GV ORBIT CLIENT

DYNAMIC SYSTEM ORCHESTRATOR
V1.4.0

Quick Start Guide

13-03082-030 AD

2020-08-12 (Supersedes version dated 2020-05-29)

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Title	GV Orbit Client Quick Start Guide
Part Number	13-03082-030 AD
Revision	Issue 1 Revision 4 2020-08-12, 08:59

This document is available on the Grass Valley website at:

https://www.grassvalley.com/products/gv_orbit/

Related Documentation

Use the following related documentation to configure GV Orbit and to better understand the available features. You can obtain the latest product documentation from the Documentation Library section of Grass Valley's website (www.grassvalley.com/docs/gvorbit).

Part Number	Document Title
GVB-2-0860A-EN-DS	GV Orbit Datasheet
13-03082-010	GV Orbit Release Notes
13-03082-020	GV Orbit Welcome
13-03082-030	GV Orbit Client Quick Start Guide (this document)
13-03082-090	GV Orbit Admin Guide (Includes GV Orbit Services)
13-03082-130	GV Orbit Routing Panel User Guide
13-03082-160	GV Orbit Control User Guide

Latest Software

You can obtain the latest GV Orbit software from Grass Valley Technical Support. See Grass Valley Technical Support, on page 105.

Table of Contents

Introduction

Summary contents of this chapter:

Introduction

Welcome to the *GV Orbit Client Quick Start Guide*. The purpose of the guide is to provide the minimum steps required to install, configure and get started with the GV Orbit Client application.

In the first chapter, there is an introduction to the GV Orbit Client. The next chapter contains the quick start steps. A final chapter provides additional information.

Product Introduction

GV Orbit is a single, consolidated, overarching configuration, control and monitoring package specifically designed for the dynamic orchestration of broadcast media networks, whether they be SDI, hybrid or pure IP. The underlying client-server architecture is targeted at open standards-based IP systems with many features and functions specifically crafted to make IP easy.

'Dynamic Orchestration' is GV Orbit's core strength that differentiates it from competitive systems. The ability to build, configure and change systems on-the-fly is hugely powerful, whether it is the adding/removing of devices or simply changing a name. In today's cost-conscious world, fast and efficient deployment and re-purposing of systems for alternative scenarios or productions is a key requirement.

GV Orbit uses one or more GV Orbit servers running the GV Orbit services and one or more client computers running the GV Orbit Client application.

This *GV Orbit Client Quick Start Guide* outlines steps to get going with the GV Orbit Client application.

GV Orbit Products

The GV Orbit **Professional** and **Enterprise** products require a GV Orbit server (GVO-HW) and are shipped with various software license options pre-installed. The options purchased determine the overall functionality and feature set available in a GV Orbit deployment.

The GV Orbit **Lite** product is a free-of-charge download from the Grass Valley website; it operates without a GV Orbit server and has basic functionality.

Table 1-1: GV Orbit Products - Functionality and Options Codes

Functionality	Lite (Free of charge)	Professional GVO-CFG-PRO	Professional GVO-MON-PRO	Professional GVO-CTL-PRO	Enterprise GVO-CTL-ENT
Uses GV Orbit Client	●	●	●	●	●
Requires GV Orbit Control Client		●	●	●	●
Requires min. one GV Orbit server [a]		●	●	●	●
Functionality:					
Device Configuration	●	●	●	●	●
Device Upgrade	●	●	●	●	●
Design MV-8 Series Video Wall	●	●	●	●	●
Client Real-Time Video Wall [b]	●	●	●	●	●
1 Seat GV Orbit Client/Control Client		●	●	●	●
Advanced Configuration		●			
Bulk Upgrade		●			
Custom Screens			●		
Custom Screens in Web View			●		
Alarm Logging			●		
Routing Configuration				●	●
Hardware Panel Support				●	●
Simple Routing				●	●
Advanced Routing					●
Third-party Device Routing Control					●

a. For system redundancy, purchase two **Professional** or **Enterprise** systems.
b. Displays H.264 video streams from compatible multiviewers (e.g. MV-8 series multiviewers).

Sections and/or sub-sections of this quick start guide are marked as being *applicable to* **Lite**, and/or **Professional** (Pro), and/or **Enterprise** (Ent) users accordingly.

GV Orbit Client

GV Orbit Client comprises two client applications:

1 **GV Orbit Client**.
2 **GV Orbit Control Client**, launched seamlessly from within the GV Orbit Client.

Both client applications are installable on PCs running MS Windows™. All the steps required to download, install and get started are covered in this guide.

GV Orbit Client and Existing Orbit

GV Orbit Client may be installed on the same client PC as the older Orbit client application.

Legacy Orbit projects can be opened and run by GV Orbit Client. However, any new features offered by GV Orbit will *not* be available in legacy Orbit projects run in GV Orbit Client.

Note: GV Orbit projects *cannot* be opened by a legacy Orbit client.

GV Orbit Project Types

GV Orbit uses a project-based workflow. The Control and Monitoring project (C&M project) is the *main* GV Orbit project type and is used for control and monitoring, and for routing control applications in GV Orbit **Professional** and **Enterprise**.

Table 1-2: GV Orbit Project Types

Project Type	Product			Description	Supported Devices
	Lite	Pro	Ent		
Multiviewer Project	●	●	●	Defines a video wall targeted at MV-8 series multiviewers.	MV-8 Series multiviewer devices.
IQ Multiviewer Project	●	●	●	Defines a video wall targeted at IQ-MV multiviewers.	IQ-MV multiviewer devices, e.g. IQUCP25-MV.
Connected Multiviewer Project	●	●	●	Pulls a Multiviewer project from a multiviewer into GV Orbit Client for video wall editing.	MV-8 Series and IQ-MV multiviewers.
Control and Monitoring Project (C&M project)	-	●	●	Main project type. Includes: • Design and deployment of custom graphical operator screens. • Device configuration, control and monitoring. • Device routing control. Uses services/applications running on GV Orbit server(s).	Densité-protocol and RollCall-protocol devices. Routing control: • IP end-points (Grass Valley and NMOS). • Traditional/SDI (NP-0017 and SW-P-08 protocols).

Requirements

For a full list of requirements, please refer to the GV Orbit Release Notes, see Related Documentation, on page iii.

Domain IDs and IP Ports

A GV Orbit system employs 'domains' to segregate internal communications. Domains are specified with a Domain ID number (1 to 252) and each Domain uses separate IP ports. (For further information about IP Ports and Domain IDs for the GV Orbit client and server, refer to the *GV Orbit Release Notes* see Related Documentation, on page iii.)

> **Note:**
> Domain ID numbers may be changed by the user. When using changed Domain ID numbers, recalculate the IP port numbers (refer to the *GV Orbit Client Release Notes* in Related Documentation, on page iii).

GV Orbit Services Requirements

Lite:

There are no GV Orbit servers and no GV Orbit services in a GV Orbit **Lite** system.

Professional and Enterprise:

GV Orbit Client requires at least one GV Orbit server running configured GV Orbit Services. Please refer to related GV Orbit documentation, see Related Documentation, on page iii.

2 Quick Start Steps

Summary contents of this chapter:

Quick Start Steps

The minimum steps required to install, configure and get started with the GV Orbit Client application are given in this section.

Step 1: Download, Install and Launch

Lite	Professional	Enterprise
●	●	●

This section describes how to download/install client installers and launch GV Orbit Client.

Step 1.1: Download Client Installers

Download Installer for GV Orbit **Lite**

On the client PC:

1. Go to https://www.grassvalley.com/products/gv_orbit/

   The GV Orbit product web page is shown.

2. Select the 'Product Documents' tab and click on 'Software Downloads'.

3. On the next page, click on 'GV Orbit software downloads'.

   The downloads page for GV Orbit opens and shows different GV Orbit versions.

4. Click on the required installer. For example, for GV Orbit Lite v1.1.0, click on v4.1.0.

   > **Note:**
   > The 'GV Orbit **Lite**' product uses solely 'GV Orbit Client':
   > - 'GV Orbit **Lite**' software version numbers start from v1.0.0; and
   > - corresponding 'GV Orbit Client' versions start at v4.0.0.

   The software downloads page for the GV Orbit version is opened in a new browser tab. Software and release notes may be downloaded from this page.

   (Web address for the software downloads page for a GV Orbit version may be similar to: *www.grassvalley.com/downloads/routers/gv_orbit_v1.1.0/*
   Note: The actual URL web address of the page might change in the future.)

5. Select the 'Software' tab and click on the link to download the installer to your computer.

   > **Note:**
   > Downloading of documentation or software may require logging into the GV website, or registering with the website if not already done so.

The GV Orbit **Lite** client installer has been downloaded.

Download Installers for GV Orbit Professional and Enterprise

GV Orbit **Professional** and **Enterprise** use one or more GV Orbit servers which are the source of client installers in GV Orbit **Professional** and **Enterprise** systems.

> **Note:**
> Downloading of the **GV Orbit Client** installer is separate from the downloading of the **GV Orbit Control Client** installer.

Download both the **GV Orbit Client** and the **GV Orbit Control Client** installer from the GV Orbit server. (Thus, client versions are kept compatible.)

(For full download instructions, refer to the *GV Orbit Admin Guide*, see Related Documentation, on page iii.)

On the client PC:

1 Enter the GV Orbit server's IP address into a browser. (Chrome recommended.)

  The GV Orbit server **Admin Login** screen appears. (See Figure 2-1.)

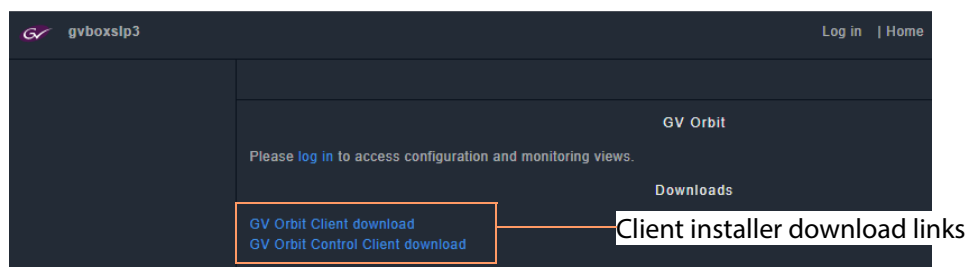2 Click on each of the client installer download links to download the installers.

Fig. 2-1: GV Orbit Server Admin Login Screen

> **Note:**
> Client installers on the GV Orbit server are updated with a server update.
> After a server update, download and reinstall the clients (recommended).

Step 1.2: Installation of GV Orbit Client

Lite	Professional	Enterprise
●	●	●

Installation of GV Orbit Client and of GV Orbit Control Client is done separately.
This section covers GV Orbit Client installation, including some information about any existing, legacy Orbit installs.
(For GV Orbit Control Client, see Step 1.3: Installation of GV Orbit Control Client, on page 10.)

Legacy Orbit Client Users

For users with the older, legacy 'Orbit' client already installed on the client PC, the following applies:

- GV Orbit Client may be installed on the same client PC as the legacy 'Orbit' client application.
- GV Orbit Client and the legacy 'Orbit' client may *not* be run together.
- At installation, GV Orbit Client inherits registry settings from any already-installed legacy 'Orbit' client (e.g. multicast/unicast discovery setting, and 'recent projects' list).

Install GV Orbit Client

> **Note:** GV Orbit client installs into client PC's 'Program Files' folder by default.

1 Run the downloaded installer file on the client PC.

Allow the installer to run by responding to any Windows™ dialogs accordingly.

The GV Orbit Client installer 'Setup GV Orbit' screen is then shown.

2 Click **Next** to begin the installation.

3 Accept the License Agreement in the following dialog and click **Next**.

The installer will install into the folder of an existing installation of GV Orbit Client.

4 If no previous GV Orbit Client is found, then an installation folder is prompted for.
(Default folder location is `C:\Program Files\Grass Valley\GV Orbit`.)

Fig. 2-2: GV Orbit Client's Setup Screen

5 Select a new folder, if required. Click **Next**.

6 At the next dialog, click **Install**.

GV Orbit Client installation begins and a progress bar is shown:

7 When GV Orbit Client installation is complete, the GV Orbit Client setup 'Completing' screen is shown.

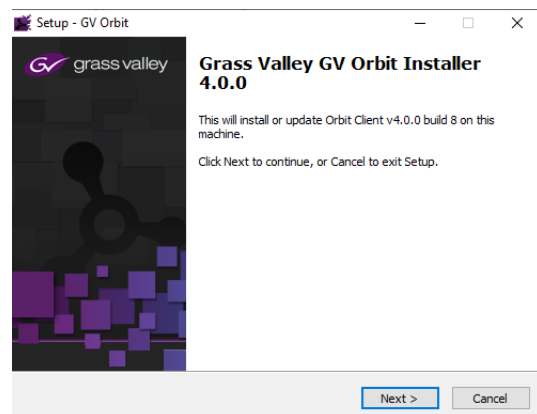8 Click **Finish** and the GV Orbit Client application launches and shows its initial screen.
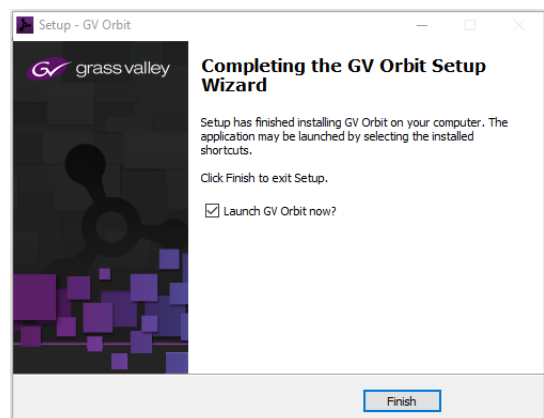
Fig. 2-3: GV Orbit Client Setup 'Completing' Screen

9   Close the GV Orbit Client application.

GV Orbit Client is installed.

