

Rainbow CTI & Media Bridge(OPENSCAPE 4000)-

#### A D M I N I S T R A T I O N G U I D E

# Rainbow CTI & Media Bridge



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# 1 Document History

Edition	Date	Changes / Comments / Details
01	15/09/2021	Initial Administration Guide.

# 2 Introduction

## 2.1 Overview - The Product

Rainbow CTI & Media Bridge works with a number of telephone systems e.g. Cisco Call Manager, Asterisk, NEC 3C etc. This document describes the administration of Rainbow CTI and Media Bridge for OpenScape 4000.

Rainbow CTI & Media Bridge application is installed on a local machine in customer premises. It connects with Rainbow Server to push the list of extensions so that they can be associated to Rainbow Users for CTI and VOIP calling, and it also interacts with third-party telephone systems to monitor those extensions for signaling information and call controls.

For other third-party telephony systems, please refer to their respective documentation available at <u>https://support.openrainbow.com</u>.

This document is a step-by-step guide for any technical engineer to configure the software.

## 2.2 Overview - The Guide

The Admin guide comes into effect once the installation is finished and its target audiences are System Administrators. This guide will walks through the administrative steps required for initial configuration and subsequent software maintenance.

The guide begins with an overview along with screenshots of the application to give the reader an understanding of the user interface design.

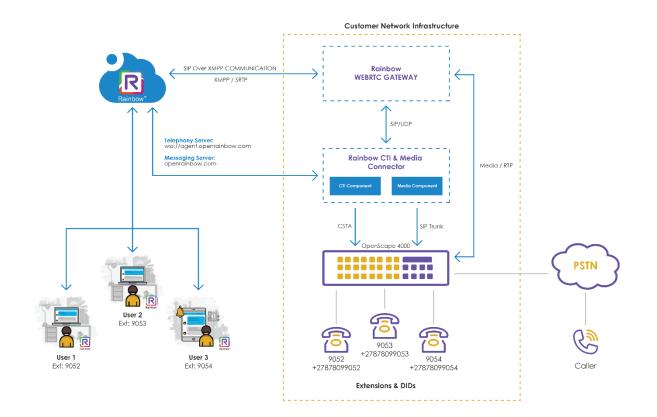
A "Table of Contents" is provided at the beginning of this guide with hyperlinks for the ease of navigation.



# 2.3 Architecture Diagram







# 3 Configuration

## 3.1 Administration - Startup

Launch Rainbow CTI & Media Bridge web administration interface by clicking on the shortcut

icon 😰 on the Windows desktop. This will display a login screen as shown below:

	E EN 🔹
	Connect to CTI & Media Bridge Administration
R	Please enter the username
Welcome to CTI & Media Bridge	Enter your password Password *
	Login
<i>9</i> ⊈ <b>3</b> ∎	By continuing, you agree to: the Terms of Service and the Privacy Policy

Please enter following credentials when you are logging into the Rainbow CTI & Media Bridge for the first time after installation:

### Username: admin

### Password: admin

Once logged in, a web interface is displayed that will allow you to navigate around application using the left vertical panel.

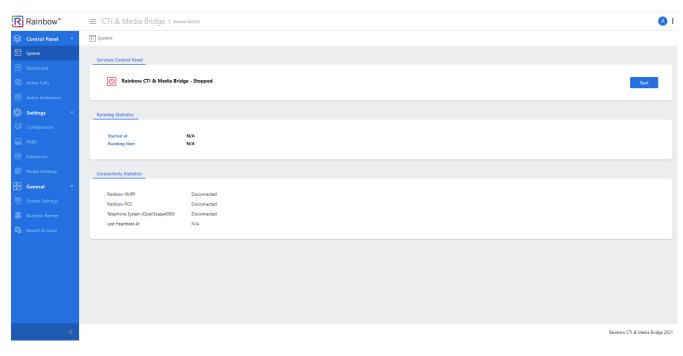
The options are grouped under the following categories:

- Control Panel
- Settings
- General

The options can be collapsed and expanded by clicking on the above categories.



There is also a slider control at the bottom that can be used to minimize or maximize the lefthand panel.



#### Screenshot-Slider Control with Left Hand Panel Displayed

R	≡ CTI & Media Bridge	Version 4.0.0.4	() :
	5- System		
5 6 8	Services Control Panel	dge - Stopped	Start
٢	Running Statistics		
	Started at Running time	N/A N/A	
Ø	Connectivity Statistics		
88	Rainbow XMPP	Disconnected	
Ē	Rainbow PCG	Disconnected	
8	Telephone System (OpenScape4000)	Disconnected	
₿.	Last Heartbeat At	N/A	
>			Rainbow CTI & Media Bridge 2021

Screenshot-Slider Control with Left Hand Panel Hidden

Similarly, click on the slider control again to show the left-hand panel.

You can also click on  $\equiv$  icon next to application title as highlighted below:



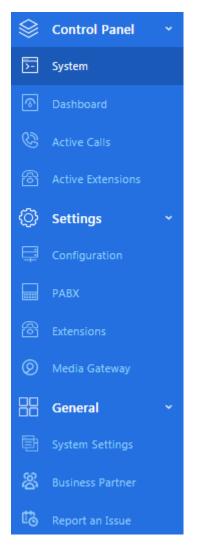
R	😑 CTI & Media Bridge	은   Version 4.0.0.4	A :
	5- System		
Þ	Services Control Panel		
۵ پ ۲	🕐 Rainbow CTI & Media Br	idge - Stopped	Start
٢	Running Statistics		
	Started at Running time	N/A N/A	
Ø	Connectivity Statistics		
88	Rainbow XMPP	Disconnected	
Ē	Rainbow PCG	Disconnected	
8	Telephone System (OpenScape4000)	Disconnected	
tà	Last Heartbeat At	N/A	
>			Rainbow CTI & Media Bridge 2021

This action will hide the entire left panel as shown below:

R Raint	bow™ ≡ CTI	& Media Bridge 1 Version 4.0.4	A :
5- System			
Services	Control Panel		
U	Rainbow CTI & Media Brid	ge - Stopped Stort	
Running	Statistics		
		N/A N/A	
Connecti	livity Statistics		
Rain	nbow XMPP nbow PCG	Disconnected Disconnected	
	ephone System (OpenScape4000) t Heartbeat At	Disconected N/A	

Below is the full view of that left panel:





Screenshot - Complete list of links in left menu

For every click on the left menu, the main page to the right will change to the corresponding display. As an administrator, it is your responsibility to provide requisite configuration details in each section and customize the application according to your particular requirements. We recommend that you work on these links, in the following order:

- Configuration
- PABX
- Media Gateway
- System
- System Settings

Once you have provided required information in each section, please click on Update/Save button for that section.

**Noe:** The administration application can also be opened by entering a URL i.e. <u>http://<IP</u> address>/webAdmin/ e.g. <u>http://172.20.1.121/webadmin</u>

# 3.2 Configuration Settings

Rainbow CTI & Media Bridge is required to connect with the main Rainbow Server to enable telephony integration. The configuration settings are entered usually during the first time setup; however, they can be updated at any time, if needed.

Go to configuration page by clicking on the Configuration tab from the left menu, as shown below.

<b>R</b> Rainbow <sup>™</sup>	≡ CTI & Media Bridge । versi	on 4.0.0.4		<b>A</b> :
😂 Control Panel 👻	>- System			
▶ System	Services Control Panel			
Dashboard	Services Control Paner			
🕲 Active Calls	Rainbow CTI & Media Brid	lge - Stopped		Start
Active Extensions				
🚫 Settings 🛛 👻	Running Statistics			
📮 Configuration	-			
равх	Started at Running time	N/A N/A		
Extensions				
Ø Media Gateway	Connectivity Statistics			
General ~				
System Settings	Rainbow XMPP Rainbow PCG	Disconnected Disconnected		
🛞 Business Partner	Telephone System (OpenScape4000)	Disconnected		
🙆 Report an Issue	Last Heartbeat At	N/A		
<			Rainbow CTI &	Media Bridge 2021

Screenshot-System

You will be presented with the screen, as shown below:



Configuration		
Rainbow Settings		
Domain *		
Proxy Settings		
Proxy Address		
Equipment Settings		
Equipment ID * Password *		Information! The Equipment Settings for Third party PBX are defined and managed via Rainbow Administration under the BP account, and are accessible through
		BP Account -> Company Administration -> Communication -> Equipment Info
Note : For the changes to take ef	ffect, Rainbow CTI & Media Bridge services needs to be restarted via Se	vices Control Panel. Update Update
		Rainbow CTI & Media Bridge 202

#### 1jScreenshot-Configuration

The relevant page is displayed which has the following main sections.

- Rainbow Settings
- Proxy Settings
- Equipment Settings

A screenshot of each section is illustrated below and a separate explanation for each is written underneath the item.

