60s All participants in conference 1 & 2 are joined • 10. 8000 goes on-hook after 70s 7101 left conference • 11. All other participants ended call after 120s 8000 left conference • 12. Retrieve CDR from CUCM All participants terminate normally ٠ 13. Check the Calling, Called, Duration, Origination & Termination 12 Records retrieved • **Cause Codes** Selected fields in CDR(s) match calls • **Test Results: Comments** Ρ F N/A N/S N/T В DUT doesn't support conference and join softkey. Х

Test Case #	EP-20	Category	ory Functional Test: Meet-Me					RF	C_Stan	dard	Ν
Objective	Verify "Meet-Me" Conference call using DUT(s), SCCP and SIP endpoints										0
Pre-Test Condit	tions										
 Remote CUC Meet-Me #: C Meet-Me Cor 	nference initiator (7	t-Me → Add No <mark>7101): Device</mark>	000; SIP:2000; ew→55555 [meet-me →Phone→DN:710 [*] ith DN: 1000, 2000	→Calling S							
Test Procedure				Expected	Results						
2. 1000 dials 555 3. 2000 dials 555 4. 8000 dials 444 5. All 4 members 6. Retrieve CDR	55 1-5555 s go on-hook after	120 secs		 All 4 p Confe 4 CDF Select Note: Characterization	1000, 2000, arties in conf rence call ter (s) retrieved ed fields in C ange the Call r test is com	ference v minate r CDR(s) m ling Sear	with 4-wa normally natch ca	ay audic IIs)		vrt
	T	est Results: (Comments	<u>.</u>		Р	F	N/A	N/S	N/T	В
	10	est results.	Johnnenta			•			140	11/1	D

Test Case #	EP-21	Category	Functional Test: Callback	RFC_Standard	N		
Objective	Objective Verify "Callback" calls between DUT(s), SCCP, SIP and PSTN endpoints						

 Remote CUCM → DUT:8000; PSTN DN: 210-222-5400 VM and CW disabled for all phones ; RPC is used to remotely control IP Phones:1000, 2000, 210-222 Test Procedure	-5400; Expected Results
 7100 dials 7101→7101 answers 8000 dials 444-7101→8000 hits "Callback" softkey and exits 7101 goes on-hook after 60s 8000 redials 444-7101 after callback alert 7101 answers→7101 goes on-hook after 60s 7100 dials 1000→1000 answers 7101 dials 1000→7101 hits "Callback" softkey and exits 7100 goes on-hook after 60s 7101 redials 1000→7100 answers 7101 redials 1000 after callback alert 1000 answers→1000 goes on-hook after 60s 12000 dials 7100→7100 answers 7101 dials 2000→7101 hits "Callback" softkey and exits 7100 goes on-hook after 60s 27101 dials 2000→7101 hits "Callback" softkey and exits 7100 goes on-hook after 60s 7101 redials 2000→7101 hits "Callback" softkey and exits 7100 goes on-hook after 60s 7101 redials 2000 after callback alert 2000 answers→7101 goes on-hook after 60s 7101 dials 92102225400→2102225400 answers 7100 dials 92102225400→7100 hits "Callback" softkey & exits 2102225400 goes on-hook after 60s 7100 redials 92102225400 after callback alert Retrieve CDR from CUCM Check the Calling, Called, Duration, Origination & Termination Cause Codes 	 Call establish between 7100 & 7101 with 2-way audio 8000 hears a busy tone & displays "Callback Active" 7100 & 7101 terminate normally 8000 receives callback alert with single button redial Call establish between 8000 & 7101 with 2-way audio Call terminate normally Call establish between 7100 & 1000 with 2-way audio 7101 hears a busy tone & displays "Callback Active" 7100 & 1000 terminate normally 7101 receives callback alert with single button redial Call establish between 1000 & 7101 with 2-way audio Call establish between 1000 & 7101 with 2-way audio Call establish between 2000 & 7100 with 2-way audio Call establish between 2000 & 7100 with 2-way audio Call establish between 2000 & 7100 with 2-way audio 7101 hears a busy tone & displays "Callback Active" 2000 & 7100 terminate normally 7101 neceives callback alert with single button redial Call establish between 2000 & 7100 with 2-way audio T101 neceives callback alert with single button redial Call establish between 2000 & 7101 with 2-way audio Call establish between 7101 & 2102225400 with 2-way audio Call establish between 7101 & 2102225400 with 2-way audio T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displays "Callback Active" T100 hears a busy tone & displ
Test Results: Comments	P F N/A N/S N/T B

Test Case #	EP-22	Category	Functional	Test: Ba	arge			RF	C_Stan	dard	Ν
Objective Pre-Test Condi		call using DU	T(s), SCCP	, SIP and	I PSTN endpoints						
 Remote CU0 PSTN:210-2. Cluster-wide Built II Party Device Phote Ph	Service Parame n Bridge Enable• Entrance Tone → DN:	; ✦On ✦True added to devic h shared lines Barge	es with DN: ➔Off	7100, 71	<mark>01,1000, & 2000;</mark> , 2102225400;						
Test Procedure					Expected Results						
1. 8000 dials 444 2. 1901 answers 3. 7101 hits line 4. 8000 goes on 5. 7100 dials 190 6. 1901 answers 7. 7101 hits line 8. 1000 goes on 9. 8000 dials 444 10. 1901 answer 11. 7100 hits line 12. 7100 goes o 13. 8000 goes o 14. 2102225400 15. 1901 answer 16. 7101 hits line 17. 2102225400 18. Retrieve CDI 19. Check the C Cause Code	(Shared line on 1901 and selects hook after 60s 01 (Shared line on 1901 and selects hook after 60s 41901 rs (Shared line of a 1901 and select n-hook after 70s dials 941044415 rs (Shared line of a 1901 and select goes on-hook after R from CUCM alling, Called, Du	s barge after 2 1000) s barge after 2 on 2000) cts barge after 901 n 7100) cts barge after fter 60s	0s 20s 20s	ination	 Call establish betw All 3 parties conference Barged conference Call establish betw All 3 parties conference Call establish betw All 3 parties conference Call establish betw All 3 parties conference Final call terminate Call establish betw All 3 parties conference Final call terminate Call establish betw All 3 parties conference Final call terminate Call establish betw All 3 parties conference Barged conference Barged conference 8 CDR(s) retrieved Selected fields in Content 	ence-in termina een 710 ence-in termina een 800 ence wi termina normall een 210 ence wi termina	with 3-v te norm 0 & 190 with 3-v te norm 0 & 190 th 3-wa te norm y 222540 th 3-wa te norm	vay audi ally 1 with 2 vay audi ally 1 with 2 y audio ally 0 & 190 y audio ally	o -way au o -way au	dio dio	lio
		Test Results:				Р	F	N/A	N/S	N/T	В
DUT is	s 3 rd party de	evice and d	oesn't su	pport	shared line.				X		

Test Case #	EP-23	Category	Functional Te	est: cBarge				RF	C_Stan	dard	Ν
Objective		rge" call using DI	UT(s), SCCP, S	SIP and PSTN	endpoints						
Pre-Test Cond	itions										
 Remote CU0 PSTN DN: 2 Enable Barg Pa Device→Ph Share Privac Single 	CM \rightarrow DUT:80 210-222-5400; ge feature by s uilt In Bridge E arty Entrance tone \rightarrow DN: ed line DN:190 cy on Phones e Button Barge	etting Cluster-wid nable → On Tone → True 11 added to devid with shared lines	de Service Para ces with DN:71 ⊶⊃Off	ameters: 00, 7101,1000	,,						
Test Procedure	9				Expected Res	ults					
Test ProcedureExpected Results1. 8000 dials 444-1901 → 1901 answers (Shared line on 7100) 2. 7101 selects line 1901 after 20s 3.1901 goes on-hook after 60s (Shared line on 7100) 4. 8000 goes on-hook after 80s 5. 2102225400 dials 94104441901 → 1901 answers (Shared line on 1000) 6. 2000 selects line 1901 after 20s 7. 7100 selects line 1901 after 20s 7. 7100 selects line 1901 Select 1901 after 30s 8. 1901 goes on-hook after 60s (Shared line on 7100) 9. Remaining 3 parties go-hook after 120s 10. Retrieve CDR from CUCM 11. Check the Calling, Called, Duration, Origination & Termination Cause CodesCall establish between 8000 & 1901 with 4. All 3 parties conference -in with 3-way at c. Call between 2102225400 & 1901 with 2 4. All 4 parties conference in with 4-way at 6. 2000 selects line 1901 after 30s 8. 1901 goes on-hook after 60s (Shared line on 7100) 9. Remaining 3 parties go-hook after 120s 10. Retrieve CDR from CUCM 11. Check the Calling, Called, Duration, Origination & Termination Cause CodesExpected Results•Call establish between 8000 & 1901 with 4. All 3 parties conference in with 3-way at c. Call between 2102225400 & 1901 with 2 • Call between 2102225400 & 1901 with 2 • Call between 2102225400 & 1901 with 2 • • Call parties conference in with 4-way at • • T100 terminated conference 1st • • • • • • • • • • • • 								vay auc nally with 2- vay auc ence af	lio way auc lio	lio	
		Test Results: device and d				Р	F	N/A	N/S	N/T	В

