

RVOC - RTS Voice Over Cloud

RVOC Engine



en Technical Manual

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1 Important Notices

1.1 Copyright and disclaimer

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1.2 Revision history

Revision	Revision date	Change description
01	04/2025	Initial release

2 Introduction

RVOC Engine is a cloud based intercom that offers flexibility and scalability, accommodating the dynamic needs for broadcast, outdoor and remote productions, live events and performance, corporate environments, healthcare, e-sports and many more applications. It will be a pivotal tool in facilitating real-time collaboration and coordination, allowing teams to communicate, receive instructions, and seamlessly coordinate live cues. In order to vacility communication on the move, a virtual keypanel is available as an app for mobile phones called RVOC Edge.

Use RVOC Engine to:

- Manage licenses
- Create and manage RVOC Engine users
- Create and manage connections

2.1 Common UI elements

After successfully deploying the RVOC Engine, a Web management interface is available that uses these icons.

lcon	Name	Description	
-	Show Filters	Shows the filter parameter fo	r each column.
Ž	Hide Filters	Hides the filter parameter for	each column.
	Show columns	Click to open the column visi Here you can: – Show or hide all column – Select individual column	bility menu. s at once. s to display or hide.
		Thide all Hide all First name Last name Email State Role Actions	Intercom alpha Connection type Configuration Reserve intercom port Actions
		RVOC Elevate	RVOC Engine
	Toggle full screen	Expands the application to fu the viewing area.	ll screen mode, maximizing
J L 7 Г	Exit full screen	Exits full screen mode.	
↑↓	Sort off	Sort is not active.	

lcon	Name	Description
↑↓	Sort on	Hover to activate sort with a click.
\checkmark	Sort descending	Sorts from the top down.
1	Sort ascending	Sorts from the bottom up.
•	Column actions	Opens a drop down menu of options for customizing the column.
к	Go to first page	Goes to the first page.
<	Go to previous page	Goes to the previous page.
>	Go to next page	Goes to the next page.
>	Go to last page	Goes to the last page.
	Edit	Activates editing on an entry.
Ī	Delete	Deletes an entry. NOTE : A confirmation message appears before deletion occurs.
	Reset user password	Sends a password reset email to the user. NOTE : A confirmation message appears before sending resetting a password.

2.2 Log

Log out

If you are using a shared computer, it is crucial to log out of RVOC Engine after you finish your session. This helps protect your personal information and ensures that no one else can access your account. To log out, simply navigate to the Profile menu on the RVOC Engine home page and select the Logout option. Taking this precaution is an important step in maintaining your account's security, especially in environments where multiple users have access to the same device. Always remember to log out to safeguard your data and privacy.

Log out of the application

1. Click the **Profile** in the upper right corner.



2. Select Logout.

RVOC Engine logs out and returns to the login page.

2.3 Change password

To change your password to RVOC Engine, use the Change password screen. It is advisable to update your password regularly.

Notice!

Your new password must meet the following criteria:

- At least 8 characters long
- Includes one uppercase letter
- Includes one lowercase letter
- Includes one number
- Includes one special character



Notice!

Use the password visibility icon to show or hide the password in the password field.

Change your password

- 1. Click the **Profile** in the upper right corner.
- 2. Select Change password.
 - The Change password screen opens.
- 3. Enter your **<current password>**.
- 4. Enter your **<new password>**.
- 5. Re-enter your **<new password>**.
- 6. Click **SAVE**.

3

Cloud formation template definitions

Template Field	Description	Where to get it	Example
	General	Settings	
Stage	Stage identifier of the deployment, this will be added as a postfix to all resources created by the stack.	Max 10 characters Unique identifier made by the user. If you create 2 intercoms this is needed. Must have at least one character (mandatory)	prod
AssetBucketKey	The S3 bucket name (and optionally the path) were the intercom installers are stored. Note that the bucket must provide access to the instances.	Should contain the intercom installers. Needs to be created in the Amazon S3 service before creating the intercom.	s3://dev-asset- bucket-rts
	Sizing Cor	nfiguration	
MaxAudioConnection s	Amount of audio connections. (Warning: This should be the MAXIMUM size as resizing will cause interruptions)	This is the number of RVON KPs, mobile apps and IFL connections, combined.	64/128/256/512/102 4/2048
OverrideInstanceType	Override the instance type. By default, the instance type is determined by the number of audio connections.		c86.xlarge
	Network Co	onfiguration	·
IntercomTerminationI nPublicSubnet	Determines whether the intercom termination points (e.g. for configuration software and keypanel connections) should be deployed in the public subnet		

Template Field	Description	Where to get it	Example
VPCID	VPC ID (Must contain the passed subnets)	From AWS VPC service.	vpc-09d2bbca22a1e0 5e2
PublicSubnetID	Public Subnet ID (must be in the same AZ as the Private Subnet)	From VPC service in AWS	subnet-0a14a8f11e4a 609ad
PrivateSubnetID	Private Subnet ID (must be in the same AZ as the Public Subnet)	From VPC service in AWS	subnet-0cb3fa4075e8 e19cf
AvailabilityZone (AZ)	Availability Zone (must be the AZ of the passed Subnets)	Select the area where the desired subnet is available. Must choose two for redundant system. (availability a and b)	us-east-1a
EnableIPv6	Enabled IPv6 on the application (e.g. turn server). Should only be set to true when the public subnets have IPv6 CIDR ranges associated with them.	Choose true or false Only choose true if IPv6 is supported in VPC	true/false
EnableGlobalAcceler ator	Enable the AWS global accelerator. Note: AWS Global Accelerator will help in certain redundancy use cases as well in optimizing the latency in a highly distributed system.	This Determine based on system design Ensures high redundancy	true/false
IngressCIDRBlock	A CIDR range used to restrict ingress traffic.		54.13.0.0/16
	DNS Con	figuration	
IntercomDomainNam e	The domain name of the intercom. If passed (together with the hosted zone id) DNS will be configure in Route53. When not passed you	From your DNS setup	prodintercom.interco ms.cloud.rtsintercom s.com

Template Field	Description	Where to get it	Example
	could setup DNS yourself as per user manual.		
IntercomHostedZonel D	The hosted zone id of the intercom. If passed (together with the domain) DNS will be configure in Route53. When not passed you could setup DNS yourself as per user manual."	Get from route 53 service	Z04490714O0S00GW EKADS
ManagementAPIDoma inName	Management API domain name. If passed (together with the certificate) the API Gateway will be deployed on a custom domain.	From your DNS setup	prod.intercoms.cloud .rtsintercoms.com
ManagementAPIDoma inCertificateARN	Management API domain SSL certificate ARN. If passed (together with the domain) the API Gateway will be deployed on a custom domain.	AWS certificate manager service	arn:aws:acm:us- east-1:851275182736 :certificate/ b1a88034-554b-45be- b506-e5b4b24c4c75
ManagementAPIHose dZoneID	The hosted zone id of the management API. If passed (together with the domain and certificate) the API Gateway will be deployed on a custom domain. When not passed you could setup DNS yourself as per user manual.	From route 53	Z04490714O0S00GW EKADS
	Email Cor	figuration	·
EmailFromAddress	The email address that will be used as the 'From' address for emails sent by the system. Note that it		reply@cloud.rtsinterc oms.com

Template Field	Description	Where to get it	Example
	is expected SES has been setup to allow emails to be sent from this address and SES is in production mode		
EmailReplyToAddress	(Optional) The email address that will be used as the 'Reply To' address for emails sent by the system.		Reply- to@cloud.rtsintercom s.com
EmailProvider	Select the email provider. Available options are None, AWS-SES, and SMTP.		
SMTPHostname	The hostname of the email server (required if SMTP is selected).		
SMTPPort	The port of the email server (required if SMTP is selected).		
SMTPUsername	The username for the email server (required if SMTP is selected, can be overriden in the AWS Secret Manager).		
SMTPPassword	The password for the email server (required if SMTP is selected, can be overriden in the AWS Secret Manager).		
	Advanced	d Settings	
DeployCoturn	Deploy Coturn as part of the stack. When deployed the intercom is as well configured with all properties to setup		true/false

