# **Configure and Troubleshoot RONA with CCE CVP**

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### Introduction

This document describes how to configure and troubleshoot Ring-No-Answer (RONA) with Cisco Customer Voice Portal (CVP) and Contact Center Enterprise (CCE).

## Prerequisites

#### Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco Unified Customer Voice Portal (CVP)
- Cisco Unified Contact Center Enterprise (UCCE)
- Packaged Unified Contact Center Enterprise (PCCE)
- Cisco Unified Comuncations Manager (UCM)

#### **Components Used**

The information in this document is based on these software versions:

- CVP 12.6
- UCCE 12.6
- PCCE 12.6
- UCM 12.5 and later.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

### Overview

The RONA functionality ensures that when an agent does not answer a call, for example because he walked away from his desk without make himself Not Ready, the call is taken away after the call has rang for a configurable number of seconds. The call is then presented to another agent or put back in queue, and the agent is put in not ready state. When you use CCE with CVP, the UCM does not control the queue platform (CVP) and can therefore not send the call back to the CVP for re-queue. Instead, the CVP controls the call and takes action. The solution is to use the RONA function only to make the agent unavailable when he does not answer the call and use the ICM Router Requery function to take the call away from the non-answer agent.

When a solution of CCE application is integrated with CVP as a queue point and routing client, RONA needs to be configured differently than when it is integrated with IP-IVR. The difference is that IP-IVR's call control is with the UCM, whereas with CVP, the call control is with the CVP.

## Configuration

Ensure that the CVP agent RNA Timeout < CUCM call forward timer.

#### **UCCE - Agent Desk Settings**

The agent desk setting needs to be assigned to the agent who is non-auto answer

Step 1. Access Configuration Manager in Adminstrator server.

Step 2. Navigate Tools-> List Tools -> Agent Desk Settings List .

Step 3.See list of Agent Desk Settings if you added already, or you can add those new Agent Desk Settings.

🖨 Agent Desk Settings List		
Select filter data	Attributes	
Optional Filter Condition Value (Case Sensitive)	Name * AGS Ring no answer time	seconds (1
Save Retrieve Cancel filter changes	Ring no answer dialed number <nor< th="">           Logout non-activity time         1200</nor<>	seconds (1
Agent Desk Settings	Work mode on incoming * Requ	uired with Wrapup Data
AGS	Work mode on outgoing * Requ	uired
	Wrap up time 60	seconds (1
	Assist call method Cons	ult
	Emergency alert method Cons	ult
	Description	
	Miscellaneous Auto answer	Outbound Ac
	ldle reason required	National
	Logout reason required	Local priv
	Auto record on emergency	
	Enable Cisco Unified Mobile Agen	t
	Mobile agent mode Ager	it chooses
Add Delete Revert		S
ICM Instance: citi		

**Note**: Agent state set is READY or NOT\_READY after CVP RNA expires based on the Step 4. and Step 5. configuration respectively

Step 4. Agent state set is **NOT\_READY** after CVP RNA expires when:

In Agent Desk Settings, the **Ring no answer dialed number**field is set to blank.

You do not enter a value in the Ring No Answer time field.

Select filter data	Attributes		
	Name	* AGS	
Optional Filter Condition Value (Case Sensitiv	e) Ring no answer time	)	seconds (1
None v	Ring no answer diale	ed number <pre></pre>	
Save Retrieve Cancel filter d	anges Logout non-activity t	time 1200	seconds (1
int Desk Settings	Work mode on incor	ming * Required	I with Wrapup Data
Name AGS	Work mode on outg	oing * Required	1
] TEAM	Wrap up time	60	seconds (1
	Assist call method	Consult	
	Emergency alert met	thod Consult	
	Description		
	Miscellaneous		Outbound Ac
	Auto answer		
	Idle reason req	quired	National
	Logout reason	required	Local priv     Operator
		emergency	
	✓ Enable Cisco U	Unified Mobile Agent	
	Mobile agent r	mode Agent ch	looses
Add Delete Bevert			
			Sa

Step 5 Agent state set is **READY** after CVP RNA expires when:

In Agent Desk Settings, the **Ring no answer dialed number**field is set to blank.

You entered a value in the **Ring No Answer time**field. This value must be at least 2 seconds more than timeout configured at Unified CVP for RNA Timeout.

Agent Desk Settings List		
Select filter data	Attributes	
	Name * AGS	
Optional Filter Condition Value (Case Sensitive)	Ring no answer time 10	seconds (1
None V V V	Ring no answer dialed number <pre><non< pre=""></non<></pre>	e>
Save Retrieve Cancel filter changes	Logout non-activity time 1200	seconds (1
Agent Desk Settings	Work mode on incoming * Requ	ired with Wrapup Data
AGS	Work mode on outgoing * Requ	ired
✓ TEAM	Wrap up time 60	seconds (1
	Assist call method Consu	ılt
	Emergency alert method Consu	ult
	Description	
	Miscellaneous	Outbound Ac
	Auto answer	National
		Operator     PBX
	Enable Cisco Unified Mobile Agent	
	Mobile agent mode Agent	chooses
Add Delete Revert		S
ICM Instance: citi		

**Note**: In the example script Scripting for RONA:

1. The Queue node for the skill group that selects the first agent must have Target Requery enabled.

2. Raise the priority of the call so that it moves to the front of the queue.

#### **PCCE - Agent Desk Setting**

Step 1. Open the CCEAdmin and navigate to Desktop.

