

Grandstream Networks, Inc.

How to Integrate UCM6100 with Microsoft Lync[®] Server





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OVERVIEW

The UCM6100 and Microsoft Lync[®] server can be connected using SIP peer trunk to achieve integration for better and more effective enterprise communication. This document introduces how to configure the UCM6100 and Microsoft Lync[®] server to implement the integration.

The following equipment and services are required in order to set up the UCM6100 with Microsoft Lync[®] as described in this document.

- A properly installed and deployed Microsoft Lync[®] server
 The configuration presented in this document is based on Microsoft Lync[®] server 2013. The instruction is similar if the user has Microsoft Lync[®] 2010 instead. Before starting to peer Microsoft Lync[®] server with the UCM6100, please ensure the Microsoft Lync[®] server is properly configured and working for all the Lync[®] clients in the environment to be deployed.
- UCM6100 with firmware version 1.0.7.11 is up and running Before starting to peer Microsoft Lync[®] server with the UCM6100, please ensure the UCM6100 is upgraded to the latest firmware version. Here is the firmware link: <u>http://www.grandstream.com/support/firmware</u>

The UCM6100 also needs to be properly configured and working for the registered extensions in the environment to be deployed.

• Functional network environment where the UCM6100 and Microsoft Lync[®] server are connected Please ensure network connectivity between the two devices and port availability on the devices as well as firewall settings.

The Microsoft Lync[®] server and the UCM6100 can be located on the Internet or corporate Intranet. The configuration presented in this document applies to devices that are located on public network and the SIP trunk is over public Internet connection. Also, TCP is used as transport protocol for SIP signaling using port 5060.



UCM6100 CONFIGURATION

STEP 1: CREATE SIP PEER TRUNK

• Go to web UI->PBX->Basic Call/Call Routes->VoIP Trunks, click on "Create New SIP Trunk".

Ennovative IP Voice & Video	Status <u>PBX</u> Settings Maintenance
	PBX >> Basic/Call Routes >> VoIP Trunks 🖸
Basic/Call Routes	VoIP Trunks
- Extensions	
- Analog Trunks	Create New SIP Trunk Create New IAX Trunk
- VolP Trunks	Dravider Name (A) Technology Tune

Figure 1: Create New SIP Trunk on the UCM6100

- In the "Create New SIP Trunk" dialog, configure the following:
 - > Type: Select "**Peer SIP Trunk**"
 - > Provider Name: Enter a name to identify this SIP trunk in the UCM6100
 - > Host Name: Enter the IP address of the Lync Server to be peered with

Cre	ate New SIP Trunk		x
		More details will be shown when editing trunk.	
	Туре:	Peer SIP Trunk	
6	Provider Name:	MSLync	
i	Host Name:	Lync Server IP Address	
i	Keep Trunk CID:		
()	Disable This Trunk:		
(j)	TEL URI:	Disabled •	
i	Auto Record:	No 🔻	
		Cancel Save	

Figure 2: Create Peer SIP Trunk



Click on "Save" to create the peer SIP trunk.

• The newly created SIP trunk will appear in the VoIP trunk web page. Click on icon 🗾 to further

configure the	SIP trunk.				
PBX >> Basic/Call Routes	>> VolP Trunks 🖸				
VoIP Trunks					
Create New SIP Trunk	Create New IAX Trunk				View: 10 💌
Provider Name ⊘	Technology	Туре	Hostname/IP	Username	Options
MSLync	SIP	peer	96.31.248.21		📈 តា 🛋 🟛

Figure 3: VoIP Trunks Web Page

- In the dialog to edit the SIP trunk, configure the following:
 - > Transport: Select "TCP Only"
 - Enable Qualify: enable this so that the UCM6100 can monitor the connectivity status with the Microsoft Lync[®] server in status page

Edit SIP Trunk: MSLync	
Provider Name	MSLync
(i) Host Name	96.31.248.21
(j) Transport	TCP Only
(i) Keep Trunk CID	
(j) Disable This Trunk	
(j) TEL URI	Disabled •
(i) Caller ID	
CallerID Name	
(j) Codec Preference	Available Codecs Selected Codecs
(j) Auto Record	No
(i) DID Mode	Request-line •
(i) DTMF Mode	Default 🔻
(i) Enable Qualify	
(i) Qualify Timeout	1000
Qualify Frequency	60

Figure 4: Edit Peer SIP Trunk



Click on "Save" on the bottom of the dialog.

