QUORUM

User Guide

Version 5.1

ROSS

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Our mission is to:

1. Provide a Superior Customer Experience
   - offer the best product quality and support
2. Make Cool Practical Technology
   - develop great products that customers love

Ross has become well known for the Ross Video Code of Ethics. It guides our interactions and empowers our employees. I hope you enjoy reading it below.

If anything at all with your Ross experience does not live up to your expectations be sure to reach out to us at *solutions@rossvideo.com*.

David Ross
CEO, Ross Video
david.ross@rossvideo.com

Ross Video Code of Ethics

Any company is the sum total of the people that make things happen. At Ross, our employees are a special group. Our employees truly care about doing a great job and delivering a high quality customer experience every day. This code of ethics hangs on the wall of all Ross Video locations to guide our behavior:

1. We will always act in our customers' best interest.
2. We will do our best to understand our customers' requirements.
3. We will not ship crap.
4. We will be great to work with.
5. We will do something extra for our customers, as an apology, when something big goes wrong and it's our fault.
6. We will keep our promises.
7. We will treat the competition with respect.
8. We will cooperate with and help other friendly companies.
9. We will go above and beyond in times of crisis. *If there's no one to authorize the required action in times of company or customer crisis - do what you know in your heart is right. (You may rent helicopters if necessary.)*

Quorum · User Guide

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Ross Video products are protected by patent numbers US 7,034,886; US 7,508,455; US 7,602,446; US 7,802,802 B2; US 7,834,886; US 7,914,332; US 8,307,284; US 8,407,374 B2; US 8,499,019 B2; US 8,519,949 B2; US 8,743,292 B2; GB 2,419,119 B; GB 2,447,380 B. Other patents pending.

Notice

The material in this manual is furnished for informational use only. It is subject to change without notice and should not be construed as commitment by Ross Video Limited. Ross Video Limited assumes no responsibility or liability for errors or inaccuracies that may appear in this manual.

Important Regulatory and Safety Notices to Service Personnel

Before using this product and any associated equipment, refer to the “Important Safety Instructions” listed in the front of this manual to avoid personnel injury and to prevent product damage.

Product may require specific equipment, and/or installation procedures to be carried out to satisfy certain regulatory compliance requirements. Notices have been included in this publication to call attention to these specific requirements.

Symbol Definitions

Protective Earth: This symbol identifies a Protective Earth (PE) terminal, which is provided for connection of the supply system's protective earth (green or green/yellow) conductor.

Important: This symbol on the equipment refers you to important operating and maintenance (servicing) instructions within the Product Manual Documentation. Failure to heed this information may present a major risk of damage or injury to persons or equipment.

Warning: The symbol with the word “Warning within the equipment manual indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION: The symbol with the word “Caution” within the equipment manual indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Warning Hazardous Voltages: This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product enclosure that may be of sufficient magnitude to constitute a risk of shock to persons.

ESD Susceptibility: This symbol is used to alert the user that an electrical or electronic device or assembly is susceptible to damage from an ESD event.

Important Safety Instructions

General Safety Instructions

1. **Warning:** Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with manufacturer's instructions.
8. Do not install near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. Do not expose this apparatus to dripping or splashing, and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.
15. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle.
16. The mains plug of the power supply cord shall remain readily operable.
17. **Warning:** Indoor Use: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

18. The safe operation of this product requires that a protective earth connection be provided. A grounding conductor in the equipment's supply cord provides this protective earth. To reduce the risk of electrical shock to the operator and service personnel, this ground conductor must be connected to an earthed ground.

19. **Warning:** This apparatus, when equipped with multiple power supplies, can generate high leakage currents. To reduce the risk of electric shock, ensure that each individual supply cord is connected to its own separate branch circuit with an earth connection.

20. **CAUTION:** These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

21. Service barriers within this product are intended to protect the operator and service personnel from hazardous voltages. For continued safety, replace all barriers after servicing.

22. This product contains safety critical parts, which, if incorrectly replaced, may present a risk of fire or electrical shock. Components contained within the product's power supplies and power supply area are not intended to be customer-serviced and should be returned to the factory for repair.

23. Use only power cords specified for this product and certified for the country of use.

24. The safe operation of this equipment requires that the user heed and adhere to all installation and servicing instruction contained within the equipment's Setup Manuals.

25. **Warning:** This product includes “Ethernet Ports” which allow this product to be connected to local area networks (LAN). Only connect to networks that remain inside the building. Do not connect to networks that go outside the building.

26. For use at altitude 2000m or lower.

27. For use in non-tropical locations.

28. **CAUTION:** Do not make mechanical or electrical modifications to the equipment or add metallic items, such as metallic foil labels, to the printed circuit boards. Modifications can impair regulatory compliance, or performance and may void your warranty.

29. **CAUTION: RISK OF ABNORMAL SUPPLY LOADING:** USB connected accessory loading not to exceed 5 USB unit loads. Each USB unit Load on Rear panel is limited to 250mA max.

30. **CAUTION:** This apparatus contains a Lithium battery, which if replaced incorrectly, or with an incorrect type, may cause an explosion. Replace only with a CR2032 coin type lithium battery. Dispose of used batteries according to the manufacturer’s instruction by qualified service personnel.

EMC Notices

United States of America — FCC Part 15

This equipment has been tested and found to comply with the limits for a class A Digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Important: Changes or modifications to this equipment not expressly approved by Ross Video Limited could void the user's authority to operate this equipment.

Canada

This Class “A” digital apparatus complies with Canadian ICES-003.

Cet appareil numerique de la classe “A” est conforme a la norme NMB-003 du Canada.

Korea - Class A Statement

이 기기는 업무용 환경에서 사용할 목적으로 적합성 평가를 받은 기기로서 가정용 환경에서 사용하는 경 우 전파간섭의 우려가 있습니다 .

This device has been evaluated for conformity for use in a business environment. When used in a home environment, there is a danger of interference.

Europe

This equipment is in compliance with the essential requirements and other relevant provisions of **CE Directive 93/68/EEC**.

International

This equipment has been tested to **CISPR 32:2015** along with amendment **AMD1:2019**, and found to comply with the limits for a Class A Digital device.

Important: This is a Class A product. In domestic environments, this product may cause radio interference, in which case the user may have to take adequate measures.

General Handling Guidelines

- Careful handling, using proper ESD precautions, must be observed.
- Power down the system before PCB removal.

A Word About Static Discharge

Throughout the many procedures in this manual, please observe all static discharge precautions.

CAUTION: Avoid handling the switcher circuit boards in high static environments such as carpeted areas, and when synthetic fiber clothing is worn. Touch the frame to dissipate static charge before removing boards from the frame, and exercise proper grounding precautions when working on circuit boards.

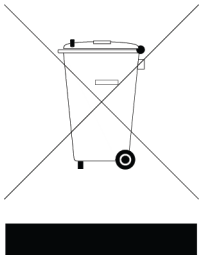
Environmental Information

Waste Electrical and Electronic Equipment Directive (WEEE Directive)

The equipment that you purchased required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment.

To avoid the potential release of those substances into the environment and to diminish the need for the extraction of natural resources, Ross Video encourages you to use the appropriate take-back systems. These systems will reuse or recycle most of the materials from your end-of-life equipment in an environmentally friendly and health conscious manner.

The crossed-out wheeled bin symbol invites you to use these systems.



If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration.

You can also contact Ross Video for more information on the environmental performances of our products.

Use of Hazardous Substances in Electrical and Electronic Products (China RoHS)

Ross Video Limited has reviewed all components and processes for compliance to:

“Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products” also known as China RoHS.

The “Environmentally Friendly Use Period” (EFUP) and Hazardous Substance Tables have been established for all products. We are currently updating all of our Product Manuals. The Hazardous substances tables are available on our website at: http://www.rossvideo.com/about-ross/company-profile/green-practices/china-rohs.html

电器电子产品中有害物质的使用

Ross Video Limited 按照以下的标准对所有组件和 流程进行了审查：
″ 电器电子产品有害物质限制使用管理办法 ″ 也被称 为中国 RoHS。
所有产品都具有 ″ 环保使用期限 ″ (EFUP) 和有害物 质表。目前，我们正在 更新我们所有的产品手册。
有害物质表在我们的网站 :
http://www.rossvideo.com/about-ross/company-profile/green-practices/china-rohs.html

Power Information

To ensure safe operation and to guard against potential shock or risk of fire, ensure your AC power source for the system is within the required voltage range and frequency.

- Input AC Power Requirements:
  - 100-127VAC / 15.0-12.0A / 50-60Hz (x2)
  - 200-240VAC / 8.5-7.0A / 50-60Hz (x2)

Operating Environment

The optimum operating environment is within the following ranges:

- Recommended Operating Temperature: 13°C to 35°C (55°F to 95°F)
- Recommended Operating Humidity: 20% to 80% non-condensing

✶ High temperature/humidity should be avoided at all times.

Company Address

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Website: http://www.rossvideo.com

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Introduction

A Word of Thanks

Thank you for choosing Ross Video Quorum as your meeting control solution.

We are committed to providing you with the highest level of customer satisfaction possible. If, for any reason, you have questions or comments, please call Ross Video at +1-613-652-4886 or send us an email at techsupport@rossvideo.com.

We hope that you visit our website at www.rossvideo.com to stay up to date with ongoing software releases, join our customer forum and learn more about the complete range of Ross Video products.

Note that software maintenance and extended warranties are available for your system to protect and extend the life of your investment. Our sales team is more than happy to provide further information on the plans available. Members of our sales team promptly respond to emails sent to: solutions@rossvideo.com.

Again, thank you for your purchase of a Quorum meeting control solution from Ross Video. We are confident of your future pleasure with your choice.

Yours sincerely,

Ben Gatien
Product Manager
ben.gatien@rossvideo.com

About This Guide

This guide contains the following chapters, which describe the use of the Quorum system:

1. "**Introduction**" — summarizes this guide and explains important terms, conventions, and features.
2. "**New Features**" — provides an overview of the new features in Quorum 5.1.
3. "**Getting Started**" — provides instructions on laying out panels in the Quorum user interface and setting user preferences.
4. "**Broadcasting a Meeting**" — provides instructions on using Quorum to broadcast a meeting.
5. "**Online Meetings**" — provides instructions on using Quorum online meeting agents to enable attendees who are participating in an online meeting through an external application to join a Quorum meeting.
6. "**Managing Your Venue**" — provides instructions on managing Quorum rooms, contacts, and meetings for your venue.
7. "**Configuring Quorum**" — provides instructions on configuring Quorum settings.

Related Documentation

For additional information about using Quorum, refer to the following document:

- ***Quorum Quick Start Guide (4500DR-007-xx)*** — this guide describes the steps to start and run a Quorum meeting.

Documentation Conventions

This guide uses special text formats to identify parts of the user interface, the text that a user must enter, or a sequence of menus and submenus that a user must follow to reach a particular command.

Interface Elements

Bold text identifies a user interface element such as a dialog box, a menu item, or a button. For example:

In the **Media Manager Client**, click **Channel 1** in the **Channels** section.

User Entered Text

Courier text identifies text that a user must enter. For example:

In the **File Name** box, enter `Channel01.property`.

Referenced Guides

Italic text identifies the titles of referenced guides, manuals, or documents. For example:

For more information, refer to the section "**User Interface Layout**" on page 3–6 in the ***Quorum User Guide***.

Menu Sequences

Menu arrows indicate a sequence of menu items that a user must follow to reach a particular command. For example: if a procedure step contains "**Server** > **Save As**," a user should click the **Server** menu and then click **Save As**.

Important Instructions

Star icons indicate important instructions or features. For example:

★ After installing Quorum Server software, you must obtain Quorum feature licenses from Ross Video Technical Support before users can access Quorum features.

Getting Help

To access the Quorum Online Help system, click the **Help** icon in the main toolbar. For help about the currently open panel, click the **Help** button in a panel title bar to view a help topic about the panel.

The Online Help system contains the following navigation tabs to locate and access Online Help topics:

- **Contents** — table of contents
- **Search** — full text search
- **Favorites** — preferred information storage and access

Ross Video also supplies print-ready PDF files of the ***Caprica User Guide for Quorum***, ***Quorum Installation Guide***, and the ***Quorum User Guide*** in the **Printing and Guides Download** section of the Quorum Online Help system.

Contacting Technical Support

Technical Support is staffed by a team of experienced specialists ready to assist you with any question or technical issue.

Ross Video has technical support specialists strategically located around the globe to ensure a prompt response to technical inquiries. Our primary technical support center is located in Ottawa, Ontario, Canada. In addition, we have offices in The United Kingdom (London), Australia (Sydney), and Singapore with satellite locations in New York City, The Netherlands, and China. As we expand our presence globally, we are constantly evaluating other key locations to have a local technical support specialist in order to better service our customers.

North America

Our North America center is located in Ottawa, Ontario, Canada and is open Monday to Friday 8:30 a.m. to 6:00 p.m. EST, with 24/7/365 on-call service after hours.

Our telephone number is: +1-613-686-1557

Toll free within North America: +1 833-859-0499

EMEA

Our EMEA center is open Monday to Friday 8:30 a.m. to 5:00 p.m. GMT. After hours support is provided by our North America location.

Our telephone number is: +44 (0)1189502446

International toll free: +800 3540 3545

If the local support specialist is not available, your call will be transferred automatically to our North America center.

Australia

Our Sydney, Australia office is located in Alexandria, NSW.

Our local support telephone number is: 1300 007 677

If the local support specialist is not available, your call will be transferred automatically to our North America center.

Online

Email: techsupport@rossvideo.com

Website: open a support request using the link https://support.rossvideo.com/.

New Features

Take advantage of the new features in Quorum v5.1 to help simplify and streamline your workflow. Use the topics in this section to learn about the new features in Quorum v5.1.

The following features are new in Quorum v5.1:

- Shure MXA929 Ceiling Array
- Importing Quorum Rooms
- Exporting Quorum Rooms

Shure MXA929 Ceiling Array

Quorum now supports the Shure MXA929 Ceiling Array.

For More Information on...

- configuring the Shure MXA929 Ceiling Array to work with Quoru, refer to the section "**Configuring Microphone Systems**" on page 7–34.

Importing Quorum Rooms

Quorum rooms can be exported from a Quorum Server into a JSON file. On your Quorum Server, you can import the rooms in a Rooms JSON file into the Room Manager. Rooms imported from a Rooms JSON file do not replace existing rooms in the Room Manage that have the same name.

For More Information on...

- importing rooms from a JSON file, refer to the section "**Importing Quorum Rooms**" on page 7–15.

Exporting Quorum Rooms

The rooms contained in the Room Manager can be exported to a JSON file. Exporting rooms to a Rooms JSON file is a good way to back up rooms on your Quorum Server or to copy rooms from one Quorum Server to another.

For More Information on...

- exporting rooms from the Room Manager to a JSON file, refer to the section "**Exporting Quorum Rooms**" on page 7–16.

Getting Started

The design of the Quorum user interface enables a single operator with limited production experience to produce quality broadcasts of meetings, legislative sessions, and other events. Clicking an attendee icon will focus the assigned camera on the attendee's mark. You can select from multiple preset shots to frame the mark to your liking and take the shot to air. When a shot goes live, the XPression™ graphics system displays the attendee's name and information on the screen.

This chapter discusses the following topics:

- User Interface Layout
- Customizing Your Layout
- Setting User Preferences
- Viewing Notifications

User Interface Layout

The layout of the Quorum user interface consists of the side navigation and several types of panels (**Figure 3.2**). When you launch Quorum for the first time, it opens with the side navigation and a blank area to add panels.

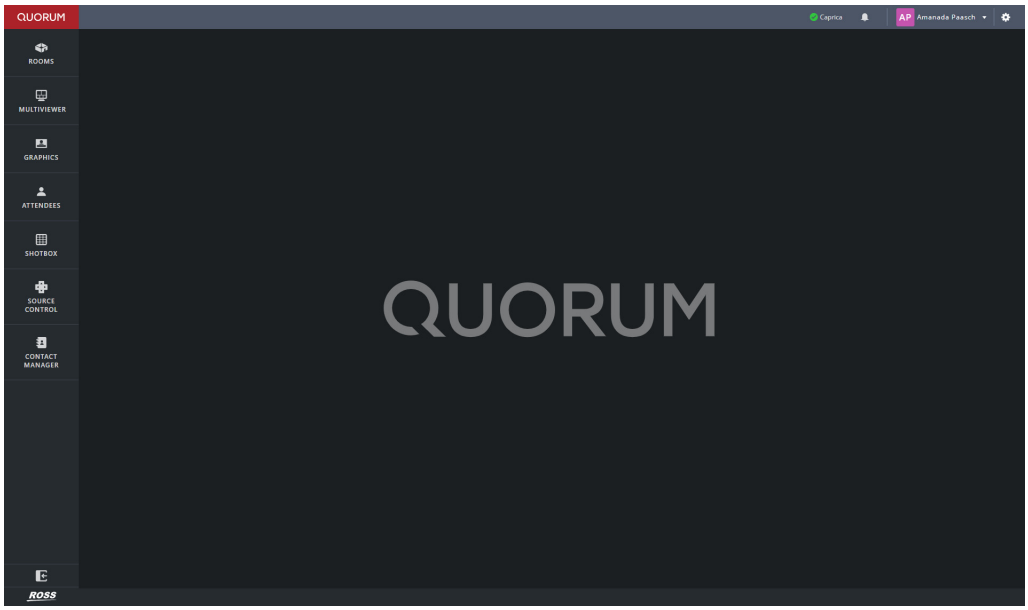


Figure 3.1 First Login Quorum UI

The choice of panels to include in the user interface is up to the user. After adding the panels you need for your particular workflow, you can rearrange and resize them.

✶ Since the layout of the Quorum user interface can vary according to your requirements, the images of the Quorum user interface in this guide are for demonstration purposes only.

Figure 3.2 - Quorum User Interface Example

Main Toolbar

The icons in the Quorum Main toolbar enable you to view the Caprica connection status, access the Notification Center, manage your user, and access system configuration settings.

The Main toolbar contains the following items:

or **Caprica** — this icon displays the current connection status between the Quorum Server and Caprica Server. A green icon indicates that the servers are connected, while a red icon indicates a disconnection.

or **Notification Center** — click this icon to view and manage system notifications.

User — use this menu to open the User Preferences window or log out of the Quorum Server. Refer to the section "**Setting User Preferences**" on page 3–7 for more information about the available user preference settings.

System Configuration — click this icon to open the **System Configuration** window.

Side Navigation

The icons in the Quorum side navigation enable you to open panels to access all the features of Quorum. Clicking an icon in the side navigation opens the associated panel for use.

The side navigation contains the following icons (**Table 3.1**):

Table 3.1 Side Navigation Icons

Icon	Name	Description
	ROOMS	Hover over this icon to display the list of available rooms. Select a room from the ROOMS list to open it in a Room panel. You can also open the Room Manager panel from the ROOMS list. For more information, refer to the section "**Managing Rooms**" on page 6–2.
	MULTIVIEWER	Opens the Multiviewer panel. For more information, refer to the section "**Taking Attendees or Marks On-Air**" on page 4–10.
	GRAPHICS	Opens the Graphics panel. For more information, refer to the section "**Running Graphics Sequences Manually**" on page 4–18.
	ATTENDEES	Opens the Attendees panel. For more information, refer to the section "**Taking Attendees or Marks On-Air**" on page 4–10.
	SHOTBOX	Opens the Shotbox panel. For more information, refer to the section "**Running Custom Controls**" on page 4–20.
	CONTACT MANAGER	Opens the Contact Manager panel. For more information, refer to the section "**Managing Contacts**" on page 6–10.
	SOURCE CONTROL	Opens the Source Control panel. For more information, refer to the section "**Controlling a PTZ Camera**" on page 4–13.

Table 3.1 Side Navigation Icons

Icon	Name	Description
	Collapse the Side Navigation	Collapse the side navigation to only display icons for the options. This icon is only available when the side navigation is expanded
	Expand the Side Navigation	Expand the side navigation to display icons and names for the options. This icon is only available when the side navigation is collapsed.

Customizing Your Layout

You can add, resize, move, or close panels in the Quorum user interface to match your personal workflow.

Add a Panel

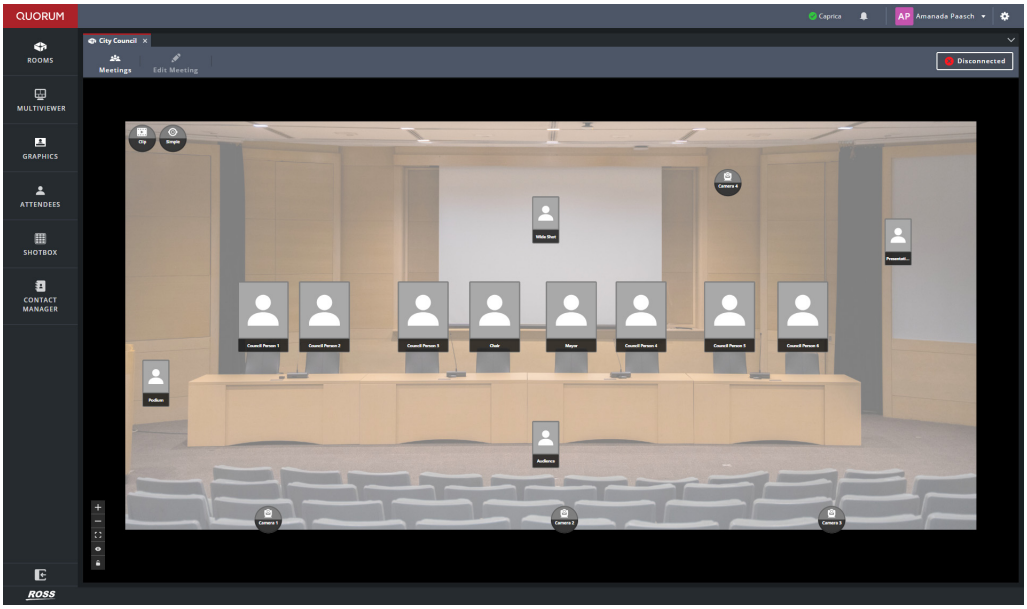
The icons in the Quorum side navigation enable you to open panels to access all the features of Quorum. Clicking an icon in the side navigation opens the associated panel for use.

To add a panel

1. Use your Quorum user credentials in one of the following supported web browsers to open the Quorum web page provided by your Quorum administrator:
   - Microsoft Edge version 100 or greater
   - Google Chrome™ browser version 100 or greater
   - Mozilla Firefox® version 100 or greater
   - Apple Safari® version 16 or greater

   For a detailed procedure on how to log in to Quorum, refer to the section "**Accessing Quorum**" on page 4–2.
2. In the Quorum **side navigation**, click the icon associated with the **panel** to add to the Quorum user interface.

   The selected **panel** opens in the Quorum user interface.



3. Use the side navigation to add the panels you need for your particular workflow.

   After adding the panels you need for your particular workflow, you can rearrange and resize them.

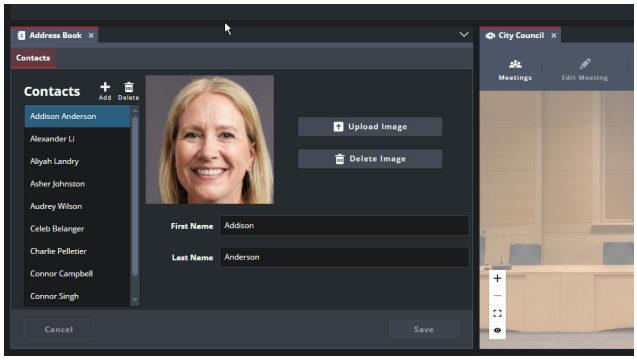
Resize a Panel

You can make panels smaller to display more panels in the Quorum user interface, or you can enlarge panels to make them easier to work with.

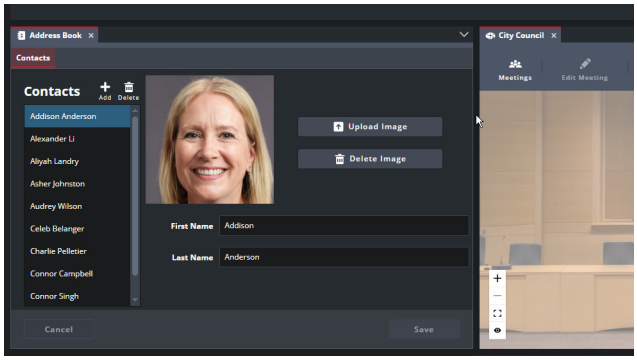
✶ You can only resize panels that are above, below, or beside another panel

To resize a panel

1. To resize a panel, place the mouse pointer on a panel border as follows:
   - To change the **height** of a panel, place the mouse pointer on the top or bottom border of the panel that it shares with the panel above or below it.



   - To change the **width** of a panel, place the mouse pointer on the left or right border of the panel that it shares with the panel beside it.



2. When the mouse pointer changes to the ⇕ **height** or ⇔ **width** adjustment cursor, click and drag the border to shrink or enlarge the panel.
3. When the size of the selected panel meets your requirements, release the mouse button to set the panel size.

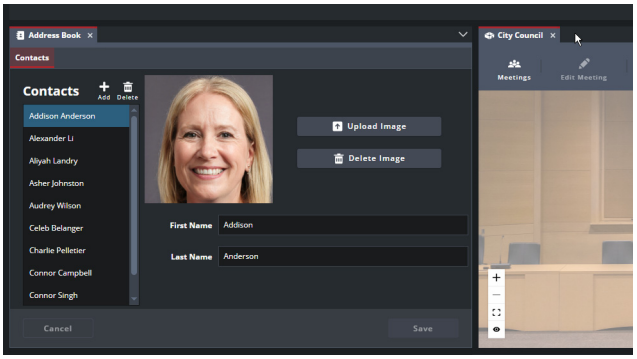
   The Quorum user interface layout updates to display the selected panel at the set size.

Move a Panel

You can move panels within the Quorum user interface to better match your workflow.

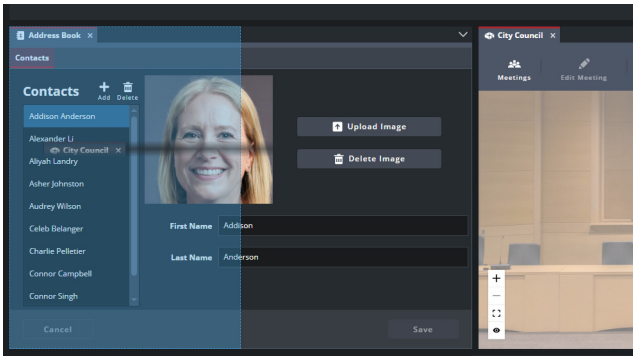
To move a panel

1. Place the mouse pointer on the title bar of the panel to move.



2. Click and hold the mouse button.
3. Drag the selected panel to a new location in the Quorum user interface.

   As you drag the panel, a blue shaded area previews the new location for the panel.



4. When the view outline displays at the location that you want to place the panel, release the mouse button.

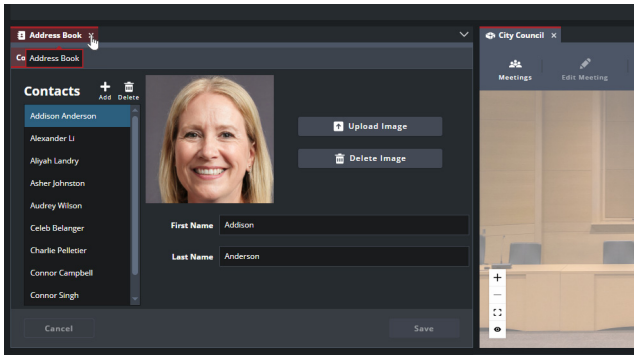
   The Quorum user interface updates to display the selected panel at the placed location.

Close a Panel

When you no longer require a panel, you can close the panel to remove it from the Quorum user interface.

To close a panel

- On the panel to close, click the **X** icon to the right of the panel name.



The selected panel closes and the remaining panels expand to occupy the space vacated by the closed panel.

Setting User Preferences

Along with customizing the layout of the Quorum user interface, you can also set your own user preferences. The User Preferences window contains the following panels that you can use to set your own user preferences: User Profile, Language, Password, Joystick, Colors and Multiviewer Layouts.

Managing Your User Profile

The settings in the User Profile panel enable you to manage the user profile information about your Quorum user account.

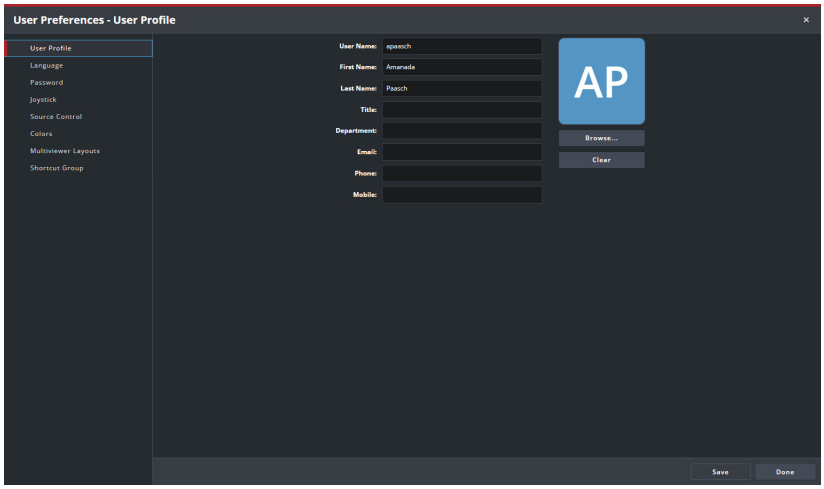
To manage your user profile information

1. In **Quorum**, use the **User** menu at the right side of the Main toolbar to select **User Preferences**.

   The **User Preferences** window opens.

2. In the side navigation, click **User Profile**.

   The **User Profile** panel opens.



3. In the **Username** box, enter a name for your user.

   Use this username to log in to your Quorum system. Usernames are case-sensitive.

4. In the **Password** box, enter a password of at least five characters for your user. All user accounts must have a password.

   Use this password along with the set username to log in to your Quorum system. Passwords are case-sensitive.

5. In the **First Name** box, enter a first or proper name for your user.

6. In the **Last Name** box, enter the last or family name for your user.

   After logging in to Quorum with a username and password, the **User** menu displays the first and last name associated with the username.

7. In the **Title** box, enter the job title for your user within the organization.

8. In the **Department** box, enter the department to which your user belongs within the organization.

9. In the **Email** box, enter the corporate email address for your user.

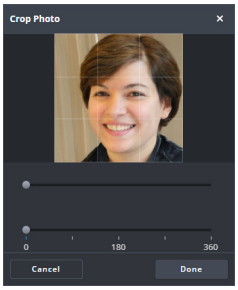
10. In the **Phone** box, enter the corporate telephone number for your user.

11. In the **Mobile** box, enter the mobile telephone number for your user.

12. To set a profile photo for your user, complete the following steps:

    a. Click **Browse** to use the **Open** dialog box to upload a profile image. For the best performance and a consistent visual appearance, profile images should be small square images of about 150 x 150 pixels in size in any of the following image formats: gif, .jpg, .jpeg, or .png.

       The selected image opens in the **Crop Photo** dialog box.



    b. Use the sliders to size and rotate the selected image.

    c. Click **Done**.

       The selected image replaces the initials displayed for your user profile.

13. When you no longer want your profile photo, click **Clear**.

    Your user profile initials replace your profile photo.

14. Click **Save**.

    Quorum saves your updated user profile.

15. Click **Done** when you want to close the **User Preferences** window.

    When the **User Preferences** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Selecting Your User Interface Language

The Language panel enables you to select the user interface language for your Quorum user. The user interface language that you select for your Quorum user overrides the default user interface language set for the Quorum Server.

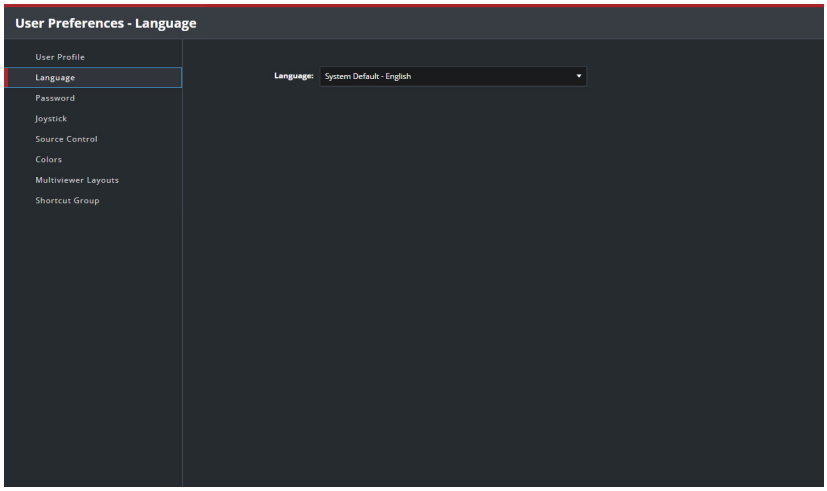
To select your user interface language

1. In **Quorum**, use the **User** menu at the right side of the title bar to select **User Preferences**.

   The **User Preferences** window opens.

2. In the side navigation, click **Language**.

   The **Language** panel opens.



3. Use the **Language** list to select the user interface language for your Quorum user. Select **System Default** to use the language set by the Quorum administrator as the default user interface language.

4. Click **Save**.

   Quorum saves your user interface language selection.

5. Click **Done** when you want to close the **User Preferences** window.

   When the **User Preferences** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

6. In **Quorum**, use the **User** menu at the right side of the title bar to select **Logout**.

   The **Logout** alert opens.