Template Field	Description	Where to get it	Example
	the STUN/TURN server in front of the traffic. Note that in most use cases it is required to run a STUN/TURN server to make the intercom function.		
DeployCoturnNetwor kLayer	Determines in which network layer to deploy the TURN server. When deploying the turnserver in the public subnet, the turnserver is directly associated with a public IP address, when deploying the turn server in a private subnet, the turnserver is associated with a Network Load Balancer. Note that placing the TURNserver in a private subnet considerably increases the Total Cost of Ownership.	Align with you cloud security department.	Public
OverrideInstanceAmi	Override the instance AMI. Note that we only support Ubuntu 2024 and Ubuntu 2022.		
LicenseServerHostNa me	The Backoffice endpoint.		api.cloud.rtsintercom s.com

4 Installation

Before proceeding with the RVOC Engine installation, you must:

- 1. Sign up for RVOC Elevate.
- 2. Download the RVOC Engine package.

Notice!

You can download the package and install RVOC Engine, however, you cannot use RVOC Engine until you have a license. If you have not received your license yet, please contact support team for assistance.

For more information, see the Initial setup chapter in the RVOC Elevate technical manual.

4.1 **Requirements and Recommendations**

- AWS account
- VPC
 - One public subnet
 - One private subnet (with NAT Gateway / internet connectivity)
- At least 2 Elastic IP's available for a non-high available system
- Minimum 1 iPhone (iOS 16 or later) or Android (version 9 or later)device
- RTS Cloud formation template
- Optional, but strongly recommended: Email sending service (AWS SES and SMTP supported)
- Optionally: DNS (e.g. Route53) and an SSL certificate (in AWS ACM)

4.2 Download installer package

Before you can create RVOC Engine, you must download the installer package from RVOC Elevate.



Notice!

Downloads are only visible when you have a license.

- 1. Open RVOC Elevate.
- 2. Navigate to **Downloads**.

RTS		RVOC Elevate
යා Home	Downloads	John Smith My Organization - Owner
Q Licenses ^		
Cost calculator	Version: 1.0.0 2025-01-24 10:02	
Organization settings	Single -	
Contact support	Initial release for RTS Intercoms Cloud	
Documentation	New features: • RTS Intercoms Cloud - Single Instance Stack	
© Copyright 2025 RTS intercome		

3. Select **Single** from the drop down menu.

4. Click the **Download** icon.

The system sends the installer package to your computer.

Package contents:

 Intercom-core-single.json - This template file is used with the AWS CloudFormation service. It provides the details of the AWS infrastructure as shown in RTS template.

4.3 Deploy the intercom

Deploying an intercom in the cloud includes configuring AWS services and creating RVOC Engine Intercom elements.

- 1. Log in to AWS.
- 2. Navigate to CloudFormation.
- 3. From the Create stack menu, select **With new resources (standard)**.

CloudFormation > Stacks							
Stacks (14)		C	Del	ete	Update	Stack actions 🔻	Create stack 🔺
	Filter status					With new resources (s	tandard)
Q. Filter by stack name	Active		•	0	View nested	With existing resource	es (import resources)

- 4. Under Prepare template, select **Choose an existing template**.
- 5. Under Specify template, select **Upload the template file**.
- 6. Click Choose file.
- Navigate to the intercom core template.json file.
 For more information on the RTS template, see Cloud formation template definitions, page 8.



Notice!

Values shown in the following graphics are for example only.

reate stack	Create stack
ep 2 pecify stack details	Prerequisite – Prepare template You can also create a template by scanning your existing resources in the IaC generator [2]
tep 3 onfigure stack options	Prepare template Every stack is based on a template. A template is a JSON or VAML file that contains configuration information about the AWS resources you want to include in the stack.
tep 4 Review and create	Choose an existing template Upload or choose an existing template Choose from our sample template library.
	Spectry & elimptate is a JSON or YAHL file that describes your stack's resources and properties. Template source Selecting a template generates an Amazon 53 URL where it will be stored.
	A template is a JSON or YAHL file that describes your stack's resources and properties. Template source Selecting a template generates an Amazon 53 URL where it will be stored. A Mazzon 53 URL Upload a template file Sync from Git
	A template is a JSON or VAH. If the describes your stack's resources and properties. Template source Selecting a template generates an Amazon 53 URL where it will be stored. A mazon 53 URL to your template. Upload a template file Upload your template directly to the console. Upload a template file
	A template a a JON or YMM-II the describes your stack's resources and properties. Template source Selecting a template generates an Amazon SS URL where it will be stored. O Amazon SS URL Provide an Amazon SS URL to your template. Upload a template file Upload your template directly to the console. Upload a template file From Choose file Intercommune commune commune (R) know. Intercommune commune
	A template a a JON or VAH. If the the describes your stack's resources and properties. Template source Selecting a template genreates an Annazon S3 URL where it will be stored. O Anazon S3 URL Provide an Annazon S3 URL to your template. O Upload a template file O Choose file Intercom-core-single-high-available.template (8).json JON or VAH. formatted file

8. Click Next.

The Specify stack details screen appears.

- 9. Enter a **<stack name>**.
- 10. Fill in the necessary fields.

Specify stack details

Provide a stack name
Stack name
Enter a stack name
Stack name must be 1 to 128 characters, start with a letter, and only contain alphanumeric characters. Character count: 0/128.
Parameters
Parameters are defined in your template and allow you to input custom values when you create or update a stack.
General Settings Stage
Stage identifier of the deployment, this will be addded as a postfix to all resources created by the stack.
hand Booline Mar
ASSET DUCKET KEY The S5 bucket name where the intercom installers are stored. Note that the bucket must provide access to the instances.
Enter String
Sizing Configuration
Max Audio Connections Number of audio connections. (Warning: This should be the MAXIMUM size as resizing will cause interruptions)
64
Override Instance Type (Optional) Override the instance type. By default the instance type is determined by the number of audio connections.
Enter String
Network Configuration
ntercom Termination In Public Subnet Jetermines whether the intercom termination points (e.g. for configuration software and keypanel connections) should be deployed in the public submet
true
PC ID PC ID (Must contain the passed subnets)
Select AWS::EC2::VPC::id
Public Subnet ID Public Subnet ID (Instance A7 as the Private Subnet)
Select AWS::EC2::Subnet::Id
rivate Subnet ID
Select AWS::EC2::Subnet::/d
vailability Zone
vailability Zone (must be the AZ of the passed Subnets) Select AWS::EC2::AvoilabilityZone::Name
inshle IDu6
inable IPV6 on the application (e.g. turn server). Should only be set to true when the public subnets have IPv6 CIDR ranges associated with them.
false
Enable Global Accelerator inable the AWS global accelerator. Note that AWS Global Accelerator will help in certain redundancy use cases as well in optimizing the latency in a highly distributed system. Global accelerator is only available when the intercom is
false
ngress CIDR Block
CIDR range used to restrict ingress traffic.
4.44.474
NNC Configuration
ntercom domain name
Dptional) The domain name of the intercom. If passed (together with the hosted zone id) DNS will be confiure in Route53. When not passed you could setup DNS yourself as per user manual.
ntercom Hosted Zone ID
Optional) The hosted zone id of the intercom. If passed (together with the domain) DNS will be confiure in Route53. When not passed you could setup DNS yourself as per user manual.
enter sunng
anagement API domain name Jptional) Management API domain name. If passed (together with the certificate) the API Gateway will be deployed on a custom domain.
Enter String

Management API domain certificate ARN (Optional) Management API domain SSL certificate ARN. If passed (together with the domain) the API Gateway will be deployed on a custom domain.