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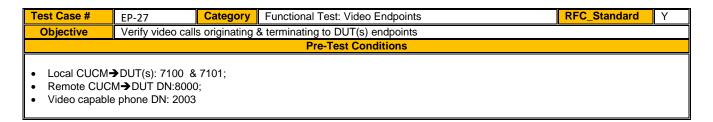
 Pre-Test Conditions Local CUCM→DL Remote CUCM→ Shared line DN:15 Privacy on Phone RPC is used to reised to reis	UT(s):7100 & 7101; SCCF DUT:8000; 901 added to devices wit as with shared lines → Off emotely control IP Phones 1901 answers (Shared Lin	P:1000; SIP:2000; th DN:7101,1000, & : s with DN: 1000, 2000	0; Expected Results			
 Local CUCM→DL Remote CUCM → Shared line DN:19 Privacy on Phone RPC is used to reised to reise Test Procedure 7100 dials 1901→1 1901 hits "Hold" soi 1901 hits "Resume 	UT(s):7100 & 7101; SCCF DUT:8000; 901 added to devices wit as with shared lines → Off amotely control IP Phones 1901 answers (Shared Lin	th DN:7101,1000, & 2	0; Expected Results			
 Remote CUCM → Shared line DN:15 Privacy on Phone: RPC is used to reited to reited to the state of the state	DUT:8000; 901 added to devices wit as with shared lines →Off motely control IP Phones 1901 answers (Shared Lin	th DN:7101,1000, & 2	0; Expected Results			
1. 7100 dials 1901 → 1 2. 1901 hits "Hold" so 3. 1901 hits "Resume		ne on 7101)				
2. 1901 hits "Hold" so 3. 1901 hits "Resume		ne on 7101)				_
5. 7100 dials 1901 → 1 6. 1901 hits "Hold" so 7. 1901 hits "Resume 8. 7100 goes on-hook 9. 7100 dials 1901 → 1 10. 1901 hits "Hold" so 11. 1901 hits "Resum 12. 1901 goes on-hoo 13. 2001 dials 1901 → 14. 1901 hits "Resum 15. 1901 hits "Resum 16. 1901 goes on-hoo 17. Retrieve CDR fror	" softkey after 30s < after 80s 1901 answers (Shared Lin oftkey after 30s " softkey after 30s < after 80s 1901 answers (Shared Li softkey after 30s bk after 80s ▶1901 answers (Shared Li softkey after 30s bk after 80s botkey after 30s botkey after 30s	ne on 1000) ine on 2000) Line on 7101)	 Call establish between 7100 & 19 7100 is On-Hold (tone or silence 7100 & 1901 resume call Call terminate normally Call establish between 7100 & 19 7100 is On-Hold (tone or silence 7100 & 1901 resume call Call terminate normally Call establish between 7100 & 19 7100 is On-Hold (tone or silence 2001 & 1901 resume call Call terminate normally 4 CDR(s) retrieved Selected fields in CDR(s) match of) 901 with 2-way aud) 901 with 2-way aud) 901 with 2-way aud	dio dio	
	Test Results:	: Comments	P F	N/A N/S	N/T	В

 DUT is 3rd party device and doesn't support shared line.
 X

Test Case #	EP-25	Category	Functional Test: Jabber for Windows	RFC_Standard	Y					
Objective	Objective Verify Jabber calls originating & terminating to DUT(s) endpoints (Jabber for Windows)									
Pre-Test Conditions										
Remote CUCJabber for W	→DUT(s):7100 & CM →DUT:8000; Vindows (Device→ with Jabber clien	Phone→Add	2:1000; SIP:2000; d New → CSFUSER1:DN:1922; End User:juser01/123456)							

Test Procedure	Expected Results						
 7100 dials 1922 (Duration=30s) 1922 dials 7101 (Duration=30s) 8000 dials 444-1922 (Duration=30s) Calling and Called party goes on-hook alternatively Retrieve CDR from CUCM Check the Calling, Called, Duration, Origination & Termination Cause Codes 	 3 calls establish with 2-way audio 3 calls terminate normally 3 CDR(s) retrieved Selected fields in CDR(s) match calls 						
Test Results: Comments		Р	F	N/A	N/S	N/T	В
		X					

Test Case #	EP-26	Category	Functional Test: IP (Communicator			RF	C_Stan	dard	Y
Objective	Verify IP Comm	nunicator calls	s originating & termina	ting to DUT(s) endpoints	S					
			Pre-Test C	onditions						
 Local CUCM→DUT(s):7100 & 7101; SCCP:1000; SIP:2000; CIPC:1940; Remote CUCM →DUT:8000; Launch IP Communicator on a PC: Phone Preferences→Network: Use this Device Name: CIPC00001940 Use this TFTP Servers:10.10.20.211 CIPC Credentials: ipcuser01/123456 Windows PC with IP Communicator client installed Test Procedure Expected Results										
 2. 1940 dials 710 3. 8000 dials 444 4. 1940 dials 234 5. Calling and Ca 6. Retrieve CDR 	 1. 7100 dials 1940 (Duration=30s) 2. 1940 dials 7101 (Duration=30s) 3. 8000 dials 444-1940 (Duration=30s) 4. 1940 dials 234-8000 (Duration=30s) 5. Calling and Called party goes on-hook alternatively 6. Retrieve CDR from CUCM 7. Check the Calling, Called, Duration, Origination & Termination 4 calls establish with 2-way audio 4 calls terminate normally 4 CDR(s) retrieved Selected fields in CDR(s) match calls 									
	Τε	est Results:	Comments	¢.	Р	F	N/A	N/S	N/T	В
					Χ					
										ـــــــ



Test Procedure	Expected Results						
 7100 dials 2003 (Duration=30s) 2003 dials 7101 (Duration=30s) 8000 dials 444-2005 (Duration=30s) Calling and Called party goes on-hook alternatively Retrieve CDR from CUCM Check the Calling, Called, Duration, Origination & Termination Cause Codes 	 3 calls establish w If DUT is video-ca from both devices 3 calls terminate r 3 CDR(s) retrieve Selected fields in 	apable, 2 with ac normally d	2-way v cceptabl /	ideo/aud le quality		aming o	ccurs
Test Results: Comments		Р	F	N/A	N/S	N/T	В
3 rd Party Device configurations don't allow view	video calls. X						

	LF-20	Calegory	Functional Test. E	xtension Mobility	EP-28 Category Functional Test: Extension Mobility RFC_Standard N								
Objective	Verify DUT(s) se	upports "Exter	nsion Mobility" call										
Pre-Test Condit	ions												
 Local CUCM→DUT(s):7100 & 7101; SCCP:1000; SIP:2000; Remote CUCM →DUT:8000; SCCP DN:5200; SIP DN:6200; PSTN: 210-222-5400; Extension Mobility Service activated & started Extension Mobility Service provisioned : Device→Device Settings→Phone Service→Add New→Extension Mobility Create Virtual Device Profile: Device→Device Profile→Add New→EM_7100 with DN:1934 Extension Mobility service subscribed on 7100: Device→Phone→Select "Subscribe/Unsubscribe Services" →EM Create User/PIN: emuser01/123456; Associate device profile EM_7100 to user under Extension Mobility; EMCC checked; RPC is used to remotely control IP Phones with DN: 1000, 2000, 5200, 6200, 210222-5400 ; 													
Test Procedure Expected Results													
Test ProcedureExpected Results1. 7100 hits "Services" button and selects EM service.2. 7100 logs in with "emuser01/123456".3. 1934 dials 1000 \$>1000 answers \$>1934 on-hook after 30s.4. 2000 dials 1934 >1934 answers \$>2000 on-hook after 30s.5. 7101 dials 1934 >1934 answers >2000 on-hook after 30s.6. 1934 dials 234-5200 >5200 answers >1934 on-hook after 30s.7. 6200 dials 444-1934 >1934 answers >6200 on-hook after 30s.8. 1934 dials 92102225400 >2102225400 answers.9. 2102225400 goes on-hook after 30s.10. 1934 hits "Services" button and selects EM service11. 1934 logs out12. Retrieve CDR from CUCM13. Check Calling, Called, Duration, Origination & Termination Cause Codes													
3. 1934 dials 100 4. 2000 dials 193 5. 7101 dials 193 6. 1934 dials 234 7. 6200 dials 444 8. 1934 dials 921 9. 2102225400 gr 10. 1934 hits "Set 11. 1934 logs out 12. Retrieve CDR 13. Check Calling	0→1000 answers 4→1934 answers 4→1934 answers -5200→5200 answ -1934→1934 answ 02225400→21022 bes on-hook after rvices" button and a from CUCM g, Called, Duration	 →1934 on-hi → 2000 on-hic →7101 on-hoc wers → 1934 c wers → 6200 c 225400 answig 30s selects EM s 	ok after 30s ok after 30s on-hook after 30s on-hook after 30s ers ervice	 All calls terminate nor 1934 logs out and dev 6 CDR(s) retrieved 	mally vice rebooted to								

Extension mobility is not support on DUT			X			
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Test Case #	EP-29	Category	Functional Test: Hunt Group	RFC_Standard	Ν					
Objective Verify "Hunt Group" calls using DUT(s), SCCP, SIP and PSTN endpoints										
Pre-Test Conditi	Pre-Test Conditions									
Remote CUCI PSTN: 210-22 Hunt Group P Route call to I	ilot 3000 (1 st mem Destination=234-8	CCP DN:520 aber-7101; 2 ^{nc} 3000;		x. waiting timer=60 se	ecs,					

Test Procedure	Expected Results										
 7100 dials 3000→7101 answers→7100 on-hook after 60s 7101 dials 2000→2000 answers 7100 dials 3000→1000 answers→1000 on-hook after 60s 2000 goes on hook after 70s 7101 dials 1000→1000 answers 7100 dials 3000→2000 answers 7100 dials 3000→2000 answers 7100 dials 3000→2000 answers→7100 on-hook after 60s 212225400 dials 414443000→2000 answers 2000 goes on-hook after 60s 1000 goes on-hook Retrieve CDR from CUCM Check the Calling, Called, Duration, Origination & Termination Cause Codes 	 Call route to hunt grou Call establish between Call terminate normal 7101 & 2000 member Call route to hunt grou Call establish between Call terminate normal 7101 & 1000 member Call route to hunt grou Call establish between Call establish between Call terminate normal Call route to hunt grou Call terminate normal Call terminate normal Call establish between Call terminate normal Call terminate normal Call terminate normal Call terminate normal Call coute to hunt grou Call terminate normal Call coute to hunt grou Call establish between Call terminate normal 6 CDR(s) retrieved Selected fields in CDF 	n 7100 lly rs are l up mer n 7100 lly rs are l up mer n 7100 lly up mer n 2102 lly) & 710 ⁻ busy mber 10) & 1000 busy mber 20) & 2000 mber 20 2225400	1 with 2- 000 0 with 2- 000 0 with 2- 000 00 & 200	way au way au	dio dio	ıdio				
Test Results: Comments		Р	F	N/A	N/S	N/T	В				
		X									

Test Case #	RFC_Standard	Ν								
Objective	Objective Verify "Hunt Group" calls on DUT(s) when no members are available									
Pre-Test Condit	Pre-Test Conditions									
Remote CUC	 Local CUCM→DUT(s):7100 & 7101; SCCP:1000; SIP:2000; Remote CUCM →DUT:8000; SCCP DN:5200; SIP DN:6200; 									
 PSTN: 210-22 	• PSTN: 210-222-5400;									

