QUORUM

Quorum User Guide

Version 1.0

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David Ross
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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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Environmental Information

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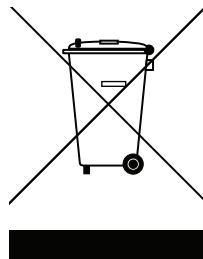
If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration.

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

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Introduction

This user guide provides an overview and detailed operational procedures for Quorum. The following chapters are included:

- "**Introduction**" summarizes the guide and provides important information, including related documentation, documentation conventions, and technical support details.
- "**System Overview**" provides information on the various features and benefits of using Quorum.
- "**Quorum User Interface**" outlines the panels and menus available in the Quorum interface.
- "**Operating Quorum**" provides instructions on how to start Quorum and perform different functions during a broadcast.
- "**Editing Contact Data**" provides instructions on how to edit attendee data, including names, custom data, and positions within a meeting.

Related Documentation

For additional information about Quorum and related products, see the following documents:

- *Quorum Commissioning Guide (4500DR-008-xx)*

  Describes how to install and configure Quorum.
- *Quorum Quick Start Guide (4500DR-007-xx)*

  Describes how to open rooms and meetings, as well as how to put a mark on Preview and Program.
- *Caprica User Guide (4902DR-001-xx)*

  Describes how to install and configure a Caprica Server.
- *Caprica Quick Start Guide (4902DR-010-xx)*

  Describes how to cable a Caprica Server

Documentation Conventions

Special text formats are used in this guide to identify parts of the user interface, text that a user must enter, or a sequence of menus and sub-menus that must be followed to reach a particular command.

Interface Elements

Bold text is used to identify a user interface element such as a dialog box, menu item, or button. For example:

In the **Program** pane, click one of the **Take** buttons to take the shot to air.

User Entered Text

Courier text is used to identify text that a user must enter. For example:

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

Referenced Guides

Italic text is used to identify the titles of referenced guides, manuals, or documents. For example:

Quorum Commissioning Guide (4500DR-008-xx)

Menu Sequences

Menu arrows are used in procedures to identify a sequence of menu items that you must follow. For example, if a step reads "**Server** > **Save As**," you would click the **Server** menu and then click **Save As**.

Interface Navigation

Navigation procedures assume that you are running Microsoft® Windows®. If you are running Mac® OS or Linux® Fedora®, menu names and options may differ.

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 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
E-mail: techsupport@rossvideo.com

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

System Overview

Having an understanding of the minimum system requirements and basic hardware of Quorum can help ensure a good user experience.

This chapter includes the following topics:

- "**System Requirements**" on page 2–2
- "**Hardware Overview**" on page 2–2

System Requirements

This section provides the supported web browsers that should be used in order to successfully run Quorum.

Web Browsers

The following web browsers can be used to access Quorum:

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

Hardware Overview

This section provides a general overview of the features of the front and back panels of the Quorum server.

Front Panel

The features of the front panel of the Quorum server can be seen in **Figure 2.1**, and are described in **Table 2.1**.
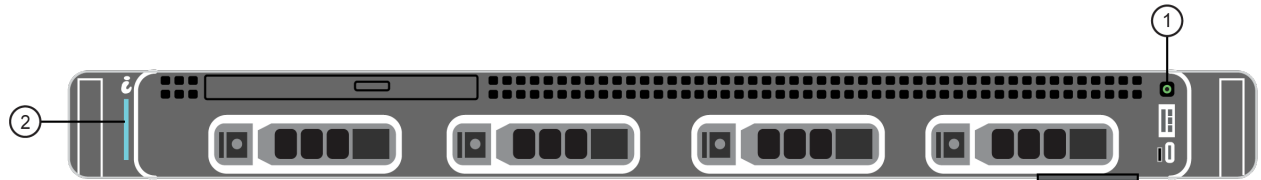
Figure 2.1 Quorum Server — Front Panel (Door Removed)

Table 2.1 Quorum Server — Front Panel Features

Label	Feature	Description
1	Power Button	The main power button for the Quorum server.
2	LED Status Indicator	Indicates the system health and system ID status. The LED Status Indicator can display the following codes: • Solid blue light — The system is powered on, healthy, and the system ID mode is not active. • Blinking blue light — The system is powered on, healthy, and the system ID mode is active. • Solid amber light — The system is in fail-safe mode. • Blinking amber light — The system is experiencing an error.

Back Panel

The features of the back panel of the Quorum server can be seen in **Figure 2.2**, and are described in **Table 2.2**.
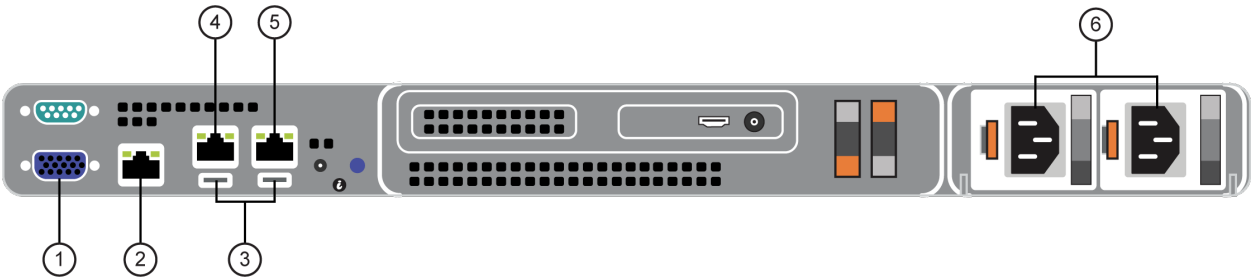
***Figure 2.2*** *Quorum Server — Back Panel*

Table 2.2 Quorum Server — Back Panel Features

Label	Feature	Description
1	VGA Port	This port connects to a monitor using a VGA cable.
2	iDRAC9 Port	Not in use.
3	USB 3.0 Ports	These ports connect to a keyboard and mouse.
4	1 GigE Ethernet Port	This port connects to your Local Area Network using an Ethernet cable. This port is 1 GigE.
5	2 GigE Ethernet Port	This port connects to your Local Area Network using an Ethernet cable. This port is 2 GigE.
6	AC Power Ports	These ports connect to the main power source using AC power cords.
Note: A USB-C to Display Port adapter is also included, if required.		

Quorum User Interface

Quorum is designed to enable a single operator with limited production experience to produce flawless broadcasts of meetings, legislative sessions, and other events. When you click an attendee's icon, the assigned cameras focus on that mark. Then you can choose from multiple preset shots to find the one that frames the mark best, and take it to air. When it goes live, the attendee's name and information appears on the screen, powered by XPression™ graphics.

Figure 3.1 shows an example of the Quorum interface.

Note: The panels within the Quorum interface can be arranged and resized to better match your workflow. The Quorum interface may vary according to your needs. The images of the Quorum interface in this guide are used for demonstrative purposes only.

Figure 3.1 - Example of the Quorum Interface
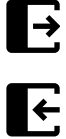
This chapter provides an overview of the Quorum user interface, and includes the following topics:

- "**Quorum Menu**" on page 3–2
- "**Rooms**" on page 3–3
- "**Multiviewer Panel**" on page 3–7
- "**Graphics Panel**" on page 3–8
- "**Attendees Panel**" on page 3–9
- "**Shotbox Panel**" on page 3–9
- "**Address Book Panel**" on page 3–10
- "**User Menu**" on page 3–10
- "**System Configuration**" on page 3–14

Quorum Menu

The Quorum menu displays the different menu options, including panels and elements, of the Quorum interface that are available. Selecting an option in the Quorum menu will open it, allowing the user to interact with it. The options and their associated buttons are shown in **Table 3.1**.

