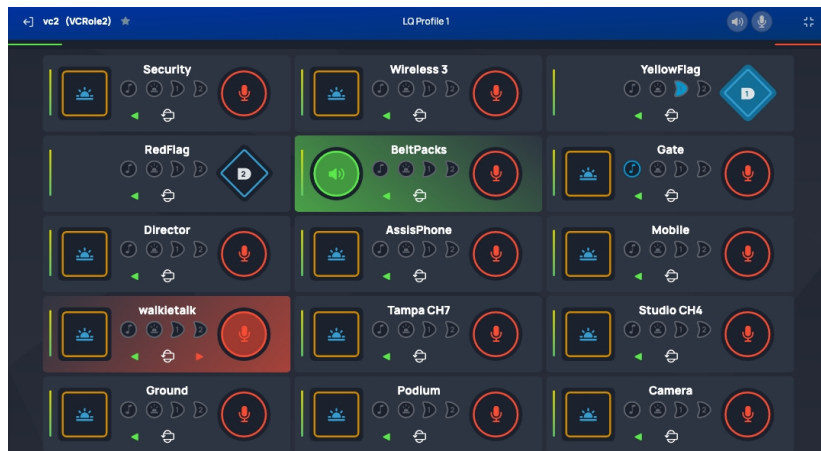


User Guide

Station-IC 1.3 Virtual Desktop Client User Guide



Part Number: PUB-00051 Rev E

January 26, 2023

Document reference

Station-IC™ User Guide

Part Number: PUB-00051 Rev E

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1

Introduction to Station-IC

Station-IC™ is a desktop application available for Microsoft® Windows® and Apple® macOS® computers which enables them to operate as a virtual intercom client for Eclipse® HX (EHX) matrix systems and LQ® Series interfaces.



For information about the Station-IC software version, click , and then **About**.

A screen appears with software version information.

About Station-IC

Version: 1.0.0-build.38

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OK

To access the Station-IC User Guide, click , and then **User Guide**.



2 Installing Station-IC

To install Station-IC on your PC or Mac, download it from the Clear-Com website and install.

Note: *Be sure to enable Station-IC to pass through the system firewall.*

Station-IC is in demo mode until you purchase and install a license, available from your Clear-Com partner.

See [Station-IC Licenses on page 7](#)

Before you can connect to the host intercom system with your virtual client, you must first setup connection details in the target software user interface. Station-IC connects to the host system using a profile. You will need:

User credentials:

- User ID
- Password

Network:

- IP address for the system you are connecting to.

3 Station-IC Licenses

Station-IC supports a number of licensing options that are described below.

3.1 Intercom System Hosted Licenses

Perpetual Eclipse Hosted Licenses Permanent for a major version of Station-IC

Eclipse v. 13 +

Order Code

- STATION-IC-HX: 1 user
- STATION-IC8-HX: 8 users
- Perpetual Eclipse Hosted Station-IC licenses require Eclipse HX version 13.0 or higher.

The following apply:

- Permanent licenses hosted on the Eclipse intercom system are fixed to the Eclipse frame. They cannot be transferred between Eclipse intercom systems.
- The frame's unique dongle ID (hardware ID) must be provided at the time of order.
- Licenses are served to concurrently connected users on a first-come-first-served basis. For example, if you have a license for 8 users, up to 8 users can be connected at any one time. The 8 user connections can be drawn by a larger pool of users.
- Permanent licenses are issued for the major versions of Station-IC (for example, v.1.x, v.2.x,)

3.2 Client Computer Hosted Licenses

Subscription Licenses - for ongoing operation

Order Code

- ST-IC-1Y Subscription Initiation: 1 user, 1 year
- ST-IC-ADD1Y Subscription Extension: 1 user, +1 year
- ST-IC-8-1Y Subscription Initiation: 8 users, 1 year
- ST-IC-8-ADD1Y Subscription Extension: 8 users, +1 year

Event Licenses - for time limited use**Order Code**

- ST-IC-1W : 1 user, 1 week
- ST-IC-1M : 1 user, 1 month

The following apply:

- Subscription licenses can be transferred between computers
- Subscription licenses start depleting following initial activation. The remaining time does not stop while you transfer subscription licenses
- An extension license will start from the time the subscription license lapsed
- Multiple extensions can be installed at the same time. For example, for 3 years continuous use, install 1 Subscription Initiation and 2 Subscription Extensions. Subscription Initiation is installed before the extension
- One event license can be installed on a computer at any one time, additional licenses will overwrite the first. If you wish to extend your event license, wait until it has expired and then install a new one
- If you wish to use an event license on a computer that has previously hosted an initiation/subscription license, you must remove the subscription license before installing the event license. See [Re-hosting a Client Hosted Subscription License on page 15](#)
- Event licenses cannot be transferred between computers
- Event licenses activate and start depleting on first connection to the intercom system
- One event license can be installed on a computer at any one time, additional licenses will overwrite the first. If you wish to extend your event license, wait until it has expired and then install a new one
- If you wish to use an event license on a computer that has previously hosted a subscription license, you must remove the subscription license before installing the event license. See [Re-hosting a Client Hosted Subscription License on page 15](#)


3.3 Obtaining a License

To obtain licenses for Station-IC, contact your Clear-Com partner. Once you have purchased your license(s), Clear-Com will send :

- An Eclipse passcode unique to your matrix frame (for Eclipse hosted licenses)
- A license ticket containing licenses codes (for Client computer hosted licenses)

It is advisable to keep a record of license details for future use.

Example license details from Clear-Com :



Eclipse® HX Hosted Function License(s)

Subscription License(s) - for ongoing use

<input type="checkbox"/> A-IC-HX-1Y	Subscription Initiation License	1 User	1 Year
<input type="checkbox"/> A-IC-HX-ADD1Y	Subscription Extension License	1 User	+1 Year

Subscription License Bundle(s) - for bulk purchase

<input type="checkbox"/> A-IC-HXB-1Y	Subscription Initiation License	8 Users	1 Year
<input type="checkbox"/> A-IC-HXB-ADD1Y	Subscription Extension License	8 Users	+1 Year

Perpetual License(s)

<input type="checkbox"/> AGENT-IC-HX	Virtual Mobile Client	1 User	Version 2.x
<input type="checkbox"/> AGENT-ICB-HX	Virtual Mobile Client	8 Users	Version 2.x
<input type="checkbox"/> STATION-IC-HX	Virtual Desktop Client (*****)	1 User	Version 1.x
<input type="checkbox"/> STATION-ICB-HX	Virtual Desktop Client (*****)	8 Users	Version 1.x
<input type="checkbox"/> DYNAM-EC-1-HX	Assignment Management Software	1 User/Frame	
<input type="checkbox"/> DYNAM-EC-SITE-HX	Assignment Management Software	Site License	
<input type="checkbox"/> HCI-E-HX	Host Control Interface - API	1 Frame	
<input type="checkbox"/> ECLIPSEHX-DELTALITEUG	Upgrade from Delta Lite to four card slots		

Dear Customer,

Thank you for purchasing Clear-Com License. Please find your license details below.

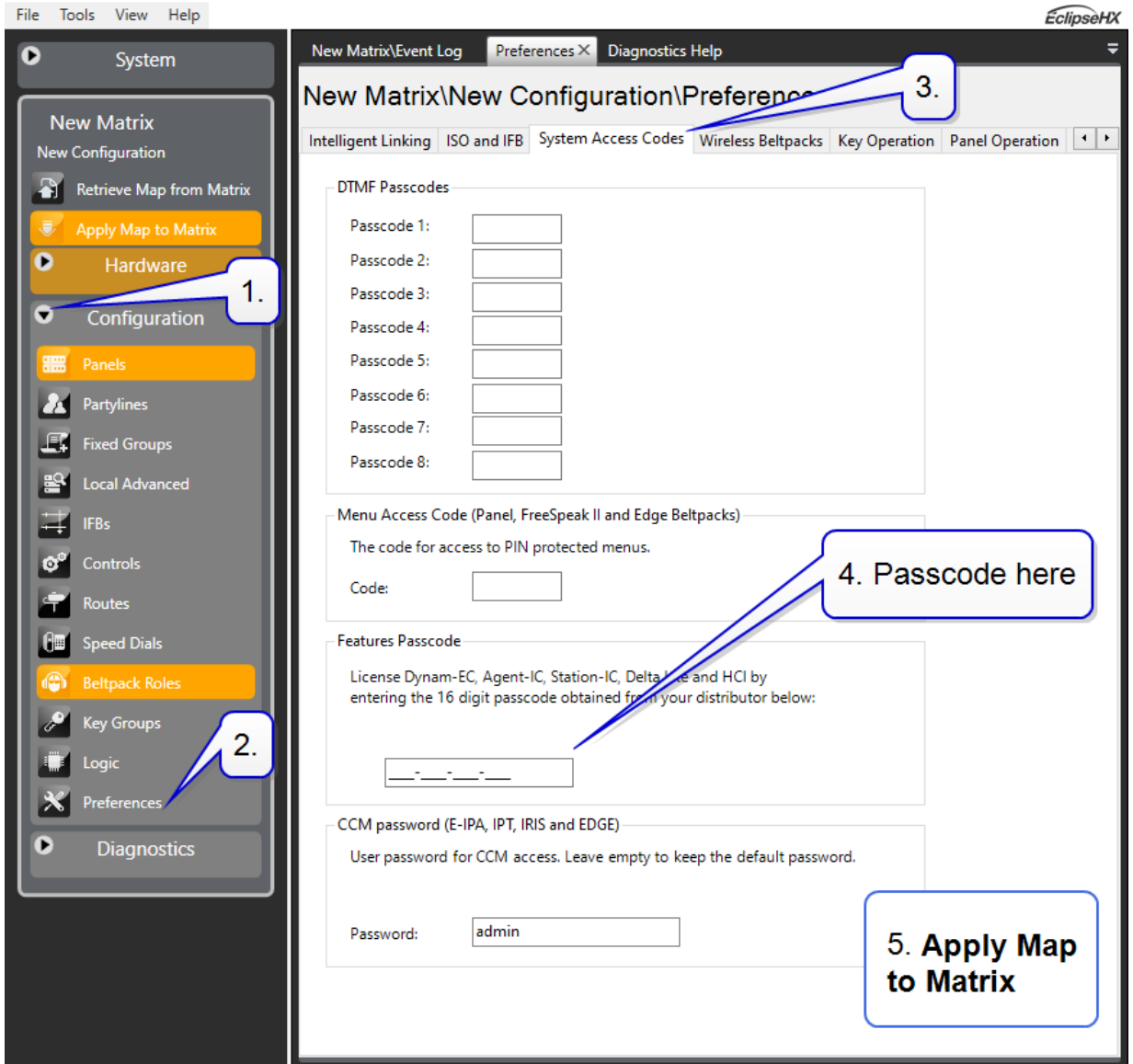
Job Code:	123123123
Description:	CUSTOMER
Dongle Id:	123456
Dynam-EC/PM-Pro:	0 seats
Agent-IC Clients:	0
Station-IC Clients:	6
Passcode version:	4
Generated Passcode:	FFFF FFFF FFFF FFFF
HCI Licence:	False
HExtD - Internal Use:	False
Delta Lite Upgrade:	False
TM - Internal Use:	False
IDE - Internal Use:	False

Note: To find the unique dongle ID (hardware ID) of your matrix, in EHX navigate to: **Matrix > Diagnostics > Event Log > Request Info > Matrix Overview > Send**. You will see the dongle ID (Hardware ID) output to the application window.

3.4 Installing an Intercom System Hosted License

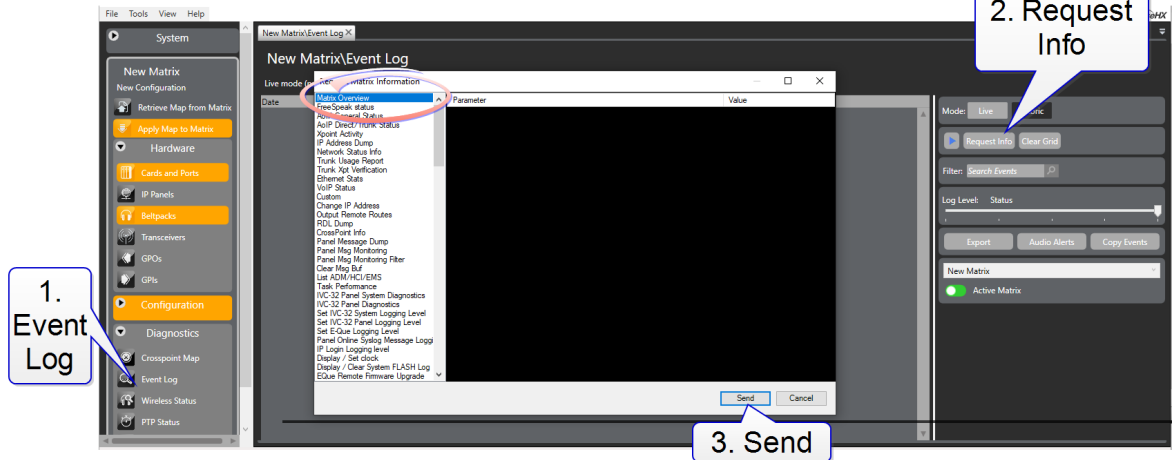
To install a perpetual Eclipse hosted license for Station-IC, open the EHX configuration tool and select the matrix that the license will be applied to.

1. Navigate to **Configuration > Preferences > System Access Codes**
2. Enter the 16 digit passcode that has been sent by Clear-Com into the **Features Passcode** field
3. **Apply Map to Matrix** (with a reset)

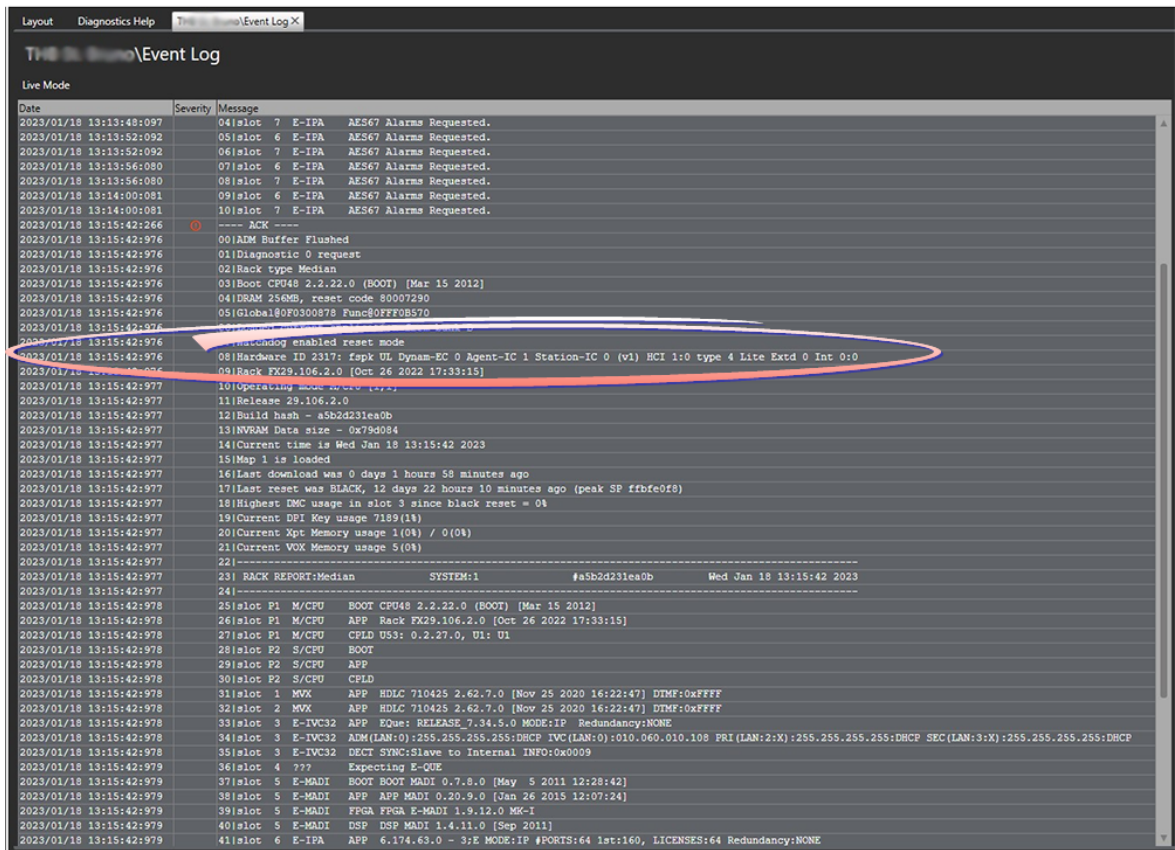


3.4.1 Validating the Installed License Key

1. In the EHX configuration tool, connect to the matrix and navigate to: **Matrix > Diagnostics > Event Log > Request Info > Matrix Overview > Send**

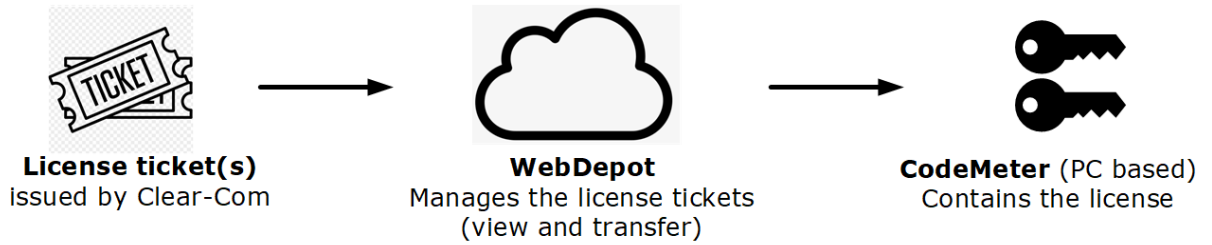


- The event log window will print details including the matrix **Hardware ID** (dongle ID) to the application window. On the same line you will see Station-IC licenses.



3.5 Installing a Client Computer Hosted License

Licenses are activated by you using a Cloud-based WebDepot which transfers selected licenses from the license ticket to the CodeMeter license manager (a software application) that runs on your computer.

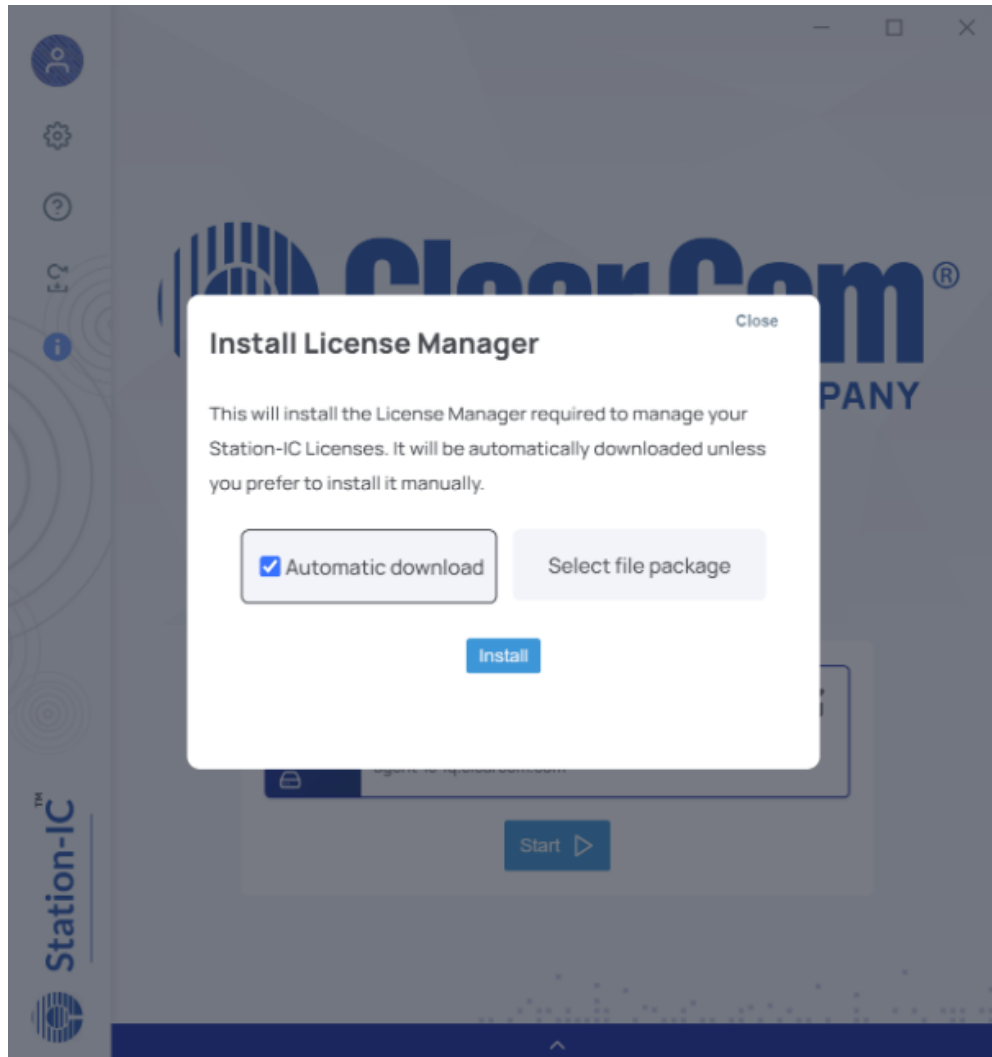


3.5.1 Installing CodeMeter (Client Computer Hosted Licenses)

1. Download Station-IC from the Clear-Com website. Station-IC will open in demo mode.
2. Install the license manager (CodeMeter) by clicking the install icon.



3. Select **Automatic download** and click **Install**. Accept all default options of the CodeMeter License Manager installer.



4. The License Manager is automatically downloaded and installed.

The **Select file package** option allows the CodeMeter License Manager to be installed from an installer file package. This is intended for IT environments that may restrict applications from downloading. Contact Clear-Com for the installer file package.