7. Click **Logout**.

   Quorum logs your user out of Quorum.

8. Log in to Quorum with the Quorum user for which you selected a user interface language.

   The Quorum user interface opens in the language you selected for your Quorum user.

Changing Your Quorum User Password

The Password panel enables you to change the password that you use with your user account to log in to Quorum.

✶ Quorum user account passwords must be at least five characters long.

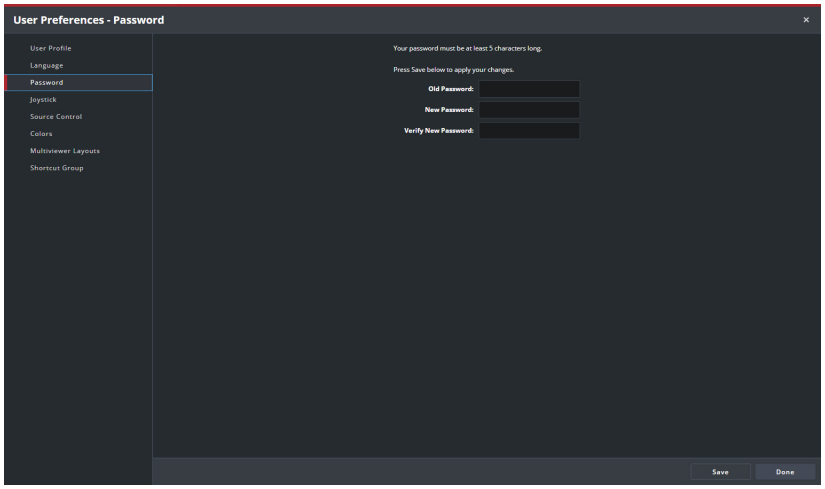
To change your user account password

1. In **Quorum**, use the **User** menu at the right side of the title bar to select **User Preferences**.

   The **User Preferences** window opens.

2. In the side navigation, click **Password**.

   The **Password** panel opens.



3. In the **Old Password** box, enter the current password of your Quorum user.

4. In the **New Password** box, enter a new password for your Quorum user that satisfies the password policy of your organization.

   Quorum user account passwords must be at least five characters long.

5. In the **Verify Password** box, enter the same password that you entered in the **New Password** box.

6. Click **Save**.

   Quorum saves your new password.

7. Click **Done** when you want to close the **User Preferences** window.

   When the **User Preferences** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Selecting a Joystick for Source Control

The Source Control panel enables you to control the camera used by the selected source. You can also select a joystick connected to your local computer to control cameras.

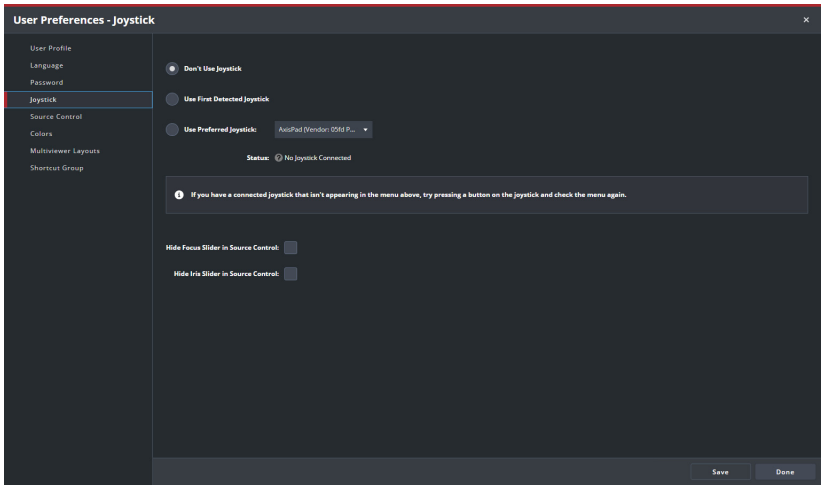
To select a joystick for source control

1. In **Quorum**, use the **User** menu at the right side of the title bar to select **User Preferences**.

   The **User Preferences** window opens.

2. In the side navigation, click **Joystick**.

   The **Joystick** panel opens.



3. Select the **Don't Use Joystick** option when you want to prevent joysticks connected to your local computer from controlling cameras.

   You can still control cameras with the **Source Control** panel or keyboard shortcuts when this option is selected.

4. Select the **Use First Detected Joystick** option when you want to use the first detected joystick connected to your local computer to control cameras.

   The **Status** field displays the name of the detected joystick.

5. When you want to select a joystick connected to your local computer as the preferred joystick to control cameras, complete the following steps:

   a. Select the **Use Preferred Joystick** option.

   b. Use the list to the right of the **Use Preferred Joystick** option to select the preferred joystick for camera control. Your preferred joystick must be connected to your computer to be included in the selection list.

   The **Status** field displays the name of the selected joystick.

6. Select the **Hide Focus Slider in Source Control** check box when you want to hide the focus control in the **Source Control** panel by hiding the **Focus** slider. Clear this check box to display the **Focus** slider in the **Source Control** panel.

7. Select the **Hide Iris Slider in Source Control** check box when you want to hide the iris control in the **Source Control** panel by hiding the **Iris** slider. Clear this check box to display the **Iris** slider in the **Source Control** panel.

8. Click **Save**.

   Quorum saves your user interface language selection.

9. Click **Done** when you want to close the **User Preferences** window.

   When the **User Preferences** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Hiding Individual Source Control Panel Controls

In the Source Control panel, you can choose to hide the focus slider, iris slider, or Program section.

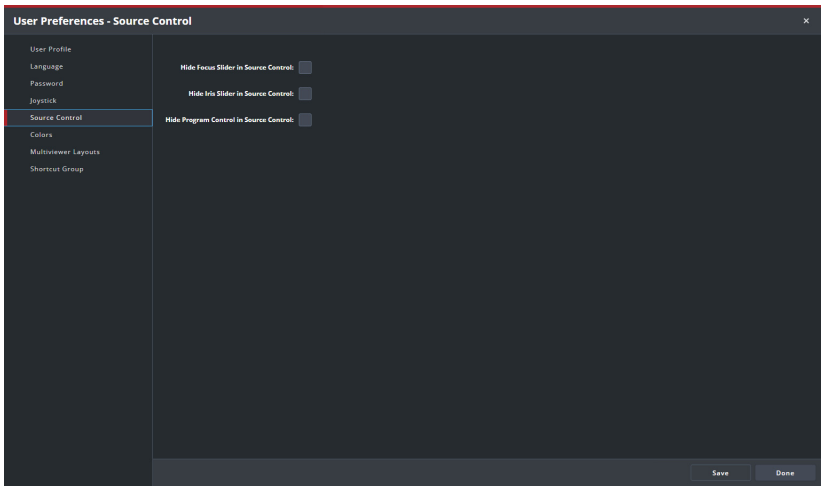
To hide individual Source Control panel controls

1. In **Quorum**, use the **User** menu at the right side of the title bar to select **User Preferences**.

   The **User Preferences** window opens.

2. In the side navigation, click **Source Control**.

   The **Source Control** panel opens.



3. Select the **Hide Focus Slider in Source Control** check box to hide the focus control in the **Source Control** panel by hiding the **Focus** slider. Clear this check box to display the **Focus** slider in the **Source Control** panel.

4. Select the **Hide Iris Slider in Source Control** check box to hide the iris control in the **Source Control** panel by hiding the **Iris** slider. Clear this check box to display the **Iris** slider in the **Source Control** panel.

5. Select the **Hide Program Control in Source Control** check box to hide the controls for the shot in the Multiviewer panel **PGM** pane by hiding the **Program** section in the Source Control panel. Clear this check box to display the **Program** section in the **Source Control** panel.

Customizing User Interface Colors

The settings in the Colors panel enable you to customize the colors that Quorum uses to highlight user interface items. Clicking the current color of a user interface item opens the Color Picker to set a new color for the selected item.

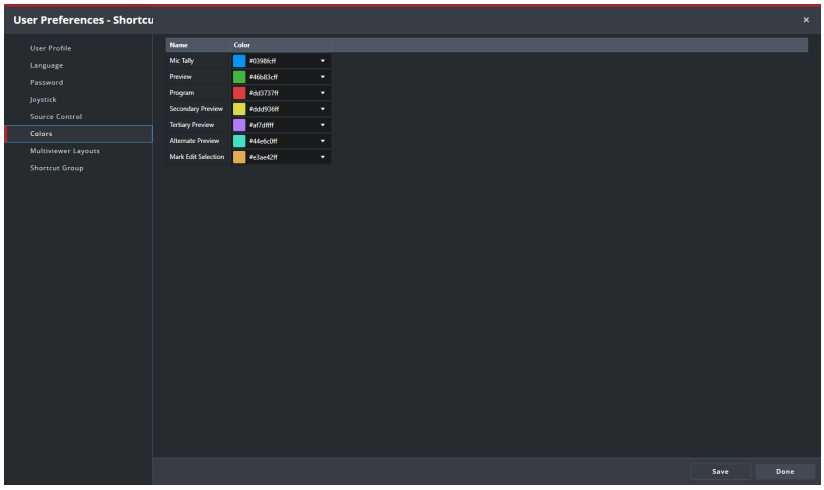
To customize the user interface highlight colors

1. In **Quorum**, use the **User** menu to select **User Preferences**.

   The **User Preferences** window opens.

2. In the side navigation, click **Colors**.

The **Colors** panel opens.



3. Click the **Color** of a user interface item that you want to customize. The available user interface items are as follows:

   - **Mic Tally** — highlight color for the active microphone.
   - **PV1** — highlight color for the camera on the PV1 pane in the Multiviewer panel, and the background color of the associated camera in the Room panel when the room is connected to a switcher destination.
   - **Program** — highlight color for the PGM pane in the Multiviewer panel, the background color of the associated camera in the Room panel when the room is connected to a switcher destination, and the background color of the program buttons in the Graphics panel.
   - **PV2** — highlight color for the camera on the PV2 pane in the Multiviewer panel, and the background color of the associated camera in the Room panel when the room is connected to a switcher destination. This color is also used in the Room panel Editing Room mode to highlight the PV2 camera / Source 2 for the selected mark.
   - **PV3** — highlight color for the camera on the PV3 pane in the Multiviewer panel, and the background color of the associated camera in the Room panel when the room is connected to a switcher destination. This color is also used in the Room panel Editing Room mode to highlight the PV3 camera / Source 3 for the selected mark.
   - **PV4** — the color used in the Room panel Editing Room mode to highlight the PV4 / Source 4 camera for the selected mark.
   - **Mark Edit Selection** — the color used in the Room panel Editing Room mode for the border of the selected mark to edit.

   The **Color Picker** opens for the associated user interface item.

4. Use the **Color Picker** to set the highlight color for the associated user interface item. The **Color Picker** contains the following settings:

   - **Color Rectangle** — this box displays color set for the marker type.
   - **HTML Color Code** — enter in this box the HTML color code to set the marker type color.
   - **Color Swatches** — use this list to select a color for the marker type. Click a color swatch to set the marker type color.

5. Click **Save**.

   Quorum saves your customized colors.

6. Click **Done** when you want to close the **User Preferences** window.

   When the **User Preferences** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Setting Your Multiviewer Layout

The settings in the Multiviewer Layouts panel enable you to configure the layout of the panes in your Multiviewer panel.

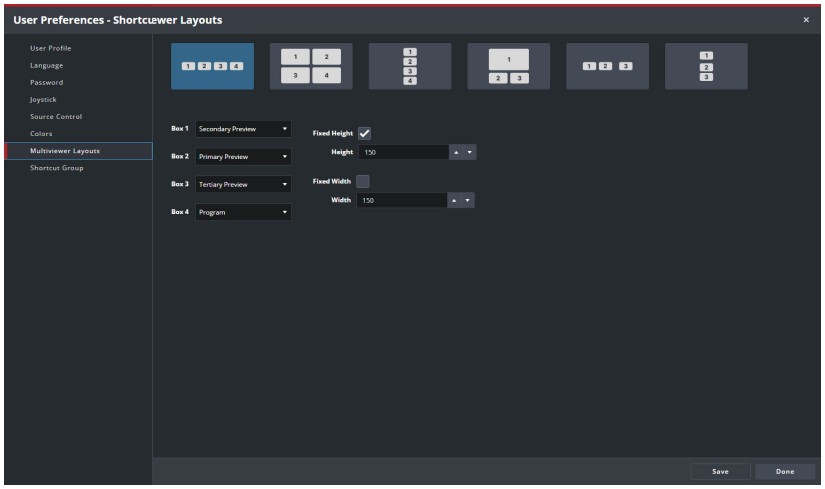
To configure the layout of the panes in your Multiviewer panel

1. In **Quorum**, use the **User** menu to select **User Preferences**.

   The **User Preferences** window opens.

2. In the side navigation, click **Multiviewer Layouts**.

   The **Multiviewer Layouts** panel opens.



3. At the top of the **Multiviewer Layouts** panel, click a **Layout** button to select the pane layout for your **Multiviewer** panel.

4. Use the **Box 1** list to select the pane to display in position **1** of the selected pane layout.

5. Use the **Box 2** list to select the pane to display in position **2** of the selected pane layout.

6. Use the **Box 3** list to select the pane to display in position **3** of the selected pane layout.

7. Use the **Box 4** list to select the pane to display in position **4** of the selected pane layout.

   This box is only available when the selected **Multiviewer** panel layout contains four panes.

8. Select the **Fixed Height** check box to display the panes in **Multiviewer** panel at the height set in the **Height** box. Clear this check box to scale the height of the panes with the height of the **Multiviewer** panel.

9. Use the **Height** box to enter or select the height in pixels to display panes in the **Multiviewer** panel.

   Quorum only uses this setting when the **Fixed Height** check box is selected.

10. Select the **Fixed Width** check box to display the panes in **Multiviewer** panel at the width set in the **Width** box. Clear this check box to scale the width of the panes with the width of the **Multiviewer** panel.

11. Use the **Width** box to enter or select the width in pixels to display panes in the **Multiviewer** panel.

    Quorum only uses this setting when the **Fixed Width** check box is selected.

12. Click **Save**.

    Quorum saves the set layout for your Multiviewer panel.

13. Click **Done** when you want to close the **User Preferences** window.

    When the **User Preferences** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Selecting Your Shortcut Group

Shortcut groups contain key and joystick shortcuts that enable quick access to commands in a view. Quorum comes with a System Default shortcut group that is initially selected for all users. Additional shortcut groups can be created that contain custom key and joystick shortcuts. To use the key and joystick shortcuts in a shortcut group, you must select the group for your user preferences.

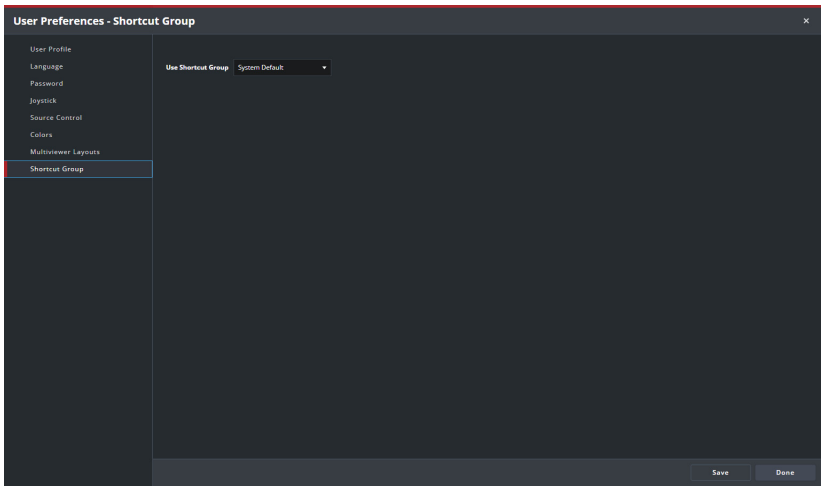
To select your shortcut group

1. In **Quorum**, use the **User** menu at the right side of the title bar to select **User Preferences**.

   The **User Preferences** window opens.

2. In the side navigation, click **Shortcut Group**.

   The **Shortcut Group** panel opens.



3. Use the **Use Shortcut Group** list to select the shortcut group that contains the key and joystick shortcuts that your user will use to quickly access commands in Quorum views.

4. Click **Save**.

   Quorum saves your shortcut group selection.

5. Click **Done** when you want to close the **Shortcut Group** window.

   When the **Shortcut Group** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

6. In **Quorum**, use the **User** menu at the right side of the title bar to select **Logout**.

   The **Logout** alert opens.

7. Click **Logout**.

   Quorum logs your user out of Quorum.

8. Log in to Quorum with the Quorum user for which you selected a shortcut group.

   The Quorum user interface opens and loads the key and joystick shortcuts contained in the shortcut group you selected for your Quorum user.

For More Information on...

- viewing the key and joystick shortcuts in a shortcut group, refer to the section "**Creating Shortcut Groups**" on page 7–18.

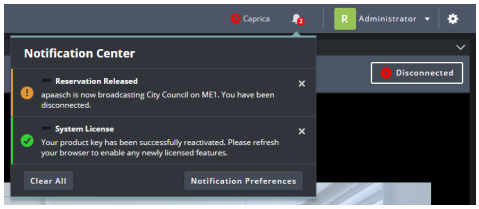
Viewing Notifications

The Notification Center saves system notifications sent to you from the Quorum Server. You can use the Notification Center to view and manage system notifications.

To view system notifications

1. In the **Main** toolbar, click the icon. A badge on the icon indicates the number of new notifications that you have not read.

   The **Notification Center** opens displaying the available notifications.



2. To clear a notification from the Notification Center, click the **X** associated with the **notification** to clear.
3. To clear all of the notifications from the Notification Center, click **Clear**.

Broadcasting a Meeting

With Quorum, a single operator with limited production experience can produce quality broadcasts of meetings, legislative sessions, and other events. Quorum combines robotic camera control, video switching, and graphics control in one operator position. A basic operation workflow will enable you to produce most broadcasts.

This chapter discusses the following topics:

- Basic Operations Workflow
- Accessing Quorum
- Opening a Room
- Opening a Meeting
- Connecting to a Switcher Destination
- Taking Attendees or Marks On-Air
- Controlling Sources
- Running Graphics Sequences Manually
- Running Custom Controls
- Recording a Meeting

Basic Operations Workflow

You can produce most broadcasts using Quorum with a basic operations workflow. Producing an actual broadcast may involve additional steps, but the general structure of the operations workflow will remain the same.

The main steps in the Quorum operations workflow are as follows:

1. Log in to your Quorum Server.

   For more information, refer to the procedure "**To access Quorum**" on page 4–2.

2. Open the Rooms, Attendees, Multiviewer, Graphics, and Shotbox panels.

   For more information, refer to the section "**User Interface Layout**" on page 3–2.

3. Open a meeting in the Room panel.

   For more information, refer to the procedure "**To open a meeting**" on page 4–5.

4. Connect the room to a switcher destination.

   For more information, refer to the procedure "**To open a room**" on page 4–4.

5. Select the method used to transition a shot from preview to on-air.

   For more information, refer to step **2** in the procedure "**To take an attendee or mark on-air**" on page 4–10.

6. Select an attendee to preview or put on-air.

   For more information, refer to step **3** in the procedure "**To take an attendee or mark on-air**" on page 4–10.

7. In preview, select the shot to take on-air.

   For more information, refer to step **4** in the procedure "**To take an attendee or mark on-air**" on page 4–10.

8. Take a shot on-air.

   For more information, refer to step **5** in the procedure "**To take an attendee or mark on-air**" on page 4–10.

9. Run graphics sequences when required.

   For more information, refer to the procedure "**To manually run a graphics sequence**" on page 4–19.

10. Run custom controls when required.

    For more information, refer to the procedure "**To run a custom control from Quorum**" on page 4–20.

Accessing Quorum

Quorum is installed on a server computer in your facility and accessed through a web browser. Before you can use Quorum, you must log in to Quorum.

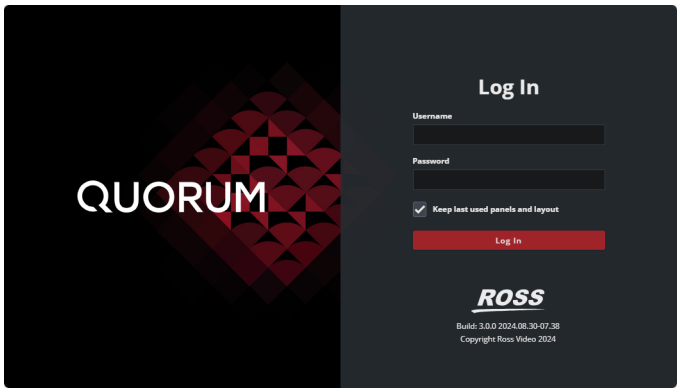
To access Quorum

1. Use one of the following methods to access the **Quorum** web page:
   - **Quorum Server Computer**
     - › On the desktop, double-click the **Ross Quorum** icon.
     - › Use the **Start** menu to select **Ross Quorum** > **Ross Quorum**.
   - **Quorum Client Computer**
     - › On a computer connected to the same subnetwork as your Quorum Server computer, use a supported web browser to open `http://<Quorum Server>/aura/`. In the URL, `<Quorum Server>` is the hostname or IP address of the Quorum Server computer.

Quorum supports the following web browsers:

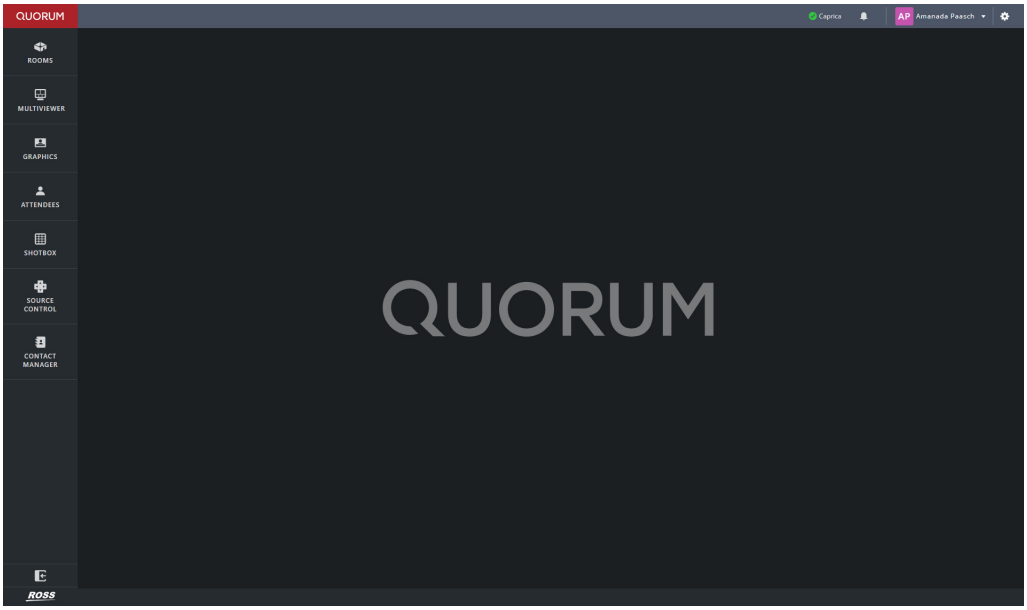
- Microsoft Edge
- Google Chrome™ browser version 51 or greater
- Mozilla Firefox® version 52 or greater
- Apple Safari® version 10.2 or greater

The **Log In** web page opens.



2. In the **Log In** section, enter the login credentials for your Quorum user in the **Username** and **Password** boxes.
3. By default, the **Keep last used panels and layout** check box is selected to automatically display the panel layout from your last Quorum session when you log in. Clear this check box to start a fresh Quorum session without any open panels.
4. Click **Log In**.

   The **Quorum** user interface opens.



   Use the **side navigation** to add the panels that you need in the Quorum user interface for your particular workflow.

5. To log out of Quorum, select **Logout** from the **User** menu at the right side of the title bar.

   Quorum logs you out and displays the **Log In** web page.

For More Information on...

- customizing the Quorum user interface, refer to the section "**Customizing Your Layout**" on page 3–4.

Opening a Room

Rooms are the central to running a production using Quorum. The Room panel displays a photo or map of the meeting venue, overlaid with camera and mark icons. You can open multiple rooms in the Room panels, but you can only run a production from one room at a time. After you open a room, you can open a meeting for the room to load meeting attendees into the room marks.

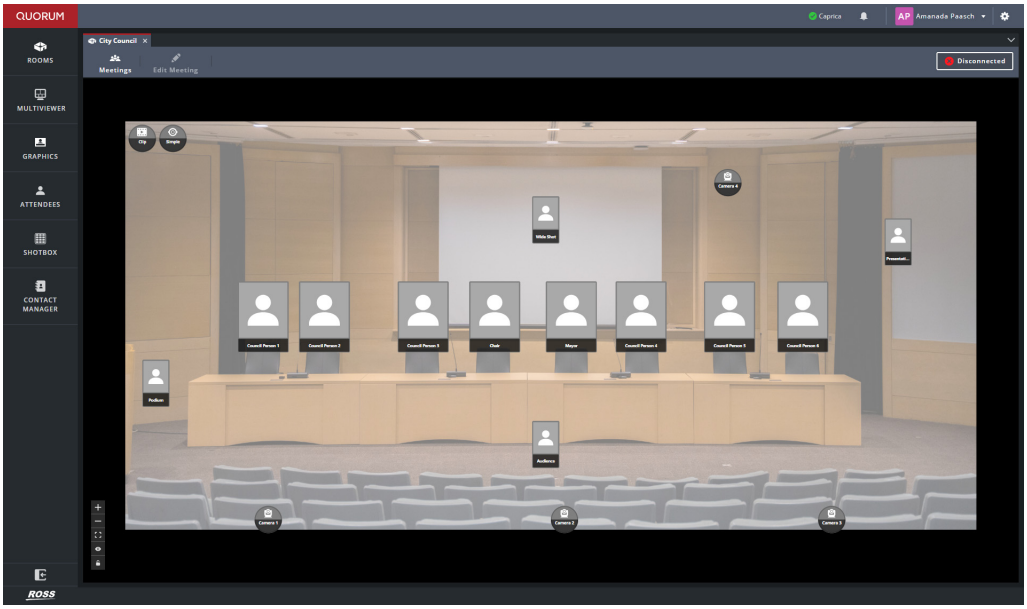
To open a room

1. In the **side navigation**, hover the mouse pointer over the **ROOMS** icon.

   The **ROOMS** list opens.

2. Use the **ROOMS** list to select the room to open.

   The selected room opens in a **Room** panel.



After opening the **Room** panel, you can position it to best suit your workflow. You are now ready to open a meeting in your room. The room background image automatically re-centers when the **Room** panel is moved or resized.

For More Information on...

- positioning panels in the Quorum user interface, refer to the section "**User Interface Layout**" on page 3–2.

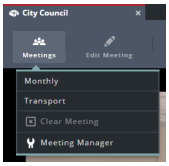
Opening a Meeting

After opening a room, you are ready to open a meeting in the room. A meeting assigns attendees to the marks in a room. Rooms are often used for a variety of meetings with different attendance lists.

To open a meeting

1. In the **Room** panel, click **Meetings** in the toolbar.

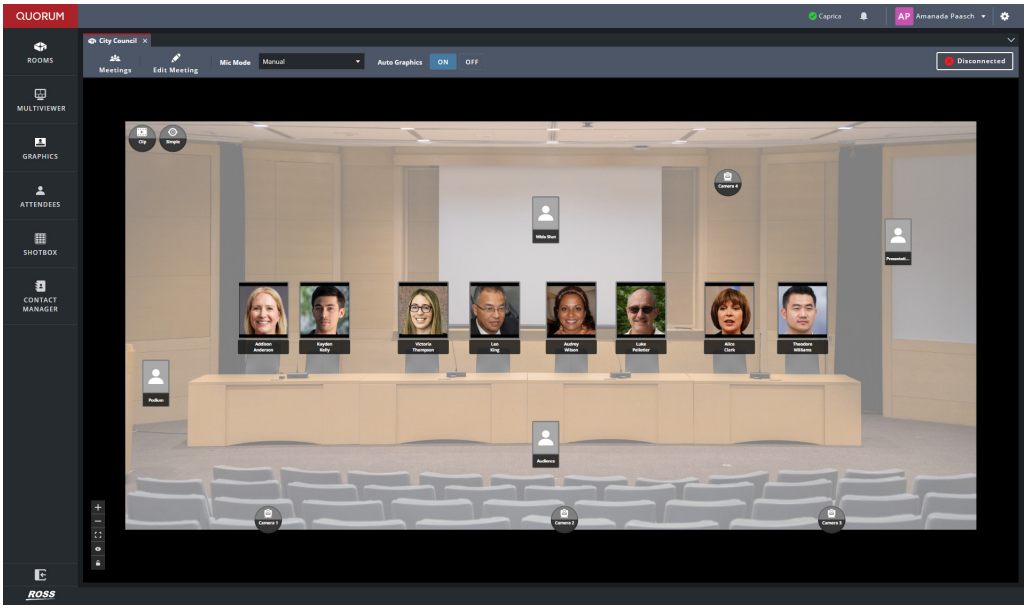
   The **Meetings** list opens and displays a list of available meetings for the current room.



2. Use the **Meeting** list to select a meeting for the room.

   When a meeting is open in a room, you can clear the meeting from the room by selecting **Clear Meeting** from the **Meeting** list.

   Quorum displays the attendees in the selected meeting at their assigned marks in the room.



   At any point, you can use the **Meetings** list to change or clear the room meeting. Before you can broadcast a meeting, you must connect to a switcher destination.

For More Information on...

- connecting to a switcher destination, refer to the section "**Connecting to a Switcher Destination**" on page 4–8.

Changing Your View of a Meeting

The view controls in the lower left corner of the Room panel enable you to focus on attendees, cameras, and other marks in a room.

Zooming

Zooming the Room panel view enables you to enlarge portions of a room or view the entire room. You can use the Room panel view controls, your mouse scroll wheel, or your touchpad to change the zoom level for the panel.

To use the view controls to zoom in/out on a meeting

1. In the lower left corner of the **Room** panel, click [+] **Zoom In** to zoom in on the middle of the panel.

   The room view magnifies each time you click [+] **Zoom In**.

2. Click [−] **Zoom Out** to zoom out from the middle of the panel.

   The room view zooms out to show more of the room each time you click [−] **Zoom Out**.

3. You can pan to view other portions of the room at the current zoom level.

To use a mouse scroll wheel to zoom in/out on a meeting

1. In the **Room** panel, place your mouse pointer on the location to zoom.
2. Use your mouse scroll wheel as follows to zoom on the selected location:
   - **In** — rotate the scroll wheel forwards to zoom in. The room view magnifies as you rotate the scroll wheel forwards.
   - **Out** — rotate the scroll wheel backwards to zoom out. The room view minimizes to show more of the room as you rotate the scroll wheel backwards.

   You can pan to view other portions of the room at the current zoom level.

To use a touchpad to zoom in/out on a meeting

1. In the **Room** panel, place your touchpad pointer on the location to zoom.
2. Use the following gestures to zoom on the selected location:
   - Place two fingers on the touchpad and spread them apart to zoom in. The room view magnifies each time you spread your fingers apart.
   - Place two fingers on the touchpad and pinch inward to zoom out. The room view zooms out to show more of the room each time you pinch inward.

   You can pan to view other portions of the room at the current zoom level.

Panning

Panning the view of a meeting in the Room panel enables you to change your viewing area without changing the zoom level. Panning is very useful to locate marks when viewing the Room panel at a high zoom level.

To pan a Room panel

1. Place your pointer on the meeting background image.

✶ Do not place your pointer on a **mark**.

2. Click and drag the meeting view to display your area of interest.
3. Release the mouse button when your area of interest is visible in the **Room** panel.

   You can also use the **Mini Map** to pan your view of the **Room** panel.

4. In the lower left corner of the **Room** panel, use the following buttons to control room view panning.
   - [🔒] **Lock Layout** — click this button to lock room view panning. You cannot pan the room view when it is locked.
   - [🔒] **Unlock Layout** — click this button to unlock the room view to enable panning. You can pan the room view when it is unlocked.

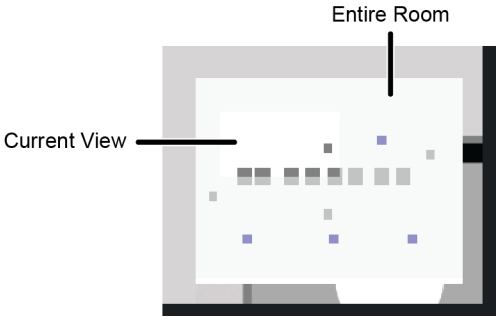
Navigating Using the Mini Map

When viewing the Room panel at high zoom levels, it is challenging to determine where you are in relation to the entire room. You can use the Room panel Mini Map to see your current view in relation to the entire room.

To see your current view in the Mini Map

1. Zoom in on an area of the **Room** panel.
2. In the lower left corner of the **Room** panel, click **Toggle Mini Map**.

   The **Mini Map** opens in the lower right corner of the **Room** panel. A **white rectangle** shows the position of your current view in relation to the entire room.



3. To view another area of the room, click and drag the **white rectangle** to the location to view in the entire room.

   The **Room** panel displays your newly selected view.
4. To close the **Mini Map**, click **Toggle Mini Map**.

Resetting Your View

After multiple pans and zooms in the Room panel, you can quickly view the entire room by clicking Fit View in the view controls.

To view an entire room

1. Change the view in the **Room** panel by zooming and panning.
2. In the lower left corner of the **Room** panel, click **Fit View**.