#### 3.2.1 Rainbow Settings

Rainbow fulfillment team with your company's subscription confirmation will provide these settings. The default value for this section is set to 'openrainbow.com', which is valid for the production sites.

Please enter the provided information accordingly, as shown below for illustration.

Rainbow Setting	5	
Domain * :	openrainbow.com	

#### Screenshot-Rainbow Settings

### 3.2.2 Proxy Settings

If a company has a proxy setup in place for outgoing traffic, the proxy address shall be provided as part of the configuration. It is important to note that this field is optional.

Please enter the provided information accordingly, as shown below for illustration.

Proxy Settings	
Proxy Address :	

Screenshot- Proxy Settings

### 3.2.3 Equipment Settings

Equipment ID is generated by Rainbow system and shall be provided by Rainbow fulfillment team/business partner with your company's subscription confirmation.

Please enter the provided information accordingly, as shown below for illustration.

quipment Settings		
Equipment ID * Password *	PBX78d4-5910-e92e-4a33-b5f2-e336-14b2-8a7b	<ul> <li>Information!</li> <li>The Equipment Settings for Third party PBX are defined and managed via Rainbow Administration under the BP account, and are accessible through</li> <li>BP Account -&gt; Company Administration -&gt; Communication -&gt;</li> </ul>
		Equipment Info

Screenshot-Equipment Settings

Finally, once you have entered the details into each field, click **Update**, as shown below.

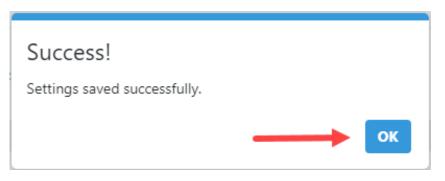


Configuration		
Rainbow Settings		
Domain *	openrainbow.com	
Proxy Settings		
Proxy Address		
Equipment Settings		
Equipment ID * Password *	PBX78d4-5910-e92e-4a33-b5f2-e336-14b2-8a7b	Information! The Equipment Settings for Third party PBX are defined and managed via Rainbow Administration under the BP account, and are accessible through
		BP Account -> Company Administration -> Communication -> Equipment Info
Note : For the changes to take effect, R	ainbow CTI & Media Bridge services needs to be restarted via Services Contr	ol Panel. Cancel Update
		Deichen, CTI 9: Madia Deida a 2021

Rainbow CTI & Media Bridge 2021

#### Screenshot-Configuration

You will be presented with the popup window, click **OK**, as shown below.



**NOTE:** Once successfully configured, do not change these settings unless advised by Rainbow Support team.

# 3.3 PABX Settings

Rainbow CTI & Media Bridge is required to connect to OpenScape 4000 telephone system to get phonebook information and also to get telephony events and perform call controls.

Click on the PABX tab from the left menu on the screen, as shown.

R	Rainbow <sup>™</sup>	≡ CTI & Media Bridge I ver	ion 4.0.0.4	:
	Control Panel Y	5- System		
5-	System	Services Control Panel		
•		Services control Parler		
C		C Rainbow CTI & Media Bri	dge - Stopped	Start
8				
٥	Settings *	Running Statistics		
₽				
		Started at Running time	N/A N/A	
8				
Ø		Connectivity Statistics		
88	General ~			
Ē		Rainbow XMPP	Disconnected	
		Rainbow PCG Telephone System (OpenScape4000)	Disconnected Disconnected	
		Last Heartbeat At	N/A	
ťô.				
	<			Rainbow CTI & Media Bridge 2021

Screenshot- System

You will be presented with the screen, as shown below:



x		
ectivity Settings		
ectivity Settings		
Friendly Name	OpenScape4000	() CSTA Connection Details
CSTA Connection Details		The CSTA settings are required to establish a communication channel with <b>openscape4000</b> for call controls and signaling information.
IP Address *		This includes the IP address and port on which CSTA services are configured and running in
Port *		openscape4000. Username and password will be required for cases where openscape4000 requires
Username		an authenticated connection to CSTA.
Password		
Voice Gateway		
Desk Extension Length	4 🗸	
External Outbound Prefix		
External Outbound Prenx		
runk Settings		
runk Settings	5060	
Port *	5060	SIP Trunk Setup! A SIP trunk setup is required between openscape4000 and Rainbow CTI & Media Bridge
Port * Prefix *	5060	A SIP trunk setup is required between <b>openscape4000</b> and <b>Rainbow CTI &amp; Media Bridge</b> application. In <b>openscape4000</b> , the SIP trunk should have following set of configurations:
Port *	5060	A SIP trunk setup is required between openscape4000 and Rainbow CTI & Media Bridge
Port * Prefix *	5060	A SIP trunk setup is required between <b>openscape4000</b> and <b>Rainbow CTI &amp; Media Bridge</b> application. In <b>openscape4000</b> , the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement c. UDP as transport medium
Port * Prefix *	5060	A SIP trunk setup is required between <b>openscape4000</b> and <b>Rainbow CTI &amp; Media Bridge</b> application. In <b>openscape4000</b> , the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement c. UDP as transport medium d. Destination address is the machine IP address on which <b>Rainbow CTI &amp; Media Bridge</b> application is installed
Port * Prefix *	5060	A SIP trunk setup is required between <b>openscape4000</b> and <b>Rainbow CTI &amp; Media Bridge</b> application. In <b>openscape4000</b> , the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement c. UDP as transport medium d. Destination address is the machine IP address on which <b>Rainbow CTI &amp; Media Bridge</b>
Port * Prefix *	5060	A SIP trunk setup is required between <b>openscape4000</b> and <b>Rainbow CTI &amp; Media Bridge</b> application. In <b>openscape4000</b> , the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement c. UDP as transport medium d. Destination address is the machine IP address on which <b>Rainbow CTI &amp; Media Bridge</b> application is installed e. <b>183</b> Session in progress enablement to provide ringtone to Rainbow users while making outbound calls f. <b>G711 u-law</b> should be enabled
Port * Prefix *	5060	A SIP trunk setup is required between openscape4000 and Rainbow CTI & Media Bridge application. In openscape4000, the SIP trunk should have following set of configurations:     a. Disable digest authentication     b. No authentication enablement     c. UDP as transport medium     d. Destination address is the machine IP address on which Rainbow CTI & Media Bridge     application is installed     e. 183 Session in progress enablement to provide ringtone to Rainbow users while making     outbound calls     f. G711 u-law should be enabled     Deflect Prefix
Port * Prefix *	5060	A SIP trunk setup is required between openscape4000 and Rainbow CTI & Media Bridge application. In openscape4000, the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement c. UDP as transport medium d. Destination address is the machine IP address on which Rainbow CTI & Media Bridge application is installed e. 183 Session in progress enablement to provide ringtone to Rainbow users while making outbound calls f. G711 u-law should be enabled Deflect Prefix It is only required when SIP trunk in openscape4000 is configured to attach an additional prefix while transferring the call from openscape4000 to CTI & Media Bridge application. It is mandatory that this
Prefix *	5060	A SIP trunk setup is required between openscape4000 and Rainbow CTI & Media Bridge application. In openscape4000, the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement c. UDP as transport medium d. Destination address is the machine IP address on which Rainbow CTI & Media Bridge application is installed e. 183 Session in progress enablement to provide ringtone to Rainbow users while making outbound calls f. G711 u-law should be enabled Deflect Prefix It is only required when SIP trunk in openscape4000 is configured to attach an additional prefix while transferring the call from openscape4000 to CTI & Media Bridge application. It is mandatory that this prefix should be removed by the PABX after the call is transferred to CTI & Media Bridge application.
Port * Prefix *	5060	A SIP trunk setup is required between openscape4000 and Rainbow CTI & Media Bridge application. In openscape4000, the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement c. UDP as transport medium d. Destination address is the machine IP address on which Rainbow CTI & Media Bridge application is installed e. 183 Session in progress enablement to provide ringtone to Rainbow users while making outbound calls f. G711 u-law should be enabled Deflect Prefix It is only required when SIP trunk in openscape4000 is configured to attach an additional prefix while transferring the call from openscape4000 to CTI & Media Bridge application. It is mandatory that this
Port * Prefix *	5060	A SIP trunk setup is required between openscape4000 and Rainbow CTI & Media Bridge application. In openscape4000, the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement c. UDP as transport medium d. Destination address is the machine IP address on which Rainbow CTI & Media Bridge application is installed e. 183 Session in progress enablement to provide ringtone to Rainbow users while making outbound calls f. G711 u-law should be enabled Deflect Prefix It is only required when SIP trunk in openscape4000 is configured to attach an additional prefix while transferring the call from openscape4000 to CTI & Media Bridge application. It is mandatory that this prefix should be removed by the PABX after the call is transferred to CTI & Media Bridge application.

The relevant page is displayed which has the following main sections.