•	Hunt Group Pilot 3010 (1	st member-7101),	Queuing flag enabled,	max. wa	aiting timer=60 secs,
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- Call Routing→Route/Hunt→Hunt Pilot→3010→Route call to this destination→234-8000; ٠
- Call Routing→Route/Hunt→Hunt Pilot→3012→Route call to this destination→1000; ٠
- ٠
- Call Routing \Rightarrow Route/Hunt \Rightarrow Hunt Pilot \Rightarrow 3013 \Rightarrow Route call to this destination \Rightarrow 2000; Call Routing \Rightarrow Route/Hunt \Rightarrow Hunt Pilot \Rightarrow 3014 \Rightarrow Route call to this destination \Rightarrow 92102225400; ٠
- RPC is used to remotely control IP Phones with DN: 1000, 2000, 2102225400; •

Test Procedure	Expected Results						
 7101 stays off-hook to make it unavailable 7100 dials 3010→8000 answers→8000 on-hook after 60s 7100 dials 3012→1000 answers→1000 on-hook after 60s 7100 dials 3013→2000 answers→7100 on-hook after 60s 7100 dials 3014→210225400 answers 2102225400 goes on-hook after 60s 7101 goes on-hook 8. Retrieve CDR from CUCM 9. Check the Calling, Called, Duration, Origination & Termination Cause Codes 	 HG member-7101 is ur Hunt Group has no me Call route to hunt group Call establish between Call terminate normally Call route to hunt group Call establish between Call establish between Call routed to hunt group Call establish between Call terminated normal Call establish between 	embers ip alten 7100 y ip alten 7100 illy oup alten 7100 illy oup alten 7100 illy illy illy	rnate de & 8000 rnate de & 8000 rnate de & 1000 ernate d & 2000 ernate d & 2000 ernate d & 2102	estinatic) with 2- estinatic) with 2- destinat) with 2- destinat	way au n 1000 way au ion 2000 way au ion 2102	dio) dio 2225400	
Test Results: Comments		Ρ	F	N/A	N/S	N/T	В
		Χ					

Test Case #	EP-31	Category	Ils on DUT(s) when maximum queue length exceeded GCCP:1000; SIP:2000; N:5200; SIP DN:6200; 00), Queuing flag enabled, max. waiting timer=60 secs, Route ones with DN: 1000, 2000, 2102225400; Expected Results • Call route to hunt group membe • Call route to hunt group membe • Call route to hunt group membe • Call establish between 7100 & • 7101 & 8000 waiting in queue • Maximum number of callers in o • Maximum wait timer exceeded • Both calls (8000 & 7101) were • 3 CDR(s) retrieved • Selected fields in CDR(s) match					C_Stand	dard	N
Objective	Verify "Hunt Gro	oup" calls on E	OUT(s) when maxim	um queue length exceede	ed					
Pre-Test Condit	ons									
 Remote CUC PSTN: 210-22 Hunt Group P # of callers in 	M → DÙŤ:8000; S 22-5400; ilot 3015 (1 st mem i queue=1;	CCP DN:5200); SIP DN:6200; ueuing flag enabled,	C C	ecs, Rou	ute call t	o Destir	nation di	sabled;	Max.
Test Procedure				Expected Results						
2. 7101 dials 301 3. 8000 dials 444 4. 7100 goes on- 5. Retrieve CDR	-3015 hook after 200 sec from CUCM	n & Termination	 Call establish betwee 7101 & 8000 waiting Maximum number of Maximum wait timer Both calls (8000 & 7 3 CDR(s) retrieved 	en 7100 i in quer f callers exceec 101) we	0 & 2000 ue in queu led 60s ere not t) with 2- le excee erminate	eded		5	
	Te	est Results: (Comments		Р	F	N/A	N/S	N/T	В
					X					
Test Case #	EP-32	Category	Functional Test: Se	ecure Endpoint			RF	C_Stan	dard	Ν
Objective	Verify "Authention	cated" call be	tween DUT(s), SCC	P, SIP and PSTN endpoir	nts					

Pre-Test Conditions	
 1001: Device Security Profile==>7975_SCCP_Auther 2001: Device Security Profile + 8945_SIP_Authentica RPC is used to remotely control IP Phones with DN: 1000,1001 	Profile → 3rd_Party_SIP_Advanced_Secure_Authenticated nticated tted , 2000, 2001, 2102225400;
Test Procedure	Expected Results
 7100 dials 7101→7101 answers→7100 on-hook after 30s 7100 dials 234-8000→8000 answers→8000 on-hook after 30s 7100 dials 1001→1001 answers→1001 on-hook after 30s 2001 dials 7101→7101 answers→7101 on-hook after 30s 1000 dials 7100→7100 answers→7100 on-hook after 30s 7101 dials 2000→2000 answers→2000 on-hook after 30s 7100 dials 2102225400→2102225400 answers 7100 goes on-hook after 30s Retrieve CDR from CUCM Check the Calling, Called, Duration, Secured Status, Origination & termination Cause Codes 	 Authenticated call between 7100 & 7101 with 2-way audio Call terminate normally Non-Secure call between 7100 & 8000 with 2-way audio Call terminate normally Authenticated call between 7100 & 1001 with 2-way audio Call terminate normally Authenticated call between 2001 & 7101 with 2-way audio Call terminate normally Authenticated call between 2001 & 7101 with 2-way audio Call terminate normally Non-Secure call between 7100 & 1000 with 2-way audio Call terminate normally Non-Secure call between 2000 & 7101 with 2-way audio Call terminate normally Non-Secure call between 2102225400 & 7101 Call terminate normally Y CDR(s) retrieved Selected fields in CDR (s) match calls Note: callSecuredstatus in CDR = 1 callSecuredstatus in CDR = 0 for unsecured calls
Test Results: Comments	P F N/A N/S N/T B
	X

Test Case #	EP-33 Category Functional Test: Join Across Line								RF	C_Stan	dard	Ν
Objective		ross Lines" ca	Ills between DUT(s)), SC0	CP, SIP and PS1	TN end	dpoints	3				
 Remote CUC PSTN: 21022 Enable JAL for Shared Line 1 	DUT(s):7100 & 3 M →DUT:8000; 25400; or all phones :Devi 1901 assigned to 7	ice → Phone → 7101, 1000, 8	1000; SIP:2000; DN→Join across L 2000: Device→Ph vith DN: 1000, 2000	one-3 , 210	DN→2 nd line→		901					
2. 8000 dials 444 3. 7101 selects lin 4. 8000 goes on-f 5. 7100 dials 190 6. 7101 dials 100 7.1000 selects lin 8. 7101 goes on-f 9. 7100 dials 190 10. 8000 dials 190 10. 8000 dials 44 11. 2000 selects l 12. 7100 goes on 13. 2102225400 dials 44 15. 8000 dials 44 16. 7101 selects l 17. 2102225400 dials 44 18. Retrieve CDR	1→1901 answers 0→1000 answers e 1901 and hits so hook after 120s 1→1901 answers 4-2000→2000 and hits -hook after 120s dials 9410444190 s (Shared line on 7 4-7101→7101 and hits goes on-hook after from CUCM lling, Called, Dura	wers oftkey "Join" (Shared Line oftkey "Join" (Shared Line swers softkey "Join 1 7101) swers softkey "Join r 120s	e on 1000) e on 2000) "		Call establish b 1901 is On-Hole Call establish b 7100 & 8000 jo Call terminate r Call establish b 1901 is On-Hole Call establish b 7100 & 7101 jo Call terminate r Call establish b 1901 is placed Call establish b 7100 & 8000 jo Call terminate r Call establish b 1901 is placed Call establish b 2102225400 & Call terminate r CDR(s)s retriev Selected fields	d (MO betwee ined ir hormal betwee ined ir hormal betwee on-hol on-hol o	9H) en 710 n a cal lly en 710 h a cal lly en 710 d (MC en 710 d (MC en 710 d (MC en 210 ld (MC in 8000 join in lly	1 & 8000 I, 7101 d 0 & 190 I & 100 I, 1000 d 0 & 190 O & 190 O & 190 O & 2000 COO drc 2225400 OH 0 & 710 a call. 7	0 with 2 drops fro 1 with 2 drops fro 1 with 2 drops from 0 with 2 0 with 2 0 with 2 0 by from 0 & 190 1 with 2 1 with 2 1 00 dro	-way au om call -way au om call -way au -way au call 1 with 2- -way au	dio dio dio dio dio -way au dio	dio
		est Results:					Р	F	N/A	N/S	N/T	В
	Join s	oftkey is n	ot supported							X		

Test Case #	EP-34 Category Functional Test: Hotline RFC_Standard N											
Objective Pre-Test Conditi	Verify "Hotline" calls between DUT(s), SCCP, SIP and PSTN endpoints										
 Remote CUCI PSTN: 210222 Hotline Config Call Call Call Call Assign 7100, Assign 7101 a 	5400; uration to dial out 234-8000: Routing→ Class of Control → Partitic Routing→ Class of Control → Calling Routing→ Translation Pattern→ Add I ↓ Translation Pattern→ blank ↓ Partition→pt_hotline_2348000 ↓ CSS→css_hotline_2348000 ↓ Called Party Transform Mask→ 000, 2000 a CSS for Intercluster Hot	on→Add New→pt_hotline_2348000 g Search Space→Add New→css_hotline_2 New: 2348000 tline: Device→Phone→DN→CSS→css_hot hone → DN →CSS→ css_hotline_210222	otline_2348000									
Procedure		Expected Results										
2. 7100 goes on-h 3. 1000 goes off-h 4. 1000 goes off-h 5. 2000 goes off-h 6. 8000 goes on-h 7. 7101 goes off-h 8. 7101 goes on-h 9. Retrieve CDR f 10. Check the Cal Cause Codes Note: Upon completion 2000→None CUCM Administra	bok→8000 rings & answers bok after 30s bok→8000 rings & answers bok after 30s bok→2102225400 rings & answers bok after 30 bom CUCM ing, Called, Duration, Origination & 1 of the test, change CSS for 7100, 710	 Call terminate normally 8000 ringing Call establish between 7 Call terminate normally 8000 ringing Call establish between 7 Call establish between 7 Call terminate normally 2102225400 ringing Call establish between 7 Call establish between 7 										
	Test Results: Comm	ents	P F N/A N/S N/T B									
	DUT doesn't support	post dial	X									