   The **Room** panel displays the entire room.

Connecting to a Switcher Destination

Before you can broadcast the meeting that you opened in a room, you must select a switcher destination for the broadcast. The switcher in a Quorum system can have up to three switcher destinations. Each switcher destination can be used to broadcast a meeting with the cameras in a room. The switcher in a Quorum system can broadcast multiple meetings at once by routing room cameras through the available switcher destinations (**Figure 4.1**).

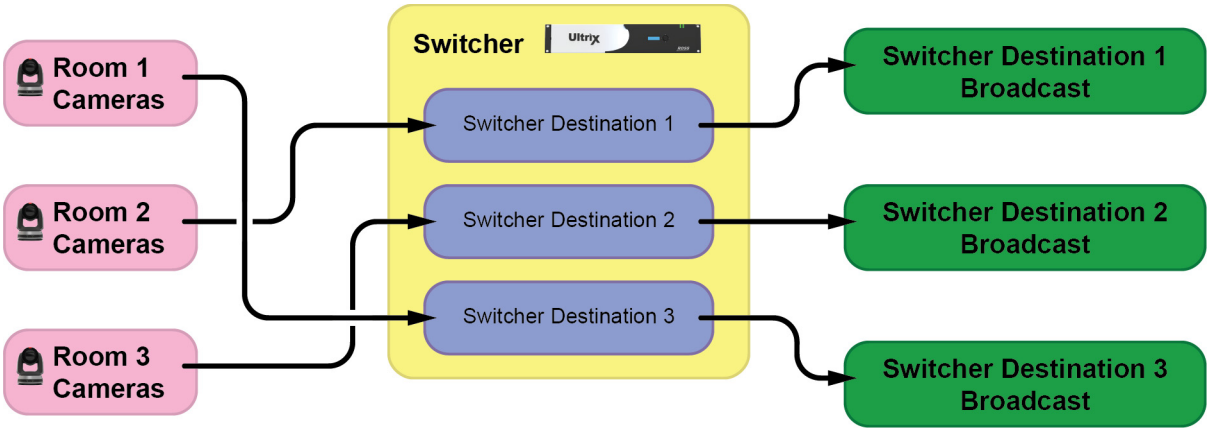


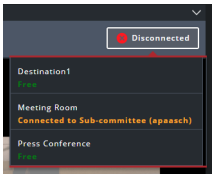
Figure 4.1 Multi-Room Broadcast

✶ A Quorum user can only use one switcher destination at a time. For example, if you had the Monthly meeting open in the City Council room using switcher destination ME2, you cannot run another meeting on a free switcher destination.

To select a switcher destination for a meeting

1. In the **Room** panel, click Disconnected in the toolbar.

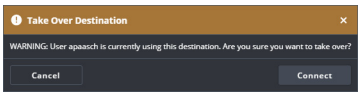
   The **Switcher Destinations** list opens and displays list of the **Free** and **Connected** switcher destinations. For connected switcher destinations, the name of the user using the switcher destination is displayed with the name.



   Destination1 is the default switcher destination name. The quantity and names of the listed switcher destinations will depend on the configuration of your Quorum system.

2. Use the **Switcher Destination** list to select a switcher destination for the meeting.

   When you select a switcher destination that is connected to a room, the **Take Over Destination** alert opens to warn you that connecting to the switcher destination will disconnect the user currently using it. Select **Cancel** to select another switcher destination or **Connect** to take over the selected switcher destination.



   With a switcher destination selected for the meeting you have open in a room, you are ready to broadcast the meeting using the room cameras.

3. When you are finished broadcasting a meeting, complete the following steps to disconnect from the switcher destination you were using for your broadcast:

   a. Click Destination1 in the toolbar, where Destination1 is the name of the switcher destination the room is currently using.

   b. Select **Disconnect apaasch from Destination1**, where **apaasch** is the name of the user using the switcher destination and **Destination1** is the name of the switcher destination being used.

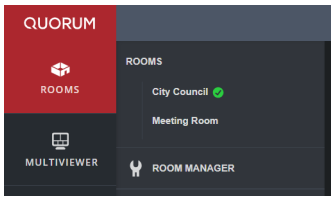
Monitoring a Room Connected to a Switcher Destination

When a room is connected to a switcher destination, other Quorum users can open the same room to monitor the meeting broadcast from the room. Users in monitor mode cannot control the broadcast from the room that they are monitoring, only the user who connected the room to a switcher destination can control the broadcast.

To monitor a meeting broadcast from room connected to a switcher destination

1. In the **side navigation**, hover the mouse pointer over the **ROOMS** icon.

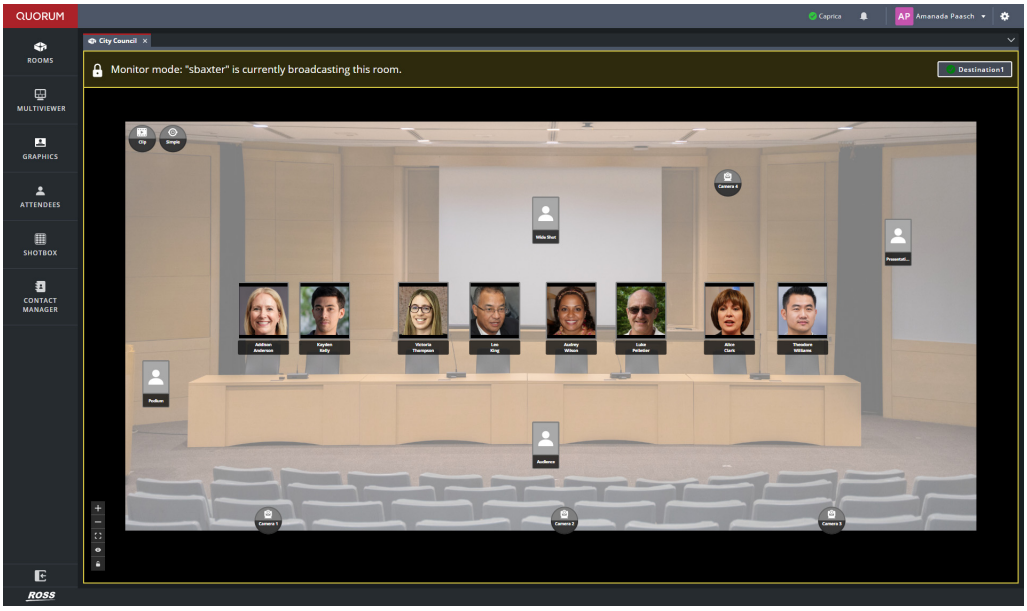
   The **ROOMS** list opens and displays list of available rooms.



   Rooms connected to a switcher destination are highlighted by the icon displayed to the right of their room name.

2. Use the **ROOMS** list to select a room, marked with the icon, to monitor.

   The selected room opens in a **Room** panel in **Monitor Mode**. The banner displays the name of the Quorum user who is controlling a meeting broadcast from the room.Monitor mode will turn off when the room is disconnected from the switcher destination.



Taking Attendees or Marks On-Air

With your meeting connected to a switcher destination, you are ready to run your production and take attendees or marks on-air. You can select the attendee to take on-air from either the Room panel or the Attendees panel. Marks to take on-air are selected from the Room panel. The transition from the current on-air attendee or mark to the next on-air attendee or mark is set in the PGM pane of the Multiviewer panel.

To take an attendee or mark on-air

1. If the **Multiviewer** panel is not open, click the **MULTIVIEWER** icon in the side navigation.

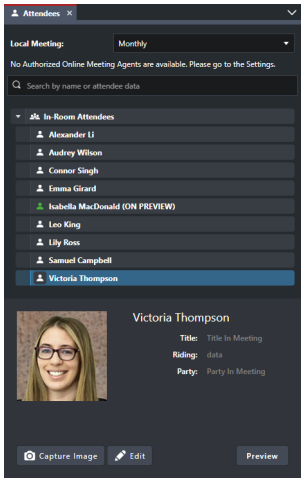
   After opening the **Multiviewer** panel, you can position it to best suit your workflow.

2. Use the following buttons in the **PGM** pane to select the method used to transition a shot from preview to on-air:

   - **Cut** — click this button to perform an instantaneous transition from the current on-air shot to the shot selected to take on-air.
   - **Mix** — click this button to perform a gradual transition from the current on-air shot to the shot selected to take on-air.

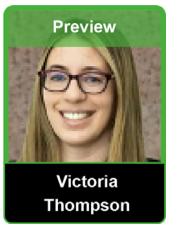
3. Use one of the following methods to select the attendee to take on-air:

   - **Room panel**
     › In the **Room** panel, click the photo of the **attendee** or the icon of the **mark** to take on-air.
   - **Attendees panel** — if the **Attendees** panel is not open, click the **ATTENDEES** icon in the side navigation.

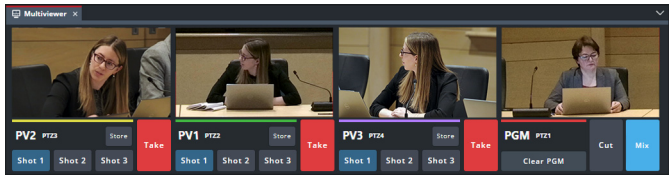


   › In the **Attendees** panel, expand the **In-Room Attendees** node.
   › Use the **Name** list to select the **attendee** to put in preview.
   › Click **Preview**. You can also double-click an attendee to put them in preview.

   In the **Room** panel, the border of the selected attendee or mark turns green to show that the attendee or mark is in preview.



The available cameras move to display shots of the selected attendee or mark in the **Multiviewer** panel.



The **Multiviewer** panel contains three **Preview** panes that display previews of shots ready to take on-air. The background color of a pane title identifies the pane type as follows:

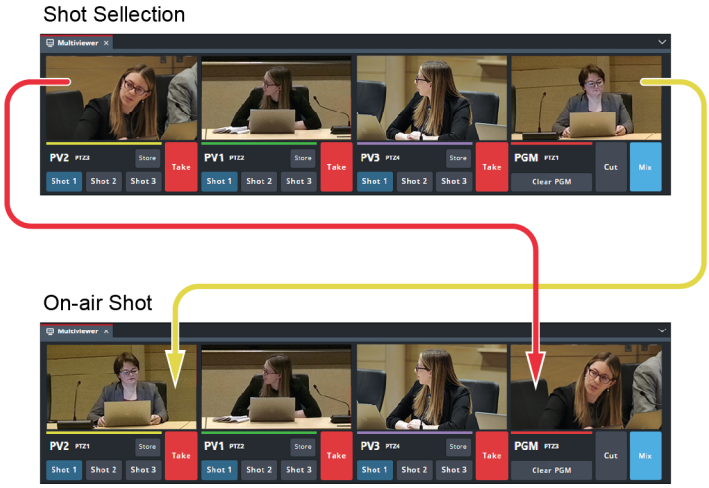
- **PV2** — yellow
- **PV1** — green
- **PV3** — purple

4. In one of the three **PV** panes, click a **Shot #** button to set the view that you want to take on-air.

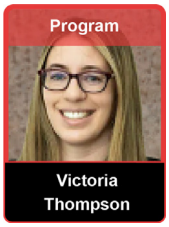
   The camera in preview moves to the position associated with the clicked **Shot #** button. The **PV** pane updates to display a preview of the selected shot.

5. In the **PV** pane displaying the shot to take on-air, click the **Take** button.

   Quorum takes the selected shot on-air and displays it in the **PGM** pane. The previous on-air shot is placed into preview. For example, clicking **Take** in the **PV2** pane puts Victoria Thompson on-air in the **PGM** pane and Layla Smith into preview.



In the **Room** panel, the border of the on-air attendee turns red to show that attendee is on-air.



Using the Microphone System to Control Shots

When your Quorum system is configured to work with a microphone system, you can use the activated microphone to automatically take the attendee associated with it to Preview or Program.

To select the microphone system control mode

1. Open a room in the **Room** panel.
2. Connect to the room.
3. In the **Room** panel toolbar, use the **Mic Mode** list to select the control mode for the microphone system. The available modes are as follows:
   - **Manual** — do not take marks associated with the activated microphone to Preview or Program.
   - **Semi** — take the mark associated with the activated microphone to Preview.
   - **Full** — take the mark associated with the activated microphone to the PV1, and then take it to Program after a specified time delay. When no microphones are activated for a specified time, take the default mark to Preview or Program.

For More Information on...

- configuring microphone systems, refer to the section "**Configuring Microphone Systems**" on page 7–34.

Active Microphone Badge

Marks with an activated microphone (**Figure 4.2**) are highlighted with the Microphone badge as follows:

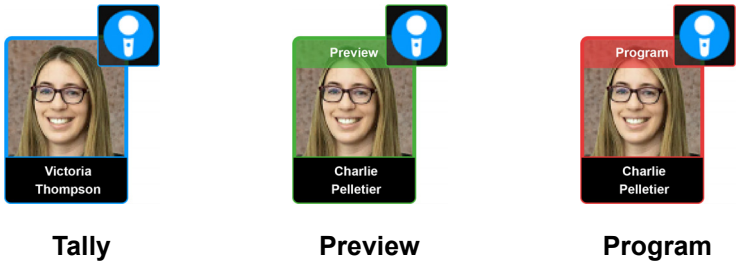


Figure 4.2 Marks with Active Microphones

Taiden Microphone Request Badge

Marks requesting to speak are indicated with a Hand badge. When more than one attendee requests a microphone, the number in the Hand badge indicates the order of requests.

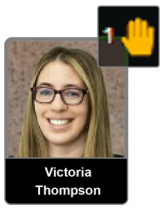


Figure 4.3 First Microphone Request

A microphone activation request must be approved in the Taiden microphone system to activate an attendee's microphone. In Semi mode, the attendee is taken to Preview when their microphone is activated. In Full mode, the attendee is taken to Program when their microphone is activated.

Controlling Sources

The Source Control panel displays controls for the shot in the PGM pane of the Multiviewer panel and for the shot in the selected PV pane.

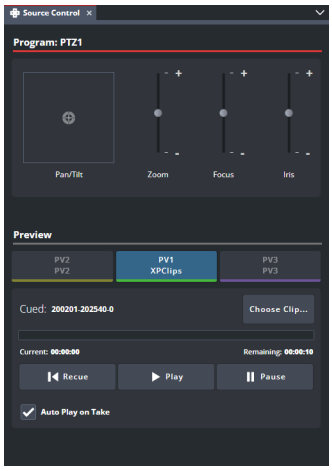


Figure 4.4 Controls for the PTZ Camera on Program and the Clip Player in Preview

The displayed controls depend on the source type associated with the mark. The available source types are as follows:

- **PTZ Camera** — position a camera using shots, the Source Control panel controls, keyboard shortcuts, or a controller.
- **Clip Player** — select a video clip to play and control the playout of the video clip.
- **Simple Source** — display the output from a computer.

Controlling a PTZ Camera

The Source Control panel enables you to control the camera in the Multiviewer panel PGM pane or the shot in the selected PV pane. You can select a source for camera control from the Multiviewer panel or the Preview section of the Source Control panel. You can control a camera in the following ways using the Source Control panel controls, keyboard shortcuts, or a joystick:

- **Pan** — horizontally rotate the camera right or left.
- **Tilt** — vertically rotate the camera up or down.
- **Zoom** — change the focal length of the lens to make the image larger or smaller.
- **Focus** — adjust the camera lens to produce a clear image.
- **Iris** — control the amount of light passing through the lens.

For More Information on...

- configuring keyboard shortcuts, refer to the section "**Creating Shortcut Groups**" on page 7–18.
- selecting a joystick for source control, refer to the section "**Selecting a Joystick for Source Control**" on page 3–11.

To control the camera used by a selected source

1. In the side navigation, click the **SOURCE CONTROL** icon.

   The **Source Control** panel opens.

   After opening the **Source Control** panel, you can position it to best suit your workflow.

2. In the **Multiviewer** panel, select the **PGM** or **PV** pane that is using the camera that you want to control. You can also use the **Source** buttons in the **Preview** section of the **Source Control** panel to select the camera to control.

   Quorum adds the **Source Control** icon to the selected **PGM** or **PV** pane to indicate the camera under your control.

3. Pan the camera right or left in the horizontal axis using one of the following methods:

   - **Source Control panel** — in the **Pan/Tilt** section, click and drag the **crosshair handle** to the right to horizontally rotate the camera to the right. Drag the **crosshair handle** to the left to horizontally rotate the camera to the left. The farther you drag the **crosshair handle** from the center of the **Pan/Tilt** section, the faster the camera moves.

     At the required camera position, release the mouse button. The **crosshair handle** returns to the center of the **Pan/Tilt** section.
   - **Keyboard Shortcut** — press the **key** assigned to the **Pan right** command to horizontally rotate the camera to the right. Press the **key** assigned to the **Pan left** command to horizontally rotate the camera to the left.
   - **Joystick** — use the **axis** assigned to the **Pan right** command to horizontally rotate the camera to the right. Press the **axis** assigned to the **Pan left** command to horizontally rotate the camera to the left.

4. Tilt the camera up or down in the vertical axis using one of the following methods:

   - **Source Control panel** — in the **Pan/Tilt** section, click and drag the **crosshair handle** upwards to vertically rotate the camera up. Drag the **crosshair handle** downwards to vertically rotate the camera down. The farther you drag the **crosshair handle** from the center of the **Pan/Tilt** section, the faster the camera moves.

     At the required camera position, release the mouse button. The **crosshair handle** returns to the center of the **Pan/Tilt** section.
   - **Keyboard Shortcut** — press the **key** assigned to the **Tilt up** command to vertically rotate the camera upwards. Press the **key** assigned to the **Tilt down** command to vertically rotate the camera downwards.
   - **Joystick** — use the **axis** assigned to the **Tilt up** command to vertically rotate the camera upwards. Use the **axis** assigned to the **Tilt down** command to vertically rotate the camera downwards.

5. Zoom in or out on the mark using one of the following methods:

   - **Source Control panel** — in the **Zoom** section, click and drag the **slider** to the right to zoom in on the mark. Drag the **slider** to the left to zoom out from the mark. The farther you drag the **slider** from the center of the **Zoom** section, the faster the camera zooms.

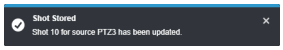
     At the required zoom level, release the mouse button. The **slider** returns to the center of the **Zoom** section.
   - **Keyboard Shortcut** — press the **key** assigned to the **Zoom in** command to zoom in on the mark. Press the **key** assigned to the **Zoom out** command to zoom out from the mark.
   - **Joystick** — press the **button** assigned to the **Zoom in** command to zoom in on the mark. Press the **button** assigned to the **Zoom out** command to zoom out from the mark.

6. Focus on a mark using one of the following methods:
   - **Source Control panel** — in the **Focus** section, click and drag the **slider** to the right to focus on marks that are far from the camera. Drag the **slider** to the left to focus on marks that are near to the camera. The farther you drag the **slider** from the center of the **Focus** section, the faster the camera focuses.

     At the required focus distance, release the mouse button. The **slider** returns to the center of the **Focus** section.
   - **Keyboard Shortcut** — press the **key** assigned to the **Focus far** command to focus on marks that are far from the camera. Press the **key** assigned to the **Focus near** command to focus on marks that are near to the camera.
   - **Joystick** — press the **button** assigned to the **Focus far** command to focus on marks that are far from the camera. Press the **button** assigned to the **Focus near** command to focus on marks that are near to the camera.
7. Control the amount of light passing through the camera lens using one of the following methods:
   - **Source Control panel** — in the **Iris** section, click and drag the **slider** to the right to open up the camera iris and increase the amount of light that passes through the camera lens. Drag the **slider** to the left to close down the camera iris and reduce the amount of light that passes through the camera lens. The farther you drag the **slider** from the center of the **Iris** section, the faster the camera lens iris changes.

     At the required iris setting, release the mouse button. The **slider** returns to the center of the **Iris** section.
   - **Keyboard Shortcut** — press the **key** assigned to the **Iris open** command to open up the camera iris and increase the amount of light that passes through the camera lens. Press the **key** assigned to the **Iris close** command to close down the camera iris and reduce the amount of light that passes through the camera lens.
   - **Joystick** — press the **button** assigned to the **Iris open** command to open up the camera iris and increase the amount of light that passes through the camera lens. Press the **button** assigned to the **Iris close** command o close down the camera iris and reduce the amount of light that passes through the camera lens.
8. To return the camera position to the **Shot #** selected for the source you are controlling, click **Recall Original Shot**.
9. To update the **Shot #** selected for the source you are controlling with the current camera position, click **Store Shot**.

   An **Alert** opens to inform you of the shot change.



Playing Clips from Video Servers

The Clip Player panel enables you to load video clips from a video server and then play them in your production. Selecting the Clip Player mark in the Room panel enables you to take video clips loaded in the Clip Player panel on-air.

✶ Before you can use the Clip Player panel in a room, it must be configured for the room. For information on how to configure the Clip Player panel for a room, refer to the section "**Defining Sources**" on page 6–3.

To play a video clip

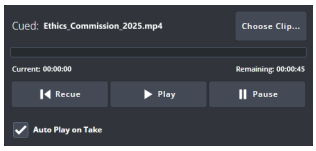
1. In the side navigation, click the **SOURCE CONTROL** icon.

   The **Source Control** panel opens.

   After opening the **Source Control** panel, you can position it to best suit your workflow.
2. In the **Room** panel, select the **mark** associated with the video server that contains the clips that you want to play in your production.

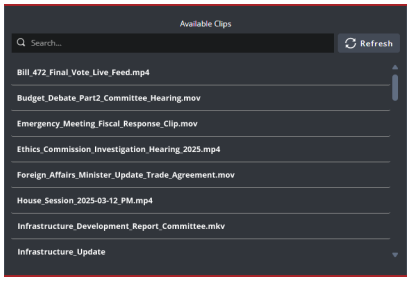
The border of the selected clip player **mark** turns green to show that the clip player is in preview.

The **Source Control** panel **Preview** section displays the Clip Player controls.



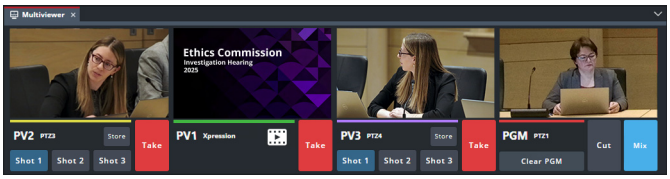
3. Select how to start playing a clip when you take it on-air using the **Auto Play on Take** check box as follows:
   - **Automatic** — select the **Auto Play on Take** check box to automatically play a clip when you take it on-air.
   - **Manual** — clear the **Auto Play on Take** check box to use the playout controls to manually play a clip after you take it on-air.
4. Click **Choose Clip**.

   The **Available Clips** list opens.

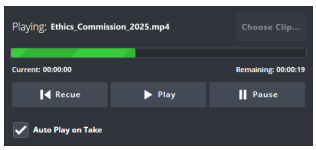


5. In the **Available Clips** list, click the clip to play. You can filter the **Available Clips** list by typing any part of a clip name in the **Search** box. As you enter a clip name, the list automatically updates to only show the clips that match what you have entered.

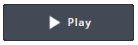
   A **PV** pane in the **Multiviewer** panel displays the selected clip.



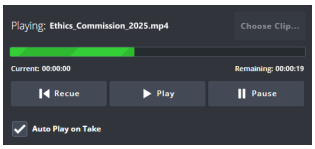
The top of the **Clip Player** panel displays status information about the selected clip.

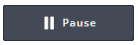


6. In the **Clip Player** panel, use the playout controls to view the selected clip in a **PV** pane.

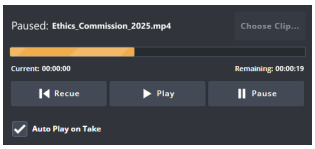
- 

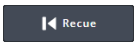
— click the **Play** button to play the clip.



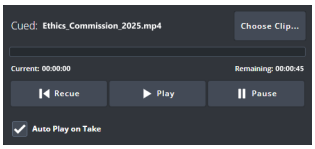
- 

— click the **Pause** button to pause the playing clip. To resume playing the clip, click the Play button. Clips paused at a timecode in the **PV** pane will start playing from the paused timecode when taken on-air.



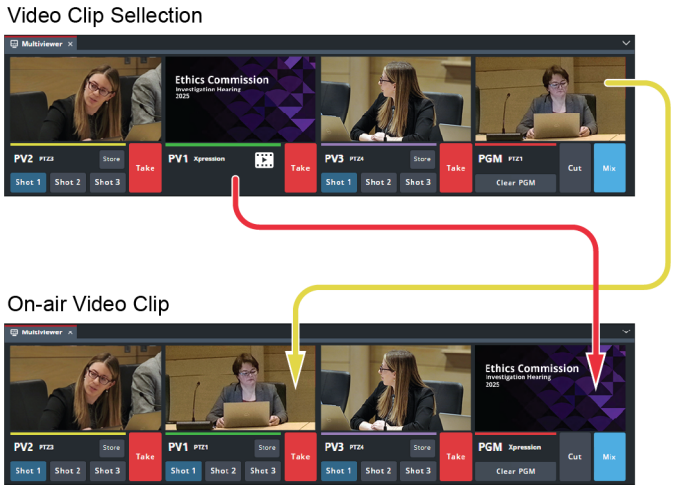
- 

— click the **Recue** button to recue the clip to the start.

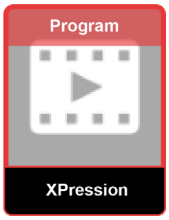


7. In the **PV** pane displaying the clip to take on-air, click the **Take** button.

   Quorum takes the selected clip on-air and displays it in the **PGM** pane. The previous on-air shot is placed into preview.



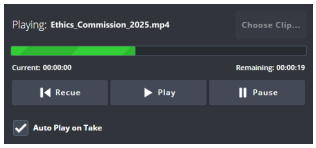
In the **Room** panel, the border of the selected clip player **mark** turns red to show that the clip player is on-air.



✶ While a clip is on-air, you cannot preview other clips. You must take an attendee or other mark on-air before you can once again preview clips, which stops you from playing two clips back-to-back.

8. When the **Auto Play on Take** check box is selected in the **Clip Player** panel, the clip automatically starts playing when you take it on-air. When the **Auto Play on Take** check box is cleared, you must click the **Play** button to manually start playing the on-air clip.

   Clips paused at a timecode in the **PV** pane will start playing from the paused timecode when taken on-air.



9. Use the playout controls in the **Clip Player** panel to Play, Pause, or Recue the on-air clip.

Controlling Simple Sources

A Simple source enables you to display the output from a computer in your Quorum meeting. Since there are no Quorum controls for this source type, you must control the computer output from the computer.

Running Graphics Sequences Manually

The Graphics panel enables you to manually run graphics sequences from the Ross Video XPression graphics system. When you select a graphic from the Graphics panel to run in a Preview or PGM pane, Quorum sends a request to XPression to run the selected graphics sequence. You can run a graphics sequence in the PV pane to see how it looks and behaves, and then run it in the PGM pane to take it on-air.

✶ Ross Video recommends that you practice running graphic sequences before a broadcast, to familiarize yourself with their behavior. Each graphic is designed individually, and may behave in very different ways.

Some graphics sequences automatically turn on and off without operator intervention. Other graphics sequences are designed to turn on when you first click the graphic button, and then turn off when you click the graphic button once again. The behavior of a graphics sequence depends on how it was designed in XPression. For information about how to create XPression graphics sequences, refer to the ***XPression User Guide***.

When you take a shot on-air, it has no effect on currently running manually-operated graphics sequence. The PGM pane continues running the graphics sequences when the new shot is taken on-air. If your Quorum system is configured to run automated graphic sequences when a shot is taken on-air, the automated graphics sequence associated with the new shot taken on-air will replace the running manually-operated graphics sequence.

Your Quorum system can be configured to automatically run graphics sequences when a shot is taken on-air. Automatically run graphics sequences can be turned off in the System Configuration window.

✶ If you do not want the automated graphics to run, you can turn them off for a room using the **Auto Graphics** button in the room toolbar.

For More Information on...

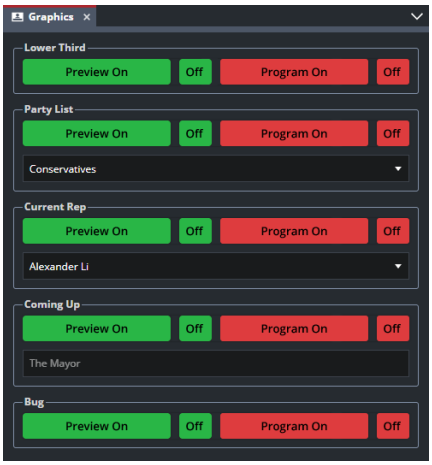
- controlling graphics sequence automation, refer to the section "**Adding Graphics**" on page 7–29.

To manually run a graphics sequence

1. In the **Room** panel toolbar, click **OFF** for the **Auto Graphics** control.

2. In the **side navigation**, click the **GRAPHICS** icon.

   The **Graphics** panel opens.



   After opening the **Graphics** panel, you can position it to best suit your workflow.

3. In the **Graphics** panel, locate the section containing the controls for the graphics sequence to run.

4. For graphics sequences that accept data, specify the data by entering it in the provided **box** or selecting from the provided **list**.

5. To run the graphics sequence, use the following buttons:

   - Preview On — click this button to run the graphics sequence in the **PV** pane.
   - Program On — click this button to run the graphics sequence in the **PGM** pane.

   Ross Video recommends running your graphics sequences in the **PV** pane before running them in the **PGM** pane.

6. To turn off a graphics sequence, use the following buttons:

   - Off — click this button to turn off the graphics sequence in the **PV** pane.
   - Off — click this button to turn off the graphics sequence in the **PGM** pane.

   Ross Video recommends running your graphics sequences in the **PV** pane before running them in the **PGM** pane.

7. When you have multiple graphics sequences running in a **PV** or the **PGM** pane, use the following **Multiviewer** panel buttons clear all running graphics sequences:

   - **Clear PV** — click this button to clear all graphics sequences running in the **PV** pane.
   - **Clear PGM** — click this button to clear all graphics sequences running in the **PGM** pane.

For More Information on...

- positioning panels in the Quorum user interface, refer to the section "**User Interface Layout**" on page 3–2.

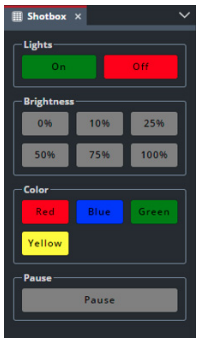
Running Custom Controls

Through the Shotbox panel, you can run custom controls to control the switcher, graphics system, and other devices in your Quorum system. Custom controls are created and stored on the Caprica Server in your Quorum system. Any custom control on your Quorum Caprica Server can be added to the Shotbox.

To run a custom control from Quorum

1. In the **side navigation**, click the **SHOTBOX** icon.

   The **Shotbox** panel opens displaying the available custom controls.



   After opening the **Shotbox** panel, you can position it to best suit your workflow.

2. At the point in your production that you want to run a custom control, click the **custom control** button in the **Shotbox** panel.

   The behavior of the custom controls in your **Shotbox** panel is specific to your Quorum system. Contact your Quorum system administrator for more information about your custom controls.

For More Information on...

- creating custom controls in Caprica, refer to the ***Caprica User Guide for Quorum***.
- assigning custom controls to Shotbox buttons, refer to the section "**Adding Custom Controls to the Shotbox Panel**" on page 7–32.
- positioning panels in the Quorum user interface, refer to the section "**User Interface Layout**" on page 3–2.

Recording a Meeting

You can record the meetings broadcasts from your Quorum system on a Media I/O Server thanks to the close interaction between the Ross Video Quorum and Video Media I/O products.

★ Before you can record meetings, the Media I/O Connection and Media I/O Configuration must be set on your Quorum system.

For More Information on...

- setting the Media I/O Connection, refer to the section "**Configuring a Media I/O Connection**" on page 7–42.
- setting the Media I/O Configuration, refer to the section "**Defining the Media I/O Configuration**" on page 7–44.

To record a meeting

1. Open a **room** for the meeting to record.
2. In the open room, open the **meeting** to record.
3. Connect the room to a **switcher destination**.

   Quorum adds the following meeting recording controls to the **Room** panel toolbar:

   - **Status** — this field displays the current recording state for the room. The available states are as follows:
     - › IDLE — the Media I/O Server channel configured for the switcher destination is available for recording.
     - › RECORDING — a recording is in progress on the Media I/O Server channel configured for the switcher destination.
     - › ERROR — the Media I/O Server directory and codec combination associated with the switcher destination is not valid. Check that the Media I/O Server is running as well as the correctness of the Media I/O Output setting in the Media I/O Configuration panel.
     - › DISCONNECTED — Quorum is unable to communicate with the Media I/O Server. Check that the Media I/O Server is running as well as the correctness of your Media I/O Connection and Media I/O Configuration settings.
   - **Record** — click this button to start recording the meeting. This button is only available when the Media I/O Server channel configured for the switcher destination is available for recording.
   - **Stop** — click this button to stop recording the meeting. This button is only available while a room recording is in progress.
4. When you want to start recording the meeting, click **Record** in the toolbar.

   The **Record** button changes to **Stop**, and the **Status** changes to **RECORDING**.
5. When you want to stop recording the meeting, click **Stop** in the toolbar.

   The **Record** button changes to **Record** and the status changes to **IDLE**.

   You can also control a room recording from the Media I/O Server. The **Record** button and **Status** field automatically update when the recording is started or stopped from a Media I/O server.

Online Meetings

Quorum online meeting agents enable attendees participating in an online meeting through an external application to join a Quorum meeting. During a Quorum meeting, Online attendees can also stream content to the meeting.