> **Note:**
> A shortcut is available from the
> Windows™ Start menu.
> (Start -> Grass Valley -> GV Orbit)

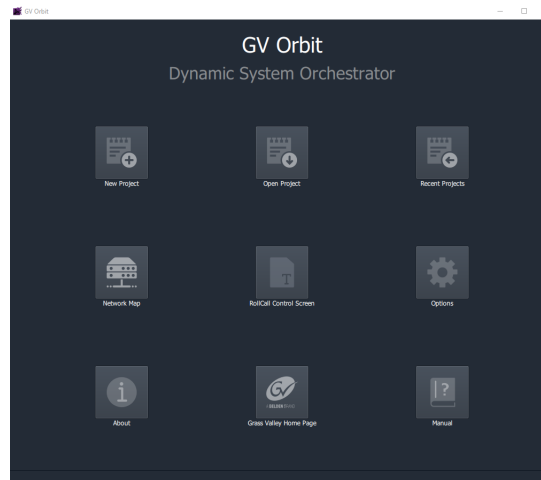*Fig. 2-4: GV Orbit Client Initial Screen*

Firewall

10 Check that the GV Orbit Client
application is not blocked by your client PC's firewall.

> **Note:** **Firewall:**
> 'orbit.exe' should be on a list of allowed apps (or programs) that can
> communicate through the client PC's firewall.
> These PC settings may be controlled by your network administrator.

Step 1.3: Installation of GV Orbit Control Client

Lite	Professional	Enterprise
-	●	●

This sub-section is applicable to GV Orbit **Professional** and **Enterprise** product versions.

> **Note:**
> The GV Orbit Control client installs into a *user* folder on the client PC. Thus it is normally only available to the user who carries out the installation.

1   Log into the client PC as the user who will be operating the GV Orbit clients.

2   Run the downloaded GV Orbit Control Client installer file.

   Allow the file to run on the client PC by responding to any dialogs accordingly.

   A splash screen is shown during installation:
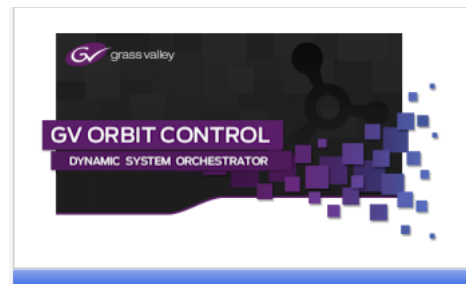
3   When the installation is complete, the GV Orbit Control Client login screen appears.

Fig. 2-5: GV Orbit Control Client Login Screen

4   Enter 'admin' for both the **User name** and the **Password**.

5   Enter the IP address of the GV Orbit server in the **Server** text box.

6   Click **Log in**.

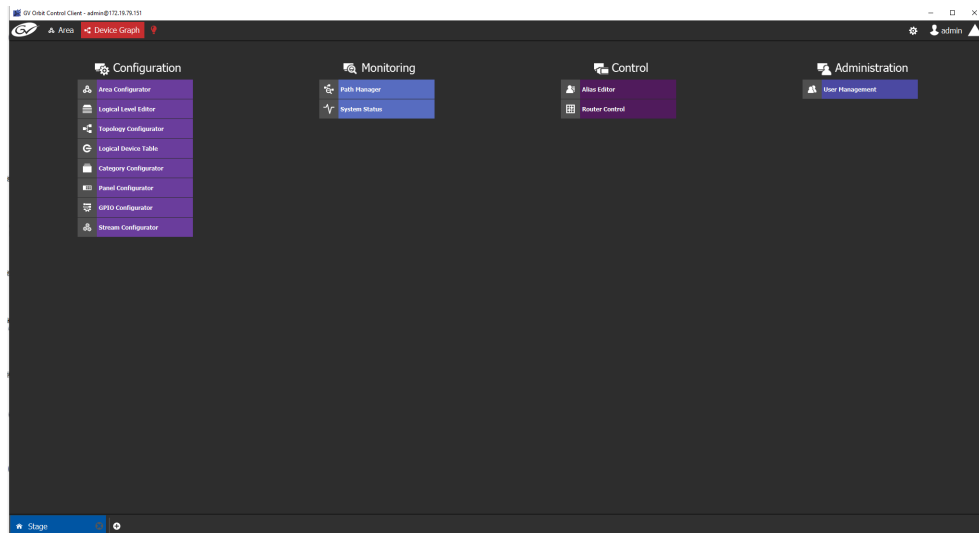   A blank **GV Orbit Control Client** screen appears.

Fig. 2-6: GV Orbit Control Client Screen Example

7 Close GV Orbit Control Client.

GV Orbit Control Client installation is complete.

The installation folder is in the user folder, for example:

    C:\Users\A_User\AppData\Roaming\JWrapper-GVOrbitControlClient\

CAUTION:
The GV Orbit Control Client is installed in a user folder and is therefore
normally only available to the user who carried out the installation.

Note:
GV Orbit Control Client is *not* normally launched manually by the user.
Instead, it is launched by the GV Orbit Client application.
(Although a shortcut is available on the client PC desktop and from the
Windows™ Start menu: Start -> Grass Valley -> GV Orbit Control Client)

Firewall

8 Check that the installed application is not blocked by your client PC's firewall.

Note:Firewall:
'GVOrbitControlClient.exe' should be on a list of allowed apps (or
programs) that can communicate through the client PC's firewall.
These PC settings may be controlled by your network administrator.

Step 1.4: Launch GV Orbit Client

1 GV Orbit Client may be launched from the Windows™ Start button. ("GV Orbit")

A splash screen is shown during start up:

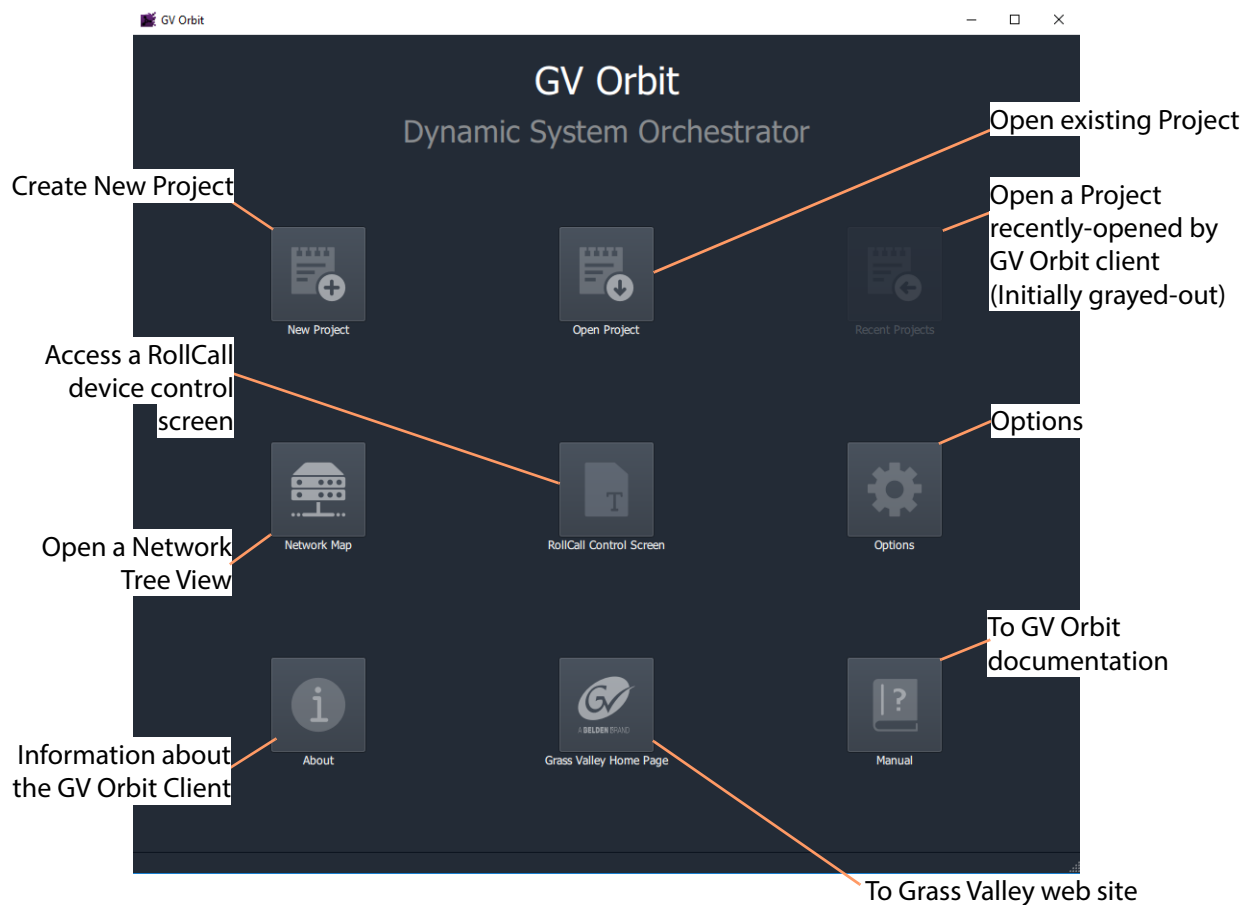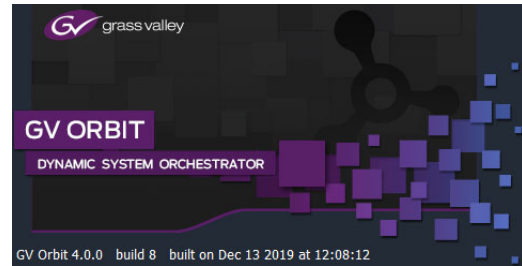And then the GV Orbit Client initial screen is shown. See Figure 2-7.

Fig. 2-7: GV Orbit Client Initial Screen

Step 2: GV Orbit Projects

Lite	Professional	Enterprise
●	●	●

This section describes how to open a project. GV Orbit project types are listed in Table 1-2 on page 3. Once a project is created in GV Orbit Client, it can be saved locally on the client PC but it needs to be deployed for use by saving it (pushing it) to either:

- a multiviewer device (multiviewer projects; GV Orbit **Lite**, **Enterprise** and **Professional**); or to
- a GV Orbit server (C&M projects; GV Orbit **Professional** and **Enterprise** only).

Multiviewer project types are used to define a compatible multiviewer's video wall. These are applicable to GV Orbit **Lite**, **Enterprise** and **Professional**.

The main project type for GV Orbit is a 'Control and Monitoring' project (C&M project) which is used for control and monitoring applications, and for routing control. This project type uses services running on a GV Orbit server and is applicable to GV Orbit **Professional** and **Enterprise** only.

Step 2.1: New Project

To Open a Project from the Initial Screen

1 Click **New Project**.

The **New Project** dialog is shown.

