

UNITY & TELESTAX INTEGRATION – END USER GUIDE

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1.1 End-User Confirmation (Opt-In)

All Unity clients fetch license details for the user from the Kakapo cloud during startup. The license response will include any CPaaS numbers that are assigned to the user and have been successfully SMS-Enabled, as outlined above.

However, before the number can be used to send and receive SMS messages through Unity, the user must opt-in to the feature. This is because of the strong regulatory conditions that surround SMS in America, whereby the sending of spam can result in being blacklisted from the mobile network. Given that some end-users may not realise that their VoIP number has been SMS-enabled, it's important to ensure the user has been notified and has explicitly confirmed that they understand and accept that they may receive SMS messages through their Unity client. Therefore, the next time they start Unity after a number has been successfully SMS-enabled the below prompt will be displayed.



If the user clicks Yes, then the number will immediately be available to send and receive SMS messages. The Kakapo cloud is also updated with a timestamp of when the user opted-in for this user, in case this is queried in future.

If the user clicks No, then the number will not be available for SMS messaging and the user will be opting out.

If the user clicks Cancel, then the number will not be available for SMS messaging and the user will be prompted to opt-in again. The Kakapo cloud is updated with a timestamp of when the user opted out, in case this is queried in future. The Kakapo cloud will also send an email notification to all portal users at the system provider level that have the "Send Alerts" notification setting enabled. The email will include the CPaaS number and the current user assignment.

The Kakapo portal will shortly list all CpaaS numbers at the group, reseller and system provider levels, including the SMS enablement status and opt-in state for each number. The portal user will

be able to click into a number to reset the opt-in state, for example if the end-user opted out by accident. When Unity is next restarted they will be prompted again and will be able to opt-in.

2 Configuration & Usage

Unity SMS functionality can be configured in Unity settings, as shown below.

vices Settings	
Call Forward Busy Call Forward No Answer Contact Center	Configure Unity for mobile messaging including how to notify you when new messages are received. All numbers must be in E.164 format so if the country code isn't included in a numb when sending an outbound message Unity will use the settings here to ensure one is added
Statistics	Assigned Numbers
Columns	12012010580
Abandoned Calls	Allow messages to be sent to any phone number
Available: Out Of Office	+1
Unavailable	Exclude the leading zero if applying the default country code
- Do Not Disturb	Show conversations in docked panel
- External Calling Line ID Delivery	On an incoming message
Internal Calling Line ID Delivery	Pop conversation
Outgoing Calls	Play a notification sound
- Caling Line ID Delivery Blocking	Show popup notification
Broadworks Anywhere	Show popup notification until closed
Call Park Retrieve	When notification clicked
- Call Recording	Pop conversation message
- Flexible Seating Guest	Pop Outlook (if applicable)
- Hoteling Guest - Remote Office - Shared Call Appearance	Pop CRM (if applicable)
- Mobile Messaging Voicemail	Į.

Unity will show all assigned CPaaS numbers, if multiple numbers are assigned use the arrow buttons to show them all.

2.2.1 Allow messages to be sent to any phone number

By default, Unity will allow the user to send an SMS message to any number for a contact, including VoIP numbers. This is because many directories don't specifically state if a number is a mobile number or not, for example the BroadWorks personal directory and group/enterprise common phone list. By enabling this setting the user is able to message any number, so it's up to them to know if the number is capable of receiving those messages or not. If this setting is disabled then Unity will only allow the user to SMS message numbers that it knows are mobile numbers, which are:

- Any numbers saved in the mobile field of the user profile in BroadWorks
- The mobile field of any Outlook contacts
- The mobile field of any CRM contacts (if applicable)

2.2.2 Default country code and leading zero settings

This field is automatically populated by Unity based on the country code of the user profile in BroadWorks. It is used so that numbers can easily be modified either to or from E.164 format without user knowledge. This is because most CPaaS platforms require that all numbers be in E.164 format, but often the end-user doesn't know what this is. In most cases this field would not need to be modified. This also applies to the "Exclude the leading zero if applying the default country code" setting.