This chapter discusses the following topics:

- Online Meeting Workflow
- Authorizing an Online Meeting Agent
- Connecting to an Online Meeting
- Taking Online Attendees or Streamed Content On-Air

Online Meeting Workflow

Once you configure Quorum to connect with an external application, you can manage online attendees as if they were sitting in your meeting venue.

The main steps in the online meeting workflow are as follows:

1. Authorize an online meeting agent.

   For more information, refer to the procedure "**Authorizing an Online Meeting Agent**" on page 5–2.

2. Connect to an online meeting. Only a single meeting on a Quorum Server can connect to an online meeting.

   For more information, refer to the section "**Connecting to an Online Meeting**" on page 5–5.

3. Take online attendees or online meeting stream on-air.

   For more information, refer to the section "**Taking Online Attendees or Streamed Content On-Air**" on page 5–6.

Authorizing an Online Meeting Agent

Before online attendees in an external meeting can join meetings on your Quorum Server, you must authorize an online meeting agent to connect Quorum to the external application. Through a meeting agent, attendees in a Zoom meeting can join a meeting on your Quorum Server.

To configure a meeting agent

1. Log in to **Quorum**.

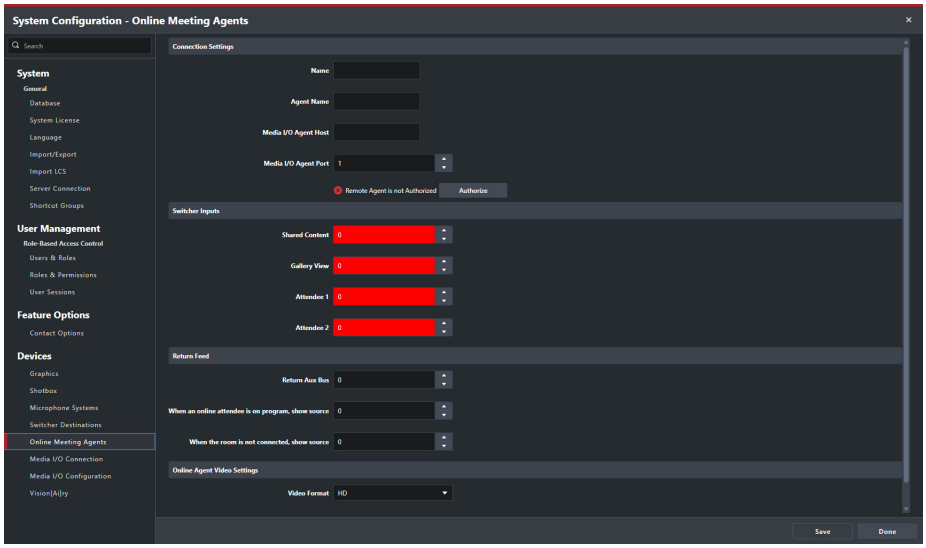
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **Devices** section of the side navigation, click **Online Meeting Agents**.

   The **Online Meeting Agents** panel opens.



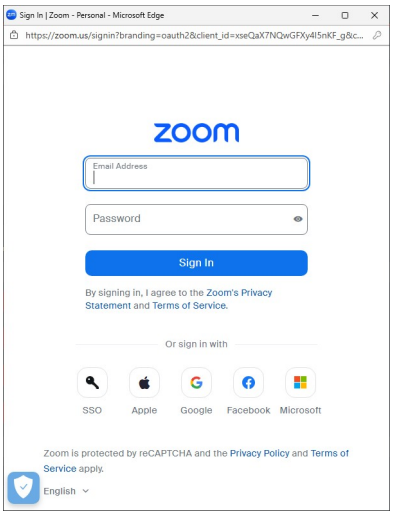
4. In the **Connection Setting** section, enter a name for the connection in the **Name** box.

5. In the **Agent Name** box, enter a name for the online meeting agent.

   The name entered in the **Agent Name** box will be the title of the Quorum meeting room view in the external application.

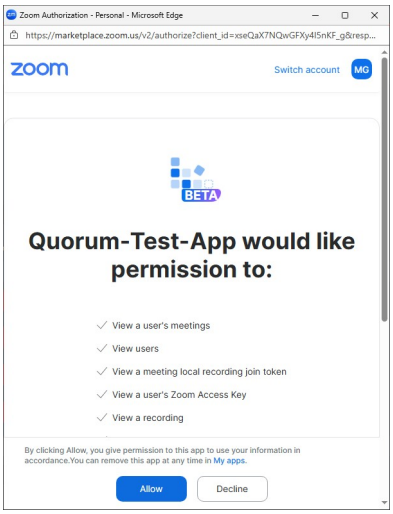
6. In the **Media I/O Agent Host** box, enter the IP address of the Media I/O Server for the online meeting agent.
7. Use the **Media I/O Agent Port** box to enter or select the port number that the Media I/O Server uses to communicate with the online meeting agent.
8. Authorize your Quorum Server to connect to a **Zoom** meeting application as follows:
   a. Click **Authorize**.

      The **Sign In | Zoom** web page opens. If you are currently logged in to your Zoom account, continue with step **c**.



   b. Log in to your **Zoom** account.

      After you successfully log in to your **Zoom** account, the **Zoom Authorization** web page opens.



   c. In the **Zoom Authorization** web page, click **Allow**.

      Zoom authenticates Quorum to connect to Zoom meetings and displays a success message. The Quorum **Authorize** button changes to **Log Out**, and the status changes to **Remote Agent is Authorized**.
   d. Close the **Zoom Authenticated with Quorum** window.
9. In the **Switcher Inputs** section, use the **Shared Content** box to enter or select the switcher input to receive content shared from the external application.
10. Use the **Gallery View** box to enter or select the switcher input to receive the gallery view from the external application.

11. Use the **Attendee 1** box to enter or select the switcher input to receive the video stream of an attendee from the external application.

    Quorum switches this switcher input with the switcher input set in the **Attendee 1** box to switch online attendees between **Preview** and **Program**.

12. Use the **Attendee 2** box to enter or select the switcher input to receive the video stream of an attendee from the external application.

    Quorum switches this switcher input with the switcher input set in the **Attendee 2** box to switch online attendees between **Preview** and **Program**.

13. In the **Return Feed** section, use the **Return Aux Bus** box to enter or select the aux bus number that Quorum uses to feed the meeting **Program** back to the external application.

14. Use the **When an online attendee is on program show source** box to enter or select the switcher source to show in the external application meeting when an online attendee is on Program.

15. Use the **When the room is not connected, show source** box to enter or select the switcher source to show in the external application meeting when the Quorum local room is not connected.

16. In the **Online Agent Video Settings** section, use the **Video Format** list to select the video format for the NDI stream that Quorum receives from the Media I/O Server.

17. Use the **Video Frame Rate** list to select the video frame rate for the NDI stream that Quorum receives from the Media I/O Server.

18. Click **Done** when you want to close the **System Configuration** window.

    When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Deauthorize an Online Meeting Agent

When you want to disconnect your Quorum Server from an online meeting agent or use a different remote meeting application account, log out of the remote meeting application. Logging out of the remote meeting application deauthorizes it from Quorum.

To deauthorize a meeting agent

1. Log in to **Quorum**.

   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

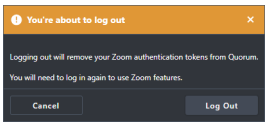
   The **System Configuration** window opens.

3. In the **Devices** section of the side navigation, click **Online Meeting Agents**.

   The **Online Meeting Agents** panel opens.

4. In the **Connection Settings** section, click **Log Out**.

   The **You're about to log out** alert opens.



5. Click **Log Out**.

   Quorum deauthorizes the Zoom application. The Quorum **Log Out** button changes to **Authorize**, and the status changes to **Remote Agent is not Authorized**.

   When you log out of the Zoom application, Quorum deletes all Zoom-related information from the database that relates to the authorized user, including any attendee information and access refresh tokens. Quorum also revokes the user's access token. You must log back in to the Zoom application to use remote meeting application features again.

6. Click **Done** when you want to close the **System Configuration** window.

   When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Connecting to an Online Meeting

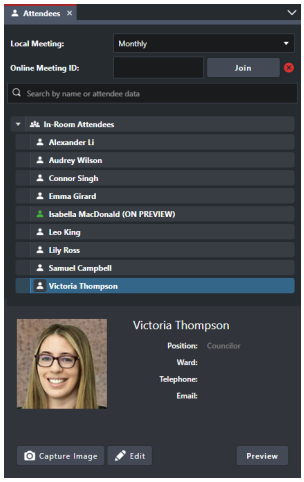
Meeting IDs are used to connect a Quorum meeting to an online meeting.

✶ Only a single meeting on a Quorum Server can connect to an online meeting.

To connect to an online meeting

1. Open a **Quorum room** to host your meeting.
2. Open a **meeting** to add local attendees to your meeting.
3. If the **Attendees** panel is not open, click the **ATTENDEES** icon in the side navigation to open it.

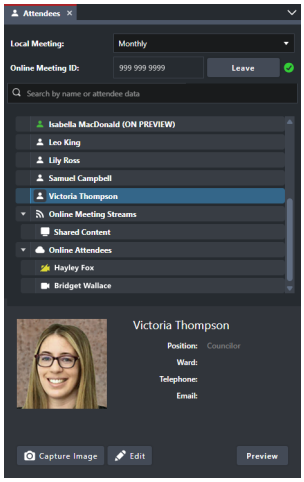
   The **Attendees** panel opens.



4. In the **Online Meeting ID** box, enter the **ID** of the meeting to join on the external application.
5. Click **Join**.

   Quorum joins the selected online meeting and adds the online meeting attendees to the **Online Attendees** node in the **Attendees** panel. As new attendees join the online meeting, they are automatically added to the **Online Attendees** node.

6. Expand the **Online Attendees** node to view the current attendees in the online meeting.



As attendees join or leave the online meeting, they are automatically added to or removed from the **Online Attendees** node. In the online meeting, attendees can view the on-air feed from Quorum room.

Taking Online Attendees or Streamed Content On-Air

After connecting to an online meeting, you are ready to include online attendees and streamed content in your production. You can select the online attendee to take on-air from the Attendees panel. You can also select shared content streamed from the online meeting to take on-air.

Online Attendees

The Online Attendees node in the Attendees panel lists the current attendees in the online meeting. As attendees join or leave the online meeting, they are automatically added to or removed from the **Online Attendees** node.

To take online attendees on-air

1. In the **Attendees** panel, expand the **Online Attendees** node to view the current attendees in the online meeting.
2. Use the **Online Attendees** node list to select an **online attendee** to put in preview.

   The **Attendees** panel displays information about the selected online attendee. The icon and color of the icon to the left of an attendee name shows the attendee status as follows:

   - **Preview** — the online attendee is in preview.
   - **Program** — the online attendee is on-air.
   - **None** — the online attendee is neither in preview nor on-air.
   - **Camera Off** — the remote camera for the online attendee is turned off.
3. Click **Preview**. You can also double-click an online attendee to put the attendee in preview.

   The **Multiviewer** panel displays the selected online attendee in a **PV** pane.
4. In the **PV** pane displaying the online attendee to take on-air, click the **Take** button.

   Quorum takes the online attendee on-air and displays it in the **PGM** pane. The previous on-air shot is placed into preview.

Online Meeting Streams

The Online Meeting Streams node in the Attendees panel gives you access to shared content from the online meeting.

To take an online meeting stream on-air

1. In the online meeting, have an attendee share the content to stream to the Quorum production.
2. In the **Attendees** panel, expand the **Online Meeting Streams** node.

   The color of the icon to the left of the **Shared Content** item shows the item status as follows:

   - **Preview** — the item is in preview.
   - **Program** — the item is on-air.
   - **None** — the item is neither in preview nor on-air.
3. In the **Online Meeting Streams** node, select **Shared Content**.
4. Click **Preview**. You can also double-click **Shared Content** to put the online meeting stream in preview.

   The **Multiviewer** panel displays the online meeting stream in a **PV** pane.
5. In the **PV** pane displaying the online meeting stream to take on-air, click the **Take** button.

   Quorum takes the online meeting stream on-air and displays it in the **PGM** pane. The previous on-air shot is placed into preview.

Managing Your Venue

Meeting rooms, meetings, and attendees are unique to the venue from which you will use Quorum to broadcast meetings. You must first add possible meeting attendees to your address book before you can add them to your meetings. From your address book, you can select attendees for a meeting. After you create a meeting, you can open it in a room for broadcast.

This chapter discusses the following topics:

- Managing Rooms
- Managing Contacts
- Managing Meetings
- Using the Room Panel to Assign Contacts to Marks
- Using the Room Panel to Edit a Room

Managing Rooms

In Quorum, it all starts with your room, the central part to running a meeting broadcast. The Room panel displays a photo or map of the meeting venue, overlaid with camera and mark icons. Marks are targets for camera shots. A mark icon indicates the position of an attendee, podium, or other important locations.

Creating Rooms

A Quorum room defines the marks, automation, and sources used to broadcast a meeting from a physical room in your venue. Rooms are created from the Room Manager panel.

To create a room

1. In the **side navigation**, hover the mouse pointer over the **ROOMS** icon.

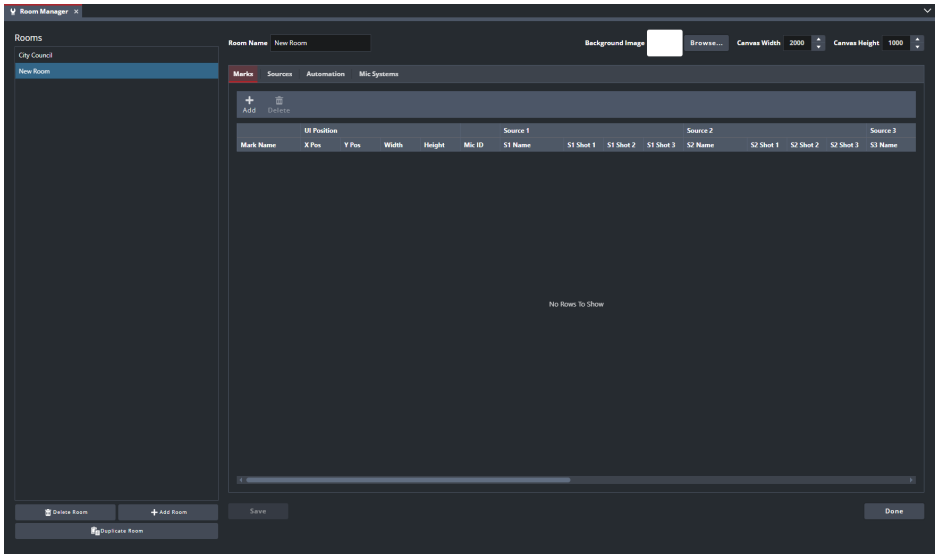
   The **ROOMS** list opens.

2. Use the **ROOMS** list to select **ROOM MANAGER**.

   The **Room Manager** panel opens. After opening the **Room Manager** panel, you can position it to best suit your workflow.

3. At the top of the **Rooms** list, click **Add**.

   A new room opens in the **Room Manager** panel.



4. In the **Room Name** box, enter a name for the new room.
5. Click **Browse** to the right of the **Background Image** field.

   The **Open** dialog box opens.

6. Use the **Open** dialog box to select a background image for the room.
7. Click **Open**.

   The **Open** dialog box closes, and the **Room Manager** panel displays a thumbnail of the selected room background image in the **Background Image** field.

8. Use the **Canvas Width** box to enter or select the width of the room canvas in pixels.

9. Use the **Canvas Height** box to enter or select the height of the room canvas in pixels.
10. Click **Save**.

    Quorum adds the new room to the **Rooms** list.

For More Information on...

- positioning panels in the Quorum user interface, refer to the section "**User Interface Layout**" on page 3–2.

Editing a Room

You can edit a room any time the room is not being used to broadcast a meeting.

To edit a room

1. In the **Room Manager** panel, use the **Rooms** list to select the room to edit.

   The **Room Manager** panel displays the settings for the selected room.
2. Edit room settings as required.
3. Click **Save**.

   Quorum saves the updated room settings.

Deleting a Room

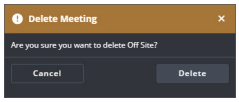
When you no longer require a room, you can delete it from the **Room Manager** panel.

To delete a room

1. In the **Room Manager** panel, use the **Rooms** list to select the room to edit.

   The **Room Manager** panel displays the settings for the selected room.
2. At the top of the **Rooms** list, click **Delete**.

   The **Delete Room** alert opens.



3. Click **Delete** to delete the selected room or **Cancel** to keep it.

   The **Delete Room** alert closes. When you clicked **Delete**, Quorum deletes the selected room from the **Rooms** list.

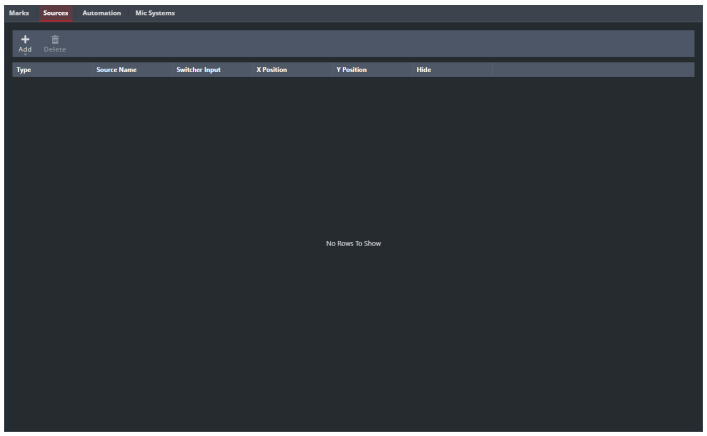
Defining Sources

Each camera in a room is defined as a source. You can also define sources for clip players or simple sources like a computer output. The definition of a source includes the type, name, switcher input, and room canvas location of the source. The sources defined in the Sources tab are used in the Marks tab to set the source for a mark.

To define a source

1. In the **Room Manager** panel with an open room, click the **Sources** tab.

   The **Sources** tab opens for the room.



2. In the **Sources** tab toolbar, use the **Add** list to select the type of source to add to a room. The type selected for a source sets how you can control the source. The available source types are as follows:

   - **Clip Player** — select a video clip to play and control the playout of the video clip.
   - **PTZ Camera** — position a camera using shots, the Source Control panel controls, keyboard shortcuts, or a controller.
   - **Simple Source** — display the output from a computer. There are no Quorum controls for this source type.

   Quorum adds a new source to the **Sources** tab and displays the source type in the **Type** column.

3. In the **Source Name** box enter a name for the source.
4. Use the **Switcher Input** box to enter or select the switcher input to which the source is connected.
5. Use the **X Position** box to enter or select the horizontal position in pixels for the source on the room canvas. The left side of the room canvas is pixel 0.
6. Use the **Y Position** box to enter or select the vertical position in pixels for the source on the room canvas. The top of the room canvas is pixel 0.

   After you save the sources for a room, you can use the **Room** panel **Editing Room** mode to drag sources to new positions on the room canvas.

7. If you want to hide the source icon from the room canvas, select the **Hide** check box. Clear this check box to display the source icon on the room canvas.
8. Add a source for each camera, clip player, or simple source available to the physical room at your venue.
9. Click **Save**.

   Quorum saves the sources defined for the room.

Editing a Source

You can edit the definition of room sources any time the room is not being used to broadcast a meeting.

To edit a room source

1. In the **Sources** tab of the **Room Manager** panel, locate the source to edit.
2. Edit source settings as required.
3. Click **Save**.

   Quorum saves the updated source settings.

Deleting a Source

When you no longer require a source in a room, you can delete it from the room.

To delete a source from a room

1. In the **Sources** tab of the **Room Manager** panel, select the source to delete.

   Quorum highlights the selected source.

2. In the **Sources** tab toolbar, click **Delete**.

   Quorum deletes the selected source from the **Sources** tab.

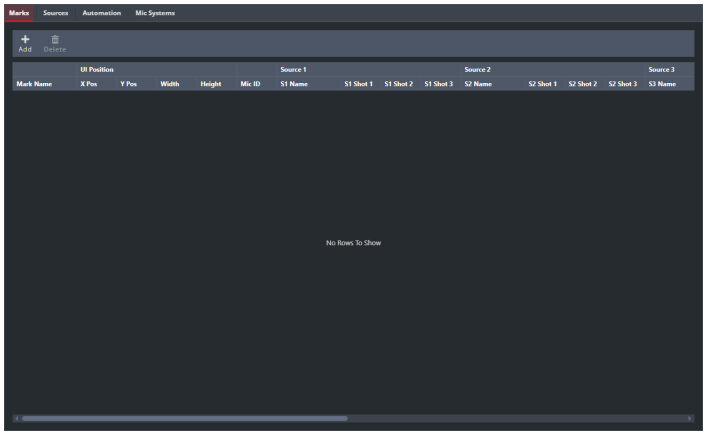
Setting Marks in a Room

Marks are targets for camera shots. A mark icon indicates the position of an attendee, podium, or other important locations. Marks are set in the Marks tab of the Room Manager panel.

To set marks for a room

1. In the **Room Manager** panel with an open room, click the **Marks** tab.

   The **Marks** tab opens for the room.



2. In the **Marks** tab toolbar, click **Add**.

   Quorum adds a new mark to the **Marks** tab.

3. In the **Mark Name** box, enter a name for the mark displayed on the room canvas.

4. In the **UI Position** section of the **Marks** table, use the following columns to set the position of the mark on the room canvas:
   - **X Position** — enter in this box the horizontal position in pixels for the mark on the room canvas. The left side of the room canvas is pixel 0.
   - **Y Position** — enter in this box the vertical position in pixels for the mark on the room canvas. The top of the room canvas is pixel 0.
   - **Width** — enter in this box the width in pixels of the mark icon.
   - **Height** — enter in this box the height in pixels of the mark icon.
5. When using a microphone system to select previews and/or trigger video transitions, enter the identifier of the microphone used by the mark in the **Mic ID** box.

   In **Semi** or **Full Mic Mode**, Quorum will automatically select the mark when the microphone used by the mark activates.
6. When setting sources for a mark, you must set **Source 1** first. After setting **Source 1**, you must set additional sources for the mark in the following sequence: **Source 2**, **Source 3**, then **Source 4**. Only set the **Sources** that you require for a mark.

   Complete the following steps to set **Source 1** for a mark:

   a. In the **Source 1** section of the **Marks** table, use the **S1 Name** list to select the first **source** for the mark. This list contains the sources set in the **Sources** tab.

      Once you select a **source**, do not select it for the other **Source #** sections of the mark.

   b. When the selected source is a **PTZ Camera**, use the following columns to select shot presets for the selected camera:
      - **S1 Shot 1** — enter in this box the shot preset number for shot 1.
      - **S1 Shot 2** — enter in this box the shot preset number for shot 2.
      - **S1 Shot 3** — enter in this box the shot preset number for shot 3.
7. In sequence, use the **Source 2**, **Source 3**, and **Source 4** sections to set additional sources for the mark. Only set the **Source #s** that you require for a mark. When you do not want to use a source for a mark, select **None** from the associated **S# Name** list.

   Do not select **None** from an **S# Name** list if a **source** is selected in the **S# Name** lists before and after it. For example:
   - **Correct**

S1 Name	S2 Name	S3 Name	S4 Name
Camera 1	Camera 3	Clip	None

   - **Incorrect**

S1 Name	S2 Name	S3 Name	S4 Name
Camera 1	Camera 3	None	Clip

8. Add a mark to the room for each meeting attendee position, podium, important location, clip players, or simple sources.
9. Click **Save**.

   Quorum saves the marks set for the room.

Editing a Mark

You can edit the settings of room marks any time the room is not being used to broadcast a meeting.

To edit a room mark

1. In the **Marks** tab of the **Room Manager** panel, locate the mark to edit.
2. Edit mark settings as required.
3. Click **Save**.

   Quorum saves the updated mark settings.

Deleting a Mark

When you no longer require a mark in a room, you can delete it from the room. Deleting a mark does not delete the contact information for the attendee associated with the mark.

To delete a mark from a room

1. In the **Marks** tab of the **Room Manager** panel, select the mark to delete.

   Quorum highlights the selected mark.

2. In the **Marks** tab toolbar, click **Delete**.

   Quorum deletes the selected mark from the **Marks** tab.

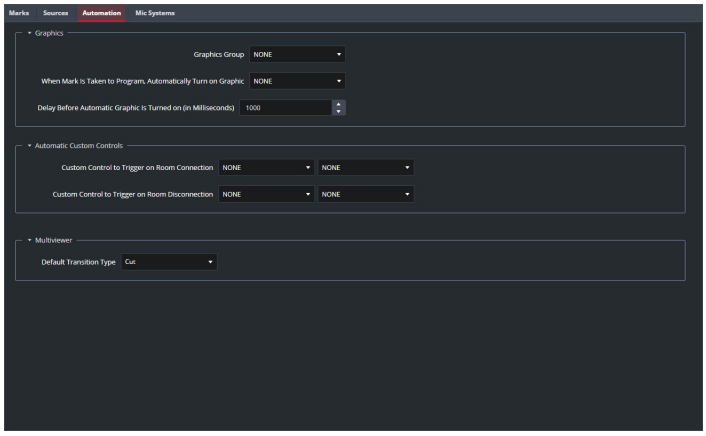
Configuring Automation

The Room Manager panel Automation tab contains automation settings for the graphics system, the microphone system, automatic custom controls, and the Multiviewer in your Quorum system.

To configure automation settings for your Quorum system

1. In the **Room Manager** panel with an open room, click the **Automation** tab.

   The **Automation** tab opens for the room.



2. The **Graphics** section contains the following automation settings:
   - **Graphics Group** — use this list to select the graphics group to load into the Graphics panel for the room. A graphics group contains XPression graphics configured in the Graphics panel of the System Configuration window. Only one room at a time can use a graphics group for broadcast.
   - **When Mark Is Taken to Program, Automatically Turn on Graphic** — use this list to select the graphic to automatically turn on when a mark is taken on-air. This list contains the graphics from the **Graphics** panel.

     Select **None** when you do not want to automatically display a graphic.
   - **Delay Before Automatic Graphic Is Turned on (in Milliseconds)** — use this box to enter or select the amount of time in Milliseconds to wait after a mark goes on-air before displaying the selected automatic graphic.

     Quorum only uses this setting when an automatic graphic is selected from the **When Mark Is Taken to Program, Automatically Turn on Graphic** list.
3. The **Automatic Custom Controls** section contains the following automation settings:
   - **Custom Control to Trigger on Room Connection** — use the two lists to the right of this option to select the Quorum system switcher custom control bank and button of the custom control to trigger when you connect to the room.
     - › **Bank** — use this list to select the custom control bank that contains the custom control button assigned to the custom control to trigger when you connect to the room. Select **None** to not trigger a custom control.
     - › **Button** — use this list to select the custom control button assigned to the custom control to trigger when you connect to the room. Select **None** to not trigger a custom control.
   - **Custom Control to Trigger on Room Disconnection** — use the two lists to the right of this option to select the Quorum system switcher custom control bank and button of the custom control to trigger when you disconnect from the room.
     - › **Bank** — use this list to select the custom control bank that contains the custom control button assigned to the custom control to trigger when you disconnect from the room. Select **None** to not trigger a custom control.
     - › **Button** — use this list to select the custom control button assigned to the custom control to trigger when you disconnect from the room. Select **None** to not trigger a custom control.
4. The **Multiviewer** section contains the following automation setting:
   - **Default Transition Type** — use this list to select the default method used by the **PGM** pane to transition a shot from preview to on-air. The available transitions are as follows:
     - › **Cut** — perform an instantaneous transition from the current on-air shot to the shot selected to go on-air.
     - › **Mix** — perform a gradual transition from the current on-air shot to the shot selected to go on-air.
5. Click **Save**.

   Quorum saves the automation settings for the room.
6. Click **Done**.

   The **Room Manager** panel closes. When the **Room Manager** panel contains unsaved changes, Quorum opens the **Unsaved Changes** alert so you can choose to save your changes.

Configuring Mic Systems

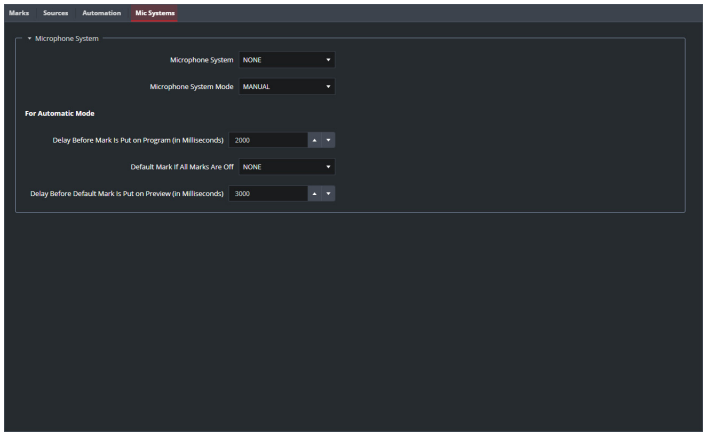
The Room Manager panel Mic Systems tab contains automation settings for the microphone system you use with your Quorum room.

✶ You can only configure microphone automation settings for Quorum rooms that are not currently connected to a destination.

To configure microphone automation settings for a Quorum room

1. In the **Room Manager** panel with an open room, click the **Mic Systems** tab.

   The **Mic Systems** tab opens for the room.



2. The **Microphone System** section contains the following automation settings:
   - **Microphone System** — use this list to select the microphone system used by the room.
   - **Microphone System Mode** — use this list to select the control mode for the microphone system. The available modes are as follows:
     - › **MANUAL** — do not take marks associated with the activated microphone to Preview or Program.
     - › **SEMI_AUTO** — take the mark associated with the activated microphone to Preview.
     - › **FULL_AUTO** — take the mark associated with the activated microphone to the PV1, then take it to Program after a specified time delay. When no microphones are activated for a specified time, take the default mark to Preview or Program.
   - **Delay Before Mark Is Put on Program** — use this box to enter or select the time in milliseconds to wait before automatically taking the mark associated with the activated microphone to Program.
   - **Default Mark If All Marks Are Off** — use this list to select the microphone to use when the microphones associated with marks are all turned off.
   - **Delay Before Default Mark Is Put on Preview** — use this box to enter or select the time in milliseconds to wait before automatically taking the default mark to Preview when the microphones associated with marks are all turned off.

3. Click **Save**.

   Quorum saves the automation settings for the room.

4. Click **Done**.

   The **Room Manager** panel closes. When the **Room Manager** panel contains unsaved changes, Quorum opens the **Unsaved Changes** alert so you can choose to save your changes.

Managing Contacts

You can manage the contacts who may be meeting attendees using the Contact Manager panel. New contacts can be added to your Quorum address book or you can import contacts from a Ross Video Legislative Control System.

Contact Photos

Contact photos (headshots) help identify attendees (**Figure 6.1**). Quorum displays contact photos in the Contact Manager panel, Attendees panel, and on mark icons in the Room panel. Contact photos are never used in on-air graphics.

Default Uploaded

Figure 6.1 Contact Photos

For the best performance and a consistent visual appearance, contact photo images should be square images no larger than 150 x150 pixels in size. Contact photo images can be .gif, .jpg, .jpeg, or .png format images.

✶ Ross Video recommends creating an `Images` folder in the Quorum installation folder to store your contact photos. The default Quorum installation folder is `C:\Program Files\Ross Video\RossQuorum\`.

Adding Contacts

Each contact in your Quorum address book has a first name, a last name, and a photo.

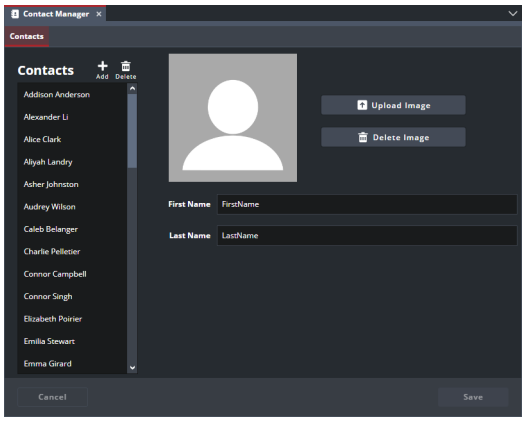
To add a contact to your address book

1. In the **side navigation**, click the **CONTACT MANAGER** icon.

   The **Contact Manager** panel opens. After opening the **Contact Manager** panel, you can position it to best suit your workflow.

2. At the top of the **Contacts** list, click **Add Contact**.

   Quorum adds a new contact to the **Contacts** list.



3. Click **Upload Image** to select an image from the **Open** dialog box for the contact photo.

   If the image you selected does not work for the contact, upload another image for the contact or click **Delete Image** to display the default image for the contact.

4. In the **First Name** box, enter the first or proper name of the contact.
5. In the **Last Name** box, enter the last or family name of the contact.
6. Enter information for the **custom information fields** in the **Contact Manager**.
7. Click **Save**.

   Quorum adds the new contact to the **Contacts** list.

For More Information on...

- positioning panels in the Quorum user interface, refer to the section "**User Interface Layout**" on page 3–2.

Editing a Contact

You can edit the information for an existing contact in your Quorum address book at any time.

To edit a contact in your address book

1. In the **Contact Manager** panel, use the **Contacts** list to select the contact to edit.

   The **Contact Manager** panel displays information about the selected contact.

2. Edit contact information as required.
3. Use one of the following options to change the contact photo:
   - **New Photo** — click **Upload Image** to select a different image as the contact photo.
   - **Default Photo** — click **Delete Image** to set the default image as the contact photo.
4. Click **Save**.

   Quorum saves the updated contact information.