Table 3.1 Quorum Menu Buttons

Button	Description
	Hovering over this icon displays a list of available rooms, which when selected open in the **Rooms** panel of Quorum. The **Room Manager** is also accessible in this list. The Rooms panel and Room Manager are described in "**Rooms**" on page 3–3.
	Opens the **Multiviewer** panel of Quorum, which is described in "**Multiviewer Panel**" on page 3–7.
	Opens the **Graphics** panel of Quorum, which is described in "**Graphics Panel**" on page 3–8.
	Opens the **Attendees** panel of Quorum, which is described in "**Attendees Panel**" on page 3–9.
	Opens the **Shotbox** panel of Quorum, which is described in "**Shotbox Panel**" on page 3–9.
	Opens the **Address Book** panel of Quorum, which is described in "**Address Book Panel**" on page 3–10.
	Toggles light and dark mode for the Quorum interface.
	Toggles the expanded Quorum menu.

Rooms

Rooms are a central part to running a production using Quorum. It is important to understand the features of the Rooms panel, as well as how to best use the options and settings within the Meeting Manager and the Room Manager.
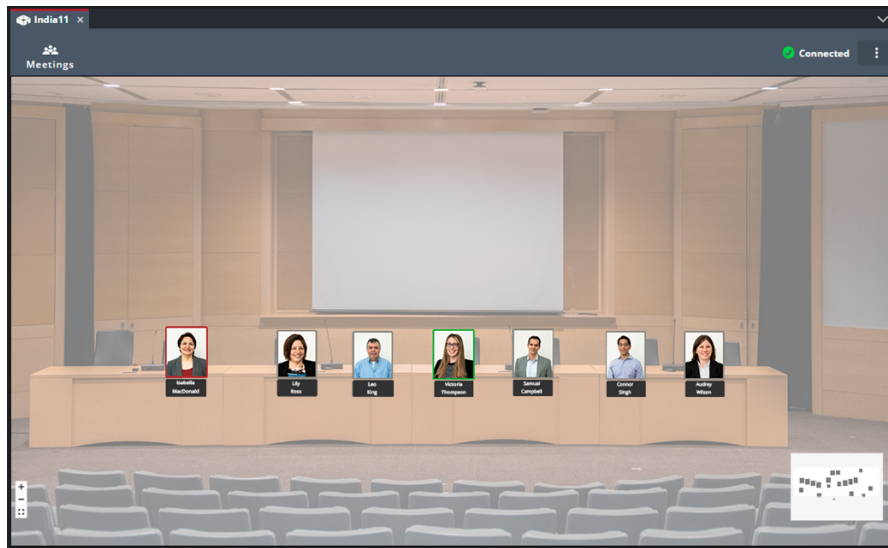
Figure 3.2 - Example of the Quorum Rooms Panel

Rooms Panel

The Rooms panel displays a photo or map of the meeting venue, overlaid with mark icons and camera icons.

Marks are targets for camera shots. A mark icon indicates the position of an attendee, podium, etc. Marks can appear either as a head shot photo or the default icons. A default icon with a grey border indicates that the mark is not in use, a green border indicates that the mark is in preview, and a red border indicates that the mark is on-air. See **Table 3.2** below for the default icons used.

Table 3.2 Default Mark Icon Color Chart

Grey	Green	Red
Not in use	In preview	On-air

If a head shot photo is used, the background of the mark icon is green when that mark is in preview, and turns red when it is taken to air, as shown in **Table 3.3** below.

Table 3.3 Head Shot Icon Color Chart

Grey	Green	Red
Not in use	In preview	On-air.

Note: Head shot icons are filled with a transparent background that matches the icon border.

Camera icons show where your cameras are located. The background color indicates status: gray when not in use, green when in preview, yellow or purple in alternate preview, and red when on-air, as shown in **Table 3.4** below. If the cameras do not appear in the background layout, go to **Config > Sources** and enable **Show Sources on Production**.

Table 3.4 Camera Icon Color Chart

Grey	Yellow	Green	Purple	Red
Not in use	In alternative preview	In preview	In alternative preview	On-air.

In the top right corner of the Rooms panel, there is a kebab menu ⋮ which allows you to connect the room to the Caprica so that it can be controlled for a production. For more info on this, see refer to the section "**Connecting Rooms to Make Them Live**" on page 4-3. Beside the kebab menu is the status indicator for the Caprica. It states **Connected** or **Not Connected** to indicate whether or not the room is connected to the Caprica.

In the top left corner of the Rooms panel, there is a Meetings button, seen in **Figure 3.3**. Clicking on the Meetings button opens a list of available meetings for the room, as well as the option to open the Meeting Manager, which is described in "**Meeting Manager**" on page 3–4.

Figure 3.3 - The Meetings Button Icon

Meeting Manager

The Meeting Manager allows you to create and manage meetings for specific rooms, allowing you to assign specific attendees to marks. Assigning attendees to marks in cases where the seating arrangement is assigned/fixed can be beneficial, as all info in Quorum that is associated with each attendee will be readily available for things like graphics to use. The Meeting Manager is accessible in the list of available rooms that displays when the Meetings button in the Rooms panel is clicked. **Table 3.5** summarizes the fields displayed in the Meeting Manager.

Table 3.5 Meeting Manager Items

Item	Description
Meetings List (Left side)	
Add	Adds a new meeting to the Meetings list.
Delete	Deletes the selected meeting from the Meetings list.
Meetings List	Displays all available meetings for the room.
Meeting Info	
Meeting Name	Specifies the name of the meeting.
Mark Assignments	Lists all marks in the room and allows Attendees to be assigned to each mark. Use the dropdown menu in the **Attendee** column to assign an Attendee to the desired marks.

Room Manager

The Room Manager consists of three areas: the rooms list, the room info, and the data table.

The rooms list area allows you to create new rooms, delete existing rooms, and see all available rooms in Quorum. It is located on the left side of the Room Manager. **Table 3.6** summarizes the fields displayed in the Rooms list area of the Room Manager.

Table 3.6 Room Manager - Rooms List Items

Item	Description
Add	Adds a new room to the Rooms list.
Delete	Deletes the selected room from the Rooms list.
Rooms List	Displays all available rooms.

The room info area allows you to manage the info of the selected room in the rooms list. It is located on the right side of the Room Manager, above the data table. **Table 3.7** summarizes the fields displayed in the Rooms list area of the Room Manager.

Table 3.7 Room Manager - Room Info Items

Item	Description
Room Name	Specifies the name of the room.
Background Image	Specifies the background image used for the room. Click **Browse** and select the desired image from your computer.
Canvas Width	Specifies the width of the room canvas in pixels.
Canvas Height	Specifies the height of the room canvas in pixels.

The data table area has three tabs, each allowing you to manage a different aspect of the selected room in the rooms list. The tabs are: Marks, Automation, and Sources.

The **Marks** tab of the data table allows you to manage the marks that are available in a room, giving you the ability to add and delete marks, and edit their details. **Table 3.8** summarizes the fields displayed in the Marks tab in the data table area of the Room Manager.

Table 3.8 Room Manager - Data Table (Marks Tab) Items

Item	Description
Add	Adds a new mark to the list.
Delete	Deletes the selected mark from the list.
Mark Name	Specifies the name of the mark. (Optional)
X Pos	Specifies the horizontal position (in pixels) of the mark in the room. A value of zero positions the mark at the very left side of the room.
Y Pos	Specifies the vertical position (in pixels) of the mark in the room. A value of zero positions the mark at the very top of the room.
Width	Specifies a custom width (in pixels) for the mark icon.
Height	Specifies a custom height (in pixels) for the mark icon.
Source #	Specifies the video sources to use for the mark in order of preference. There are four Source columns, numbered 1-4, with Source 1 being the default.