Enter String

Management API hosted zone ID
(Optional) The hosted zone id of the management API. If passed (together with the domain and certificate) the API Gateway will be deployed on a custom domain. When not passed you could setup DNS yourself as per user manu
Enter String

The email address that will b	e used as the 'From' address for emails sent by the system. Note that it is expected SES has been setup to allow emails to be sent from this address and SES is in production mode
Enter String	
Email Reply To Address (Optional) The email address	s that will be used as the 'Reply To' address for emails sent by the system.
Enter String	
Email provider choice Select the email provider.	
NONE	
SMTP Hostname The hostname of the email s	erver (required if SMTP is selected).
Enter String	
SMTP Port The port of the email server	(required if SMTP is selected).
587	
SMTP Username The username for the email	server (required if SMTP is selected, can be overriden in the AWS Secret Manager),
Enter String	
Enter String SMTP Password The password for the email s	server (required if SMTP is selected, can be overriden in the AWS Secret Manager).
Enter String SMTP Password The password for the email s Enter String	server (required if SMTP is selected, can be overriden in the AWS Secret Manager).
Enter String SMTP Password The password for the email s Enter String Advanced Settings Deploy Coturn Deploy a TUNN server (Coturn	server (required if SMTP is selected, can be overriden in the AWS Secret Manager).
Enter String SMTP Password The password for the email s Enter String Advanced Settings Deploy Coturn Deploy a TURN server (Coturn Intercom function. Defaults to true	server (required if SMTP is selected, can be overriden in the AWS Secret Manager).
Enter String SMTP Password The password for the email s Enter String Advanced Settings Deploy Coturn Deploy a TUNN server (Coturn true Deploy Coturn Network Determines in which network Determines in which network	server (required if SMTP is selected, can be overriden in the AWS Secret Manager). a part of the stack. When deployed the intercom is automatically configured to setup the STUN/TURN server. Note that in almost all usecases it is required to run a STUN/TURN server to make the to true Layer Layer Layer Layer to deploy the TURN server. When deploying the turnserver in the public subnet, the turnserver is directly associated with a public IP address, when deploying the turn server in a private subnet, to the Sturk Stur
Enter String SMTP Password The password for the email s Enter String Advanced Settings Deploy Coturn Deploy a TURN server (Ceturr true Deploy Coturn Network Determines in which network umserver is associated with a public	server (required if SMTP is selected, can be overriden in the AWS Secret Manager).
Enter String SMTP Password The password for the emails Enter String Advanced Settings Deploy Coturn Deploy a TURN server (Coturn Intercom function. Defaults to true Deploy Coturn Network Determines in which network umserver is associated with a public Override Instance AMI (Optional) Override the instance	erver (required if SMTP is selected, can be overriden in the AWS Secret Manager). a s part of the stack. When deployed the intercom is automatically configured to setup the STUN/TURN server. Note that in almost all usecases it is required to run a STUN/TURN server to make the to true by a s part of the stack. When deployed the intercom is automatically configured to setup the STUN/TURN server. Note that in almost all usecases it is required to run a STUN/TURN server to make the to true by a setup to deploy the TURN server. When deploying the turnserver in the public subnet, the turnserver is directly associated with a public IP address, when deploying the turn server in a private subnet, to a Network Load Balancer. Note that placing the TURNserver in a private subnet, to a Network Load Balancer. Note that placing the TURNserver in a private subnet considerably increases the Total Cost of Ownership. nee AMI. Note that we only support Ubuntu 2024 and Ubuntu 2022.
Enter String SMTP Password The password for the email s Enter String Advanced Settings Deploy Coturn Deploy 2 TURN server (Coturn thercom function. Defaults to true Deploy Coturn Network Determines in which network unserver is associated with a public Override Instance AMI [Dotional] Override the instan Enter String	server (required if SMTP is selected, can be overriden in the AWS Secret Manager). a part of the stack. When deployed the intercom is automatically configured to setup the STUN/TURN server. Note that in almost all usecases it is required to run a STUN/TURN server to make the to true Layer Layer to deploy the TURN server. When deploying the turnserver in the public subnet, the turnserver is directly associated with a public IP address, when deploying the turn server in a private subnet, to a Network Load Balancer. Note that placing the TURNserver in a private subnet considerably increases the Total Cost of Ownership.
Enter String SMTP Password The password for the email s Enter String Advanced Settings Deploy Coturn Deploy a TURM server (Coturn intercom function. Defaults to True Deploy Coturn Network I Determines in which network to Determines in which network to public Doverride Instance AMI Optional) Override the instar Enter String License Server Host Nam	server (required if SMTP is selected, can be overriden in the AWS Secret Manager). as part of the stack. When deployed the intercom is automatically configured to setup the STUN/TURN server. Note that in almost all usecases it is required to run a STUN/TURN server to make the to true Layer Layer Layer is deploy the TURN server. When deploying the turns erver in the public subnet, the turnserver is directly associated with a public IP address, when deploying the turn server in a private subnet, the turnserver is directly associated with a public IP address, when deploying the turn server in a private subnet, the turnserver is the Total Cost of Ownership. nee AMI, Note that twe only support Ubuntu 2024 and Ubuntu 2022. Re Cost of Downership. Cost of Do

- 11. Click Next.
- 12. Click Next.
- 13. Review the modifications.
- 14. Scroll down and select I acknowledge that AWS CloudFormation might create IAM resource with customized names check box located at the bottom of the page.
- 15. Click Submit.

It can take up to 10 minutes to create the resources. The progress of the stack creating is displayed on the screen.

The URL to the RVOC Cloud intercom is available in the Output tab of the stack formation template.

16. Log into the intercom for the first time.

4.4 Log in to the intercom for the first time

After completing the AWS stack creation, use the link from the Outputs section of the stack output to perform your initial login to the intercom.

í

Notice!

The first login to the intercom, by default, becomes the administrator of the intercom. You can add additional users with administrator rights after the initial login.

Perform an initial login

 Click the **RTSManagementAPI link** that was created in the output stack in AWS. The Welcome page appears.

Notice!

This URL allows you to connect through RVOC Edge in the absence of AWS SES (Amazon Simple Email Service). Additionally, system administrators may find this link useful for troubleshooting connectivity issues in the future.

Stack info Events Resources	Outputs Parameters Template	Changesets Git sync	tack actions V Create stack
Outputs (3)			C
Q Search outputs			< 1 > @
Key 🔺	▼ Value ▼	Description ∇	Export name
RTSManagementAPI	https://wf02gubo2i.execute-api.us-east- 1.amazonaws.com/default	Management API URL used to setup the cloud intercom (e.g. to license and setup mobile application users).	
RTSOnboardingURL	https://wf02gubo2i.execute-api.us-east- 1.amazonaws.com/default/api/info	The URL to be used to onboard this intercom to mobile app users.	
RTSPublicIP	34.235.35.186	Intercom IP used to access this intercom. This Intercom IP can be used to configured the intercom using RTS NEO (and IPEdi / AZEdit). This IP is also used as destination for any RVON connections. To setup DNS for the intercom (e.g. to use from RTS NEO) use this IP address in the A record.	
TS			RVOC En

Welcome to RVOC Engine

NEXT

 Click NEXT. The Set up administrative profile page appears.



- 3. Enter your **<first name>**.
- 4. Enter your **<last name>**.
- 5. Enter your **<email address>**.
- 6. Enter a **<password>**.
- 7. Re-enter the **<password>**.
- Click NEXT. The Log-in page appears.

Notice!

You will receive the email only if email service was configured during the stack creation in the previous steps. We will send an email to your registered address containing access information to RVOC Engine. This email serves as your login credentials for future access to the intercom.