- Connectivity Settings
- SIP Trunk Settings

A screenshot of each section is illustrated below and a separate explanation for each is written underneath the item.

### 3.3.1 Connectivity Settings

Friendly Name field is usually the name that organization has given to the installed telephone system and it is only for better readability purposes. This becomes particularly useful when there are more than one telephony systems in an organization and in that case only IP addresses do not help the administrators to quickly identify the respective systems.

The default value for this field is set to 'OpenScape 4000' but it can be changed.

### IP Address and Port:

Please provide IP address and port number of OpenScape 4000 PBX in these fields.

### Username and Password:

These credentials can be found in OpenScape 4000 user interface. It is important that the provided user is correctly setup in PBX for integration to work properly.

### Voice Gateway IP:

Provide IP Address for Voice Gateway in case OpenScape 4000 is using an external voice gateway.

### Desk Extension Length:

Enter the number of characters that an extension will comprise of in this field e.g. if extensions in your organization range between 100-999 then you will select 3 as your desk extension length.

### External Outbound Prefix

Enter the prefix that must be affixed with extension when used for external outbound calls.

Connecti	ivity Settings		
F	ivity Settings iriendly Name STA Connection Details IP Address * Port * Username Password	OpenScape 4000 172.20.1.119 5555 admin 	<ul> <li>CSTA Connection Details</li> <li>The CSTA settings are required to establish a communication channel with openscape4000 for call controls and signaling information.</li> <li>This includes the IP address and port on which CSTA services are configured and running in openscape4000. Username and password will be required for cases where openscape4000 requires an authenticated connection to CSTA.</li> </ul>
	Password /oice Gateway Desk Extension Length	31312 5 V	
E	xternal Outbound Prefix	<u>a</u>	

Screenshot- PABX

### 3.3.2 SIP Trunk Settings

Provide configurations for SIP Trunk setup in this sections that are required for connectivity between OpenScape 4000 and Rainbow CTI & Media Bridge application. Provide SIP Trunk port address and prefix that will be affixed with the extensions operating with SIP Trunk server. Also provide deflect prefix if SIP Trunk in OpenScape 4000 is configured to attach an additional prefix while transferring the call from OpenScape 4000 to CTI & Media Bridge application.



SIP Tru	ink Settings				
	Port * Prefix * Deflect Prefix		<ul> <li>SIP Trunk Setup!</li> <li>A SIP trunk setup is required between openscape4000 and Rainbow CTI &amp; Media Bridge application. In openscape4000, the SIP trunk should have following set of configurations:         <ul> <li>Disable digest authentication</li> <li>No authentication enablement</li> <li>UDP as transport medium</li> <li>Destination address is the machine IP address on which Rainbow CTI &amp; Media Bridge application is installed</li> <li>183 Session in progress enablement to provide ringtone to Rainbow users while making outbound calls</li> <li>Grift u-law should be enabled</li> </ul> </li> <li>Deflect Prefix         <ul> <li>It sonly required when SIP trunk in openscape4000 is configured to attach an additional prefix while transferring the call from openscape4000 to CTI &amp; Media Bridge application. It is mandatory that this prefix insufer to CTI as Media Bridge application. Hence, the 'To' party in INVITE packet should display the number without this prefix.</li> </ul> </li> </ul>		
(î) №	te : For the changes to take effect, Rain	bow CTI & Media Bridge services needs to be restarted	d via Services Control Panel.	Cancel	Update

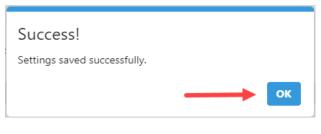
Screenshot- SIP Trunk Settings

Once you have entered the details into each field, click **Update** as shown below:

Friendly Name	OpenScape4000	
CSTA Connection Details	opensepense	CSTA Connection Details The CSTA settings are required to establish a communication channel with openscape4000 for call controls and signaling information.
IP Address *	172.20.0.22	Controls and signaling information. This includes the IP address and port on which CSTA services are configured and running in
Port *	5056	openscape4000. Username and password will be required for cases where openscape4000 requires an authenticated connection to CSTA.
Username Password	admin	
Voice Gateway	172.20.0.1	
Desk Extension Length	6 🗸	
External Outbound Prefix	9	
ık Settings		
	5060	③ SIP Trunk Setup!
nk Settings Port * Prefix *	6	A SIP trunk setup is required between <b>openscape4000</b> and <b>Rainbow CTI &amp; Media Bridge</b> application. In <b>openscape4000</b> , the SIP trunk should have following set of configurations:
Port *		A SIP trunk setup is required between <b>openscape4000</b> and <b>Rainbow CTI &amp; Media Bridge</b> application. In <b>openscape4000</b> , the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement
Port * Prefix *	6	A SIP trunk setup is required between <b>openscape4000</b> and <b>Rainbow CTI &amp; Media Bridge</b> application. In <b>openscape4000</b> , the SIP trunk should have following set of configurations: a. Disable digest authentication
Port * Prefix *	6	A SIP trunk setup is required between <b>openscape4000</b> and <b>Rainbow CTI &amp; Media Bridge</b> application. In <b>openscape4000</b> , the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement c. UDP as transport medium d. Destination address is the machine IP address on which <b>Rainbow CTI &amp; Media Bridge</b> application is installed e. <b>183</b> Session in progress enablement to provide ringtone to Rainbow users while making outbound calls f. <b>G711 u-law</b> should be enabled
Port * Prefix *	6	A SIP trunk setup is required between <b>openscape4000</b> and <b>Rainbow CTI &amp; Media Bridge</b> application. In <b>openscape4000</b> , the SIP trunk should have following set of configurations: a. Disable digest authentication b. No authentication enablement c. UDP as transport medium d. Destination address is the machine IP address on which <b>Rainbow CTI &amp; Media Bridge</b> application is installed e. <b>183</b> Session in progress enablement to provide ringtone to Rainbow users while making outbound calls



You will be presented with the popup window, click **OK**, as shown below.



Screenshot-Message from Application

**NOTE:** Once successfully configured, restart the Rainbow CTI & Media Bridge service for changes to take effect.

## 3.4 Media Gateway

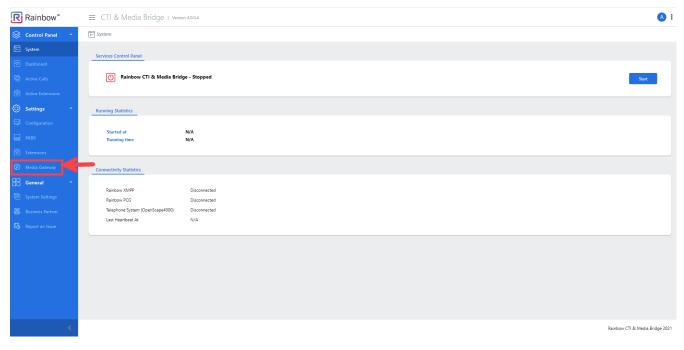
Rainbow CTI and Media Bridge works as a middleware between Rainbow and ALE WebRTC Gateway so that users (with CTI capability) can receive and take their desk extension (PABX) calls onto their rainbow applications.

It is important that Rainbow WebRTC Gateway is correctly configured before setting up Media Gateway. Media Gateway configuration is necessary if users are setup to receive their business phone calls on their Rainbow applications.

For more detailed information on webRTC Gateway configuration, please check:

https://support.openrainbow.com/hc/en-us/articles/360019337180-WebRTC-gatewayinstallation-and-configuration-for-third-party-PBX

Click on the Media Gateway tab from the left menu on the screen, as shown:



Screenshot-System

You will be presented with the screen, as shown below:

dia Settings		
Media Server IP *	Select IP 🗸	() Media Setting & webRTC Gateway
webRTC Gateway		Media Server IP is the IP address of the machine on which <b>Rainbow CTI &amp; Media</b> <b>Bridge</b> application is installed. This IP address needs to be provided (in the below
IP *		command) while configuring webRTC Gateway. mpconfigPBX_DOMAIN=""
SIP Port *	•	Following set of commands can be used to check the configuration and running status for webRTC Gateway.
note Extensions Numbering Plan		
Prefix		The number format for remote extensions is divided into two parts. The first part is the
Same Prefix configured in PABX		prefix for the remote extension number; which can either be the same as the prefix defined while setting up the SIP trunk in <b>openscape4000</b> or can be a different custom
<ul> <li>Other Number</li> </ul>		number. Along with prefix, the second part of remote extension number can either be a random number of selected length, or can be same as desk extension.
Extension Pattern		
<ul> <li>Desk extension</li> </ul>		Following outline a sample pattern of the remote extensions on basis of the configurations.
<ul> <li>A random extension of length</li> </ul>	~	000000 - 999999
ler ID policy for VOIP calling		
No policy for Caller ID		
<ul> <li>Set policy for Caller ID</li> </ul>		

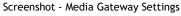
The relevant page is displayed which has the following main sections.