2.2.3 Show conversations in docked panel

Like with instant message conversations, the user can decide to show SMS conversations using docked panels in the main Unity window or as stand-alone windows. This setting is separate to the setting which dictates how IMs are displayed, for example the docked panel can be used for IM conversations but the stand-alone window (which provides a look and feel more similar to a cell phone) can be used for SMS conversations.

navailable Available Wrap	-up Release	Dial	Transfer	Hold Conference	e Voicemail	Recording F	Reports Settin	ngs						SYSTEMS
			My Statist	dCS				Overa	Il Queue Statistics	6		1	Dale Cassidy (Offline)	
lame	Total Calls	Answered Calls	Missed Calls	Web Chats Received	Web Chats Answered	Total Calls	Calls Answered	Calls In Queue	Web Chats Web Received Que	Chats eued	Callbacks Received	Callbacks Answered		
Holiday Cruises	0	0	0	Conversatior	: Mr. James	Merced (Sam	ple) (Zoho Lea	ad)	- 🗆 🗙		-	-		
Kakapo Sales	0	0	0			25/1	0/2019			^	-	-		
Kakapo Support	0	0	0								-	-		
Production Streams	-	-	-						this is a test		0	0		
Kakapo Live Streams	-	-	-						05:34 PM		0	0		
	0	0	0					Bales Buppor	t		0	0		1
Activity Fre	om												Nina Harrelson (Offline)	
Contacts Activity Logs	Abandoned (Calls Voicen	nail	karra kapport	0 5	0		0	05:34 PM	•	My status: o	do not disturb	conversations	
O Missed calls O R	Received calls	O Dialled	calls (То					× C 🗋		1
ast Message Received		CPaas	6 Numbe										Kathryn Vincent	• 5
		Chris	Cell (12)											•
9/11/2019 17:06:53		Chris	Cell (12)	cavity Loga	voicemail Abandon	Id Calls AgentAdWity				V ((Mobile)			
9/11/2019 17:06:53 8/11/2019 15:33:34		Chris	Cell (12)			Ph		P == 1	05-35 PM		_			
19/11/2019 17:06:53 18/11/2019 15:33:34 18/11/2019 15:31:13		Chris	Cell (12)						Wranun Re	rce	ed (Sample) (2	Zoho Lead)		
19/11/2019 17:06:53 18/11/2019 15:33:34 18/11/2019 15:31:13 01/11/2019 17:42:29		07400								rce	ed (Sample) (2	Lono Lead)		
19/11/2019 17:06:53 18/11/2019 15:33:34 18/11/2019 15:31:13 01/11/2019 17:42:29 01/11/2019 17:06:52 01/11/2019 12:50:31		07480 Chris	042700 Doll (19)											
19/11/2019 17:06:53 18/11/2019 15:33:34 18/11/2019 15:31:13 01/11/2019 17:42:29 01/11/2019 15:06:52 01/11/2019 12:50:31		07480 Chris	Cell (12)							2.4				
9/11/2019 17:06:53 8/11/2019 15:33:34 8/11/2019 15:31:13 1/111/2019 17:42:29 9/1/11/2019 15:06:52 1/111/2019 12:50:31		07480 Chris	Cell (12)		SMS	convers	ation			~				1
9/11/2019 17:06:53 8/11/2019 15:33:34 8/11/2019 15:33:113 11/11/2019 15:31:13 11/11/2019 15:06:52 11/11/2019 15:50:31		07480 Chris	Cell (12)		SMS	conversa	ation		B • × €I	•			Arjun Harikumar	

2.2.4 Notifications

Unity can be configured how to alert the user when an SMS message is received, using a combination of audio alert and visual notifications. This is similar to Unity notifications for instant messages and calls.

2.3 Sending & Receiving SMS and MMS

Unity uses a combination of the remote party number and the assigned CPaaS number to join all SMS messages together to form a conversation. Whenever the user wants to send a message using any of the methods outlined below, Unity will look for any SMS conversations that exist for that remote party number and CPaaS number, and show the conversation to the user. If no existing conversation is found a new conversation will be created when the first message is sent. This also applies when an SMS is received, Unity will look to append the message to a conversation if one exists, otherwise a new conversation will be created.

The Kakapo cloud will store all sent and received messages for 90 days, after which time they will be removed. Any messages received when Unity is offline will be stored in the Kakapo cloud and delivered to the Unity client when it is next started.