- 9. Enter your **<email address>**.
- 10. Enter your **<password>**.
- 11. (Optional) Select Keep me signed in.This option allows the system to remember your login information.
- 12. Click **NEXT**.

The Import license page appears. You may skip this step for now and complete it later.

RTS		RVOC Engine
Licenses		Mike Smith M
ය. Users		
→ ^e Connections		
① Connectivity	Step 3/6: (Optional) Import license	Next
Configuration		
Contact support		
	Warning: This intercom is not licensed, and therefore will not operate.	
	Request a license on cloud disintercoms com and import it	
	IMPORT	

13. Click NEXT.

The Add users screen appears. You may skip this step for now and complete it later. For more information on adding users, see *Users, page 31*.

RTS							RVO	C Engi	ine
Licenses							м	ike Smith	M
와, Users									-
	Step 4/6: (Optiona	l) Add users							
								∓ Ⅲ ≎	
	First name	Last name	Email	State	Admin	Intercom user	Actions		
			mike.smith@example.com	Active					
	CREATE USER EAVE CHANG	•							

14. Click **NEXT**.

The Assign users to the connections screen appears. You may skip this step for now and complete it later. For more information on assigning connections, see *Connections, page* 37.

RTS					RVOC	Engin	е
					Mar	k Smith	
	Step 5/6: (Optional) As	sign users to the connect	tions			Next	
Configuration							
	SAVE CHANGES					r III G	
	Intercoms Alpha	Connection Types	Configurations			ions	
	N001	Mobile User	smith.john@example.com		ď	Û	
				M			
	N003	Mobile User	<mark>lose</mark> un jane@example.com		ď	Û	
	N004	Mobile User			ď	8	
	N005	Mobile User	david.paul@example.com		ď	8	
	N006	Mobile User	johnson.jeff@example.com		Ľ	8	
	N007	Mobile User			ď	8	
	NODE	Mobile User			ď	8	
	N009	Mobile User			ď	î	
	N010	Mobile User			ď	Î	
				Rows per page 10 -			

15. Click NEXT.

The Configure intercom using RTS configuration software screen appears. For more information on configuring the intercom with a configuration software, see *Connectivity*, *page 43*.

ſ	rts		RVOC Engine
			Mike Smith M
		Step 6/6: Configure intercom using RTS configuration software	FINISH
		Connectivity Information To connect using RTS configuration software to the system, use the following configuration information. Note that depending on your network configuration you need to pick one of the addresses. Private IP address To configuration addresses To configuration addressese	
ê Ceşye	цат. 2225 875 мянсолго.		

 Click **FINISH**. RVOC Engine is ready.

RTS			RVOC Engine
			Mike Smith
路, Users			•
→ ^e Connections			
Connectivity			
🕸 Configuration 🗸			
Contact support			
ତ୍ତ୍ Diagnostics ~	IMPORT		
	License Summary Organization Sens Dense High availability locensed	My Organization Example 3 306 10 No	
	All In use Scheduled Expired		
	Example 3		
	Organization Senta Logis extilant Krigh vontability Activation date Expiration date		Release Unlinks the license from the intercom.
th Convrints 2125 813 internance			

4.4.1 Generate a pairing code

To validate the intercom license, you will need a pairing code. Generate this code in RVOC Elevate, and then enter it in RVOC Engine.

For more information, see *License Lifecycle*, page 27.

- 1. Open RVOC Elevate.
- Select Licenses | Overview from the left navigation. 2.
- 3. Select an **available license**.

Be sure to verify it is the correct organization and system name.

4. Click Generate Pairing Code on the appropriate license.

A Pairing code window with the assigned pairing code appears.

RTS			RVOC Elevate
			John Smith My Organization - Owner
	Al Ingue Availab Example 1 Ports License status High availability Activation date Expiration date	Pairing code bc0bd4ea-b00d4681-91c2-6831751020cd	RENEW LICENSE Contact sales to renew this license. Generate Pai ying Code Generate a pairing code to activate this license in the RVOC Engine
	Example 3 🌶		Paring code generated. × Pairing code for system Example 1 'has been generated.

- Click the **copy icon** to copy the pairing code to clipboard. 5.
- 6. Go to RVOC Engine to activate the license. You may need to send the license to the administrator of RVOC Engine.

4.4.2 Enter the pairing code

Use the code you generated in RVOC Elevate to pair the license to the intercom in RVOC Engine.

- 1. Open RVOC Engine.
- 2. From the left navigation, click Licenses.

i

Notice!

The error presented in the screenshot reflects whether your AWS account is sufficient for the number of licenses. For more information, see *License Lifecycle*, page 27.

3. Enter the **<pairing code>** provided by the RVOC Elevate administrator.

	RTS		RVOC Engine
		Licenses	Mark Smith M
			-
		Pairing code *	
		34131867-7b45-4275-a404-59445ea(9af2)	
		IMPORT	
		License Summary	
		The current server resources are insufficient to support your licensed seat capacity. A minimum of 14CPUs (Audio Miver 11CPUs Control 3CPUs) is required for optimal performance	
		Organization My Organizations System name Example 2 Seats 288 In use seats 2 High availability licensed No	
		Al Inuse Scheduled Expired	
00	opyright 2025 RTS intercoms.	Example 3	

4. Click IMPORT.

The License information screen appears.

	RTS			RVOC Engine
â				Mike Smith M
23				
\rightarrow_{d}				
ଷ			License information	
			pairing code: e0cad68e-9a93-4281-ac3a-cda614aa1a19	
			Name: Example 3 Mg Organization Organization Mg Organization License type: Duration hand Hard paralability Yes Antration data 2025-65-28 112-05 Expansion data 2025-65-28 112-05 Waxang Conference 2025-65-28 112-05 Contract Contract	
oc				
5.	Clic	Confirm.		

5. Click **Confirm**. A success message appears.

RTS			RVOC Engine
			Mark Smith
ය. Users			
-+ Connections			
Connectivity			
Configuration	961d211a-877F-44ba-a31F2519ba9b9f2d		
Contact support			
	IMPORT		
	License Summary		
	Organization	unknown	
	Systemane	unlicensed	
	Seats In use seats		
	High availability licensed		
	Al Investigation Dated		
	Example 2		
			Release
	Ports License status		
	High availability Activation date		
	Expiration date	2025-02-23 14:00	

4.4.3 Connect the cloud intercom to the intercom configuration software Connect with AZedit

i

Notice!

Use AZedit to program the system, such as keypanel keys, party lines, etc.

- 1. Open AZedit.
- 2. Select **Options | Communications**.
- 3. Select Network under Connection.
- In the Main field, enter the <IP address> or <domain name> (created during stack formation) of the cloud intercom.
 This IP address or domain name is available on the Connectivity screen in the Cloud Intercom Manager
- 5. Click **OK**.
- 6. Select Online | Connect.

Connect with NEO Intercom Configuration Software



Notice!

Use RTS NEO to program the system, such as keypanel keys, party lines, etc.

- 1. Open NEO.
- Click the **Connect** button. The Available Intercoms screen opens.
- Click the Enter IP address manually button. The Connect to Intercom screen opens.
- 4. Click inside the **Connect to** field.
- Enter the <IP address> of the cloud intercom.
 Find this IP address on the Connectivity screen in the Cloud Intercom Manager.
- 6. Click **Connect**.

A success message appears. The software populates with intercom data.

7. Click **Cancel** to close the screen.

Connect with IPedit

i

Notice!

Use IPedit to configure Cloud ports and remote keypanels, so that the connection can be established.

- 1. Open IPedit.
- 2. Navigate to **Devices | Add**. The Add Devices screen opens.
- 3. Enter the **<IP address>** from the Connectivity screen in RVOC Engine.
- 4. Click Add.

The cloud intercom appears in the Device Catalog.