Item	Description
Source # Shot #	Specifies the shot numbers for each camera source used for the mark.
	There are three Shots available for each Source, with Source # Shot 1 being the default.
Mic ID	Maps the mark to a microphone. When the microphone is activated, the mark is selected.
	Type the string that the microphone system sends when the microphone at the mark location is activated.
	Applies only to systems that use a delegate microphone system to select previews an/or trigger video transitions.

The **Automation** tab of the data table allows you to manage what happens automatically when a mark is taken to Program, or their microphone is turned on. **Table 3.9** summarizes the fields displayed in the Automation tab in the data table area of the Room Manager.

Table 3.9 Room Manager - Data Table (Automation Tab) Items

Item	Description
Graphics	
When Mark Is Taken to Program, Automatically Turn On Graphic	Specifies which graphic to display each time a mark is taken to Program.
Delay Before Automatic Graphic is Turned On (in milliseconds)	Specifies the delay in milliseconds before an automatic graphic is turned on.
Microphone System	
Microphone System Mode	Specifies the mode of the microphone system.
Delay Before Mark is Put on Program (in milliseconds)	Specifies the delay in milliseconds before a mark is put on Program when the microphone is activated.
Default Mark if All Marks Are Off	Specifies the default mark to be used if all marks' microphones are not activated.
Delay Before Default Mark is Put On Preview	Specifies the delay in milliseconds before the default mark is put on Preview when all marks' microphones are not activated.

The **Sources** tab of the data table allows you to manage the sources that are available in a room, allowing you to select which to use, define their name, and choose where and if they are displayed in the room. **Table 3.10** summarizes the fields displayed in the Sources tab in the data table area of the Room Manager.

Table 3.10 Room Manager - Data Table (Sources Tab) Items

Item	Description
Source Name	Specifies the name of the source.
X Pos	Specifies the horizontal position (in pixels) of the source in the room. A value of zero positions the source at the very left side of the room.
Y Pos	Specifies the vertical position (in pixels) of the source in the room. A value of zero positions the source at the very top of the room.

Multiviewer Panel

The Multiviewer panel, as seen in **Figure 3.4**, contains the following four panes:

- Alternate Preview Pane (ALT PRV)
- Preview Pane (PRV)
- Alternate Preview Pane (ALT PRV)
- Program Pane
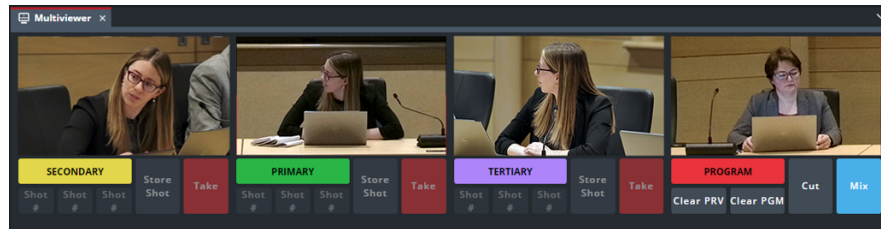
Figure 3.4 *- Example of the Quorum Multiviewer Panel*

The Preview and Alternate Preview panes all function the same, displaying different shots as previews that can be taken to air. The Program pane displays the shot that is currently on-air. Descriptions of these two types of panes can be found below.

The order of these panes can be changed in the Multiviewer Layouts area of the User Configuration menu. For more information, refer to the section "**Multiviewer Layouts**" on page 3-12.

Preview (PRV) and Alternate Preview (ALT PRV) Panes

There is one Preview pane, and two Alternative Preview panes that display different preview shots. Each pane is highlighted by a colored outline and color fill under the title of the pane. The Preview pane is highlighted in green, the first Alternative Preview pane is highlighted in yellow, and the second Alternative Preview pane is highlighted in purple. You can keep one shot prepared in the preview pane, and one in each of the alternate preview panes.

Each of these panes contain the following buttons:

- **Shot #** — Each pane has three of these, each providing a different shot. Selecting them will change the shot that is used for that pane.
- **Store Shot** — Sets the current shot as the default shot for the mark.
- **Take** — Takes the selected shot to air. The selected shot will then be displayed in the Program pane, and the attendee previously on-air will be placed into the Preview and Alternative Preview panes.

Program Pane (PGM)

The Program pane displays the program out video, and is highlighted in red. The source displayed is the shot that is currently on-air.

The Program pane contains the following buttons:

- **Clear PRV** — Clears all optional graphics layers from the Preview pane.
- **Clear PGM** — Clears all optional graphics layers from the Program pane.
- **Cut** — Sets the transition that will be taken to air when a Take button is clicked on one of the Preview or Alternate Preview panes. Cut performs an instantaneous transition between the previous shot and the newly selected one.
- **Mix** — Sets the transition that will be taken to air when a Take button is clicked on one of the Preview or Alternate Preview panes. Mix performs a gradual transition from the previous shot to the newly selected one. The duration for Mix transitions can be configured on the switcher. The process for specifying the duration will depend on the switcher being used.

Graphics Panel

The Graphics panel enables you to run graphics sequences manually, which are created on the Ross Video XPression graphics system. Quorum then sends commands to XPression to run the graphics. It is recommended that you practice running graphics before a broadcast, to familiarize yourself with their behavior. Each graphic is designed separately, and they may behave in very different ways. You can run a sequence in the Preview pane to see how it looks and behaves, and then run it in the Program pane (on-air).

Some graphics appear and then disappear without any operator intervention. Others are configured to appear when you tap the button the first time, and then disappear when you tap it again. How a graphic sequence behaves depends on how it was designed in XPression. For information about how to create graphics sequences for Quorum, see the ***Quorum Commissioning Guide (4500DR-008-xx)***.

These manually run graphics are controlled in the Graphics panel. The Graphics panel contains sections for the various graphics that are available for use in Quorum, some of which accept data, either as text or via a dropdown list, as seen in **Figure 3.5**. Each section controls a different graphic through the use of two buttons

- The green button that says **Preview** runs the graphic in the **Preview** pane.
- The red button that says **Program** runs the graphic in the **Program** pane (on-air).

To remove these graphics, use the **Clear PRV** and **Clear PGM** buttons in the **Program** pane of the **Multiviewer** panel, as explained in "**Program Pane (PGM)**" on page 3–7.
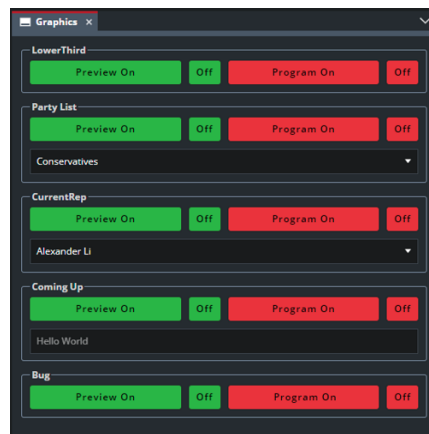
Figure 3.5 *- Example of the Quorum Graphics Panel*

Note: In addition to graphics that you operate manually, Quorum may be configured to run graphics automatically. If you do not want the automated graphics to run, you can turn them off. In the **Configuration** interface, navigate to the **Graphics** tab, and then tap the **Auto Graphics Mode** check box to turn it gray.

Attendees Panel

The Attendees panel displays attendee information. As you select attendees in a meeting in the Rooms panel, information such as their name and photograph will appear in the Attendees panel. You can also select an attendee to view using the dropdown list of available attendees.
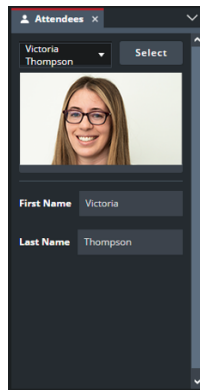
Figure 3.6 *- Example of the Quorum Attendees Panel*

Shotbox Panel

The Shotbox panel contains any custom controls created to be recalled on the Caprica Server. The functions of these custom controls and methods of controlling them will depend on how they have been set up.