2 Select a project type.
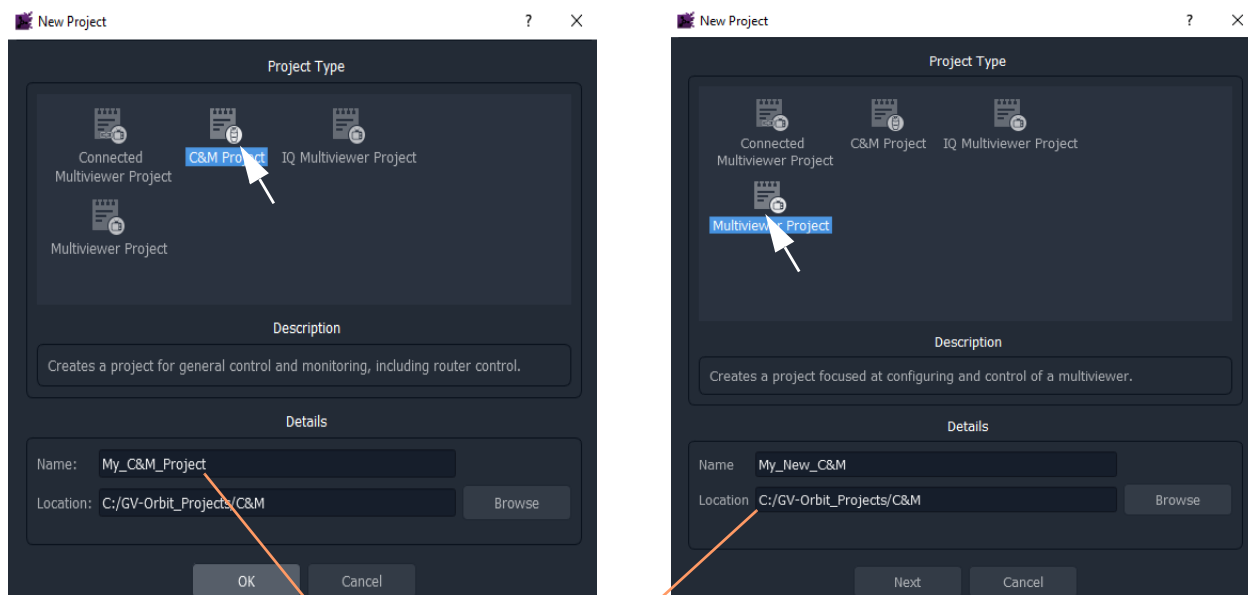
Entered project name. Path to chosen folder.

a) C&M project type selected   b) Multiviewer project type selected

13

Fig. 2-8: New Project Dialogs

3 Click **Browse** and browse to a local folder on the client PC (or to a network folder accessible from the client PC) where the new project files will be placed.
Click **Choose**.

> **Note:** The chosen folder is not on a GV Orbit server.

4 Enter a name for the new project.

5 Click **OK** / **Next**.

A sub-folder is created with the name of the project. It contains the new project files.

If prompted, answer **Yes** to create a directory (sub-folder).

For a Multiviewer project,
see For a Multiviewer Project (GV Orbit Lite, Enterprise and Professional), on page 14.
For a C&M project,
see For a C&M Project (GV Orbit Enterprise and Professional), on page 14.

For a Multiviewer Project (GV Orbit **Lite**, **Enterprise** and **Professional**)

A dialog is shown for setting up the resolution of the multiviewer head display outputs.

6 Select the **Output Size** (1920x1080 or 1280x720).

7 Click **OK**.

The new multiviewer project is created and its GV Orbit Client project **Home Screen** is shown. See Project Home Screens, on page 18.

For a C&M Project (GV Orbit **Enterprise** and **Professional**)

A **Setup** dialog is shown.
(For more information about setting up a C&M project, see Step 7: C&M Project Setup (Professional/Enterprise), on page 39.)
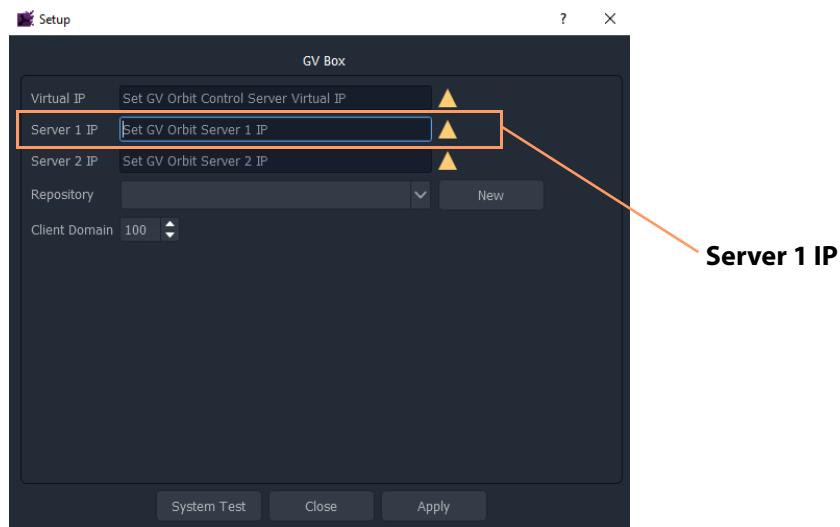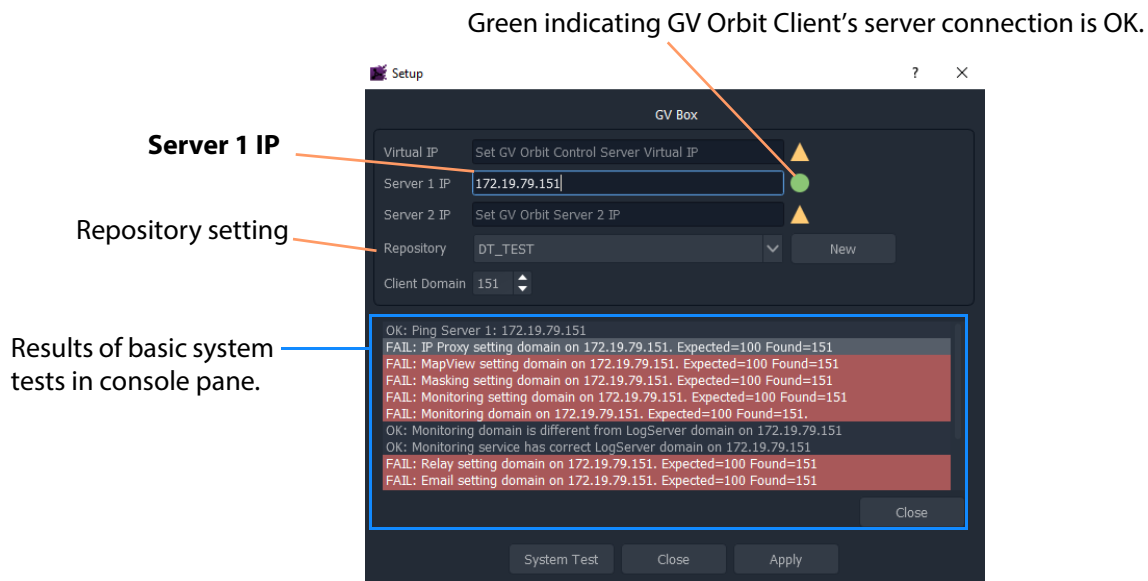

Fig. 2-9: C&M Project Setup Dialog

For the C&M project, in the **Setup** dialog:

8   Set **Server 1 IP** to the IP address of the GV Orbit server.
(For a dual-server GV Orbit system, still just enter the IP address of one server. The
second server will be discovered automatically in the steps below.)

After the IP address is entered, GV Orbit Client carries out some basic system tests; it
uses the current **Setup** dialog settings. System connectivity is checked and some basic
system information is discovered from the GV Orbit server.

9   After these system tests are done, the results are listed in the dialog in a console pane.
See Figure 2-10.

Green indicating GV Orbit Client's server connection is OK.

Server 1 IP

Repository setting

Results of basic system
tests in console pane.

(For more information, see Step 7: C&M Project Setup (Professional/Enterprise), on page 39.)

Fig. 2-10: Example Basic System Test Results (Single Server Shown)

Note:
Some system test console items may be shown in 'red', indicating where
discovered information disagrees with settings in the **Setup** dialog. In this
case, settings in the dialog are then filled out automatically to be consistent
with discovered settings.
A subsequent system re-test (performed below) *will clear these red items.*

Repository in Setup Dialog

For deployment, a C&M project is saved to the GV Orbit server in a **Repository**, one project per
Repository. This setting selects which **Repository** is used by the project.

10   For the **Repository** setting, click **New**.

The **Create Repository** dialog is shown:

11   Enter a name for the new repository and click **OK**.
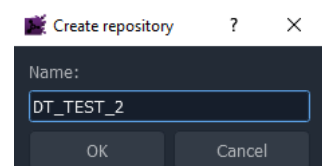
System Re-Test

A system re-test will now remove any red items in the console pane. In the **Setup** dialog:

12 Click **System Test**.

This forces the GV Orbit Client to redo its basic system tests. The results are shown in the console. Any 'red' items from before should now be cleared.

Single GV Orbit server   Dual GV Orbit servers and
                                           Virtual IP Address
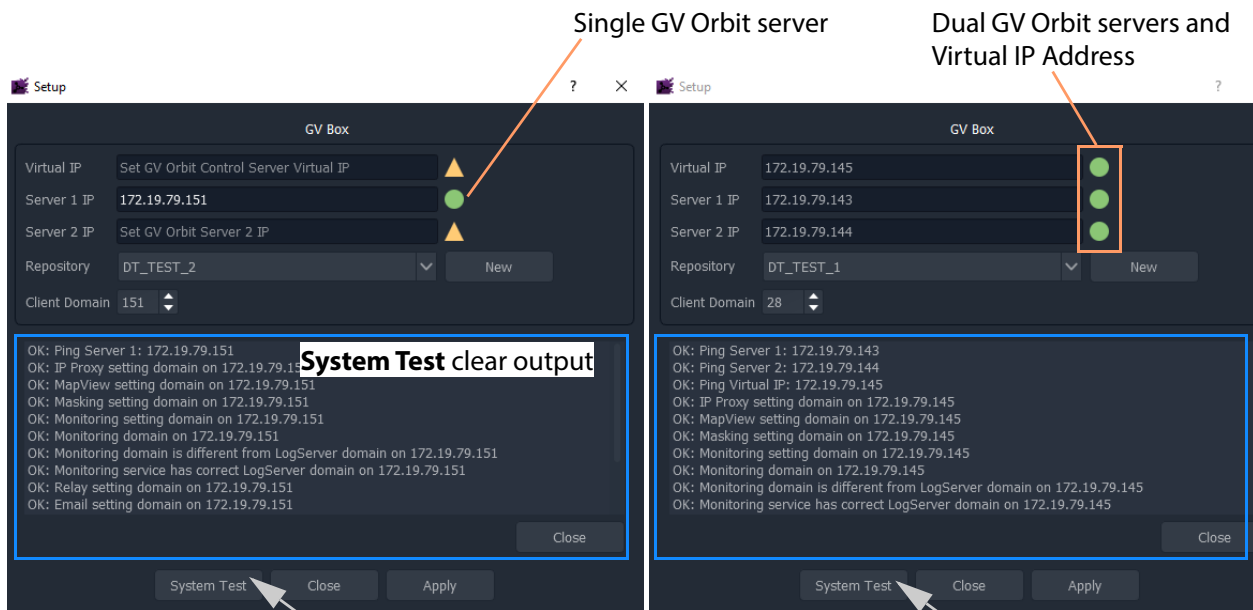
a) Single GV Orbit Server   b) Dual GV Orbit Server Cluster
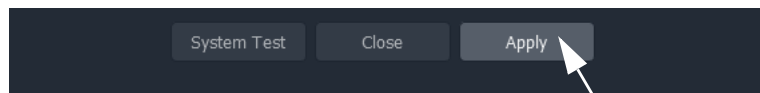
Fig. 2-11: System Test Console Output:
a) Single GV Orbit Server.
*b) Dual GV Orbit Server Cluster.*

13 Click **Apply**.

The settings are applied to the project and a progress bar appears in the dialog.

14 A pop-up dialog may appear, asking if the local project should be updated from the chosen repository.

- Click **Yes** to update the local project (and lose any local changes made).

- Click **No** to keep the local project changes (and not pull the project from the repository on the server).
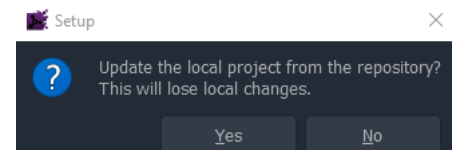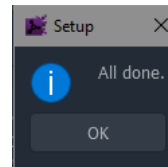
The applying of settings continues and progress is shown in the progress bar:
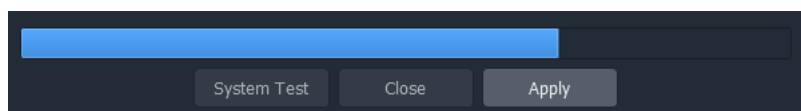
15 A pop-up dialog box confirms when the
'Applying' is all done.

Click **OK** in the pop-up to proceed.