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Test Case #	EP-35	Category	Functional Test: G	Group	Pickup			RFC	C_Stand	lard	Ν
Objective		ickup" calls be	etween DUT(s), SC	CP, S	SIP and PSTN endpo	ints					
 Remote CUC PSTN: 21022 Group Pickup Call Re 	→DUT(s):7100 & CM →DUT:8000; 225400; 0 configured on all outing→Call Picku	7101; SCCP:1 phones; Grou p Group → Ado	000; SIP:2000; p: Sales (DN: 7100 d New → Sales (DN) & 10 :3005)00); Group: TAC (DN ;Visual Alert; Calling	l: 7101 & Calle	d party	checked	l)		
DeviceDevice	e→Phone→DN→ι e→Phone→DN→ι	update Call Pic update Call Pic	d New✦TAC (DN: skup Group to Sale skup Group to TAC ith DN: 1000,2000,	s for for 7 2102	101 & 2000;	Called	l party c	hecked)			
3. 1000 enters Si 4. 1000 goes on- 5. 8000 dials 444 6. 7101 goes off- 7. 7101 enters T/ 8. 8000 goes on- 9. 2102225400 di 10. 7100 goes of 11. 7100 enters Si 12. 2102225400 13. Retrieve CDF 14. Check the Car Cause Codesi Note: Upon completion 7101, 1000 & 20 CUCM Administr	hook, hits "Group ales Group_Pickup hook after 60s I-2000 hook, hits "Group AC Group_Pickup hook after 60s lials 4104441000 f-hook, hits "Group Sales Group_Picku goes on-hook afte R from CUCM alling, Called, Dura s	 DN:3005 Pickup" softke DN:3006 Pickup" softkup DN:3005 r 60s tion, Origination e Call Pickup 	y ey on & Termination Group for 7100,	• • • • •	7100 in alerting state Call establish betwee Call terminate norma 2000 in alerting state Call establish betwee Call terminate norma 1000 in alerting state Call establish betwee Call terminate norma 6 CDR(s) retrieved Selected fields in CE	en 8000 ally en 8000 ally en 2102 ally	0 & 710 ⁻ 2225400	1 with 2-	way aud	lio	dio
	Te	est Results: C	omments			Р	F	N/A	N/S	N/T	В
Gr	oup Pickup so	oftkey is no	ot implemente	d in	DUT				X		

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Test Case #	EP-36	Category	Functional Test: Do	o Not Disturb (DND)			RF	C_Stan	dard	Y
Objective	Verify "Do Not E	Disturb Ringer	Off " feature is supp	orted for DUT(s) endpoir	nts		•			
Pre-Test Conditions Local CUCM → DUT(s):7100 & 7101; SCCP:1000; SIP:2000; Remote CUCM → DUT:8000; PSTN: 2102225400; Enable DND on DN:7101 Service Parameters→BLF Status Depicts DND → True Device→ Device Settings > Softkey Template, add Do Not Disturb to a softkey template (Alerting and Connected state) Device→ Device Settings > Softkey Template, add Do Not Disturb to a softkey template (Alerting and Connected state) Device→ Phone→ DN:7101: Do Not Disturb→ checked DND Option: Ringer Off DND Incoming Call Alert: Flash Only RPC is used to remotely control IP Phones with DN: 1000,2000, 2102225400;										
Test ProcedureExpected Results1. 7100 dials 7101→7100 goes on-hook after 5 secs. 7101 flashes to in2. 8000 dials 444-7101→8000 goes on-hook after 5 secs. 7101 flashes to in3. 1000 dials 7101→1000 goes on-hook after 5 secs. 7101 is given and4. 2000 dials 7101→2000 goes on-hook after 5 secs. 7101 is given and5. 2102225400 dials 94104447101→2102225400 goes on-hook. Call terminated by6. Retrieve CDR from CUCM. Check the Calling, Called, Duration, Origination & Termination7. Check the Calling, Called, Duration, Origination & Termination						ack tone inswer c arty	all			
	Те	est Results: (Comments		Р	F	N/A	N/S	N/T	В
DUT is 3	DUT is 3 rd party device and doesn't support specific softkey template configurations.							X		

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Test Case #	EP-37	Category	Functional Test:	Do Not	Disturb (DND)			RF	C_Stan	dard	Ν
Objective Pre-Test Condi		Disturb Call R	eject " feature is su	upporte	ed on DUT(s) endpoi	nts					•
Remote CU	I→DUT(s):7100 & CM →DUT:8000;	7101; SCCP:	1000; SIP:2000;								
≻ Devic <mark>≻ Devic</mark>	on:7100 e→Phone→DN:71 e→Device Setting e→Phone→DN:71 b Do Not Distur b DND Option: 0 b DND Incoming	s > Softkey Te I01: b → checked Call Reject g Call Alert: Be		ot Distu	urb to a softkey temp	late *Al	erting a	nd Conr	nected s	tate	
Test Procedure				Ex	pected Results						
2. 7101 dials 710 3. 7101 goes on 4. 8000 dials 44 5. 8000 goes on 6. 1000 dials 710 7. 1000 goes on 8. 2000 dials 710 9. 2000 goes on 10. 2102225400 11. 1001 goes on 12. Retrieve CD	4-7100→7100 hits -hook 00→7100 hits "DN -hook 00→7100 hits "DN -hook dials 7100→7100 n-hook after 200s R from CUCM alling, Called, Dura	ID" softkey in ("DND" in con ID" softkey in (ID" softkey in () hits "DND" in	nected state connected state connected state	• • • • • • • • • • • • • • • • • • • •	Call establish betwe 7100 hears ringback CUCM rejects call w 7100 hears a beep f 5 calls terminate wit 1 st call terminate not 6 CDR(s) retrieved Selected fields in CI	c for all vith Rea for all th h User_ rmally	incomin son:Use e reject Busy	g calls in er Busy ed calls	,		ate
		est Results:				Р	F	N/A	N/S	N/T	B
DUT is	3 ^{ra} party devic	e and doe	sn't support s	pecif	ic softkey				X		

		1		
C	S	C	0	

Test Case #	EP-38	<u> </u>	Functional Test: iE					RF	C_Stan	dard	Ν
Objective Pre-Test Condi	,	call between	DUT(s), SCCP, SIF	P and	PSTN endpoints						
 Remote CUC PSTN: 2102: VM enabled Enable iDive > Servic > Device > Device 	on all phones; VM rt on DN:7101 e Parameter→Leg e→Device Settings e→Phone→DN:71	Pilot # 7000; acy Immediat → Softkey Te 01→Softkey	Device→Phone→D	User _User	(Add iDivert to terr		onnecte	ed, On H	old & R	ing state	es)
Test Procedure	•			Exp	pected Results						
27100 leaves a 3. 8000 dials 444 4. 8000 goes on 5. 1000 dials 710 6. 1000 leaves a 7. 2000 dials 710 8. 2000 leaves a 9. 2102225400 c 10. 7101 hits "iD 11. 2102225400 12. Retrieve CDI	alling, Called, Dura	• • • • • •	7100 directed to 7 8000 directed to 7 1000 directed to 7 2000 directed to 7 2102225400 direct MWI "On" when vo 7101 able to retrie MWI "Off" only afte All calls terminate 5 CDR(s) retrieved Selected fields in 0	01's voice 101's voi 101's voi ed to 710 icemail p ye all 4 v or 4 th voi normally	email bo cemail b cemail b 01's voi oresent voicema cemail v	box box box cemail b for 7101 ils vas retri					
	Те	est Results: (Comments			Р	F	N/A	N/S	N/T	B
DUT is cor			evice and ergo configurations.		sn't support				X		

Test Case #	EP-39	Category	Functional Test:	CFA & iDivert				RF	C_Stan	dard	Ν
Objective	Verify "CFA" &	"iDivert " call	between DUT(s),	SCCP, SIP and	PSTN endp	ooints					
 Remote CUC PSTN: 21022 VM enabled Enable iDive > Legac > Device > Device 	→DUT(s):7100 & 7 CM →DUT:8000;	<mark>venabled on</mark> Service Para Softkey Te 00→Softkey	7101→7100; VM meter Set to True mplate→SP_EP_ Femplate→SIP_E	Jser (Add iDive 2_User	rt to templat	te - Cor	inected,	. On Hol	ld & Rin	g states	;)
2. 8000 leaves v 3. 1000 dials 710 4. 7100 hits "iDiv 5.1000 leaves a 6. 2000 dials 710 7. 7100 hits "iDiv 8. 2000 leaves a 9. 2102225400 c 10. 2102225400 c 11. Retrieve CDI	47101→7100 hits " oicemail and goes 01→7100 answers voicemail and goes 01→7100 answers voicemail and goes voicemail and goes voicemail and goes lials 94104447101 goes on-hook with R from CUCM alling, Called, Dura	on-hook connected st s on-hook connected st s on-hook →7100 answe out leaving ve	ate (after 10s) ate (after 20s) ers picemail	 8000 diri Call term Call esta 1000 diri Call term Call esta 2000 diri Call esta 2000 diri Call term Call esta 2102225 Call term MWI "Or 7100 wa MWI "Of 5 CDR(s 	esults I forward to ected to 710 inate norma- blish betwe ected to 710 inate norma- blish betwe ected to 710 inate norma- blish betwe 400 directe inate norma- " when a vo s able to ref " only after) retrieved I fields in CI	00's void ally en 1000 00's void ally en 2000 00's void ally en 2102 d to 710 ally bicemai trieve al 3 rd mes	cemail b 0 & 710 cemail b 0 & 710 cemail b 2225400 00's void 1 is left c II 3 void sage w	oox 0 with 2 0 ox after 0 with 2 0 & 7100 cemail b on 7100 emails as retrie	- 10s -way au - 20s 0 with 2- box after 's mailbo	dio ∙way au 20s	dio
		est Results: (Р	F	N/A	N/S	N/T	В
DUT is cor	nfigured as a 3 softkey		evice and erge configurations		pport				X		