5 Licensing Model

Licensing manages access to RVOC Engine. The licensing model RVOC Engine uses allows organizations to purchase and assign user licenses based on the time duration and number of seats needed. RVOC Engine uses the information in licenses to determine the number of seats and duration of time those seats are available for use.

The RVOC licensing model is duration-based, giving you complete control over how long your license remains valid.

- You can specify the exact number of days for which the license is active, allowing you to tailor your usage to fit specific project timelines, such as short-term events or seasonal productions.
- You have the option to choose between standard licensing and high availability licensing, ensuring that you can select the level of service that best meets your needs.

Туре	Description
Standard	 The Standard model focuses on basic operational functionality using a single instance of RVOC Engine. No fail over security The system continuously monitors health and performance to identify and address potential issues before they lead to downtime.
High Availability (HA)	 The High Availability (HA) model's primary goal is to provide continuous service availability. High availability is another feature that can be added on top of the AWS S3 module to guarantee the highest availability by eliminating single-point-of-failure (SPOF) and providing continuous service availability. The system automatically fails over when it detects an issue, such as AWS EC2 instance not available or application failure. It supports deployment across two zones within the same region. The system continuously monitors health and performance to identify and address potential issues before they lead to downtime.

For information on requesting a license, see the RVOC Elevate technical manual.

Available licenses

Daily

# of Seats	High Availability	License
10		RVOC IaaS-DY-S-ST
10	X	RVOC IaaS-DY-S-HA
25		RVOC IaaS-DY-M-ST
25	X	RVOC IaaS-DY-M-HA
75		RVOC IaaS-DY-L-ST
75	Х	RVOC IaaS-DY-L-HA

# of Seats	High Availability	License
10		RVOC IaaS-WK-S-ST
10	Х	RVOC IaaS-WK-S-HA
25		RVOC IaaS-WK-M-ST
25	Х	RVOC IaaS-WK-M-HA
75		RVOC IaaS-WK-L-ST
75	Х	RVOC IaaS-WK-L-HA

Weekly

Monthly

# of Seats	High Availability	License
10		RVOC IaaS-MO-S-ST
10	Х	RVOC IaaS-MO-S-HA
25		RVOC IaaS-MO-M-ST
25	Х	RVOC IaaS-MO-M-HA
75		RVOC IaaS-MO-L-ST
75	Х	RVOC IaaS-MO-L-HA

Yearly

# of Seats	High Availability	License
10		RVOC IaaS-YR-S-ST
10	X	RVOC IaaS-YR-S-HA
25		RVOC IaaS-YR-M-ST
25	X	RVOC IaaS-YR-M-HA
75		RVOC IaaS-YR-L-ST
75	Х	RVOC IaaS-YR-L-HA

6 License Lifecycle

You can easily add, remove, or reassign licenses as the system requirements change, providing flexibility in managing software access and costs.

RTS		RVOC Engine
යි Licenses	Licenses	Mark Smith M
ぷ, Users		-
→ Connections		
 Connectivity 		
형 Configuration 🗸		
Contact support		
⊛ Diagnostics ∽	IMPORT	
	Clicense Summary The current server resources are insufficient to support your licensed seat capacity. A minimum of 14CPUs (Audio Mixer 11CPUs, Control 3CPUs) is required for optimal performance. Organization My Organizations System name Example 2 Seats 28 In use seats 2 High availability licensed No	
© Copyright 2025 RTS Insercoms.	All In use Scheduled Diplined RVOC Test	

Figure 6.1: Licenses page

Important:	The current server resources are insufficient to support your licensed seat capacity. A minimum of 14CPUs (Audio Mixer 11CPUs, Control 3CPUs) is required for optimal performance.	
	If you receive this message, it means the hardware you are running on does	
	not have enough capacity to support the licenses. You need more CPU. If you	
	do not fix this error, you may experience audio degradation.	
	To fix this error, go to the AWS CloudFormation and change the max audio	
	channels to match the licensed audio channels.	

Pairing code field

Enter the pairing code you copy from the RVOC Elevate application.

Import button

Initiates the pairing of the license with the Engine.

License Summary

Displays the Organization, system name, the number of seats, the number of seats in use, and if the license has high availability capabilities.

License Overview Notebook

The License Overview notebook lets you view and manage your system's licenses in a logical arrangement, allowing you to easily see all licenses at once or filter by different stages such as in-use, available, or expired.

State	Description	
All	Shows all licenses in the system regardless of state.	
In-use	Shows licenses currently active and in use by the intercom.	
Available	Shows licenses currently active but not in use by the intercom.	

State	Description
Expired	The term of the license has expired and the license needs renewal.

 Table 6.1: Overview Pages

Release button

Releases the license from use. Once you release the license, it is available for use by another intercom system within the organization, if needed.

6.1 Pair a license

Pairing the license allows RVOC Engine to start. You can pair an unlimited number of licenses to the system.

Pair a license

- 1. Open RVOC Engine.
- 2. Navigate to the **Licenses page**.
- 3. Enter the **<pairing code>** you receive from the RVOC Elevate administrator.



Notice!

The system permits you to pair a code only once.

	RTS		RVOC Engine
ଜ		Licenses	Mark Smith M
8			
->(~			
6		Pairing code *	
۲		✓ 34131867-7b45-4275⊕404-59445eat9af2	
R			
ନ୍ତ		× IMPORT	
		License Summary	
		The current server resources are insufficient to support your licensed seat capacity.	
		A minimum of 14CPUs (Audio Mixer 11CPUs, Control 3CPUs) is required for optimal performance.	
		Organization My Organizations System name Example 2 Seats 28 In use seats 2 High availability licensed No	
		Al Inue Scheduled Expired	
0	Copyright 2025 RTS intercoms	Example 3	

4. Click **IMPORT**.

The License information screen appears.



5. Click **Confirm**.

A green success message appears.

6.2 Release a license

You may need to unpair a license from a cloud application for several reasons:

- Reallocation to different Intercom
- Efficient use of resources

Notice!

Once you release a license, you must generate a new pairing code in RVOC Elevate.

Releasing a licenses disconnects all existing connected users.

Release a license

- 1. Navigate to the **Licenses page**.
- 2. Find the **license** you want to release.

RTS			RVOC Er	igine
Licenses			Mike Smit	h M
_షి, Users → ^e Connections	Pairing code *			
③ Connectivity				
😂 Configuration 🗸	IMPORT			
Contact support				
ତ୍ତ୍ Diagnostics ✓				
	License Summary Organization System name Sents In use seats High analballity licensed	My Organization Example 3 2 0 No		
	All Inux Scheduled Expired			
	Example 3			
	Organization Connectation Hogh availability Activation date Expiration date		bitmen Utilinks the intercom.	
0 Copyright 2025 RTS intercome.				
3. Click	Release			

A confirmation message appears.

RTS			RVOC Engi
Licenses			Mike Smith
ය. Users			
→ ^e Connections			
Connectivity			
Configuration ~			
Contact support			
©, Diagnostics ∽			
	License Summary Organization System name Beats In gene High analability licensed	Caution! Releasing locases will upgate the intercom from this locase and possibly disturb your operations. Are you sure that you want to proceed?	
			bilions Unioùs the isone from the intercom
© Copyright 2025 #18 intercorns.			

4. Click **CONTINUE**.

A success message appears.

l	RTS	R\	/OC Engine
		Lornes	Mike Smith M
		⊗ License release License har been	d × successfully released.

7

Users

The Users page allows you to create and manage users within RVOC Engine. There are two available profiles in RVOC Engine:

- Administrator profile: only this profile can log into the intercom and create user profiles.
- Intercom User profile: this profile allows users to use RVOC Edge, but cannot access RVOC Engine.