16 In the **Setup** dialog,
click **Close**.
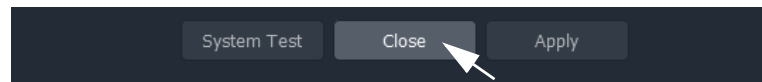
The new C&M project is created in GV Orbit Client and its **Home Screen** is shown.
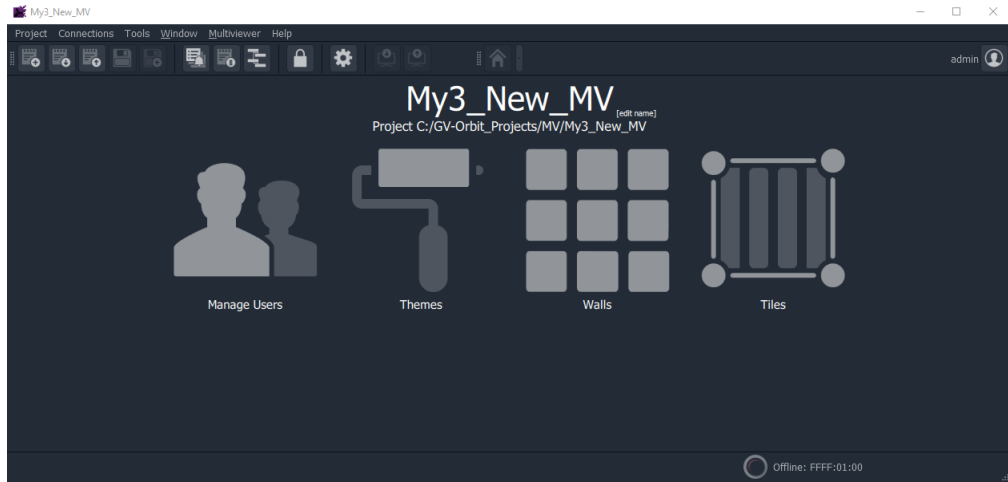(See Project Home Screens, on page 18.)

Note:
The **Setup** dialog can also be viewed when a C&M project is open by clicking
Connections -> GV Server in the main menu of GV Orbit Client.

Project Home Screens

The project's **Home Screen** is shown and a new GV Orbit project has been created.

> **Note:**
> The **Home Screen** appearance varies according to project type and which GV Orbit Client windows are enabled and being shown.

a) Example New <u>Multiviewer Project</u> Home Screen

Click icons to hide/show windows of project Home Screen
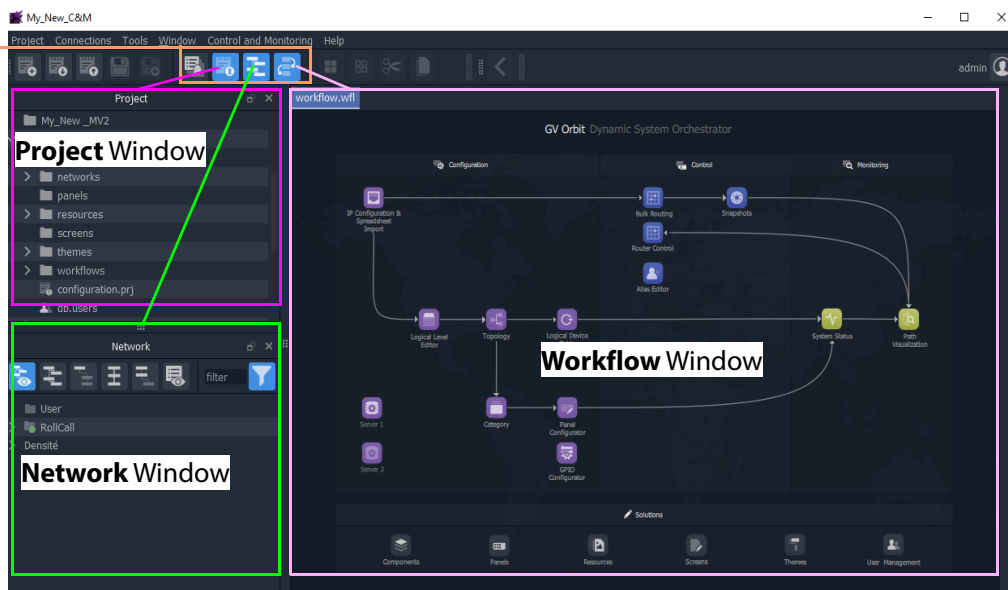
b) Example New <u>C&M Project</u> Home Screen (See Project Home Screen for Information)

Fig. 2-12: GV Orbit Home Screen Examples: a) Multiviewer Project; b) C&M Project.

> **Note:**
> A C&M project type is for GV Orbit **Professional** and **Enterprise** only.
> A C&M project can be created in GV Orbit **Lite**, but may not be used.

Step 2.2: Save, Push, and Close

Step 2.2.1: Save a Project Locally

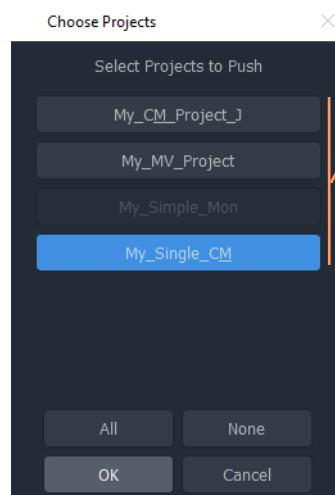To locally save a project from GV Orbit Client:

1 Click **Project -> Save Project** in the main menu to save the project into the local folder on the client PC.

Step 2.2.2: Push Project (Save to Server)

To push an open project back into a repository (on the GV Orbit server, or on a multiviewer device):

1 Click **Project -> Push** in the main menu.

A **Choose Projects** dialog is shown.

Projects listed have been opened by the GV Orbit Client before. These appear in the **Project** window on the client.

Fig. 2-13: Choose Projects Dialog

2 Select the project to be pushed. (More than one may be selected.)
Click **OK**.

The project is pushed to the repository.

Once a project is in a repository, it is deployed for use:

- **Multiviewer project** - A project is pushed to a multiviewer which can then adopt the project's video wall design.
- **C&M project** - A project is pushed to the GV Orbit server. Applications/services etc. on the server can then access the project. For example, the Web Renderer service can read the project and render its custom operator screens for viewing in a web browser.

Step 2.2.3: Close a Project

To close a project in GV Orbit Client:

- Click **Project -> Close Project** to close the project.

Open and Pull

Open Existing Local Project

To open an existing local project from the GV Orbit **Initial Screen**:

1 Click the **Open Project** icon.

   The **Open** dialog is shown:

2 Browse *into* the local project folder required and select the 'configuration.prj' file within it.

3 Click **Open**.

   A login screen is shown.

4 For a new project, enter **User name** 'admin' and **Password** 'admin' and click **Login**.

   The project's **Home Screen** is shown.
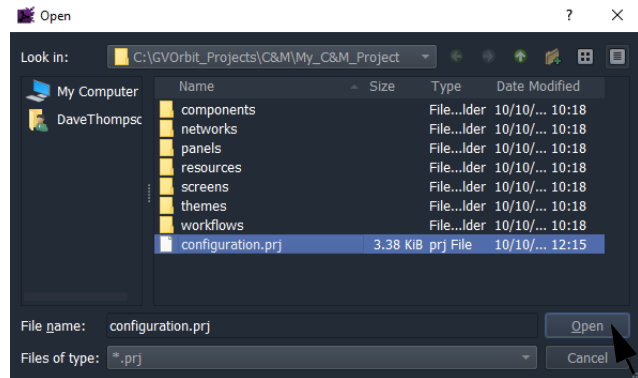
> **Note:** New GV Orbit projects have **User name** 'admin' , **Password** 'admin.

Pull a Project (Load from Server)

To pull a project from a repository (on the GV Orbit server, or on a compatible multiviewer):

1 Click **Project -> Pull** in the main menu.

   A **Choose Projects** dialog is shown. (See Figure 2-13.)

2 Select the project to pull.

3 Click **OK**.

   The project is pulled from the repository, stored locally on the client PC, and is opened by the GV Orbit Client.

> **Note:** **Pull** and **Push**:
>
> When connecting to a repository, the user may be prompted to **Pull** a project from a **Repository**. **Pull** a project in order to either:
> • edit the project locally (any local project is overwritten); or
> • run the project locally (for example, to run operator screens).
>
> Do not **Pull**:
> • if a local project has all been created or changed and which needs to be put into a **Repository**. (This requires a **Push**.)

Exit GV Orbit Client

To exit and close the GV Orbit Client application:

1 Click **Project -> Exit**.

   The application shuts down and exits.

Step 3: Device Configuration

| Lite	Professional	Enterprise
●	●	●

This section describes how to access device control screens with GV Orbit Client. Devices can then be configured as required. RollCall- and Densité-protocol devices are covered.

Step 3.1: Direct Configuration of RollCall-protocol Devices

RollCall-protocol devices can be configured directly from GV Orbit Client with the device's IP address from the GV Orbit Client **Initial Screen**:

1   Click the **RollCall Control Screen** icon, (or, with a project open, in the main menu click **Connections -> RollCall -> RollCall Control Screen**).

The **Open Template** dialog is shown:
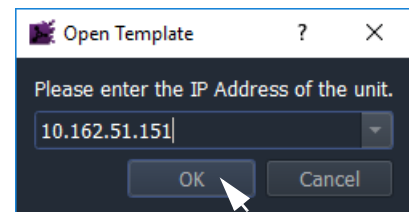
2   Enter the IP address of the target device.

3   Click **OK**.

The control screen is shown in a tab.

Click on **x** on tab to close device control screen

Fig. 2-14: Example Device Control Screen (RollCall-protocol Device shown)

4   When all device configuration changes are complete, close the control screen tab.

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# Step 3.2: Configuration of Densité and RollCall Devices

With a GV Orbit project open in GV Orbit Client, GV Orbit **Professional** and **Enterprise** can show RollCall-protocol and Densité-protocol devices with full status indication listed in a **Network** window.

However, GV Orbit **Lite** can only _list_ RollCall-protocol device items in the **Network** window and _without_ any status indication.

Network Window Views

The **Network** window can show devices either in a tree-view or in a list-view. Toggle between these views with the tool bar controls shown in Figure 2-15.
See Network Window for a description of the Network window.

Click to show List-View   Click to show Tree-View
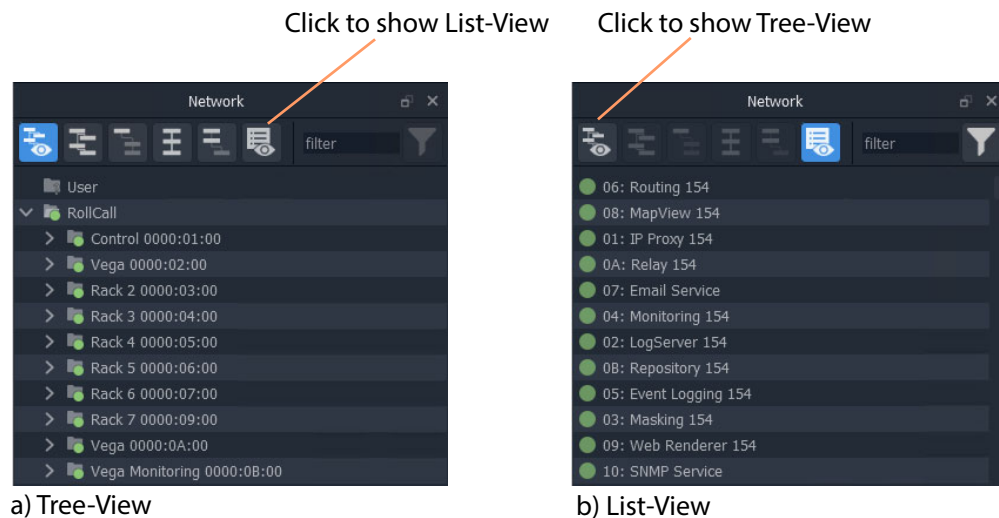
a) Tree-View   b) List-View
Fig. 2-15: Network Window Views

> **Note:**
> The **Network** window may already be showing system devices etc. for a C&M project open in GV Orbit Client if the GV Orbit services have been set up on the GV Orbit server, so no set up may be required here.

Initial set up of the **Network** window can be done in a project; this is done differently for RollCall-protocol devices than for Densité-protocol devices and each is described below:

- Step 3.2.1: Network Window Setup For RollCall Devices
- Step 3.2.2: View a Device Control Screen - RollCall Devices
- Step 3.2.3: Network Window Setup For Densité Devices
- Step 3.2.4: View a Device Control Screen - Densité Devices

### Step 3.2.1: Network Window Setup For RollCall Devices

RollCall device control screens can be viewed with GV Orbit Client via a GV Orbit server (which runs a GV Orbit IP Proxy service).

To set up the **Network** window:

1 For GV Orbit:

- **Lite** - From the GV Orbit Client **Initial Screen**, click the **Network Map** icon.
- **Professional** and **Enterprise** and with a C&M project open -
  Click **Connections -> RollCall -> Network Map** in the main menu.