Step 2. On Desktop select the Desk settings that the agent has configured.



#### Step 3. Select either Not Ready or Ready on the Agent State after RONA field.

#### CVP- OAMP Console (for UCCE only)

Step 1. Access OAMP Web Page.

Step 2. Navigate System -> Dialed Number Pattern.

Ci	Cisco Unified Customer Voic						
Sys	tem 👻	Device Management 👻	User Ma				
	Contro	ol Center					
	Device	e Pool					
	Import	System Configuration					
	Export	t System Configuration					
	Location						
	SIP Server Groups						
	Dialed Number Pattern						
	Web Services						
	IOS Configuration						
	VVB Configuration						
	Courtesy Callback						
	SIP Error Reason Code Mapping						
	Cloud	Services	•				

Step 3.See list of patterns if you added already, or you can add those new end points used for Agent extension.

Dialed Number Pattern					
Deploy Deployment Status 💡 Help					
General					
List of Dialed Number Patterns					
Display Pattern Type: Display All					
Dialed Number Pattern					
Local Static Route					
RNA Timeout for Outbound Calls					
Local Static Route					
☐ 9191919100					
Local Static Route					
□ <u>9191&gt;</u>					
Local Static Route					
Local Static Route					

Step 4. Locate the "Patterns for RNA timeout on outbound SIP calls" - this is where you add the time CVP to wait prior to initiating the Target re-query in ICM. Add the timer - 12 second and hit SAVE and DEPLOY at the bottom. You don't have to re-start CVP.

Edit Dialed Number Pattern		
📊 Save 🕞 Cancel 🢡 Help		
General		
Dialed Number Pattern Configuration General Configuration		
Dialed Number Patterns * Description:	600>	
Dialed Number Pattern Types		
Enable Local Static Route:	2	
Route to Device:	- Select Device -	v
Route to SIP Server Group:	12-CCM.chase.com	v
IP Address/Hostname/Server Group Name: *	12-CON.chase.com	
Enable Send Calls To Originatori		
Enable RNA Timeout for Outbound Calls:	2	
Timeout *	12 seconds	
Enable Custom Ringtone:		·
Enable Post Call Survey for Incoming Calls:		
* Required.		
<sup>1</sup> At least one dialed number pattern configuration type	must be selected.	

Dialed Number Pattern						
Deploy 🕞 Deployment Status 🦻 Help			Riter: Dialed			
Dialed Number Pattern (600>) was successfully saved.						
A The Dialed Number Pattern configuration has changed since the last deployn	nent request. You must deploy the configuration again for changes to take effect.					
General						
List of Dialed Number Patterns						
Display Pattern Type: Display All 🗸 Display						
Daled Number Pattern	Description					
9 502						
Local Static Route	IP Address/Hostname/Server Group Name:	12-00M.chase.com				
<ul> <li>RNA Timeout for Outbound Galls</li> </ul>	* RNA Timeout for Outbound Callis Timeout 12 seconds					
□ @ <u>7777&gt;</u>						
Local Static Route	IP Address/Hostname/Server Group Name:	12-WB drase.com				
□ 3 9191919100	□ 3 9191919100 WhispherAnnouncement					
* Local Static Route IP Address/Hostname/Server Group Name: 10.201-224-60						
Local Static Route IP Address/Hostname/Server Group Name: 12-WB.chase.com						
□ © <u>9292</u> 2						
Local Static Route	IP Address/Hostname/Server Group Name:	12-W8.dase.com				
Add New Dekte Edit Collapse all Expand all						

### **PCCE - RNA Timeout Configuration**

Step 1. Open the CCEAdmin and navigate to Routing Pattern.

- Step 2. Select Route Settings.
- Step 3. Add the timer to the RNA Timeout field.

alialia cisco	Unified Contact Center	r Enterprise Management
	Route Settings	
Overview	Edit 10*	
	Routing Pattern*	
Infrastructure	Description	Agent Extensions
٩		
Organization	Site*	Main Q
	Pattern Type*	Agent
Users	Destination*	cucm1.dcloud.cisco.com 💿 🔍
0	DNA Timesud	
	Inter Timeout	15 seconds
Desktop	Send to Originator	
Capacity		

#### **CCE** - Scripting

Step 1. Access Script Editor in Adminstrator server.

Step 2. See list of Scripts if you added already, or you can create a new script.

Step 3. Navigate **File -> New**.