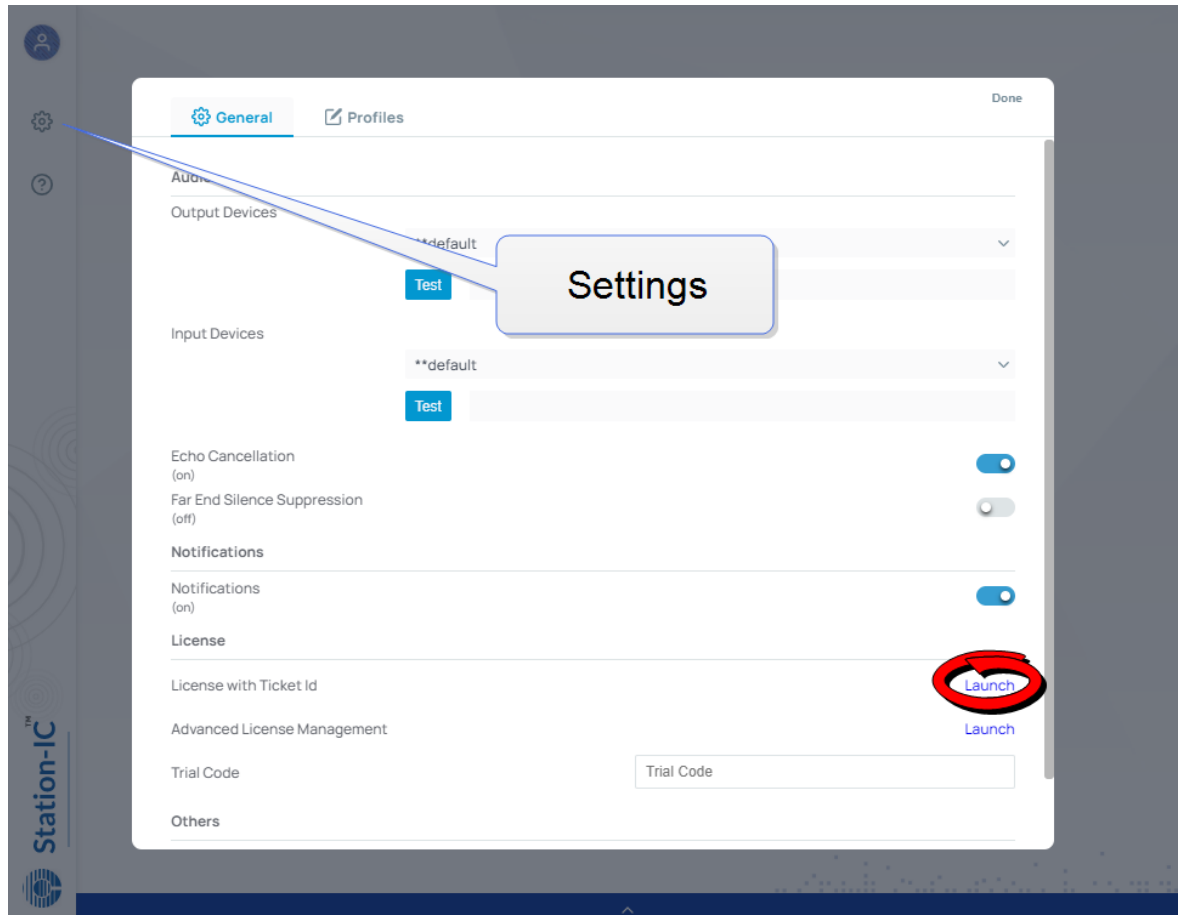
Note: After CodeMeter is installed, the install icon is no longer visible.

Once installed, the CodeMeter License Manager runs in the background on your PC, holding your licenses. License status can be monitored from the CodeMeter License Manager application.

3.5.2 Installing a New License for Client Computer Hosted Licenses (Online)

Installing your licenses online is recommended.

1. Once CodeMeter is installed on your computer and you have license ticket ID from Clear-Com, go to **Settings** in Station-IC and launch **License with Ticket ID**. (Trial Code is for factory service use only).



- The online WebDepot opens. Copy and paste your Ticket ID, and click **Next**.

- You will see the purchased licenses available to you on the license ticket. These licenses are managed by the WebDepot. Press **Activate Licenses**. Select the license(s) you wish to install on your computer, then select **Activate Selected Licenses Now**. Following the license transfer, Station-IC will be licensed and no longer in demo mode.

Note: *In some circumstances you may need to apply licenses to a computer that does not have access to the internet. In this case follow these instructions: [Installing Client Computer Hosted Licenses \(File-Based\) on page 58](#).*

3.5.3 Re-hosting a Client Hosted Subscription License

A client hosted subscription license can be removed from a computer and returned to the license ticket using the WebDepot where it will be available to install on a different computer using the steps outlined above. The license ticket can then be used for another computer. To re-host a license go to **Settings>Launch with Ticket ID** (step 3). You will need your Ticket ID to do this.

My Licenses

Name	Purchased On	Activated On	CmContainer	Status
Station-IC Virtual Client: Subscription Initial, 1 user, 1 year	2021-03-01 02:42:39			Available: 1 (1)
Station-IC Virtual Client: Subscription Ext., 1 user, +1 year	2021-03-01 02:42:39			Available: 1 (1)
Station-IC Virtual Client: Event License, 1 user, 1 month	2021-03-01 02:42:39			Available: 1 (1)
Station-IC Virtual Client: Event License, 1 user, 1 week	2021-03-01 02:42:39	2021-03-02 01:35:30	381461340	Available: 0 (1)

Re-host the license installed on this computer

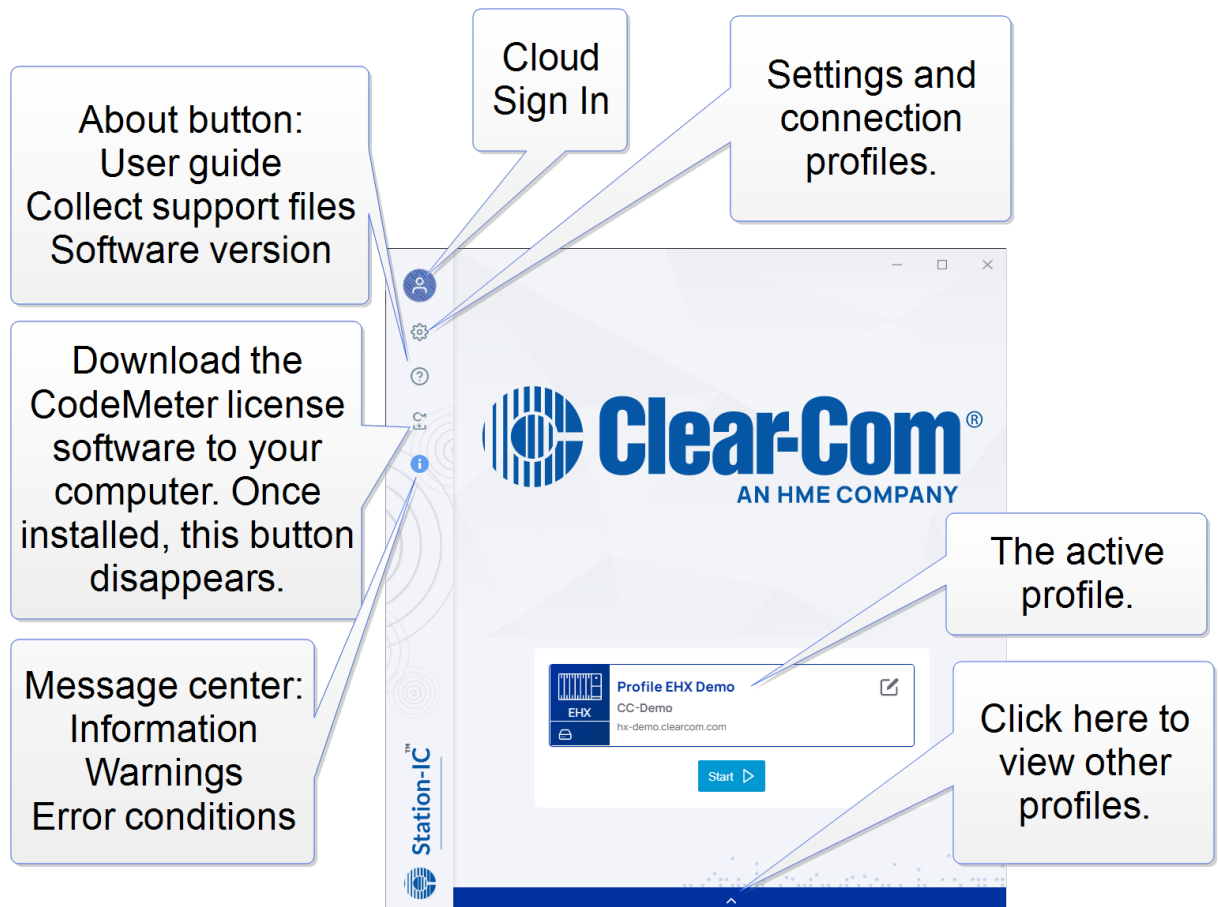
Activate Licenses Re-Host Licenses

Note: Client hosted event licenses cannot be re-hosted and transferred between computers.


4

The Startup Screen

When you open Station-IC, the **Startup** screen appears:



Note:

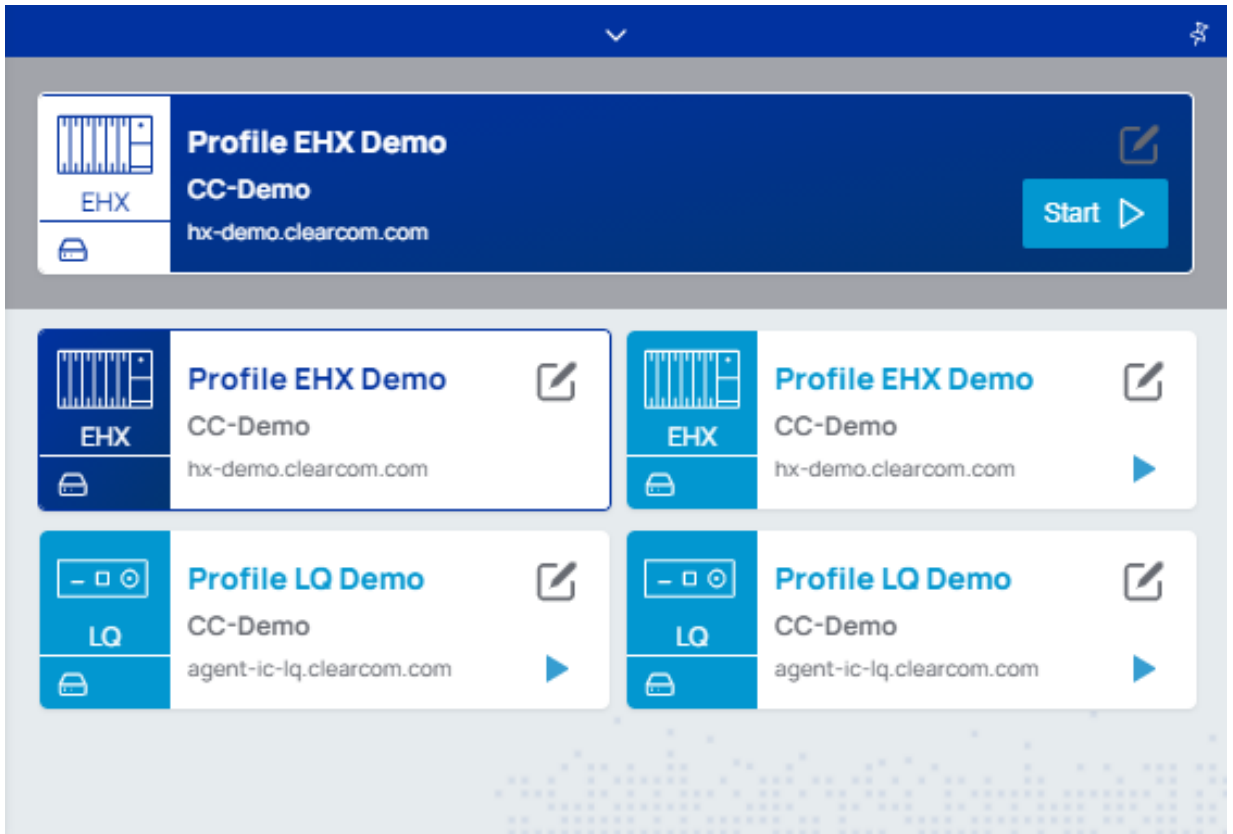
If updates for your virtual client are available, you will see the message center notification . Click this to see messages. You can choose to update, or wait until a more convenient time. See [The Message Center on page 51](#) for more information.

To begin using Station-IC, select **Start**. You will connect to the intercom host specified by the selected profile. On first start up this will be the Clear-Com demo system or, in normal usage, the system last connected to.

If you wish to sign in to cloud services, do this before you press **Start**. See [Station-IC Cloud Features on page 19](#) for information.

4.1 Changing profiles

Click the profile selection drawer to see other profiles. Available profiles: 2 x Eclipse, 2 x LQ.



Note: For information about editing the selected profile, see [Configuring Station-IC on page 24](#).

5 Station-IC Cloud Features

Station-IC can be extended with cloud enabled features. Some of these features require user authentication with your choice of authentication method. Being an authenticated cloud user brings a number of advantages as cloud authentication allows users to securely access information and services based in the cloud.


Once signed in to the cloud, any changes to your Station-IC profiles (user credentials, connection details and other settings) are automatically saved to the cloud and can be accessed from any device that has Station-IC or Agent-IC installed on it. For example, you can connect from your office, from an internet café, or from a mobile phone while you are on the move.

5.1 Authentication

You can sign in to Clear-Com cloud services using any of the following authentication services:

- Email
- Google
- Apple
- Microsoft
- Single Sign On (SSO). This option is only available once you have entered an SSO Provider Code in the virtual client **Settings** tab

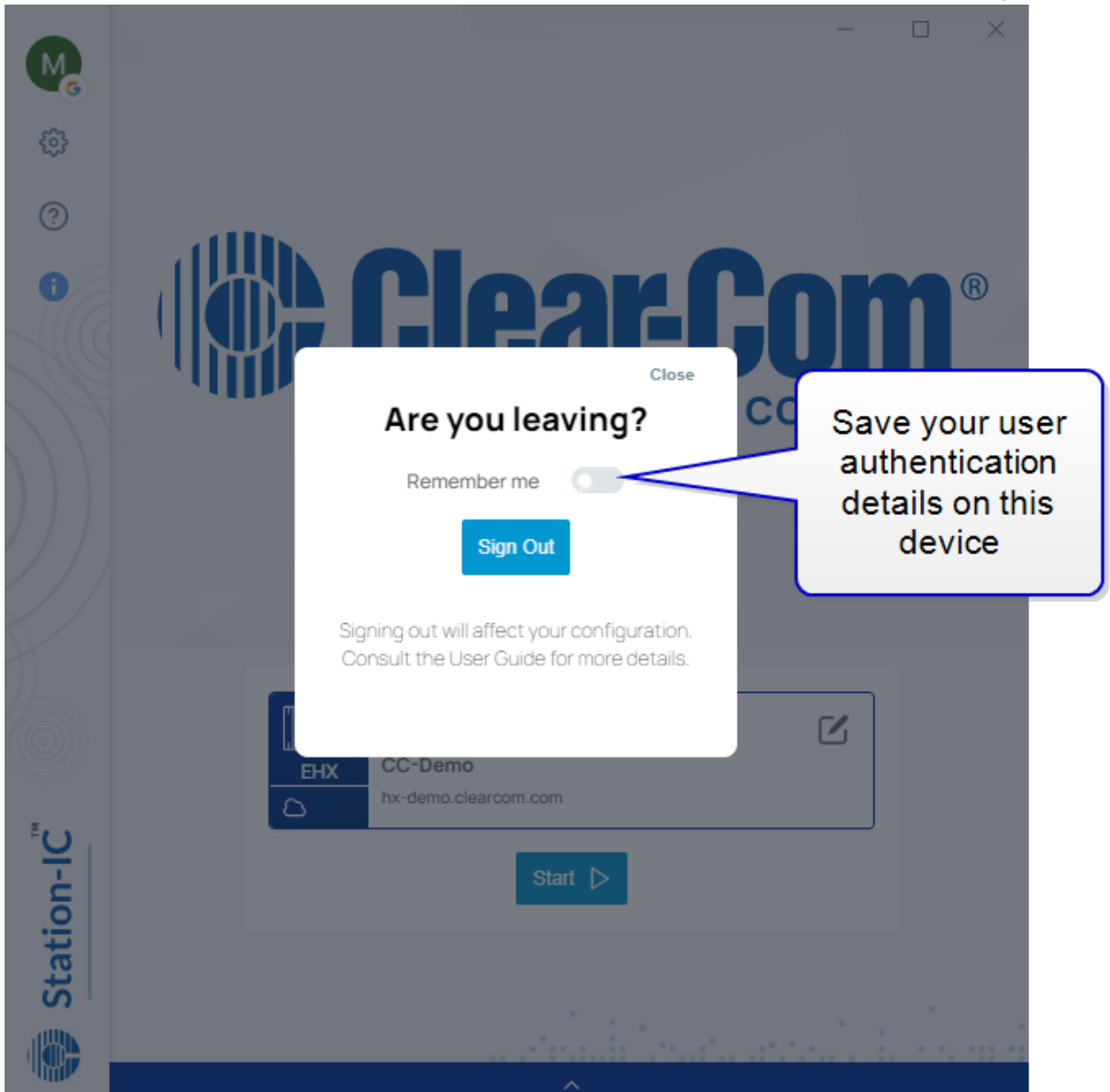
5.2 Sign In to the Cloud

Click the Sign In icon on the starting screen . Select your authentication method and follow instructions on the screen.

Note: *Sign in to the cloud before you press the **Start** button to connect to the server. If you wish to sign out of the cloud (you do not need to sign out) you must disconnect from the server first. If you sign out of the cloud, your intercom client will revert to the settings that are saved locally, and these may be different from the cloud profiles. This can affect the connection of your intercom client to the server.*




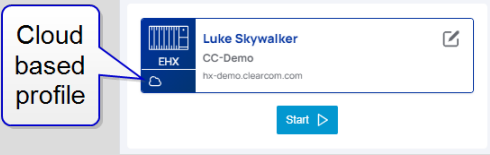

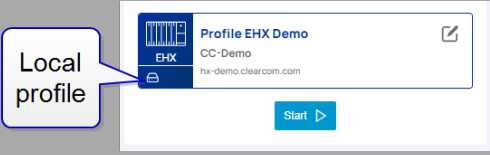

Note: *If you disconnect your intercom session from the host server without signing out of the cloud, you will automatically be signed in to the cloud next time you press **Start**.*

Note: *On a private computer or device you can choose to allow your cloud authentication details to be cached for fast and easy sign on.*



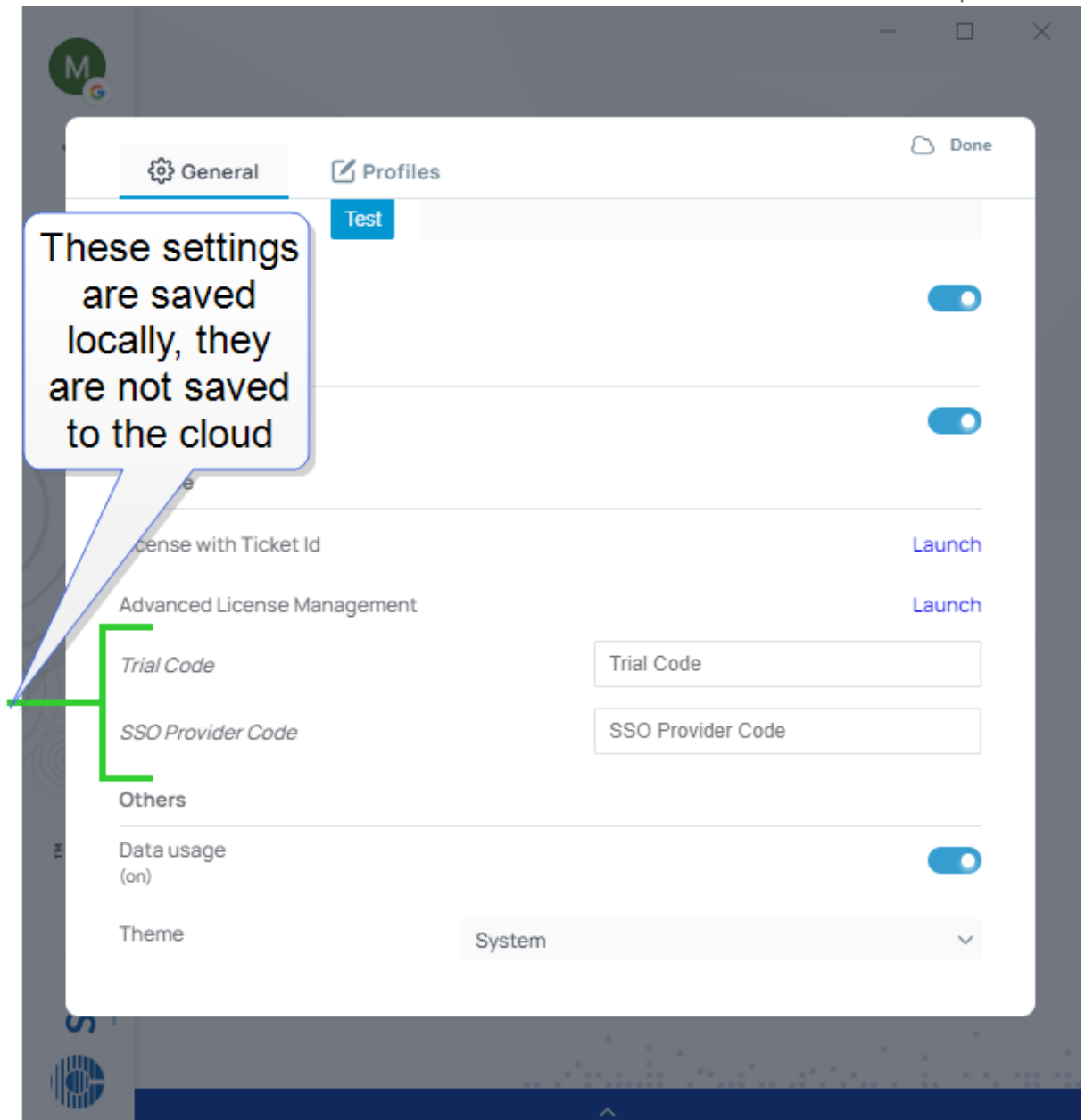
Note:

5.3 Cloud indication icons

Icon	Indication
	<p>This is the sign in icon. This indicates that you are not currently signed into the cloud.</p>
	<p>This is the sign in icon when you are signed into the cloud. If you have a photo uploaded it will show here (Google Cloud). This indicator will also show the authentication type: email, Apple, Google, Microsoft, or SSO, if you have that option enabled on your device. Click here if you wish to sign out of the cloud services</p>
	<p>This indicates that your profiles are saved to and retrieved from the cloud</p> 
	<p>This indicates that your profiles are saved and retrieved locally</p> 
	<p>This indicates that your current authentication method is Single Sign On (SSO)</p>

5.4 Settings in the cloud

Not all settings are saved to the cloud. In the settings page, a setting that displays an italic font is not saved to the cloud.