A single conversation cannot contain both IM and SMS messages, and group chat is not currently available for SMS messaging.

2.3.1 Ad-hoc

To send an ad-hoc SMS message to a number that isn't in any directory, simply use the Dial button as shown below. The ten-digit number can be entered, the user doesn't need to worry about E.164 compliance.

Dial				×
N	umber	201201057	9	
	[× Cancel	🗸 Dial	😑 SMS

If multiple CPaaS numbers are assigned to the user then clicking the SMS button will allow the number to select the number to send the outbound SMS through, using a context menu.

Dial					×	
	Number	201201057	9			
		× Cancel	🗸 Dial	 \$		Chris Cell (12012010580)
					(Chris Mobile (12012010660)

2.3.2 Context menu

Any contact displayed in Unity can be SMS messaged, but this depends on the setting outlined in section 2.2.1. If the contact can be SMS messaged then the context menu will present this option.

Contacts	Activity Logs	Abandoned Calls	Voicemail		
Search	han	Q			
Name			Pho	ne	
Han Han	(Mobile) Mobile		+44	C	Call number
V Harri	mobile		015		Send mobile message
				+	Add to default list
					Copy number
					Personal directory
				۰	Manage user list
					Appearance +

If multiple CPaaS numbers are assigned to the user then the context menu will allow the user to specify which number to send the message from.

Contacts	Activity Logs	Abandoned Call	s Voicemai					
Search	han	C	2					
Name			1	Phone			Extension	ACD S
Han	(Mobile) Mobile			-44	Call number			
< Hall	Mobile			<i>—</i>	Send mobile message 🔹 🕨	Cł	nris Cell (12012010580)	
				+	Add to default list	Cł	nris Mobile (12012010660)	
					Copy number			
					Personal directory			
				•	Manage user list			
					Appearance +			

If a contact can be instant messaged and SMS messaged, the context menu will show both options. Also if the contact has multiple numbers that can be messaged (which depends on the setting outlined in section 2.2.1) then both numbers will be displayed in the context menu so the user can decide which one to send the SMS message to.



If right-clicking on an Outlook contact, if there a multiple numbers available for messaging then the number type will be displayed

Contacts Activity Logs Abandoned Calls Voicemail						
Search						
Name	Business Phone	Home Phone				Mobile
Abin UK		07493 5				
Al Foot						+447968417
Amy Earl		07544 889				
C Barnes		07778899885	Call number			+44 7899 0601
			Call Humber			
		<u>_</u>	Send mobile message	•	Ho	me Phone
			Copy number	•	Mo	bile
			Personal directory	•		
			Appearance	•		

Contacts, leads and accounts from any configured CRM platform can also easily be SMS messaged using the context menu.

Contacts	Activity Logs	Abandoned Calls	Voice	ma	il
Search	james	Q			
Name					Phone
📞 Jame	es Venere (Sar	nple) (Zoho Contac	:)		555-555-5555
🤇 Mr. Ja	ames Merced (Sample) (Zoho Lea	d) (L	Call number
			5	Ð	Send mobile message
					Send email
					Show CRM contact
			-	÷	Add to default list
					Copy number
					Copy email
					Personal directory
			4	٥	Manage user list
					Appearance +

2.3.4 SMS Conversation Window

All SMS messages are shown in a conversation window or panel, as is the case with IM conversations. It is possible to have both SMS conversations and IM conversations docked in the same panel in Unity. Hovering the mouse over the title bar will always show the conversation type as a tool tip