• Click on "Apply Changes" on the upper right of the web UI. Now the SIP peer trunk is successfully configured.

STEP 2: CONFIGURE OUTBOUND RULE

• Go to web UI->PBX->Basic/Call Routes->Outbound Routes, click on "Create New Outbound Rule".

Forevalue IP Voice & Video	Status PB	X Settings	Maintenance		English ▼ Logout 2014-09-22 15:47 UTC-04:00
	PBX >> Basic/Call Routes >	> Outbound Routes	6		
Basic/Call Routes	Outbound Routes				
- Extensions					
- Analog Trunks	Create New Outbound Rule	e			
- VolP Trunks	An outgoing calling rule associates FXO port while 'long distance' allo	s an extension pattern with a ws 10-digit dialed through a lo	trunk used to dial the pattern. This allows di ow-cost SIP trunk. A failover trunk can be se	ifferent patterns to be dialed through different trun et up to be used when the primary trunk fails. Not	Iks. For example, 'local' allows 7-digit dialed through e: This panel only manages individual outgoing calling
- SLA Station	rules.				View: 10 -
- Outbound Routes	Sequence 🔿	Outhound Rule Name	a Dattern	Drivilere Level	Ontions
- Inbound Routes	Sequence 🕓		Pattern	Filvinge Level	Optiona

Figure 5: Create New Outbound Rule

• In the dialog to create new outbound rule, configure the following:

Create New Outbound Rule		
Galling Rule Name:	Outbound	
(i) Pattern:	1xxx	
i) Password:		•
Call Duration Limit:		
Privilege Level:	Internal V security risks.	Narning: Setting privilege level at 'Internal' has potential
 Enable Filter on Source Caller ID: 		
Send this call through trunk		
Use Trunk:	SIP Trunks MSLync 🔻	
 Strip: 		
Prepend:		
(i) Use Failover Trunk:		
Frunks S	trip Prepend	1 Options
	Click to add	failover trunk
	Cancel	Save

Figure 6: Create New Outbound Rule



- > Calling Rule Name: Enter the outbound rule name to identify it in the UCM6100
- Pattern: The Microsoft Lync[®] server already has extensions 1xxx configured. Therefore, configure 1xxx here as the pattern to dial out from the UCM6100 extensions
- Use Trunk: Select the SIP peer trunk created in step 1 as the trunk to be used for the outbound rule

Click on "Save" on the bottom of the dialog.

• Click on "Apply Changes" on the upper right of the web UI. Now the outbound rule is successfully configured on the UCM6100.

STEP 3: CONFIGURE INBOUND RULE

• Go to web UI->PBX->Basic/Call Routes->Inbound Routes, select the SIP trunk created in step 1 and click on "Create New Inbound Rule".

Encountive IP Voice & Vindee	Status	PBX	Settings	Maintenanc	e
	PBX >> Basic/Call	Routes >> Inbo	ound Routes		
Basic/Call Routes	Inbound Routes				
- Extensions					
- Analog Trunks	Create New Inbo	ound Rule	Blacklist		
- VoIP Trunks	Trunks SIF	PTrunks MSLync	•		
- SLA Station					
- Outbound Routes	Pattern C	allerID Pattern	Time Condition	Time	Туре
- Inbound Routes	_x.	No Limit	None		-

Figure 7: Create New Inbound Rule

- In the dialog to create inbound rule, configure the following:
 - > Trunks: Make sure the SIP trunk created in the step 1 is selected
 - > DID Pattern: Enter "x." to allow any digit
 - Default Destination: Select "By DID"
 - DID Destination: Select "Extension" and other destinations you would like to have the Lync client to reach when calling into the UCM6100



Create New Inbound	Rule
(i) Trunks:	SIP Trunks MSLync 🔹
 DID Pattern: 	X/
Privilege Level:	Internal v
(i) Default Destination:	By DID 🔹
Strip:	
Prepend Trunk Name:	
i Dial Trunk:	
 DID Destination: 	Extension Conference Call Queue Ring Group
	Paging/Intercom Groups IVR Voicemail Groups
	Fax Extension Dial By Name All
Alert-Info:	None 🔹
Time Condition	
(i) Time Condition:	None v
	Cancel

Figure 8: Edit Inbound Rule

Click on "Save" on the bottom of the dialog.