- Media Settings
- Remote Extensions Numbering Plan
- Caller ID Policy for VOIP calling

### 3.4.1 Media Settings

Please select the IP address using which the Media Gateway services will be communicating to webRTC Gateway. Also provide the IP address and port on which webRTC Gateway services are running. In most cases, Port will remain the same i.e. 5060 and so only IP address of the webRTC Gateway needs to be provided.

ia Settings		
Media Server IP *	172.20.2.75	⑦ Media Setting & webRTC Gateway
webRTC Gateway		Media Server IP is the IP address of the machine on which <b>Rainbow CTI &amp; Media</b> Bridge application is installed. This IP address needs to be provided (in the below
IP *	172.20.0.191	command) while configuring webRTC Gateway. mpconfigPBX_DOMAIN="172.20.2.75"
SIP Port *	5060	Following set of commands can be used to check the configuration and running status for webRTC Gateway.





### 3.4.2 Remote Extensions Numbering Plan

Remote Extensions are entities that are managed by Rainbow CTI & Media Bridge application to handle calls received from telephone system via SIP trunk. Remote Extension Prefix is required so that internal extensions do not conflict with PBX existing dial plan).

### Prefix

You can either select the prefix of these remote extensions same as SIP Trunk prefix configured in PABX settings section or you can assign some other prefix by selecting the appropriate option.

### Extension Pattern

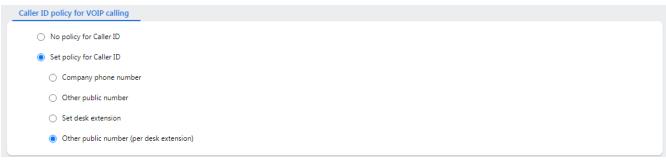
Select whether you want to use similar extension pattern as opted in PABX settings or do you want to use a random extension length. If you opt for a random extension length, then please do mention the exact length from the drop down next to this option.

Prefix	The number format for remote extensions is divided into two parts. The first part is the
Same Prefix configured in PABX	prefix for the remote extension number; which can either be the same as the prefix defined while setting up the SIP trunk in <b>openscape4000</b> or can be a different custom
Other Number	number. Along with prefix, the second part of remote extension number can either be a
extension Pattern	random number of selected length, or can be same as desk extension.
O Desk extension	Following outline a sample pattern of the remote extensions on basis of the configurations.
● A random extension of length	1000000 – 1099999

Screenshot-Remote Extensions Numbering Plan Settings

### 3.4.3 Caller ID Policy for VOIP calling

You can select a particular policy for Caller ID option in this section. Simply opt for first option if you don't want to adopt a policy. If you select the second option, another menu opens up as displayed below:



Screenshot-Caller ID policy for VOIP Calling

### **Company Phone Number**

Enter company phone number that you want to display as caller ID when a call is received on another extension from your extension.



### Other Public Number

Enter some random public number that you want to display as caller ID when a call is received on another extension from your extension.

### Set Desk extension

Select this option if you want to display your assigned desk extension as caller ID when a call is received on another extension from your extension.

### Other Public Number (per desk extension)

Select this option if you want to display some other public number that is assigned as your desk extension as caller ID when a call is received on another extension from your extension.

Once you have entered the details into each field, click Update.

You will be presented with the popup window, click **OK**, as shown below.

Success!		
Settings saved successfully.		
	$\longrightarrow$	ОК

Screenshot-Message from Application

# 3.5 Starting and Stopping Rainbow CTI & Media Bridge Service

Once the configuration is updated, Rainbow CTI & Media Bridge Service can be started to establish a connection with Rainbow Server.

Go to system screen by clicking on "System"

The "*System*" screen provides an easy interface to start or stop the service without the need to go to Windows Services Control Manager.

R	Rainbow™	≡ CTI & Media Bridge I v	ersion 4.0.0.4		<u> </u>
	Control Panel *	>- System			
5-	System	Services Control Panel			
(		Services Control Panel			
Q		🕐 Rainbow CTI & Media B	ridge - Stopped		Start
8					
Ø	Settings *	Running Statistics			
₽					
		Started at Running time	N/A N/A		
8					
Ø		Connectivity Statistics			
88	General ~				
Ē		Rainbow XMPP Rainbow PCG	Disconnected Disconnected		
		Telephone System (OpenScape4000)	Disconnected		
		Last Heartbeat At	N/A		
U3					
				Rainbow C	1 & Media Bridge 2021
		-			

Screenshot - System

The Service screen displays the status of the Rainbow CTI & Media Bridge service. Using this screen, you can either start or stop the service.

On the left, you will see an LED indicating the current state of the service. A **Green** LED icon indicates that this service is running. A **Red** LED icon indicates that it is stopped. You can find the Stop or Start button on the right. Click that button to either start or stop the service.

The figure below shows the state when Rainbow CTI & Media Bridge service is in running state.



rvices Control Panel		
🕧 Rainbow CTI & Media Brid	ge - Running	Stop
nning Statistics		
Started at	Wednesday, September 15, 2021 3:51:37 PM	
Running time	0d 0h 0m	
nnectivity Statistics		
Rainbow XMPP	Disconnected	
Rainbow PCG	Disconnected	
	Disconnected	
Telephone System (OpenScape4000)	Disconnected	

Screenshot- System

# 4 Calls and Extensions

## 4.1 Dashboard

Rainbow CTI & Media Bridge has a number of pre-selected statistics such as **CTI Connector connection status**, **Monitored & Un-monitored extensions list** and **On-going Calls**. To view statistics, click on the **Dashboard** from the left menu, as shown below.

	Control Panel *	System
5-	System	Services Control Panel
•		
		Rainbow CTI & Media Bridge - Running       Stop
٢	Settings *	Running Statistics
₽		Started at Wednesday, September 15, 2021 6:36:44 PM
		Running time 0d 0h 0m
		Connectivity Statistics
	General *	Rainbow XMPP
		Rainbow PCG
		Telephone System (OpenScape4000) Last Heartbeat At N/A
₿.		

Screenshot -System

You will be presented with the screen, as shown below.

(The Dushboard				
OpenSc	ape4000	Extension	s Monitoring	
21 20 PHONEBOOK USERS ENTRIES		<b>22</b> success	1 FAILURE	
с	alls	Rainbow Users		
54			7 (TI & VOIP	

#### Screenshot-Dashboard

The dashboard tab provides wealth of information that can fast track troubleshooting.

# 4.2 Extensions & User Entries

Rainbow CTI & Media Bridge retrieves the list of total extensions/users entries available in OpenScape 4000 PBX and sends that information to Rainbow Server. This information is then made available in Rainbow Enterprise configuration.

If you want to see the list of telephone extensions/Users entries, click on the **PHONEBOOK**, as shown below.

Cushboard			
OpenScape4000		Extension	s Monitoring
21	20 USERS ENTRIES	22 success	1 FAILURE
C C	Calls		ow Users
54			7 CTI & VOIP

Screenshot-Dashboard

You will be presented with the screen, as shown below



All CTI CTI & V	OIP			Search	
Extension	Operating Mode	DDI	Rainbow User ID	Remote Exter	ision
<b>\$]</b> 1201	CTI & VOIP		BBB10348812081690249	91201	ť
<b>6</b> 100	СТІ			9100	ť
<b>(</b> ) 1012	СТІ			91012	ť
<u><b>C</b></u> 1000	CTI & VOIP		BBB10746154790219190	91000	ť
<b>6</b> 1001	СТІ			91001	ť
<b><u>C</u></b> 1002	CTI & VOIP		BBB10746154790219190	91002	ť
<b>4</b> ] 1003	CTI & VOIP			91003	ť
<b>(2)</b> 1004	СТІ		BBB10739485544734664	91004	ť
<b></b> 1005	CTI & VOIP			91005	đ
<b>4</b> ] 1006	CTI & VOIP		BBB10318714704420568	91006	ť
α 1 2 »				10	rows per page

#### Screenshot- Extensions

You can also go to extensions screen by clicking on the Extensions tab from the left menu, as shown.