Figure 3.7 *- Example of the Quorum Shotbox Panel*

Address Book Panel

The Address Book panel contains a full list of attendees and their information. It consists of the following tab:

• Contacts
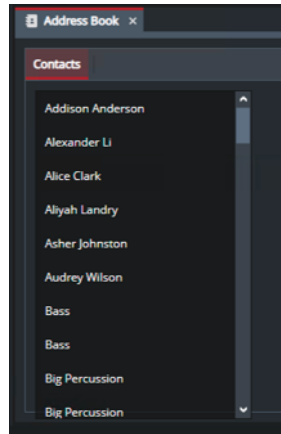
Figure 3.8 - Example of the Quorum Address Book Panel

Contacts

The Contacts tab of the Address Book panel has a list of attendees that is sorted alphabetically (by first name) at the left side of the tab. When an attendee is selected from the list, their information is displayed in editable fields to the right. Descriptions of items in the Contacts tab are in **Table 3.11** below.

Table 3.11 Contacts Tab Items

Item	Description
First Name	Specifies the first name of the attendee.
Last Name	Specifies the last name of the attendee.
Image	Displays the image used for the attendee.
Cancel	Select Cancel to cancel any unsaved changes to the attendee's information.
Save	Select Save to save any unsaved changes to the attendee's information.

User Menu

Clicking on the User Menu at the top right corner of the Quorum interface provides you with the option to logout of Quorum, and the option to view the User Preferences menu, as seen in **Figure 3.9**.
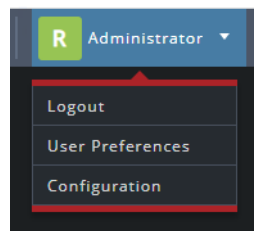
Figure 3.9 - The User Menu

User Preferences

The User Preferences menu has different areas which allow you to manage the information that is associated with your Quorum user account, and change preferences that effect your experience using Quorum.
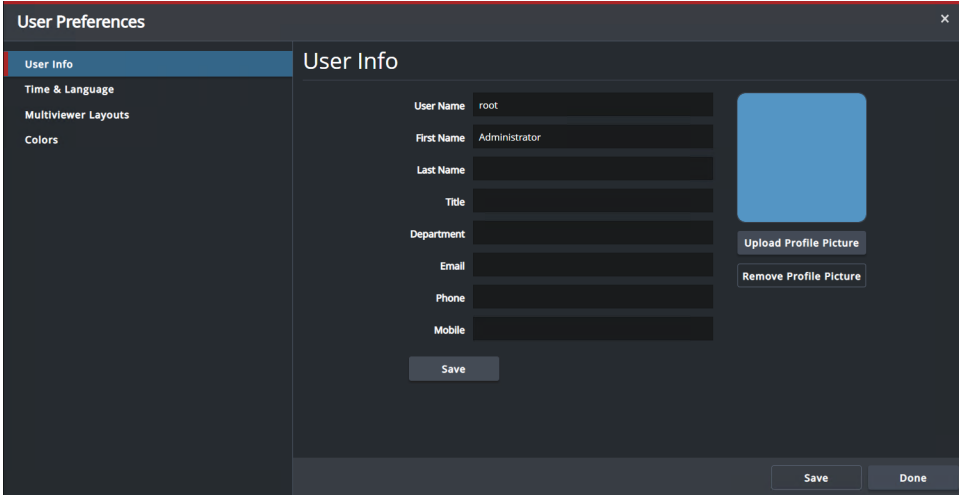
The different areas are:

- User Info
- Multiviewer Layouts
- Colors

User Info

The User Info area of the User Preferences menu allows you to manage the information that is associated with your Quorum user account.

Table 3.12 summarizes the fields displayed in the User Info area (**Figure 3.10**).

Figure 3.10 - *The User Info area of the User Preferences menu*

Table 3.12 User Preferences - User Info Items

Item	Description
User Name	Enter the user name associated with your Quorum account.
First Name	Enter your first name here.
Last Name	Enter your last name here.
Title	Enter your job title here.
Department	Enter the department you work in here.
Email	Enter your email address here.
Phone	Enter your phone number here.
Mobile	Enter your mobile phone number here.
Upload Profile Picture	Click this button to select an image to upload from your computer to use as your profile picture.
Remove Profile Picture	Click this button to remove an image currently set as your profile picture.
Save	Click Save to save any unsaved changes to your user info. **Note:** Leaving the User Info area without clicking Save will result in any unsaved changes being lost.

Multiviewer Layouts

The Multiviewer Layouts area of the User Preferences menu allows you to configure the layout of the Multiviewer panel for your Quorum user account. This allows you to configure the Multiviewer panel in a way that best suits your workflow.

Table 3.13 summarizes the fields displayed in the Multiviewer Layouts area (**Figure 3.11**).
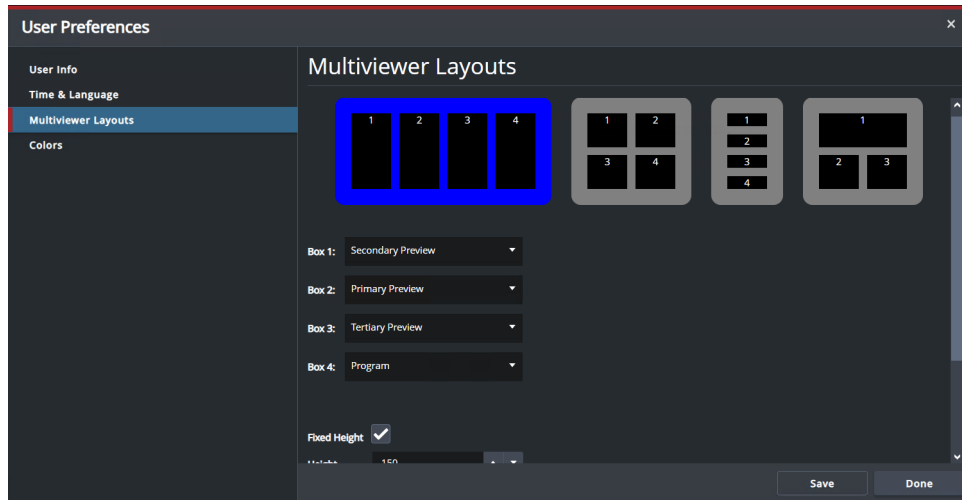
Figure 3.11 - The Multiviewer Layouts area of the User Preferences menu

Table 3.13 User Preferences - Multiviewer Layouts Items

Item	Description
Layout Options	The four layout options at the top of the Multiviewer Layouts area. Clicking the desired layout to select it will turn it blue.
Box 1	Specifies which pane you want to display in Box 1 of your selected Multiviewer layout.
Box 2	Specifies which pane you want to display in Box 2 of your selected Multiviewer layout.
Box 3	Specifies which pane you want to display in Box 3 of your selected Multiviewer layout.
Box 4	Specifies which pane you want to display in Box 4 of your selected Multiviewer layout.
Fixed Height	Selecting this box locks the height of the panes to a fixed height, which is set in the Height field. Clearing this box allows the height of the panes to scale with the size of the Multiviewer panel.
Height	Specifies the height (in pixels) used when the Fixed Height box is selected.
Fixed Width	Selecting this box locks the width of the panes to a fixed height, which is set in the Width field. Clearing this box allows the width of the panes to scale with the size of the Multiviewer panel.
Width	Specifies the width (in pixels) used when the Fixed Width box is selected.
Save	Click Save to save any unsaved changes to your user info. **Note:** Leaving the Multiviewer Layout area without clicking Save will result in any unsaved changes being lost.

Colors

The Colors area of the User Preferences menu allows you to manage the colors used to indicate a mark that is on preview and on program in Quorum.