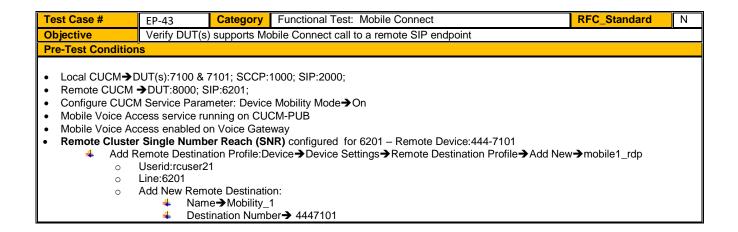
Test Case #	EP-40	Category	Functional Test: N	lalicious Call			RF	RFC_Standard N				
Objective	Verify DUT(s) is	s able to mark	a call malicious									
Pre-Test Condi	tions											
Local CUCM→DUT(s):7100 & 7101; SCCP:1000; SIP:2000; Remote CUCM → DUT:8000; PSTN: 2102225400; Update softkey template on device→SIP_EP_User (Includes MCID softkey) RPC is used to remotely control IP Phones with DN: 1000, 2000; Test Procedure Expected Results . 3 calls establish with 2-way audio on 7100												
2. 7101 goes on 3. 8000 dials 444 4. 8000 goes on 5. 1000 dials 710 6. 7100 goes on 7. 2000 dials 710 8. 2000 goes on 9. 2102225400 c 10. 7101 hits "M 11. 7101 goes on 12. Retrieve CD	-hook after 30s 4-7100→7100 ans- hook after 30s 20→7100 answer -hook after 30s 20→7100 answer -hook after 30s dials 9410444710 CID" softkey n-hook after 30s R from CUCM alling, Called, Dur	 3 calls establish with 2 calls establish with Called parties marke Call terminate norma 5 CDR(s) retrieved Selected fields in CE 	i 2-way e as ma ally	audio o licious								
	Test Results: Comments					F	N/A	N/S	N/T	В		
	MCID softkey not implemented in DUT.						Х					

Test Case #	EP-41	Category	Functional Test: Mobile Connect	RFC_Standard	Ν
Objective	Verify DUT(s)) supports Mo	bile Connect call to a remote DUT endpoint		
Pre-Test Condition	ns Is				
 Mobile Voice Ac Mobile Voice Ac Local Cluster S Add F 	→DUT:8000; 400; M Service Parar cess service ru cess enabled o Single Number Remote Destina Userid:dutuser Line:7101 Add New Remo ↓ Nam ↓ Dest ↓ Chec e Settings→So Management→ e→Phone→71 ote Device: Devi	meter: Device nning on CUG n Voice Gate Reach (SNR tion Profile:Do 02 ote Destination ination Numb ck "Enable Ur ftkey Templar End User→d 01→Owner u ice→Phone→	Mobility Mode→On CM-PUB way) configured for 7101→Remote Device:234-8000 evice→Device Settings→Remote Destination Pro	ofile→Add New→mobility_1_rdp "Enable Move to Mobile" look & Connected)	

Test Procedure	Expected Resu	lts					
 7100 dials 7101 → 7101 answers → 7101 hits "Mobility" softkey after 30s Select the option to send call to mobile device 8000 answers 7101 goes on-hook after 30s 8000 sends DTMF *74 after 30s for call hanoff 7101 answers 8000 goes on-hook 7101 goes on-hook after 30s Repeat steps 1-7, replace 7100 with SCCP:1000 Repeat steps 1-7, replace 7100 with SIP:2000 Repeat steps 1-7, replace 7100 with PSTN:2102225400 Retrieve CDR from CUCM Check the Calling, Called, Duration, Origination & Termination Cause Codes 	 Both 7101(lo Call establish Call is transfi Call establish 8000 handof Call restored Final Call restored Final Call ters Results for S above 6 CDR(s) ret Selected field 	n betwe erred to n betwe f call ba l betwee minate sCCP, S	en 7100 mobile en 7100 ick to 7 en 7100 normall SIP & PS	0 & 710 device 0 & 8000 101 & 7101 y STN call	I with 2- 8000) with 2- s are si	⊷way auo	
Test Results: Comments		Р	F	N/A	N/S	N/T	В
DUT doesn't support Mobility softkey.				X			

Test Case #	EP-42	Category	Functional Test: Mobile Connect	RFC_Standard	N
Objective	Verify DUT(s)	supports Mo	bile Connect call to a remote PSTN endpoint		
Pre-Test Condition	S				
 Mobile Voice Act Mobile Voice Act Local Cluster S Add R o o o o o 	 → DÚT:8000; 401; 4 Service Param cess service run cess enabled on ingle Number R emote Destinati Userid:dutuser0 Line:7100 Add New Remote 4 Name 4 Destir 4 Checket Settings→Soft 	eter: Device ning on CUO Voice Gate Reach (SNR on Profile:De 1 te Destinatio → Mobility_2 nation Numb c "Enable Ur key Templat	Mobility Mode→On CM-PUB way) configured for 7100→ Remote Device:921022254 evice→Device Settings→Remote Destination Profile on:	e→Add New→mobile2_rdp nable Move to Mobile" k & Connected)	

 Device > Phone > 7100 > Owner userid > dutuser01 Remote Device: Device > Phone > 2102225401 > Line > RPC is used to remotely control IP Phones with DN: 1000,2000, 21 	02225401;	on → 60					
 Test Procedure 1. 7101 dials 7100 → 7100 answers 2. 7100 hits "Mobility" softkey after 30s and selects to send call to mobile 3. 2102225401 answers 4. 7100 goes on-hook 5.2102225401 sends DTMF *74 after 30s (call handoff) 6.7100 answers 7.2102225401 goes on-hook 8.7101 goes on-hook after 30s 9. Repeat steps 1-8 and replace the Calling DN:1000 10. Repeat steps 1-8 and replace Calling DN:2000 11. Retrieve CDR from CUCM 12. Check the Calling, Called, Duration, Origination & Termination Cause Codes and Comments 	Expected Results Both 7101 & 7100 Call establish bet Call transfer to m Call establish bet 2102225401 han Call restored betv Final Call termina Results for SCCF 6 CDR(s) retrieve Selected fields in 	ween 7 obile de ween 7 doff cal ween 7 ated nou P and S ed	100 & 7 evice 21 100 & 2 I back to 100 & 7 mally IP call a	022254 102225 7100 101 re simila	01 (PST 401 with	ΓN) n 2-way	audio
Test Results: Comments	<u></u>	Р	F	N/A	N/S	N/T	В
DUT doesn't support Mobility softkey				Х			



 Device Settings Softkey Template SIP_EP_User A User Management End User rouser21 Check "Ena Device Phone 6201 Owner userid rouser21 Remote Device: Device Phone 7101 Line No An RPC is used to remotely control IP Phones with DN: 1000,2000, 6 	ble Mobility" &"Enable № swer Ring Duration→60	lobile V					
 7100 dials 2346201 → 7101 answers 7101 sends DTMF *74" after 30s 6201 answers 7101 goes on-hook 6201 hits "Mobility" softkey after 30s 7101 answers 6201 goes on-hook 7101 goes on-hook 7101 goes on-hook 7100 goes on-hook 87100 goes on-hook after 60s 9. Repeat steps 1-8 and replace the Calling DN:1000 10. Repeat steps 1-8 and replace the Calling DN:2000 11. Retrieve CDR from CUCM 12. Check the Calling, Called, Duration, Origination & Termination Cause Codes 	 Both 6201 & 710 Call establish bei Call is transferred Call establish bei 2000 handoff cal Call restored bet Final Call termina Results for SCCF 6 CDR(s) retrieve Selected fields in 	ween 7 d to dev ween 7 back to ween 7 ated nor ated nor and S ed	100 & 7 rice 620 100 & 6 5 7101 100 & 7 rmally IP call a	1 5201 wit 101 are simil	h 2-way	audio	
Test Results: Comments		Р	F	N/A	N/S	N/T	В
DUT doesn't support Mobility softke	y			X			

Test Case #	EP-44	Category	Functional Test: Mobile Voice Access (MVA)	RFC_Standard	Ν
Objective	Verify Inbou	und Mobile Vo	ice Access (MVA) calls from DUT(s) endpoints		-
Pre-Test Condi	tions				
Remote CU CUCM Serv CUCM Serv Fr Fr Fr Fr M Fr M	CM →DUT:8000 ice Parameter: nable Enterprise nable Mobile Voic obile Voice Acce); Feature Access ce Access→Tr ess Number→8) with Remote [ue 005555 Destination → Partial Match		

•

- Mobile Voice Access service running on CUCM-PUB ٠
- Mobile Voice Access enabled on Voice Gateway
- MVA # provisioned in CUCM: Media Resources→Mobile Voice Access→Add New→8005555 ٠
 - Local Cluster Single Number Reach (SNR) configured for 7101→Remote Device:234-8000:
 - Add Remote Destination Profile: Device > Device Settings > Remote Destination Profile > Add New > mobile1_rdp 4 Userid:dutuser02 0
 - Line:7101 0
 - 0 Add New Remote Destination:
 - Name→Mobility_1 4
 - 4 Destination Number→ 2348000

 - Check "Enable Unified Mobility", "Enable Single Number Reach" & "Enable Move to Mobile"
 Device Settings→Softkey Template→SIP_EP_User→Add "Mobility" softkey (On-Hook & Connected) 4
 - User Management→End User→dutuser02→Check "Enable Mobility" &"Enable Mobile Voice Access" 4
 - Device→Phone→7101→Owner userid→dutuser02 4
 - 4 Remote Device: Device→Phone→8000→Line→No Answer Ring Duration→60
- RPC is used to remotely control IP Phones with DN: 1000,2000;

Test Procedure	Expected Results						
 1.8000 (Mobil device) dials MVA #8005555 Mobil User enters 3222348000# or 2348000# 3.Mobil User enters PIN:123456# & DN:7100# 4.7100 answers 5.8000 sends DTMF *74 to handoff session after 30s 7100 goes on-hook after 60s 7. Retrieve CDR from CUCM 8. Check the Calling, Called, Duration, Origination & Termination Cause Codes 	 Mobile user prompt Mobile user prompt 7100 is ringing Call establish betwee Call hand-off to 71 Call terminate norm 1 CDR retrieved Selected fields in C 	oted fo veen 8 101 mally	or PIN 8	& Destir 7100 wit	nation D	N	
Test Results: Comments		Р	F	N/A	N/S	N/T	В
DUT doesn't support Mobility softkey					X		

Test Case #	EP-45	Category	Functional Test: Enterprise Feature Access (EFA)	RFC_Standard	Ν
Objective	Verify Inboun	d Enterprise	Feature Access (EFA) - Hold/Resume call from a DUT endpoin	t	
Pre-Test Condition	ons				
	1 → DÙŤ:8000;	,	:1000; SIP:2000;		
🔸 Enal	ble Enterprise F	eature Acces	s→True		