	RTS									RV	ос	Engine
۵											Mike	Smith M
23.												
$\rightarrow_{4^{*}}$												
0												••••
8		First name		Last name	Email :	State :	Admin :	Intercom u	iser	Actions		
œ												
କ୍												
		CREATE USER	SAVE CHANG	ES								

Figure 7.1: Users page

First names column

Displays the first name of the user.

Last names column

Displays the last name of the user.

Emails column

Displays the email address of the user.

States column

Displays the state of the user.

- **Pending** the system has sent an email with login credentials, but the user has not logged in and not authenticated to RVOC Engine.
- Active the user credentials are validated and authorized to use RVOC Engine.

Admins column

Identifies the user has administrator privileges and is allowed to log in RVOC Engine. It is possible to have both Administrator and Intercom User privileges.

Administrators are able to:

- Edit user profiles
- Delete user profiles
- Reset user passwords

Intercom users column

Identifies the user has intercom user privileges. Users can use RVOC Edge, but cannot access RVOC Engine.

When a user with only Intercom User privileges tries accessing RVOC Engine, a screen appears denying them access.



Actions column

Actions that only users with Admin privileges can perform:

Edit:	Make changes to the user profile.
Delete:	Deletes a user's profile from the system.
Reset user password:	Reset the user's password.

For more information, see *Edit a user, page 33*, *Delete a user, page 34*, *Reset a password, page 35*.

Create User button

Opens the add user details screen, allowing you to create new users. For more information, see *Create a user, page 32*.

Save Changes button

Saves additions, modifications, and deletions made in the Users screen to the system.

7.1 Create a user

Before you can begin using RVOC Engine, you need to create users in the system.

Create a user

 Click the Create User button. The Add user details window appears.

	RTS					RVOC Engine
۵						Mike Smith
23.						
$\Rightarrow_{\phi_{i}}$						
0						
8						
2				Add user details		
ଉ						
				riist Name -		
		CREATE USER				
		CREATE DOLL		Last Name *		
				Cancel CONFIRM		
0	Copyright 2025 IITS intercome.					

- 2. Enter the **<first name>**.
- 3. Enter the **<last name>**.
- 4. Enter the **<email address>**.
- 5. Select Administrator rights to give the user administrator privileges.
- 6. Select Intercom User to assign intercom user privileges.

i

Notice!

For more information on the different profiles, see Users, page 31.

7. Click Confirm.

The system creates a user and sends an invitation via email to the newly created user. An email is only sent if an email service is configured during the stack process.

RTS			RVOC Engine
	Converting of the second secon		
			⊘ Success × User has been created

7.2 Edit a user

Sometimes it is necessary to modify a user's profile. You may need to change a person's name or their user role.

Edit a user

1. Click the **Edit icon** in the user profile's row to edit.

	RTS					F	voo	C EI	ngin	e
ଇ							N	tike Smi	th M	
තී										
->←										
()								ŦΙ	1 0	
1 33	Configuration	First name		State	Admin :					
æ		Mike								
କ୍ଷ		Mark	Joh							
		Cindy								
		CREATE USER SA	VE CHANGES			Rows per page				
00										

2. Make the necessary modifications.

The only fields modifiable are First Name, Last Name, Admin Role, and Intercom User Role.

3. Click the Save Changes button.

An Update summary window appears. The update summary shows the number of successful and unsuccessful changes and the total number of updates done.

l	RTS	5					F	VOC E	ngine
								Mike Sr	nith M
					Undate summary				
					opulie outlinally				
					Operation	Count			
			Cindy	Jones	Total				
			CREATE USER						
						CLOSE			

4. Click **Close**.

7.3 Delete a user

Occasionally, you may need to delete a user to remove them from the intercom.

Delete a user

1. Click the **Delete icon** in the user row you want to delete. A confirmation message appears.

RTS					RVOC Engine
Licenses					Mike Smith M
요. Users					
.→ ^e Connections					
③ Connectivity					
S Configuration ∨					
Contact support					
ඬ Diagnostics ∽					
	CREATE USER SAVE CHANG	Do you really want to delete Cindy J	ones?		
6 Connect 221315 Stations					

2. Click **YES** to delete the user or click **NO** to keep the user. A green confirmation message appears.

	RTS						RV	OC	Engine
									- J
í de la comercia de l								Mike	Smith M
<u>ح</u> ة									
->*-									
0									
*			Carst Harrier	sute	-	intercont user	Actions		
21		Mike							
ଭ									
		CREATE USER SAVE CHANG	ES						
							erpage •		
							User deleted User Cindy Jo	nes has b	× sen deleted
•									

7.4 Reset a password

As an administrator, you can reset users' passwords when necessary.

Reset a password

- Click the **reset password icon** in the user's row. A confirmation message appears.
- Click Yes to reset the user password.
 A Temporary password window appears.

	RTS	I							F	RVO	CE	ngin	ie
â												ith M	
路													
→←													
(i)													
1													
2													
ন্ত						New password for user N	lark Johnson						
						Temporary password	⊗ ⊔						
			CREATE	JSER S/		Close							
01													

3. Click **Close**.

The system sends an email with the new password to the user.

Notice!

If you do not have an email service set up, you can copy the temporary password and share it with the user.

The user is required to change their password when they access RVOC Engine for the first time.

8 Connections

Connections are the dedicated seats used to communicate with other users. There are two ways to configure seats.

- Mobile User designates mobile device user.
- **RVON** designates keypanel or belt pack user that supports RVON.

	rts					R	vocı	Engine
							Mike	Smith M
옹								
6			SAVE CHANGES					••••
1 93			Internem alaba	Connection time	Configuration	Deserve intercom port		
2	Contact support				comguation		Actiona	
a	Diagnostics		N001					
~			N002					
			N003					
			N004					
			N005					
			N006					
			N007					
			N008					
						Rows per page 👻 1-8 o		

Figure 8.1: Connections Page

Save Changes

Saves changes made to the Connections table.

Intercom Alpha

Displays the intercom alpha. This field is not editable from RVOC Engine. If you want to make changes to this field, you must use AZedit or NEO.

Connection Type

Select the type of connection for the port. This column has two options: Mobile User: Uses RVOC Edge RVON: Uses a KP-series panel or DBP/DSPK that supports RVON firmware.

Configurations

Indicates the user email address to associate with the seat. This field is only available with the Mobile User connection type. Once you click the Save Changes button, an email is sent to the user with an invitation to install RVOC Edge and create login credentials. The Configuration column populates with email addresses entered in the User screen.

Reserve Intercom Ports

By selecting the checkbox, you confirm that the user has access to this seat, ensuring they can effectively use the intercom. Enabling this feature limits the number of 'dynamic' users because it reserves seats that others cannot use. For example, if you have 10 licensed seats and reserve 8, only 2 users can dynamically access the non-reserved ports, as the system allocates 8 ports for dedicated users. While this feature can benefit key users, it also presents challenges by limiting the system's flexibility and overall seat availability.

Actions

Use the Edit icon to make changes to the seat. Use the Delete icon to delete the seat from the system.

8.1 Configure a connection

There are two ways to configure a port in the Cloud intercom

- As a mobile user
- As an RVON connection

Notice!

The intercom alpha is the port number/name in the system of that particular configured user or keypanel. When using software as AZedit and/or NEO, you can modify the user view of that particular user connected to that specific intercom alpha.

The Intercom Alpha is not editable from this page. You can change the alpha in NEO or AZedit.

Configure a mobile user

- 1. Navigate to Connections.
- 2. Select the Intercom Alpha you want to configure.

RTS					RVO	C Engine
						Mike Smith
						· ·
	SAVE CHANGES					
	Intercom alcha					
			Comiguation			
		Mobile User +	cindy tones (lexample.com ×	₽		
			john.thomas@example.com			
			tom.brown@examle.com			
			cindy.jones@example.com			

- 3. Click the **Edit icon**.
- 4. Under connection type, select **Mobile User**.
- 5. From the Configuration drop down field, select the **user email** you want to assign to the port.