Deleting a Contact

When you no longer require a contact as meeting attendee, you can delete them.

✶ Deleting a contact that is still an attendee in a meeting also deletes that attendee from the meeting.

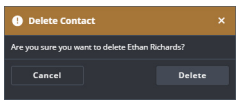
To delete a contact from your address book

1. In the **Contact Manager** panel, use the **Contacts** list to select the contact to delete.

   The **Contact Manager** panel displays information about the selected contact.

2. At the top of the **Contacts** list, click **Delete Contact**.

   The **Delete Contact** alert opens.



3. Click **Delete** to delete the selected contact or **Cancel** to keep it.

   The **Delete Contact** alert closes. When you clicked **Delete**, Quorum deletes the selected contact from the **Contacts** list.

Importing Contacts

You can import contacts from the following file types into the Contact Manager:

- **Representative** — contacts exported from a Ross Video Legislative Control System. Importing a Representative file is part of migrating from a Ross Video Legislative Control System to Ross Video Quorum. For information on importing contacts from a Representative file, refer to the section "**Importing Data from a Ross Video Legislative Control System**" on page 7–16.
- **Taiden** — contacts exported from a Taiden meeting into an XML file. For information on importing contacts from an XML file, refer to the section "**Importing Taiden Contacts into Quorum**" on page 7–11.
- **CSV** — contacts contained in a comma-separated values (CSV) file. For information on importing contacts from a CSV file, refer to the section "**Importing Contacts into Quorum**" on page 7–13.

Managing Meetings

In Quorum, a meeting sets the attendees and their position in a room for a meeting broadcast. You can create multiple meetings for a room, but a meeting can only be used in the room for which it was created.

Creating Meetings

Meetings are created for the room open in the Room panel.

To create a meeting

1. In the **side navigation**, hover the mouse pointer over the **ROOMS** icon.

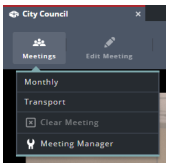
   The **ROOMS** list opens.

2. Use the **ROOMS** list to select the room for which you want to create a meeting.

   The selected room opens in a **Room** panel. After opening the **Room** panel, you can position it to best suit your workflow.

3. In the **Room** panel, click **Meetings** in the toolbar.

   The **Meetings** list opens and displays list of available meetings for the current room.

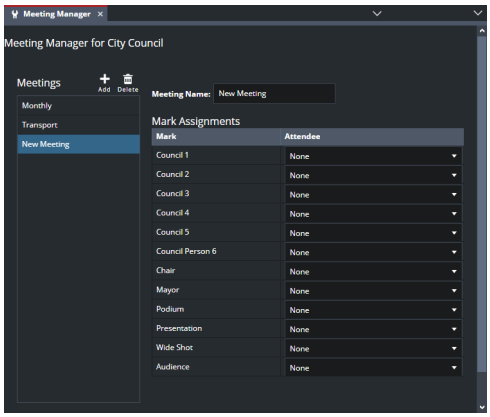


4. Use the **Meeting** list to select **Meeting Manager**.

   The **Meeting Manager** panel opens for the room. After opening the **Meeting Manager** panel, you can position it to best suit your workflow.

5. At the top of the **Rooms** list, click **Add**.

   Quorum adds a new meeting to the **Meetings** list. The meeting lists the marks set for the room.



6. In the **Meeting Name** box, enter a name for the new meeting.
7. For each **Mark** use the **Attendee** list to select a contact for the mark. You can start typing a contact in the **Attendee** box to filter the **Attendee** list to only the attendees that match what you type.

   Select **None** if you do not want to assign an attendee to a mark.
8. Click **Save**.

   Quorum saves the attendee and mark assignments for the room.

For More Information on...

- positioning panels in the Quorum user interface, refer to the section "**User Interface Layout**" on page 3–2.

Editing a Meeting

You can edit a meeting any time the meeting is not being used in a broadcast.

To edit a meeting

1. In the **Meeting Manager** panel, use the **Meetings** list to select the meeting to edit.

   The **Meeting Manager** panel displays the meeting name and attendee assignments for the selected meeting.
2. Edit the meeting name and/or attendee assignments as required.
3. Click **Save**.

   Quorum saves the updated meeting.

Deleting a Meeting

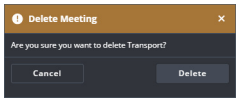
When you no longer require a meeting for a room, you can delete the meeting from the room.

To delete a meeting

1. In the **Meeting Manager** panel, use the **Meetings** list to select the meeting to delete.

   The **Meeting Manager** panel displays information about the selected meeting.
2. At the top of the **Meetings** list, click **Delete**.

   The **Delete Meeting** alert opens.



3. Click **Delete** to delete the selected meeting or **Cancel** to keep it.

   The **Delete Meeting** alert closes. When you clicked **Delete**, Quorum deletes the selected meeting from the **Meetings** list.

Using the Room Panel to Assign Contacts to Marks

If seating assignments in the meeting room change, you can open the room in the Room panel to assign contacts to the appropriate marks.

To use the Room panel to assign contacts to marks

1. In the **side navigation**, hover the mouse pointer over the **ROOMS** icon.

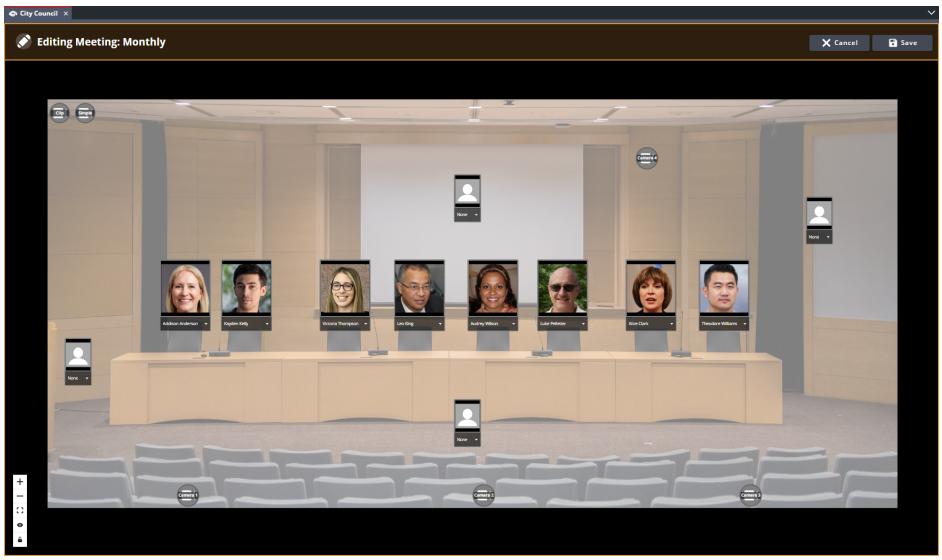
   The **ROOMS** list opens.

2. Use the **ROOMS** list to select the room in which you want to assign contacts to marks.

   The selected room opens in a **Room** panel. After opening the **Room** panel, you can position it to best suit your workflow.

3. In the **Room** panel, click **Edit Meeting** in the toolbar.

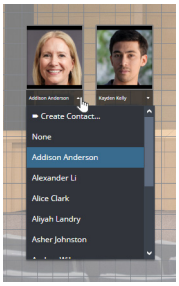
   The **Room** panel switches to **Editing Meeting** mode for the current room.



4. Locate the mark that you want to assign a contact or change the contact assignment.

5. Click the **menu arrow** to the right of the **mark name**.

   The **Contacts** list opens.



6. Use the **Contacts** list to select the contact to assign to the mark. Select **None** if you want to remove the contact from the mark.

   The mark displays the photo and name of the selected contact.

7. Continue assigning contacts to marks, as required.

8. In the upper right corner of the **Room** panel, click **Save**.

   Quorum saves the updated mark assignments, and turns off **Editing** mode.

For More Information on...

- positioning panels in the Quorum user interface, refer to the section "**User Interface Layout**" on page 3–2.

Creating a New Contact for a Mark

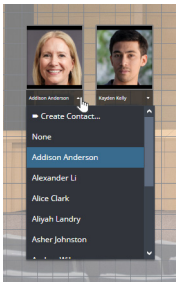
When the Contacts list does not contain the contact that you want to assign to a mark, you can create a new contact. The Create Contact item in the Contacts list enables you to create a new contact without leaving your current room editing session.

To create a new contact for a mark

1. While editing a room, locate the mark that you want to assign a contact or change the contact assignment.

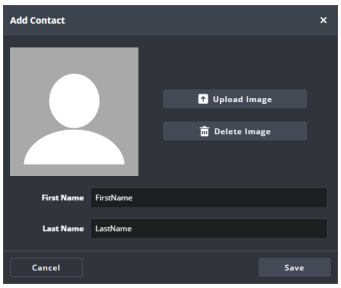
2. Click the **menu arrow** to the right of the **mark name**.

   The **Contacts** list opens.



3. Use the **Contacts** list to select Create Contact.

   The **Add Contact** dialog box opens.



4. In the **First Name** box, enter the first or proper name of the contact.

5. In the **Last Name** box, enter the last or family name of the contact.

6. In the box below the **Last Name** box, enter a description of the contact.

7. Enter information for the **custom information fields** in the **Contact Manager**.

8. Click **Upload Image** to select an image from the **Open** dialog box for the contact photo.

   If the image you selected does not work for the contact, upload another image for the contact or click **Delete Image** to display the default image for the contact.

9. Click **Save**.

   The mark displays the photo and name of the new contact. Quorum also adds the new contact to the **Contact Manager** panel.

10. In the upper right corner of the **Room** panel, click **Save**. Click **Cancel** to exit **Editing Meeting** mode without saving any of the changes that you made to the meeting.

    Quorum saves the updated mark assignments, and exits **Editing Meeting** mode.

For More Information on...

- managing contacts in the Contact Manager panel, refer to the section "**Managing Contacts**" on page 6–10.

Using the Room Panel to Edit a Room

When you switch the Room panel to Editing Room mode, you can use the panel to graphically edit the marks and sources in a room.

★ The Room Editing mode does not have an Undo command. To discard unwanted changes, click Cancel to exit Editing Room mode without saving the changes that you made to the room.

To switch the Room panel to Editing Room mode

1. In the **side navigation**, hover the mouse pointer over the **ROOMS** icon.

   The **ROOMS** list opens.

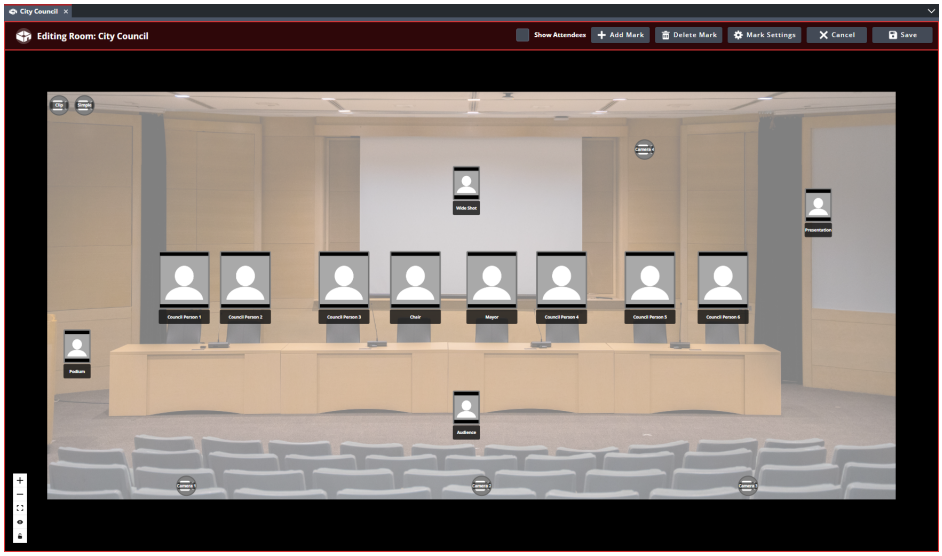
2. Use the **ROOMS** list to select the room that you want to edit.

   The selected room opens in a **Room** panel. After opening the **Room** panel, you can position it to best suit your workflow.

3. If the room is connected to a switcher destination, use the **Switcher Destinations** list to disconnect the room.

4. In the **Room** panel, click **Edit Room** in the toolbar. This button is only available when a room is disconnected from a switcher destination.

   The **Room** panel switches to **Editing Room** mode for the current room.



5. Use the **Room** panel in **Editing Room** mode to select and edit the marks and sources in the room.

6. Select the **Show Attendees** check box to display the meeting attendees from the meeting open in the **Room** panel when you switched to **Editing Room** mode. This check box is only available when a meeting was open in the **Room** panel when you switched to **Editing Room** mode.

7. When you complete your required edits, click **Save** to save your changes and exit **Editing Room** mode.

   Click **Cancel** to exit **Editing Room** mode without saving the changes that you made to the room.

   Clicking **Cancel** after making changes to the room opens the **Unsaved Changes** dialog box.

   Click one of the following buttons in the **Unsaved Changes** dialog box to manage your changes:

   - **Don't Save** — click this button to exit **Editing Room** mode without saving your changes.
   - **Cancel** — click this button to close the **Unsaved Changes** dialog box and continue editing the room.
   - **Save** — click this button to save your changes and exit **Editing Room** mode.

Editing Marks and Sources

When you switch the Room panel to Editing Room mode, you can edit the marks and sources in the room as follows:

- Change the Details of a Mark or Source
- Change the Source of a Mark
- Graphically Move a Mark or Source
- Graphically Change the Size of a Mark

Change the Details of a Mark or Source

You change the name, icon, size, position, and the microphone ID for the selected mark in a room. For a selected source, you can change the icon and position.

To change the details of a mark or source

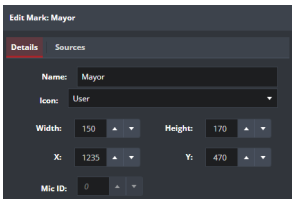
1. With the **Room** panel in **Editing Room** mode, select the **mark** or **source** for which to change details.

2. Click **Mark Setting**.

   The **Edit Mark** dialog box opens for the selected mark.

3. Click the **Details** tab.

   The **Details** tab opens



4. In the **Name** box, enter a new name for the selected mark.

   The name of the selected mark automatically changes in the room as you type in the **Mark** box. You cannot change the name of a source.

5. Use the **Icon** list to select the icon to display in the room for the selected mark or source.

6. To change the size of the selected **mark** icon, complete the following steps:

   a. Use the **Width** box to enter or select a new width in pixels for the selected mark icon.

      The mark resizes in the **Room** panel as you change the value in the **Width** box.

   b. Use the **Height** box to enter or select a new height in pixels for the selected mark icon.

      The mark resizes in the **Room** panel as you change the value in the **Height** box.

7. To reposition the selected **mark** or **source** by entering **X** and **Y** coordinates, complete the following steps:

   a. Use the **X** box to enter or select the new horizontal position for the selected mark.

      The mark moves in the **Room** panel as you change the value in the **X** box.

   b. Use the **Y** box to enter or select the new vertical position for the selected mark.

      The mark moves in the **Room** panel as you change the value in the **Y** box.

8. When using a microphone system to select previews and/or trigger video transitions, enter the identifier of the microphone used by the mark in the **Mic ID** box.

Change the Source of a Mark

For a selected mark, you can also change the source for the mark.

To change the source for a mark

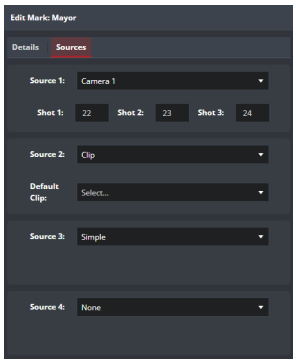
1. With the **Room** panel in **Editing Room** mode, select the **mark** or **source** for which to change the source.

2. Click **Mark Setting**.

   The **Edit Mark** dialog box opens for the selected mark.

3. Click the **Sources** tab.

   The **Sources** tab opens



4. Use the **Source 1**, **Source 2**, **Source 3**, and **Source 4** section to change the sources for the selected mark.

   The source settings that you can edit depend on the type of source you select. The settings available for a selected source are as follows:

   - **Clip Player**
     - **Default Clip** — use this list to select the default clip for the clip player to play.
   - **PTZ Camera**
     - **Shot 1** — enter in this box the shot preset number for shot 1 of the selected source.
     - **Shot 2** — enter in this box the shot preset number for shot 2 of the selected source.
     - **Shot 3** — enter in this box the shot preset number for shot 3 of the selected source.
   - **Simple Source**
     - There are no settings for this source type.

Graphically Move a Mark or Source

You can graphically move a mark or source to a new position in a room by dragging or using the arrow keys.

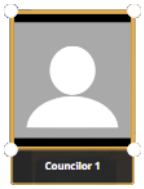
To graphically move a mark

1. To move a **mark** or **source** by dragging, complete the following steps:
   a. In the **Room** panel, place the mouse pointer over the **mark** or **source** to move.
   b. Click and hold on the **mark** or **source** to move.
   c. Drag the selected **mark** or **source** to a new position in the room.

      As you drag the mark or source in the room, horizontal and vertical blue lines display to show alignment of the selected mark or source with other marks and sources in the room.
   d. With the **mark** or **source** at the desired new position, release the mouse button.

      The **Room** panel updates to show the selected mark or source at the selected position.
2. To move a **mark** or **source** using the arrow keys, complete the following steps:
   a. In the **Room** panel, select the **mark** or **source** to move.

      Quorum highlights the selected mark or source.



   b. Use the arrow keys as follows to move the selected **mark** or **source**:
      - → — move the mark or source one pixel to the right.
      - ← — move the mark or source one pixel to the left.
      - ↑ — move the mark or source up one pixel.
      - ↓ — move the mark or source down one pixel.

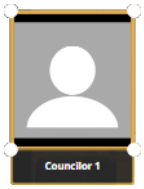
Graphically Change the Size of a Mark

You can change the height and width of a mark by dragging the corners of the mark or entering a new size.

To graphically change the size of a mark

1. To change the size of a mark by dragging, complete the following steps:
   a. In the **Room** panel, select the **mark** to resize.

      Quorum highlights the selected mark and displays a resize handle at each corner of the mark image.



   b. Place the mouse pointer over the **resize handle** to use to resize the mark.
   c. Click and hold on the **resize handle**.

d. Drag the **resize handle** to change the size of the selected mark as follows:

- **Width** — left to enlarge, right to shrink.
- **Height** — up to enlarge. down to shrink.

e. With the **mark** displayed at the desired new size, release the mouse button.

The **Room** panel updates to show the resized mark.

2. To change the size of a mark by entering height and width, complete the following steps:

a. In the **Room** panel, select the **mark** to resize.

Quorum highlights the selected mark.

b. Use the **H** box to enter or select a new height for the selected mark.

The height of the selected mark changes in the **Room** panel as you change the value in the **H** box.

c. Use the **W** box to enter or select a new width for the selected mark.

The width of the selected mark changes in the **Room** panel as you change the value in the **W** box.

Add a New Mark

You can add new marks to a room.

To add a new mark to a room

1. In the **Room** panel, click **Add Mark**.

Quorum adds a new mark to the **Room** panel.

2. To add a mark to the room at the position of the mouse pointer, complete the following steps:

a. In the **Room** panel, place the mouse pointer at the location to add a new **mark**.

b. Press **ALT +** or **ALT =**.

Quorum adds a new mark to the **Room** panel at the mouse pointer location. If the mouse pointer is not in the **Room** panel, the new mark is added to the upper left corner of the panel.

3. Edit the size and position of the new mark as required.

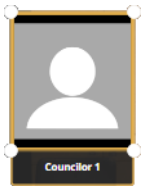
Delete a Mark

You can delete marks from a room.

To delete a mark from a room

1. In the **Room** panel, select the **mark** to delete.

Quorum highlights the selected mark.



2. Click **Delete Mark** or press **ALT -**, **ALT Backspace**, or **ALT Delete**.

Quorum deletes the selected mark from the **Room** panel.

Configuring Quorum

In Quorum, the System Configuration window contains the settings to configure Quorum for your venue and workflow.

This chapter discusses the following topics:

- Configuring the Database Connection
- Licensing Your Quorum System
- Setting the Default User Interface Language
- Importing a Taiden Room Layout into a Quorum Room
- Importing Taiden Contacts into Quorum
- Importing Contacts into Quorum
- Exporting Contacts from Quorum
- Importing Quorum Rooms
- Exporting Quorum Rooms
- Importing Data from a Ross Video Legislative Control System
- Creating Shortcut Groups
- Setting the User Session Timeout
- Adding User Accounts
- Configuring User Permissions
- Adding Custom Contact Fields
- Configuring Devices

Configuring the Database Connection

Your Quorum system uses a database to store configuration and production information. The Database panel contains the database driver, connection URL, and database user settings that Quorum uses to connect to the system database.

To configure database settings

1. Log in to **Quorum** as a user with **administrator privileges**.

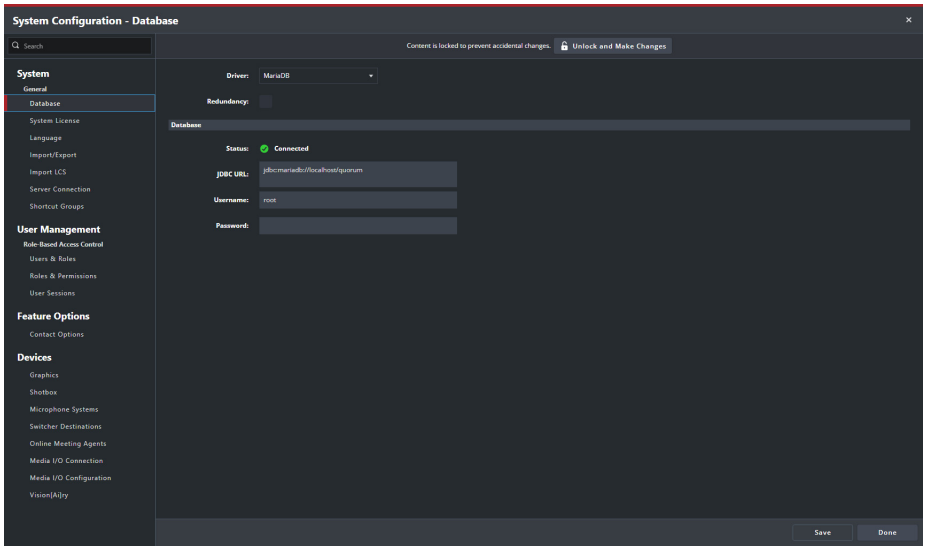
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **System** section of the side navigation, click **Database**.

   The **Database** panel opens.



4. The settings in the **Database** panel are locked to prevent accidental changes. To edit these settings, click **Unlock and Make Changes** at the top of the panel.

5. Use the **Driver** list to select a database driver that Quorum uses to connect to the system database.

6. In the **JDBC URL** box, enter the JDBC URL that Quorum uses to connect to the system database.

   For example: to connect to a database named quorum in local MariaDB database use the JDBC URL `jdbc:mariadb://localhost/quorum`.

7. In the **Username** box, enter the username that Quorum uses to access the system database.
8. In the **Password** box, enter the password associated with the username.
9. Click **Save**.

   Quorum saves the set database configuration. You must restart the Quorum Server for the database configuration changes to take effect.
10. Click **Done** when you want to close the **System Configuration** window.

    When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

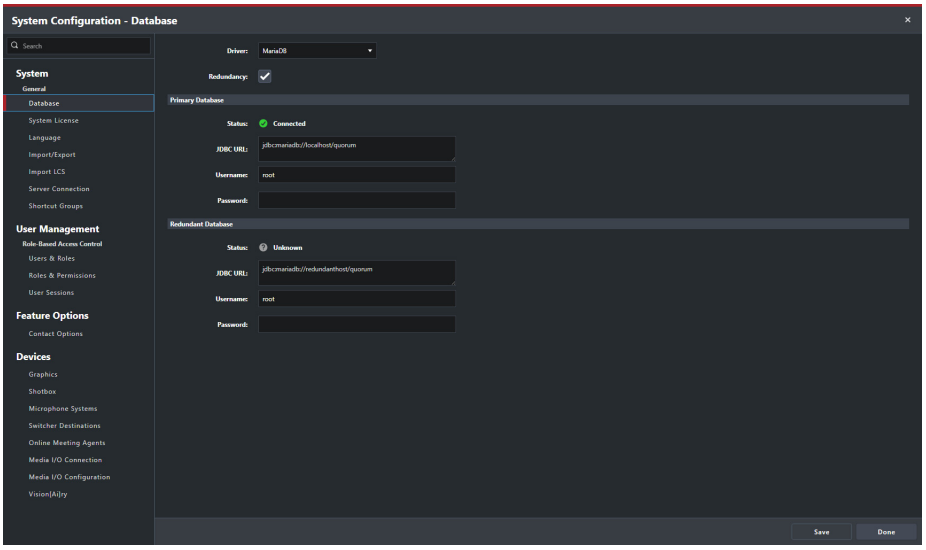
Redundant Database

If you have another database running on a different computer, you can configure a Redundant Database system for your Quorum system. In a Redundant Database system, one database is configured as the Primary database and a second database is configured as the Redundant database. If the Primary database falters, your Quorum system can continue operating by using the Redundant database.

To configure Redundant database settings

1. Complete the procedure "**To configure database settings**" on page 7–2 to configure the database setting for the **Primary** database.
2. Select the **Redundancy** check box.

   The **Database** section title changes to **Primary Database** and the **Redundant Database** section opens.



3. In the **JDBC URL** box of the **Redundant Database** section, enter the JDBC URL that the Quorum uses to connect to the Redundant database.

   For example: to connect to a database named quorum in a MariaDB database on a redundant database host, use the JDBC URL `jdbc:mariadb://redundanthost/quorum`.
4. In the **Username** box, enter the username that Quorum uses to access the Redundant database.
5. In the **Password** box, enter the password associated with the username.
6. Click **Save**.

   Quorum saves the set Redundant Database configuration. You must restart the Quorum Server for the database configuration changes to take effect.

Licensing Your Quorum System

Ross Video uses a product key to control access to Quorum. You can use your Quorum product key with the following licensing servers to license your Quorum software:

- **Ross Activation Licensing Server** — your Quorum system must have access to the Internet to use the Ross Activation licensing server.
- **Ross Platform Manager** — use this licensing server when your Quorum system does not have access to the Internet. The Ross Platform Manager must be installed on a computer in your local network that your Quorum system can access. For information on setting up the Ross Platform Manager, refer to the section "**Ross Platform Manager Setup**" on page 7–2 in the ***Quorum Installation Guide***.

You can obtain a Quorum product key from Ross Video Technical Support.

For More Information on...

- contacting Ross Video Technical Support, refer to the section "**Contacting Technical Support**" on page 1–3.

Ross Activation Licensing Server

When your Quorum system has access to the Internet, you can use the Ross Activation licensing server to activate your product key. You can obtain a Quorum product key from Ross Video Technical Support.

★ When you activate a Quorum product key, your Quorum system computer must contact the Ross Activation licensing server through the Internet.

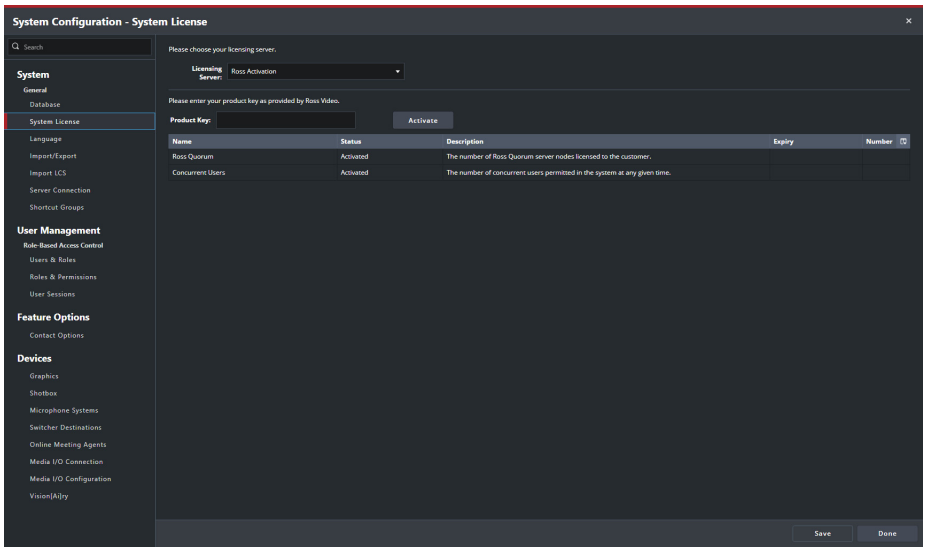
To use the Ross Activation Licensing Server to activate product keys

1. Verify that the **Quorum** computer can connect to the Internet.
2. Log in to **Quorum** as a user with **administrator privileges**.

   Quorum opens.
3. On the main toolbar, click the **System Configuration** icon.

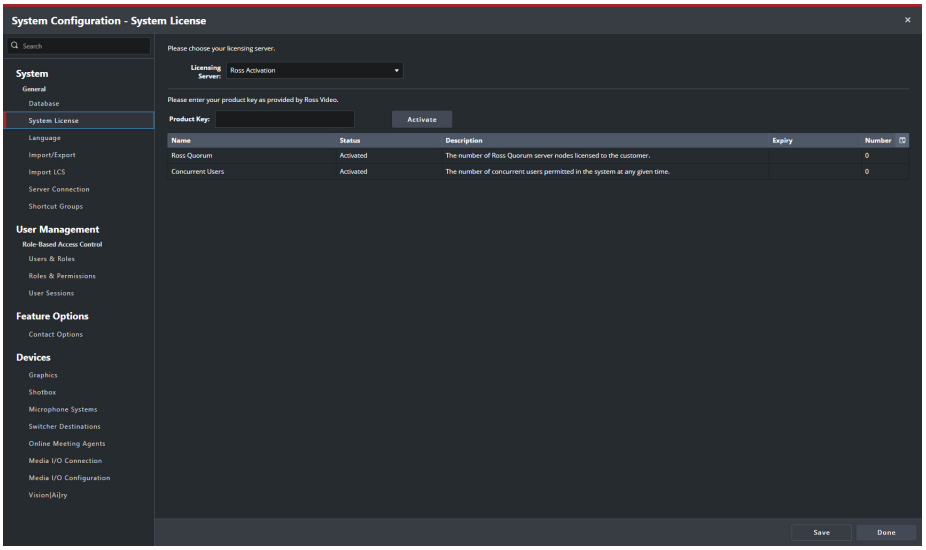
   The **System Configuration** window opens.
4. In the **System** section of the side navigation, click **System License**.

   The **System License** panel opens.



5. Obtain a Quorum product key from Ross Video Technical Support.
6. Use the **Licensing Server** list to select **Ross Activation**.
7. In the **Product Key** box, enter the product key obtained from Ross Video Technical Support.
8. Click **Activate**.

   The **System License** panel updates to display the feature licenses associated with the activated product key.



   The **Status** column displays one of the following states:

   - **Activated** — feature is active and available to Quorum users.
   - **Expires in # days** — feature availability for Quorum users expires in the displayed number of days.
   - **Expired** — feature has expired and is no longer available to Quorum users.
   - **Invalid MAC** — feature license key is invalid for the active network interface card of the Quorum computer.
   - **Not Purchased** — feature is not accessible to Quorum users, but it is available for purchase.

9. Click **Save**.

   Quorum saves the set licensing configuration.

10. Click **Done** when you want to close the **System Configuration** window.

    When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Ross Platform Manager

When your Quorum system does not have access to the Internet, use the Ross Platform Manager licensing server to activate your Quorum product key. You can obtain a Quorum product key from Ross Video Technical Support.

To use the Ross Platform Manager licensing server to activate product keys

1. Verify that the **Ross Platform Manager** is installed on a computer in your network to which your **Quorum** computer can connect.

   For information on installing and configuring the Ross Platform Manager, refer to the section "**Ross Platform Manager Setup**" on page 7–2 in the ***Quorum Installation Guide***.

2. Activate your **Quorum** product key on the **Ross Platform Manager** in your system.

   For information on using the Ross Platform Manager to activate product keys, section "**Activate Quorum Product Keys**" on page 7–6 in the ***Quorum Installation Guide***.

3. Log in to **Quorum** as a user with **administrator privileges**.

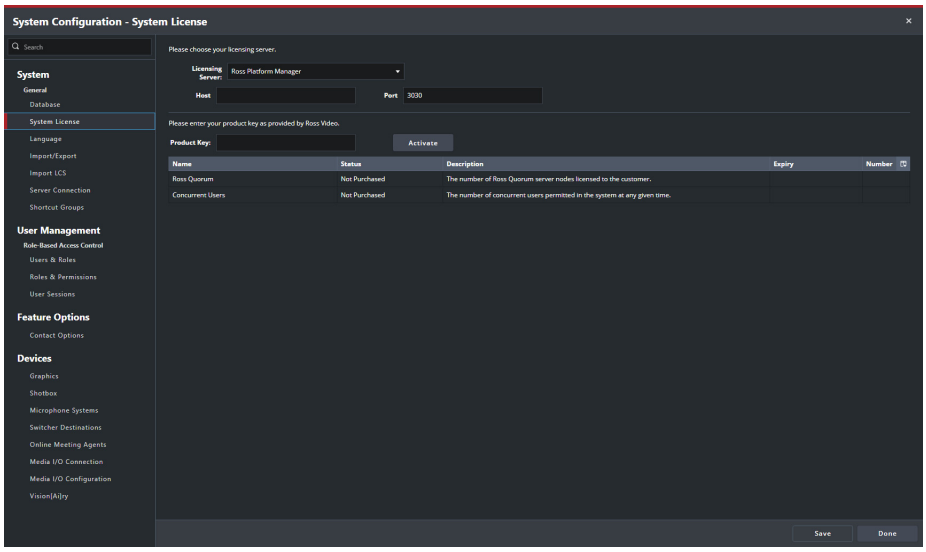
   Quorum opens.

4. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

5. In the **System** section of the side navigation, click **System License**.

   The **System License** panel opens.



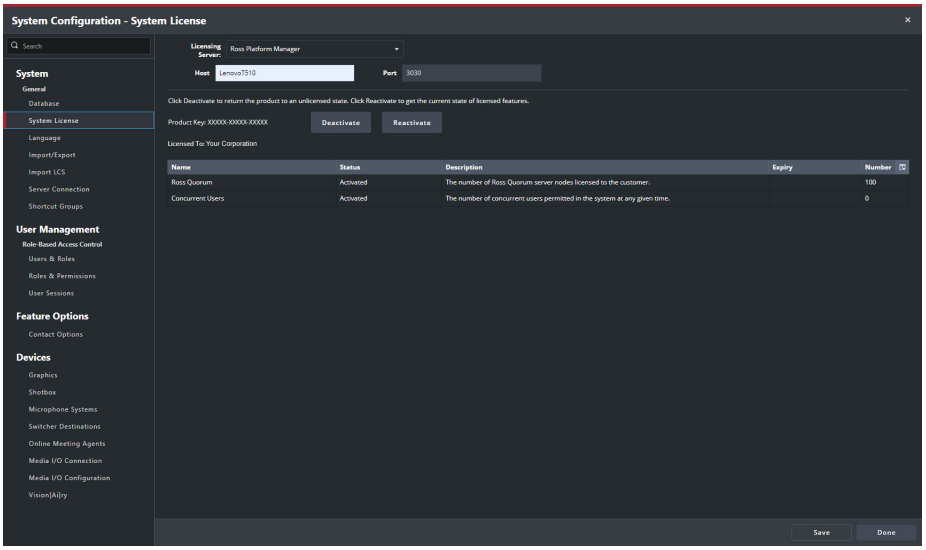
6. Obtain a Quorum product key from Ross Video Technical Support.
7. Use the **Licensing Server** list to select **Ross Platform Manager**.
8. In the **Host** box, enter the IP address or hostname of your **Ross Platform Manager Server** computer.
9. In the **Port** box, enter the network port number of your **Ross Platform Manager Server**.

   Ross Platform Manager Servers in a Quorum system use port `3030` as the network port for unsecure HTTP connections. **Ross Platform Manager Servers** use port `443` for secure HTTPS connections.

10. In the **Product Key** box, enter the product key obtained from Ross Video Technical Support.

11. Click **Activate**.

    The **System License** panel updates to display the feature licenses associated with the activated product key.



    The **Status** column displays one of the following states:

    - **Activated** — feature is active and available to Quorum users.
    - **Expires in # days** — feature availability for Quorum users expires in the displayed number of days.
    - **Expired** — feature has expired and is no longer available to Quorum users.
    - **Invalid MAC** — feature license key is invalid for the active network interface card of the Quorum computer.
    - **Not Purchased** — feature is not accessible to Quorum users, but it is available for purchase.

12. Click **Save**.

    Quorum saves the set licensing configuration.

13. Click **Done** when you want to close the **System Configuration** window.

    When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Reactivate a Product Key

After purchasing new features for your Quorum system, the Quorum product key requires reactivation to make the purchased features available to Quorum users.

To reactivate a Quorum product key

1. Log in to **Quorum** as a user with **administrator privileges**.

   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **System** section of the side navigation, click **System License**.

   The **System License** panel opens.

4. Click **Reactivate**.

   The **System License** pop-up message reports the status of your product key reactivation.

5. Click **Save**.

   Quorum saves the set licensing configuration.

6. Click **Done** when you want to close the **System Configuration** window.

   When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Deactivate a Product Key

When you want to move Quorum software to another computer, you must first deactivate the Quorum product key on the current Quorum computer.

To deactivate a Quorum product key

1. Log in to **Quorum** as a user with **administrator privileges**.

   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

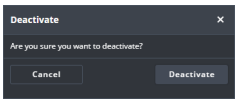
   The **System Configuration** window opens.

3. In the **System** section of the side navigation, click **System License**.

   The **System License** panel opens.

4. Click **Deactivate**.

   The **Deactivate** alert opens.



5. Click **Deactivate** to deactivate the product key or **Cancel** to keep it active.

   The **Deactivate** alert closes. When you clicked **Deactivate**, the product key displayed in the **Product Key** box deactivates. You can now use the deactivated product key to activate Quorum software on another computer.

   Deactivating a product key unlicenses and removes Quorum user access to all the Quorum features associated with the product key.

6. Click **Save**.

   Quorum saves the set licensing configuration.

7. Click **Done** when you want to close the **System Configuration** window.

   When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Setting the Default User Interface Language

Quorum administrators can set the default user interface language for all of the Quorum users on a Quorum system. Quorum users can individually override the default user interface language by setting their own user interface language.

To set the default user interface language for your Quorum system

1. Log in to **Quorum** as a user with **administrator privileges**.

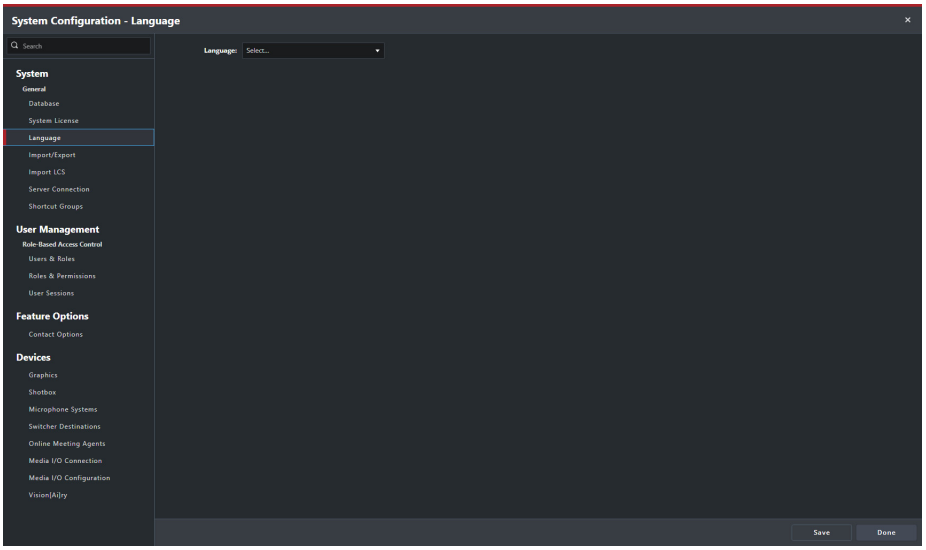
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **System** section of the side navigation, click **Language**.

   The **Language** panel opens.



4. Use the **Language** list to select the default user interface language for all Quorum users on your Quorum Server.

5. Click **Save**.

   Quorum saves the default user interface language selection.

6. Click **Done** when you want to close the **User Preferences** window.

   When the **User Preferences** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

7. Use the **User** menu at the right side of the Quorum title bar to select **Logout**.

   The **Logout** alert opens.

8. Click **Logout**.

   Quorum logs you out of Quorum and displays the Quorum **Log In** web page in the default user interface language. Quorum users that have set a user interface language will view the Quorum user interface in their set language.

Importing a Taiden Room Layout into a Quorum Room

Using the Taiden Room Designer Client, you can export the marks to a Taiden to a Room Layout XML file. In Quorum, you can import the Taiden Room Layout XML file into an existing room to set marks in the room.

✶ Importing a Taiden Room Layout XML file into a Quorum room will overwrite the room name and marks with values from the selected Taiden Room Layout XML file.

To import marks from a Taiden Room Layout XML file into a Quorum room

1. Log in to **Quorum**.

   Quorum opens.

2. Create a room in which to import marks from a Taiden Room Layout XML file.

   A new room only requires a room name. To create a room, refer to the procedure "**To create a room**" on page 6–2.

3. On the main toolbar, click the **System Configuration** icon.

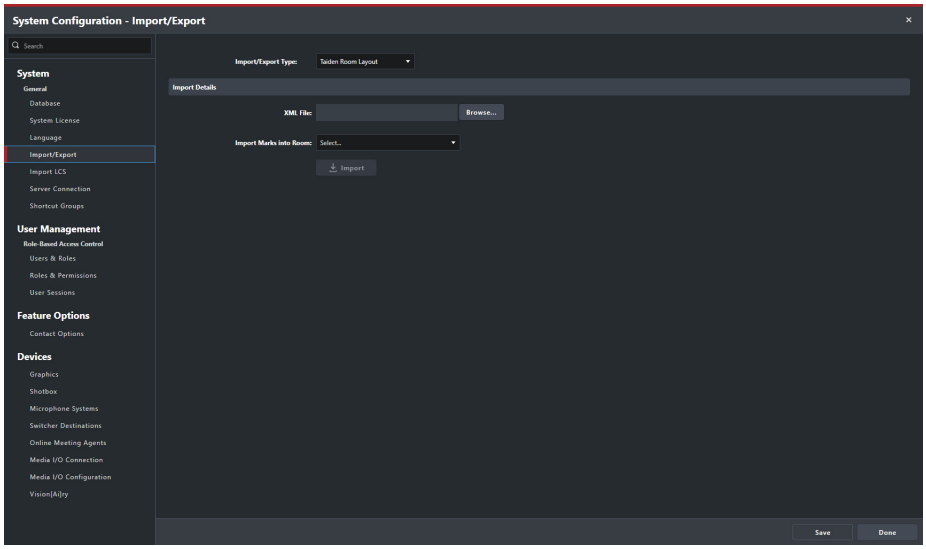
   The **System Configuration** window opens.

4. In the **System** section of the side navigation, click **Import/Export**.

   The **Import/Export** panel opens.

5. Use the **Import/Export Type** list to select the **Taiden Room Layout**.

   The **Import/Export** panel displays the settings to import a Taiden Room Layout XML file.



6. Click **Browse** to the right of the **XML File** box.

   The **Open** dialog box opens.

7. In the **Open** dialog box, select the Taiden Room Layout XML file that contains the marks to import.

8. Click **Open**.

   The **Open** dialog box closes, and the **XML File** box in the **Import XML** panel displays the name of the selected Taiden Room Layout XML file.

9. Use the **Imports Marks into Room** list to select the Quorum room in which to import the marks contained in the selected Taiden Room Layout XML file.

10. Click **Import** to import the data contained in the selected Taiden Room Layout data into the selected Quorum room.

Importing Taiden Contacts into Quorum

Contact data can be exported from a Taiden meeting into a Contacts XML file. In Quorum, you can import the contacts in a Taiden Contacts XML file into the Quorum Contact Manager. Contacts imported from a Taiden Contacts XML file do not replace contacts with the same first and last name that were created in Quorum. During an import, you can choose to add imported contacts as attendees to a meeting.

✶ A Taiden Contacts XML file must contain the **First Name**, **Last Name**, and **Number** fields from your Taiden microphone system. The file must also contain the **Seat** field if you want to automatically place contacts in a room and meeting imported from your Taiden microphone system.

To import contacts from a Taiden Contacts XML file into the Contact Manager

1. Log in to **Quorum**.

   Quorum opens.

2. Create a room in which to import marks from a Taiden Room Layout XML file.

   A new room only requires a room name. To create a room, refer to the procedure "**To create a room**" on page 6–2.

3. On the main toolbar, click the **System Configuration** icon.

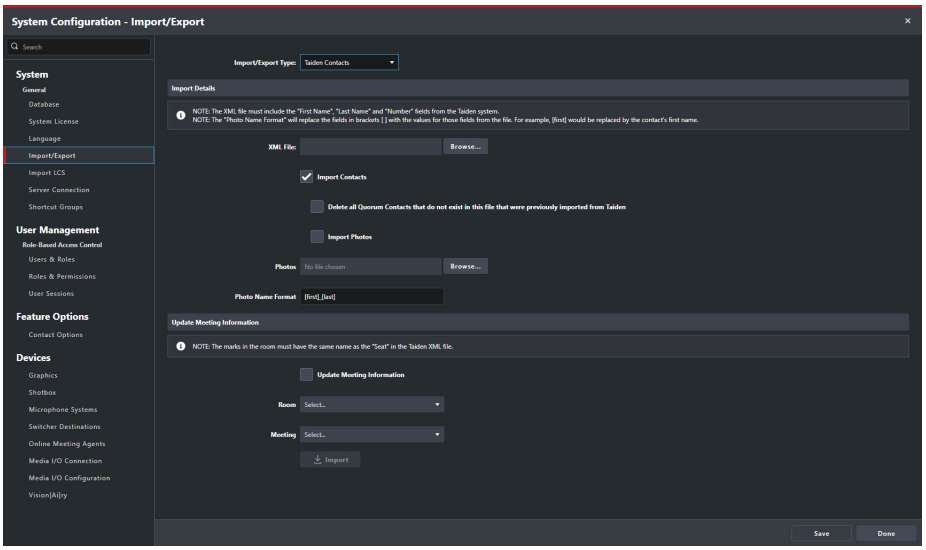
   The **System Configuration** window opens.

4. In the **System** section of the side navigation, click **Import/Export**.

   The **Import/Export** panel opens.

5. Use the **Import/Export Type** list to select the **Taiden Contacts**.

   The **Import/Export** panel displays the settings to import a Taiden Contacts XML file.



6. Click **Browse** to the right of the **XML File** box.

   The **Open** dialog box opens.

7. In the **Open** dialog box, select the Taiden Contacts XML file that contains the contacts to import.

8. Click **Open**.

   The **Open** dialog box closes, and the **XML File** box in the **Import XML** panel displays the name of the selected Taiden Contacts XML file.

9. Select the **Import Contacts** check box.

10. Select the **Delete all Quorum Contacts that do not exist in this file that were previously imported from Taiden** check box when you want to delete contacts that were previously imported from Taiden before you import contacts from the selected Taiden Contacts XML file. Clear this check box if you want to retain contacts previously imported from Taiden.

11. Select the **Import Photos** check box to import photos for the contacts in the selected Taiden Contacts XML file. Clear this check box to import contacts without photos.

12. When you have chosen to import photos for Taiden contacts, click **Browse** to the right of the **Photos** box.

    The **Open** dialog box opens.

13. In the **Open** dialog box, select one or more image files to match with the contacts in the selected Taiden Contacts XML file. You can use the following methods to select image files:

    - **All** — click an image, then press **Ctrl-A**. All of the images file in the current folder get selected.
    - **Range** — click the first image file in the selection range, then **Shift-click** the last image file in the selection range. The image file selection includes the first selected image file, the last selected image file, and all the image files between the two selected image files.
    - **Multiple** — click the first image file to select, then select additional image files to add to the selected category as follows:
      - **Windows** — **Ctrl-click** each image file to add to your selection.
      - **macOS** — **Cmd-click** each image file to add to your selection.

14. Enter in the **Photo Name Format** box, the file name format, excluding the file extension, to match contacts in the selected Taiden Contacts XML file with a photo from the selected image files.

    Photo name formats are made up of the characters and field name values that an image file name must match to become the photo for a contact. Quorum uses the values from the field names in square brackets (`[ ]`) to complete the pattern. Using the example pattern `[first]_[last]`, Quorum would replace `[first]` with the contact's first name and `[last]` with the contact's last name. Here are some example matches:

    - **Elizabeth Poirier** would be matched with the image file `Elizabeth_Poirier.jpg`.
    - **Felix Thomas** would be matched with the image file `Felix_Thomas.jpg`.

    The example pattern `[first]_[last]` would not match the following image files with a contact:

    - `Elizabeth Poirier.jpg` — the space between Elizabeth and Poirier does not match the pattern of an underscore (_) between the first and last name of a contact.
    - `Felix_Thomas_Headshot.jpg` — the extra `_Headshot` text in the file name does not match the pattern of only the first and last names of a contact joined by an underscore (_).

15. Select the **Update Meeting Information** check box to update meeting attendees with the contacts contained in the selected Taiden Contacts XML file.

16. Use the **Room** list to select the room that contains the marks for the contacts in the selected Taiden Contacts XML file.

    Quorum uses the Taiden contact seat name to match imported contacts with markers in the selected room.

17. Use the **Meeting** list to select the meet to which you want to add contacts in selected Taiden Contacts XML file as attendees.

18. Click **Import**.

    Quorum imports the contacts contained in the selected Taiden Contacts XML file into the **Contact Manager**. If you chose, Quorum also adds the imported contacts as attendees to the selected meeting.

Importing Contacts into Quorum

Contact data in a comma-separated values (CSV) file can be imported into the Quorum Contact Manager. You can use a text editor or a spreadsheet program that can export to a CSV file to create a contacts file to import. The following is an example of a contacts CSV file:

```
First Name,Last Name,Position,Ward,Email
Addison,Anderson,Councilor,2,A_Anderson@city.gov
Kayden,Kelly,Councilor,1,K_Kelly@city.gov
Victoria,Thompson,Councilor,4,V_Thompson@city.gov
Leo,King,Chair,3,L_King@city.gov
Audrey,Wilson,Mayor,6,A_Wilson@city.gov
Luke,Pelletier,Councilor,5,L_Pelletier@city.gov
Alice,Clark,Councilor,8,Alice_Clark@city.gov
Theodore,Williams,Councilor,7,T_Williams@city.gov
```

When importing a CSV file that contains a field that the Contact Manager does not, Quorum will automatically add the field to the Contact Manager.

✶ Contact CSV files must contain a **First Name** and a **Last Name** field. Quorum will only import contacts that contain a value in their **First Name** or **Last Name** fields.

To import contacts from a Contacts CSV file into the Contacts Manager

1. Log in to **Quorum**.

   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

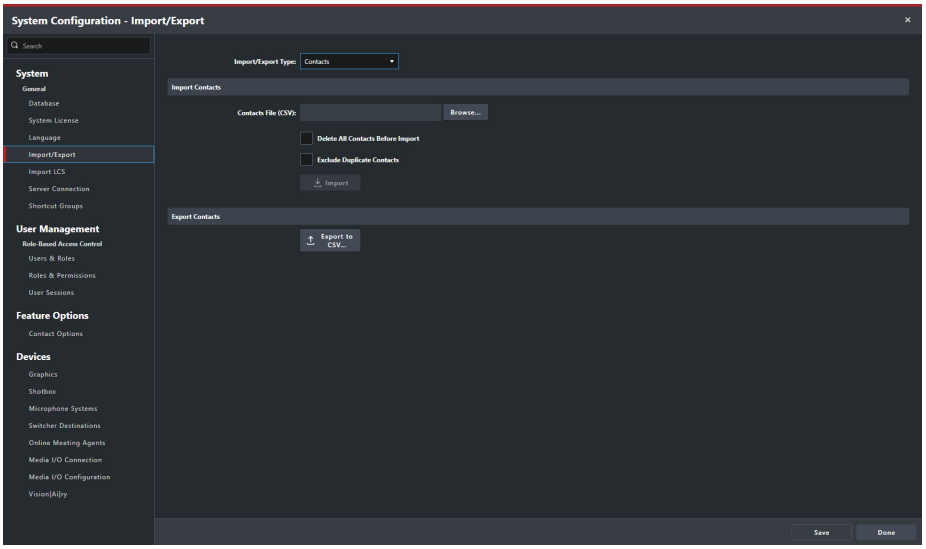
   The **System Configuration** window opens.

3. In the **System** section of the side navigation, click **Import/Export**.

   The **Import/Export** panel opens.

4. Use the **Import/Export Type** list to select the **Contacts**.

   The **Import/Export** panel displays the settings to import a Contacts CSV file.



5. In the **Import Contacts** section, click **Browse** to the right of the **Contacts File (CSV)** box.

   The **Open** dialog box opens.

6. In the **Open** dialog box, select the Contacts CSV file that contains the contacts to import.
7. Click **Open**.

   The **Open** dialog box closes, and the **Contacts File (CSV)** box in the **Import/Export** panel displays the name of the selected Contacts CSV file.
8. Click **Import**.

   Quorum imports the contacts contained in the selected Contacts CSV file into the **Contact Manager**.

Exporting Contacts from Quorum

The contacts contained in the Contact Manager can be exported to a comma-separated values (CSV) file.

To export contacts from the Contact Manger to a CSV file

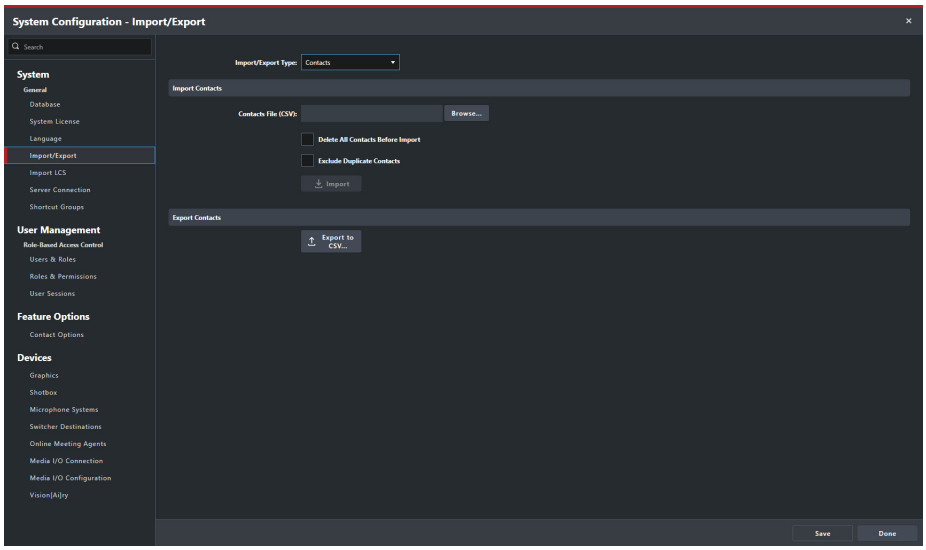
1. Log in to **Quorum**.

   Quorum opens.
2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.
3. In the **System** section of the side navigation, click **Import/Export**.

   The **Import/Export** panel opens.
4. Use the **Import/Export Type** list to select the **Contacts**.

   The **Import/Export** panel displays the settings to export contacts from the **Contact Manager** to a Contacts CSV file.



5. In the **Export Contacts** section, click **Export to CSV**.

   Quorum exports all of the contacts in the **Contact Manager** to a file named `address-book-contacts.csv` in the **Downloads** folder of your local computer.

Importing Quorum Rooms

Quorum rooms can be exported from a Quorum Server into a JSON file. On your Quorum Server, you can import the rooms in a Rooms JSON file into the Room Manager. Rooms imported from a Rooms JSON file do not replace existing rooms in the Room Manage that have the same name.

To import Quorum rooms from a rooms export JSON file into the Room Manager

1. Log in to **Quorum**.

   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

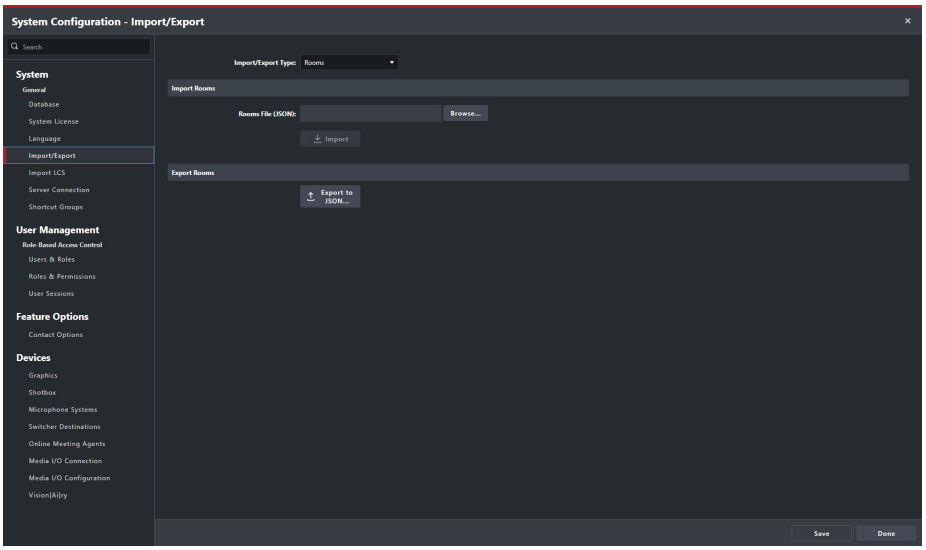
   The **System Configuration** window opens.

3. In the **System** section of the side navigation, click **Import/Export**.

   The **Import/Export** panel opens.

4. Use the **Import/Export Type** list to select the **Rooms**.

   The **Import/Export** panel displays the settings to import a rooms export JSON file.



5. In the **Import Rooms** section, click **Browse** to the right of the **Rooms File (JSON)** box.

   The **Open** dialog box opens.

6. In the **Open** dialog box, select the Rooms JSON file that contains the rooms to import.

7. Click **Open**.

   The **Open** dialog box closes, and the **Rooms File (JSON)** box in the **Import/Export** panel displays the name of the selected Rooms JSON file.

8. Click **Import**.

   Quorum imports the rooms contained in the selected Rooms JSON file into the **Room Manager**.

Exporting Quorum Rooms

The rooms contained in the Room Manager can be exported to a JSON file. Exporting rooms to a Rooms JSON file is a good way to back up rooms on your Quorum Server or to copy rooms from one Quorum Server to another.

To export rooms from the Room Manger to a JSON file

1. Log in to **Quorum**.

   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

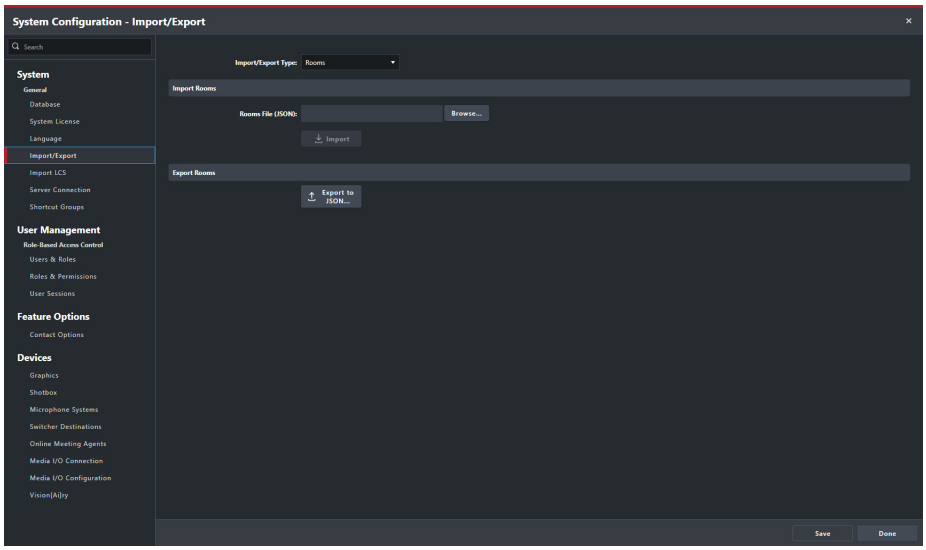
   The **System Configuration** window opens.

3. In the **System** section of the side navigation, click **Import/Export**.

   The **Import/Export** panel opens.

4. Use the **Import/Export Type** list to select the **Rooms**.

   The **Import/Export** panel displays the settings to export the rooms in the **Room Manager** to a Rooms JSON file.



5. In the **Export Rooms** section, click **Export to JSON**.

   Quorum exports the rooms in the **Room Manager** to a file named `rooms-export-<export_date>.json` in the **Downloads** folder of your local computer, where `<export_date>` is the year, month, and day when the rooms were exported.

Importing Data from a Ross Video Legislative Control System

You can import mark, contact, and settings data that was exported from a Ross Video LCS (Legislative Control System) to create rooms, meetings, and contacts in your Quorum system. Importing LCS data is part of migrating from a Ross Video LCS to a Ross Video Quorum system.

✶ Only import LCS data into a new Quorum system with an empty database. Importing LCS data into a configured Quorum system overwrites microphone and graphic settings with imported data.

✶ Only import a Representative file once into a Quorum system. Importing a Representative file multiple times creates duplicate contacts in your Quorum address book.

To import LCS data into your Quorum system

1. Log in to **Quorum**.

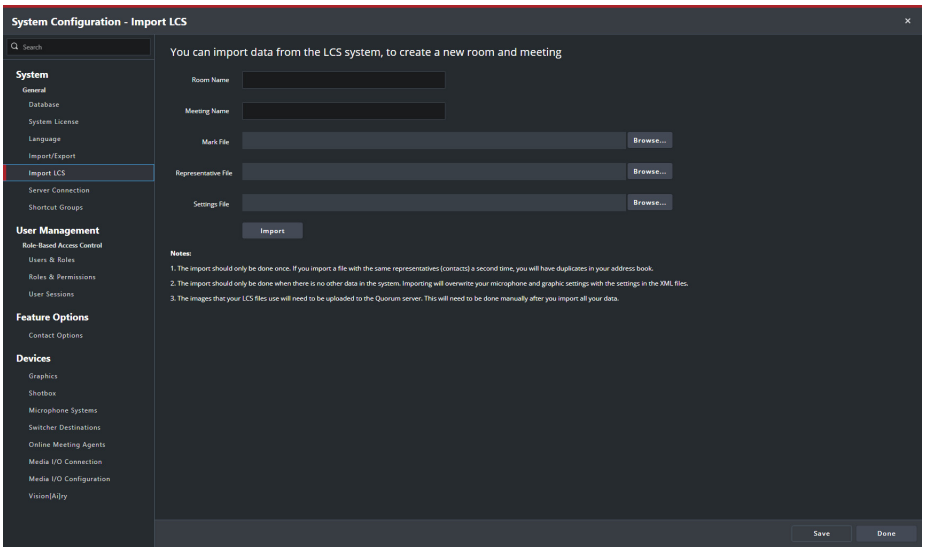
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **System** section of the side navigation, click **Import LCS**.

   The **Import LCS** panel opens.



4. In the **Room Name** box, enter the name of the room to create from the imported LCS data.
5. In the **Meeting Name** box, enter the name of the meeting to create for the room.
6. Click **Browse** to the right of the **Mark File** box to use the **Open** dialog box to select the LCS XML file that contains room marks.
7. Click **Browse** to the right of the **Representative File** box to use the **Open** dialog box to select the LCS XML file that contains contacts.
8. Click **Browse** to the right of the **Settings File** box to use the **Open** dialog box to select the LCS XML file that contains settings.
9. Select the **Use LCS-compatible field names when sending data to DataLinq** check box to retain LCS naming for DataLinq fields so that you do not need to change your graphics packages after an import. Clear this check box to use Quorum naming for DataLinq field, which requires graphics package updates after an import.
10. Click **Import**.

    Quorum imports the selected LCS data. You will need to manually upload contact and room images referenced by the imported LCS files to your Quorum system.

11. Click **Done** when you want to close the **System Configuration** window.

Creating Shortcut Groups

Shortcut groups contain key and joystick shortcuts that enable quick access to commands in a view. Quorum comes with a System Default shortcut group that you can use, or you can create your own shortcut groups.

✶ Modern software features numerous keyboard shortcuts that vary by operating system and application. Quorum offers its own shortcuts, some of which may overlap with others on your system. To prevent conflicts, test shortcuts with your system before assigning them in Quorum. Since shortcuts depend on the active application, ensure they work as intended with all software you use on your client PC to avoid triggering unintended actions.

To create a shortcut group

1. Log in to **Quorum** as a user with **administrator privileges**.

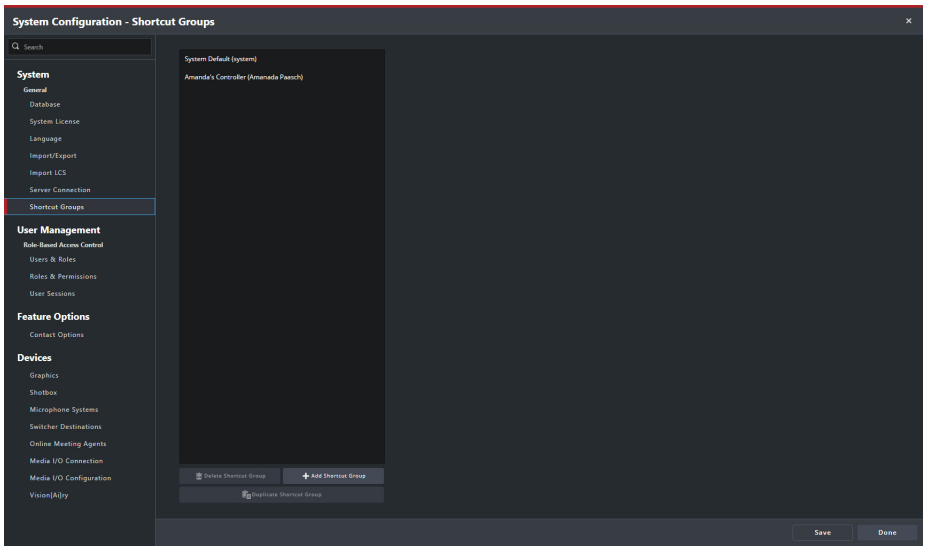
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

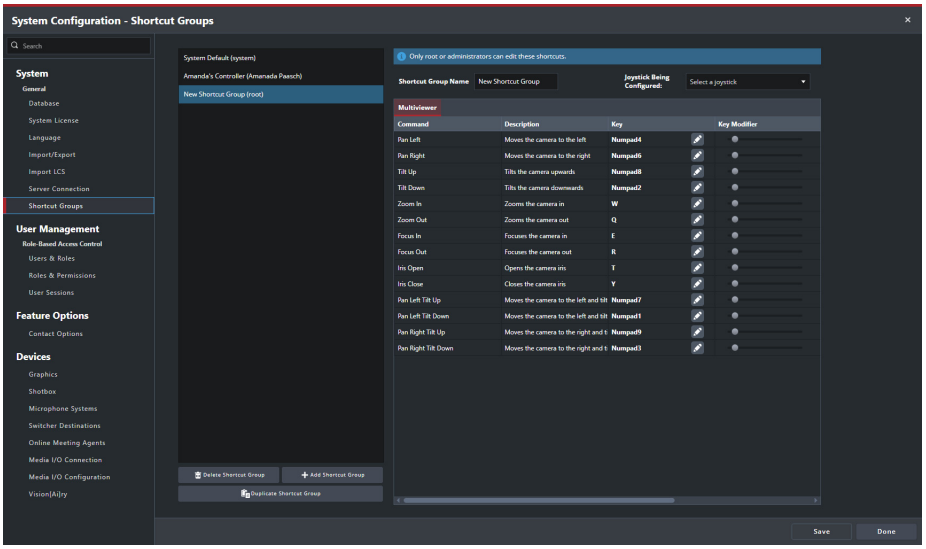
3. In the **System** section of the side navigation, click **Shortcuts**.