 Enable Mobile Voice Access>True Mobile Voice Access service running on CUCM-Publisher Mobile Voice Access enabled on Voice Gateway EFA # provisioned in CUCM: Call Routing>Mobility>Enterprise Fe Local Cluster Single Number Reach (SNR) configured for 7101- Add Remote Destination Profile:Device>Device Settings Userid:dutuser02 Line:7101 Add New Remote Destination: Name>Mobility_1 Destination Number> 2348000 4 Check "Enable Unified Mobility", "Enable Device Settings>Softkey Template>SIP_EP_User>Acc User Management>End User>dutuser02 Remote Device: Device>Phone>8000>Line>No Ans RPC is used to remotely control IP Phones with DN: 1000,2000; 	Remote Device:234- Remote Destination Single Number Reac Id "Mobility" softkey (C ble Mobility" &"Enable	8000: n Profile h" & "Er Dn-Hool e Mobile	e → Add nable M k & Con	New→r love to M inected)	nobile1 _. Nobile"	_rdp	
Test Procedure	Expected Results						
 8000 (Mobil device) dials EFA #9005555 Mobil user prompted to enter remote device DN 2348000# Mobil User enters PIN:123456#, Option 1 & DN:7100# 7100 answers call 8000 sends DTMF *81 to place call on-hold after 30s 8000 sends DTMF *83 to resume call after 30s 8000 goes on-hook after 120s Retrieve CDR from CUCM Check the Calling, Called, Duration, Origination & Termination Cause Codes 	 Mobile user pron Mobile user pron Selects option 1 7100 is ringing Call establish be 7100 is On-Hold Call resumes Cal terminate no 1 CDR retrieved Selected fields ir 	npted fo and en etween 8 ormally	or PIN ters Ca 8000 &	lled DN: 7100 wi	7100 th 2-wa		
Test Results: Comments		Р	F	N/A	N/S	N/T	В
DUT doesn't support Mobility softkey.					X		

9.5 Negative Tests

Test Case #	EP-46	Category	Negative Test: PUB Failure	RFC_Standard	Y
Objective	Verify a PUB	failure should	not affect stable or transient calls on DUT(s)		

Pre-Test Conditions

Test Procedure Expected Results I. 7100 dials 7101→7101 answers Call establish between 7100 & 7101 with 2- 2. 2000 dials 234-8000→8000 answers Call establish between 2000 & 8000 with 2- 3. Access CUCM-PUB server via SSH (Local Cluster) Cull establish between 2000 & 8000 with 2- 4. Enter CLI: utils system restart <cr> yes 5. 1000 dials 7101→7101 answers 2nd incoming call Stable calls not impacted by PUB restart 6. Called party goes on-hook for all 3 calls Transient calls not impacted by PUB restart 7. Repeat steps 1-2,5-6 after CUCM-PUB recovery All calls terminate normally 8. Retrieve CDR from CUCM CuCM 9. Check Calling, Called, Duration, Origination & Termination Cause Codes Stelected fields in CDR matches calls</cr>		
	-way audio -way audio rt	
Test Results: Comments P F N/A	N/S N/	/Т

Test Case #	EP-47	Category			RF	C_Stan	dard	Y			
Objective	Verify a SUE	3 failure should	not affect stable cal	ls on DUT(s)							
Pre-Test Conditio	ns										
 Local CUCM→DUT(s):7100 & 7101;SCCP:1000; SIP:2000; Remote CUCM→DUT:8000; RPC is used to remotely control IP Phones with DN: 1000,2000; Test Procedure Expected Results 1. 7100 dials 7101→7101 answers Call establish between 7100 & 7101 with 2-way audio 											
1. 7100 dials 7101- 2. 2000 dials 234-8 3. Access CUCM-S 4. Enter CLI: utils s yes 5. 1000 dials 7101 6. Called party goe 7. Repeat steps 1-2 8. Retrieve CDR fro 9. Check the Callin Cause Codes	000 → 8000 ans SUB server via S system restart s on-hook for al 2, after CUCM-S om CUCM	 Call establi Call establi CUCM-SU Stable calls Transient of Call between All stable of CUCM-SU All calls su 4 CDR(s) r Selected find 	ish betwe B is resta s not imp calls impa en 1000 calls term B is in-se ccessful etrieved	een 200 arted bacted b acted b & 7101 inate n ervice after S	00 & 800 by SUB y SUB r unsucc ormally UB failu	00 with : restart estart cessful re recov	2-way a				
	Т	est Results: C	Comments	<u>ų</u>		Р	F	N/A	N/S	N/T	В
						Х					

Test Case #	EP-48	Category	Negative Test: Phone Network Failure	RFC_Standard	Y			
Objective	Verify DUT(s) recovers from a network failure							

Pre-Test Conditions • Local CUCM→DUT(s):7100 & 7101;SCCP:1000; SIP:2000; • Remote CUCM→DUT:8000; • RPC is used to remotely control IP Phones with DN: 1000,2000	;
Test Procedure	Expected Results
 7100 dials 7101→7101 answers Unplug network EPle from device DN:7100 Restore the network EPle after 60s 2000 dials 7100→7100 answers 7100 goes on-hook after 60s Retrieve CDR from CUCM Check Calling, Called, Duration, Origination & Termination Cause Codes 	 Call establish between 7100 & 7101 with 2-way audio Network failure reported on device DN:7100 Stable call drops Device 7100 re-registers after network EPle restored Network Data: DNS, DHCP, TFTP, CUCM, VLAN, Load ID are restored on device Call establish between 2000 & 7100 with 2-way audio Call terminate normally 2 CDR(s) retrieved Selected fields in CDR(s) match calls
Test Results: Comments	P F N/A N/S N/T B
	X

Test Case #	EP-49	Category	Negative Test: F	Phone P			RF	C_Stan	dard	Y		
Objective	Verify DUT	(s) recovers from	n a power failure									4
Pre-Test Conditi	ons											
Remote CUCM	M→DÙŤ:8000;		1000; SIP:2000; rith DN: 1000,200		pected F	Posults						
1. 7100 dials 710' 2. Remove power 3. Restore power 4. 2000 dials 710' 5. 7101 goes on-h 6. Retrieve CDR f 7. Check Calling, Cause Codes		Call esta 7101 los Stable c Device Network restorec Call esta Call terr 2 CDR(s	ablish be st power :all drops 7101 re-I : Data: D I on devi ablish be ninate no s) retriev	s registers DNS, DHC ce etween 20 ormally	after pov P, TFTF 000 & 71	ver is re P, CUCN 01 with	stored 1, VLAN	I, Load I	D are			
		Test Dessilie	Comments				Р	F	N/A	N/S	N/T	В
		Test Results: 0										-

Test Case #	EP-50	Category	Negative Test: A	Abnorm	al Call Scen	arios			RF	C_Stan	dard	Y
Objective	Verify calls o	n DUT for negat	ive call scenarios			DN, Aban	doned,	RNA)				
			Pre-Te	est Con	ditions							
 Local CUCM→DUT(s):7100 & 7101;SCCP:1000; SIP:2000; Remote CUCM→DUT:8000; Invalid DN:7777 Call Waiting disabled for 7100 & 7100 Device Profile: Busy Trigger set to 1 for DN: 7100 & 7101 Voicemail disabled for 1000 & 2000; RPC is used to remotely control IP Phones with DN: 1000,2000; Test Procedure Expected Results Call establish between 7100 & 1000 with 2-way audio 												
	Test Results: Comments							F	N/A	N/S	N/T	B

9.6 Miscellaneous Tests

These tests are executed to verify specific information about the third-party products provided by partners

Test Case #	EP-51	Category	Miscellaneous T	est: Co	dec (G722 & G72	9)			RF	C_Stan	dard	Y
Objective	Verify URI calls	between DU	「(s) & SIP endpoi	ints for	In-band Codec (C	G722,	G729	9)				
 Local CUCM > DUT(s):7100 (dutuser01@abc.inc); 7101(dutuser02@abc.inc); SCCP:1000 (cuser01@abc.inc); SIP:2000;cuser20@abc.inc; Remote CUCM > DUT:8000; Go to System > Region Information > Audio Codec Preference List > Add New > G722 > Select G722 Codec Go to System > Region Information > Audio Codec Preference List > Add New > G729 > Select G729ab Codec Go to System > Region Information > Region > Add New > G722 - Region > G729 Go to System > Region Information > Region > Add New > G729 - Region > G729 Go to System > Device Pool > Add New > G722 - dp > Region > G729. Region > G729. Go to System > Device Pool > Add New > G729 - Region > G729. Region > G729. Go to System > Device Pool > Add New > G729 - Region > G729. Region > G729. Region > G729. Configure Speed Dial for 7100, 7101, 2000: Device > Phone > 7100 > Add new SD > dutuser02@abc.inc Device > Phone > 7100 > Add new SD > dutuser02@abc.inc Device > Phone > 1000 > Add new SD > dutuser01@abc.inc RPC is used to remotely control IP Phones with DN: 2000; 												
	Test Pro	ocedure		E	Expected Results	5						
Test Procedure Expected Results 1. 7100 hits Speed dial button • DUT receives both the Caller ID and URI 2. 7101 answers call • DUT receives both the Caller ID and URI 3. 7101 goes on-hook after 60s • calls establish with 2 way audio for G722 codec 4. 2000 poes on-hook after 60s • calls terminate normally 6. 2000 goes on-hook after 60s • calls terminate normally 9. 7101 hits Speed dial button • calls terminate normally 9. 7101 goes on-hook after 60s • Voice quality was good for both codec types 10. 1000 hits Speed dial button • Selected fields in CDR(s) match calls 11. 7100 goes on-hook after 60s • Selected fields in CDR(s) match calls 12. 7100 goes on-hook after 60s • Selected fields in CDR(s) match calls 13. Repeat steps 1-9 with device pool of G720-dp for 7100 & 7101 • Retrieve CDR from CUCM Server 15. Check Calling, Called, Duration, Origination & Termination Cause Codes • MA N/S N/T B												
								F	N/A	N/S	N/T	В
DUT GUI uses 'Favorites" option in place of "Speed Dial". Same X functionality.												