• Click on "Apply Changes" on the upper right of the web UI. Now the inbound rule is successfully configured.



MICROSOFT LYNC® CONFIGURATION

STEP 1: CREATE NEW PSTN GATEWAY

• Open Microsoft Lync[®] 2013 Topology Builder. Download or open a topology.

18	Lync Server 2013, Topology Builder	_ 🗆 X
File Action Help	Define a new deployment from the Actions pane	
	 Copology Builder Welcome to Topology Builder. Select the source of the Lync Server topology document. Download Topology from existing deployment Retrieve a copy of the current topology from the Central Management store and save it as a local file. Use this option if you are editing an existing deployment. Open Topology from a local file Open an existing Topology Builder file. Use this option if you have work in progress. New Topology Create a blank topology and save it to a local file. Use this option for defining new deployments from scratch. Help 	

Figure 9: Open Microsoft Lync[®] 2013 Topology Builder

• Find the folder "PSTN Gateway" under Lync Server directory "Shared Components".



20	Lync Server 2013, Topology Builder			
File Action Help	File Action Help			
 Lync Server LabSite1 Lync Server 2010 Lync Server 2013 Shared Components SQL Server stores File stores File stores Office Web Apps Servers Branch sites 	The properties for this item are not available for editing.			

Figure 10: PSTN Gateway under Lync Server

• Right click on "PSTN gateways" and select "New IP/PSTN gateway..." to create a new IP/PSTN gateway.

140 (A)	Lync Server 2013, Topology Builder	_ 🗆 X
File Action Help		
Lync Server Lync Server 2010 Lync Server 2013 Shared Components SQL Server stores SQL Server stores New IP/PSTN Gateway Topology Bray Help	The properties for this item are not available for editing.	

Figure 11: Create New IP/PSTN Gateway

• The setup wizard for the IP/PSTN Gateway will guide you to configure it step by step. Firstly configure the FQDN as the UCM6100 IP address or the domain name. Then click on "Next".



26	Lync Server 2013, Topology Builder	_ 🗆 X
File Action Help		
▲ Lync Server	Define New IP/PSTN Gateway	
Lauster Lync Serve Lync Serve Lync Serve Lync Serve	Define the PSTN Gateway FQDN	
 SQL Se File sto 	Define the fully qualified domain name (FQDN) for the PSTN gateway. FQDN: *	
 PSIN g Trunks Office V 	UCMIP_ADDRESS	
📜 Branch site		
	Help Back Next Cancel	

Figure 12: Define the PSTN Gateway FQDN

• Leave the configuration as default in "Define the IP Address" dialog. Click on "Next".

16	Define New IP/PSTN Gateway	x
5	Define the IP address	
● Er @ ○	able IPv4) Use all configured IP addresses.) Limit service usage to selected IP addresses. PSTN IP address:	
O Er @	able IPv6) Use all configured IP addresses.) Limit service usage to selected IP addresses.	
	PSTN IP address:	
He	Back Next Cancel	

Figure 13: Define the IP Address

• Define the root trunk. Configure the trunk as followings:



- Listening port for IP/PSTN gateway: 5060
- > SIP Transport Protocol: TCP

14	Lync Server 2013, Topology Builder	_ □	x
File Action Help			
▲ Lync Server ▲ □ LabSite1	Define New IP/PSTN Gateway		
 Lync Serve Lync Serve Shared Co 	Define the root trunk		
 SQL Se File sto PSTN q 	Trunk name: * trunkname		
 Trunks Office V Rranch site 	Listening port for IP/PSTN gateway: * 5060		
	SIP Transport Protocol: TCP		
	Associated Mediation Server: GSLync2k13.GSLA.grandstream.com LabSite1		
	Associated Mediation Server port: * 5060		
	Help Back Finish Cancel		

Figure 14: Define the Root Trunk

Click on "Finish".