Table 3.14 summarizes the fields displayed in the Colors area (**Figure 3.12**).
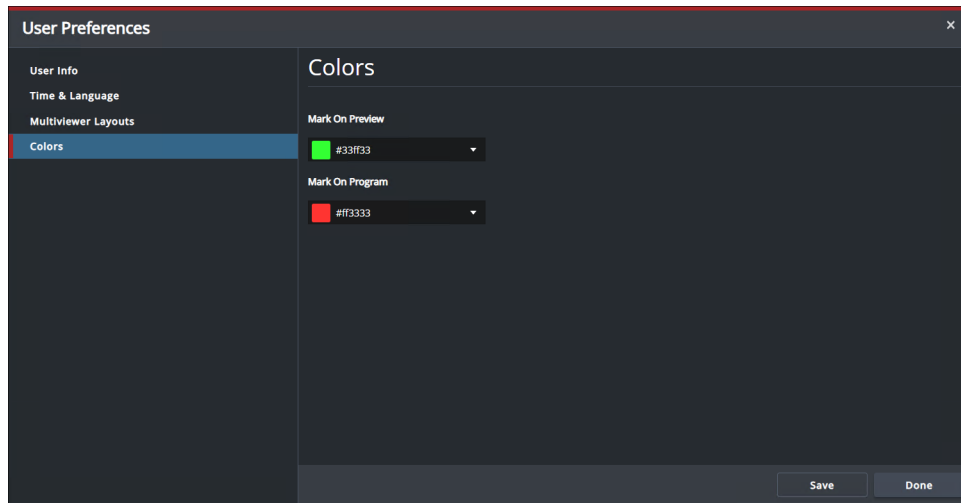
Figure 3.12 - The Colors area of the User Preferences menu

Table 3.14 User Preferences - Colors Items

Item	Description
Mark On Preview	Specifies the color used to indicate a mark on preview. Selecting this field opens an area for you to specify the desired color using either the RGB, HSB, or HSL color models. Select the desired color in this area, and click Apply. **Note:** Leaving the Colors area without clicking Apply will result in any unsaved changes being lost.
Mark On Program	Specifies the color used to indicate a mark on program. Selecting this field opens an area for you to specify the desired color using either the RGB, HSB, or HSL color models. Select the desired color in this area, and click Apply. **Note:** Leaving the Colors area without clicking Apply will result in any unsaved changes being lost.

System Configuration

The System Configuration menu has different areas that can be used to manage various aspects of your system. It can be accessed by clicking on the System Configuration gear icon seen in **Figure 3.13**, located at the top right corner of the Quorum interface.

The different areas are:

• Users & Roles

• System License

• Graphics

• Shotbox

• Microphone System
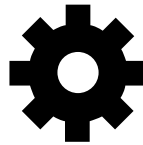
Figure 3.13 - *System Configuration Icon*

Users & Roles

The Users & Roles area of the System Configuration menu, seen in **Figure 3.14**, allows you to manage the information of all users.

Table 3.15 summarizes the fields displayed in the Users & Roles area.
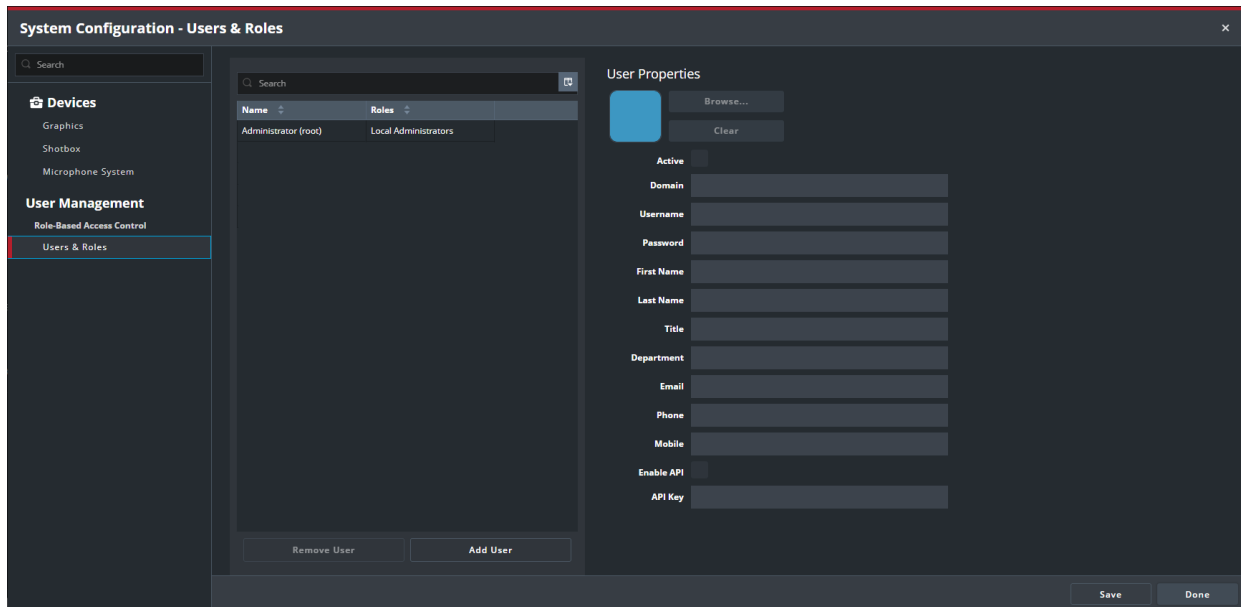
Figure 3.14 - *The Users & Roles area of the System Configuration menu*

Table 3.15 System Configuration - Users & Roles

Item	Description
Users Table (Left side)	
Search	Allows you to search for a specific user from all available users.
Name	The name of the user.

Item	Description
Roles	The roles associated with the user. **Note:** This feature is currently non-functional, but will be implemented in a future release.
Remove User	Removes the selected user.
Add User	Adds a new, blank user profile.
User Properties (Right side)	
Browse...	Allows you to select an image to upload from your computer to use as the profile picture for the selected user. **Note:** This feature is currently non-functional, but will be implemented in a future release.
Clear	Removes the image currently set as the profile picture for the selected user. **Note:** This feature is currently non-functional, but will be implemented in a future release.
Active	Select this box to activate the selected user, and enable users to use this account to log into Quorum. Clear this box to stop users from using this account to log into Quorum.
Domain	The name of the domain to which the selected user belongs, typically Local or an LDAP domain.
Username	Sets the username associated with the selected user's Quorum account.
Password	Sets the password for the selected user's Quorum account.
First Name	The first name of the selected user.
Last Name	The last name of the selected user.
Title	The job title of the selected user.
Department	The department that the selected user works in.
Email	The email address of the selected user.
Phone	The phone number of the selected user.
Mobile	The mobile phone number of the selected user.
Enable API	Select this box to enable the user to make API requests.
API Key	The API key that Quorum automatically assigns to the user when the Enable API box is selected.
Save	Saves any changes made. **Note:** Leaving the Users & Roles area without clicking Save will result in any unsaved changes being lost.
Done	Closes the System Configuration menu. **Note:** Leaving the Users & Roles area without clicking Save will result in any unsaved changes being lost.

System License

For more information on licensing, see the ***Quorum Commissioning Guide (4500DR-008-xx)***.

Graphics

The Graphics area of the System Configuration menu, seen in **Figure 3.15**, allows you to manage the graphics that are available to use in the Graphics panel.