    An **Open Network** dialog is shown. (See Figure 2-16.)
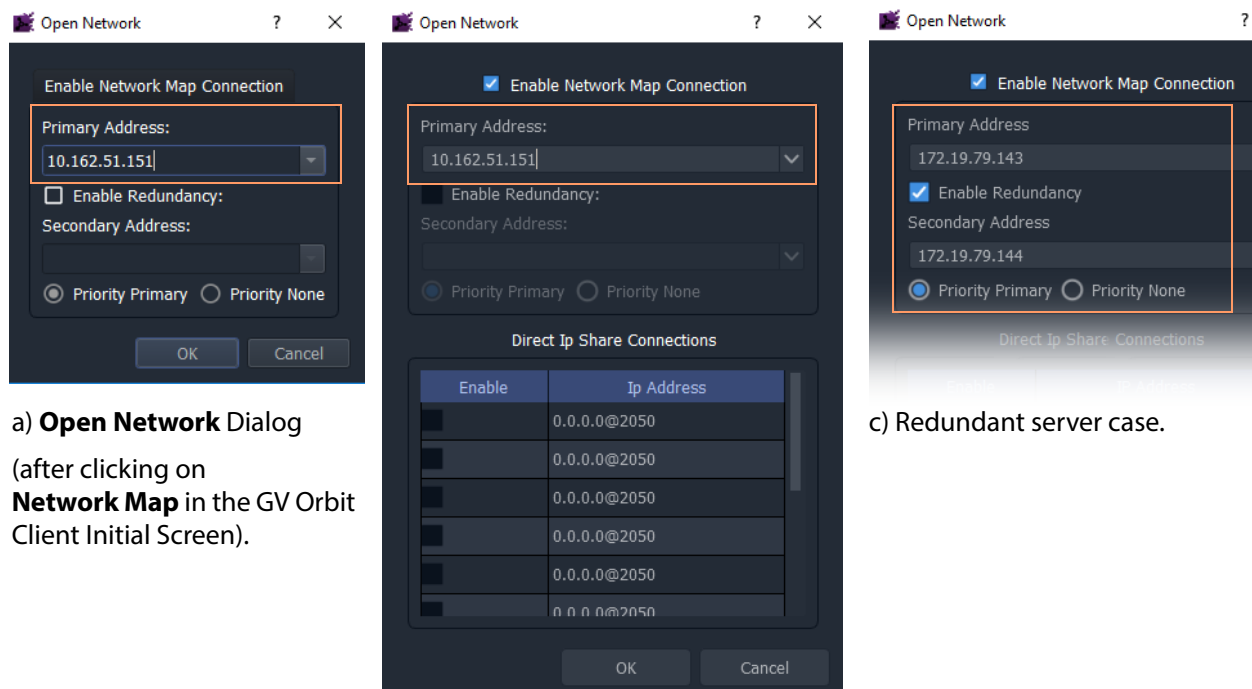
a) **Open Network** Dialog

(after clicking on
Network Map in the GV Orbit
Client Initial Screen).

c) Redundant server case.

b) **Open Network** dialog
(after clicking on **RollCall -> Network Map** in GV Orbit Client's main menu).

Fig. 2-16: Open Network Dialogs:
> *a) After clicking Network Map icon in GV Orbit Client Initial Screen.*
> *b) After clicking RollCall -> Network Map in GV Orbit Client main menu.*
> *c) Redundant server case.*

2 Select **Enable Network Map Connection**, if available in the dialog.

3 Enter an IP address for the **Primary Address**:

- GV Orbit **Lite**:
  Enter the address of an IQ frame controller to be able to access all devices in the
  frame.

- GV Orbit **Professional** and **Enterprise:**
  Enter the IP address of a GV Orbit server.

    This will connect to the IP Proxy service running on the server and allow access to
   all devices connected to the IP Proxy service.

> **Note:**
> The IP address entered in the **Open Network** dialog may be for either:
> * a GV Orbit server, which runs a IP Proxy service; or for
> * a single device.

4 For redundant GV Orbit systems,
   select **Enable Redundancy** and enter the IP address of a second GV Orbit server.

5 Click **OK**.

   A **Network** window appears in the GV Orbit Client:

   This can be re-sized. It can show an expandable tree-view of *all* devices attached to the IP Proxy service.
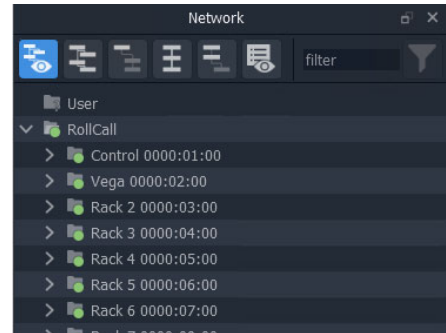
Step 3.2.2: View a Device Control Screen - RollCall Devices

To view a RollCall device control screen from the **Network** window:

1 Locate the target device in the **Network** window **(**tree-view or list-view).
   Right-click on the item and select 'Control'.

   The control screen and its sub-menus are loaded and are then shown in a tab.
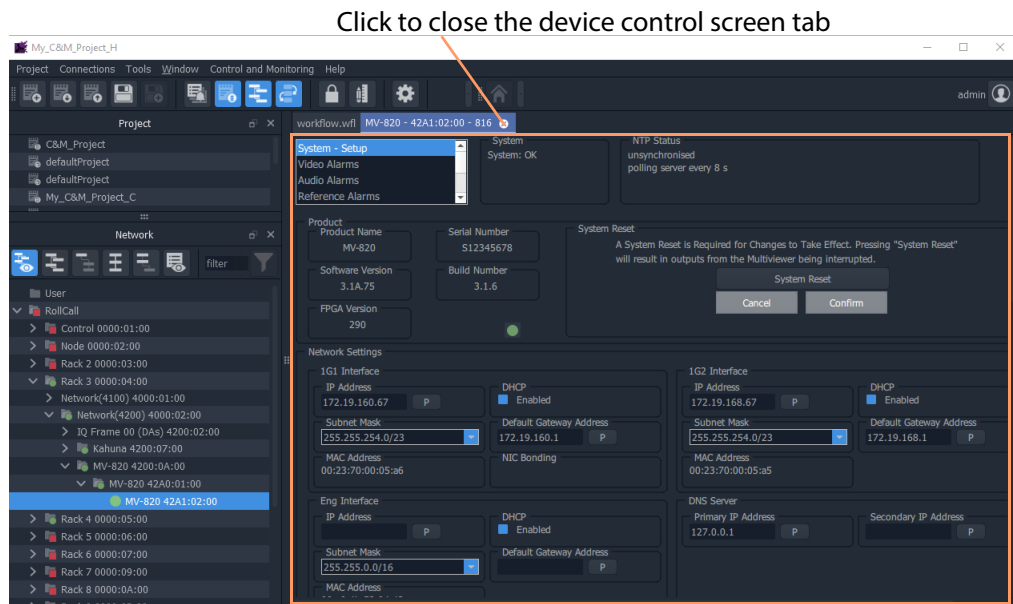
Click to close the device control screen tab

Fig. 2-17: Example Device Control Screen (RollCall-protocol Device Shown)

2 When all required user device configuration changes are done,
   close the control screen tab.

Right-click on any other device in the **Network** window to display/edit its control screen, as required.

Step 3.2.3: Network Window Setup For Densité Devices

Densité device control screens (card control panels) can be viewed with GV Orbit Client from the **Network** window via a GV Orbit server (which runs a GV Orbit Densité service). GV Orbit Client must be configured to connect to the Densité server/service.

In a C&M project open in GV Orbit Client:

1 Click **Connections -> Densité** in the main menu.

   The **Densité Configuration** dialog is shown:

2 Enter the GV Orbit server IP address.

3 Select:

   • 'Lookup Service'; and

   • 'Densité REST'.

4 Enter the **Username** and **Password** (if not already set up) to access the GV Orbit server (and hence the Densité service).

   Note: These are *not* the same login credentials as those used when opening a GV Orbit project with GV Orbit Client.
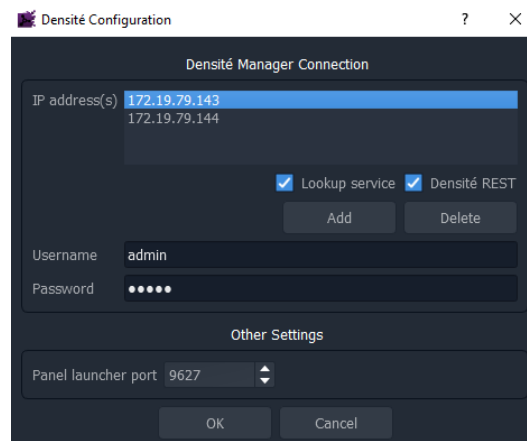
> **Note:** Densité service credentials are set up automatically if the **Setup** dialog (**Connections -> GV Server** in main menu) was used when creating the C&M project.

5 Click **OK**.

   GV Orbit Client connects to the Densité service on the GV Orbit server.

6 Add all Densité frames to the Densité service. (Refer to the Densité Manager service chapter in the *GV Orbit Admin Guide* in the Related Documentation.)

   Added Densité frames become visible in the **Network** window.

This has set up the **Network** window in GV Orbit Client to show Densité frames and to show fitted cards supported by the GV Orbit server.

> **Note:** Densité cards can appear in the **Network** window if the card is:
> • present in a Densité frame that has been added into the GV Orbit Densité Manager service on the GV Orbit server; and is
> • supported by the GV Orbit server; and is
> • accessible by the GV Orbit server over the network.

If a Densité card is still not shown in the window, support for it may need to be added to the GV Orbit server. To add support for other Densité cards, if required, see Step 5: Adding Densité Card Support.

> **Note:** GV Orbit **Professional** and **Enterprise** ship with native support for some Densité cards. Refer to the GV Orbit release notes documentation for a list of natively-supported Densité cards. See Related Documentation.

Step 3.2.4: View a Device Control Screen - Densité Devices

This step assumes that the Densité card is shown in the **Network** window (see Step 3.2.3: Network Window Setup For Densité Devices).

> **Note:** Densité cards can appear in the GV Orbit Client **Network** window if the card is:
>
> • present in a Densité frame that has been added into the GV Orbit Densité Manager service;
>
> • supported by the GV Orbit server; and is
>
> • accessible by the GV Orbit server over the network.
>
> To add support for a card, see Step 5: Adding Densité Card Support.

To access a Densité device control screen (device control panel) from the **Network** window:

1 Locate the target device in the **Network** window.

2 Right-click on the device and select 'Control'.

> **Note:** An informative message appears (bottom left of GV Orbit Client) while the control screen is being accessed.
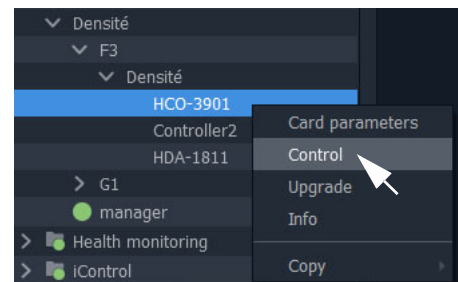
The Densité-protocol device's control screen opens in a *separate window* (i.e. not in the GV Orbit Client's overall window) and may be obscured on your client PC's screen. Check that this window is not behind the GV Orbit Client window or other windows.

Click to close the Densité device control panel.

Fig. 2-18: Example Densité *Device Control Panel*

3 When all the required user device configuration is complete, close the control panel.

Right-click on any other device in the **Network** window to open its control screen, as required.

Step 4: Device Upgrade

Lite	Professional	Enterprise
●	●	●

This section describes how to upgrade software/firmware on a device using GV Orbit Client.

Upgrade packages for RollCall or Densité cards comprise a version of software and a version of firmware bundled together in a .zip file.

To upgrade a device (or unit), the **Network** window must be open and showing the system device to be upgraded. (See Network Window Views, on page 22.)

Note:

Before starting, ensure that the upgrade package file is:
- accessible;
- for the correct RollCall or Densité card model; and is
- the correct version required.

Contact Grass Valley customer support for advice about upgrade packages.

Step 4.1: Upgrade RollCall-protocol Devices

- **Lite** - Simple device upgrade is possible directly from GV Orbit Client.
- **Professional** and **Enterprise** - Simple device upgrade and advanced device upgrades are possible with the GVO-CFG-PRO option.