Now, right click on "Lync Server" and select "Publish Topology..." to update the existing topology with the new PSTN gateway configurations.

ò			Lync Server 2013, To	pology Builder
File	Action	Help		
⊿ [کے Lyn 👌			
⊿	T.	New Central Site		
		Edit Properties		
	Þ	New Topology		GSLA.grandstream.co
	⊿	Open Topology		Not configured
		Download Topology		
		Save a copy of Topology As		
		Publish Topology		
	1	Install Database		
		Merge Office Communications Serv	e Publish topology to the Centra	al Management store.
		Remove Deployment		🗸 https://
		Help		dialin.GSLA.
			Meeting URLs:	Active S

Figure 15: Select Publish Topology



	Lync Server 2013, Topology Builder	_ 🗆 X
File Action Help		
Lync Server	e Publish Topology	×
Lubsher Lync Serve Lync Serve Lync Serve Lync Serve Lync Serve	Publishing in progress	
 SQL Se File sto PSTN g 96.3 Trunks Office V Branch site 	Please wait while Topology Builder tries to publish your topology. Succeeded Downloading global simple URL settings Succeeded Updating role-based access control (RBAC) roles Succeeded Enabling topology Back Next Cancel 	P domain A.grandstrea pm

Figure 16: Publish Topology Process

14	Lync Server 2013, Topology Builder	_ 🗆 X
File Action Help		
Lync Server LobSite1 Dauge Lync Serve Dauge Lync Serve Dauge Lync Serve Dauge Lync Serve	Publish Topology × Publishing wizard complete	
 SQL Se File sto PSTN g 96.3 Trunks Office V Branch site 	Step Status ✓ Publishing topology Success ✓ Downloading topology Success ✓ Downloading global simple URL settings Success ✓ Updating role-based access control (RBAC) roles Success ✓ Enabling topology Success	P domain A.grandstrea pm
	To close the wizard, click Finish. Help Back Finish Cancel	Site Site1

Figure 17: Publish Topology Finished

STEP 2: CONFIGURE DIAL PLAN ON MICROSOFT LYNC® SERVER

• Open the Microsoft Lync[®] 2013 control panel. Select "Voice Routing"->"Dial Plan". Double click on "Global" to edit Dial Plan - Global.



3		Microsoft Lync Server 2013 Control Panel	_ D X
Ly	nc Server 2013		Administrator Sign out 5.0.8308.556 Privacy statement
	Home	Dial Plan Voice Policy Route PSTN Usage Trunk Configuration Test Voice Routing	
33	Users	Create voice routing test case information	~
×	Topology		
Ģ	IM and Presence	٩	
P	Persistent Chat	A New V Bdit V Action V Commit V	0
C	Voice Routing	Name Scope State Normalization rules ▲ Description	
S	Voice Features	🔂 Global Global Committed 2	
22	Response Groups		
Ð	Conferencing		



• In "Edit Dial Plan - Global" dialog, select "New" under "Associated Normalization Rules".

8	Microsoft Lync Server 2013 Control Panel	
Lync Server 2013	3	Administrator Sign o
🐴 Home	Dial Plan Voice Policy Route PSTN Usage Trunk Configuration Test Voice Routing	
33 Users	Create voice routing test case information	*
Topology		
IM and Presence	Edit Dial Plan - Global	
Persistent Chat	VOK X Cancel	•
😋 Voice Routing	Scope: Global Name: *	
📞 Voice Features	Global	
Response Groups	Simple name: *	
💭 Conferencing	DefaultProfile	
Clients		
Federation and	Dial-in conferencing region:	
External Access	3	
and Archiving	External access prefix:	
Security	Associated Normalization Rules	
Network Configuration	🖕 New 🖹 Copy 📋 Paste 🏊 Select 🥕 Show details Remove 👚 🐥	
	Normalization rule State Pattern to match Translation pattern	
	Extensions Committed ^(1\d{3})\$ +1626555\$1;ext=\$1	

Figure 19: Edit Dial Plan – Global

- In our sample, the UCM6100 has extensions 3xxx. Therefore, configure the following in the dial plan:
 - Starting digits: 3
 - Length: exactly 4
 - Digits to remove: 0



Digits to add: none. By default it's "+". We removed the "+" here since we just use 3xxx for the extensions to be dialed.