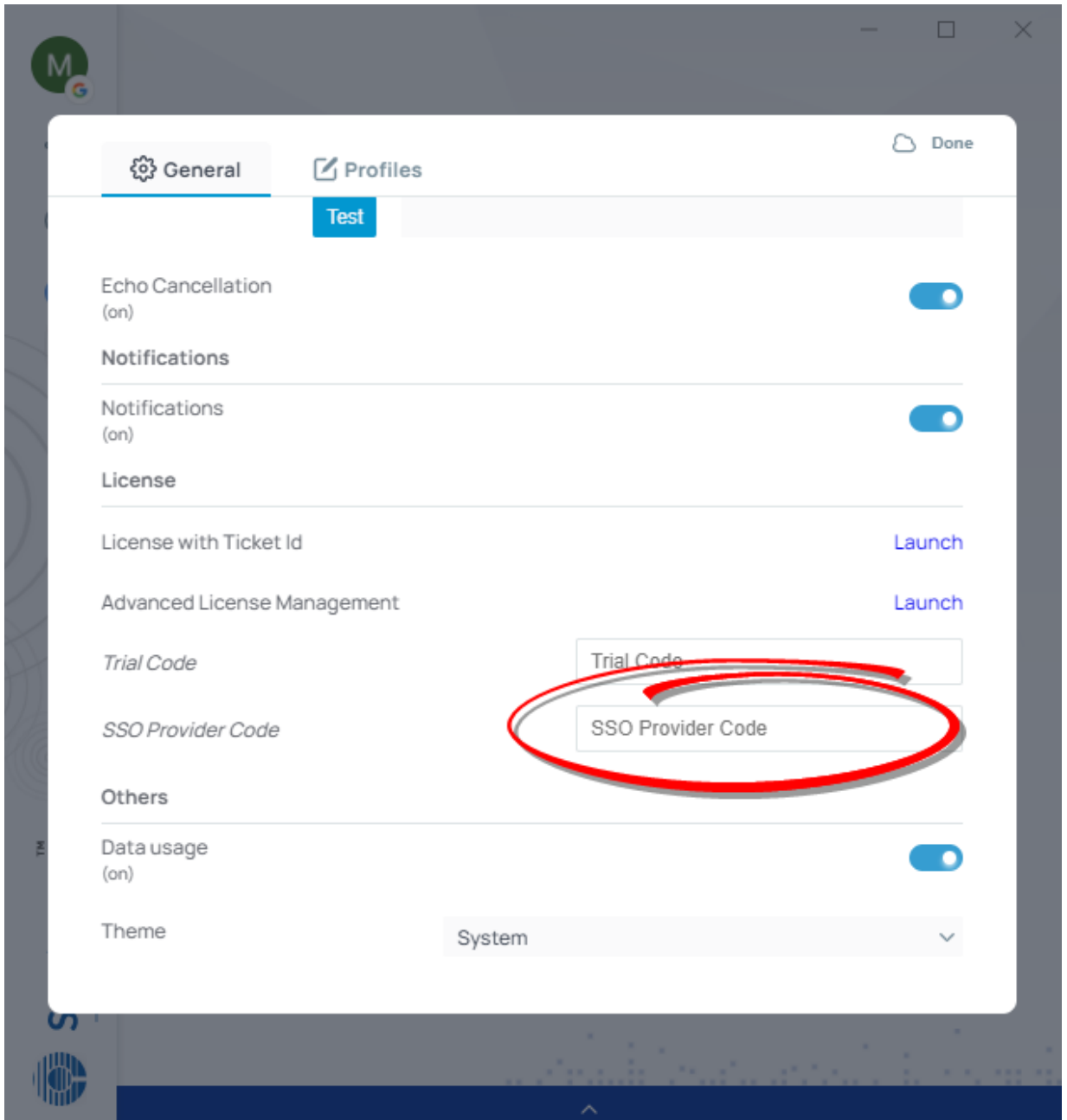
Some settings, for example, device audio settings are device specific, but these are negotiated in the cloud.

For more information on settings see [Configuring General Settings on page 25](#).

5.5 Single Sign On (SSO)

With this authentication method, you can use your organization's unified credentials to access Station-IC connection profiles. SSO is a charged service provided by Clear-Com where your organization supplies Clear-Com with a connection to your credential management system. Once the service has been setup and activated, Clear-Com provides a code to enter into your Station-IC client's settings.

Please contact your Clear-Com Representative for further information.



6


Configuring Station-IC

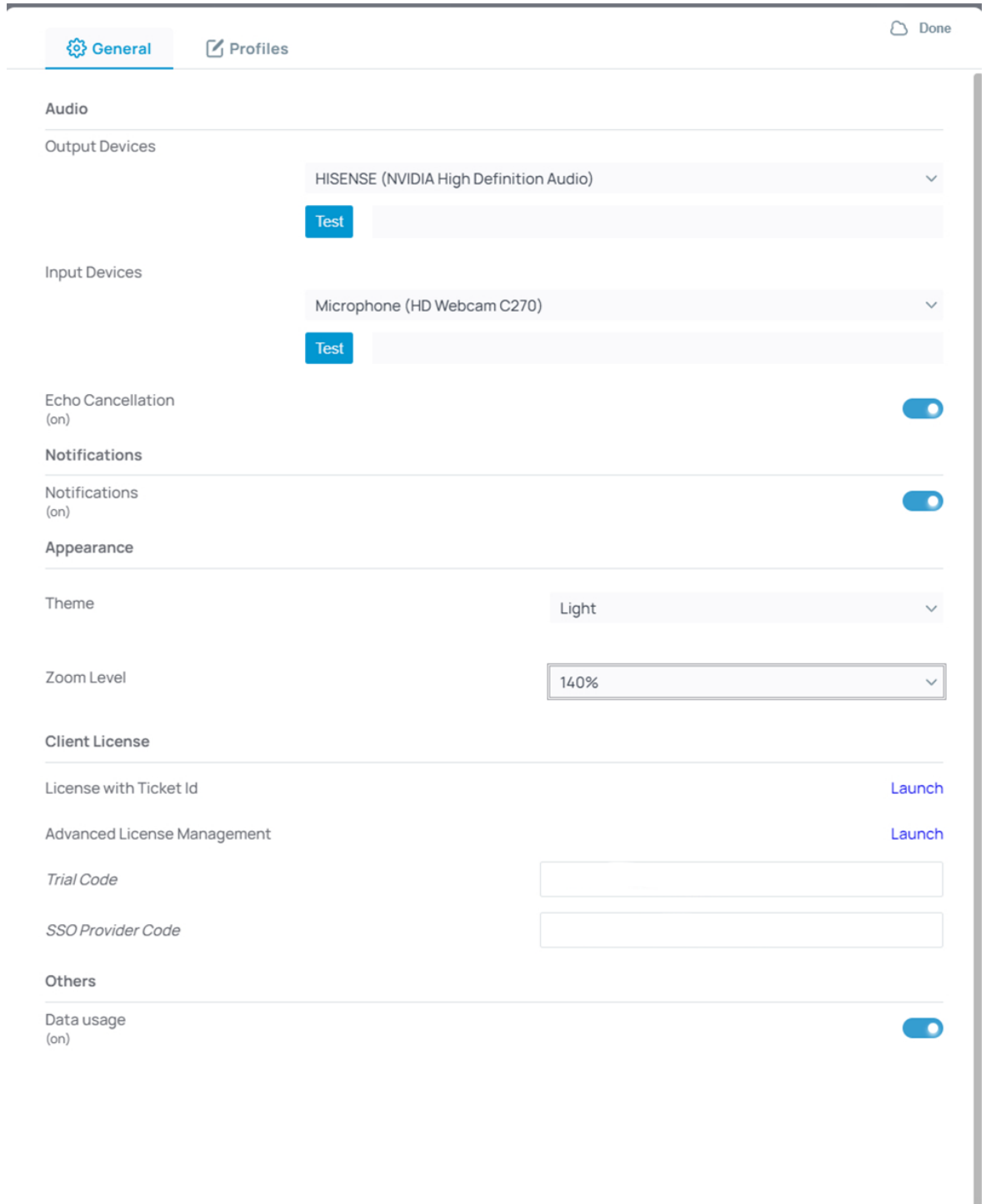
You can configure Station-IC as follows:

- **General Settings.** This includes audio input and output devices such as microphones and loudspeakers. It also includes audio quality settings, notifications, links to licensing tools and data usage diagnostics.
- **Profiles.** A profile is a collection of settings including user credentials, network address and port number, that enable you to connect with the required intercom host system. Profile settings must match corresponding settings in the host intercom system. Profiles are available for EHX and LQ.

6.1 Configuring General Settings

To configure Station-IC general settings:

1. Click on the Settings icon,  The Settings dialog screen appears.



The screenshot shows the 'General' settings page in the Station-IC application. The page has a top navigation bar with 'General' (selected) and 'Profiles'. A 'Done' button is in the top right corner. The settings are organized into sections:

- Audio**
 - Output Devices**: A dropdown menu shows 'HISENSE (NVIDIA High Definition Audio)' with a 'Test' button below it.
 - Input Devices**: A dropdown menu shows 'Microphone (HD Webcam C270)' with a 'Test' button below it.
 - Echo Cancellation**: A toggle switch is turned on (on).
- Notifications**
 - Notifications**: A toggle switch is turned on (on).
- Appearance**
 - Theme**: A dropdown menu shows 'Light'.
 - Zoom Level**: A dropdown menu shows '140%'.
- Client License**
 - License with Ticket Id**: A 'Launch' button.
 - Advanced License Management**: A 'Launch' button.
 - Trial Code**: An empty text input field.
 - SSO Provider Code**: An empty text input field.
- Others**
 - Data usage**: A toggle switch is turned on (on).

2. Ensure that the **General** tab is selected. Edit the settings as required, and then select **Done**.

Input/Output Devices

Click the dropdown arrow to select Input and Output audio devices from those available on your PC. Click **Test** to make sure that the audio devices are functioning.

Echo Cancellation

Echo Cancellation can reduce echo and thus improve audio quality. Far End Silence suppression, by stopping transmission when there is no audio on the line, can reduce your bandwidth consumption to the host intercom system.

Theme

Choose a theme that suits your preferences for the Station-IC display. The **Dark** theme may be better for a darkened environment.

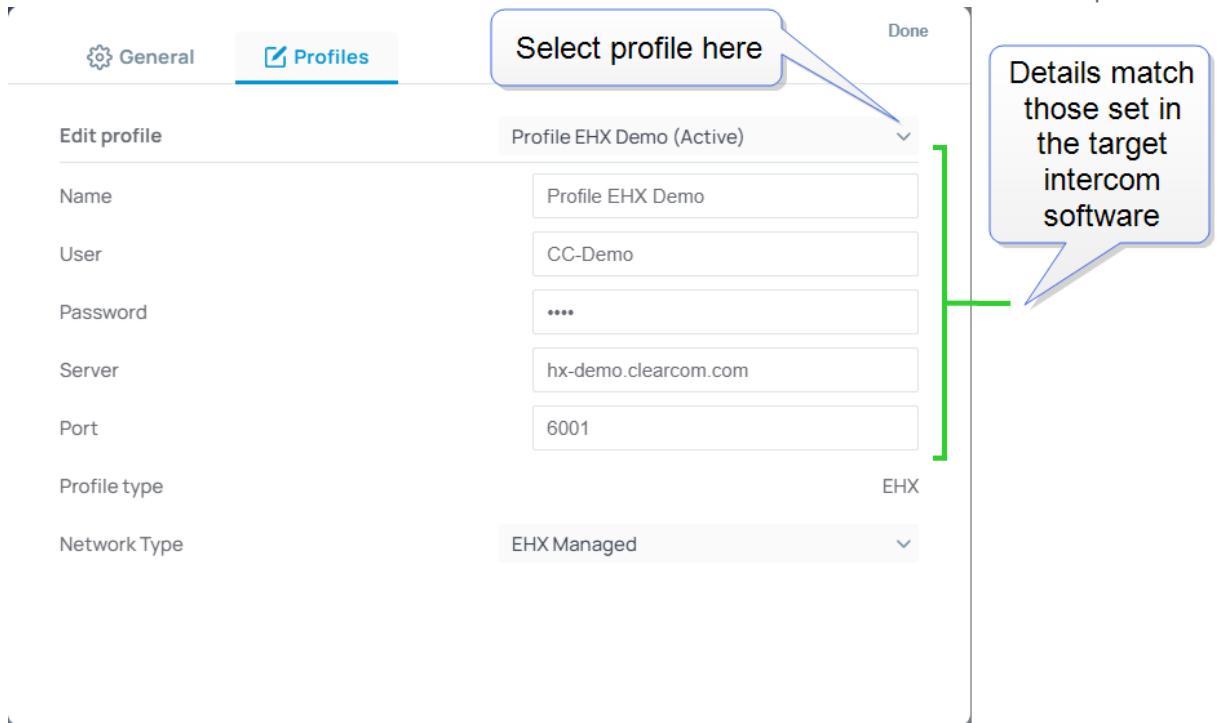
Zoom Level

To enlarge the display of Station-IC keysets, set **Zoom Level**. Choose between 100 - 185%.

6.2 Configuring an EHX Profile

To configure an EHX profile:

1. Click on the Settings icon,  The Settings dialog screen appears:



2. Ensure that the **Profiles** tab is selected.
3. Edit the settings as required by the host intercom system, and then select **Done**.

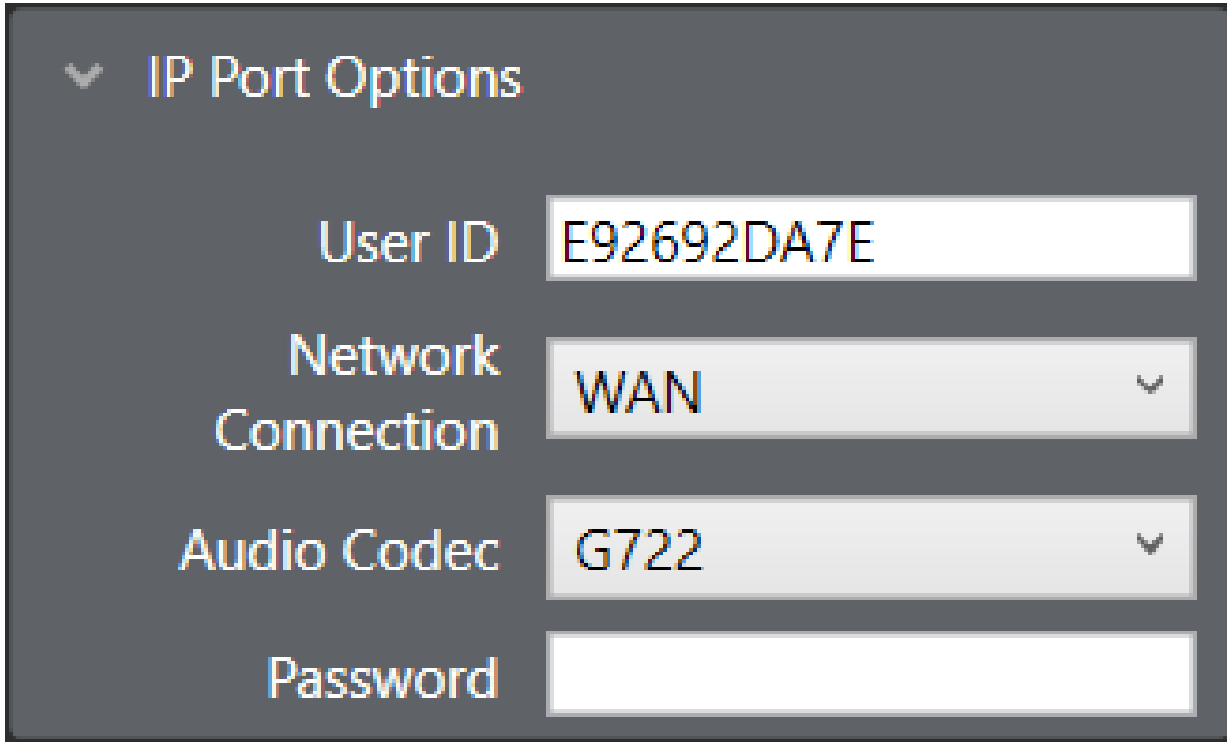
6.2.1 Network Quality

Network quality	Description/comments
LAN	LANs (Local Area Networks) usually cover a small area, such as an office, single building or business.
WAN	WANs (Wide Area Networks) cover a broad area and may include any number of local area networks (LANs).
Internet	Global network that may be used to connect local networks in various locations around the world.
EHX managed	Station-IC follows the port settings set in the EHX configuration software.

6.2.2 Example EHX configuration:

Configuration is required in the host intercom software. This section contains a brief overview of required configuration. In the EHX configuration software you will set:

IP port options (User ID and Password)



The screenshot shows a configuration window titled "IP Port Options" with a dropdown arrow to its left. It contains four fields:

- User ID:** A text input field containing the alphanumeric string "E92692DA7E".
- Network Connection:** A dropdown menu currently displaying "WAN" with a downward arrow on the right.
- Audio Codec:** A dropdown menu currently displaying "G722" with a downward arrow on the right.
- Password:** An empty text input field.

Note: The port type must be *Virtual Client* in the host EHX software.

E-IPA Card Properties (IP address)

E-IPA-HX Card Properties

Use IVC settings for Admin connection

E-IPA-HX Port License:

View card license: [Open in browser](#)

Admin and IVC | AoIP | Protocol Settings | Co < >


Rear Connection:	<input type="text" value="LAN 1"/>
IP Address:	<input type="text" value="10.50.14.147"/>
Subnet mask:	<input type="text" value="255.255.252.0"/>
TCP/UDP Port:	<input type="text" value="6001"/>
Default gateway:	<input type="text" value="10.50.12.1"/>
External IP Address:	<input type="text" value="255.255.255.255"/>
External TCP/UDP Port:	<input type="text" value="6001"/>

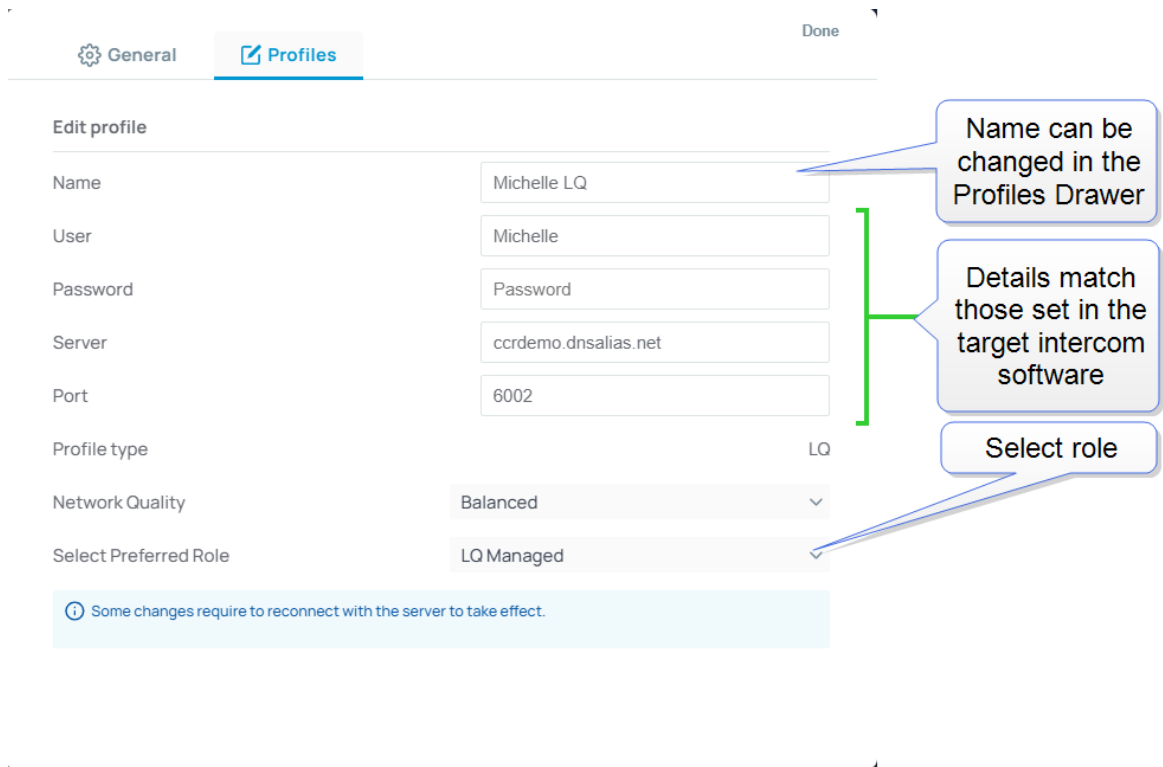
[Close](#)

For more information please refer to the latest *Eclipse EHX Configuration Software User Guide*

6.3 Configuring an LQ Profile

To Configure an LQ Profile:

1. Click on the Settings icon,  The Settings dialog screen appears.
2. Ensure that the **Profiles** tab is selected:



The screenshot shows the 'Edit profile' dialog with the following fields and values:

Field	Value
Name	Michelle LQ
User	Michelle
Password	Password
Server	ccrdemo.dnsalias.net
Port	6002
Profile type	LQ
Network Quality	Balanced
Select Preferred Role	LQ Managed

Callouts in the image:

- 'Name can be changed in the Profiles Drawer' points to the Name field.
- 'Details match those set in the target intercom software' points to the User, Password, Server, and Port fields.
- 'Select role' points to the Select Preferred Role dropdown.

A message at the bottom states: 'Some changes require to reconnect with the server to take effect.'

3. Edit the settings as required by the host intercom system.
4. Select a role, and then select **Done**.

Note: *The role can be fixed by the LQ CCM interface. In this case, you will not be able to select a role as it will be allocated automatically by the host intercom system.*

Once you have accessed the system, a user selectable role is indicated by a star in the Station-IC keysets screen:



Note: *If the role for your intercom client has been configured as fixed in the LQ CCM, you cannot select a different role. If you try to select a different role, you will see an exclamation mark in a*

triangle next to the role selection drop-down. This indicates that the role you have tried to select will not be applied to Station-IC.

Network Quality	Description/comments
High	LAN only
Balanced	LAN or WAN
Low	Internet

6.3.1 Example LQ CCM Configuration

Configuration is required in the host intercom software. This section gives a brief overview of configuration details.

User credentials are configured in the **Accounts** page of the LQ CCM:

The Agent-IC service is not licensed.
Agent-IC clients will be forced to connect in Demo mode only.