	Control Panel	•	5- System	
5-	System		Services Control Panel	
1				
Q			Rainbow CTI & Media Brid	Ige - Running Stop
8				
٢	Settings	~	Running Statistics	
₽		6-	-	
			Started at Running time	Wednesday, September 15, 2021 6:36:44 PM 0d 0h 0m
ෂ				
Ø			Connectivity Statistics	
	General	~		
퍈			Rainbow XMPP Rainbow PCG	
8			Telephone System (OpenScape4000)	
¢3			Last Heartbeat At	N/A



You will be presented with the screen, as shown below

All CTI CTI & VO	DIP			Search	
Extension	Operating Mode	DDI	Rainbow User ID	Remote Exter	nsion
<b>\$]</b> 1201	CTI & VOIP		BBB10348812081690249	91201	ť
<b>6)</b> 100	СТІ			9100	đ
<b>(</b> ) 1012	СТІ			91012	đ
<b><u>\$</u>]</b> 1000	CTI & VOIP		BBB10746154790219190	91000	đ
<b>6</b> 1001	СТІ			91001	Ē
<b>5</b> 1002	CTI & VOIP		BBB10746154790219190	91002	Ū
<b>5</b> 1003	CTI & VOIP			91003	t
<b>(</b> ) 1004	СТІ		BBB10739485544734664	91004	Ū.
<b></b> 1005	CTI & VOIP			91005	đ
<b>5</b> ] 1006	CTI & VOIP		BBB10318714704420568	91006	Ē
« 1 2 »				10	rows per page

#### Screenshot- Extensions

### 4.2.1 CTI & VOIP

VOIP introduces a routing menu Other Number in the Rainbow application to forward the PBX calls to a second extension configured with an external or internal number. It is based on Virtual Extension device on the Media Gateway.

Note: Every new extension will have CTI & VOIP set as operating mode.

If you want to handle any specific desk extension (PABX) call onto rainbow interface both in terms of signaling and voice then select CTI option from the drop down menu after clicking on **Edit** button. Once you have set the options, click **Update** as shown below:



Rextensions	
-------------	--

Extension	Operating Mode	DDI	Rainbow User ID	Remote Extens	ion
<b>5</b> ] 1201	CTI & VOIP		BBB10348812081690249	91201	đ
<b>&amp;</b> 100	СТІ			9100	đ
<b>&amp;</b> 1012	СТІ			91012	đ
<b>1000</b>	CTI & VOIP		BBB10746154790219190	91000	đ
<b>&amp;</b> 1001	СТІ			91001	Ē
1002	CTI & VOIP		BBB10746154790219190	91002	Ē
1003	CTI & VOIP			91003	Ē
<b>&amp;</b> 1004	СТІ		BBB10739485544734664	91004	Ē
1005	CTI & VOIP			91005	Ē
1006	CTI & VOIP		BBB10318714704420568	91006	Ē
« 1 2 »					ows per page

#### Screenshot- Edit Button on Extensions Page

B Extensions

xtension	Operating Mode	DDI	Rainbow User ID	Remote Extensi	on
1201	CTI & VOIP 🗸		BBB10348812081690249	91201	匝
100	CTI CTI & VOIP			9100	Ē
1012	СТІ 🗸			91012	Ē
1000	CTI & VOIP 🗸		BBB10746154790219190	91000	đ
1001	CTI 🗸			91001	世
1002	CTI & VOIP		BBB10746154790219190	91002	世
1003	CTI & VOIP			91003	世
1004	CTI 🗸		BBB10739485544734664	91004	Ē
1005	CTI & VOIP			91005	世
1006	CTI & VOIP 🗸		BBB10318714704420568	91006	Ē
1 2 »				10 rov	ws per page





All CTI CTI & VOIP	J			Search	
Extension	Operating Mode	DDI	Rainbow User ID	Remote Extens	ion
<b>1201</b>	CTI & VOIP 🗸	112533	BBB10348812081690249	91201	匝
<b>(</b> ) 100	CTI 🗸			9100	匝
<b>(</b> ) 1012	CTI 🗸			91012	匝
<b>(</b> ] 1000	CTI & VOIP		BBB10746154790219190	91000	匝
<b>(</b> ) 1001	СТІ 🗸			91001	世
<b>1002</b>	CTI & VOIP		BBB10746154790219190	91002	匝
<b>1003</b>	CTI & VOIP			91003	Ē
<b>(</b> ) 1004	СТІ 🗸		BBB10739485544734664	91004	匝
1005	CTI & VOIP			91005	世
<b>1006</b>	CTI & VOIP		BBB10318714704420568	91006	匝
« 1 2 »				10 rc	ows per page

#### Screenshot-Updating Extensions

You will be presented with the popup window, click **OK**, as shown below.

Success!		
Settings saved successfully.		
	$\longrightarrow$	ОК

Screenshot-Message from Application

While updating the Operating Mode of added extensions, you can also set DDI information for these extensions. If Operating Mode is set as **CTI & VOIP** then DDI information can be manually added and if operating mode is set as CTI, then DDI information cannot be altered and the value stored in CTI & VOIP mode is stored in the extension as shown below:



B Extensions

Extension	Operating Mode	DDI	Rainbow User ID	Remote Extens	ion
1201	CTI & VOIP V		BBB10348812081690249	91201	Ū.
100	CTI & VOIP			9100	đ
1012	CTI 🗸			91012	Ē
1000	CTI & VOIP 🗸		BBB10746154790219190	91000	Ē
1001     1001	СТІ 🗸			91001	t d
1002	CTI & VOIP 🗸		BBB10746154790219190	91002	t d
1003	CTI & VOIP			91003	ė
(1004)	CTI 🗸		BBB10739485544734664	91004	ē
1005	CTI & VOIP			91005	ē
1006	CTI & VOIP		BBB10318714704420568	91006	ė.
« 1 2 »				10 ro	ws per page

#### Screenshot- Extensions

### 4.2.2 Add Extension

You can also add new extensions by clicking on the Add Extensions button available at the bottom of the page as highlighted below:

All CTI CTI & VOIP				Search
Extension	Operating Mode	DDI	Rainbow User ID	Remote Extension
66 X				10 rows per page
	nbow CTI & Media Bridge services needs to be restarted via Services Con	terl Decel		Cancel Update Edit Add Exte
Note : For the changes to take effect, Rain	hbow CTI & Media Bridge services needs to be restarted via Services Con	urol Panel.		

#### Screenshot- Extensions

Following page is displayed when you click on Add Extensions button:

8 Extension			
Information			
Extension * DDI	[too1-1025		
Note : For the changes to ta	ike effect, Rainbow CTI & Media Bridge services needs to be restarted v	ia Services Control Panel.	Cancel Save

Screenshot- Add Extensions

Extension - You can provide a single extension or a range of extensions (100 - 125) in this field.

DDI - Provide a DDI that you want to be assigned to all the newly added extensions.

Once done, click on Save Button as highlighted below:

S Extension		
Information		
Extension *	1003-1099	
DDI	34342342	
Note : For the changes to t	take effect, Rainbow CTI & Media Bridge services needs to be restarted via Services Control Panel.	Cancel
	Screenshot- Add Extensions	

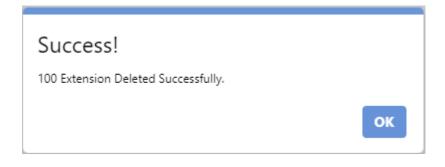
### 4.2.3 Delete Extension

You can also delete extensions by clicking on  $\overline{\blacksquare}$  icon available next to each extension as highlighted below:



All CTI CTI & V	/OIP			Search	
Extension	Operating Mode	DDI	Rainbow User ID	Remote Exten	sion
<u>\$</u> 1201	CTI & VOIP		BBB10348812081690249	91201	
<b>6</b> 100	СТІ			9100	
<b>(</b> ) 1012	СТІ			91012	
<u>6</u> 1000	CTI & VOIP		BBB10746154790219190	91000	
<b>6</b> 1001	СТІ			91001	
<b>5</b> ] 1002	CTI & VOIP		BBB10746154790219190	91002	
<b>4</b> ] 1003	CTI & VOIP			91003	
<b>(</b> ) 1004	СТІ		BBB10739485544734664	91004	
<b>4</b> ] 1005	CTI & VOIP			91005	
<u>47</u> 1006	CTI & VOIP		BBB10318714704420568	91006	
« 1 2 »				10 m	rows per page

When you click on  $\overline{\mathbf{m}}$  icon, following pop up window is displayed:



# 4.3 Monitored Extensions

Once necessary configuration is done in Rainbow Enterprise configuration, the information of telephone extensions that need to be monitored is sent to CTI & Media Bridge. The "Monitored Extensions" shows the total number of extensions that are successfully registered for monitoring by CTI & Media Bridge.

If you want to see the list of telephone extensions monitored, click on the SUCCESS from **Extension Monitoring** widget, as shown below.

@ Dashboard			
OpenSci	ape4000	Extensions	Monitoring
21	20 USERS ENTRIES	22 success	1 FAILURE
c	alls	Rainbo	w Users
54	107	<b>4</b> cT1	7 CTI & VOIP

Screenshot-Dashboard

You will be presented with the screen, as shown below

d	Search
Time Stamp	
Tuesday, February 4, 2020 6:48:00 PM	
Tuesday, February 4, 2020 6:48:00 PM	
	10 rows per page
	Tuesday, February 4, 2020 6:48:00 PM

Screenshot-Monitored Extensions



You can also go to statistics screen by clicking on the Active Extension tab from the left menu, as shown.