Simple Upgrade

Check the Current Software/Firmware Version

1 Open the **Network** window.

2 Locate the device to be upgraded, right-click on it and select **Info**.

   A **Details** window is shown for the unit, displaying unit information which includes the device's current version of software/firmware.
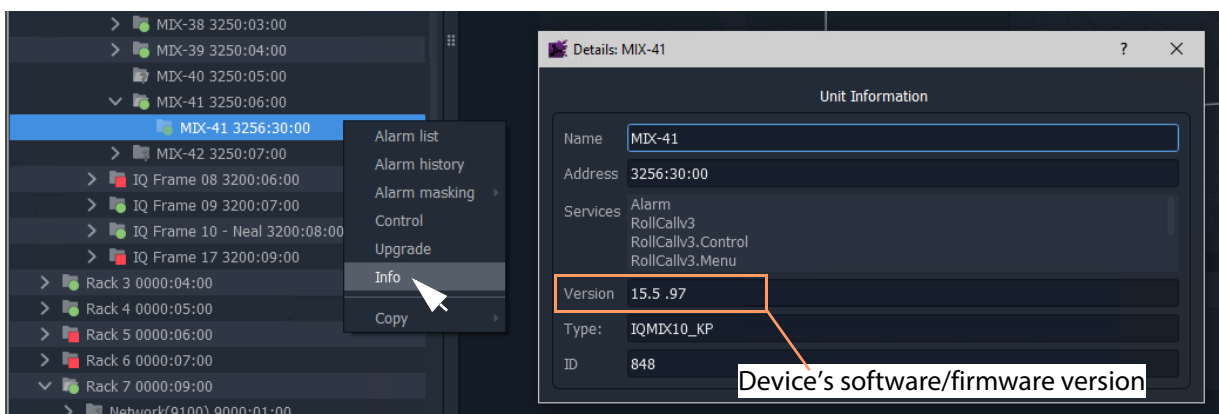

Fig. 2-19: Unit Information in Details Window

3 Close the **Details** window.

Import Upgrade Packages

4   Right-click on the tree-view device item and select 'Upgrade'.

The **RollCall Upgrade** window is shown. Any software/firmware upgrade packages that have been previously uploaded to the GV Orbit Client are shown listed on the left hand side. For a fresh install of GV Orbit Client, no packages are listed.
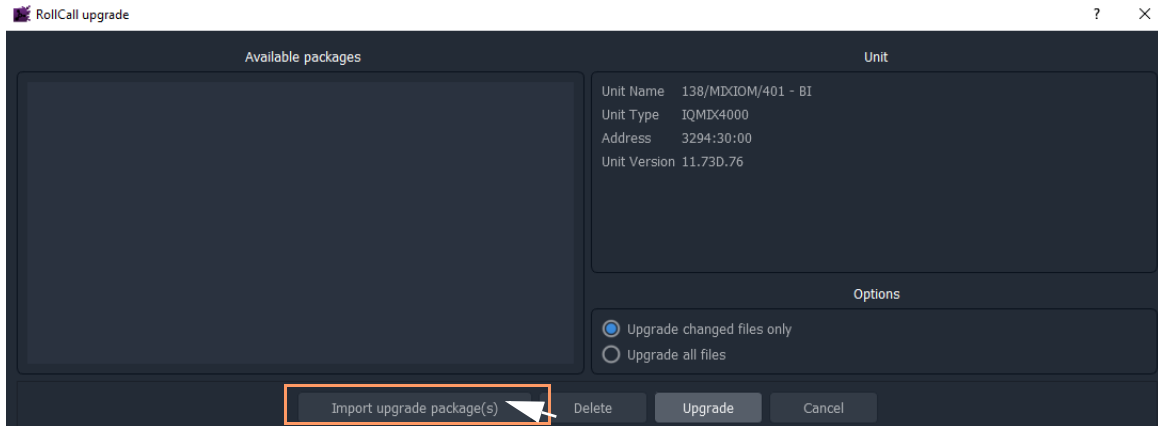

Fig. 2-20: RollCall Upgrade Window

5   Click **Import Upgrade Package(s)** and browse to the upgrade package to be uploaded. Select the package and click **Open**.

The package is imported into the GV Orbit Client.

After the package has been imported, it is listed under 'Available Packages' in the **RollCall Upgrade** window.

Upgrade the Device

6   Select a package in the 'Available Packages' list of the **RollCall Upgrade** window.

7   Select **Upgrade All Files** in the 'Options' pane to upgrade *all files* on the device, regardless of whether a file is the same on the device and in the upgrade package. (Deselect **Upgrade All Files** for a quicker upgrade.)
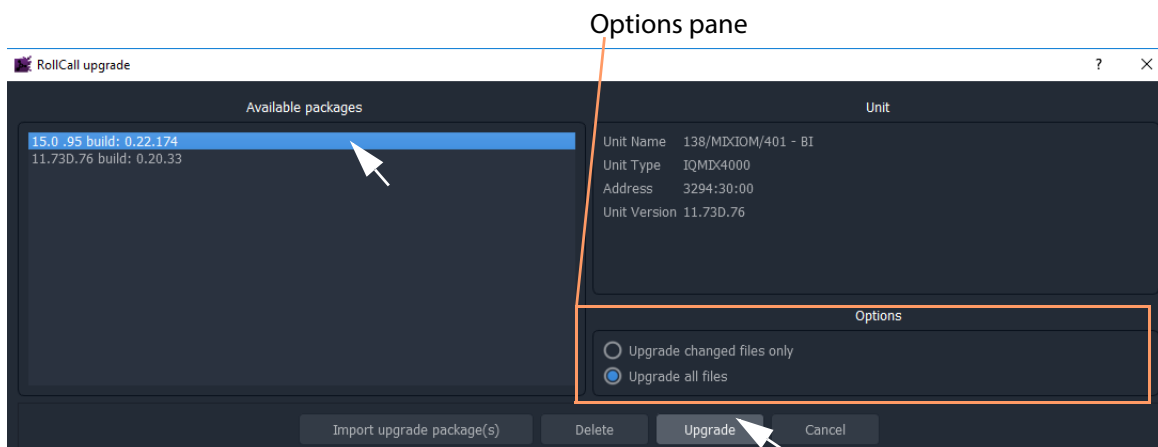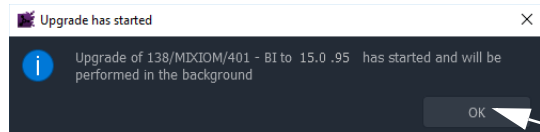

Fig. 2-21: RollCall Upgrade Window

8 Click the **Upgrade** button to start the upgrade of the device.

A message box appears informing you that the upgrade has started and will proceed in the background. Click **OK**.

> **Note:**
> The user may continue using the GV Orbit Client project while the upgrade proceeds.
> However, *only <u>one</u> RollCall upgrade can be running at any one time*.

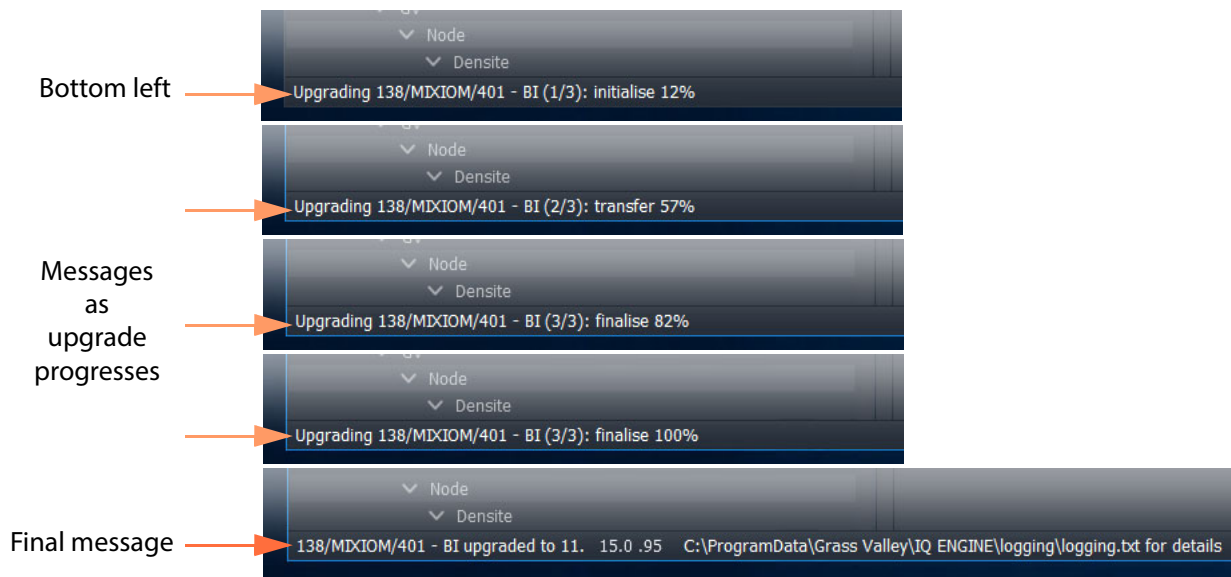The progress of the upgrade is reported bottom left in the GV Orbit Client window.

Bottom left

Messages as upgrade progresses

Final message

Fig. 2-22: Upgrade Progress Messages (Bottom left in GV Orbit Client window)

9 When the device has been upgraded, this is indicated by:
 • a final message at the bottom of the GV Orbit Client window; and also by
 • a pop-up notification message in the Windows™ system tray.

Check the Upgraded Software/Firmware Version

10 Right-click on the **Network** window upgraded-device item and select **Info**.

A **Details** window is shown displaying unit information.

11 Check that the device's current (upgraded) version of software/firmware is correct.

> **Note:**
> If the **Network** window is being presented through an IP Proxy then a GV Orbit server fail-over (in a dual server cluster system) during an upgrade will cause a failed upgrade.

Step 4.2: Upgrade Densité-protocol Devices

- **Lite** - Simple device upgrade of Densité devices is *not* possible via the GV Orbit Client.

> **Note:**
> Densité modular devices may still be upgraded independently of GV Orbit Client using Grass Valley's iControl Solo product.

- **Professional** and **Enterprise** - Densité device upgrade is possible via GV Orbit Client with the GVO-CFG-PRO option, including upgrade of single and multiple Densité devices.

Device Upgrade (GV Orbit **Professional** and **Enterprise** only)

This sub-section assumes that the Densité card is shown in the **Network** window (see Step 3.2.3: Network Window Setup For Densité Devices).

> **Note:** Densité cards can appear in the GV Orbit Client **Network** window if the card is:
> - present in a Densité frame that has been added into the GV Orbit Densité Manager service;
> - supported by the GV Orbit server; and is
> - accessible by the GV Orbit server over the network.
>
> To add support for a card, see Step 5: Adding Densité Card Support to be able to see the card to upgrade.

Check Current Device Software/Firmware Version

1 Open the **Network** window and locate the device to be upgraded.

2 Right-click on the device item to be upgraded and select **Info**.

A **Details** window is shown for the unit, displaying unit information which includes the device's current version of software/firmware.

Device's software/firmware version

Fig. 2-23: Unit Information in Details Window

3 Close the **Details** window.

Import Upgrade Packages

4 Right-click on the tree-view device item and select 'Upgrade'.
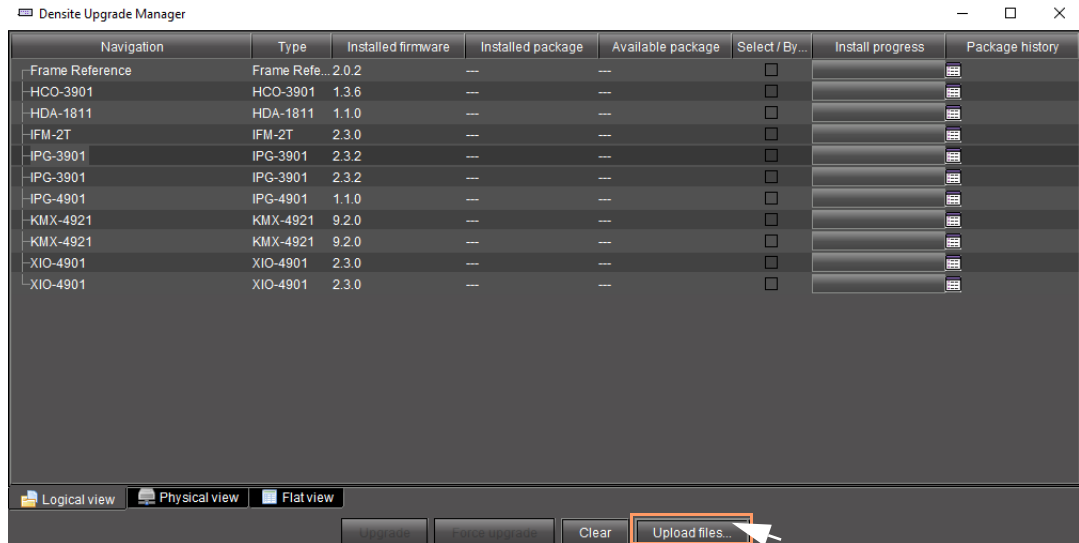
The **Densité Upgrade Manager** window is shown.

Fig. 2-24: Densité Upgrade Manager

5 Click **Upload Files...** and browse to the upgrade package to be uploaded. Select the package and click **Open**.

A message window appears prompting the user to start the upload.

6 Click **Upload** in the **Progress** window.

Progress of the upload is shown in the window and the package is uploaded to the **Densité Upgrade Manager**.

7 When complete, the **Progress** window shows 100% done, 'Operation finished':

Click **Close**.

8 Verify the uploaded package is present in the **Densité**

Fig. 2-25: Progress Window - Upgrade Package 100%

Upgrade Manager window by clicking in the 'Available package' column and looking in the drop-down list.

> **Note:** After an upgrade package has been uploaded, it is available in a drop-down box in the 'Available Package' column, in all rows for Densité devices compatible with the newly-uploaded package.
> (I.e. for an IPG-3901 package, check in any IPG-3901 device row.)