R	Microsoft Lync Server 2013 Control Panel	_ _ ×
Lync Server 2013		Administrator Sign out 5.0.8308.556 Privacy statement
🟠 Home	Dial Plan Voice Policy Route PSTN Usage Trunk Configuration Test Voice Routing	
33 Users	Create voice routing test case information	~
Topology		
IM and Presence	Edit Dial Plan 🕨 New Normalization Rule	
Persistent Chat	V Cancel	
🧐 Voice Routing	Name: *	
📞 Voice Features	Description:	
🔉 Response Groups		
💭 Conferencing	Build a Normalization Rule	
Clients	Fill in the fields that you want to use, or create the rule manually by clicking Edit.	
Federation and External Access	Starting digits: 3	
Monitoring and Archiving	Length: Reactly ¥ 4	
Security	Digits to remove:	
Network		
 Configuration 	Digits to add:	
	^(3)d(3))\$	
	Translation rule: *	
	\$1	
	Edit Reset ?	
	Internal extension	
	Dialed number to test:	
	Go	

Figure 20: Create New Normalization Rule

• Click on OK.

STEP 3: CONFIGURE VOICE POLICY ON MICROSOFT LYNC® SERVER

• In the Microsoft Lync[®] 2013 control panel, select "Voice Routing"->"Voice Policy". Double click on "Global" to edit "Voice Policy - Global".



	Microsoft Lync Server 2013 Control Panel						
Lvnc Server 2013		Administrator Sign out					
-,		5.0.8308.556 Privacy statement					
🏠 Home	Dial Plan Voice Policy Route PSTN Usage Trunk Configuration Test Voice Routing						
33 Users	Create voice routing test case information	~					
Topology	Topology						
🗊 IM and Presence							
Persistent Chat		0					
🧐 Voice Routing	Name 🔺 Scope State PSTN usage Description						
📞 Voice Features	Global Global Committed						

Figure 21: Voice Routing->Voice Policy

• Under associated PSTN usage, click on "New".

Lvr	nc Server 2013		Administrator Sign out
-).			5.0.8308.556 Privacy statement
	Home	Dial Plan Voice Policy Route PSTN Usage Trunk Configuration Test Voice Routing	
22	Users	Create voice routing test case information	~
×	Topology		
Ģ	IM and Presence	Edit Voice Policy - Global	
7	Persistent Chat	V OK X Cancel	
Ċ	Voice Routing	Scope: Global Name: *	
C	Voice Features	Global	
23	Response Groups	Description:	
Ð	Conferencing	∧ Calling Features	
P	Clients	✓ Enable call forwarding ✓ Enable team call	
B	Federation and	✓ Enable delegation ✓ Enable PSTN reroute	
_	Monitoring	✓ Enable call transfer Enable bandwidth policy override	
	and Archiving	✓ Enable call park ✓ Enable malicious call tracing	
	Security	✓ Enable simultaneous ringing of phones	
9	Network Configuration	Associated PSTN Usages	
	Configuration	🔂 New 🔄 Select 🧷 Show details Remove 👚 🥾	
		PSTN usage record Associated routes	

Figure 22: Edit Voice Policy - Global



• In the dialog "Edit Voice Policy->New PSTN Usage Record", click on "New" under Associated Routes.