Contacts Activity Logs Abandoned	Calls Voicemail							
Search	Q					Charles Berry (Offline)		×
Name	Phone	Extension	ACD State	Status				
Aliza Hassan		0007	Sign-In		^			
Amanda Dawson		0006	Sign-Out			Instant message		
Arjun Harikumar		8004				instant message		
Benedict Hutton		0008	Available			conversation		
 Charles Berry 		0010	Available					
Oale Cassidy		0011						
Gopikrishnan V		8332						P
🝳 Jenna Wimshurst	0208619	2472	Sign-In					
3 Jenson Franklin	0208619	2474		I am in a meeting from 07 June 11:00 until furth		Mr. James Merced (Sample) (Zoho Lead)	• B C	×
Jevan Howe		0012	Sign-Out			07900575695 : SMS	03:12 PM	^
Kathryn Vincent	0208619	0009	Sign-Out				test 3	
Kendrick Hester		0013	Sign-Out				04:53 PM	
Larry Redman		0015	Available			SMS conversation	test4	
Lucy Dickens		0014	Available				05:32 PM	
Mabel Graves		0016	Available				test 5	
Nina Harrelson	0208619	2475					05:42 PM	~
Robbie Sears		0017	Available	I am ingen from 21 June 12:40 until further notice.				_
Sally Jones	020861!	2477			¥			_

The conversation title bar will always show the name of the remote party (if a match was found) or the remote party number. As is the case with all media processed by Unity, all directories will be interrogated, including all BroadWorks directories, Outlook, any configured CRM platform and any third-party directories (such as SQL Server or LDAP).

Regardless of whether the conversation is displayed as a docked panel or a stand-alone window, the same functionality is available.



As well as sending messages, Unity allows certain file types to be sent. Selected local files are uploaded to the Kakapo cloud then sent through SMS as a URL, MMS is not used to send files because this incurs an additional charge [per MMS] from the mobile supplier, whereas SMS messages are included "in bundle". In addition PDF files can be sent from Unity, which is not supported generally by the MMS industry standard. The following file types can be sent from Unity; .txt, .mpeg, .mp3, .mp4, .pdf,.jpeg, .jpg, .bmp, .png, .gif and .csv.

It's also possible to quickly add the remote party number as a personal contact, for example if an SMS was received by a previously unknown number. Just right-click the number in the title bar and select the option from the context menu



As is the case with IM conversations, the conversation window can be expanded into a stand-alone window or collapsed into a docked window.

2.3.5 Delivered/Undelivered receipts

When the Kakapo cloud sends an outbound message through Restcomm, it provides a call-back URL to which all status updates (sent, delivered, failed etc) should be sent, these status updates are then delivered in real-time to Unity clients over the Kakapo IM&P backbone. In this way Unity is able to display if an outbound SMS message was undelivered/failed, which would be shown as below. The user can click on the error image to attempt to resend the message.

Patrick Mo	bile	▲ 🖯 🔍 × 🧳 🖨 🔺
	01/11/201	9
() Cli	Hey Patrick it's Chris we'r ck here to try to resend	e testing read receipts :) 12:50 PM
		æ

As soon as a message was successfully delivered to the remote party cell phone, Unity will be updated with the delivery receipt.

Mr. James Merced (Sample) (Zoho Le	ad)	• 🖻 📞	×
25/10/2019			^
	0	this is a test 05:34 PM	
	Sales Support		
			~
			þ

2.3.6 Activity List

As previously mentioned, all SMS messages are stored in the Kakapo cloud for a period of 90 days, and are merged into SMS conversations by Unity client. All previous and existing conversations are displayed in the Activity list as shown below. Unity will display the CPaaS number (including the friendly name) as well as the remote party name.

Contacts Activity Logs Abandoned Calls	Voicemail		
O Missed calls O Received calls O	Dialled calls 🔿 Conversations 💿 Mobile	messaging	× č 🗎
Last Message Received	CPaaS Number	Phone Number	Name
20/11/2019 19:18:16	Chris Cell (2012010580)	70360	7036089795
18/11/2019 15:33:34	Chris Cell (2012010580)	009199959428	Gopikrishnan V (Mobile)
18/11/2019 15:31:13	Chris Cell (2012010580) 2403219795 Sabeeh		Sabeeh
01/11/2019 17:42:29	Chris Cell (2012010580)	0790057!	Mr. James Merced (Sample) (Zoho Lead)
01/11/2019 15:06:52	07480542760	0790057 Mr. James Merced (Sample) (Z	
01/11/2019 12:50:31	Chris Cell (2012010580)	2055404 Patrick Mobile	

Simply double-click on a conversation to open it [and send a message], or right-click for more options.