27. S	cript	Edito	r - [Qu	ieueing_	Thankyou	ı {All	Cust	ome	rs}.01	5 [Act	ive V	ersio	n][Bi	rowse	-]]			
3	<u>F</u> ile	<u>E</u> dit	<u>V</u> iew	<u>S</u> cript	<u>O</u> ptions	<u>W</u> ir	ndow	<u>H</u> el	р									
6		<u>N</u> ew			Ctrl+N		1 🙈	****		E		1	Þ	Ē		<u>.</u>	8	24
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=		Close	All							144						,		

Step 4. Change the Queue Type properties by righ click on the **Queue to Skill Group node** to enable **Target Requery** and set the higher **Priority.** 

Queue to Skill Group Properties       X         Queue Connection Labels       Target references         Queue type       Phinty 5         Using Skill Groups       Change         Target Requery Enabled       Consider If         Requery Enabled       Skill Group         Add Targets       Pelete Row         1       CUCM_1.Cisco_Voice.         Billing_RT       Delete Row         Validate       rnula Editor         7       Business Entity:         9       Enterprise target:         10       Priority:         12       Priority:         13       Veitapplicable		· · · ·	Skill CUC	Queue to Group M_1.Cisco_Voice.Billi X	Skill Group No. ng	% 	· ·	
Skill Group Consider If Route Translation Route Add Targets   1 CUCM_1.Cisco_Voice. Billing_RT Delete Row   3 Queue Type Validate   4	Queue Queue Priori Using Targe	Le to Skill Group Prope Connection Labels	ties	ange © Explicit © Lookup © By © By	ences target references target references by name ID	expression		×
	1 ( 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Skill Group CUCM_1.Cisco_Voice. Queue Type Business E Enterprise t Priority: Enable	Consider If e c Skill Group ntity: (Not applicable) arget: (Not applicable) 5 target requery	Route Billing_RT	Translation Rou	UK OK Cancel Help	Add Targets Delete Row Mula Editor	

Step 5.Configure RequeryStatus variable in the script to validate the router requeuery status.



If there is an available agent, the Queue node selects the longest available agent from the configured skill groups. If there is no available agent, the script then queues the call with a priority set in the node and continues down the success exit of the node. When an agent becomes available, the Unified ICM always selects the longest queued call from the ones with the highest priority. The RONA mechanism works as follows:

- The Queue node selects an agent.
- If the agent does not answer the call, then the script exits through the failure terminal of the Queue node.
- The If node tests the RequeryStatus variable. If it has value of greater than zero, this is a requery call and the script re-queues the call.
- In the Scripting for RONA example above, it also sets a flag using a call variable for reporting purposes.
- Assuming that there are no agents available, the Queue node immediately exits through the success

terminal.

- If this is a required call, It increases the Queue Priority of the call so that it is handled before any other calls in queue.
- It then enters the normal wait loop with RunScripts

Router Requery is triggered by the routing client (the CVP) when a No-Answer-Timer setting (RNATimeout) expires on CVP. After the CVP VB RNATimeout expires the CVP --> VRU PG sends an**EventReport = No Answer**to the router. The router picks another target according to the routing script and sends the Connect message to the CVP. The target might be another agent or it might be a VRU label to re-queue the call.

The No Answer timer for Router Re-query is not controlled by the ICM, but by the switching fabric, which is the CVP in this case. CVP

- has a configurable No Answer timer, called RNATimeout. Set the RNATimeout to the desired number of seconds that the agent phone should ring before being taken away. In any case, this timeout should be longer than the RONA time-out set in the Agent Desk Settings.
- Enable Requery on the node in the script that selects the first agent. Depending on the type of node used, the Requery mechanism select a new target from the available agents or requires additional scripting. The ICM Script Editor Guide describes how Requery works for the different nodes.

**Note:** Script design is outside the scope of this document. This only explains the minimum step needed to requeue the call. For more details on this, see <u>Scripting and Media Routing Guide for Cisco Unified</u> <u>ICM/Contact Center Enterprise</u>

#### **UCM - No Answer Ring Duration**

Step 1. Access the DN of each Agent Extension and verify the call forward Ring No Answer timer which is 20 seconds by default.

#### -Call Forward and Call Pickup Settings

	Voice Mail	
Calling Search Space Activation Policy		
Forward All	🗌 or	
Secondary Calling Search Space for Forward All		
Forward Busy Internal	🗌 or	
Forward Busy External	🗆 or	
Forward No Answer Internal	🗆 or	
Forward No Answer External	Or	
Forward No Coverage Internal	Or	
Forward No Coverage External	Or	
Forward on CTI Failure	🗆 or	
Forward Unregistered Internal	🗆 or	
Forward Unregistered External	🗆 or	
No Answer Ring Duration (seconds) 20		
Call Pickup Group <pre>&lt; None &gt;</pre>		~

#### **Best Practice**

- Setup Agent Desktop Setting and ICM Scripting
- Enable RNA timer in CVP and UCM
- Collect CVP logs with SIP traces

- Collect CUCM logsCollect UCCE Rouer logsCollect Wireshark Traces

Note: You can use the <u>Set Traces and Collect Logs in CCE</u> link for collecting logs.