Scontrol Panel 🔹	System
▶ System	Services Control Panel
Dashboard	
C Active Calls	🕐 Rainbow CTI & Media Bridge - Running
🗟 Active Extensions	
💮 Settings 🔹 👻	Running Statistics
Configuration	
равх	Started at     Wednesday, September 15, 2021 6:36:44 PM       Running time     0d 0h 0m
🗟 Extensions	
Ø Media Gateway	Connectivity Statistics
General *	
System Settings	Rainbow XMPP Rainbow PCG
😤 Business Partner	Telephone System (DjeurScape4000)
🔁 Report an Issue	Last Heartbeat At N/A

#### Screenshot-System

You will be presented with the list of all both monitored and unmonitored extensions, as shown below:

All Monitored Unmonit	ored	Search
Extension	Time Stamp	
340	Tuesday, February 4, 2020 6:48:00 PM	
8005	Tuesday, February 4, 2020 6:48:00 PM	
« 1 »		10 rows per page

Screenshot-Active Extensions

Click on the Monitored tab from top menu, as shown below.



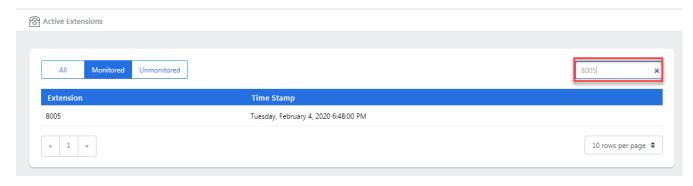
All Monitored Unmonit		Search
Extension 340	Time Stamp Tuesday, February 4, 2020 6:48:00 PM	
8005	Tuesday, February 4, 2020 6:48:00 PM	
« 1 »		10 rows per pag

Screenshot-Active Extensions

## You will be presented with the monitored extensions, as shown below

Active Extensions		
All Monitored Unmonitored		Search
Extension	Time Stamp	
340	Tuesday, February 4, 2020 6:48:00 PM	
8005	Tuesday, February 4, 2020 6:48:00 PM	
« 1 »		10 rows per page 🗢
		Rainbow CTI & Media Bridge 2
	Screenshot-Monitored Extensions	

Key in the extension number in order to search for a specific monitored extension, as shown below.



Screenshot-Monitored Extensions

## 4.4 Unsuccessful monitoring of extensions

There could be many reasons due to which CTI & Media Bridge may not be able to monitor an extension. The reasons could range from missing configuration to a faulty phone cable.

This section gives the total number of extensions that could not be monitored. If you want to see the list of telephone extensions that are not monitored, click on **FAILURE** from **Extension Monitoring** widget, as shown below:

Dushboard			
OpenSci	ape4000	Extension	s Monitoring
21	20 USERS ENTRIES	<b>22</b> success	1 FAILURE
c	alls	Rainbo	ow Users
54	107	4	7 CTI & VOIP

Screenshot-Dashboard

You will be presented with the screen, as shown below

All Monitored Unmonitored		Search
Extension	Time Stamp	
6001	Thursday, July 2, 2020 11:05:00 PM	
6002	Thursday, July 2, 2020 11:05:00 PM	
6005	Thursday, July 2, 2020 11:05:00 PM	
« 1 »		10 rows per page 🗢

Screenshot-Unmonitored Extensions

You can also go to active extensions screen by clicking on the Active Extensions tab from the left menu, as shown below:



😂 Control Panel 🛛 👻	Dr         System
▶ System	Services Control Panel
Dashboard	
🕲 Active Calls	O Rainbow CTI & Media Bridge - Running
C Active Extensions	
💮 Settings 🔹 👻	Running Statistics
Gamma Configuration	
PABX	Started at     Wednesday, September 15, 2021 6:36:44 PM       Running time     0d 0h 0m
🗟 Extensions	
Ø Media Gateway	Connectivity Statistics
General *	
🖶 System Settings	Rainbow XMPP Rainbow PCG
🛞 Business Partner	Telephone System (OpenScape4000)
Co Report an Issue	Last Heartbeat At N/A

#### Screenshot-System

You will be presented with the list of both monitored and unmonitored extensions, as shown below:

Active Extensions		
All Monitored Unmonito	red	Search
Extension	Time Stamp	
340	Tuesday, February 4, 2020 6:48:00 PM	
8005	Tuesday, February 4, 2020 6:48:00 PM	
« 1 »		10 rows per page

Screenshot-Active Extensions

Click on the Unmonitored tab from top menu, as shown.

Time Stamp	
Tuesday, February 4, 2020 6:48:00 PM	
Tuesday, February 4, 2020 6:48:00 PM	
	10 rows per page
	Tuesday, February 4, 2020 6:48:00 PM

Rainbow CTI & Media Bridge 2021

Screenshot-Active Extensions

You will be presented with the list of unmonitored extensions, as shown below:

Extension	Time Stamp	
5001	Thursday, July 2, 2020 11:05:00 PM	
6002	Thursday, July 2, 2020 11:05:00 PM	
6005	Thursday, July 2, 2020 11:05:00 PM	

Screenshot-Unmonitored Extensions

Key in the extension number in order to search for a specific unmonitored extension.

## 4.5 Seeing active calls in the system

Rainbow CTI & Media Bridge provides a way to see the currently in-progress calls in the system. This may be needed during troubleshooting to see if certain calls are being recognized and correctly passed on to Rainbow Server.

To see the details of the **calls in progress**; click on "**IN PROGRESS**" from **Calls** widget, as shown below.

Dushboard			
OpenSc	ape4000	Extensions	: Monitoring
21	20 USERS ENTRIES	22 success	1 FAILURE
c	alls	Rainbo	w Users
54 IN PROCESSS	107 TOTAL PROCESSED	4 cri	7 (TI & VOIP

Screenshot-Dashboard

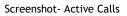
You will be presented with the screen with calls' current state, as shown below.

			Search
Extension	Called By	Called To	State
8005 🛄 🛧	8005	340	CONNECTED
« 1 »			10 rows per pag

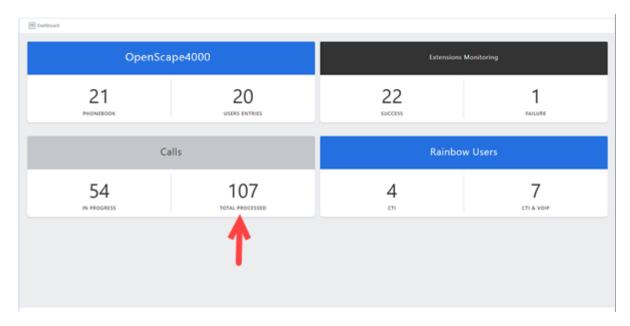
Screenshot-Active Calls

Connected calls will be shown, as below.

Active Calls				
				Search
Extension	Called By	Called To	State	
8005 🛄 个	8005	340	CONNECTED	
« 1 »				10 rows per page



The **"Total Processed"** stat shows the total number of calls; Rainbow CTI & Media Bridge service has processed since its last restart.



Screenshot-Dashboard

## 4.6 Seeing active users in the system

Rainbow CTI & Media Bridge provides a way to see the currently active users in the system (CTI users as well as CTI & VOIP users).

To see the details of the CTI users; click on "CTI" from Rainbow Users widget, as shown below:

Dashboard			
OpenSc	ape4000	Extension	s Monitoring
21	20 USERS ENTRIES	22 success	1 FALLURE
c	alls	Rainbo	ow Users
54	107 TOTAL PROCESSED	4	7 CTI & VOIP
		1	
		•	
	Screenshot	-Dashboard	

You will be presented with the screen with Rainbow users using CTI extension, as shown below.

	10101001	
	10101003	
	10101005	
	10101007	
		10101005

Screenshot- CTI Extensions

You can also go to statistics screen by clicking on the Extension tab from the left menu, as shown.



	Control Panel	~	5- System	
5-	System		Services Control Panel	
1				
Q			Rainbow CTI & Media Brid	ge - Running Stop
8				
٢	Settings	•	Running Statistics	
₽				
			Started at Running time	Wednesday, September 15, 2021 6:36:44 PM 0d 0h 0m
8		◄	-	
Ø			Connectivity Statistics	
88	General	•		
			Rainbow XMPP Rainbow PCG	
器			Telephone System (OpenScape4000)	
ťð			Last Heartbeat At	NA

Screenshot-System

You will be presented with the list of all user both CTI and CTI & VOIP extensions, as shown below:

All CTI CTI & V	OIP			Search	
Extension	Operating Mode	DDI	Rainbow User ID	Remote Exten	sion
<u>\$</u> 1201	CTI & VOIP		BBB10348812081690249	91201	ť
<b>6)</b> 100	СТІ			9100	ť
<b>6)</b> 1012	СТІ			91012	ť
<b>\$</b> 1000	CTI & VOIP		BBB10746154790219190	91000	Ŭ
<b>6</b> 1001	СТІ			91001	ť
<b>1002</b>	CTI & VOIP		BBB10746154790219190	91002	ť
<b>1003</b>	CTI & VOIP			91003	ť
<b>6</b> 1004	СТІ		BBB10739485544734664	91004	ť
<b>6</b> ] 1005	CTI & VOIP			91005	ť
<b>5</b> 1006	CTI & VOIP		BBB10318714704420568	91006	ť
« 1 2 »				10 r	ows per page

Screenshot- Extensions

Click on the CTI tab from top menu, as shown below.