Notice!

You can only see emails that you previously created on the Users page.

- 6. Select the **Reserve Intercom Port check box** to guarantee a port for the user.
- Click Save Changes.
 An Update summary messages window appears.
- 8. Click Close.

Configure an RVON port

i

Notice!

Configuring an RVON port requires additional hardware and software, such as an RTS Intercoms keypanel and IPedit to configure the connection details.

- 1. Navigate to Connections.
- 2. Select the Intercom Alpha you want to configure.

/	RTS				RVO	C Engiı	ne
		Connections				Mike Smith	
							1
		SAVE CHANGES					
8			Connection type	Reserve Intercom port			
			RVON × -				
			Mobile User	0			

- 3. Click the **Edit icon**.
- 4. Under connection type, select **RVON**.
- 5. Select the **Reserve Intercom Port check box** to guarantee a port for the user.
- 6. Click Save Changes.
 - An Update summary messages window appears.
- 7. Click **Close**.

8.2 Modify a connection

You may need to modify channels periodically when people change or port assignments change.

Modify a connection

- 1. Navigate to Connections.
- 2. Select the Intercom Alpha you want to modify.
- 3. Click the Edit icon.

	RTS				R	VOC E	Engine
ଇ						Mike S	mith M
ඵ							
→←							
î		SAVE CHANGES					••••
ŝ		Intercom alpha	Connection type	Configuration	Reserve intercom port		
2			Mohile User	mark johnson@example.com			
ন্ত	Diagnostics 🗸				_		
		N002				Lon	
		N003					
		N004					
		N005					
		N006					
		N007					
		N008					
					Rows per page 👻 1-8 o		

4. Make the **modifications** needed

	RTS	5				R	VOC E	Engine		
â							Mike S	mith M		
ෂ										
->≮-										
0			SAVE CHANGES	SAVE CHANGES						
£93			Intercom alpha	Connection type	Configuration :	Reserve intercom port				
2				Mobile User 🗸	mark.johnson@example.com •		ð			
ন্থ	Diagnostics		N002	RVON			Revert			
			N003	Mobile User						
			N004							
			N005							
			N006							
			N007							
			N008							
_										
0 00										

5. Click Save Changes.

An Update summary messages window appears.

	RTS				R	VOC	Engine
ົດ							Smith M
8							
→←							
(i)							
£ \$3			Update summary				
e			Operation	Count			
ন্ত							
			Success				
			Failed				
				•			
				CLOSE			

6. Click Close.

8.3 Delete a connection

You may want to delete connections to remove them from the intercom.

- 1. Navigate to Connections.
- 2. Select the Intercom Alpha you want to delete.
- Click the **Delete icon**.
 A confirmation message appears.

	RTS	1				R	VOCI	Engine
â								Smith M
8								
→←								
6								
1 33								
2								
ন্ত								
				RVI Do you really want to delete N002 3	? NO YES			
					tom.brown@examle.com			

4. Click YES to confirm the deletion.A green popup message confirms the deletion.

	RTS				I	RVOC Engir	ne
ଲ	Licenses					Mike Smith M	
8	Users						
->≮-							
()		SAVE CHANGES			•	≂ ∎ 0	
ŝ		Intercom alpha	Connection type		Reserve Intercom port	Actions	
2		N001	Mobile User	mark johnson@example.com		/ m	
ন্ত	Diagnostics 🗸 🗸						
		NUUZ					
		N003					
		N004					
		N005					
		N006					
		N007					
		N008					
					Rows per page + 1	8 of 128 IC C > >I	×
					Connect	on NOO2 has been deleted.	

9

Connectivity

The Connectivity page shows the different IP addresses you can use to access the intercom. The IP Addresses and DNS Server are configured during the stack setup and cannot be modified from this page.

RTS	RVOC Engine
C Licenses	Connectivity Mark Streith 🕢
Lusers	
→ ⁺ Connections	
① Connectivity	Connectivity Information
Configuration Contact support	To connect using RTS configuration software to the system, use the following configuration information. Note that depending on your network configuration you need to pick one of the addresses.
Diagnostics	
	Printle ID address
	DNS Name
	singlentation quinteconte

Figure 9.1: Connectivity Page

Primary IP address

The Primary IP address serves as a gateway for external access to the intercom system, allowing users to connect from anywhere without the need to be physically or have access to the local network.

Use this IP address when you want to access the intercom through Direct Connect, VPN, or from a virtual machine in the cloud.

Private IP address

The Private IP address is used within a specific local network, and it is not accessible from the outside internet. By using a Private IP address, organizations can protect their internal systems from external threats and unauthorized access.

DNS Name

The DNS Name is an easily read address that corresponds to an IP address on the internet. It serves as a way to identify and locate resources, such as websites, servers, or services, in a format that is easier for people to remember and use compared to numerical IP addresses. You can use the DNS name to connect to the intercom, which helps you avoid remembering the IP address.

Notice!

The DNS field displays only when you configure a DNS server.

9.1

Connect the cloud intercom to the intercom configuration software

Connect with AZedit

Notice!

Use AZedit to program the system, such as keypanel keys, party lines, etc.

- 1. Open **AZedit**.
- 2. Select **Options | Communications**.
- 3. Select Network under Connection.
- In the Main field, enter the <IP address> or <domain name> (created during stack formation) of the cloud intercom.
 This IP address or domain name is available on the Connectivity screen in the Cloud Intercom Manager
- 5. Click **OK**.
- 6. Select **Online | Connect**.

Connect with NEO Intercom Configuration Software



Notice!

Use RTS NEO to program the system, such as keypanel keys, party lines, etc.

- 1. Open **NEO**.
- 2. Click the **Connect** button. The Available Intercoms screen opens.
- 3. Click the **Enter IP address manually** button. The Connect to Intercom screen opens.
- 4. Click inside the **Connect to** field.
- Enter the <IP address> of the cloud intercom.
 Find this IP address on the Connectivity screen in the Cloud Intercom Manager.
- Click Connect.
 A success message appears. The software populates with intercom data.
- 7. Click **Cancel** to close the screen.

Connect with IPedit

Notice!

Use IPedit to configure Cloud ports and remote keypanels, so that the connection can be established.

- 1. Open IPedit.
- 2. Navigate to **Devices | Add**.
 - The Add Devices screen opens.
- 3. Enter the **<IP address>** from the Connectivity screen in RVOC Engine.
- 4. Click Add.

The cloud intercom appears in the Device Catalog.

10 Configuration

10.1 Intercom

Use the Intercom page to change the organization name or the system name of the intercom.

l	RTS		RVOC Engine
			Mark Johnson M
		SAVE	

Figure 10.1: Intercom Page

Organization name

Displays the name of your organization. This is the name of the Intercom and displays in the RVOC Edge Intercom list. You can modify this name to make it more recognizable.

System name

Displays the name of the license. You can modify this name to make it more recognizable.

Save button

Saves the changes you make.

10.2 Import/Export

The **Import/Export** page offers an import/export function that allows you to modify the Intercom's configuration. After making your desired changes to the configuration file, you can upload it back to the intercom, which automatically populates the configuration.



Figure 10.2: Import/Export Page

Export button

Exports the configuration file in .csv format to the Downloads folder on your PC.

Download template

Downloads a CSV file that includes the proper column headers to simplify populating Users and Connections.

Notice!

This feature supports only the CSV file type, other file types are not supported. When you create users using the CSV template and Import function, the system assigns them Intercom User rights by default. You can change their rights to administrator later if needed.

Import button

Imports a .csv file into the system.

Perform a dry run without making changes check box

Validates the import data without making actual changes to the intercom. To update the intercom with the changes, you need to clear the check box.

Continue when an error occurs check box

Continues with the import function even when it encounters an error.