Virtual Client Users

Virtual Client Users List

#	Label	User ID	Password	Default Role	LQ Assignment	Status
C1	Michelle LQ	Michelle		None	Any	<input checked="" type="checkbox"/>
C2	2	CC-Demo	Not Set	CC-Demo	LQ-R 4W#1	<input type="checkbox"/>

For more information on setting up the host system for Station-IC see:

- [The Station-IC Knowledge Center](https://www.clearcom.com/station-ic-knowledge-center) (<https://www.clearcom.com/station-ic-knowledge-center>)
- The *LQ Series User Guide* available from the Clear-Com website.

7

Using Station-IC

Station-IC operates as a virtual intercom client to two Clear-Com systems.

- Eclipse HX (EHX) matrix systems
- LQ Series interfaces

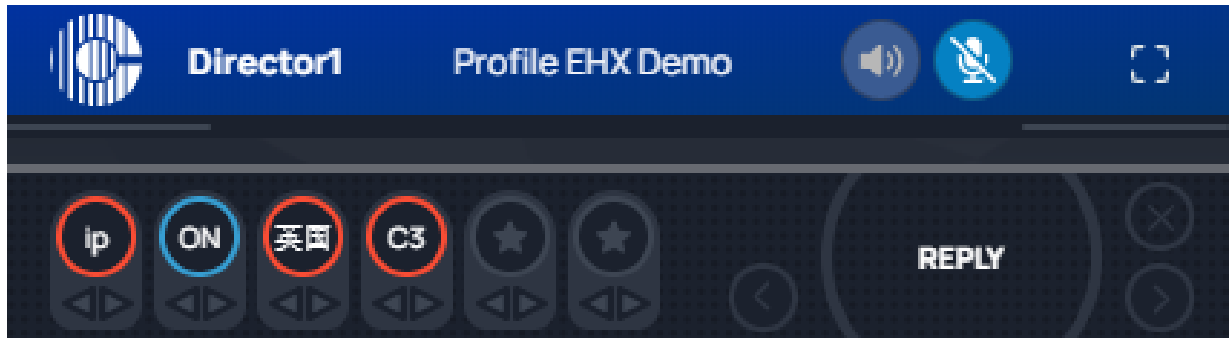
The key display and operation differs between the two systems.


7.1.2 Select Operation Mode


You can use Station-IC in two modes:

Normal Mode - you can resize the screen to any required size. The keysets will responsively adjust to fit the screen size.

Compact Mode - a small screen containing up to six keysets floats on top of the programs on the user's desktop. You can position the compact screen as required. This enables you to use Station-IC while you use your main screen for other applications. This screen appears on top of any other applications that are open.



To select Compact Mode, click the  icon.

To return to Normal mode, click the  icon.

7.1.3 Using Keysets

A keyset is a set of controls associated with an audio assignment that enables you to communicate with an endpoint user or a conference/partyline. For example, you can talk or listen to an intercom panel, or take part in a conference (partyline) group. Keysets can also be used to talk to interruptible foldbacks (IFBs), controls such as call signals, GPIO and logic functions, and direct interface ports.

Each keyset can have:

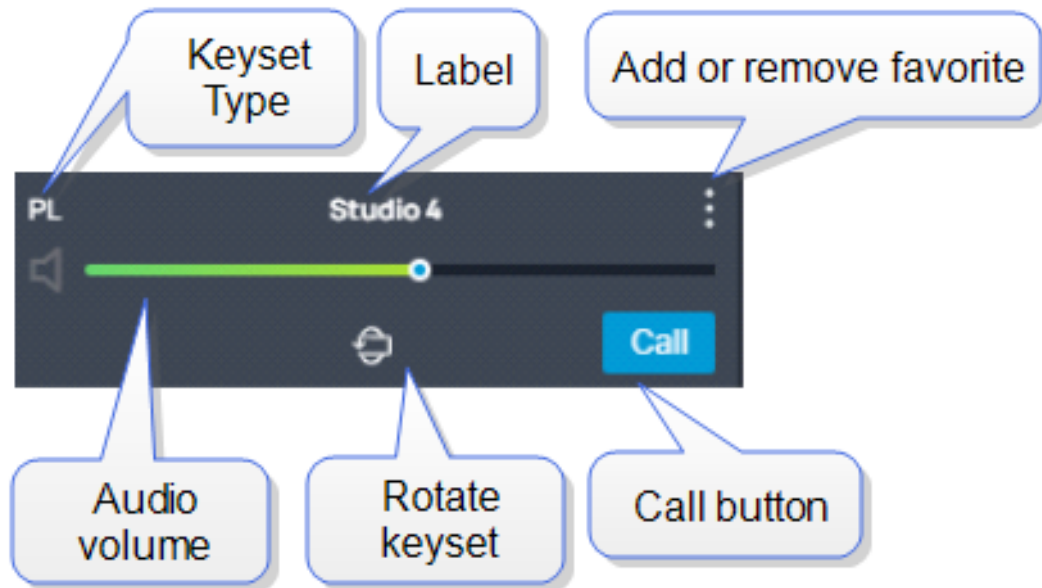
- A green Listen key
- A red Talk key
- A volume indicator
- A label that identifies the keyset

Note: *The keyset display can be made larger by setting zoom level in **Settings > General**.*



Front View of Keypad





Back View of Keypad



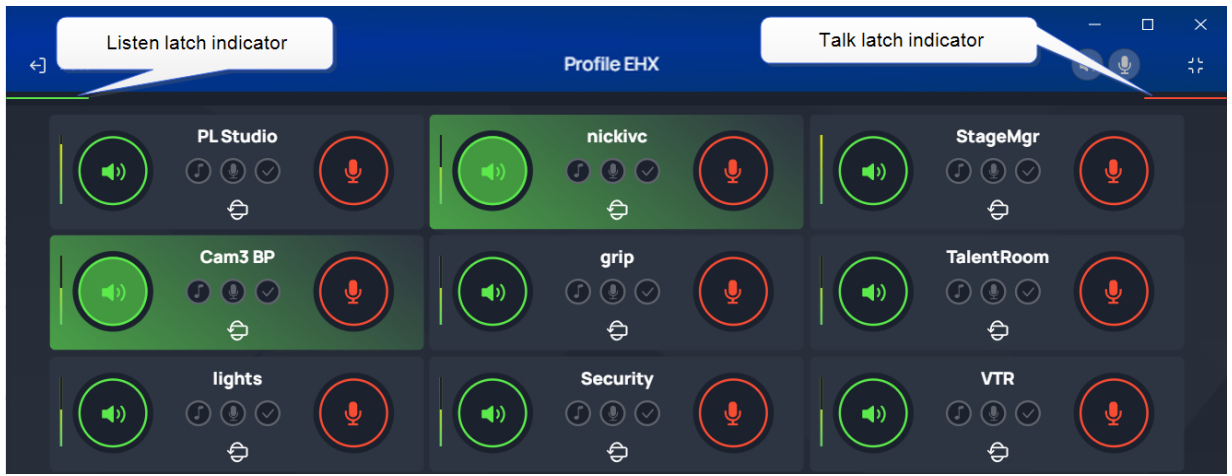
Using Talk and Listen Keys

Select the Red Talk  or Green Listen key  to talk or listen respectively.

When a Talk or Listen key is active, it is highlighted as follows,  and .

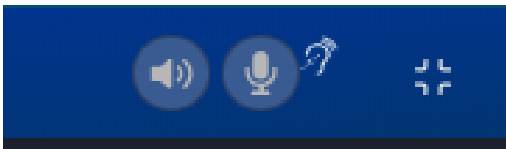
Note: If you select Talk or Listen with a brief mouse click the key will latch. This means that the Talk or Listen function remains active until you click the button again to deselect it.

Note: If you click and hold the Talk or Listen key, the key remains active until you release it. You will see Talk/Listen latch indicators at the top of the screen.




Eavesdropping

When another user has a key latched to listen to you, you will see an eavesdropping icon in the top bar. This shows you that someone is listening.







Adjusting Volume

To adjust the volume, click , and then use the green slider control to adjust the audio volume.

Muting microphones and loudspeakers

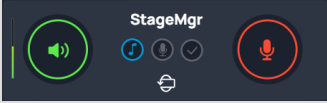
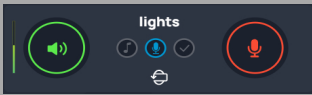
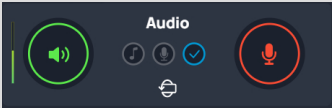
To mute all microphone and loudspeakers across all the keysets:

Click on  or  respectively. When all the microphones or all the loudspeakers are muted the icons display with line across them,  .

Call Signal

To send a call signal, click  and then click [Call](#).

Tally Icons

Tally Icon	Indication
Quaver 	Audio presence tally
Microphone 	In-use tally
Checkmark 	Panel connected tally

Using the Reply Key

The **Reply** Key is located in the footer area of the **Keysets** screen. To view this area, click as shown below.

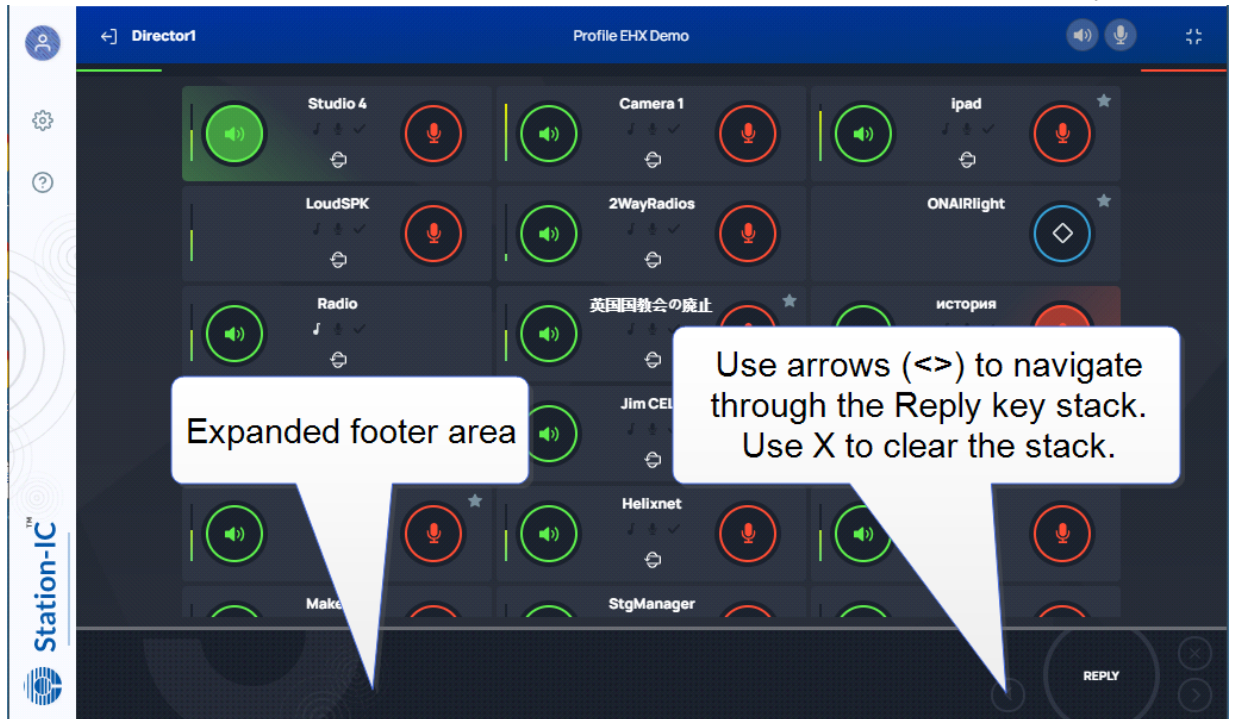


The footer area expands to show the **Reply** key.

Note:

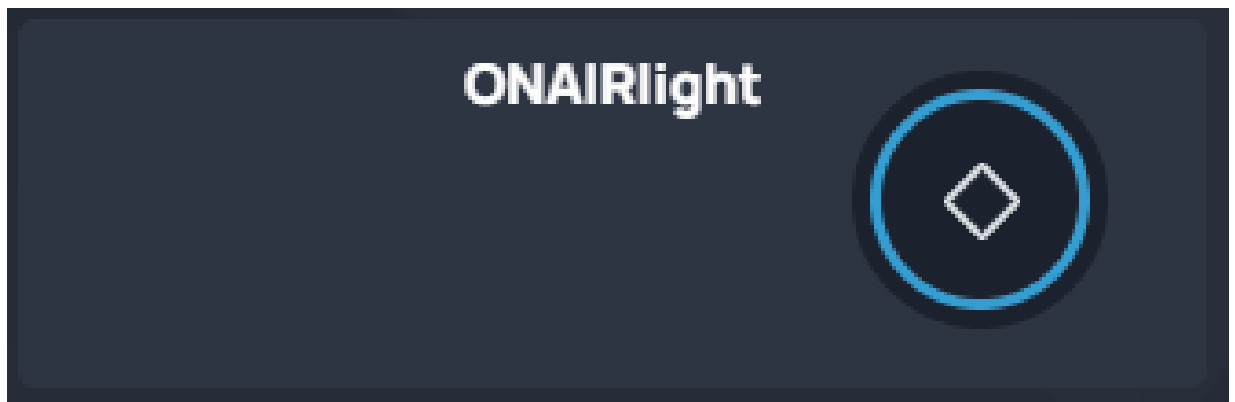
*If you receive a call, the footer area will automatically expand and the **Reply** key will flash and display the name of the caller. When the call ends, the footer area will collapse.*

Use the arrows (<>) to navigate through stacked calls on the Reply key. X clears the top element in the call stack.



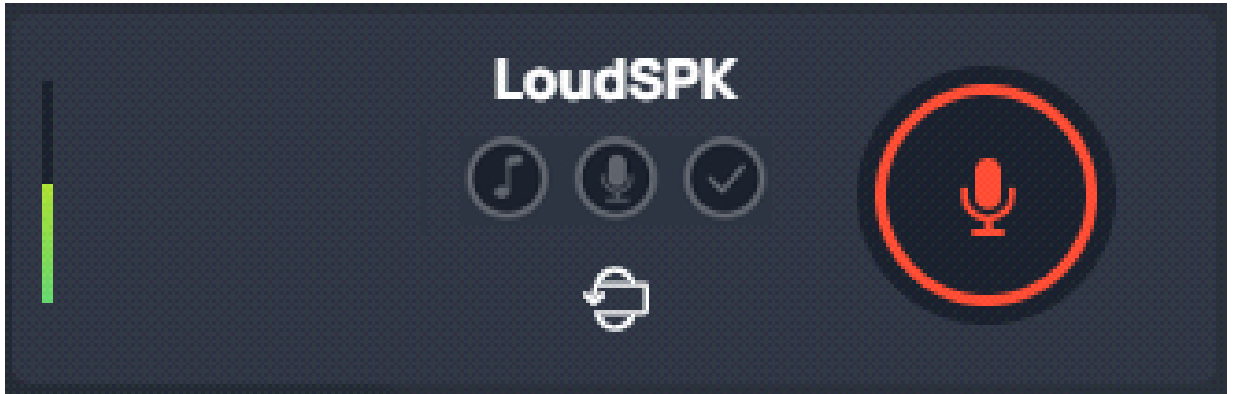
Control Key

Keysets can be configured in the host intercom system to send a control (General Purpose Output) to an external system. This allows you to control an external appliance such as an on-air light, or transmission to two-way radios.



Alternative Key Configuration

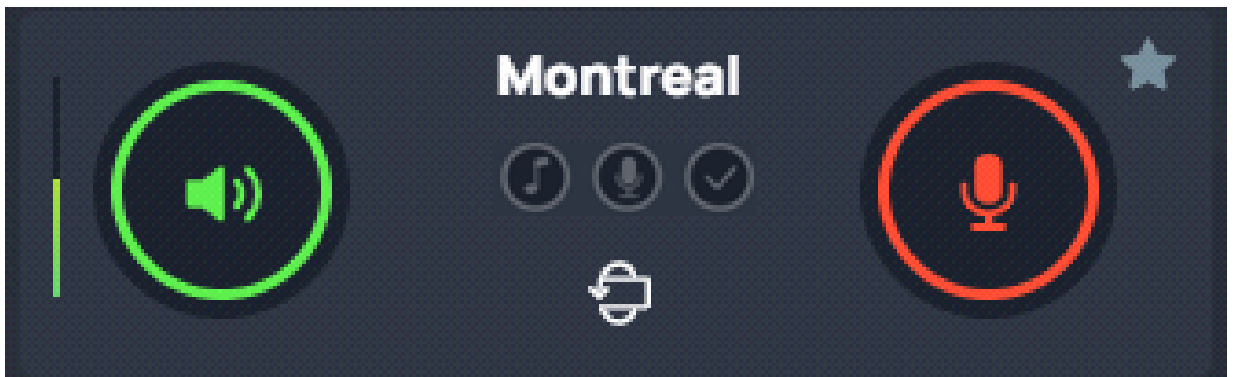
Keysets do not have to be configured in the host intercom software to have two keys. They can have listen, talk, both or none.



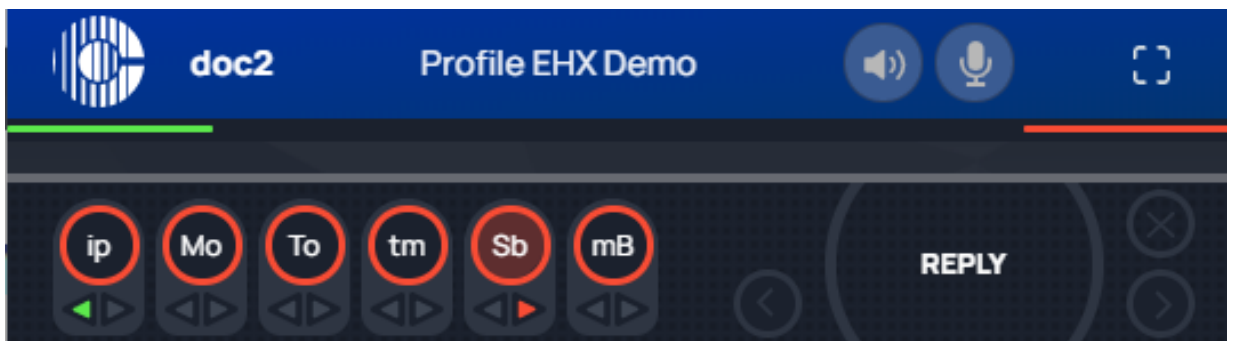
Using Compact Mode

To make any keyset appear in Compact Mode, click the **Favorite** icon at the top-right hand side of the keyset. Click the icon again to remove it from Compact Mode.

Favorite keysets have a Star icon at the top-right hand side of the keyset.



When in compact mode, the name of the key is shortened to two characters.

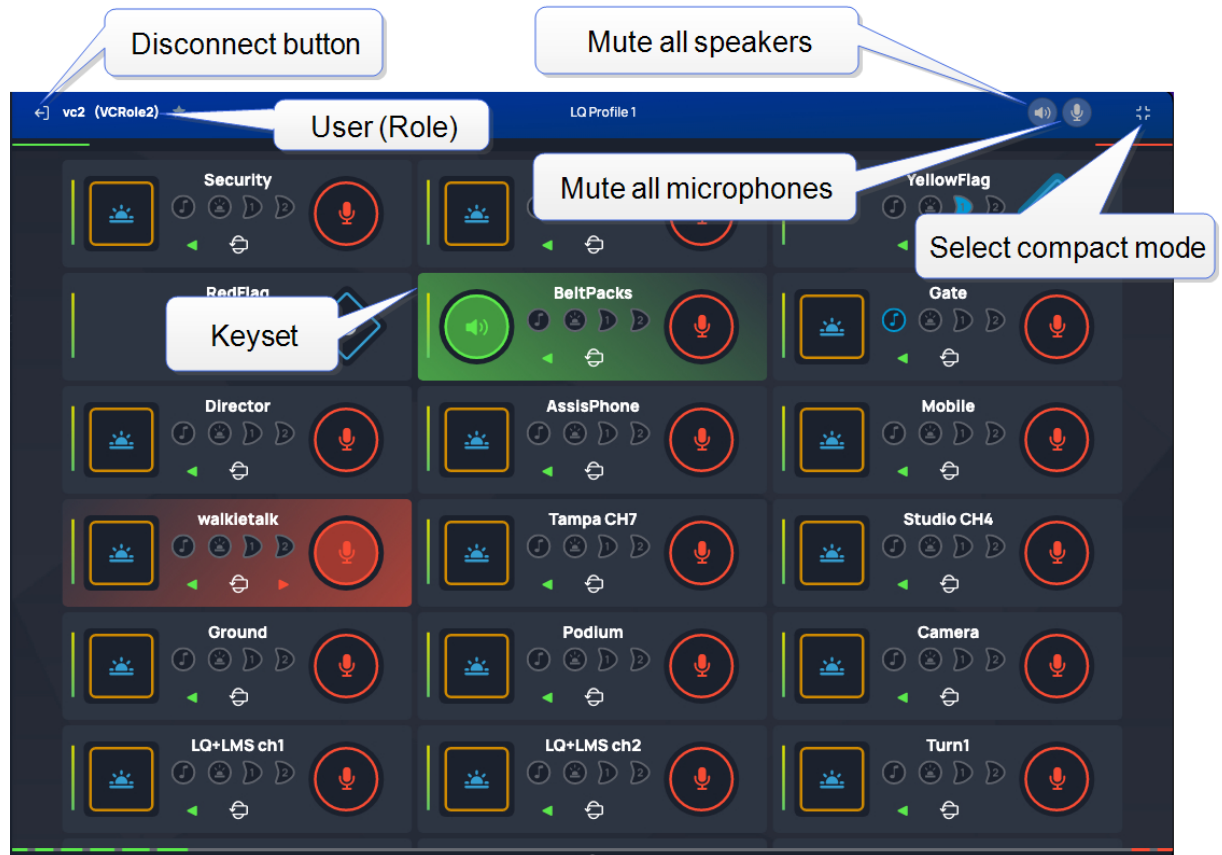


Talk (red indication) and listen (green indication) latched keys are indicated by a triangle, as well as the talk-latch indicators (the red/green bars).

7.2 Using Station-IC with LQ

When you connect to the device specified in your selected profile, the Keysets screen appears. The maximum is 24 Keysets.