All CTI CTI & VOI	P		Search	
Extension	Operating Mode	DDI Rainbow User ID	Remote Extensi	ion
<b>C</b> 1201	CTI & VOIP	BBB10348812081690249	91201	Ē
<b>(2)</b> 100	СТІ		9100	Ū.
<b>6</b> 1012	СТІ		91012	Ū.
<u>47</u> 1000	CTI & VOIP	BBB10746154790219190	91000	t.
<b>6</b> 1001	СТІ		91001	Ū
<b>5</b> 1002	CTI & VOIP	BBB10746154790219190	91002	匝
<b>4</b> ] 1003	CTI & VOIP		91003	茴
<b>(2)</b> 1004	СТІ	BBB10739485544734664	91004	茴
<b>6</b> ] 1005	CTI & VOIP		91005	茴
<b><u>C</u></b> 1006	CTI & VOIP	BBB10318714704420568	91006	ē
« 1 2 »			10 ro	ws per page

Screenshot- Extensions

## You will be presented with the CTI extensions, as shown below

All CTI CTI &	VOIP			Search	
Extension	Operating Mode	DDI	Rainbow User ID	Remote Extensio	n
<b>6</b> 1001	СТІ			10101001	Ũ
<b>6</b> 1003	СТІ			10101003	Ũ
<b>(2)</b> 1005	CTI			10101005	ť
<b>6</b> 1007	СТІ			10101007	ť
« 1 »				10 row:	s per page



Key in the extension number in order to search for a specific monitored extension.

To see the details of the CTI & VOIP users; click on "CTI & VOIP" from Rainbow Users widget, as shown below.

(Tushboard			
OpenSo	ape4000	Extensio	ns Monitoring
21	20 USERS ENTRIES	22 success	1 MALLURE
(	Calls	Rainb	ow Users
54	107 TOTAL PROCESSED	4	7 CTI & VOIP
			1

Screenshot-Dashboard

You will be presented with the screen with Rainbow users using CTI & VOIP extension, as shown below.

All CTI CTI 8	& VOIP			1003	
Extension	Operating Mode	DDI	Rainbow User ID	Remote Extensio	n
<b>6</b> ] 1000	CTI & VOIP			10101000	i
<b>1002</b>	CTI & VOIP			10101002	i
<b>6</b> ] 1004	CTI & VOIP			10101004	i
<b>6</b> 1006	CTI & VOIP			10101006	i
<b>5</b> 1008	CTI & VOIP			10101008	ī
<b>6</b> ] 1009	CTI & VOIP			10101009	i
<b>6</b> ] 1010	CTI & VOIP			10101010	i
<b>5</b> 1011	CTI & VOIP			10101011	i
<b>6</b> ] 1012	CTI & VOIP			10101012	i
<b>C</b> 1013	CTI & VOIP			10101013	i
« 1 2 »				10 row	/s per page

#### Screenshot-CTI & VOIP Extensions

You can also go to statistics screen by clicking on the Extension tab from the left menu, as shown.



	Control Panel	~	5 System
5-	System		Services Control Panel
1			
Ø			() Rainbow CTI & Media Bridge - Running
8			
٢	Settings	•	Running Statistics
₽			
-			Started at     Wednesday, September 15, 2021 6:36:44 PM       Running time     0d 0h 0m
8			
ø			Connectivity Statistics
88	General	÷ .	
란			Rainbow XMPP Rainbow PCG
器			Telephone System (OpenScape4000)
¢\$			Last Heartbean At N/A

Screenshot-System

You will be presented with the list of all user both CTI and CTI & VOIP extensions, as shown below:

All CTI CTI & V	OIP			Search	
Extension	Operating Mode	DDI	Rainbow User ID	Remote Exten	sion
<b>\$]</b> 1201	CTI & VOIP		BBB10348812081690249	91201	ť
<b>6</b> 100	СТІ			9100	ť
<b>(</b> ) 1012	СТІ			91012	ť
<b><u>1000</u></b>	CTI & VOIP		BBB10746154790219190	91000	ť
<b>6</b> 1001	СТІ			91001	ť
<b>1002</b>	CTI & VOIP		BBB10746154790219190	91002	ť
<b>C</b> 1003	CTI & VOIP			91003	ť
<b>(</b> ) 1004	СТІ		BBB10739485544734664	91004	ť
<b>1005</b>	CTI & VOIP			91005	ť
<b>5</b> 1006	CTI & VOIP		BBB10318714704420568	91006	đ
« 1 2 »				10 r	rows per page

Screenshot- Extensions

Click on the CTI & VOIP tab from top menu, as shown below.



AII CTI CTI & V	OIP		Search	
Extension	Operating Mode	DDI Rainbow User ID	Remote Exter	nsion
<b>\$]</b> 1201	CTI & VOIP	BBB10348812081690249	91201	đ
<b>(2)</b> 100	СТІ		9100	đ
<b>(</b> ) 1012	СТІ		91012	Ē
<u>C</u> 1000	CTI & VOIP	BBB10746154790219190	91000	ť
<b>6</b> 1001	СТІ		91001	Ū
<b>5</b> ] 1002	CTI & VOIP	BBB10746154790219190	91002	t
<b>\$]</b> 1003	CTI & VOIP		91003	Ē
<b>6</b> 1004	СТІ	BBB10739485544734664	91004	đ
<b>\$]</b> 1005	CTI & VOIP		91005	đ
<b>\$]</b> 1006	CTI & VOIP	BBB10318714704420568	91006	đ
« 1 2 »			10	rows per page

#### Screenshot- Extensions

## You will be presented with the CTI & VOIP extensions, as shown below

All CTI CTI & VC	DIP			1003	
Extension	Operating Mode	DDI	Rainbow User ID	Remote Extensio	'n
<b>5</b> 1000	CTI & VOIP			10101000	
<b>5</b> 1002	CTI & VOIP			10101002	
<b>5</b> 1004	CTI & VOIP			10101004	
<b>5</b> 1006	CTI & VOIP			10101006	
<b>5</b> 1008	CTI & VOIP			10101008	
<b>5</b> 1009	CTI & VOIP			10101009	i
<u>5</u> 1010	CTI & VOIP			10101010	ī
<u>5</u> 1011	CTI & VOIP			10101011	
<b>5</b> 1012	CTI & VOIP			10101012	i
<b>5</b> 1013	CTI & VOIP			10101013	
« 1 2 »				10 row	/s per page

Screenshot- CTI & VOIP Extensions



Key in the extension number in order to search for a specific monitored extension, as shown below.

All CTI CTI & VOIP				1000	
Extension	Operating Mode	DDI	Rainbow User ID	Remote Extensio	n
<u>\$</u> 1000	CTI & VOIP			10101000	茴
« 1 »				10 row	s per page 🕇
Note : For the changes to take effect, Rai	nbow CTI & Media Bridge services	s needs to be restarted via Serv	ices Control Panel.	Update Edit	Add Exter

Screenshot-CTI & VOIP Extensions

# 5 General

## 5.1 System Settings

In order to setup traces and SMTP settings, click on System settings option in the left-hand menu as shown below:

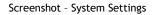
	Control Panel	~	E System
5-	System		Services Control Panel
1			
Ø			C Rainbow CTI & Media Bridge - Running
8			
٢	Settings	-	Running Statistics
₽			
			Started at         Wednesday, September 15, 2021 6:36:44 PM           Running time         Od 0h 0m
8			
Ø			Connectivity Statistics
88	General	~	
		¢	Rainbow XMPP Rainbow PCG
器			Telephone System (OpenScape4000)
ta			Last Heartbeat At N/A

#### Screenshot-System

Following screen will be displayed:



Location *		
File Size *	0 (Kbs)	
No of Files *	0	
General		
Telephony		
Communication		
Error		
Server *		
Server * Port *		
Username		
Password		
Sender Email Address *		
SSL Enabled		
	Test SMTP Settings	



## 5.1.1 Traces

The first section of System settings page is concerned with configuration of traces. A combination of Traces categories can be selected to generate logs only for the relevant information that is needed for troubleshooting. Once you have entered the details into each field, click **Update**, as shown below

5				
ocation *	C:\Program Files (x86)\Alcatel-Luce	ent Enterprise\Rainbow CTI and		
ile Size *	5000	(Kbs)		
No of Files *	20			
Seneral				
elephony				
Communication	-			
rror				

Screenshot-Traces



- **NOTE:** The more comprehensive the traces are, the more CPU resources are used up by the server. Please be careful when setting up tracing level.
- NOTE: Traces do not need to be enabled during usual functional activities. If there is an issue being experienced then support engineers can set the appropriate trace levels. CTI & Media Bridge service restart is required after updating the traces configuration.