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Test Case #	EP-52	Category	Miscellaneous Test:	st: DUT display features RFC_Standard Y								
Objective	Verify different	packetization	period support on D	UT(s) endpoints								
			Pre-Test Co	onditions								
 Remote CUC Configure Set 	to remotely contro	Preferred G.71 IP Phones wi	1 Millisecond Packet									
	Test Pro	ocedure		Expected Results								
Test Procedure Expected Results 1. 7100 dials 7101→7101 answers - 2. 7100 goes on-hook after 60s - 3. 7100 dials 234-8000→8000 answers - 4. 8000 goes on-hook after 60s - 5. 7100 dials 1000→1000 answers - 6. 7100 goes on-hook after 60s - 7. 2000 dials 7100→7100 answers - 8. 7100 goes on-hook after 60s - 7. 2000 dials 7100→7100 answers - 8. 7100 goes on-hook after 60s - 9. Repeat steps 1-8 with Packet Size=20 - 10. Repeat steps 1-8 with Packet Size=30 - 11. Retrieve CDR from CUCM Server - 12. Check Calling, Called, Duration, Origination & Termination Cause Codes -												
	Test Results: Comments						N/A	N/S	N/T	В		
	DUT only supports ptime-20ms								-	D		

Test Case #	EP-53	Category	Miscellaneous Test: D	OUT Screen Features			RF	C_Stan	dard	Y
Objective	Verify the featur	res displayed	on the screen of DUT							
			Pre-Test Co	nditions						
Local CUCM -	Local CUCM→ DUT (s):7100 & 7101;									
	Test Pro	ocedure		Expected Results						
Check DUT:7100 Missed Ca Placed Ca Received Date & Tir Clear Call Redial or I Softkeys f Multiple lir Edit Called	Able to access all display	these f	eatures	from the	e DUT's	; phone				
	Te	est Results: C	Comments		Р	F	N/A	N/S	N/T	В
	DUT does	rt multiple lines.		X						

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Test Case #	EP-54	Category	Miscellaneous Te	Test: Long Duration Calls RFC_Standard Y									
Objective	Verify long dura	tion calls betw	veen DUT(s), SCC	P, SIP and PSTN endpoint	S		•						
	Pre-Test Conditions												
Remote CUCPSTN DN: 21	,	·	000; SIP:2000; ith DN: 1000, 2000	0, 2102225400;									
Test Procedure Expected Results													
Test Procedure Expected Results 1. 7100 dials 7101 → 7101 answers (Duration: 1 Hr.) 2. 2000 dials 234-8000 → 8000 answers (Duration: 1 Hr) 3. Repeat step 1 by replacing Called DN:92102225400 • Call establish between 7100 & 7101 with 2-way audio 2. Repeat step 2 by replacing the Calling DN: 1000 5. Retrieve CDR from CUCM • Call establish between 1000 & 8000 with 2-way audio 6. Check Calling, Called, Duration, Origination & Termination Cause Codes • CDR(s) retrieved													
	Test Results: Comments						N/A	N/S	N/T	В			
					X								

Test Case #	e # EP-55 Category Miscellaneous Test: Cisco Phone Models RFC_Standard									
Objective Verify calls and mid-call features between DUT(s) and various Cisco IP Phone Models										
Pre-Test Conditions										
Remote CUCCisco PhoneFor phone model	→DUT(s):7100 & M → DUT:8000;; Models: 6961,880 odels not supported to remotely control	61, 8945, 792 ed by RPC, Au								

Test Procedure	Expected Results
 7100 dials 1100→ 1100 answers→7100 on-hook after 120s 1100 dials 7100→7100 answers→1100 on-hook after 120s 7101 dials 1100 → 1100 answers→7101 hits "Hold" after 20s 7101 hits "Resume" after 20s→1100 on-hook after 120s 1100 dials 234-8000→8000 answers→8000 on-hook after 90s 7100 dials 1100→1100 answers→81100 hits "Transfer" after 20s 1100 dials 7101→1100 hits "Transfer" after 20s 1100 dials 7101→1100 hits "Transfer→ 1100 on-hook 7100 goes on-hook after 120s 1100 dials 7100→7100 answers→7100 hits "Transfer" after 20s 1100 dials 7100→7100 answers→7100 hits "Transfer" after 20s 7100 dials 234-8000→8000 answers 7100 dials 234-8000→8000 answers 7100 dials 234-8000→8000 answers 7100 dials 234-8000→8000 answers 7100 dials 7101→7101 answers 7101 hits "Conference" after 30s→7101 dials 234-8000 8000 answers→7101 hits "Conference" after 30s 7101 goes on-hook after 120s 1100 and 8000 goes on-hook after 200s Repeat steps 1-17 by replacing DN:1100 with DN(s) of other Cisco phone models Retrieve CDR from CUCM Retrieve CDR from CUCM Check Calling, Called, Duration, Origination & Termination Cause Codes 	 Intra-cluster calls establish between DUT & Cisco IP Phone Inter-cluster calls establish between DUT & Cisco IP Phone Call Hold/Resume between DUT & Cisco IP Phone Blind Transfer between DUT & Cisco IP Phone Consult Transfer between DUT & Cisco IP Phone Conference Call between DUT & Cisco IP Phone CDR(s) retrieved for all the calls Selected fields in CDR(s) match calls Note: Any Cisco IP Phone models not supported in RPC will have Auto Answer Turned On to test basic call functions only.
Test Results: Comments	P F N/A N/S N/T B
DUT doesn't support conference.	X
Test Results: Comments	P F N/A N/S N/T B

Test Case #	EP-56	Category	Functional Test: Multi	ple Lines			RF	C_Stan	dard	Y
Objective	Verify DUT is	able to hand	le calls and mid-call fea	atures on multiple line	s					
Pre-Test Condition	S									
 Remote CUCM RPC is used to r Assumption: DU 	Local CUCM→DUT(s):7100 & 7101; SCCP:1000; SIP:2000; Remote CUCM →DUT:8000; SIP:6200; SCCP:5200; RPC is used to remotely control IP Phones with DN: 1000,2000; Assumption: DUT is Advanced 3 rd Party SIP Endpoint with multiple lines									
Test Procedure	Expected Results									
 Provision all the li Device → Phone → Initiate calls on all Calling & Called p duration Initiate intra-cluste & PSTN endpoint Calling & Called p Duration. Initiate calls and p (Hold/Resume, Tr Retrieve CDR fror Check the Calling Cause Codes 	DN→Line (DI the lines betwee arties goes on- er & inter-cluster arties goes on- perform mid-cal ansfer, Conferen n CUCM , Called, Durati	N Range: 712 een 7100 & 7 -hook alternat er calls on all l -hook alternat I features bet ence, CFNA, ion, Originatic	101 tively at random lines to SIP, SCCP tively at random ween these lines CFB) on & Termination	 All calls establis Caller ID preser Mid-call feature: All calls release CDR (s) retrieve Selected fields in 	nted for a s works normall ed	all calls as desig y	gned	d audio	quality	
	Те	est Results:	Comments		Р	F	N/A	N/S	N/T	В
	DUT doesn't support multiple lines X									

9.7 Basic call features using Expressway

Test Case #	EP-57	Category	Basic call features using	g Expressway			RF	C_Stan	dard	
Objective	Verify DUT is	able to hand	le basic inbound call from	external endpoint via	a Expre	essway				
Pre-Test Condition	ons									
0	ed as internal us ient registered a		dpoint via Expressway-E							
Test Procedure				Expected Results						
 Initiate call from Answer the call Disconnect the of 	in DUT			 DUT starts ringin Verify audio conr Verify call is disc 	nected					
	Т	est Results:	Comments		Р	F	N/A	N/S	N/T	В
					X					

Test Case #	EP-58	Category	Basic call features usir	ng Expressway			RF	C_Stand	dard	
Objective	Verify DUT is	able to hand	le basic inbound call from	m external endpoint vi	a Expre	essway				
Pre-Test Condition	is									
			dpoint via Expressway-E							
Test Procedure				Expected Results						
 Initiate call from e Answer the call ir Disconnect the ca 	DUT .			 DUT starts ringir Verify audio coni Verify call is disc 	nected					
	Te	est Results:	Comments		Р	F	N/A	N/S	N/T	В
					X					
Test Case #		Cotogory	Pagio coll footures usin				DE	C Stand	lard	
	EP-59	Category	Basic call features usir	, ,	_		RFU	-stand	laru	
Objective		able to place	a basic outbound call to	o external endpoint via	Expres	ssway				
Pre-Test Condition	S									

DUT is registered as internal user on CUCM Cisco Phone/client registered as external endpoint via Expressway-E								
Test Procedure Expected Results								
 Initiate call from DUT to external endpoint Answer the call in external endpoint Disconnect the call from originating end 	 External endpoin Verify audio conr Verify call is disc 	nected s	success					
Test Results: Comments	2	Р	F	N/A	N/S	N/T	В	
		X						

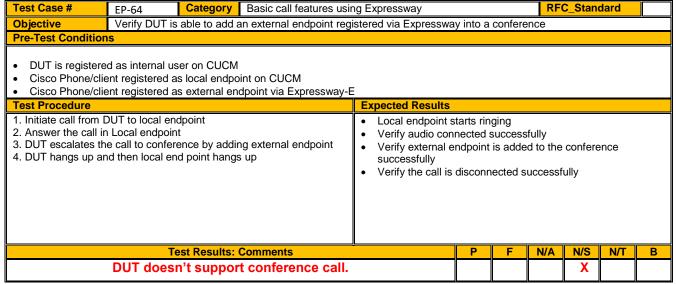
Test Case #	EP-60	Category	Basic call features usir	ng Expressway			RFO	C_Stanc	lard	
Objective	Verify DUT is	able to place	e a basic outbound call to	o external endpoint via	Expres	ssway				
Pre-Test Condition	IS									
			dpoint via Expressway-E	0						
Test Procedure				Expected Results						
 Initiate call from E Answer the call in Disconnect the ca 	external endpo	oint		 External endpoin Verify audio conr Verify call is disc 	nected	success				
	Te	est Results:	Comments		Р	F	N/A	N/S	N/T	В
					X					
Test Case #	EP-61	Category	Basic call features usin	ng Expressway			RF	C_Stand	dard	

Objective Verify DUT is able to place an outbound call to ext	ernal endpoint via Expressway on hold / resume							
Pre-Test Conditions								
 DUT is registered as internal user on CUCM Cisco Phone/client registered as external endpoint via Expressway-E 								
Test Procedure Expected Results								
Test ProcedureExpected Results1. Initiate call from DUT to external endpoint• External endpoint starts ringing2. Answer the call in external endpoint• External endpoint starts ringing3. Place the call on hold from DUT• Verify audio connected successfully4. Resume the call on DUT• Verify the call is on hold state successfully5. Disconnect the call from originating end• Verify call is disconnected successfully								
Test Results: Comments	P F N/A N/S N/T B							