7.2.1 The Keysets Screen

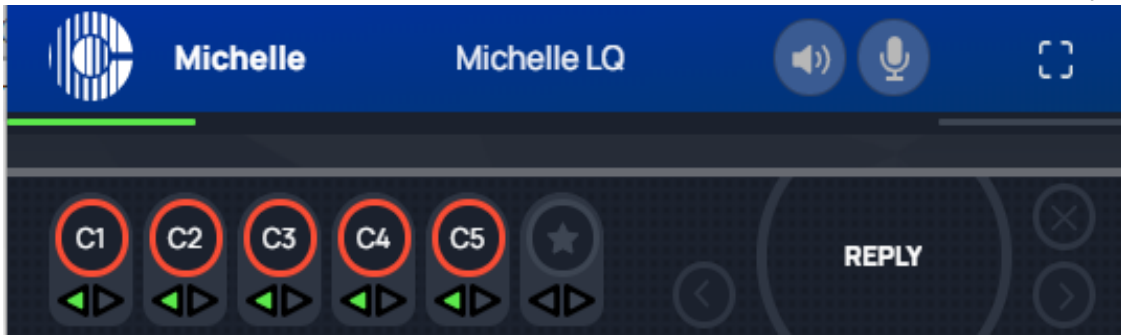


7.2.2 Select Operation Mode

You can use Station-IC in two modes:

Normal Mode - you can resize the screen to any required size. The keysets will responsively adjust to fit the screen size.

Compact Mode - a small screen containing up to six keysets floats on top of the programs on the user's desktop. You can position the compact screen as required. This enables you to use Station-IC while you use your main screen for other applications. This screen appears on top of any other applications that are open.



To select Compact Mode, click the  icon.

To return to Normal mode, click the  icon.

7.2.3 Using Keysets

A keyset is a set of controls associated with an audio assignment that enables you to communicate with a channel (conference line).

Each Keyset can be rotated to reveal more keys and controls. Click  to flip the keyset.

Each keyset has four keys that can be configured as:

- Call signal
- Event signal (1 or 2)
- Talk key (red)
- Listen key (green)
- Remote mic kill (RMK)

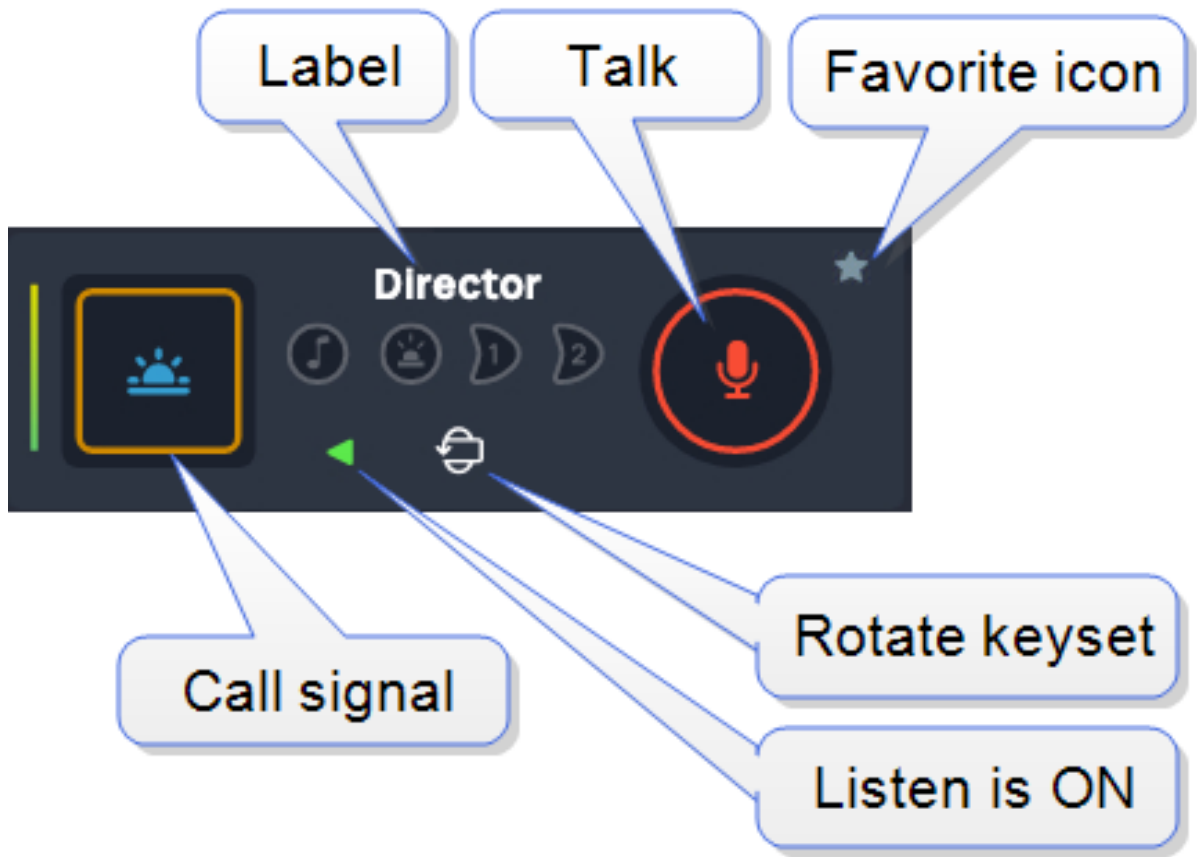
Each key also has:

- A volume indicator
- A label that identifies the keyset

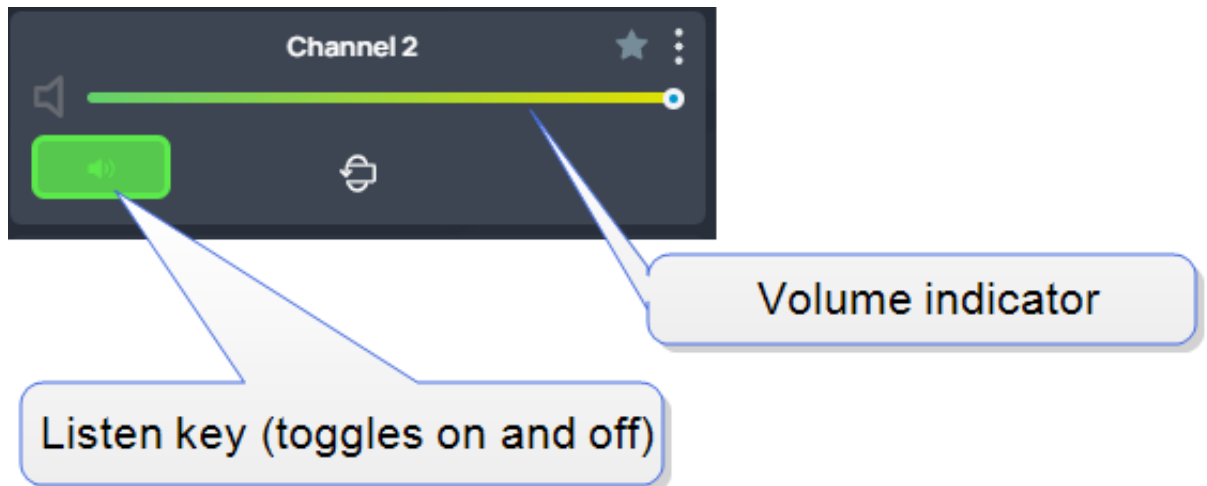
The positioning of controls on Keysets is controlled by the LQ software and can be changed as required.

Note: *The keyset display can be made larger by setting zoom level in **Settings > General**.*

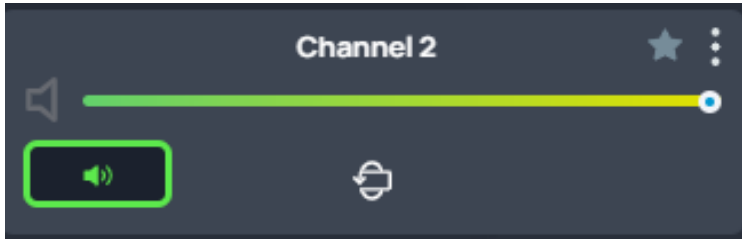
Front View of Keypad (default configuration)



Back View of Keypad




When the Listen key is not activated it has a black background:




Note: When **both** Talk and Listen keys are not activated, Call Signal, Events and RMK are not available.

Note: These graphics show the default configuration for Keysets. The system administrator may set up an alternative Keyset layout.

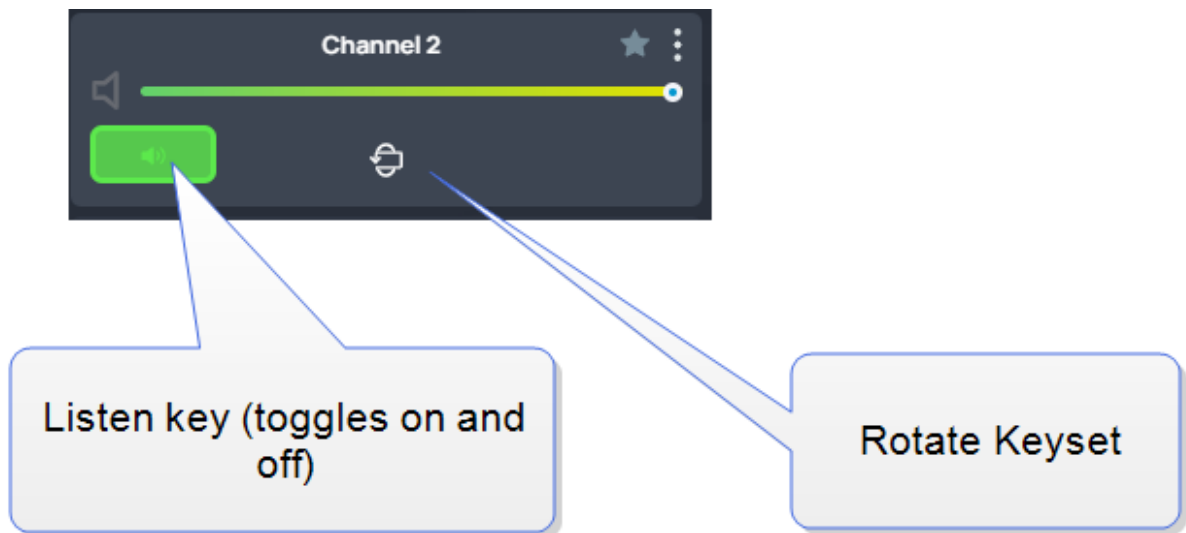
Using Talk and Listen Keys

Select the red Talk  button to talk.

When a Talk key is active, it is highlighted as follows, .

Every time you connect to Station-IC for LQ, all the Listen keys are activated. If you don't want to hear a particular key, you must turn it off.


When you disconnect and reconnect to Station-IC, all Keysets will return to default configuration (all Listen keys ON).



In the default configuration, the Listen key is latched activated.





Note: If you select Talk or Listen with a brief mouse click the key will latch. This means that the Talk or Listen function remains active until you click the button again to deselect it.

Adjusting Volume

To adjust the volume, click , and then use the green slider control to adjust the audio volume.

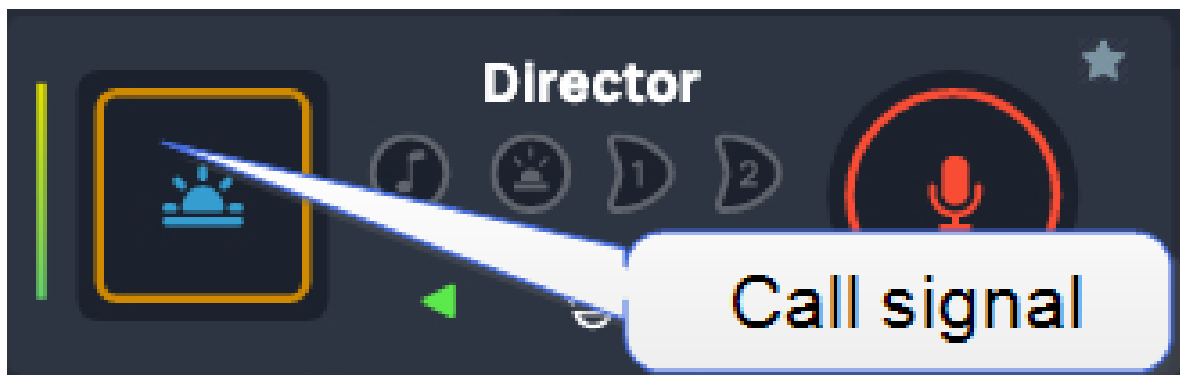
Muting microphones and loudspeakers

To mute all microphone and loudspeakers across all the keysets:

Click on  or  respectively. When all the microphones or all the loudspeakers are muted the icons display with line across them,  .

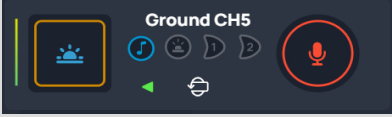

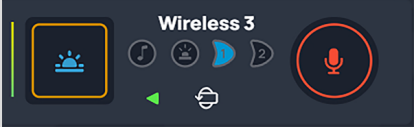
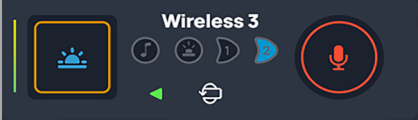
Call Signal

To send a call signal, click the call signal button on the front of the Keyset:



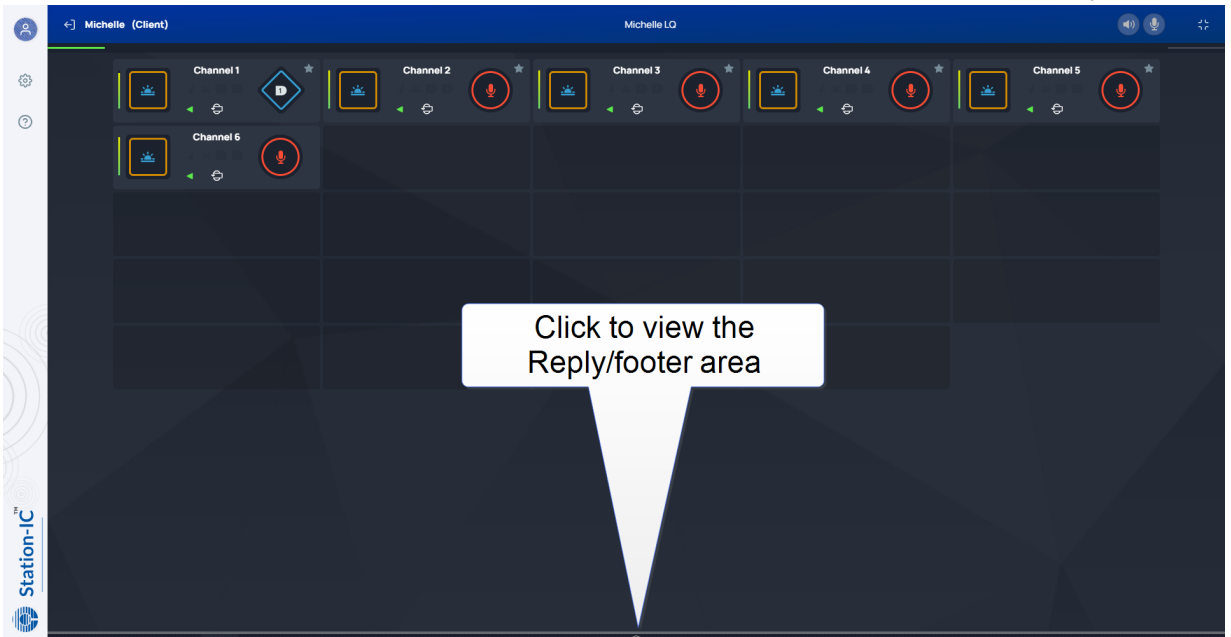
Note: *The call signal is not latchable. When you press it, you will see it light briefly. Once pressed, the call signal will remain active in the target channel for 10 seconds.*

Tally Icons

Tally Icon	Indication
<p>Quaver</p> 	Audio presence tally
<p>Call signal</p> 	Call signal active
<p>Event 1</p> 	Event 1 is currently active
<p>Event 2</p> 	Event 2 is currently active

Using the Reply key

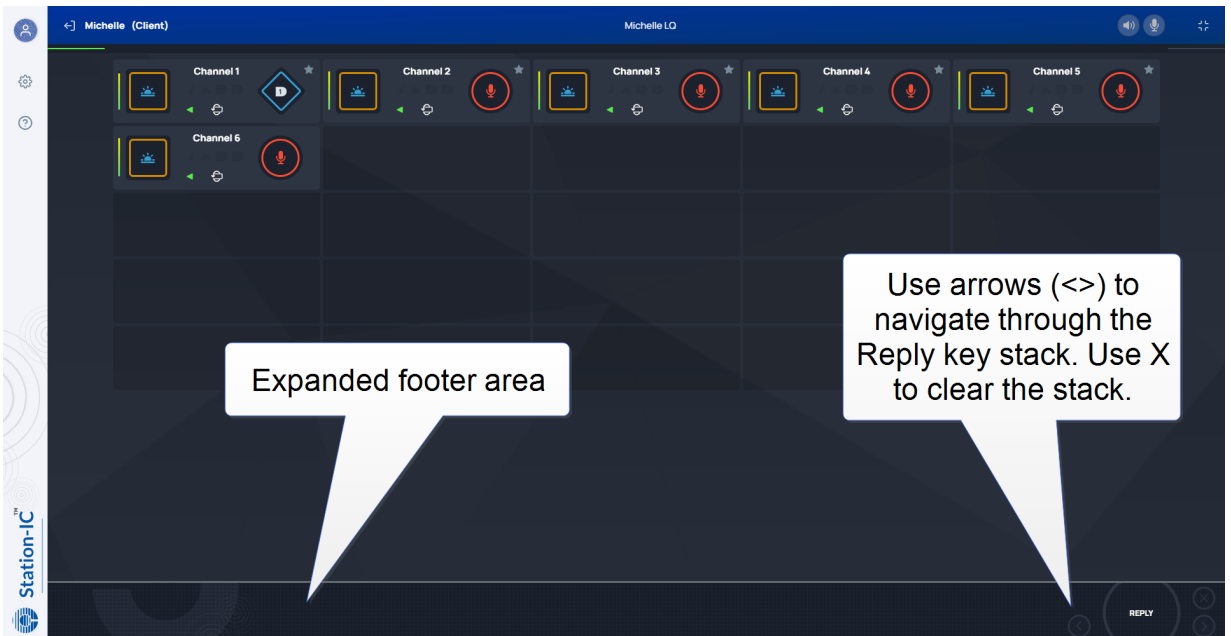
The **Reply** Key is located in the footer area of the **Keysets** screen. To view this area, click as shown below.



The footer area expands to show the **Reply** key.

Note: *If you receive a call, the footer area will automatically expand and the **Reply** key will flash and display the name of the caller. When the call ends, the footer area will collapse.*

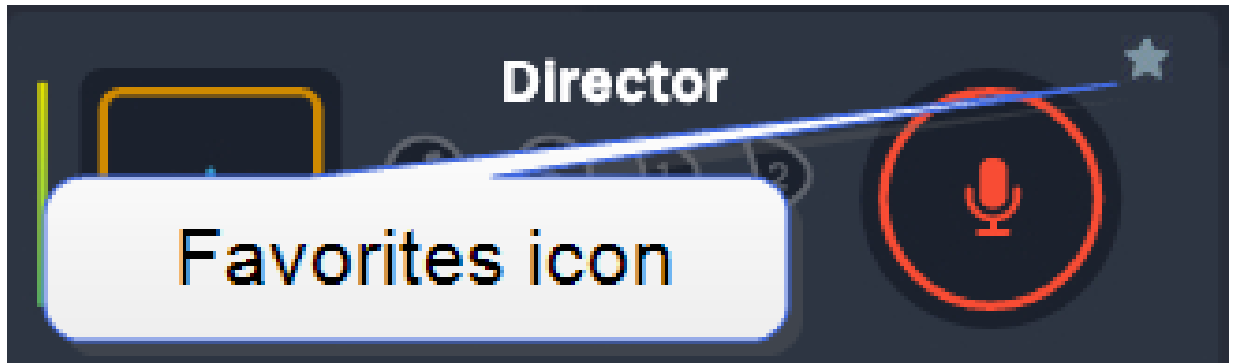
Use the arrows (<>) to navigate through stacked calls on the Reply key. X clears the top element in the call stack.



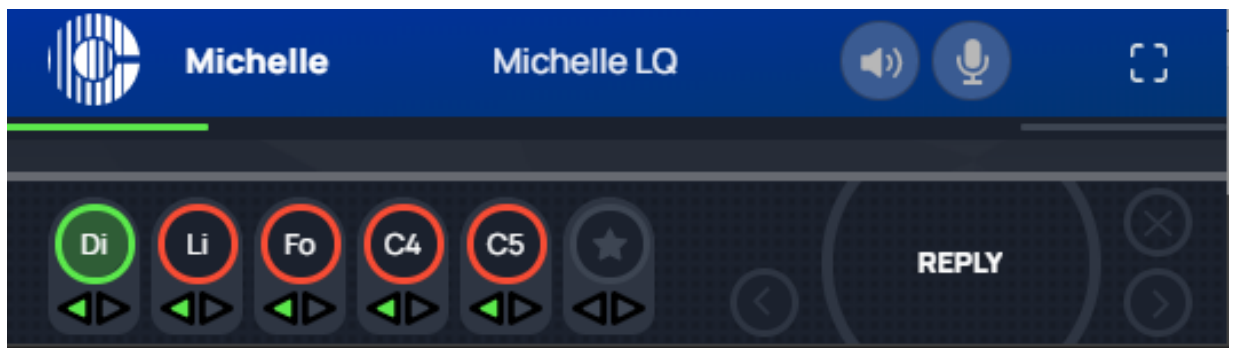
Using Compact Mode

To make any keyset appear in Compact Mode, click the **Favorite** icon at the top-right hand side of the keyset. Click the icon again to remove it from Compact Mode.

Favorite keysets have a Star icon at the top-right hand side of the keyset.



When in compact mode, the name of the key is shortened to two characters.



Talk (red indication) and listen (green indication) latched keys are indicated by a triangle, as well as the talk-latch indicators (the red/green bars).