## 5.1.2 SMTP Settings

Rainbow CTI & Media Bridge provides the ability to send emails to business partners whenever an issue is encountered in the application. In order to activate this email feature, you need to provide details of the STMP server that will be used to send the emails.

To configure SMTP settings, you need to provide the following information:

### Server:

This is IP address domain name of your SMTP server.

### Port:

This is the port used for sending emails by SMTP server.

### Username:

This is the username used when sending emails from Rainbow CTI & Media Bridge to your SMTP Server.

## Password:

This is the password used when sending email from Rainbow CTI & Media Bridge to your SMTP server.

### Sender Email Address:

This is the email address used for sending the emails.

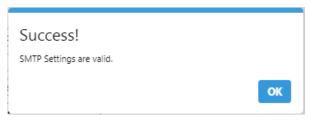
### SSL Enabled:

This is the connection that will be used for sending emails from secure SMTP server. This option should be checked, if you're using TLS enabled secure SMTP server.

**Note:** Username and password are optional fields for cases where Authentication is not setup for outgoing SMTP server.

A special button by the name of Test SMTP settings is available at the bottom of the section. Click on it and if the settings are valid, following pop up window will be displayed:





Screenshot-Message from Application

In case of invalid SMTP settings, following pop up window will be displayed:



Screenshot-Message from Application

Once you have provided required information in Traces section and SMTP settings section, click on Update button as shown below:



Location *	C\Program Files (x86)\Alcatel-Lucent Enterprise\Rainbow CTI and	
File Size *	5000 (Kbs)	
No of Files *	20	
General		
Telephony		
Communication		
Error		
Settings		
Settings		
Settings	smtp.aicatel-lucent.com	
Settings		
Server * Port *		
Server * Port * Jsername	587 John.doe@alcatel-lucent.com	
Server * Port * Jsername Password	587 John.doe@aicatel-lucent.com	

Rainbow CTI & Media Bridge 2021

Screenshot - System Settings

You will be presented with the popup window, click **OK**, as shown below.

Success! Settings saved successfully.	
	 ок

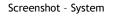
Screenshot-Message from Application

## 5.2 Business Partner

Rainbow CTI & Media Bridge enables users to send emails to their businesses partners whenever a technical issue is encountered through Report an Issue section. Information provided in Business partner section is used to send an email to your cornered partner. In order to provide contact information for your partner, click on Business Partner option in left hand menu as shown below:



	Control Panel *	ť	>- System			
5-	System		Services Control Panel			
•			Services control Parket			
Ċ			O Rainbow CTI & Media Bridge - Running			
8						
٢	Settings ~		Running Statistics			
₽						
			Started at Running time	Wednesday, September 15, 2021 6:36:64 PM 0d 0h 0m		
8						
Ø			Connectivity Statistics			
88	General ~					
Đ			Rainbow XMPP Rainbow PCG			
8			Telephone System (OpenScape4000)			
6			Last Heartbeat At	N/A		



## Following page will be displayed:

8 Business Partner	
Business Partner Details	
First Name * Last Name * Email *	() Information The business partner details are required for cases, when an end-user wants to report an issue or a suggestion related to the Rainbow CTI & Media Bridge application functionality. On basis of the provided information (via email as mentioned), the business partner will raise a ticket or CR.
	Cancel Update

Screenshot - Business Partner

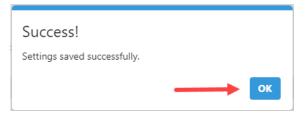
All the fields in this page are self-explanatory. Once the required information is entered, click on the update button as displayed below:

😤 Business Partner		
Business Partner Details		
First Name * Last Name * Email *	John Doe John.Doe@alcatel-lucent.com	Information The business partner details are required for cases, when an end-user wants to report an issue or a suggestion related to the Rainbow CTI & Media Bridge application functionality. On basis of the provided information (via email as mentioned), the business partner will raise a ticket or CR.
		Cancel Update

Screenshot - Business Partner

You will be presented with the popup window, click **OK**, as shown below:





Screenshot-Message from Application

## 5.3 Report an Issue

Users of Rainbow CTI & Media Bridge are empowered to report any technical issue to their business partner from within the application. For this, click on Report an Issue option from the left menu as shown below:

	Control Panel		E System			
5-	System		Services Control Panel			
1						
Ø			O Rainbow CTI & Media Bridge - Running			
8						
٢	Settings		Running Statistics			
₽						
			Started at     Wednesday, September 15, 2021 6:36:44 PM       Running time     0d 0h 0m			
ෂ						
Ø			Connectivity Statistics			
88	General					
ŧ			Rainbow PCG			
8			Telephone System (OpenScape4000)			
t3		¢	Last Hearbeat At N/A			

Screenshot - System

Following screen will be displayed:



🔁 Report an Issue	
Issue Details	
Issue Details	
Site/Customer Name	
Issue Occurrence	Always 🗸
Summary	
Description	
Environment	
Environment	
	(operating system, software platform and/or hardware specifications (include as appropriate for the issue)
Affected Platform	
Rainbow Web Application	
Rainbow Desktop Application	
Rainbow Mobile Application (iOS)	
Rainbow Mobile Application (Android)	
🗌 Rainbow CTI & Media Bridge Administr	ration
Logs Attachments	
Rainbow CTI & Media Bridge Logs	
Rainbow Web/Desktop Application Logs	
webRTC Gateway Logs	
	Cancel Submit Save Logs
	Screenshot - Report an Issue

Provide the necessary information in the following fields:

### Site /Customer Name:

Provide name of site or customer in this field.

### **Issue Occurrence:**

Select an option that gives a general ideal of how many times does this particular issue occurs. Following options are available:

- Always
- Intermittent
- Rarely

### Summary:

Provide a short subject or summary of the technical issue that you are facing.

### **Description:**

Provide a detailed description of the technical issue that you are facing.

### **Environment:**

Provide details about the environment in which the technical issue has been raised.

### Affected platform:

Select the platform in which the technical issue has been raised.

### Logs Attachments

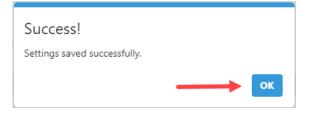


Select the appropriate logs that should be sent as attachments with the email to Business Partner.

**Note:** While reporting an issue, it is advisable to attach the logs (from the required module) as it will help to better understand the problem. However, it is not mandatory and an issue can be reported (via an email) without attaching any logs.

Once you have provided the necessary information, click on **Submit** button.

You will be presented with the popup window, click **OK**, as shown below.



Screenshot-Message from Application

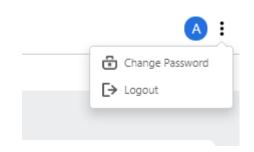
# 6 Change Password

Users of Rainbow CTI & Media Bridge application can change their account password by clicking on the icon displayed in the top right corner of any screen as highlighted below:

R	Rainbow <sup>™</sup>		≡ CTI & Media Bridge   Version 4.0.0.4						
	Control Panel	~	∑- System	5- System					
>-	System		Services Control Panel						
1			Services Control Parter						
Ċ			C Rainbow CTI &	C Rainbow CTI & Media Bridge - Running Stop					
ෂ									
Ø	Settings		Running Statistics						
₽									
			Started at Running time	N/A N/A					
ෂ									
Ø			Connectivity Statistics						
	General	~	Rainbow XMPP	Disconnected					

Screenshot-System

Following menu opens up when you click on this icon:



Screenshot- Drop Down Menu

Click on Change Password option and following screen is displayed:

≡ CTI & Media Bridge	e   Version 4.0.0.4		<u>(A)</u> :
Change Password			
Change Password			
Old Password *			
New Password *			
Confirm Password *			
			Cancel Update

Screenshot- Change Password

## All the fields are self-explanatory.

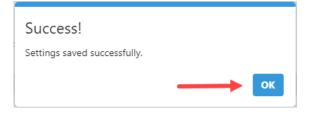
**Note:** New password must consist of more than 7 characters.

Once you have provided required information. Click on Update button as displayed below:

😤 Change Password			
Change Password			
Old Password *	······		
New Password *			
Confirm Password *			
			•
			Cancel Update

Screenshot- Change Password

You will be presented with the popup window, click **OK**, as shown below.



Screenshot-Message from Application

# enterprise.alcatel-lucent.com

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