Lv	nc Server 2013		Administrator Sign out
_,			5.0.8308.556 Privacy statement
	Home	Dial Plan Voice Policy Route PSTN Usage Trunk Configuration Test Voice Routing	
33	Users	Create voice routing test case information	~
×	Topology		
ę	IM and Presence	Edit Voice Policy 🕨 New PSTN Usage Record	
5	Persistent Chat	JOK X Cancel	
હ	Voice Routing	Name:	
C	Voice Features		
23	Response Groups	Associated Routes	
Ę	Conferencing	Name Pattern to match	
e	Clients		
ß	Federation and External Access		
	Monitoring and Archiving		
-	Security		
Ŧ	Network Configuration		

Figure 23: Edit Voice Policy - Global

- Create a new voice route.
 - > Name: Enter the name for the voice route to identify it in the Lync server
 - Build a pattern o match: Enter 3 and click on "Add". This will create a pattern starting from digit 3 to reach the 3xxx extensions in the UCM6100.
 - Associated Trunk: Click on "Add" under "Associated Trunk" and select the UCM6100 trunk created in the Topology Builder.



Ly	nc Server 2013		Administrator Sign out
	Home	Dial Plan Voice Policy Route PSTN Usage Trunk Configuration Test Voice Routing	
33	Users	Create voice routing test case information	~
M	Topology		
Ģ	IM and Presence	Edit Voice Policy 🕨 New PSTN Usage Record 🕨 New Voice Route	
P	Persistent Chat	JOK X Cancel	0
હ	Voice Routing	Scope:	
C	Voice Features	ucm6100route	
23	Response Groups	Description:	
Ð	Conferencing		
6	Clients	Build a Pattern to Match Add the starting digits that you want this route to handle, or create the	
	Federation and External Access	expression manually by clicking Edit. Starting digits for numbers that you want to allow:	
	Monitoring and Archiving	Type a valid number and then click Add.	
A	Security	J LACEPURDS	
9	Network Configuration		
		Match this pattern: * 3 Edit Reset ? Suppress caller ID Alternate caller ID: Associated trunks: Add Remove	

Figure 24: Create a New Voice Route



Lync Server 2013								
home Home		Dial Plan	Voice Policy	Route	PSTN Usage	Trunk Configuration	Test Voice Routing	
33 Users		Create voice	e routing test o	ase inforn	nation			
Topology								
🗊 IM and Pr	esence		ice Policy 🕨			rd ♭ New Voice Rout	e	
Persistent	Chat	10	K 🗙 Car	cel				
😢 Voice Rou		Scope: Name	61 · T	,				
📞 Voice Fea	ures	ucm6	Select Iru	nk			× 🕲	
🔏 Response	Groups	Descr					٩	
💭 Conference	ing	B	Sem	rice		Site		
Clients		Add	Pstn	Gateway:U	CM6100 IP	LabSite1		
Federation External A	and ccess	Sta						
Monitorin and Archi	g /ing	3						
Security								
Network Configura	ion	M Si A Aasoci	ated trunks:			OK	Cancel	

Figure 25: Select the UCM6100 Trunk as the Associated Trunk



Ly	nc Server 2013	Admin	istrator Sign out
,		5.0.8308.556 3	Privacy statement
	Home	Dial Plan Voice Policy Route PSTN Usage Trunk Configuration Test Voice Routing	
33	Users	Create voice routing test case information	~
N	Topology		
Ģ	IM and Presence	Edit Voice Policy 🕨 New PSTN Usage Record 🕨 New Voice Route	
7	Persistent Chat	✓ OK X Cancel	
હ	Voice Routing	Scope: Name: *	
S	Voice Features	ucm6100route	
23	Response Groups	Description:	
Ŗ	Conferencing	Build a Dattarp to Match	
•	Clients	Add the starting digits that you want this route to handle, or create the	
論	Federation and External Access	Expression manually by clicking Latt. Starting digits for numbers that you want to allow:	
	Monitoring and Archiving	Type a valid number and then click Add.	
0	Security	3 Exceptions	
œ	Network		
	Configuration		
		Match this pattern: *	
		Edit Reset 🕐	
		Suppress caller ID	
		Alternate caller ID:	
		Associated trunks:	
		PstnGateway:UCM6100 IP	
		Remove	

Figure 26: Associated Trunk Added

• Click on OK multiple time until all the way back to the main voice policy interface. Then commit all configurations.