Table 3.16 summarizes the fields displayed in the Graphics area.
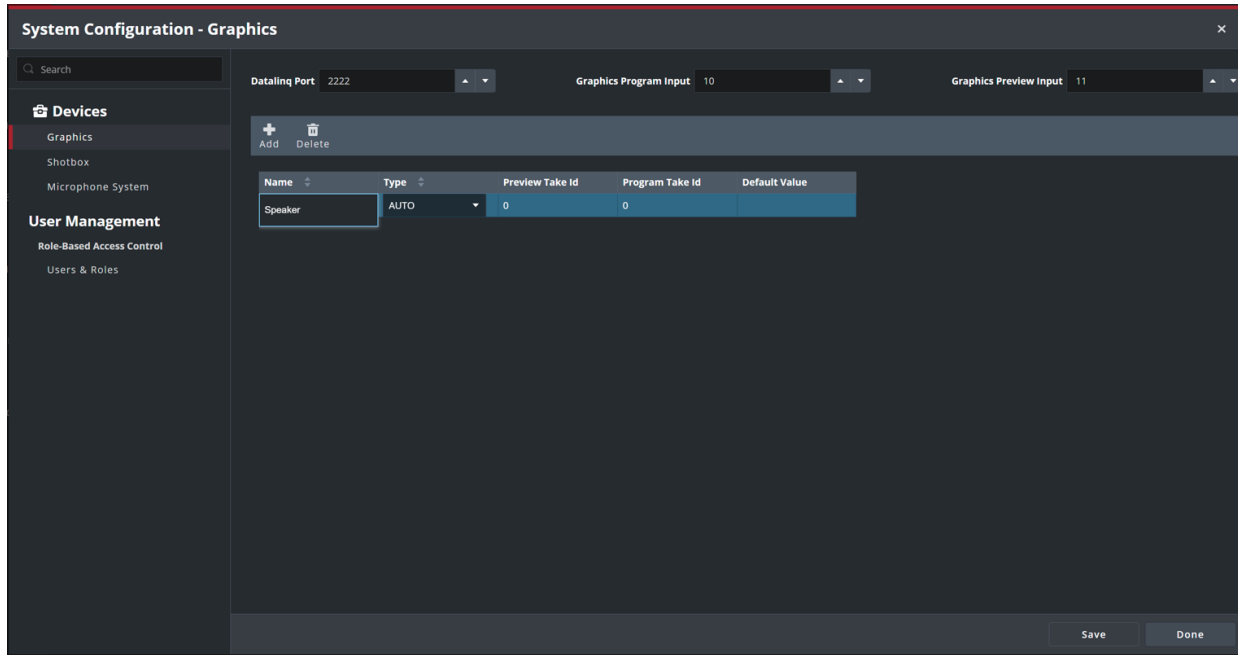
Figure 3.15 - The Graphics area of the System Configuration menu

Table 3.16 System Configuration - Graphics

Item	Description
Graphics Info (Above Data Table)	
Datalinq Port	Specifies the port on which XPression datalinq will establish a connection. This number is required in XPression to establish a DataLinq connection, to populate the graphic with data.
Graphics Program Input	Specifies the input in Caprica that is connected to the XPression's FrameBuffer 1 output. This ouput will show the Program graphics.
Graphics Preview Input	Specifies the input in Caprica that is connected to the XPression's FrameBuffer 2 output. This output will show the Preview graphics.
Data Table	
Add	Adds a new graphic.
Delete	Deletes the selected graphic.
Name	Specifies the name of the graphic.
Type	Specifies the type of graphic.
Preview TakeID	Specifies the TakeID that identifies which graphic in XPression to put on Preview when the selected graphic is turned on.
Program TakeID	Specifies the TakeID that identifies which graphic in XPression to put on Program when the selected graphic is turned on.
Default Value	The default data sent to datalinq for the selected graphic when it is turned on. You can change this data in Graphics panel before turning on the graphic

Item	Description
Save	Saves any changes made. **Note:** Leaving the Graphics area without clicking Save will result in any unsaved changes being lost.
Done	Closes the System Configuration menu. **Note:** Leaving the Graphics area without clicking Save will result in any unsaved changes being lost.

Shotbox

The Shotbox area of the System Configuration menu, seen in **Figure 3.16**, allows you to manage the custom controls that are available to use in the Shotbox panel.

Table 3.17 summarizes the fields displayed in the Shotbox area.
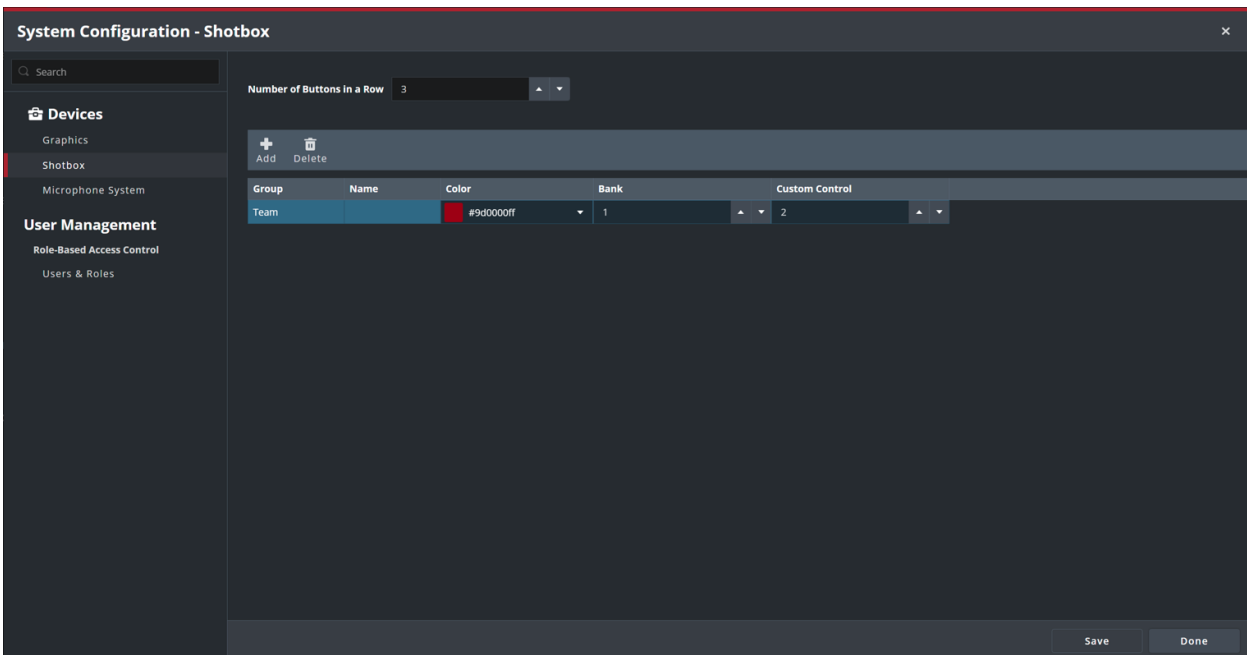
Figure 3.16 - *The Shotbox area of the System Configuration menu*

Table 3.17 System Configuration - Shotbox

Item	Description
Shotbox Info (Above Data Table)	
Number of Buttons in a Row	Specifies how many buttons will appear in one row of the Shotbox.
Data Table	
Add	Adds a new custom control.
Delete	Deletes the selected custom control.
Group	Specifies the group that the custom control belongs to.
Name	Specifies the name that will appear on the button for the custom control.

Item	Description
Color	Specifies the color of the button.
	The color can be set either by using the hex code of the desired color, or by using the sliders/number values for the Red, Green, Blue, and Opacity settings.
Bank	Specifies the custom controls bank where the custom control is saved.
Custom Control	Specifies the custom control number within the bank.
Save	Saves any changes made.
	Note: Leaving the Shotbox area without clicking Save will result in any unsaved changes being lost.
Done	Closes the System Configuration menu.
	Note: Leaving the Shotbox area without clicking Save will result in any unsaved changes being lost.

Microphone System

The Microphone System area of the System Configuration menu allows you to manage the microphone system being used and ensure that it is set up correctly.