   The **Shortcut Groups** panel opens.



4. Below the **Shortcuts** list, click **Add Shortcut Group**.

Quorum adds a new shortcut group to the **Shortcuts** list and displays the shortcuts in the group.

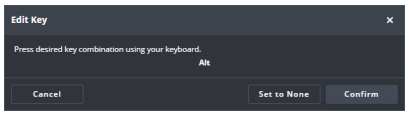


5. In the **Shortcut Group Name** box enter a name for the new shortcut group.
6. In the **Shortcuts** table, click the tab associated with the Quorum view for which you want to set key and joystick shortcuts.

   The **Shortcuts** table displays the key and joystick shortcuts for the associated Quorum view. Each table row displays the key and joystick shortcuts that perform a command in the associated Quorum view.
7. Use the **Command** column to locate the Quorum command for which you want to set a key or joystick shortcut.
8. To set a key shortcut for the associated command, complete the following steps:

   a. The **Key** column displays the key combination that will perform the associated command. Click in the **Key** column to edit the keyboard key combination.

   b. The **Edit Key** dialog box opens.



   c. While the **Edit Key** dialog box is open, use your keyboard to press the key combination that you want to use to perform the associated command. Each time you press a key combination, this dialog box displays the key combination that you pressed.

      When you want to remove the current shortcut key combination from the associated command, click **Set to None**. The **Edit Key** dialog box closes after you click **Set to None**.

   d. When the **Edit Key** dialog box displays the shortcut key combination that you want the you want to use to perform the associated command, click **Confirm**. Quorum saves the set shortcut key and the **Edit Key** dialog box closes.

      If you want to close the **Edit Key** dialog box without changing the shortcut key combination for a command, click **Cancel**.

   e. Use the slider in the **Key Modifier** column to set the movement speed for Pan, Tilt, Zoom, Focus, Iris, and Pan Tilt commands when you hold down the **Key** selected for the command. The slider range is 1 (slowest) to 512 (fastest).

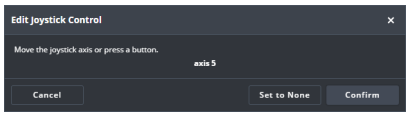
      Drag the slider to the right to increase movement speed, drag it to the left to decrease movement speed.

9. To set a joystick shortcut for the associated command, complete the following steps:

   a. Use the **Joystick Being Configured** list to select the joystick for which to set joystick shortcuts. The joystick you want to configure must be connected to your computer to be included in the **Joystick Being Configured** list.

   b. The **Joystick** column displays the axis or button that will perform the associated command. Click in the **Joystick** column to edit the axis or button.

   c. The **Edit Joystick Control** dialog box opens.



   d. While the **Edit Joystick Control** dialog box is open, move the joystick axis or press the button that you want to use to perform the associated command. Each time you move a joystick axis or press a button, this dialog box displays the control you used.

      When you want to remove the current axis or button from the associated command, click **Set to None**. The **Edit Joystick Control** dialog box closes after you click **Set to None**.

   e. When the **Edit Key** dialog box displays the shortcut key combination that you want perform the associated command, click **Confirm**. Quorum saves the set shortcut key and the **Edit Joystick Control** dialog box closes.

      If you want to close the **Edit Joystick Control** dialog box without changing the shortcut axis or button for a command, click **Cancel**.

   f. Use the slider in the **Joystick Modifier** column to multiply the joystick movement speed for Pan, Tilt, Zoom, Focus, Iris, and Pan Tilt commands. The slider range is -5 (reverse direction fastest) to 5 (regular direction fastest).

      Drag the slider from the middle to the right to increase movement speed in the regular direction of the joystick control. Drag the slider from the middle to the left to increase movement speed in the reverse direction of the joystick control.

10. Click **Save**.

    Quorum saves the shortcut group.

11. Click **Done** when you want to close the **System Configuration** window.

Edit Shortcut Groups

You can edit the key and joystick shortcuts in your shortcut groups at any time.

★ Only an administrator or the owner of a shortcut group can edit a group.

To edit a shortcut group

1. In the **Shortcuts** list, select the shortcut group that contains the key and joystick shortcuts that you want to edit.
2. In the **Shortcuts** table, click the tab associated with the Quorum view for which you want to edit key and joystick shortcuts.
3. Edit the key and joystick shortcuts as required.
4. Click **Save**.

   Quorum saves the updated shortcut group.

Delete Shortcut Groups

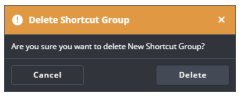
When you no longer require a shortcut group, you can delete it from the Shortcut Groups panel.

✶ Only an administrator or the owner of a shortcut group can delete a group.

To delete a shortcut group

1. In the **Shortcuts** list, select the shortcut group to delete.
2. Below the **Shortcuts** list, click **Delete Shortcut Group**.

   The **Delete Shortcut Group** alert opens.



3. Click **Delete** to delete the selected shortcut group or **Cancel** to keep it.

   The **Shortcut Group** alert closes. When you clicked **Delete**, Quorum deletes the selected shortcut group from the **Shortcut Groups** panel.

Adding User Accounts

You can configure your Quorum system to enable operators to log in with their own account and keep their own panel layout.

To add a user account

1. Log in to **Quorum** as a user with **administrator privileges**.

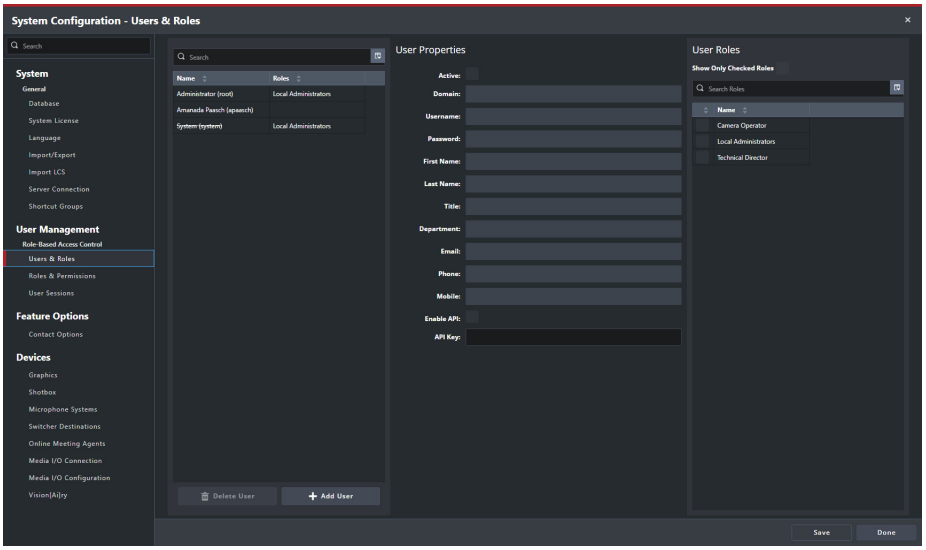
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **User Management** section of the side navigation, click **Users & Roles**.

   The **Users & Roles** panel opens.



4. At the bottom of the **User** list, click **Add User**.

   Quorum adds a new user named **New User** to the **User** list.

5. In the **User** list, click **New User**.

   The **User Properties** section displays the information that you can set for the new user account.

6. In the **User Properties** section, select the **Active** check box to make the user operational.

   Clear this check box to deactivate a user. Quorum retains information associated with an inactive user account but does not allow you to use the account to log in to your Quorum system. The names of inactive users are crossed out in the **User** list.

7. In the **Username** box, enter a name for the user.

   Use this username to log in to your Quorum system. Usernames are case-sensitive.

8. In the **Password** box, enter a password of at least five characters for the user. All user accounts must have a password.

   Use this password along with the set username to log in to your Quorum system Passwords are case-sensitive.

9. In the **First Name** box, enter the first or proper name of the user.

   - In the **Last Name** box, enter the last or family name of the user.

   After logging in to Quorum with a username and password, the **User** menu displays the first and last name associated with the username.

10. In the **Title** box, enter the job title of the user within the organization.

11. In the **Department** box, enter the department to which the user belongs within the organization.

12. In the **Email** box, enter the corporate email address of the user.

13. In the **Phone** box, enter the corporate telephone number of the user.

14. In the **Mobile** box, enter the mobile telephone number of the user.

15. In the **User Roles** section, select the check boxes associated with the user roles to assign to the user. Clear the check box associated with a user role to unassign it from the user.

16. Click **Save**.

    Quorum saves the set user properties for the new user account.

17. Click **Done** when you want to close the **System Configuration** window.

    When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Edit a User Account

You can edit the properties of a user account at any time.

To edit a user account

1. In the **Users & Roles** panel, use the **Name** list to select the user account to edit.

   The **User Properties** section displays information about of the selected user account.

2. In the **User Properties** section, edit the user account properties as required.

3. Click **Save**.

   Quorum saves the updated user account.

Delete a User Account

When you no longer want a user account to access your Quorum system, you can delete the user account from the Users & Roles panel.

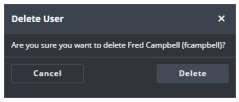
To delete a user account

1. In the **Users & Roles** panel, use the **Name** list to select the user account to delete.

   The **User Properties** section displays information about the selected user account.

2. At the bottom of the **Name** list, click **Remove User**.

   The **Delete User** alert opens.



3. Click **Delete** to delete the selected user account or **Cancel** to keep it.

   The **Delete User** alert closes. When you clicked **Delete**, Quorum deletes the selected user account from the **Users & Roles** list.

4. Click **Save**.

   Quorum saves your user account updates.

Configuring User Permissions

User permissions define the actions users have permission to perform and determine which buttons, messages, and controls they see in the Quorum user interface. In most Quorum systems, the Quorum administrator assigns users with the user permissions that are appropriate for their role in using Quorum.

User permissions are role-based. Each user account has one or more user roles, such as operator or technical director. Each user role has a set of permissions. The role-based permissions model enables Quorum administrators to precisely define user permissions for each user, to ensure conformance to your organization's business processes.

Creating User Roles

To configure user permissions, you create user roles and assign permissions to them, and then create user accounts and assign user roles to them.

To create a user role

1. Log in to **Quorum** as a user with **administrator privileges**.

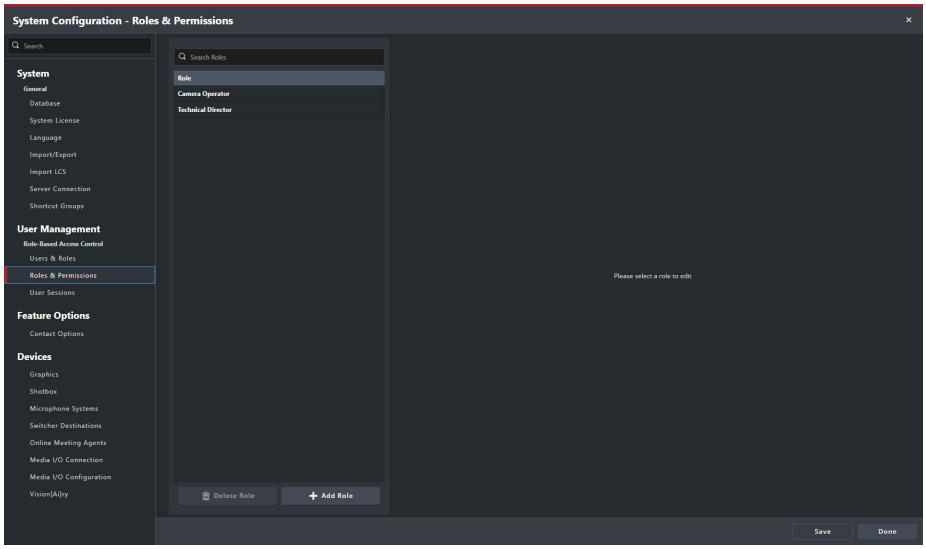
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

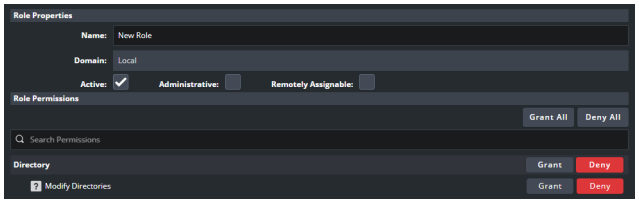
3. In the **User Management** section of the side navigation, click **Roles & Permissions**.

The **Roles & Permissions** panel opens.



4. At the bottom of the **Roles** list, click **Add Role**.

   The properties for a new role display to the right of the **Role** list.



5. In the **Name** box, enter a name for the user role.
6. In the **Role Properties** section, select the **Active** check box to make the role operational.

   Clear this check box to deactivate a user role. Inactive roles cannot convey permissions to user accounts.
7. Select the **Administrative** check box to grant the user role all user permissions and enable the user role to configure all administrative settings.

   Clear this check box to only include selected permissions with the user role.
8. Select the **Remotely Assignable** check box to enable Horizon to use the user role to assign remote user permissions on the Quorum Server.

   Clear this check box to only use the user role to assign local user permissions.

9. In the **Role Permissions** list, set the role permissions for the user role as follows:
   - **Grant All** — click this button to grant all role permissions to all available roles. Sometimes it is quicker to grant all role permissions and deny the unwanted role permissions than to just grant the required role permissions.
   - **Deny All** — click this button to deny all role permissions from all available roles.
   - **Role Permission Categories** — the Role Permissions list is divided into categories to make it easier to find the role permissions to set for the selected role. Quorum uses a dark gray shading to highlight the category headings in the list. Use the following buttons displayed in a category heading to grant or deny all category role permissions to the selected role:
     - **Grant** — click this button to grant all category role permissions to the selected role. Sometimes it is quicker to grant all role permissions and deny the unwanted role permissions than to just grant the required role permissions.
     - **Deny** — click this button to deny all category role permissions from the selected role.
   - **Individual Role Permissions** — use the following buttons displayed to the right of a role permission to grant or deny the role permission to the selected role:
     - **Grant** — click this button to grant the role permission to the selected role.
     - **Deny** — click this button to deny the role permission from the selected role.

   The **Role Permissions** list, hover the mouse pointer over a ? icon to the right of a permission to view a description of the permission.

   You can filter the **Role Permission** list by typing any part of a role permission name in the **Search** box. As you enter a role permission name, the list automatically updates to only show the role permissions that match what you have entered.

10. Click **Save**.

    Quorum saves the set role properties for the new user role.

11. Click **Done** when you want to close the **System Configuration** window.

    When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Edit a User Role

You can edit the properties of a user role at any time.

To edit a user role

1. In the **Roles & Permissions** panel, use the **Name** list to select the user role to edit.

   The **User Properties** section displays information about the selected user account.

2. In the **Role Properties** and **Role Permissions** sections, edit the user role properties as required.

3. Click **Save**.

   Quorum saves the updated user role.

Delete a User Role

When you no longer require a user role for Quorum users, you can delete the user role from the Roles & Permissions panel.

To delete a user role

1. In the **Roles & Permissions** panel, use the **Roles** list to select the user role to delete.

   The **Role Properties** section displays information about the selected user role.

2. At the bottom of the **Roles** list, click **Delete Role**.

   The **Roles** list displays a line through the selected user role to indicate that the role was deleted. Before clicking **Save**, you can restore deleted roles as follows:

   a. Select a role name with a lined displayed through it.

   b. At the bottom of the **Roles** list, click **Restore Role**.

   Quorum restores the selected role and removes the line from the role name.

3. Click **Save**.

   Quorum deletes the deleted roles from the **Roles** list.

Setting the User Session Timeout

You can configure the amount of time that Quorum users can be inactive before they are automatically logged out of Quorum.

To set the user session timeout

1. Log in to **Quorum** as a user with **administrator privileges**.

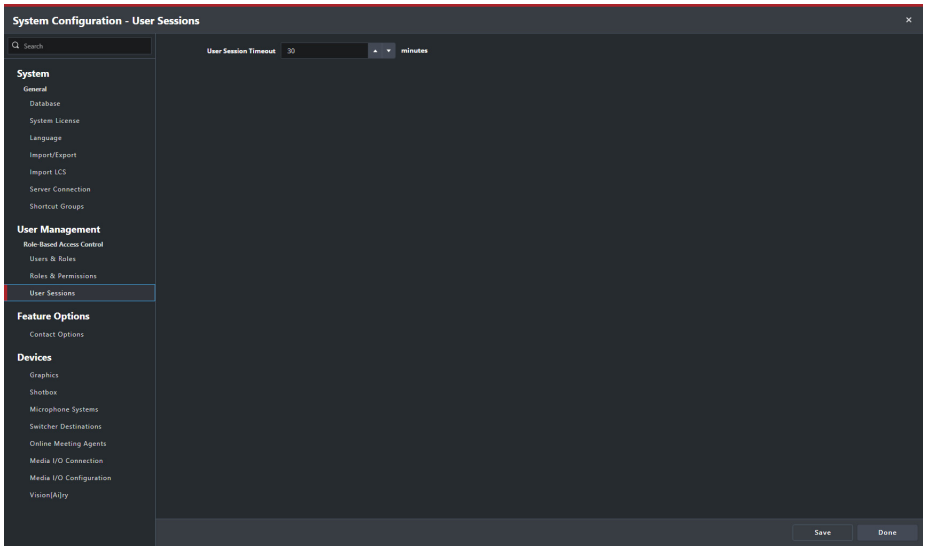
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **User Management** section of the side navigation, click **User Sessions**.

   The **User Sessions** panel opens.



4. Use the **User Session Timeout** box to enter or select the number of minutes that users can be inactive before Quorum automatically logs them out.

5. Click **Save**.

   Quorum saves the set **User Session Timeout** for all users on the Quorum Server.

6. Click **Done** when you want to close the **System Configuration** window.

   When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Adding Custom Contact Fields

The Contact Manager panel stores a photo, first name, and last name as the default information for a contact. You can add custom information fields to the Contact Manager panel to store more information about contacts. You may, for example, add Ward, Phone, and Email fields to your Contact Manager panel (**Figure 7.1**).

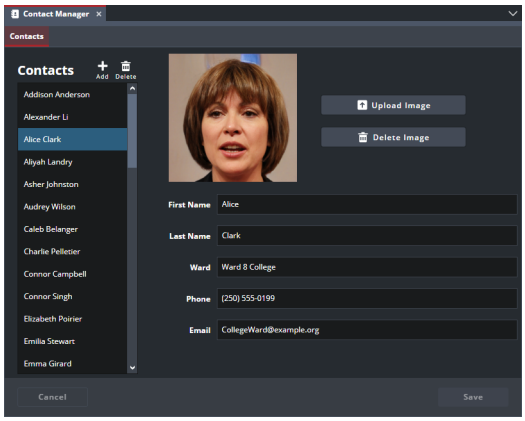


Figure 7.1 Added Contact Fields: Ward, Telephone, and Email

To add a custom information field to the Contact Manager panel

1. Log in to **Quorum**.

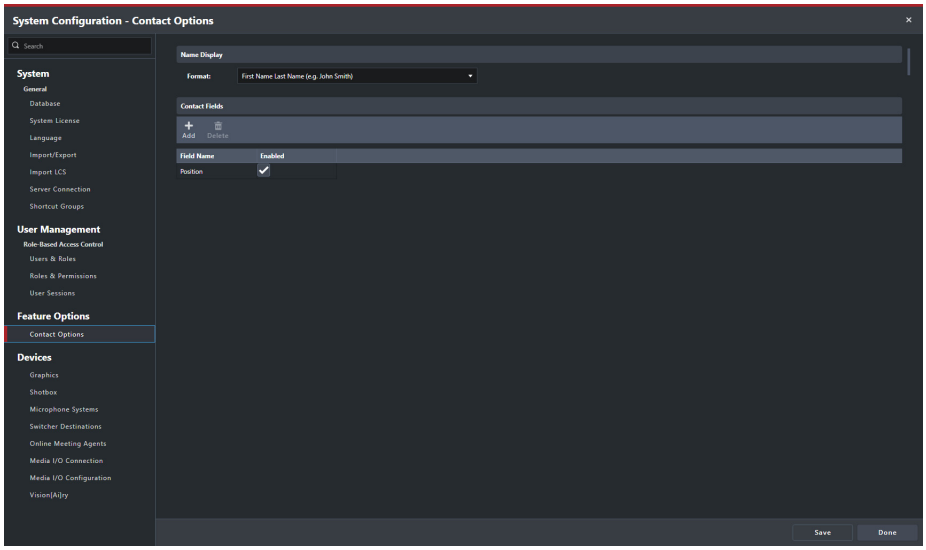
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **Feature Options** section of the side navigation, click **Contact Options**.

The **Contact Options** panel opens.



4. In the **Name Display** section, use the **Format** list to select how to display contact names. The available options are as follows:

   - **First Name, Last Name** — John Smith
   - **Last Name, First Name** — Smith, John
   - **Last Name, First Initial** — Smith, J
   - **First Initial, Last Name** — J. Smith
   - **Last Name Only** — Smith

5. In the **Contact Fields** section toolbar, click **Add**.

   Quorum adds a new field to the **Contact Fields** section.

6. In the **Field Name** column, enter a name for the field.

   The name entered in the **Field Name** column is also the field name displayed for contacts in the **Contact Manager** panel.

7. Select the check box in the **Enabled** column associated with a field to display the field for contacts in the **Contact Manager** panel. Clear the **Enabled** column to hide the field from contacts in the **Contact Manager** panel.

   Hiding a field does not delete the contact information that was entered in the field. for contacts.

8. Click **Save**.

   Quorum saves the defined contact field.

9. Click **Done** when you want to close the **System Configuration** window.

   When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

10. Open the **Contact Manager** panel to view the contact fields that you added.

    You may need to close and reopen the **Contact Manager** panel to see your new contact field.

Edit a Contact Field

You can edit the name and state of contact fields at any time.

To edit a custom information field

1. In the **Contact Fields** section of the **Contact Options** panel, locate the field to edit.
2. Edit the field as required.
3. Click **Save**.

   Quorum saves the updated contact field.

Delete a Contact Field

When you no longer require a contact field, you can delete it from the Contact Manager panel.

★ Deleting a contact field also deletes all of the contact information that was entered in the field for all contacts. To hide a contact field from the Contact Manager panel and retain entered contact information, clear the check box in the Enabled column associated with the field.

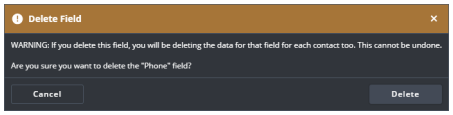
To delete a custom information field

1. In the **Contact Fields** section of the **Contact Options** panel, select the field to delete.

   Quorum highlights the selected field.

2. In the **Contact Fields** section toolbar, click **Delete**.

   The **Delete Field** alert opens.



3. Click **Delete** to delete the selected field or **Cancel** to keep it.

   The **Delete Field** alert closes. When you clicked **Delete**, Quorum deletes the selected field and entered information from all contacts.

Configuring Devices

System Configuration window Device section contains the panels to configure the available graphics in the Graphics panel, custom controls in the Shotbox panel, and microphone systems.

Adding Graphics

The graphics controlled from the Quorum user interface Graphics panel are run by the XPression graphics system that is part of your Quorum system. The XPression graphics that you configure in the Graphics panel are added to the Quorum user interface Graphics panel.

To add XPression graphics to the Quorum user interface Graphics panel

1. Log in to **Quorum**.

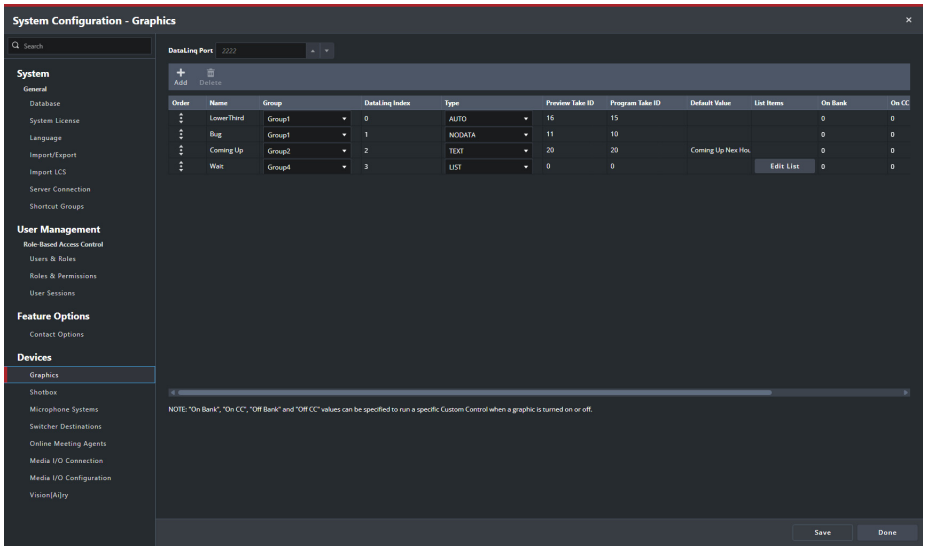
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **Devices** section of the side navigation, click **Graphics**.

The **Graphics** panel opens.



4. Use the **DataLinq Port** box to enter or select the port number that the XPression graphics system uses for DataLinq connections.

   XPression uses the DataLinq connection to populate graphics with data entered in Quorum.

   This is the output for **Preview** graphics.

5. In the **Graphics** panel toolbar, click **Add**.

   Quorum adds a new graphic to the **Graphics** panel.

6. In the **Name** column, enter a name for the graphic.

   The Quorum user interface **Graphics** panel will display this name to identify the graphic.

7. Use the list in the **Group** column to select the graphics group for the graphic.

8. In the **DataLinq Index** column, enter the index to pass to DataLinq when the graphic is turned on or off.

9. Use the list in the **Type** column to select the type of data entry control to display in the Quorum user interface **Graphics** panel for the graphic. The available controls are as follows:

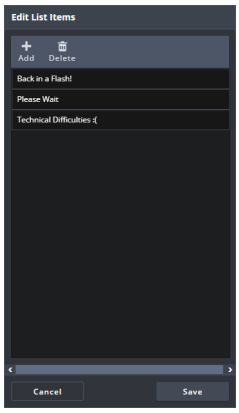
   - **AUTO** — use the fields that are automatically updated by Quorum. For example: who is on program and who is on preview.
   - **LIST** — use the list of items entered in the **List Items** column.
   - **ATTENDEE_LIST** — use a list of the attendees.
   - **TEXT** — use a text entry box.
   - **NODATA** — do not use a data control for the graphic.
   - **CONTACT_LIST** — use a list of all the contacts from Contact Manager.

10. In the **Preview Take ID** box, enter the **XPression TakeID** of the graphic to run when this graphic is turned on in **Preview**.

11. In the **Program Take ID** box, enter the **XPression TakeID** of the graphic to run when this graphic is turned on in **Program**.

12. In the **Default Value** box, enter the default text to display in text entry boxes.
13. Use the **List** column to create an item list that operators can select data to include with a graphic. To create an item list, complete the following steps:
    a. In the **Type** column, select **LIST**.
    b. In the **List Items** column, click **Edit List**.

       The **Edit List Items** dialog box opens.



    c. In the **Edit List Items** dialog box toolbar, click **Add**.

       Quorum adds an list item labeled **New Option**.
    d. Edit the **New Option** label text to enter text for your list item.
    e. Add additional list items as required.
    f. To delete a list item, select it and then click **Delete** in the toolbar.
    g. After adding the required list items, click **Save**.

       Quorum saves the list and closes the **Edit List Items** dialog box.
14. In the **On Bank** column, enter the number of the custom control bank that contains the custom control to run when the graphic turns on.
15. In the **On CC** column, enter the number of the custom control in the selected bank to run when the graphic turns on.
16. In the **Off Bank** column, enter the number of the custom control bank that contains the custom control to run when the graphic turns off.
17. In the **Off CC** column, enter the number of the custom control in the selected bank to run when the graphic turns off.
18. Click **Save**.

    Quorum saves the XPression graphics added to the Quorum user interface **Graphics** panel.
19. Click **Done** when you want to close the **System Configuration** window.

    When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Change the Display Order of Graphics in the Graphics Panel

The display order of graphics in the System Configuration Graphics panel is also the order that the Graphics panel lists graphics. You can use the Order column to change the display order of graphics in the Graphics panel.

To change the display order of graphics in the Graphics panel

1. In the **Graphics** panel list, place the mouse pointer over the icon in **Order** column of the graphic to reposition.
2. Click and hold the on the icon.
3. Drag the selected graphic to a new position in the **Graphics** panel list.
4. With the graphic at desired new position, release the mouse button.

   The **Graphics** panel list updates to show the selected graphic at the selected position.

Edit a Graphic

You can edit the properties of a graphic at any time.

To edit a graphic

1. In the **Graphics** panel, locate the graphic to edit.
2. Edit the graphic as required.
3. Click **Save**.

   Quorum saves the updated graphic.

Delete a Graphic

When you no longer require a graphic on the Quorum user interface Graphics panel, you can delete the graphic from the Graphics panel.

To delete a graphic

1. In the **Graphics** panel, select the graphic to delete.

   Quorum highlights the selected graphic.
2. In the **Graphics** panel toolbar, click **Delete**.

   Quorum deletes the selected graphic from the **Graphics** panel.
3. Click **Save**.

   Quorum saves your graphics updates.

Adding Custom Controls to the Shotbox Panel

The Shotbox panel enables you to trigger Caprica custom controls from the Quorum user interface. The custom control groups that you configure in the Shotbox panel are added to the Quorum user interface Shotbox panel.

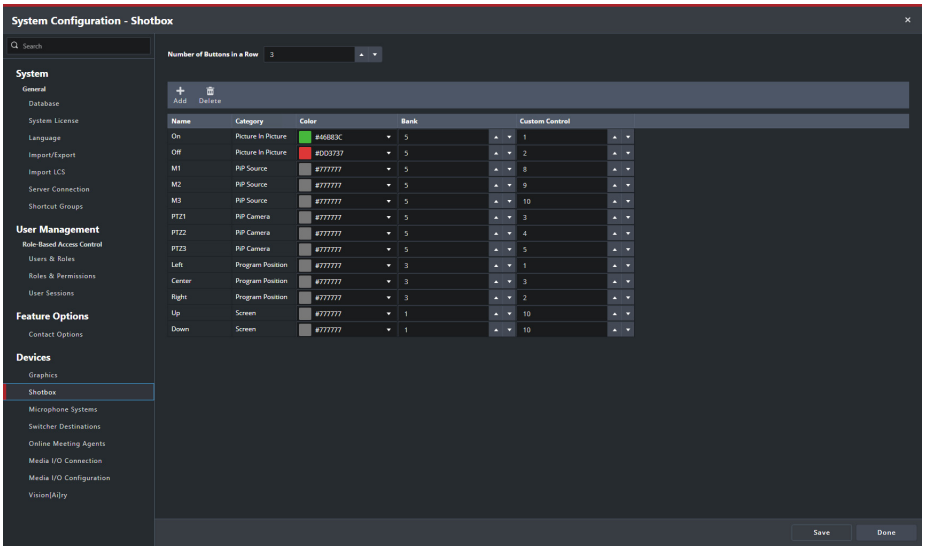
To add custom controls to the Shotbox panel

1. Log in to **Quorum**.

   Quorum opens.
2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.
3. In the **Devices** section of the side navigation, click **Shotbox**.

The **Shotbox** panel opens.



4. Use the **Number of Buttons in a Row** box to enter or select the maximum number of custom control buttons to display in a row on the **Shotbox** panel.

5. In the **Shotbox** panel toolbar, click **Add**.

   Quorum adds a new custom control button to the **Shotbox** panel.

6. In the **Name** column, enter a name for the custom control button.

   The Quorum user interface **Shotbox** panel will display this name on the custom control button.

7. When you want to display multiple custom control buttons in a group, enter the same group name in the **Category** column for each custom control button in the group.

   The Quorum user interface **Shotbox** panel will display this name to identify the group.

8. Click in the **Color** column to use the **Color Picker** that opens to set the background color for the custom control button. The **Color Picker** contains the following settings:

   - **Color Rectangle** — this box displays color set for the button background.
   - **HTML Color Code** — enter in this box the HTML color code to set the button background color.
   - **Color Swatches** — use this list to select a color for the button background. Click a color swatch to set the button background color.