Contacts Activity Logs Abandoned Calls	Voicemail			
O Missed calls O Received calls O	Dialled calls 🔘 Conversations (Mobile	messaging	× Č 🗋
Last Message Received	CPaaS Number		Phone Number	Name
20/11/2019 19:18:16	Chris Cell (2012010580)		70360{	7036089795
18/11/2019 15:33:34	Chris Cell (2012010580)		009199959	Gopikrishnan V (Mobile)
18/11/2019 15:31:13	Chris Cell (2012010580)		2403219	Sabeeh
01/11/2019 17:42:29	Chris Cell (2012010580)		070005	Mr. James Merced (Sample) (Zoho Lead)
01/11/2019 15:06:52	07480542760	Call nu	umber	Mr. James Merced (Sample) (Zoho Lead)
01/11/2019 12:50:31	Chris Cell (2012010580)	Send r	mobile message 🔹 🕨	Patrick Mobile
1		Сору	number	
		Show	CRM contact	
		Reset	column widths	
	~	Show	gridlines	

The Activity Logs tab will be updated to show the number of new messages that were received by the Kakapo cloud when Unity wasn't running, as is the case with missed calls. New messages will easily be visible to the end user.

Contacts Activity Logs (1 New) Abandoned Calls Voicemail				
Missed calls Received calls Dialled calls Conversations Mobile messaging (1 New)				
Last Message Received	CPaaS Number	Phone Number	Name	
New				
20/11/2019 21:24:10	07480542760	0790057569	Mr. James Merced (Sample) (Zoho Lead)	
Later				
20/11/2019 19:18:16	Chris Cell (2012010580)	7036	7036089795	
18/11/2019 15:33:34	Chris Cell (2012010580)	009199959	Gopikrishnan V (Mobile)	
18/11/2019 15:31:13	Chris Cell (2012010580)	240321979	Sabeeh	
01/11/2019 17:42:29	Chris Cell (2012010580)	079005756	Mr. James Merced (Sample) (Zoho Lead)	
01/11/2019 12:50:31	Chris Cell (2012010580)	205540400	Patrick Mobile	

3 Troubleshooting

The Restcomm logs are an invaluable resource when troubleshooting SMS integration. They can be used to determine if a message was received by the Restcomm platform or not, and if an outbound message was sent, including the status of the message.

Restcomm							Documentation Chris Tutt
	Applications	Numbers		Clients		Logs	
Calls	Account scope Search in current account Filters		Sub-account SID or email				
Messages			Start Date/Time	End Date/Time	m		Q
Recordings	Date ~		From o	To o	Direction .	Status	Body o
Notifications	2019-11-20 19:18:18		120120	703608		sent	Yes they are hut most c
	2019-11-20 19:17:36		170360	120120	۰	received	That's naculiar Plaasa
	2019-11-20 19:16:56		120120	703608		sent	At loset inhound MA
	2019-11-20 19:16:28		120120	703608		sent	The delivery status is at
	2019-11-20 19:16:16		170360	120120	۲	received	http://niomeg.org/04dh
	2019-11-20 19:16:08		120120	703608		sent	Ok thanke I will undate
	2019-11-20 19:15:52		170360	120120	۲	received	None come coult
	2019-11-20 19:15:26		120120	703608		sent	Can you open that HDI

Clicking on the message will provide more information, including the SMS ID which is very important when troubleshooting message delivery with the mobile carrier.

Q;_ I → 703608	
SID	SM20abc2cccb4d4f55b075c767639c080c
Date	Wed, 20 Nov 2019 19:15:02 +0000
From	120120
То	703608
Direction	outbound-api
Status	sent
Body	Hi Sabeeh, I have been asked to send a few more messages to test encoding and the d elivery receipt
	- 98 chars (1 segment)
	Close

When sending an SMS message through Unity, if the Restcomm platform shows the message was sent successfully (meaning the status is not failed or undelivered) but the message was not delivered to the cell phone, then a ticket must be raised with Telestax as this would point to an issue with Telestax or the mobile carrier. Likewise, if an SMS sent from a cell phone is not shown in the Restcomm logs then a ticket must be raised with Telestax. However, if the message is included in the Restcomm logs then a ticket should be raised in the Kakapo portal, as the issue is somewhere between the Restcomm and Kakapo clouds.