Table 3.18 summarizes the fields displayed in the Microphone System area.

Table 3.18 System Configuration - Microphone System

Item	Description
Microphone System Protocol	Specifies which microphone system protocol the vendor of your microphone system uses.
Listener Port	Specifies the port number that Quorum listens on for microphone commands from the microphone system.
Save	Saves any changes made.
	Note: Leaving the Microphone System area without clicking Save will result in any unsaved changes being lost.
Done	Closes the System Configuration menu.
	Note: Leaving the Microphone System area without clicking Save will result in any unsaved changes being lost.

Operating Quorum

Quorum is designed to enable a single operator with limited production experience to produce flawless broadcasts of meetings, legislative sessions, and other events.

Quorum combines robotic camera control, video switching, and graphics control in one operator position.

This chapter explains how to start and operate Quorum during a broadcast. It contains the following sections:

- "**Accessing Quorum**" on page 4–2
- "**Basic Operation Workflow**" on page 4–2
- "**Connecting Rooms to Make Them Live**" on page 4–3
- "**Opening and Switching Meetings**" on page 4–3
- "**Manipulating Your View of a Meeting**" on page 4–3
- "**Changing the Attendee On-Air**" on page 4–4
- "**Assigning a New Attendee to an Existing Blank Mark**" on page 4–5
- "**Operating Graphics Manually**" on page 4–5
- "**Operating Custom Controls in the Shotbox Panel**" on page 4–6

Accessing Quorum

To access Quorum

1. Open a web browser.

2. In the address bar of the web browser, enter the address for your Quorum server.

3. Enter your username in the **Username** field.

   Tip: The default username is `root`.

4. Enter your password in the **Password** field.

   Tip: The default password is `password`.

5. Click **Log In**.

   The user is now logged in and the Quorum interface is displayed.

Note: If you have forgotten your password, click **Reset Password** and follow the prompts to reset your password.

Basic Operation Workflow

This section provides a very basic example of the Quorum operation workflow. Though an actual broadcast will involve more steps than the procedure below, the general structure of the workflow will remain the same.

To perform basic operation

1. Open a meeting in the **Rooms** panel.

   For more information, see "**Opening and Switching Meetings**" on page 4–3.

2. Open the **Multiviewer** panel.

3. Connect the room.

   For more information, see "**Connecting Rooms to Make Them Live**" on page 4–3.

4. In the **Rooms** panel, click a mark (attendee) to select it.

   Tip: The icon for the selected mark is highlighted in green.

5. Below the **Preview** and **Alternate Preview** panes, click through the **Shot** buttons until you find a desired shot.

   Tip: By default, the designated default (preferred) shot appears in the **Preview** pane.

6. If you want the **Preview** shot to become the default shot for the mark, click the **Set as Default (Shot)** button.

   The preview camera and shot become the new default camera and shot for the current mark.

7. In the **Program** pane, click either the **Cut** or **Mix** button to set the transition effect that will occur when you take the shot to air:

   • **Cut** performs an instantaneous cut transition.
   • **Mix** performs a gradual transition.

8. When you are ready to take a **Preview** or **Alternate Preview** shot to air, click the **Take** button for that shot.

   The shot goes to air, along with automated graphics, if configured. The text that is displayed on the three **Take** buttons, which is normally black, temporarily turns gray to indicate that the system is not yet ready for another transition.

   Tip: If you don't want the automated graphics to run, you can turn them off. In the **Configuration** interface, navigate to the **Graphics** tab, and then click the **Auto Graphics Mode** button to turn it gray.

9. Run graphic sequences if desired.

   You can run graphics at any time. Graphics remain in the **Program** pane until you remove them, even if you are taking another shot.

For more information about operating graphics manually, see "**Operating Graphics Manually**" on page 4–5.

10. Operate controls in the **Shotbox** panel, if applicable.

For more information, see "**Operating Custom Controls in the Shotbox Panel**" on page 4–6.

Connecting Rooms to Make Them Live

Quorum allows multiple rooms to be open and viewed at once, but only one can be controlled to run a production at a time. To control a room to run a production, the room must be connected to the Caprica.

To connect a room to the Caprica

1. In the room that you would like to connect to the Caprica, click on the **kebab menu** ⁝ in the top right corner.

A dropdown opens from the kebab menu.

2. In the dropdown, click "**Connect to Room**".

The status indicator in the top right corner of the Rooms panel changes to **Connected**. The room is now connected to the Caprica and ready to be controlled to run a production.

Opening and Switching Meetings

When opening meetings within Quorum, you must first ensure that the correct room is open and displayed. Individual rooms are often used for more than one meeting, so you may also find yourself needing to switch between meetings in a room.

To open a meeting

1. Hover over the **Rooms** button in the **Quorum menu**.

A list of available rooms appears.

2. Select the desired room from the list.

The selected room displays in the **Rooms** panel.

3. Click the **Meetings** button in the top left corner of the **Rooms** panel.

A list of available meetings for the room appears.

4. Select the desired meeting from the list.

Attendee info for the meeting loads into the marks and the meeting has been opened.

To switch meetings

1. Click the **Meetings** button in the top left corner of the **Rooms** panel.

A list of available meetings for the room appears.

2. Select the desired meeting from the list.

Attendee info for the new meeting loads into the marks and the new meeting has been opened.

Manipulating Your View of a Meeting

Navigating a meeting within the **Rooms** panel to locate a desired attendee, view the locations of the cameras, or for any other reason can be difficult, especially for meetings with many marks. Being able to manipulate your view of the meeting by zooming and panning can make these tasks easier.

Zooming In and Out

Zooming in and out of a meeting can better allow you to locate and select marks, which can be especially challenging in meetings with many marks.

To zoom in/out on a meeting (mouse method)

1. Hover your cursor over the desired location in the meeting in the **Rooms** panel.

2. Rotate the scroll wheel of your mouse forwards to zoom in on that location, or backwards to zoom out of that location.

To zoom in/out on a meeting (trackpad method)

1. Hover your cursor over the desired location in the meeting in the **Rooms** panel.

2. Using two fingers on the trackpad, stretch out to zoom in on that location, or pinch in to zoom out of that location.

To zoom in/out on a meeting (button method)

1. Click the + button in the bottom left corner of the **Rooms** panel to zoom in on the middle of the panel.

2. Click the - button in the bottom left corner of the **Rooms** panel to zoom out of the middle of the panel.

Panning

Panning in a meeting allows you to change the area of the meeting that is visible, which can be useful when locating marks.

To pan in a meeting

1. Click and hold in the meeting in the **Rooms** panel.

   Note: Ensure you are clicking on an empty area of the meeting and not clicking on a mark.

2. While holding down, drag in the opposite direction of the area that you want to view.

3. Release the click when the desired area is visible.

   Note: Alternatively, you can toggle on the mini map by clicking the ⊙ **View** button in the bottom left corner of the **Rooms** panel, and simply clicking and dragging the visible area in the mini map.

Resetting Your View

Zooming and panning are useful tools when navigating a meeting, but it can be inconvenient to undo these changes to your view.

To reset your view, simply click the ⛶ **expand** button in the bottom left corner of the **Rooms** panel. This adjusts the visible area of the meeting so that all marks are visible.

Changing the Attendee On-Air

When changing the attendee who is on-air, there are two methods that can be used. The first method involves using the Rooms panel, and the second method involves using the Attendees panel.

The transition used when changing the attendee on-air is set by using the **Cut** and **Mix** buttons in the **Program** pane of the **Multiviewer** panel.

• **Cut** performs an instantaneous transition between the previous shot and the newly selected one.

- **Mix** performs a gradual transition from the previous shot to the newly selected one. To specify the duration for Mix transitions, go to **Config > Devices** and under **Switcher** set the **Dissolve (frame)**.