8		Microsoft Lync Server 2013 Control Panel	- D X
Ly	nc Server 2013	Adm 5.0.8308.556	ninistrator Sign out 5 Privacy statement
	Home	Dial Plan Voice Policy Route PSTN Usage Trunk Configuration Test Voice Routing	
33	Users	Create voice routing test case information	~
×	Topology		
Ģ	IM and Presence	ρ	
2	Persistent Chat		
Q	Voice Routing	Name Scope State Review uncommitted changes Description	
C	Voice Features	Global Global 🖟 Uncomn	
23,	Response Groups	Cancel selected changes Cancel all uncommitted changes	
Ð	Conferencing		
6	Clients		
諙	Federation and External Access		
	Monitoring and Archiving		
•	Security		
Ŷ	Network Configuration		





MAKING CALLS ON UCM6100 AND MICROSOFT LYNC® SERVER

Once SIP trunk has been set up between the UCM6100 and the Microsoft Lync[®] server, users can manipulate the deployment for different call flows and scenarios.



Figure 28: UCM6100 Integration with Microsoft Lync® Server 2013

Assuming the following has been set up:

- A UCM6100 extension 3000 is registered on the GXP2140 desk phone.
- A Lync client with extension 1002 has successfully logged in the Lync App on a mobile phone or the GXV3275.
- The UCM6100 has an analog trunk and inbound/outbound routes configured to reach outside PSTN lines. The inbound route destination is set to IVR that allows users to dial UCM6100 extensions and dial trunk.



CASE 1: CALL BETWEEN UCM6100 EXTENSION AND LYNC CLIENT

- On the GXP2140, dial 1002 to reach the Lync client directly. After the call is answered, two way audio can be successfully established.
- On the Lync client, dial 3000 to reach the registered on GXP2140 directly. After the call is answered, two way audio can be successfully established.

CASE 2: CALL FORWARDING TO LYNC CLIENT FROM UCM6100 EXTENSION

- Configure Call Forward Unconditional for the extension 3000 on the UCM6100.
- Make a call from cell phone to the UCM6100 PSTN line number. Enter 3000 after hearing the IVR. The call will be forwarded to the Lync client (extension 1002). Users can then answer the call on the Lync client. This can be used for out of office call forwarding if the user has Lync client set up on mobile phone.

CASE 3: FOLLOW ME TO LYNC CLIENT FROM UCM6100 EXTENSION

• Configure **Follow Me** on the UCM6100 under web UI->PBX->Call Features->Follow Me. Enter the Lync client extension number 1002 as the follow me number for UCM6100 extension 3000.

Gandstream Incounter IP Voice & Viece	Status	PBX Settings	Maintenance	
	PBX >> Call Feature	s >> Follow Me		
Basic/Call Routes	Follow Me User P	Create New Follow Me		x
Call Features				
	Create New Follow	Selected Extensions	3000 Reselect	
		(i) Enable		
		(j) Music On Hold Class	default 💌	
		Follow Me Numbers		
		1002 for 30 (seconds)		\odot \otimes \oplus
- Follow Me				
		Add Follow Me Number		
			Cancel	

Figure 29: Follow Me Configuration on UCM6100



• Make a call from cell phone to the UCM6100 PSTN line number. Enter 3000 after hearing the IVR. Extension 3000 will start to ring. If the call is rejected or not answered on the extension 3000, Lync client 1002 will start to ring. On the Lync client. enter 1 to accept the call.

CASE 4: DIAL TO LYNC CLIENT FROM UCM6100 ANALOG TRUNK

• Make sure the IVR for the analog trunk has "Dial Trunk" enabled.

Edit IVR : ivr			
(i) Name		ivr	
i Extension		3999	
Dial Other Ext	ensions	✓	
i Dial Trunk		✓	
(i) Permission		Internal	•
(i) Welcome Pro	mpt	welcome	▼ Prompt
 Digit Timeout 		3	
 Response Tim 	neout	10	
 Response Tim 	neout Prompt	ivr-create-timeout	•
Invalid Promp	t	invalid	•
 Response Tim Loops 	neout Repeat	3 •	
i Invalid Repea	t Loops	3 🔻	
i Language		Default	•

• Make a call from cell phone to the UCM6100 PSTN line number. Then enter Lync client extension 1002 after hearing the IVR. The Lync client will start to ring. Users can then answer the call on the Lync client.

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