9. Use the **Bank** box to enter or select the number of the custom control bank containing the custom control to assign to the button.

10. Use the **Custom Control** box to enter or select the number of the custom control in the selected bank to assign to the button.

11. Click **Save**.

    Quorum saves the custom control added to the Shotbox panel.

12. Click **Done** when you want to close the **System Configuration** window.

    When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

For More Information on...

- setting up Custom Controls in Caprica, refer to the ***Caprica User Guide***.

Change the Display Order of Graphics in the Graphics Panel

The display order of custom control buttons in the System Configuration Shotbox panel is also the order that the Shotbox panel displays custom control buttons. You can use the Order column to change the display order of custom control buttons in the Shotbox panel.

To change the display order of custom control buttons in the Shotbox panel

1. In the **Shotbox** panel list, place the mouse pointer over the icon in **Order** column of the custom control button to reposition.
2. Click and hold the on the icon.
3. Drag the selected custom control button to a new position in the **Shotbox** panel list.
4. With the custom control button at desired new position, release the mouse button.

   The **Shotbox** panel list updates to show the selected custom control button at the selected position.

Edit a Custom Control

You can edit the properties of a custom control at any time.

To edit a custom control

1. In the **Shotbox** panel, locate the custom control to edit.
2. Edit the custom control as required.
3. Click **Save**.

   Quorum saves the updated custom control.

Delete a Custom Control

When you no longer require a custom control on the Quorum user interface Shotbox panel, you can delete the custom control from the Shotbox panel.

To delete a custom control

1. In the **Shotbox** panel, select the custom control to delete.

   Quorum highlights the selected custom control.
2. In the **Shotbox** panel toolbar, click **Delete**.

   Quorum deletes the selected custom control from the **Shotbox** panel.
3. Click **Save**.

   Quorum saves your custom control updates.

Configuring Microphone Systems

The Microphone Systems panel contains settings to configure the communication between your Quorum system and microphone systems. After you configure microphone system settings, you can use the activated microphone to automatically take the attendee associated with it to Preview or Program.

To configure a microphone system

1. Log in to **Quorum**.

   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

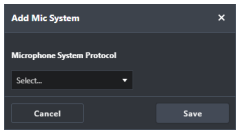
   The **System Configuration** window opens.

3. In the **Devices** section of the side navigation, click **Microphone Systems**.

   The **Microphone Systems** panel opens.

4. At the bottom of the **Microphone Systems** list, click **Add Mic System**.

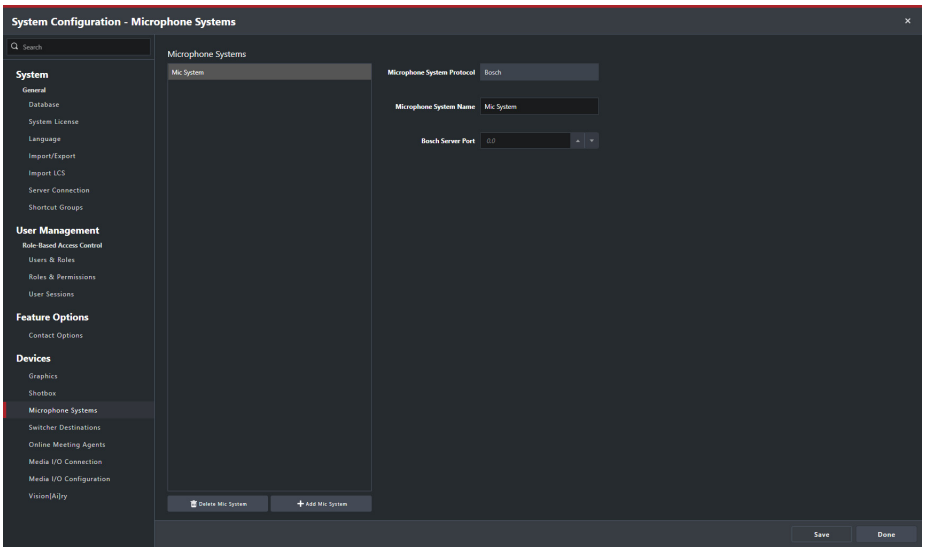
   The **Add Mic System** dialog box opens.



5. Use the **Microphone System Protocol** list to select the protocol used by your microphone system to communicate with your Quorum system.

6. Click **Save**.

   A new microphone system with the selected microphone system protocol opens in the **Microphone Systems** panel.



7. In the **Microphone System Name** box, enter a name for the new microphone system.

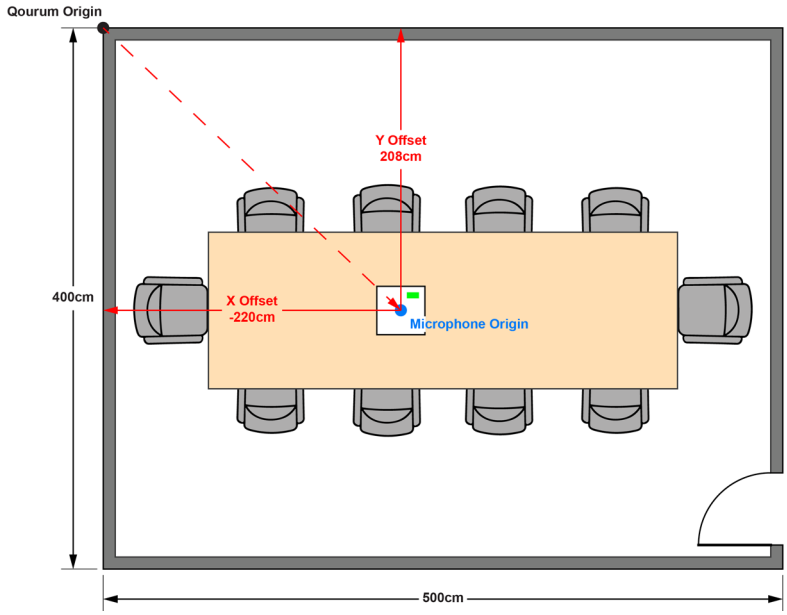
8. Depending on the **Microphone System Protocol** selected for the microphone system, configure the following settings:

- **Bosch DCN**
  - › **Bosch Server Port** — enter or select the port number that Quorum listens on for microphone system control commands from your Bosch microphone system.
- **Biamp**
  - › **Biamp Server Port** — enter or select the port number that Quorum listens on for microphone system control commands from your Biamp microphone system.
- **Shure DIX/MXC**
  - › **Shure - DIX/MXC Protocol Server Host** — enter in this box the IP address of your Shure microphone system.
  - › **Shure - DIX/MXC Protocol Server Port** — enter or select the port number that Quorum listens on for microphone system control commands from your Shure microphone system.
- **Shure MXCW**
  - › **Shure - MXCW Protocol Server Host** — enter in this box the IP address of your Shure microphone system.
  - › **Shure - MXCW Protocol Server Port** — enter or select the port number that Quorum listens on for microphone system control commands from your Shure microphone system.
- **Shure MXA929 Ceiling Array**
  - › **Shure MXA929 Host** — enter in this box the IP address of your Shure microphone system.
  - › **Shure MXA929 Port** — enter or select the port number that Quorum listens on for microphone system control commands from your Shure microphone system.
  - › **Offset from Shure Coordinates(cm)** — use this setting to offset the Shure microphone system coordinates origin, center of the Shure MXA929 Ceiling Array microphone system, from the Quorum room coordinates origin, upper-left corner of the room.

    X — use this box to enter or select the distance in centimeters to offset the Shure microphone system coordinates origin from the Quorum room coordinates origin along the X axis.

    Y — use this box to enter or select the distance in centimeters to offset the Shure microphone system coordinates origin from the Quorum room coordinates origin along the Y axis.

    In the following example placement of a Shure microphone system, the Shure microphone system coordinates origin is offset -220cm along the X axis and 208cm along the Y axis from the Quorum room coordinates origin.



› **Scale from Shure Coordinates (units per cm)** — use this setting to scale Shure microphone system coordinates to Quorum room coordinates. You can use the following equation to calculate the scale factor for the X or Y axis:

```
Quorum Image pixels (px) / Room real world centimeters (cm) = Scale
```

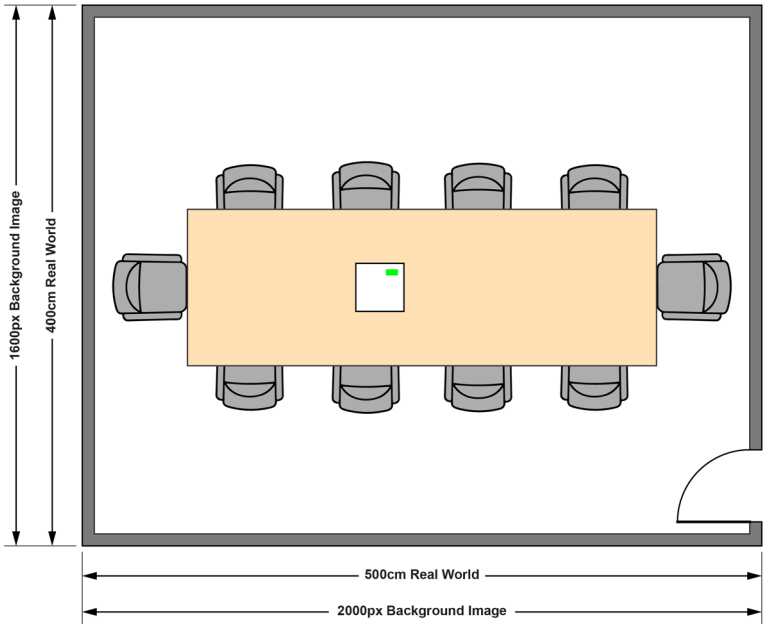
X — use this box to enter or select the scale factor for Shure microphone system coordinates along the X axis.

Y — use this box to enter or select the scale factor for Shure microphone system coordinates along the Y axis.

For the example Quorum background image and real world room, you would use the following calculations to set the X and Y scale factors:

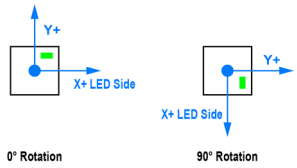
X — `2000 / 500 = 4`

Y — `1600 / 400 = 4`



› **Rotation of Mic Array (degrees)** — use this box to enter or select the degrees to rotate the Shure MXA929 ceiling array. The LED light on the Shure MXA929 ceiling array marks the X+ axis of the Shure microphone system coordinates.

Rotating a Shure microphone system also rotates the Shure microphone system coordinates.

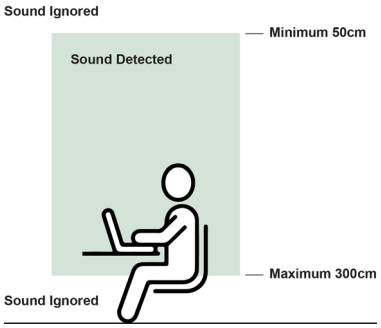


› **Ignore sound outside height range (cm)** — use this setting to set the minimum and maximum heights outside of which your Shure MXA929 ceiling array ignores sound, measured from the array.

Min — use this box to enter or select the height above which your Shure MXA929 ceiling array ignores sound.

Max — use this box to enter or select the height below which your Shure MXA929 ceiling array ignores sound.

In the following example, the minimum height is set to 50cm and the maximum height is set to 300cm:



- **Mark Radius (cm)** — use this box to enter or select the radius in centimeters around a mark in which to detect sound for the mark.
- **Sample Rate (ms)** — use this box to enter or select the rate in milliseconds at which your Shure MXA929 ceiling array sends updated talker position reports to Quorum. The minimum rate that can be set is 100ms.
- **Sound Duration to Turn Mic On (ms)** — use this box to enter or select the time in milliseconds that your Shure MXA929 ceiling array will wait before tallying a microphone on after the talker at the related mark is detected.

  For example, if an attendee at mark one begins talking and Quorum detects them as the most recent talker, the system, in full auto mode, will wait the set duration before tallying, previewing, and taking the attendee on-air.
- **Silence Duration to Turn Mic Off (ms)** — use this box to enter or select the time in milliseconds that your Shure MXA929 ceiling array will wait before removing a mark tally if the attendee is no longer talking.
- **Sensitivity Level (0-11)** — use this box to enter or select the sensitivity level that Quorum sends to the Shure MXA929 ceiling array.

  To control localization sensitivity, use the following values:

  0 — Medium, the default setting.

  1 — Low, less reporting. Use this value in rooms with lots of background noise.

  2 — High, more reporting. Use this value in reverberant rooms or when you want more location reporting.

  To control VAD sensitivity, use the following values:

  4 — Medium, the default setting.

  5 — High, more reporting, but could be triggered by noise sources.

  6 — Lowest, least amount of reporting. This value can miss speech sources.

  7 — Low.

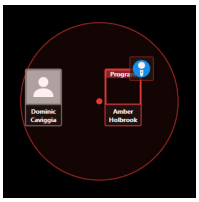
  To control reflection/height correction sensitivity, use the following values:

  8 — Reflection correction off and height correction off, the default setting.

  9 — Reflection correction off and height correction on.

  10 — Reflection correction on and height correction on.

› **Display Talker Indicator** — select this check box to display the Shure MXA929 ceiling array sound detection area around the mark on Program with an active microphone.



- **Taiden**
  - › **Taiden Server Host** — enter in this box the IP address of your Taiden microphone system.
  - › **Taiden Server Port** — enter or select the port number that Quorum listens on for microphone system control commands from your Taiden microphone system.
- **IRC**
  - › **IRC Server Port** — enter or select the port number that Quorum listens on for microphone system control commands from your IRC microphone system.
- **Audio-Technica**
  - › **Multicast Port** — enter or select the port number that Quorum listens on for microphone system control commands from your Audio-Technica microphone system.
  - › **Multicast Address** — enter in this box the Multicast Address of your Audio-Technica microphone system. Use the Audio-Technica Web Remote application to view the Multicast Address set for your microphone system in the IP Control Settings section of the System Settings > Network panel.
  - › **Quorum Host** — enter in this box the IP address of your Quorum Server NIC that listens for UDP multicasts. The Quorum Server NIC and Audio-Technica microphone system must be on the same subnet.

9. Click **Save**.

Quorum adds the new microphone system configuration to the **Microphone Systems** list.

10. Click **Done** when you want to close the **System Configuration** window.

When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Editing a Microphone System

You can edit a microphone system any time the room is not being used to broadcast a meeting.

To edit a microphone system

1. In the **Microphone Systems** panel, use the **Microphone Systems** list to select the microphone system to edit.

The **Microphone Systems** panel displays the settings for the selected microphone system.

2. Edit microphone system settings as required.

The **Microphone System Protocol** cannot be changed.

3. Click **Save**.

Quorum saves the updated microphone system settings.

Deleting a Microphone System

When you no longer require a microphone system, you can delete it from the **Microphone Systems** panel.

✶ You can only delete microphone systems that are not in use broadcasting a meeting.

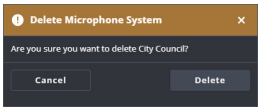
To delete a microphone system

1. In the **Microphone Systems** panel, use the **Microphone Systems** list to select the microphone system to edit.

   The **Microphone Systems** panel displays the settings for the selected microphone system.

2. At the top of the **Microphone Systems** list, click **Delete Mic System**.

   The **Delete Microphone System** alert opens.



3. Click **Delete** to delete the selected microphone system or **Cancel** to keep it.

   The **Delete Microphone System** alert closes. When you clicked **Delete**, Quorum deletes the selected microphone system from the **Microphone Systems** list.

Adding Switcher Destinations

The switcher in a Quorum system has three MEs. Each switcher ME can be used to broadcast a meeting with the cameras in a room. The cameras in a room can be routed through any of the switcher MEs. You can select any available ME for a Quorum room to broadcast a meeting. For example, you can broadcast three meetings at once by routing room cameras through all three MEs in your Quorum system switcher as follows: (**Figure 7.2**).

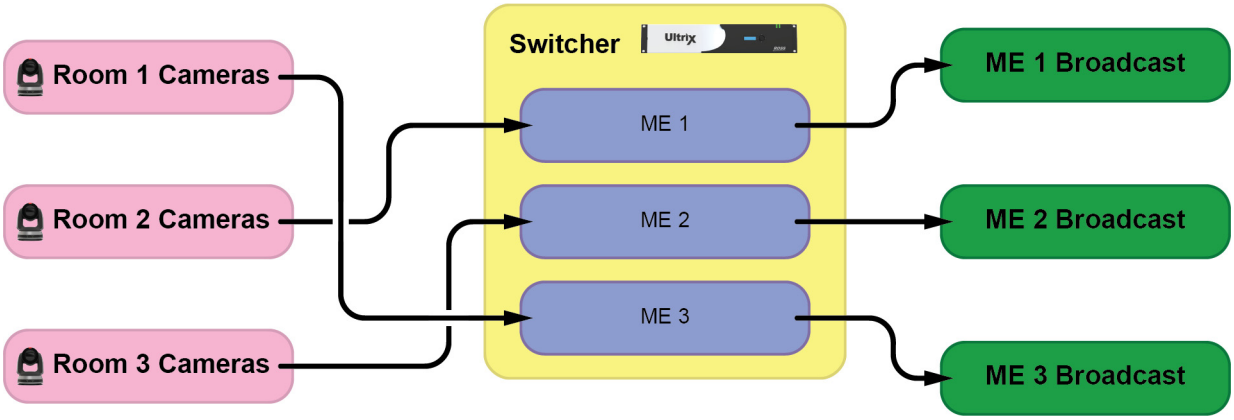


Figure 7.2 Multi-Room Camera Connections

To add switcher destinations

1. Log in to **Quorum**.

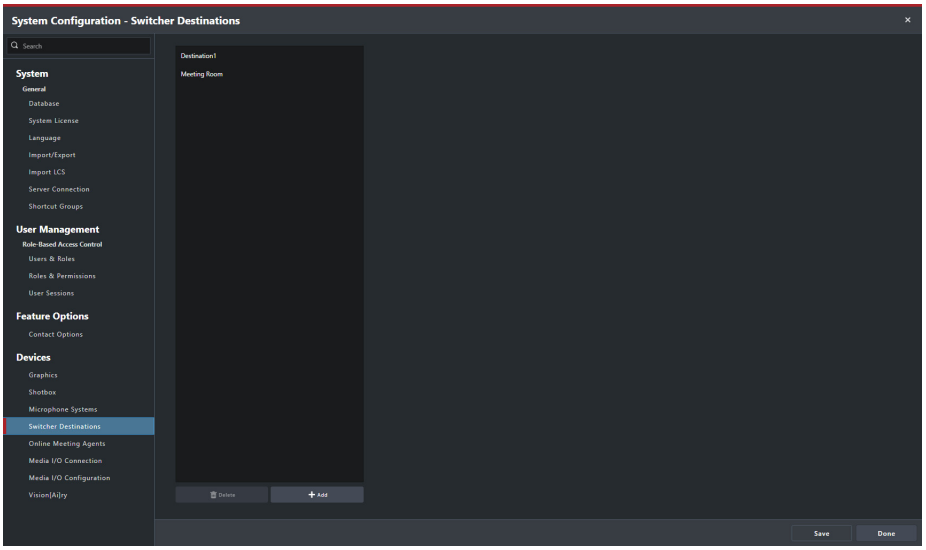
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

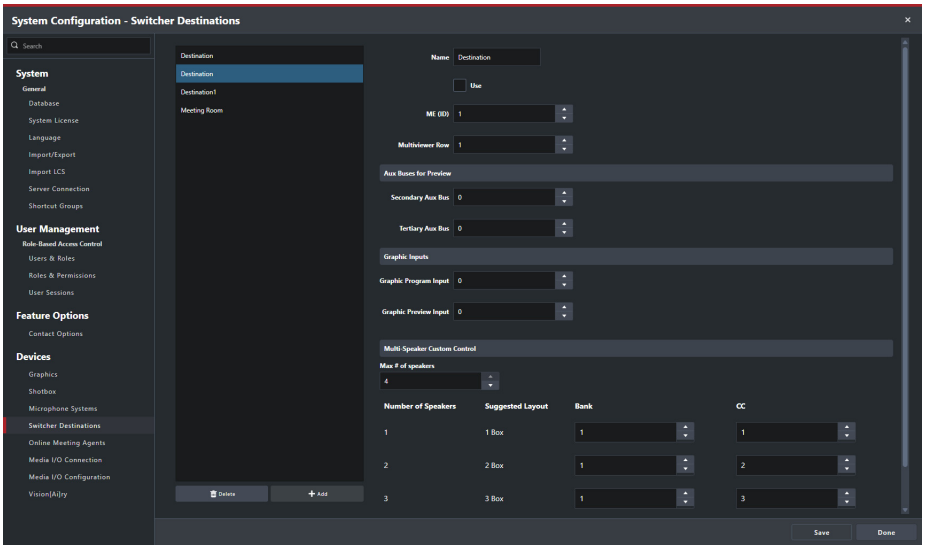
3. In the **Devices** section of the side navigation, click **Switcher Destinations**.

The **Switcher Destinations** panel opens.



4. In the **Switcher Destinations** panel toolbar, click **Add**.

   Quorum adds a new switcher destination to the **Switcher Destinations** panel.



5. In the **Name** box, enter a name for the switcher destination.

   Quorum users see switcher destination names in the **Room** panel **Switcher Destination** list when they select a switcher destination for a room.

6. Select the **Use** check box to use the switcher destination to broadcast meetings. Clear this check box to not use the switcher destination to broadcast meetings.

   You can only use the number of MEs that your Quorum system is licensed to use.

7. Use the **ME (ID)** box to enter or select the ID of the switcher ME that the switcher destination uses.

   Only one switcher destination at a time can use a switcher ME.

8. Use the **Multiviewer Row** box to enter or select the row number of the switcher Multiviewer that contains the **Multiviewer** panel **Secondary** and **Tertiary** pane feeds for the switcher destination.

9. Use the **Secondary Aux Bus** box to enter or select the aux bus source number to use to display the camera source in the **PV2** pane of the **Multiviewer** panel.

10. Use the **Tertiary Aux Bus** box to enter or select the aux bus source number to use to display the camera source in the **PV3** pane of the **Multiviewer** panel.
11. Use the **Graphics Program Input** box to enter or select the Caprica input connected to the XPression graphics system FrameBuffer 1 output.

    This is the output for **Program** graphics.
12. Use the **Graphics Preview Input** box to enter or select the Caprica input connected to the XPression graphics system FrameBuffer 2 output.

    This is the output for **Preview** graphics.
13. Click **Save**.

    Quorum saves the switcher destinations added to the **Switcher Destinations** panel.
14. Click **Done** when you want to close the **System Configuration** window.

    When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Edit a Switcher Destination

You can edit the properties of a switcher destination whenever it is not being used to broadcast a meeting.

To edit a switcher destination

1. In the **Switcher Destination** panel, locate the switcher destination to edit.
2. Edit the switcher destination as required.
3. Click **Save**.

   Quorum saves the updated switcher destination.

Delete a Switcher Destination

When you no longer require a switcher destination, you can delete the switcher destination from the Switcher Destination panel.

✶ You cannot delete all of the switcher destination for a Quorum system. Quorum requires at least one switcher destination to broadcast meetings.

To delete a switcher destination

1. In the **Switcher Destination** panel, select the switcher destination to delete.

   Quorum highlights the selected switcher destination.
2. In the **Switcher Destination** panel toolbar, click **Delete**.

   Quorum deletes the selected switcher destination from the **Switcher Destination** panel.

Configuring a Media I/O Connection

You can record meetings broadcasts from your Quorum system on a Media I/O Server thanks to the close interaction between the Ross Video Quorum and Video Media I/O products. To record meetings, you must configure a Media I/O connection and the Media I/O channel to record a meeting.

To configure a Media I/O connection

1. On your **Media I/O Server**, record the **API Key** of the Media I/O user that Quorum will use to connect to the Media I/O Server.

   You can use an existing Media I/O user or create a new user for Quorum. Refer to the ***Media I/O Configuration Guide*** for information on how to create a Media I/O user with an API key.

2. Log in to **Quorum**.

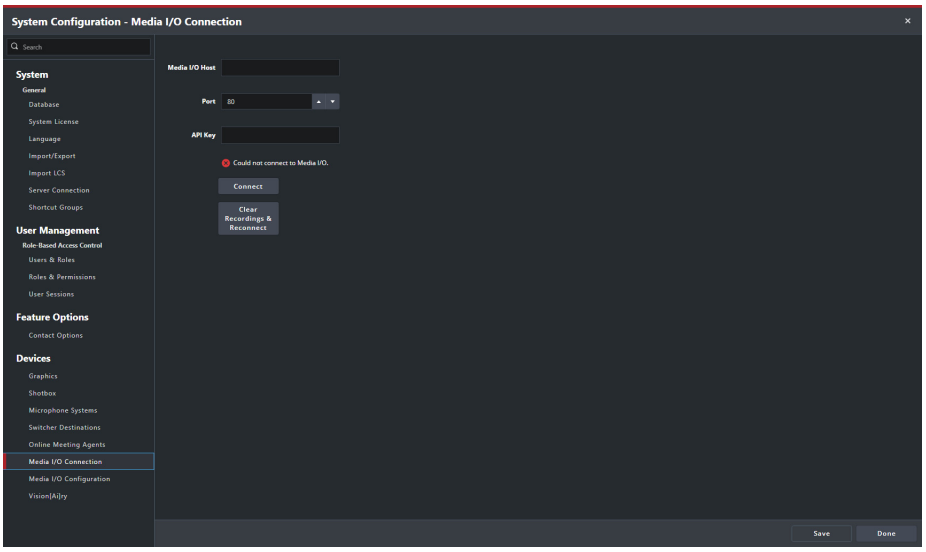
   Quorum opens.

3. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

4. In the **Devices** section of the side navigation, click **Media I/O Connection**.

   The **Media I/O Connection** panel opens.



5. In the **Media I/O Host** box, enter the IP address of the Media I/O Server to record meetings.

6. Use the **Port** box to enter or select the port number that the Media I/O Server uses to communicate with your Quorum Server.

7. Select the **Use HTTPS** check box to use a secure connection to the Media I/O Server. Clear this check box to use an unsecure connection to the Media I/O Server.

   Only select the **Use HTTPS** check box when your Media I/O Server is configured for HTTPS. Refer to the ***Media I/O Configuration Guide*** for information on how to configure HTTPS on a Media I/O Server.

8. In the **API Key** box, enter the API key of the Media I/O user that Quorum will use to connect to the Media I/O Server.

   You recorded the Media I/O user API key in step **1** on page 7-43 of this procedure.

9. Click **Connect**.

   Quorum saves the configured Media I/O connection and connects to the set Media I/O Server.

10. Below the **API Key** box, verify that the **Connection** icon is a (green check mark) indicating that the Quorum Server is connected to the Media I/O Server.

    A (red X) **Connection** icon indicates that the Quorum Server and Media I/O Server are disconnected. To repair your Media I/O connection, verify the values you entered for the connection settings.

11. To delete Quorum meeting recordings from the Media I/O Server, **Clear Recordings & Reconnect**.

    After the meeting recordings are deleted, your Quorum Server reconnects to the Media I/O Server.

12. Click **Done** when you want to close the **System Configuration** window.

    When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Defining the Media I/O Configuration

After you connect your Quorum Server to a Media I/O Server, you can configure the Media I/O server to record your Quorum meetings. You can configure each switcher destination on your Quorum Server to record to a Media I/O Server channel.

To define the Media I/O Server configuration

1. Log in to **Quorum**.

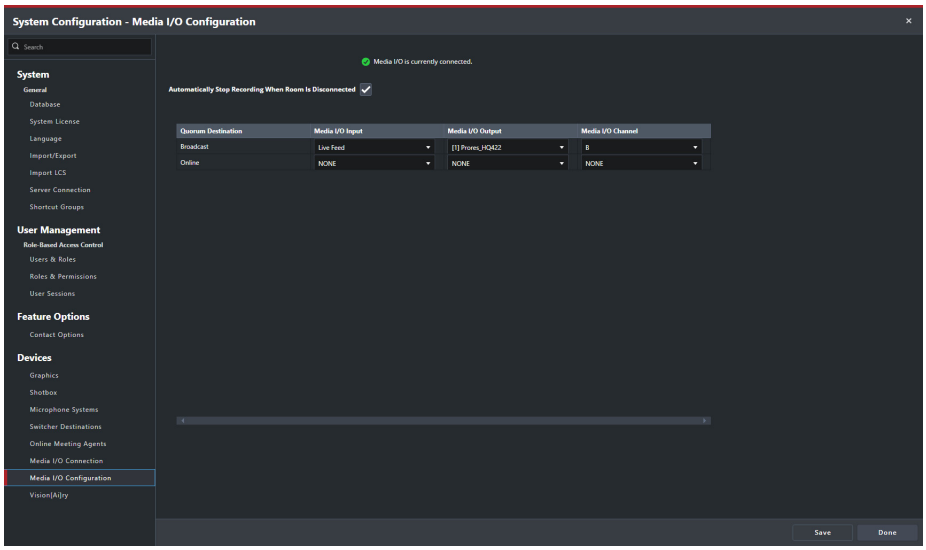
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **Devices** section of the side navigation, click **Media I/O Configuration**.

   The **Media I/O Configuration** panel opens.



4. Select the **Automatically Stop Recording when Room is Disconnected** check box to automatically stop a meeting recording on the Media I/O Server when you disconnect a meeting room from the switcher destination. Clear this check box to manually control stopping a meeting recording on the Media I/O Server.

5. Use the list in the **Media I/O Input** column to select the Media I/O Server input to receive the output from the associated Quorum switcher destination displayed in the **Quorum Destination** column.

6. Use the list in the **Media I/O Output** column to select the Media I/O Server directory and codec combination to use when recording a meeting from the associated Quorum switcher destination.

7. Use the list in the **Media I/O Channel** column to select the Media I/O Server channel to record the output from the associated Quorum switcher destination displayed in the **Quorum Destination** column.

8. Click **Save**.

   Quorum saves the defined Media I/O Server configuration.

9. Click **Done** when you want to close the **System Configuration** window.

   When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Configuring Vision[Ai]ry Camera Control

Vision[Ai]ry uses AI-based facial recognition to detect, locate, and track the position of faces within the video stream directly from the camera. When enabled, Vision[Ai]ry automatically centers the camera on a meeting attendee when previewing the attendee in the Multiviewer. After Vision[Ai]ry centers the camera on the meeting attendee, camera control is returned to the operator.

To configure Vision[Ai]ry to control cameras

1. Log in to **Quorum**.

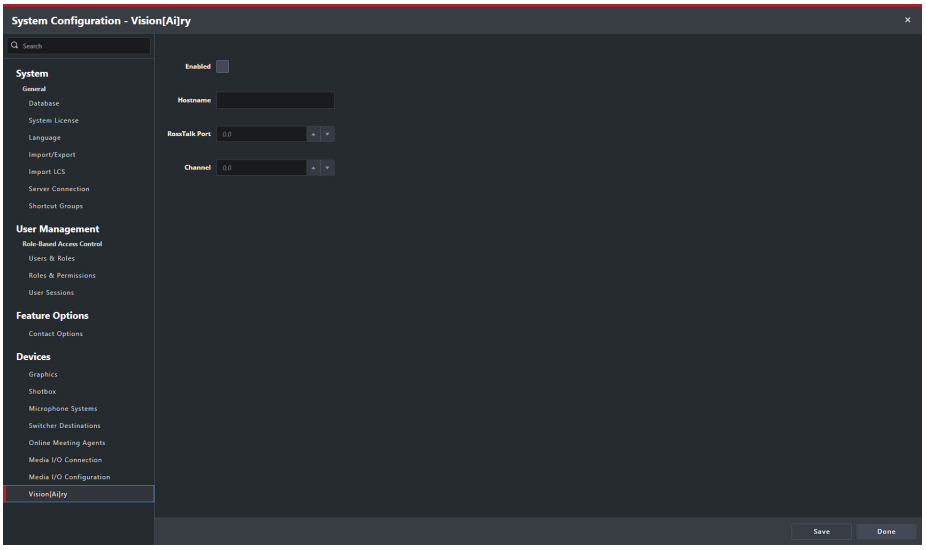
   Quorum opens.

2. On the main toolbar, click the **System Configuration** icon.

   The **System Configuration** window opens.

3. In the **Devices** section of the side navigation, click **Vision[Ai]ry**.

   The **Vision[Ai]ry** panel opens.



4. Select the **Enabled** check box to enable Vision[Ai]ry to center cameras on meeting attendees when previewing attendees in the Multiviewer. Clear this check box to stop Vision[Ai]ry from controlling camera position.

5. In the **Hostname** box, enter the hostname or IP address of the computer that is running Vision[Ai]ry.

6. Use the **RossTalk Port** box to enter or select the port number used to send RossTalk commands to Vision[Ai]ry. Port number 7683 is commonly used for RossTalk.

7. Use the **Channel** box to enter or select the channel number that Vision[Ai]ry uses to control Quorum cameras. Channel 1 is commonly used by Vision[Ai]ry to control Quorum cameras.

8. Click **Save**.

   Quorum saves the defined Vision[Ai]ry configuration.

9. Click **Done** when you want to close the **System Configuration** window.

   When the **System Configuration** window contains unsaved changes, the **Unsaved Changes** alert opens to enable you to save your changes before closing the window.

Appendix A: User Interface Reference

Refer to the What's This? section in Quorum v5.1 Online Help system for descriptions of the panels, panes, windows, and dialog boxes in the Quorum user interface. Use the following URL to open the Quorum v5.1 Online Help system in a web browser:

- http://help.rossvideo.com/quorum/help/v5.1/