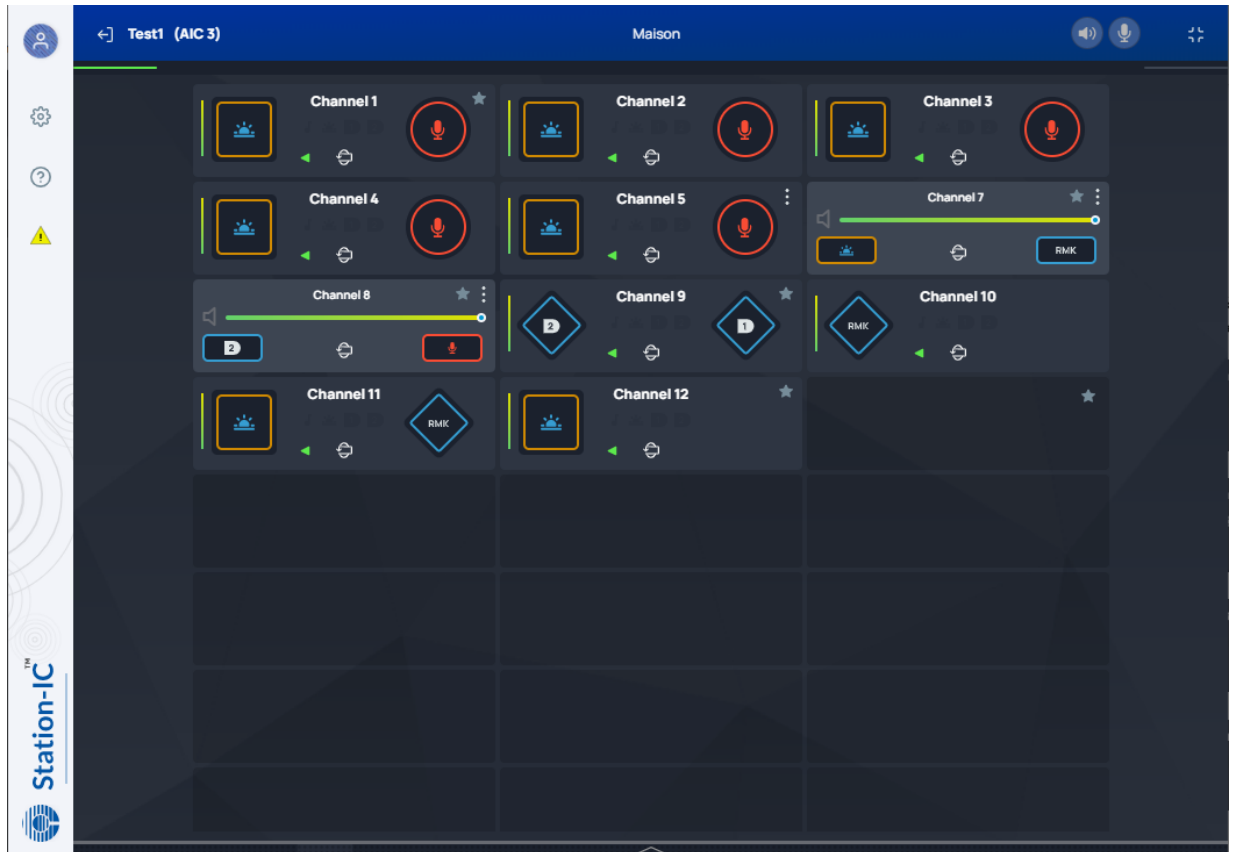
7.2.4 Alternative Key Configuration

Station-IC keysets are configurable in the host intercom software (the LQ CCM).

Each keyset has 4 keys. Each key is assigned to a channel and different functions can be assigned to the channel:

- Talk
- Listen only
- Call
- Events (1 and 2)
- Remote mic kill (RMK)

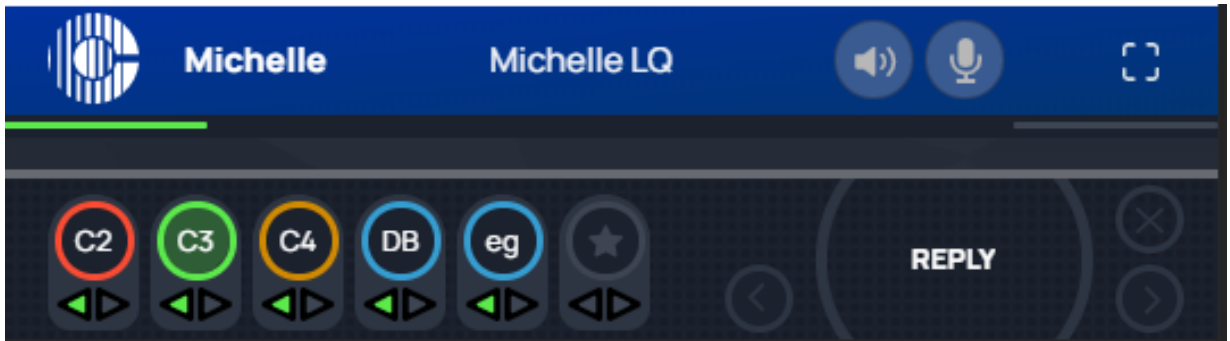
Example configuration:



Note:

Call Signal and Event keys are not latchable. You will see them light briefly in Station-IC. Call signals and events will persist for 10 seconds in the target endpoint. If you want the signal or event to last longer than 10 seconds, you must press the key again.

When in compact mode, the keys are determined according to the first key found on the keyset in the following order: Talk, Listen, Call, Event 1, Event 2, RMK.




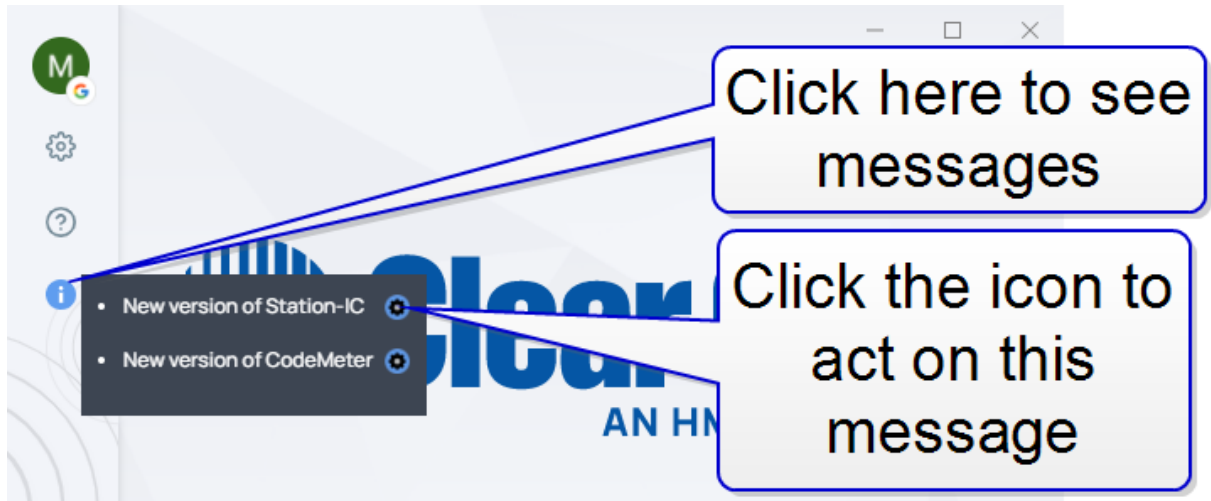
In the above example,





- C2 is a talk key
- C3 is a listen only key
- C4 is a call key
- DB and eg are Event and RMK keys respectively.

8

The Message Center

If there is information from the system, you will see the message center icon . If this is not visible, there are no messages and no actions are necessary. The message center will automatically provide you with information; updates, error conditions and warnings.




Message	Relevant information
New version of Station-IC	See Software Update on page 52
New version of Codemeter	See Software Update on page 52
You are offline, some features may not be available and changes in the settings may be lost	Click the document icon  to go to <i>Troubleshooting (Network)</i>
Missing or invalid or no more license file	Click the document icon  to go to <i>Troubleshooting (License)</i>
License is about to expire in (days remaining) day (s)	Click the document icon  to go to <i>Renewing a License</i>
License expired, please renew it	Click the document icon  to go to <i>Renewing a License</i>

9 Software Update

The application has an integrated software update mechanism that will notify you when there is a new version of the Station-IC components:

- Station-IC (main application)
- CodeMeter (license manager)

The software update notification will appear in the message center  and includes a link to perform the installation or update. Click the message center to view messages, click the cog

icon , then **Install**. The main application needs to restart for the update to take effect.

10 Troubleshooting (Network)

Ways to resolve any problems that may arise with Station-IC.

10.1 Connecting to the Matrix

In Settings/Connections , check:

- Username
- Password (passwords are case sensitive)
- DNS Name or IP Address of the host intercom system
- Host intercom system network TCP/UDP port (default 6001)

10.2 Network Issues

If your network connection to the host intercom system fails:

- Check if you can ping the host intercom system
- If you can ping the host intercom system but cannot connect, the problem may be that the port that Station-IC uses on your local network is blocked. Check with your network administrator.
- If the problem is not with the network, it may be that your network connection is not providing enough bandwidth to support Station-IC.

10.3 Configuration Issues

Are you connecting to your own host intercom system? If you are connecting to your own Eclipse matrix or LQ unit, and the issue is not with your local firewall (the port is closed) then check the following details with your system administrator:

- Hardware: is an IVC-32-HX or an E-IPA-HX card installed and configured on the matrix?
- Software: is the matrix running on Eclipse EHX 12.1 or above? Is the LQ unit (all the units if you are connecting to a Link-Group) running LQ 4.2 or above?
- Eclipse configuration: is the Station-IC client correctly configured in this system?
- Check that the firewalls are configured to allow Station-IC to access. This includes the firewalls set on your PC and those set on the host intercom system.

- LQ only: Role allocation; is another Role user still logged in to your Station-IC client? LQ (not EHX) is Role based. A Role may have many users, but only one user can log in to the Station-IC client at one time.

10.4 Poor Audio

This is caused by unreliable IP infrastructure. Query your IP provider and make sure that your network resources are suitably configured.

10.4.1 Audio Delay

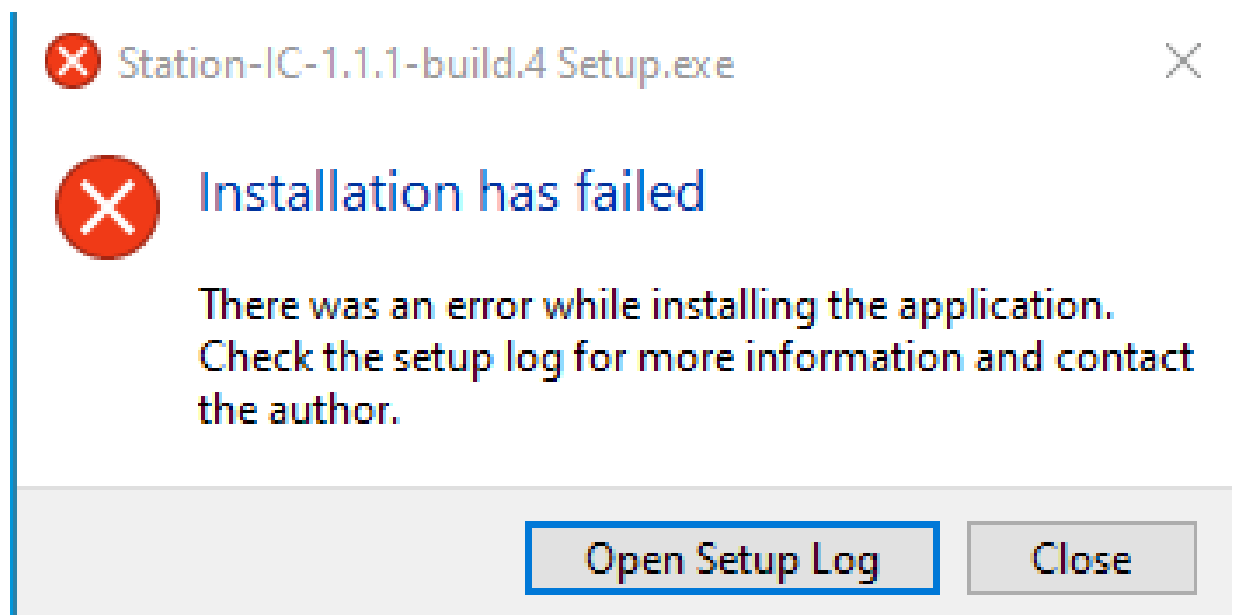
This fault is due to the inherent delay between the matrix and Station-IC. But certain devices may make this worse if they do not support low latency. Check your device capabilities under Settings.

10.4.2 Unwanted Echo

Some devices do not support acoustic echo cancellation (AEC) when in speaker mode. If one party has a device that does not support AEC, make sure that he uses a headset. Ask the other party to check his device capabilities under Settings.

10.5 Installation Issues


Windows installation error:

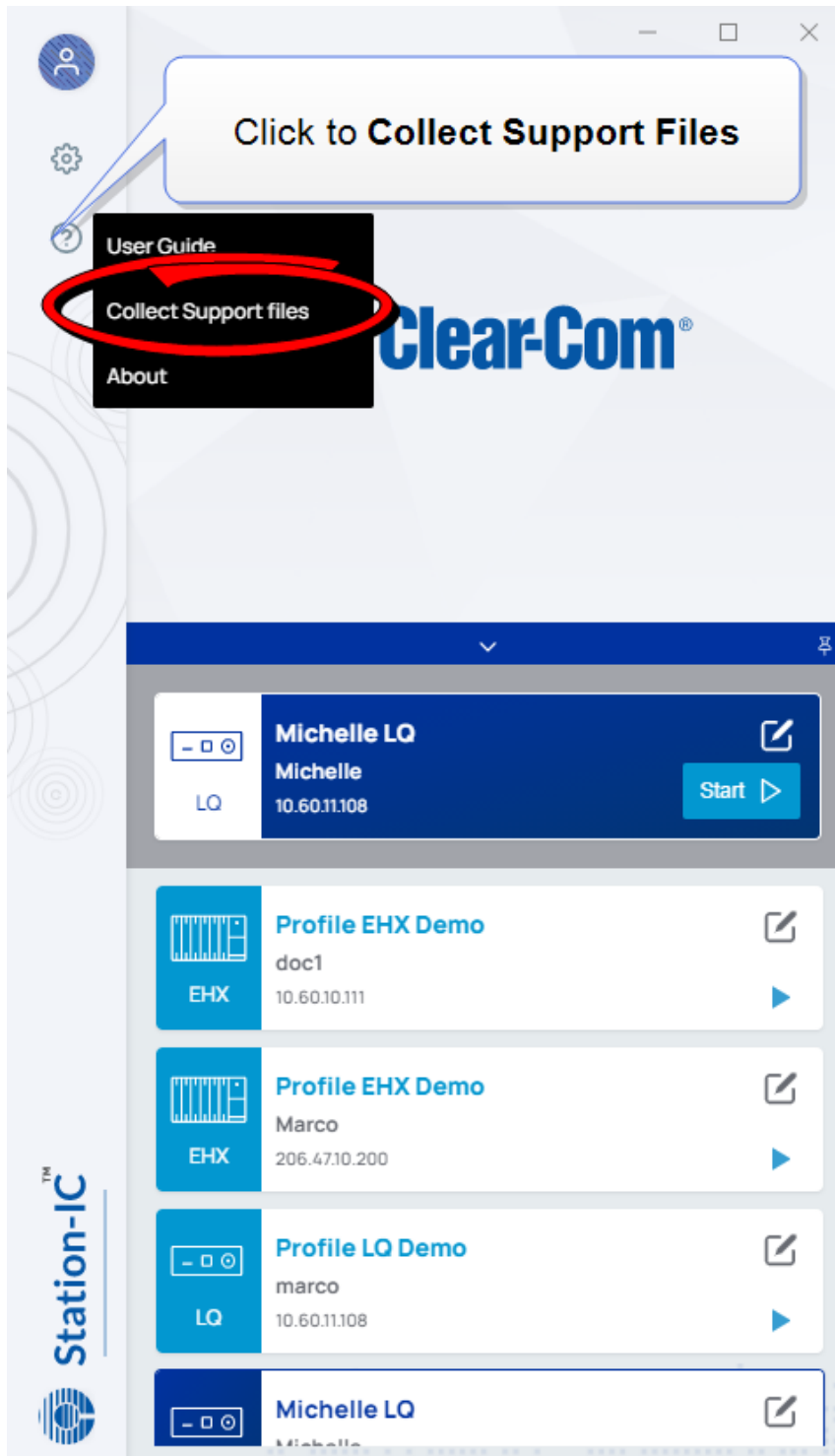


If you see this popup, follow the instructions and click 'Open Setup Log' for more information.

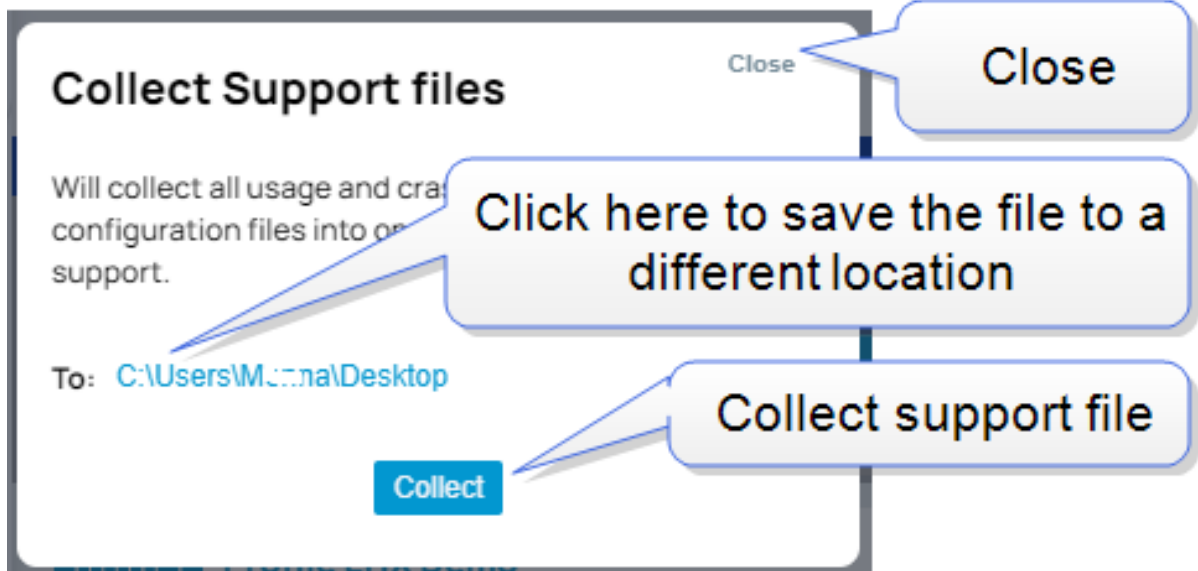
Clear-Com strongly recommends re-installing Station-IC if you are prompted with a message of failed installation.

10.6 Collect Support Files

You can download support files to send to your Clear-Com representative for diagnostic purposes. Collect a support file by clicking the Help icon  and clicking **Collect Support Files**.



By default, the support file is saved to your desktop. To save to a different location, click on the file destination message.



Note: *The support files may include the computer's user name. The support files do NOT include the user's password to access the computer.*

10.7 Any Other Issues

Please consult the Clear-Com solution finder: [Clear-Com Solution Finder](#).

11 Troubleshooting (License)

Station-IC needs a valid license to operate. Licenses are hosted either on an Eclipse Intercom System or on the client. If hosted on the client, they are managed by the CodeMeter application on your computer, in conjunction with the Clear-Com licensing WebDepot.

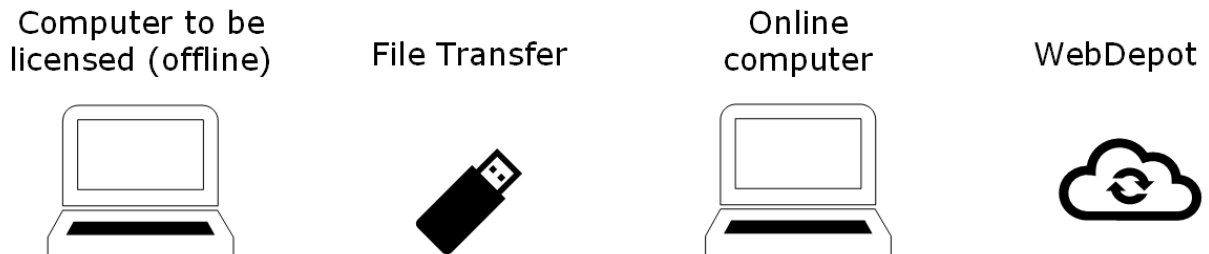
A situation may arise where you have CodeMeter installed on your computer but there is no license available for you to use. Possible causes for this are:

- No Station-IC licenses have been activated/installed
- License count is zero. For a Network/Floating license a limited number of licenses are available
- The license has expired
- The license has been cancelled

The Licensing chapter in the Station-IC User Guide covers: types of license available, obtaining a license, installing a license, renewing a license and re-hosting a license on a different computer. If you need more assistance, contact your Clear-Com dealer.

12 Installing Client Computer Hosted Licenses (File-Based)

If your computer does not have internet access, it is possible to transfer the licenses using a license file exchange. You will obtain a container for the license files from CodeMeter, installed on the computer that needs to be licensed, and load it with a license from the license ticket using the WebDepot.



1. Activate license using file-based transfer

Obtain a .WibuCmRaC file from the computer to be licensed (CodeMeter). Go to WebDepot and activate the license using **File-based license transfer** option.

2. Install the license on the required computer

Take the file update file (.WibuCmRaC) back to the computer to be licensed. Install the license (CodeMeter).

3. Obtain a receipt and return to the WebDepot

Obtain a receipt from CodeMeter (.WibuCmRaC) and return this to the WebDepot.