Invite new users to the intercom

Sends an email to new user entries detected after the file has been imported

Apply the intercom port index as defined in the file

Applies the port index as defined in the file. This means the system overwrites the port information in the system if the assignments do not match upon import.

10.2.1 Export the configuration file

Use the Export the Configuration File feature to create a copy of the current users and connections configuration in a .csv-formatted file. Exporting the configuration file allows you to: Modify the configuration file and import it back into the intercom. This is useful when you have a substantial number of Users and Connections to input in the intercom.
 Simply add the users and connections to the file.

Notice!

Make sure to maintain the order of the column headers: First Name, Last Name, Email, and Port Index. Keeping these headers in the correct sequence is crucial for a successful import back into the intercom system. If you do not follow this format, the import process will fail, and you may need to start over.

 Create a backup of the current settings. This is useful in case you need to restore the system to a previous state or recover from an error.

This feature is a valuable tool for managing Users and Connections, facilitating support, and ensuring data integrity.

Export the configuration file

Click **Export**.

The CSV (Comma Separated Values) file saves to the Downloads folder.



For more information, see Import the configuration file, page 48.

10.2.2 Download the template CSV

RVOC Engine provides you a premade CSV file with the proper headings for creating Users and Connections in the intercom.

Notice!

This feature supports only the CSV file type, other file types are not supported. When you create users using the CSV template and Import function, the system assigns them Intercom User rights by default. You can change their rights to administrator later if needed.

Download the template

1. Click **Download template**.

The connections-import-template.csv file saves to the Downloads folder.



- 1. Fill out the **template**.
- 2. Import the **connections-import-template.csv file** into RVOC Engine.

For more information, see Import the configuration file, page 48.

Refer to

Import the configuration file, page 48

10.2.3 Import the configuration file

RVOC Engine supports bulk user import through CSV files, requiring headers for First Name, Last Name, Port Index, and Alpha. You can perform various operations including user creation, connection assignment, and comprehensive import.

To enhance the import process, two key features are available: a "Dry Run" setting that lets you validate the import without making actual changes to the system and a "Continue on Error" setting that allows the process to proceed even if individual records encounter issues.

Perform a dry run import

1. Navigate to the Configuration page.

RTS	RVOC Engine	9
	Configuration > Import / Export Mike Smith M	
	Export	
Diagnostics 🗸		
	User Creation Ommedion Assignment Comprehensive Import	
	Continue on Error' setting to proceed despite individual record issues Dry Rur' mode for validating import without making actual changes	
	Perform a dry run (without making changes)	
	Continue when an error occurs	
	Invite new users to the intercom	
	Apply the intercom port index as defined in the file	

- 2. Verify that you have selected all the Import parameter checkboxes.
- 3. Click Import.

A file upload window opens.

- 4. Navigate to the file you want to upload.
- 5. Click **Open**.

The import begins. A summary report appears once the import finishes.

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			Mike Smith
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Import / Export	Import summary Operation	Count	Download template IMPORT
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		2.032 	6 tarres x
© Copyright 2225 RTB intercome.			C success File upleaded successfully.

6. Review the Import summary for errors or inconsistencies.

Perform a production run import

1. Navigate to the Configuration page.

RTS			RVOC Engine
	Cor		Mike Smith M
		Export	EXPORT
		Import	
Diagnostics 🗸			
		User Creation Connection Assignment Connection Report	
		Continue on Error" setting to proceed despite individual record issues "Dry Run" mode for validating import without making actual changes	
		Perform a dry run (without making changes)	
		Continue when an error occurs	
		Invite new users to the intercom	
		Apply the intercom port index as defined in the file	

- 2. Uncheck the **"Perform a dry run" check box**.
- 3. (Optional) To stop the import when an error occurs, select the **"Continue when an** error occurs" checkbox; otherwise, uncheck the box.
- 4. Select the **remaining check boxes**.
- Click Import.
 A file upload window opens.
- 6. Navigate to the file you want to upload.

7. Click **Open**.

The import begins. A summary report appears once the import finishes.

RTS			RVOC Engine
			Mike Smith M
			EXPORT
	Import summary		
	Operation	Count	Download template
	User accepted		
	Total		
		CEOSE	
			Success × File uploaded successfully.

8. Review the Import summary for errors or inconsistencies.

11 Contact support

Use the Contact Support page to contact the customer service or technical support team for assistance with issues, inquiries, or feedback related RVOC.

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		Drag and drop files here, or click to select files max 1 firer, was claig per lite		
		Current SUBMIT		
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Figure 11.1: Contact support page

Email addresses field

Provide the email addresses where you would like to receive notifications for the support ticket you submit.

Subject field

Enter a title for the support issue you are experiencing.

Issue description field

Provide a detailed description of the support issue you are experiencing. Include any relevant information such as error messages, steps to reproduce the problem, and the impact it has on your work. The more specific you are, the better we can assist you in resolving the issue.

Attach files field

You can attach up to five files, each with a maximum size of 100MB. Acceptable file types include text documents, screenshots, photos, and other relevant formats that can help illustrate your support issue. Please ensure that the attachments are clear and directly related to your inquiry, as this will assist the support team in understanding and resolving your issue more efficiently.

Attach configuration and logs check box

When you select this option, RVOC Engine automatically includes the configuration files and log files as attachments to the support request.

Cancel button

Clears the form and does not send the support request.

Submit button

Submits the support request to the support team.

12 Diagnostics

The Diagnostics pages serve as an essential troubleshooting tool that actively collects system information. By gathering this data, you can effectively monitor the health of your system and gain valuable insights into issues that may arise. This comprehensive information not only helps you identify potential problems but also helps you to take informed actions to resolve them.

The pages in the Diagnostics menu are as follows:

i

Notice!

Use scroll within the tables of each section to see all of the events.

Page		Description			
Overview		Displays an overview of the intercom including CPUs, general information, health, software versions, and system status. Scroll within this page to see the different sections.			
RTS			RVOC Engine		
C Licenses			Mark Johnson M		
Connections Connectivity	System		×		
Contact support			•		
Disprostics ~ Overview CPUs Intercom Events Intercom Audit Redundancy	Instance 025402773236075 030655143046286	VCPU Count Antrop Lod 41 2 2 3 2 2%	⊽ ■ 0		
			sage • 1/2012 < >		
	Health		~		
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			~		
© Copyright 2015 ITTS Intercome.					
CPUs		Displays a detailed overview of the status of all the CPUs in th system.	e intercom		



Page		Description		
Redundar	псу	Displays the status and events that occurred relating to redundancy in the system.		
RTS		RVOC Engine		
습 Licenses 꼸 Users	System diagnostic	es 5 Réduntaroy Mejan Bace 😡		
Connectivity Configuration	Redund	ndancy Status DISABLED .		
Image: Second control of the second control of th		≂ M C		
CPUs Intercom Events Intercom Audit				
Redundancy				
Englist (1919) August				

13 Technical data

RVOC Engine is offered as Infrastructure as a Service (IaaS) deployed on AWS. RVOC Engine is available able as a standalone cloud intercom, as well as a Hybrid intercom with existing RTS hardware-based matrices like ODIN and ADAM.

- RVOC Engine supports connection to iPhone as well as Android phones via the new and easy to use RTS Mobile App called RVOC Edge.
- The connections are WebRTC based and supports encryption.
- RVOC Engine supports connection to existing KP-series family, DBP, and DSPK which support RTS RVON functionality.
- RVOC Engine supports all the traditional Intercom Functionality like Point-to Point, Party Lines, IFB's , Special Lists.
- RVOC Engine is interoperable with the patented RTS Intelligent Trunking System
- Cloud deployment is available via AWS's CloudFormation template.
- Configuration of the RVOC Engine and RVOC Edge is available via AZedit, IPedit and Neo.



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