Upgrade the Device

In the **Densité Upgrade Manager** window, in the row for the device to be upgraded:

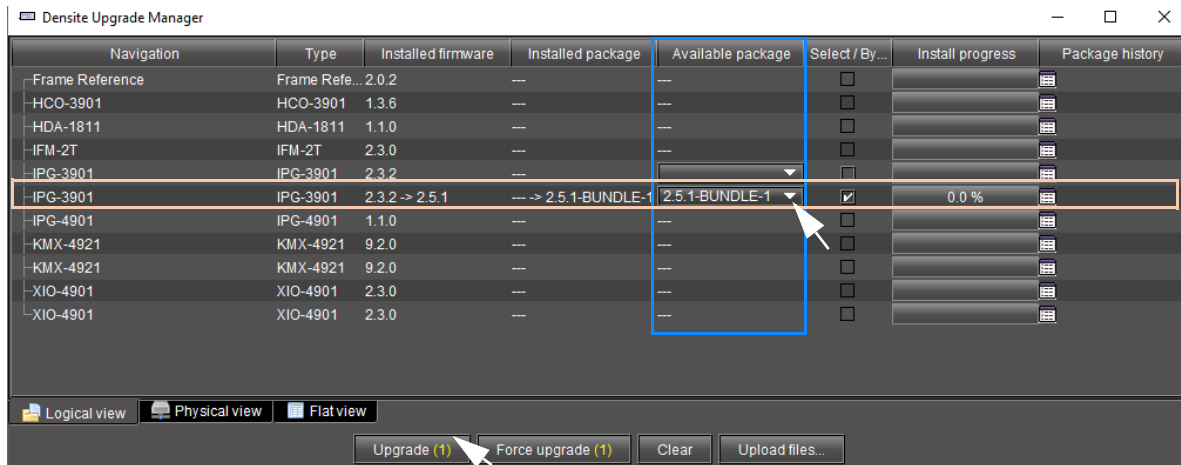9　Select an upgrade package in the 'Available Package' column's drop-down list.

Fig. 2-26: Upgrade Window with Selected Upgrade Package

10　Click the **Upgrade** button to start the upgrade of the device.

An **Upgrade Confirmation** message box appears.

11　Click **Yes** to start the upgrade.

Progress is reported in the 'Install Progress' column as a progress bar and a percentage (%):
When done, a 'Finished 100%' message appears in the 'Install progress' column.
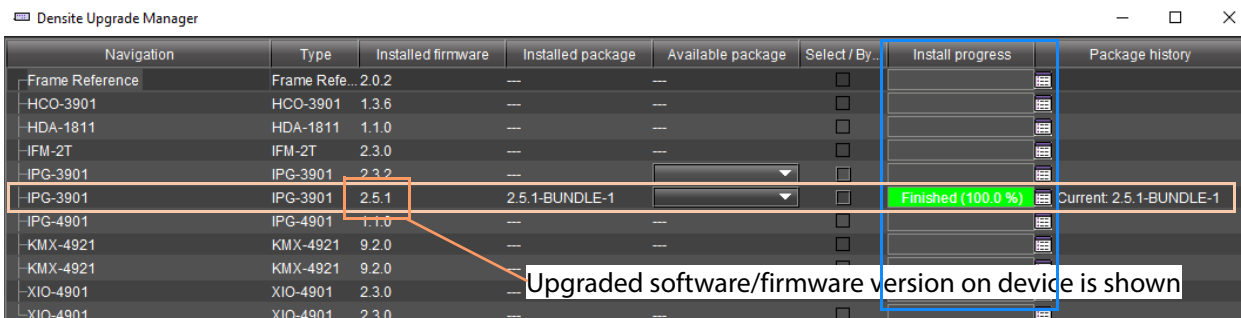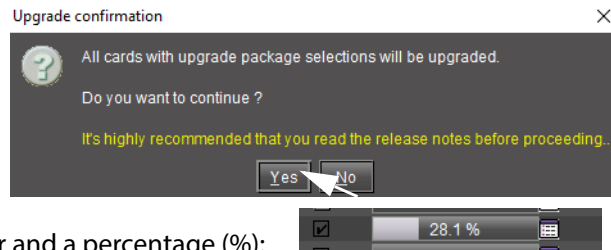
Fig. 2-27: Upgrade 'Finished 100%'

12　Close the **Densité Upgrade Manager** window.

Check Software/Firmware Version on Upgraded Device

13　In the **Network** window, right-click on the upgraded-device item and select **Info**.

A **Details** window is shown for the device/unit.

14　Check that the newly-upgraded device software/firmware version is correct.

> **Note:** The **Densité Upgrade Manager** can upgrade multiple devices.

Step 5: Adding Densité Card Support

Lite	Professional	Enterprise
	●	●

GV Orbit fully supports all Densité cards. GV Orbit **Professional** and **Enterprise** ship with native support for many Densité cards; for other cards, support needs to be added to your GV Orbit server. This section describes how to add support for Densité cards to your GV Orbit server.

Support is added by uploading the requisite Densité card software package. Once uploaded, the GV Orbit server can recognize the cards and they may be integrated into the **Network** window.

Carry out this procedure to add or to update support of a Densité card.

Add or Update Densité Card Support

Many Densité cards are automatically recognized by GV Orbit. However, some Densité cards may not show in the **Network** window, even though they are physically installed in a Densité frame. For example, a frame's controller card may be shown but one or more cards in the same frame are not shown (in the tree-view nor list-view). To make such cards available, the corresponding card software packages must be uploaded through the Densité Upgrade Manager tool.

> **Note:** Refer to GV Orbit release notes documentation for a list of natively supported Densité cards. See Related Documentation.

Prerequisite:

- All Densité frames are added to the Densité Manager service on the GV Orbit server. (Refer to the Densité Manager service chapter in the *GV Orbit Admin Guide*. See Related Documentation.)
- Software package are available for each Densité card type to be added/updated. (See each separate card documentation for how to obtain each software package.)

The procedure is similar to upgrading Densité cards (see Step 4.2: Upgrade Densité-protocol Devices):

1 Locate a Densité frame item in the **Network** window *tree-view* and expand it to show all available cards.

2 If one or more cards are not shown in the **Network** window tree-view, right-click on a fitted card item (for example, on the frame controller card item) and select 'Upgrade'.

The Densité Upgrade Manager tool is opened showing all the cards in the Densité frame. Some cards may be grayed-out.

For each Densité card type for which support is to be added/updated:

3 Import the card's software package.
(See Import Upgrade Packages for how to do this.)

4 Upgrade each card.
(See Upgrade the Device for how to do this).

After a card type has been upgraded, it should appear in the Densité Upgrade Manager tool and *not* be grayed-out.
Support for the card has now been added to the GV Orbit server.

When the support for all cards has been added:

5 Close the Densité Upgrade Manager window.

Support for the Densité cards has now been added to the GV Orbit server and the cards are displayed in the GV Orbit Client's **Network** window.

Step 6: Multiviewer Project

Lite	Professional	Enterprise
●	●	●

This section is applicable to GV Orbit Client and multiviewer applications. It describes a simple edit to a GV Orbit multiviewer project pulled from a multiviewer (MV-8 series or IQ-MV series multiviewer). The simple edit changes the appearance of the video wall and the project is pushed back to the device.

> **Note:**
> Multiviewer projects are pushed/pulled to/from a compatible *multiviewer device* rather than a server.

Step 6.1: Simple Multiviewer Project Editing Example

Pull Project and Open

1 Open GV Orbit Client at the initial screen and click **New Project**.

The **New Project** dialog is shown.

2 Select **Connected Multiviewer Project** type.

3 **Browse** *into* a new, *empty* folder (into which project information will be placed).

4 Click **Choose**.

5 Click **Next**.

A list of available multiviewers is shown.
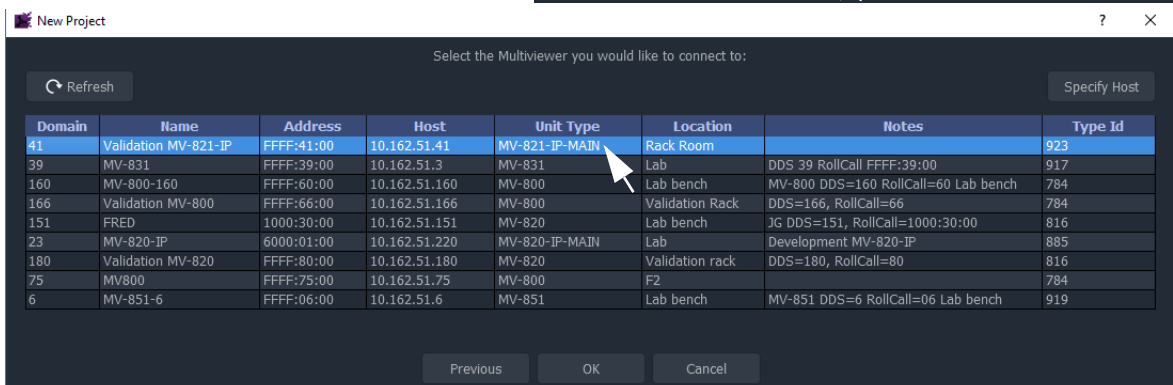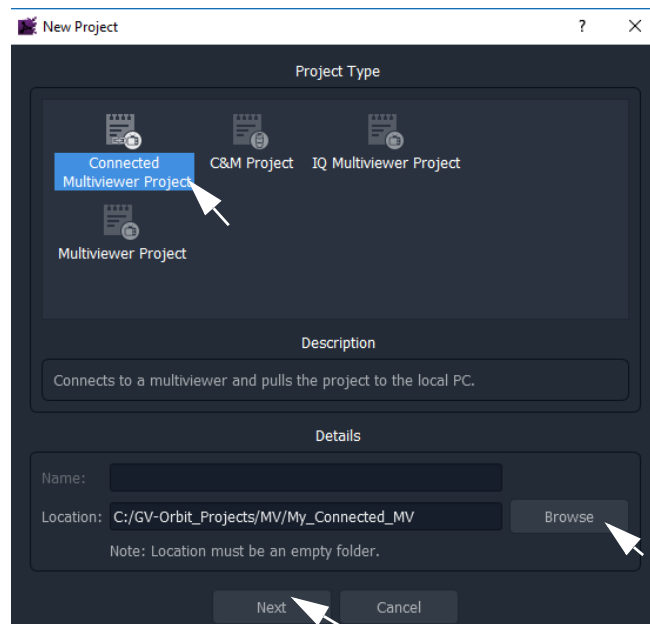
Fig. 2-28: Select Multiviewer to Connect To

> **Note:**
>
> The IP network used needs to support multicast for automatic discovery of devices to occur (for example, for listing available multiviewers).

6   Select the multiviewer to connect to and click **OK**.

GV Orbit Client connects to the multiviewer, pulls the GV Orbit project from it, attempts to open the project, and shows the login screen.

7   Enter the correct **User name** and **Password** for the accessing the GV Orbit project.

> **Note:** The default login for new projects is 'admin' 'admin'.

8   Click **Login**.

The project is opened and the multiviewer project **Home Screen** is shown.

Folder path where project is stored on the client PC.

Name of GV Orbit project (pulled from multiviewer)
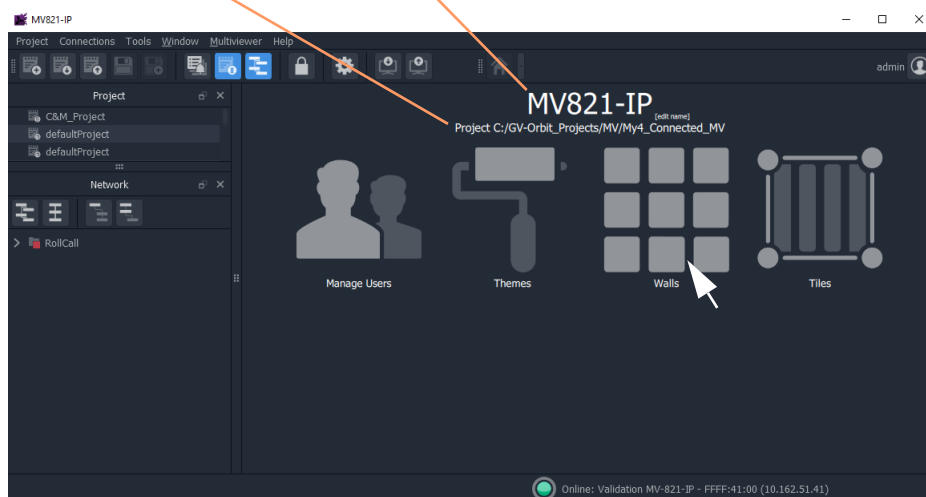
Fig. 2-29: Multiviewer Project Home Screen

The GV Orbit multiviewer project has been pulled from the target multiviewer device, locally stored on the client PC, and opened in GV Orbit Client.

The multiviewer video wall design may now be edited in GV Orbit Client.

Edit the Multiviewer Project

9   Click on the large **Walls** icon, and select one of the wall items that is shown listed.

The multiviewer video wall design is opened in a tab in the overall GV Orbit Client window. See Figure 2-30.