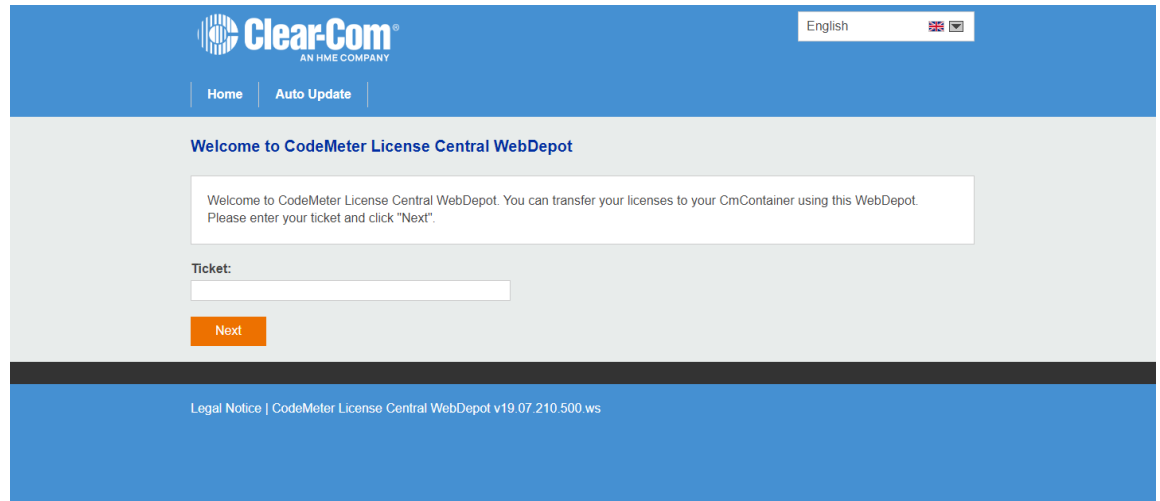
12.1 Installing File-Based Licenses, Step-by-Step Instructions

Note: *Installing CodeMeter on your computer is covered in section 3.5.1 Installing CodeMeter in this manual.*

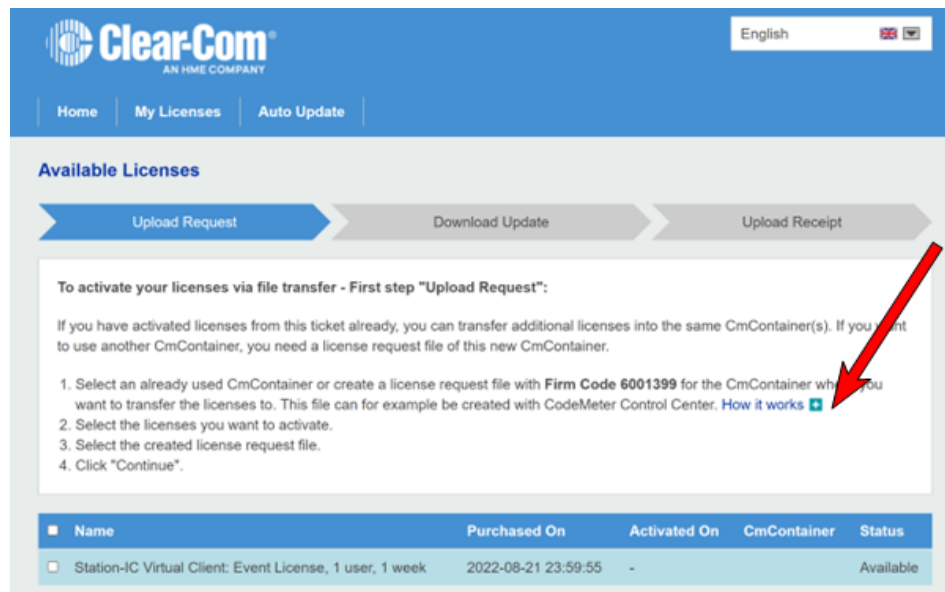
1. Open the CodeMeter Control Center and verify that it includes the **Clearcom-Universal** license Container. If CodeMeter contains the Clearcom-Universal container, go straight to step 2 of these instructions.

If CodeMeter does not include the Clearcom Universal license container, please use the following steps to obtain one:

- a. Go to the online WebDepot at <https://license.clearcom.com/webdepot/index.php>



- b. Enter your licence ticket ID and press **Next**.
- c. You will see a list of licenses to select from and information on how to get a CmContainer for your offline computer. Press **How it works +**.



- d. You will see steps on how to get a license container (CnContainer template). Press **Download template now**.

Clear-Com
AN HME COMPANY

English

Home | My Licenses | Auto Update

Available Licenses

Upload Request | Download Update | Upload Receipt

To activate your licenses via file transfer - First step "Upload Request":

If you have activated licenses from this ticket already, you can transfer additional licenses into the same CmContainer(s). If you want to use another CmContainer, you need a license request file of this new CmContainer.

1. Select an already used CmContainer or create a license request file with **Firm Code 6001399** for the CmContainer where you want to transfer the licenses to. This file can for example be created with CodeMeter Control Center. [How it works](#)
 - a. Start CodeMeter Control Center on the computer where the desired CmContainer is.
 - b. Select this CmContainer. If no CmContainer is present on that computer, you can download a template here: [Download template now](#). Import this template by dragging the downloaded file to CodeMeter Control Center.
 - c. Click "License Update".
 - d. Follow the instructions of the "CmFAS Assistant". Choose the option "Create license request".
 - e. Choose a filename for the license request file.
 - f. Click "Commit" to save the license request file.
 - g. Transfer the license request file that you just created to this computer.
2. Select the licenses you want to activate.
3. Select the created license request file.
4. Click "Continue".

Name	Purchased On	Activated On	CmContainer	Status
------	--------------	--------------	-------------	--------

e. Drag the downloaded file to the CodeMeter Control Center. Proceed to step 2.

2. From CodeMeter Control Center, click **License Update**.

CodeMeter Control Center

File Process View Help

License Events

Clearcom-Universal
130-1055051858


Name: Clearcom-Universal
Serial: 130-1055051858
Version: CmActLicense 3.00

Status: License activated

License Update | remove License

CodeMeter service is running. WebAdmin

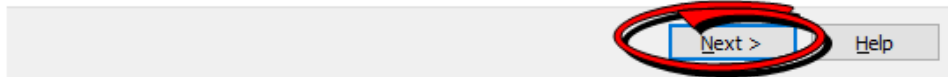
3. Click **Next**.

←  CmFAS Assistant

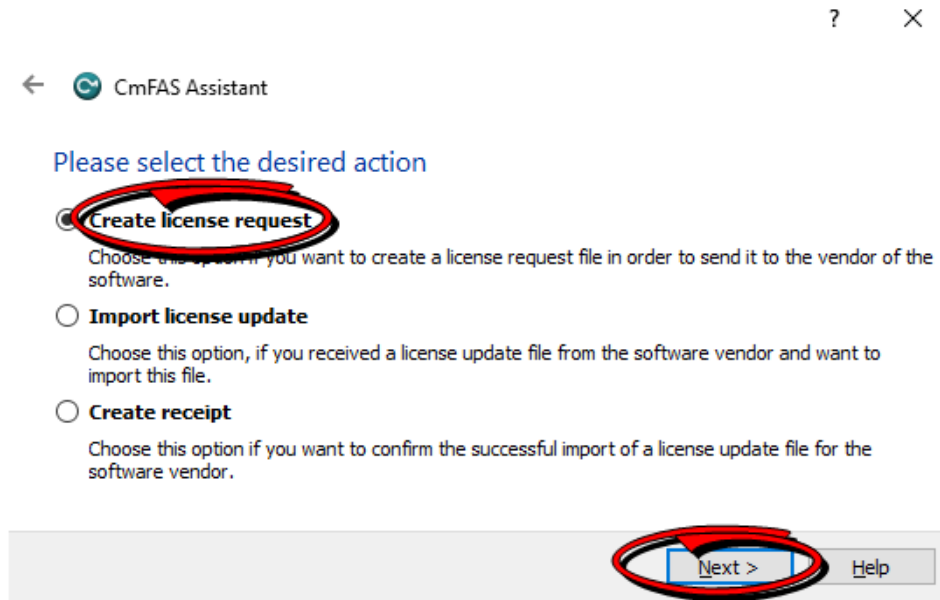
Welcome to the CmFAS Assistant!

The CodeMeter Field Activation Service (CmFAS) assistant helps you adding, changing and deleting licenses from the license management system CodeMeter.

With the CmFAS assistant you can create license request files, which you can send to the vendor of the software by email. You can also import the received license update files with the CmFAS assistant into the license management and create a receipt of the import for the vendor.



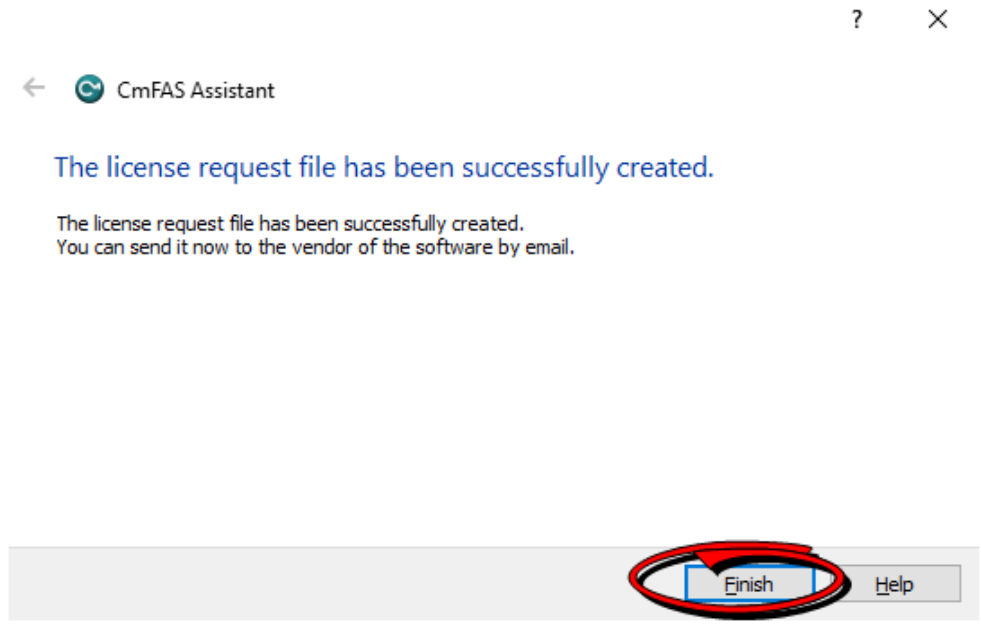
4. Select **Create license request**, and then click **Next**.



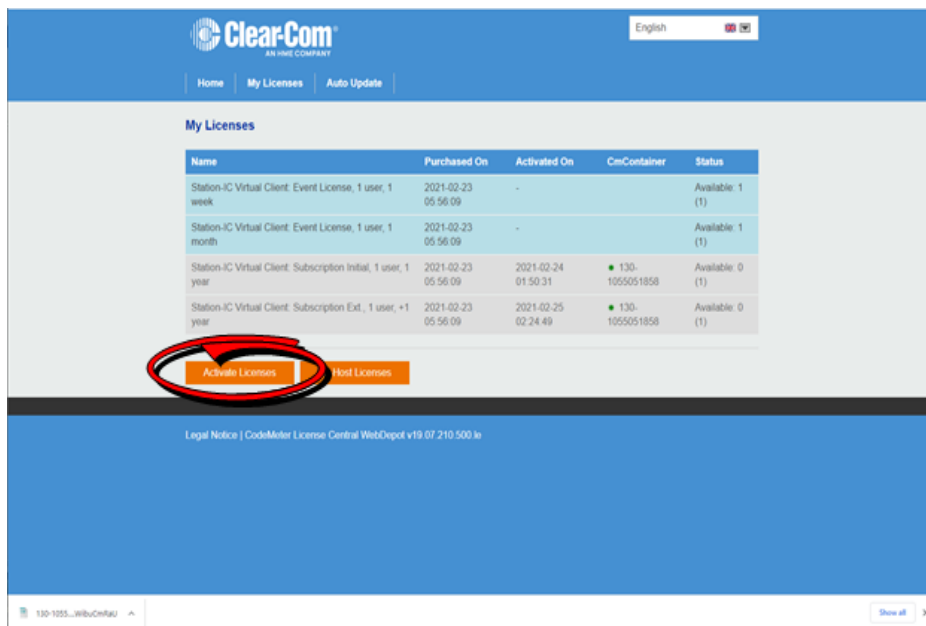
5. Navigate to a location where you want to save the file. Click **Commit**.



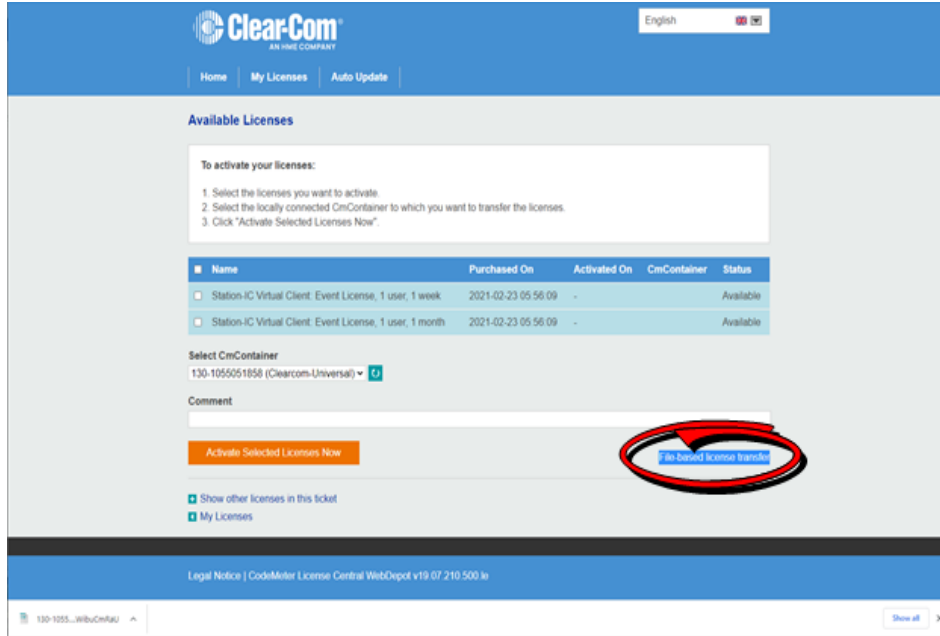
6. Click **Finish**.



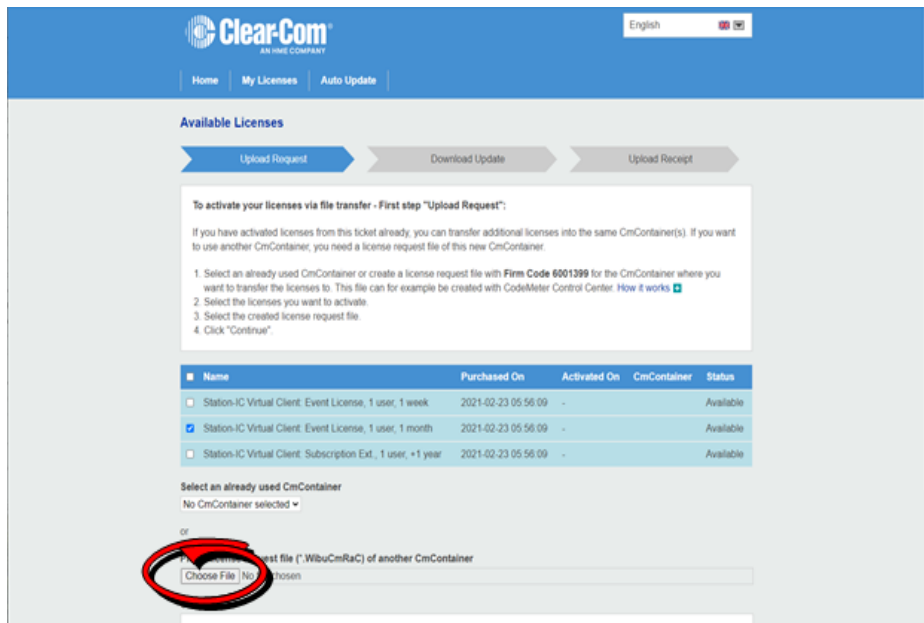
7. Enter your Ticket in **WebDepot**, and then click **Activate Licenses**.



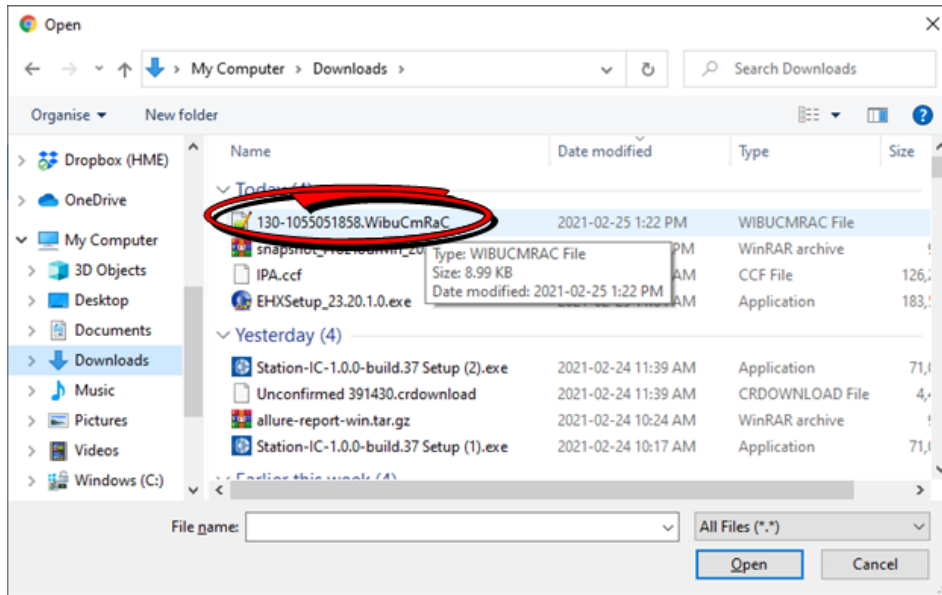
8. Click **File-based license**.



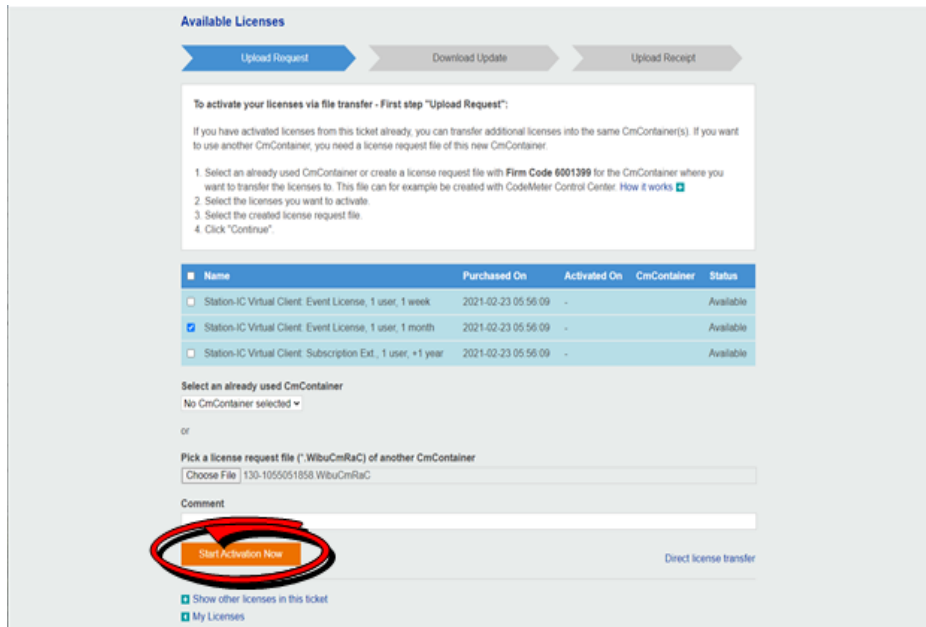
9. Select the license you want to activate, and then click **Choose File**.



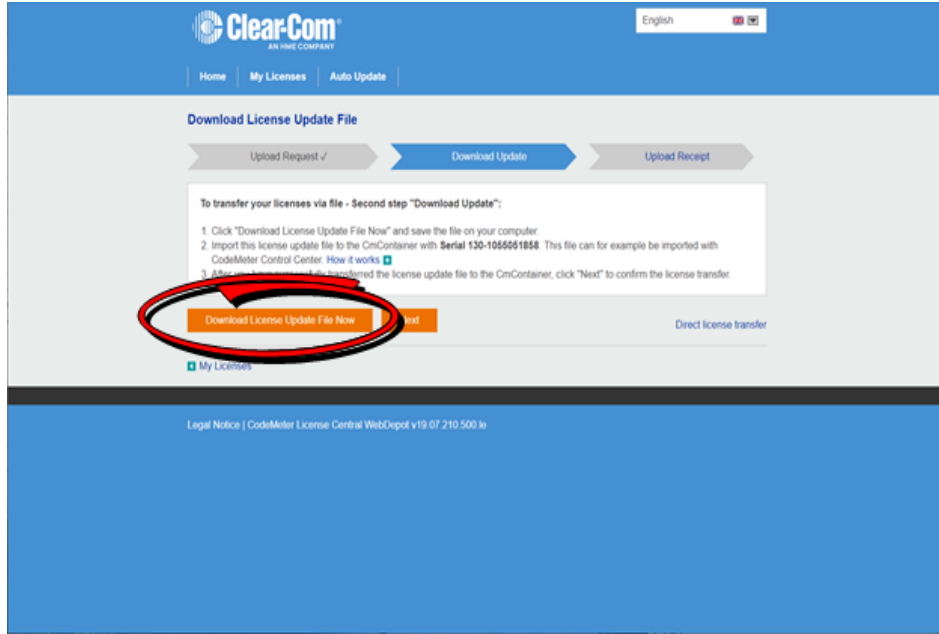
10. Select the *.WibuCmRaC* file that you saved earlier.



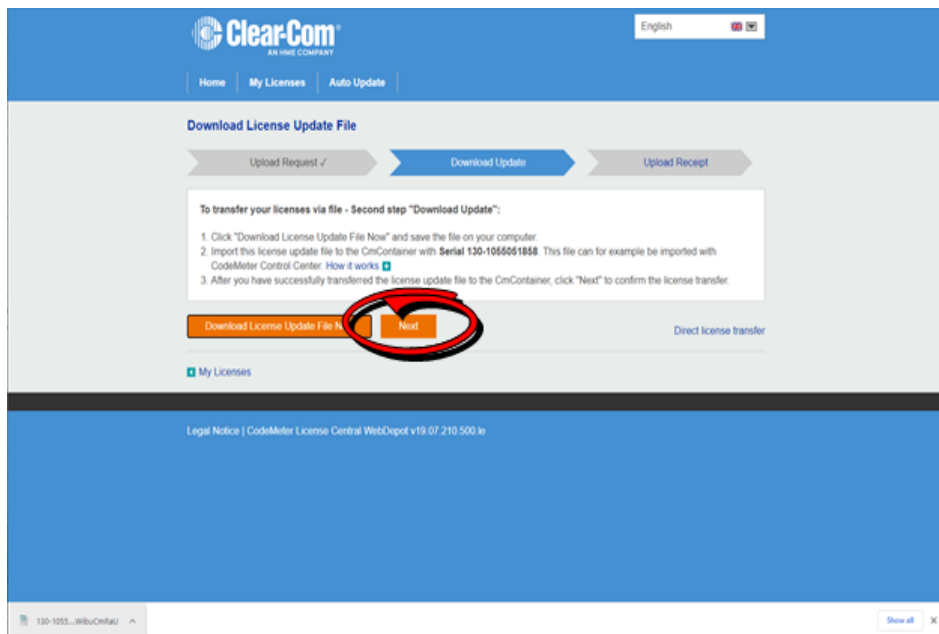
11. Click **Start Activation Now**.