To change attendee on-air (Rooms panel method)

1. In the **Rooms** panel, select the attendee that you want to put on-air.

    The selected attendee's photo is outlined in green in the **Rooms** panel, and available cameras move to display shots of the selected attendee in the **Multiviewer** panel.

2. In the **Multiviewer** panel, select which shot from the **Preview** and **Alternate Preview** panes you want to use.

3. Click the **Take** button in the same pane of the **Multiviewer** panel as the desired shot.

    The newly selected attendee is now on-air and the attendee previously on-air is placed into preview.

To change attendee on-air (Attendees panel method)

1. In the **Attendees** panel, select the attendee that you want to put on-air from the dropdown list of available attendees.

2. Click the **Select** button.

    The selected attendee's photo is outlined in green in the **Rooms** panel, and available cameras move to display shots of the selected attendee in the **Multiviewer** panel.

3. In the **Multiviewer** panel, select which shot from the **Preview** and **Alternate Preview** panes you want to use.

4. Click the **Take** button in the same pane of the **Multiviewer** panel as the desired shot.

    The newly selected attendee is now on-air and the attendee previously on-air is placed into preview.

Assigning a New Attendee to an Existing Blank Mark

If a mark is blank, no attendee is assigned to it. You are able to create a new attendee that will be directly assigned to an existing blank mark.

To assign a new attendee to an existing blank mark

1. Ensure the correct meeting is opened in the **Rooms** panel.

2. Click the blank mark to which you want to assign a new attendee.

3. In the **Attendees** panel, click the **Add a new Attendee to this Mark** button.

4. Specify values for the data fields as desired.

    The values apply for the current transition, but are not automatically retained for subsequent takes.

    Some fields accept text, and others have dropdown lists. The nature of the data available depends on how your system is configured.

5. If you want to save the values so the new attendee persists and remains assigned to the mark for future transitions, click **Apply**.

Operating Graphics Manually

The Graphics panel enables you to run graphics sequences manually, which are created on the Ross Video XPression graphics system. Quorum then sends commands to XPression to run the graphics. It is recommended that you practice running graphics before a broadcast, to familiarize yourself with their behavior. Each graphic is designed separately, and they may behave in very different ways. You can run a sequence in the Preview pane to see how it looks and behaves, and then run it in the Program pane (on-air).

Note: In addition to graphics that you operate manually, Quorum may be configured to run graphics automatically. If you don't want the automated graphics to run, you can turn them off. In the **Configuration** interface, navigate to the **Graphics** tab, and then tap the **Auto Graphics Mode** check box to turn it gray.

Some graphics appear and then disappear without any operator intervention. Others are configured to appear when you tap the button the first time, and then disappear when you tap it again. How a graphic sequence behaves depends on how it was designed in XPression. For information about how to create graphics sequences for Quorum, see the ***Quorum Commissioning Guide (4500DR-008-xx)***.

Note: When you take a shot, it has no effect on manually-operated graphics. Any such graphics remain in the **Program** pane when a new shot is taken. If your system is configured with automated graphics, those graphics will run when a new shot is taken.

To run a graphics sequence

1. In the **Graphics** panel, locate the graphic you want to run.

2. If the graphic accepts data, specify the data by typing text or by selecting the data from the dropdown list.

3. To run the graphic, click one of the graphic buttons:

   • Green **Preview** button — the graphic sequence runs in the **Preview** pane.
   • Red **Program** button — the graphic sequence runs in the **Program** pane (on-air).

   We recommend you experiment with the graphic in the **Preview** pane before you run it in the **Program** pane.

To clear a graphics sequence

If you want to clear all optional graphics from the **Preview** pane, tap the **Clear PRV** button on the **Program** pane.

If you want to clear all optional graphics from the **Program** pane, tap the **Clear PGM** button on the **Program** pane

Operating Custom Controls in the Shotbox Panel

Custom Controls on the Caprica can be used to control your switcher, graphics, and other devices in your studio. During commissioning, you can create custom controls to do various things on those devices. Once those custom controls are created, they can be triggered from within Quorum, using the **Shotbox** panel.

To operate custom controls

1. In the **Shotbox** panel, locate the desired custom control.

2. Operate the controls as required.

   The nature of the controls depends on how they were created.

Editing Contact Data

This chapter explains how to edit contact data, including names, photos, and assigned seat positions.

This chapter includes the following sections:

- "**Editing a Contact**" on page 5–2
- "**Importing Contacts from a Reps File**" on page 5–2
- "**Updating Contact Photos**" on page 5–2
- "**Assigning Contacts to Marks**" on page 5–3

Note: For information about changing other configuration settings, refer to the ***Quorum Commissioning Guide (4500DR-008-xx)***.

Editing a Contact

You can edit contact names and data to ensure the information that Quorum has for each contact is accurate.

To edit a contact

1. In the **Address Book** panel, ensure the **Contacts** tab is displayed.

2. Select the contact whose data you want to edit.

3. Edit the following data as required:

   • **First Name** — Specify the first name of the contact.

   This name appears in the Rooms panel, and in on-air graphics.

   • **Last Name** — Specify the last name of the contact.

   This name appears in the Rooms panel, and in on-air graphics.

   • **Image** — Assigns the image that is used for the contact.

   This image appears in the Rooms panel. For more information on how to change the image used for a contact, refer to the section "Updating Contact Photos" on page 5-2

4. Click the **Save** button to save unsaved changes to the contact's data.

Importing Contacts from a Reps File

You can import contact data from a Reps file. When you import contacts from a Reps file, they are added to the current list of contacts. Duplicates are possible.

For more information on how to import contacts from a Reps file, see the ***Quorum Commissioning Guide (4500DR-008-xx)***.

Updating Contact Photos

Contact photos (head shots) appear on mark icons and in the **Attendee** panel to help identify the selected attendee. Head shot photos are never used in on-air graphics.

For best performance and a consistent visual appearance, make all the photos the same pixel size and keep them small (typically below 150 pixels by 150 pixels). The image files can be any of the following formats: .gif, .jpg, .jpeg, or png.

IMPORTANT: Do not use large files. If your images are large, use graphics software to reduce their file size before using them in Quorum.

To change a contact photo

1. Create the new photo and save it.

   Note: We recommend you save all Quorum photos in the ***<install_location>*/Images/Photos** folder, to keep them well organized.

2. In the **Address Book** panel, ensure the **Contacts** tab is displayed.

3. Select the contact whose photo you want to replace.

4. Click the **Browse** button, navigate to the image you want to use, and then click **Open**.

5. Click **Save** to save the change to the contact's photo.

Assigning Contacts to Marks

If seating assignments in the meeting room change, you can reassign contacts to the appropriate marks.

If your Quorum includes automated graphics populated with contact names, you will need to reassign contacts to multi-user marks where they are about to appear, such as a podium. A contact can be assigned to multiple marks.

To assign a contact to a mark

1. Hover over the **Rooms** button in the **Quorum menu**.

   A list of available rooms appears.

2. Select the desired room from the list.

   The selected room displays in the **Rooms** panel.

3. Click the **Meetings** button in the top left corner of the **Rooms** panel.

   A list of available meetings for the room appears.

4. Select the **Meeting Manager** from the list.

   The Meeting Manager opens.

5. Using the **Meetings List** in the Meeting Manager, select the desired meeting.

   The Mark Assignments table loads any current assignments for the meeting.

6. In the **Meetings List** table, use the dropdown list in the Attendee column to select the name of the contact you want to assign to each mark.

   Tip: If you want leave the mark unassigned, select the blank entry at the top of the list.

   Tip: If you start typing the contact's name in the box, the list is filtered to help you find the correct contact quickly.

7. Continue assigning contacts to marks, as required.

8. When you have finished assigning contacts to marks, click the **Save** button to save the changes to the mark assignments.