Test Case #	EP-62	Category	Basic call features usin	ng Ex	kpressway			RF	C_Stan	dard	
Objective	Verify DUT is	able to place	an inbound call from ex	tern	al endpoint via Ex	pressw	ay on h	old / res	ume		
Pre-Test Conditio	ns										
Cisco Phone/cl	ed as internal us ient registered a		lpoint via Expressway-E	6							
Test Procedure Expected Results 1. Initiate call from external endpoint to DUT • DUT starts ringing											
 Initiate call from Answer the call or Place the call or Resume the call Disconnect the call 	in DUT hold from DUT on DUT			• • •	DUT starts ringin Verify audio com Verify the call is Verify the call is Verify call is disc	nected s on hold resume	state si d succe	uccessf ssfully	ully		
	Т	est Results: O	Comments			Р	F	N/A	N/S	N/T	В
						X					

Test Case #	EP-63	Category	Basic call features using Expressway	RFC_Standard				
Objective	Verify DUT is	able to transi	fer the call from a local phone to external phone registered v	ia Expressway				
Pre-Test Condition	S							
DUT is registered as internal user on CUCM								
Cisco Phone/client registered as local endpoint on CUCM								
Cisco Phone/clie	ent registered a	s external end	dpoint via Expressway-E					

Test Procedure	Expected Results						
 Initiate call from local endpoint to DUT Answer the call in DUT DUT calls external endpoint Answer the call in external endpoint DUT transfers the first call with local endpoint to external endpoint Disconnect the call from local endpoint 	DUT starts ringing Verify audio connected successfully Verify the first call is on hold state and external endpoir starts ringing Verify the call is connected successfully Verify transfer is successful Verify call is disconnected successfully P F N/A N/S N/T					ıt	
Test Results: Comments	-	Р	F	N/A	N/S	N/T	В
	X						
			·				



Test Case #	EP-65	Category	Basic call features using Expressway	RFC_Standard	

Objective	Verify DUT is able to forward an incoming call to e	xternal endpoint regist	ered via	a Expres	ssway			
Pre-Test Condition	S							
 Cisco Phone/clie Cisco Phone/clie 	d as internal user on CUCM ent registered as local endpoint on CUCM ent registered as external endpoint via Expressway-E all forward always to external endpoint	:						
Test Procedure		Expected Results						
Test ProcedureExpected Results1. Initiate call from local endpoint to DUT• External endpoint starts ringing2. Answer the call in external endpoint• Verify audio connected successfully between local endp and external endpoint3. Local endpoint hangs up• Verify the call is disconnected successfully					point			
	Test Results: Comments		Р	F	N/A	N/S	N/T	В
			X					

9.8 SRST Failover Cases

Test Case #	EP-66	Category	SRST Failover	Test: DUT	Registers with SF	RST		RF	C_Stan	dard	
Objective	Verify DUT is	able to regist	er to SRST whe	n CUCM c	all services fail			·			
Name: SR	DUT(s):7100; ed as internal us onfigurations se n→SRST→Add ST; IP Address: n→Device Pool•	t and pointed t New x.x.x.x; SIP N →Default→SF	letwork/IP Addre								
Test Procedure 1. Go to Cisco Unif Feature Services→ 2. Stop CallManage	ied Serviceabilit			• • • •	xpected Results Local Cisco Pho Local Cisco Pho display that in F Call services re DUT displays th server	one/clier allover I stored	nt and D Mode	UT regi	ster with	SRST,	
	Te	est Results: C	Comments	8		Р	F	N/A	N/S	N/T	В
						X					

Test Case #	EP-67	Category	SRST Failover Test: B	asic Call using SRST			RF	C_Stan	dard	
Objective	Verify DUT is	able to make	e basic local calls when v	via SRST when CUCN	A call se	ervices a	are unav	ailable		
Pre-Test Condition	S									
 SRST→DUT(s): DUT is registere Cisco Phone/clie SRST configurat SRST set with p 	d with SRST ent registered w ions set and po	rith SRST pinted towards								
Test Procedure	Expected Results									
1. 2000 dials 7100 → 2. 7100 on-hook afte 3. 7100 dials 2000 → 4. 2000 on-hook afte	er 30s ▶2000 answers			 Call established 7100 notified of 7100 answers ir Call established 2000 notified of 2000 answers ir All calls routed to 	incoming coming betwee incomin coming	ng call (t call en 7100 ng call (t call	one /dis & 2000	play) with 2-v	,	
	Te	est Results:	Comments		Р	F	N/A	N/S	N/T	В
					Х					

Test Case #	EP-68	Category	SRST Failover Test:	l		RF	C_Stan	dard		
Objective	Verify DUT is	able to make	CM call services are unavailable							
Pre-Test Condition	IS									
 SRST→DUT(s): DUT is registere SRST configurat SRST set with p 	d with SRST tions set and po	Expected Results								
Test Procedure										
 Initiate call from E DUT on-hook afte 	 Call establish be PSTN shows Ca All calls routed th Verify audio com and external end Verify the call is 	Iller ID of hrough nected	of DUT SRST success	fully be	tween Ic	,				
		Р	F	N/A	N/S	N/T	В			
					X					

Test Case #	EP-69	Category	SRST Failover T	Fest: Inl	bound Call from PST	N		RF	C_Stan	dard	
Objective	Verify DUT is	able to receiv	CUCM call services are unavailable								
Pre-Test Condition	S										
 SRST→DUT(s): DUT is registere SRST configuration SRST set with p 	d with SRST tions set and po										
Test Procedure					Expected Results						
1. Initiate call from F 2. PSTN on-hook af					 Call established All calls routed ti Call Verify audio endpoint and ex Verify the call is 	hrough connec ternal e	SRST cted suc ndpoint	cessfull	y betwe		
	Te	est Results: (Comments			Р	F	N/A	N/S	N/T	В
						X					

Test Case #	EP-70	Category	SRST Failover T	CUCM		RF	C_Stan	dard			
Objective	Verify DUT is	s able to re-reg	gister with CUCM	red							
Pre-Test Condition	is										
 SRST→DUT(s) DUT is registere SRST configura SRST set with p 	ed with SRST tions set and p										
Test Procedure			E	pected Results							
 Go to Cisco Unifi Feature Services→ Start CallManage 	•	Local Cisco Pho Call services res DUT displays tha server	tored			0		CM			
			Р	F	N/A	N/S	N/T	В			
						Х					

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10 APPENDIX A: TEST RESULT MATRIX

EP-1 X Image: Constraint of the second	Test Case #	Р	F	NA	NS	NT	В	Comments
EP-2 X		Х						
EP-3 X X X EP-4 X X X EP-5 X X X EP-6 X X X EP-7 X X X EP-8 X X X EP-9 X X X EP-10 X X X EP-11 X X X EP-12 X X X EP-13 X X X EP-16 X X X EP-17 X X X EP-18 X X X EP-19 X X X EP-11 X X X EP-12 X X X EP-13 X X X EP-14 X X X EP-15 X X X EP-18 X X X EP-20 X X X EP-23 <td< td=""><td>EP-2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	EP-2							
EP-4 X X X EP-5 X X X EP-6 X X X EP-7 X X X EP-8 X X X EP-9 X X X EP-10 X X X EP-11 X X X EP-12 X X X EP-13 X X X EP-14 X X X EP-15 X X X EP-16 X X X EP-17 X X X EP-18 X X X EP-19 X X X EP-20 X X X EP-21 X X X EP-22 X X X EP-23 X X X EP-26 X X X EP-28 X X X EP-30 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
EP-5 X X EP-6 X X EP-7 X X EP-8 X X EP-9 X X EP-10 X X EP-11 X X EP-12 X X EP-13 X X EP-14 X X EP-15 X X EP-16 X X EP-17 X X EP-18 X X EP-19 X X EP-11 X X EP-13 X X EP-14 X X EP-15 X X EP-17 X X EP-18 X X EP-20 X X EP-21 X X EP-22 X X EP-23 X X EP-26 X X EP-27 X X EP-30 X								
EP-6 X X X EP-7 X X X EP-7 X X X EP-8 X X X EP-9 X X X EP-10 X X X EP-11 X X X EP-12 X X X EP-13 X X X EP-14 X X X EP-15 X X X EP-16 X X X EP-17 X X X EP-18 X X X EP-19 X X X EP-20 X X X EP-21 X X X EP-23 X X X EP-24 X X X EP-25 X X X EP-26 X X X EP-28 X X X EP-30					Х			
EP-7 X X X EP-8 X X X EP-10 X X X EP-11 X X X EP-12 X X X EP-13 X X X EP-14 X X X EP-15 X X X EP-16 X X X EP-17 X X X EP-18 X X X EP-19 X X X EP-20 X X X EP-21 X X X EP-22 X X X EP-23 X X X EP-24 X X X EP-25 X X X EP-26 X X X EP-29 X X X EP-30 X X X EP-29 X X X EP-31					X			
EP-8 X X X EP-9 X X X EP-10 X X X EP-11 X X X EP-12 X X X EP-13 X X X EP-14 X X X EP-15 X X X EP-16 X X X EP-17 X X X EP-18 X X X EP-19 X X X EP-20 X X X EP-21 X X X EP-22 X X X EP-23 X X X EP-24 X X X EP-25 X X X EP-26 X X X EP-28 X X X EP-29 X X X EP-30 X X X EP-31		Х						
EP-9 X X X EP-10 X X X EP-11 X X X EP-12 X X X EP-13 X X X EP-14 X X X EP-15 X X X EP-16 X X X EP-17 X X X EP-18 X X X EP-19 X X X EP-20 X X X EP-21 X X X EP-22 X X X EP-23 X X X EP-24 X X X EP-25 X X X EP-26 X X X EP-28 X X X EP-29 X X X EP-30 X X X EP-31 X X X EP-33								
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EP-29 X Image: Constraint of the second				Х	-			
EP-30 X Image: Constraint of the second		Х						
EP-31 X Image: Constraint of the second sec		X						
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EP-33 X X EP-34 X		X						
EP-34 X					Х			
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EP-35 X	EP-35				X			
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EP-38 X								
EP-39 X					X			
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EP-41 X				X			-	

Test Case #	Р	F	NA	NS	NT	В	Comments
EP-42			Х				
EP-43			Х				
EP-44			Х				
EP-45			Х				
EP-46	Х						
EP-47	Х						
EP-48	Х						
EP-49	Х						
EP-50	Х						
EP-51	Х						
EP-52			Х				
EP-53	Х						
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EP-56			Х				
EP-57	Х						
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EP-62	Х						
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EP-64				Х			
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EP-66							
EP-67							
EP-68							
EP-69							
EP-70							

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