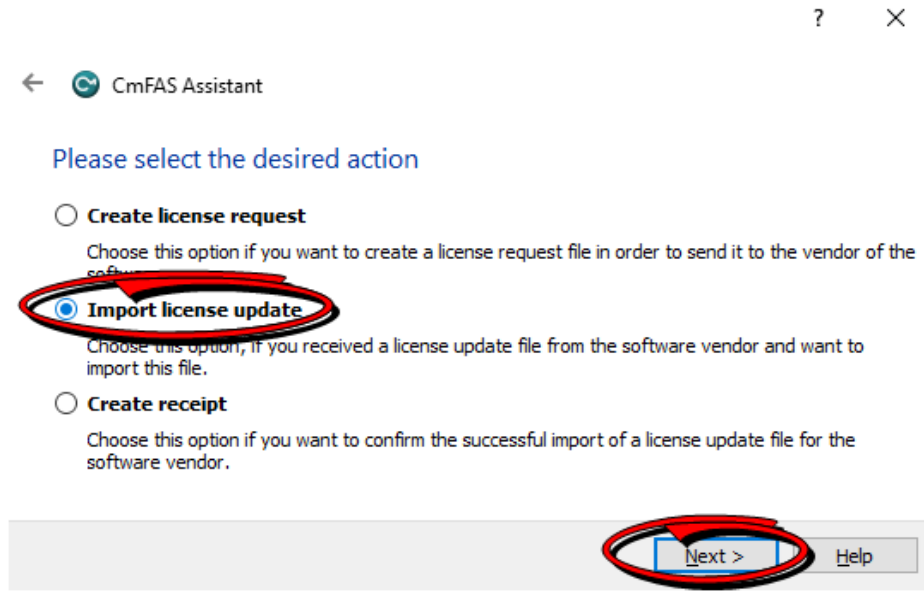
12. Click **Download License Update File Now**.



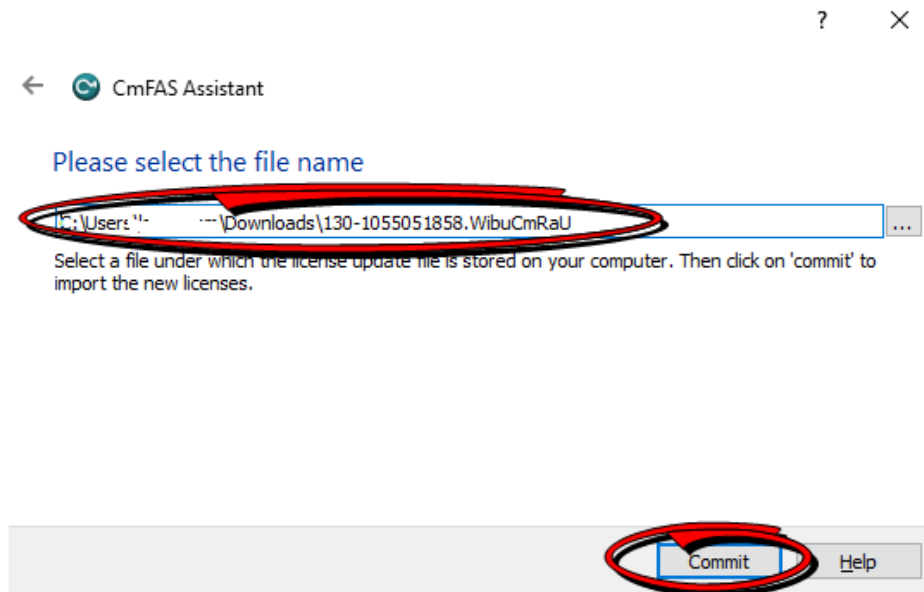
13. Click **Next**.



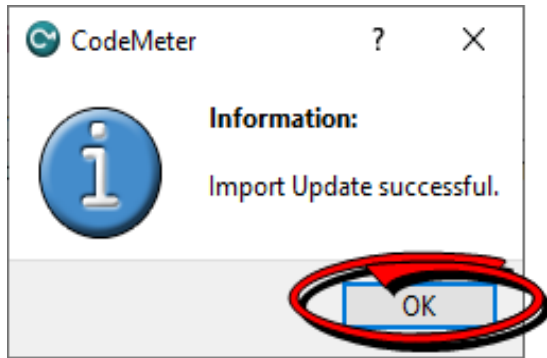
14. From CodeMeter Control Center, select **Import license update**, and then click **Next**.



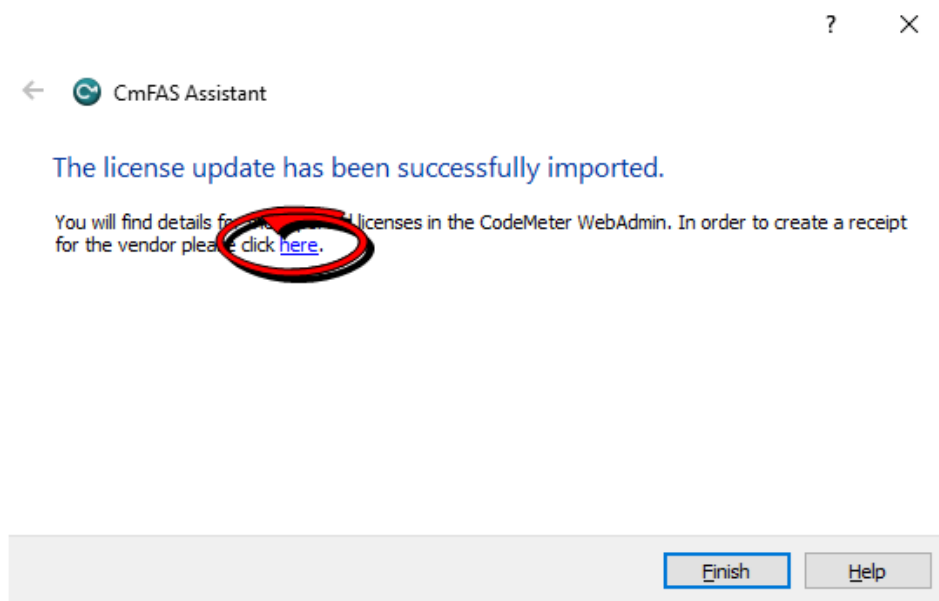
15. Select the *.WibuCmRaU* file that you downloaded in step 9, and then click **Commit**.



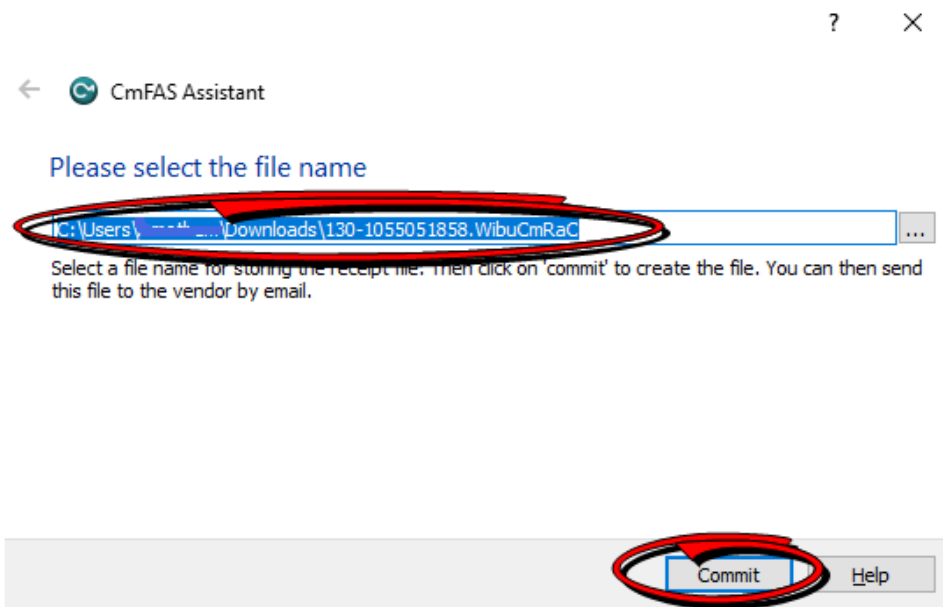
16. Click **OK**.



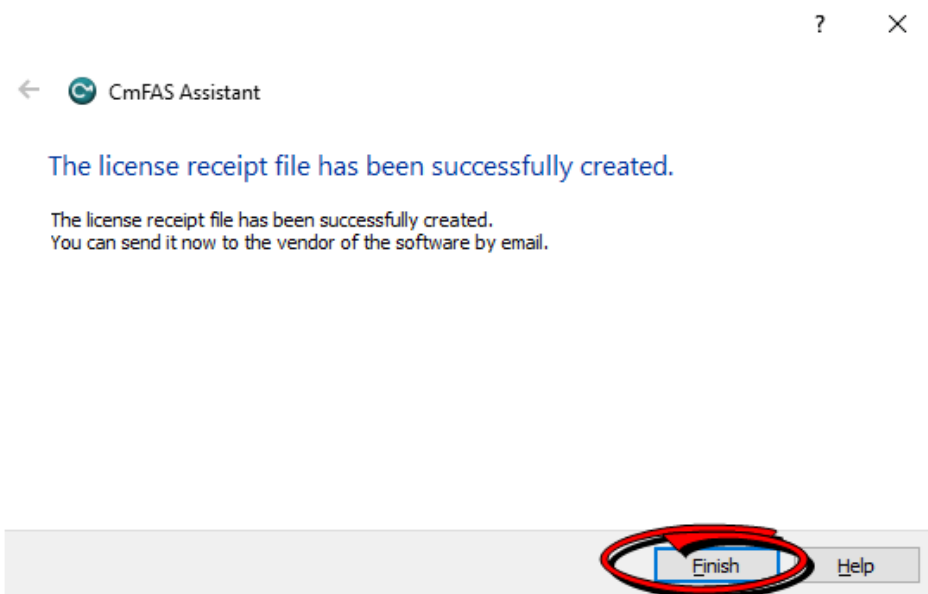
17. Click on the highlighted link.



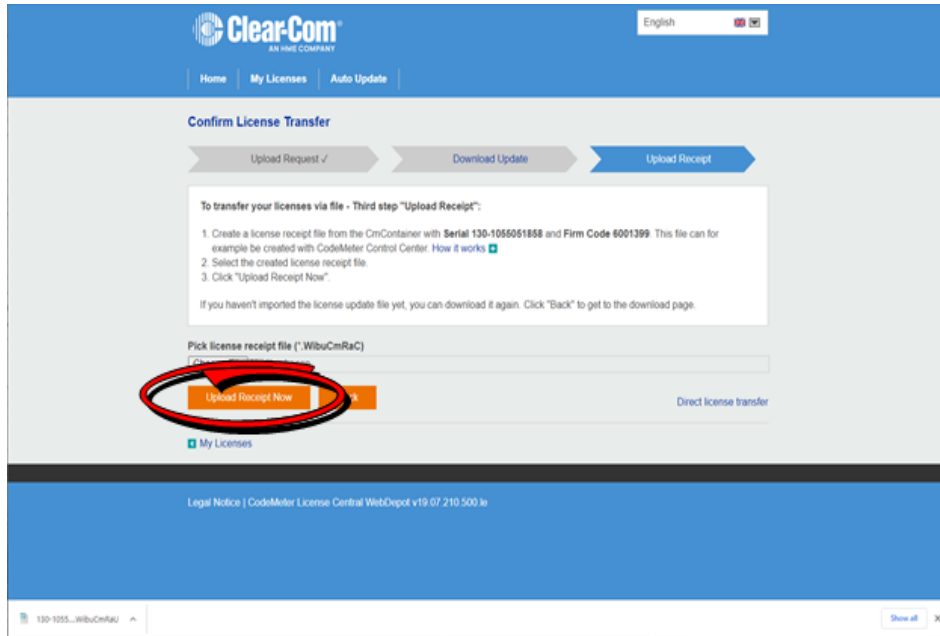
18. Save this new *.WibuCmRaC* file, and then click **Commit**.



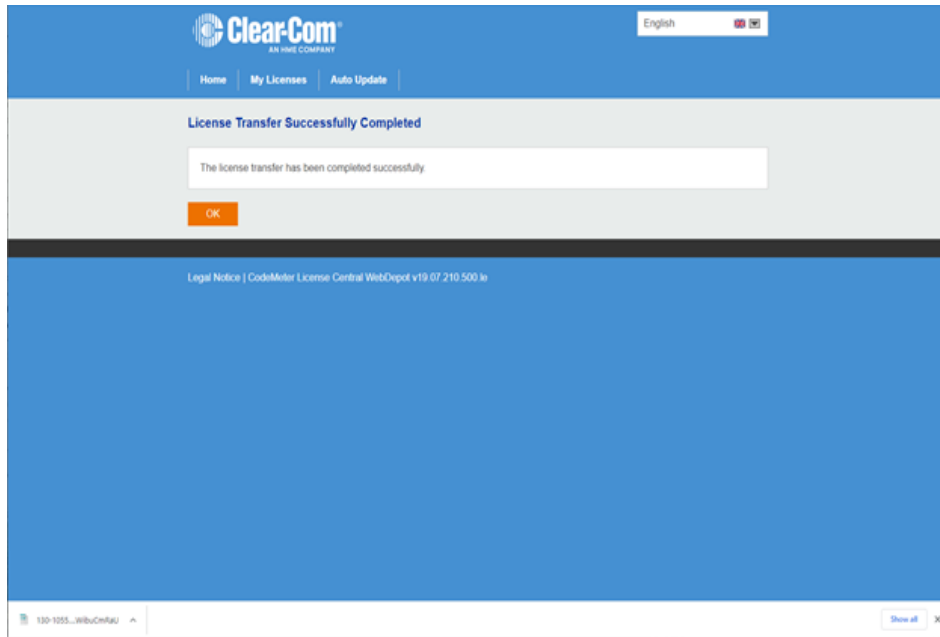
19. Click **Finish**.



20. From the WebDepot Control Center, click **Choose File** and pick the last *.WibuCmRaC* file. Click **Upload Receipt Now**.



21. A final confirmation screen appears.



13 Technical Specifications

13.1 Software Applications

Software Applications	
Eclipse	<p>Host Connection Profiles: 2</p> <p>Keysets: 23</p> <p>Assignable: Talk, Listen and Controls in EHX</p> <p>Talk/Listen: Tap to latch (if allowed), push for momentary Call signal: Initiation and indication</p> <p>Tally Indication: Audio Presence, In-Use, Panel/Client Connected</p> <p>Reply key: 1 - Shows incoming Point-to-Point talk for immediate response. Hidden by default, pops up and provides operating system notification</p> <p>Character Support: Arabic, Cyrillic, Hangeul, Hebrew, Hiragana, Kanji, Katakana, Latin</p>
LQ	<p>Host Connection Profiles: 2</p> <p>Keysets: 24</p> <p>Assignable: per assigned channel to Talk, Listen, Call, Control Events and Remote Mic Kill in LQ's CCM</p> <p>Talk/Listen: Tap to latch (if allowed), push for momentary</p> <p>Call signal: Initiation and Indication Tally Indication: Audio Presence, Call, Control Events 1 & 2</p> <p>Reply Call key: 1 - Shows incoming Call signal on a Channel for immediate response. Hidden by default, pops up and provides operating system notification</p> <p>Character Support: Latin</p>
LQ in HelixNet [®] Link-Group	Station-IC LQ functionality is available when LQ is linked in a HelixNet Link Group.

13.2 Audio Settings

Audio Settings

- Assignment to any operating system input and output
- Audio test capability for computer audio
- Audio level meters
- Far-end Silence Suppression
- Echo Cancellation

13.3 Audio Controls and Indications

Audio Controls and Indications

- Talk/Listen indication and level meter
- Talk/Listen master mute
- Listen level per key/keyset
- Master level and balance by operating systems

13.4 Minimum System Requirements

Minimum System Requirements	
Host Intercom System	<ul style="list-style-type: none"> Eclipse 12.1 or above with E-IPA (or IVC-32) LQ 4.2 or above
Windows	Version 8 (minimum), Version 10 or above (recommended) Computer and Processor: 1.6 GHz, 2 core (min) Memory: 4.0 GB RAM (min) Hard Disk: 3.0 GB (available) Display: 1024 x 768 (min)
MacOS	Version: 10.14 (min), 10.16+ (recommended) Computer and processor: Intel Duo Core Processor (min), Apple M1 Memory: 4.0 GB RAM (min) Hard disk: 1.5 GB (available) Display: 1280 x 800 (min)

Note: Please contact your Clear-Com representative for use with older Eclipse versions

13.5 Audio

Audio	
Eclipse	
Audio Encoding	G.722 – Wideband - 7 kHz audio-coding within 64 kbit/s
Frequency Response	50Hz-7kHz
LQ	
Audio Encoding	Opus – Configurable 12kHz-20kHz within 16-128kbit/s
Frequency Response	100Hz-12kHz, 100Hz-20kHz

Audio	
LQ in HelixNet Link-Group	
Audio Encoding	WavPack – Fixed Wideband 10kHz within 320kbit/s
Frequency Response	20Hz-10kHz

Note: *Frequency Response is additionally filtered depending on use*

13.6 Latency

Latency is measured on local network with user selected network presets which induce latency with processing and Forward Error Correction for network resilience. Measurements are averages that include inline adaptive Echo Cancellation and Silence Suppression. Final latency performance is heavily dependent on configuration, computer, audio peripherals and network.

Eclipse/Station-IC Latency	
Windows	Station-IC to 4-wire: LAN 85 ms, WAN 92 ms, Internet 117 ms 4-wire to Station-IC: LAN 135 ms, WAN 158 ms, Internet 216 ms Station-IC to Station-IC: LAN 220 ms, WAN 245 ms, Internet 333 ms
MacOS	Station-IC to 4-wire: LAN 109 ms, WAN 115 ms, Internet 145 ms 4-wire to Station-IC: LAN 85 ms, WAN 107 ms, Internet 177 ms Station-IC to Station-IC: LAN 185 ms, WAN 205 ms, Internet 305 ms

LQ Series to Station-IC Latency	
Opus Latency (With LQ Local mix at default High Quality)	
Windows	Station-IC to 4-wire: High 60ms, Balanced 90ms, Low 110ms 4-wire to Station-IC: High 115ms, Balanced 115ms, Low 115ms Station-IC to Station-IC: High 197ms, Balanced 202ms, Low 246ms
MacOS	Station-IC to 4-wire: High 67ms, Balanced 88ms, Low 109ms 4-wire to Station-IC: High 76ms, Balanced 76ms, Low 76ms Station-IC to Station-IC: High 94ms, Balanced 140ms, Low 152ms

LQ Series to Station-IC Latency	
WavPack Latency - (when LQ Series are linked to HelixNet Stations)	
Windows	Station-IC to LQ 4-wire: High 106ms, Balanced 106ms, Low 106ms 4-wire to Station-IC: High 115ms, Balanced 115ms, Low 115ms Station-IC to Station-IC: High 177ms, Balanced 187ms, Low 223ms
MacOS	Station-IC to 4-wire: High 109ms, Balanced 109ms, Low 109ms 4-wire to Station-IC: High 76ms, Balanced 76ms, Low 76ms Station-IC to Station-IC: High 171ms, Balanced 183ms, Low 176ms

13.7 Bandwidth

Bandwidth, Opus and WavPack (LQ only). For EHX see Network Ports in this chapter.	
Eclipse	<ul style="list-style-type: none"> • 140 kbps from Eclipse to Station-IC • 140 kbps from Station-IC to Eclipse With Far-end Silence Suppression & bidirectional Forward Error Correction
LQ	Low quality: <ul style="list-style-type: none"> • 40 kbps from LQ to Station-IC • 160 (max) kbps from Station-IC to LQ Balanced quality: <ul style="list-style-type: none"> • 70 kbps from LQ to Station-IC • 280 (max) kbps from Station-IC to LQ High quality <ul style="list-style-type: none"> • 100 kbps from LQ to Station-IC • 400 (max) kbps from Station-IC to LQ
LQ in HelixNet Link-Group	<ul style="list-style-type: none"> • 300 kbps (max), Station-IC to LQ • 1200 kbps (max), LQ to Station-IC

13.8 Network Specifications (Version 1.0)

Network Specifications	
Network Protocols	Ethernet IPv4 – Unicast Audio and Control Layer 3 – IP Routable DNS – Domain Name Server HTTP – License Transfer HTTPS – Optional Usage Data / Diagnostic Service RTP – Audio Transport G722 – Audio Codec Opus - Audio Codec for LQ WavPac - Audio Codec for LQ in HelixNet Link-Group AES-128 – Audio and Control Encryption
Network Connectivity	Ethernet, Wi-Fi, 3G, 4G, LTE (as available on device)

13.9 Network Ports

Network Ports	
Unicast	Port 443 TCP – Optional Usage Data to Diagnostic Service Port 6001 (configurable) TCP – System Management to/from Station-IC Port 6001 (configurable) UDP – Audio Streams to/from Station-IC Port 8080 TCP – Online Licensing Activation to/from CodeMeter
QoS Tags	DSCP=41, Assured Forwarding (AF)

13.10 Network Jitter Tolerance

Software Type	Jitter Tolerance
Eclipse	Station-IC Rx: LAN: <=160ms, WAN: <= 400ms, Internet: <= 600ms E-IPA Rx: Configurable LAN: <=12ms, WAN: <= 120ms, Internet: <= 200ms
LQ	Station-IC Rx: High : <=400ms, Balanced : <= 500ms, Low : <= 600ms . LQ Rx: (Configurable) High : <=60ms, Balanced : <= 60ms, Low : <= 100ms, Very Low : <= 200ms
LQ in HelixNet Link-Group	Station-IC Rx: High: <=400ms, Balanced: <= 500ms, Low: <= 600ms LQ Rx: <=128ms automatically adjusted to network performance

13.11 Endpoint Resource Use

Software Type	Resource Use
Eclipse	1 port on IPA/IVC card
LQ	1-3 See LQ Resource Estimator
LQ in HelixNet Link-Group	1

13.12 Theory of Operation

Eclipse or LQ Host Intercom System (the server) provides a network connection and includes user credentials for Station-IC (the clients) in its database. Server allows use of DNS and declaration of External IP address of an optional third-party network Router. Client logs onto the server with its credentials and establishes an encrypted RTP audio stream(s) via UDP and control via TCP. Single UDP and TCP port is required in each direction. Eclipse systems route and mix all audio for the client centrally and stream a complete mix to the clients running on a Windows or MacOS computer. LQ systems intelligently route audio ethernet packages dependent on loudest talkers and listen levels to be mixed on the client.

13.13 Privacy

Station-IC optionally collects usage data to troubleshoot and continuously improve the application. The data collected is limited to Station-IC and the use of connected equipment and is transferred to Clear-Com managed diagnostics cloud servers. The data collected does not include any content or personal data. The data collected is stored and managed according to the Clear-Com Privacy Policy. Data-Usage and related communication to Clear-Com diagnostic cloud services can be disabled by the customer.