Run Mode / Design Mode icon (GV Orbit Client is shown in Design Mode)

Wall tab

Video Wall design

Video tiles

Properties Box
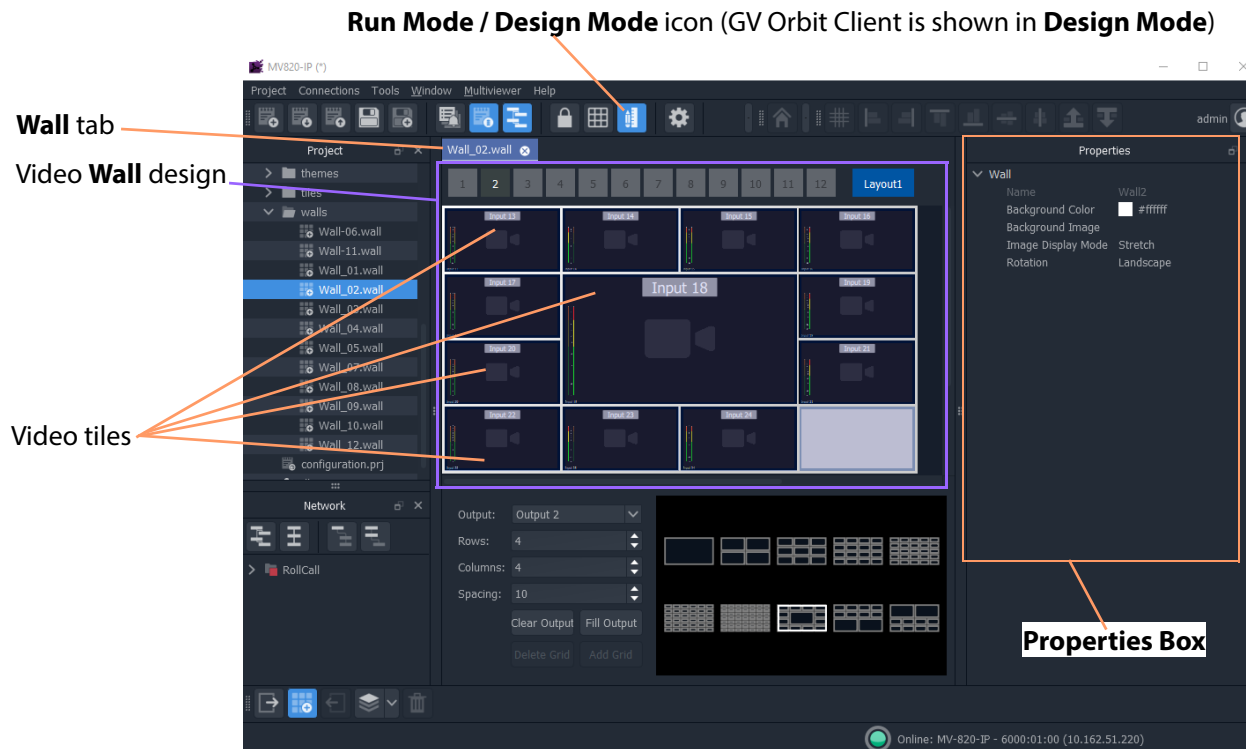
Fig. 2-30: Example Video Wall Tab in Wall Editor

The Wall tab is the stage on which a Wall is:

- designed and edited (in GV Orbit Client Design mode); and
- may be run and viewed (in GV Orbit Client Run mode).
  Although a video wall is fully deployed when running on a compatible multiviewer device.

10 Click the Run Mode / Design Mode tool bar icon to select 'Design Mode'.

> **Note:**
> Clicking the Run Mode / Design Mode tool bar icon toggles between 'Run' and 'Design' modes of GV Orbit Client.

Click to *exit* Run Mode

a) Icon appearance when *in* Run Mode

Click to *enter* Run Mode

b) Icon appearance when *in* Design Mode

Fig. 2-31: Run Mode / Design Mode Tool Bar Icon

> **Note:**
> - In Design Mode, a project may be edited (for example, a video wall may be modified).
> - In Run Mode, a project monitors log and alarm data and generates display screens in real-time.

This example edit will do a simple change to the video wall:

11   Click on one of the video tiles on the wall to select it. (E.g. the top-left video tile.)

12   In the **Properties Box**, change the **Preferences -> Type** property value to 'Analogue Clock' via the drop-down menu.

The selected tile changes to a round-faced clock within the **Wall** tab.

Selected video tile   Round-faced, analogue clock tile   Analogue clock type
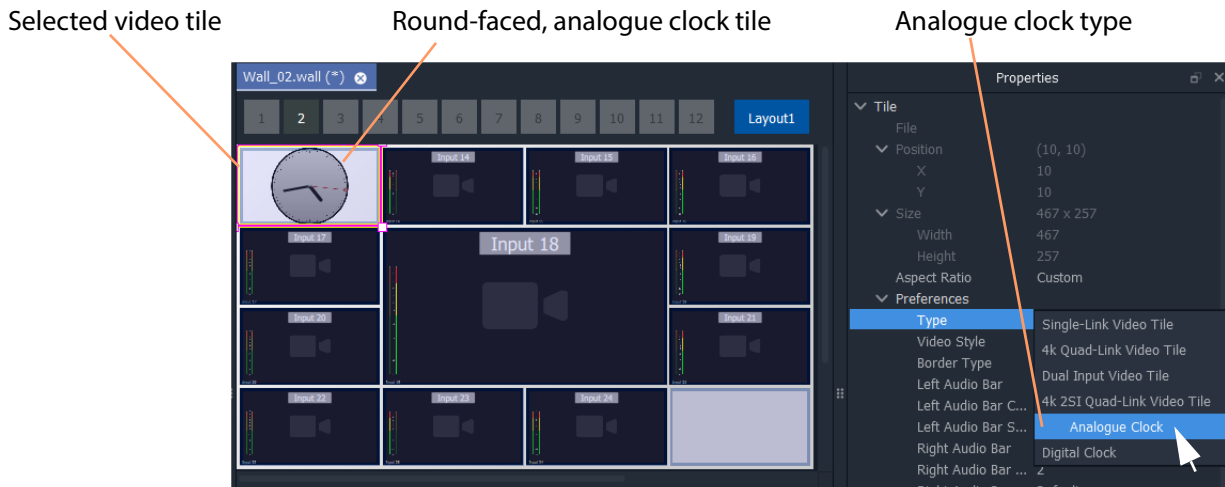
Fig. 2-32: Edited Wall Design

13   Click **Project -> Save Project** to save the whole project locally, including the video wall design.

Push Project Back to Multiviewer

14   Click **Project -> Push** in the main menu.

The **Choose Projects** dialog is shown.
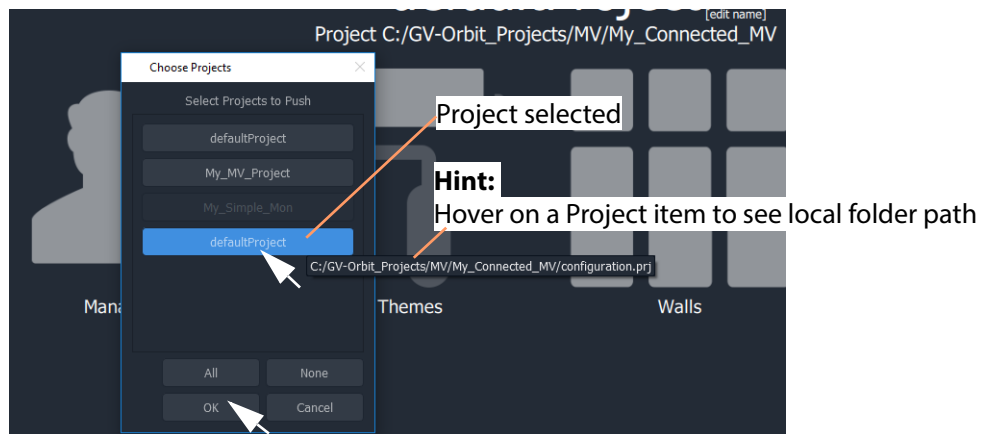
Fig. 2-33: Choose Projects Dialog

15   Select just the project to push to the multiviewer.

16   Click **OK**.

The selected project is pushed back to the multiviewer.
The edited video wall is then used and shown by the multiviewer device.

Step 7: C&M Project Setup (Professional/Enterprise)

Lite	Professional	Enterprise
-	●	●

This section is applicable to GV Orbit **Professional** and **Enterprise** only. It describes setting up a new C&M project ('Control and Monitoring' project), which is the main project type applicable to GV Orbit **Professional** and **Enterprise**. Following its setting up, a C&M project is ready for use. For example, custom graphical operator screens etc. can be designed, created and used.

All C&M projects are centrally stored in and used from repositories on the GV Orbit server (one project per repository). The GV Orbit Client application needs to be configured to communicate with the GV Orbit server(s) (see Step 7.2: C&M Setup Dialog, on page 40). A project is loaded by GV Orbit Client from a server repository and stored locally on the client PC.

> **Requirement:**
> GV Orbit Client requires network access to one or more GV Orbit servers running configured GV Orbit services.

Step 7.1: New C&M Project

From the GV Orbit Client **Initial Screen**:

1 Click **New Project.**

The **New Project** dialog is shown.

2 Select the C&M project type.

3 Click **Browse** and browse to a folder where the project will be placed. Click **Choose**.

4 Enter a name for the new project.

5 Click **OK**.
And, if prompted, answer **Yes** to create a directory.

The **Setup** dialog is shown. See Step 7.2: C&M Setup Dialog, on page 40.
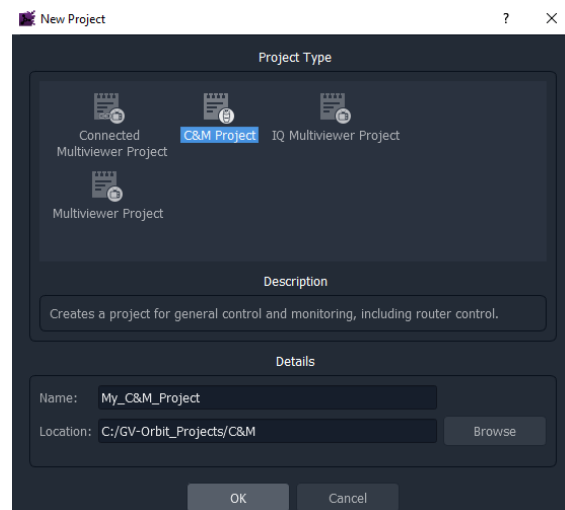
Step 7.2: C&M Setup Dialog
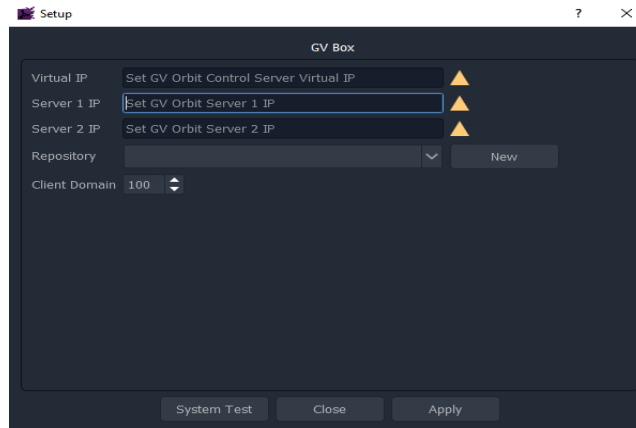
Fig. 2-34: C&M Project Setup Dialog

The C&M **Setup** dialog provides a quick way to enter key project parameters for a project.

The dialog is shown automatically when creating a new C&M project. And it can be accessed when an existing C&M project is open by clicking **Connections -> GV Server** in the main menu.

> **Note:**
> Some key project parameters are entered in the **Setup** dialog and used for the project settings. Some settings may be subsequently edited by the user, if required. Refer to

Server IP Address(es)

1 Enter the IP address of the GV Orbit server into the **Server 1 IP** text box.
For dual-server systems, enter the IP address of one server. The second server's address will be discovered automatically in the steps below.

Check the address is correct.

The GV Orbit Client attempts to connect to the server and performs some basic system tests.

> **Note: Basic System Tests**:
>
> a. Connect to the GV Orbit server.
>
> A good connection status is shown with a green light indicator.
>
> b. Find out other GV Orbit system information from the server.
>
> c. Fill out settings in the **Setup** dialog.
>
> For example:
>
> - **Client Domain** number being used (default is 100).
> - Available **Repositories** on the server.
> - IP address of any second GV Orbit server; and any IP address being commonly used by the servers ('Virtual IP').

The resulting connection status from the basic system tests is indicated in a console pane showing any system messages issued. See Figure 2-35a.

Green indicates GV Orbit Client successfully connected to the GV Orbit server.

Console pane

System messages from basic system tests.

a) Single GV Orbit Server

Green indicates GV Orbit Client successfully connected to the GV Orbit servers and virtual IP address detected.

IP addresses automatically added
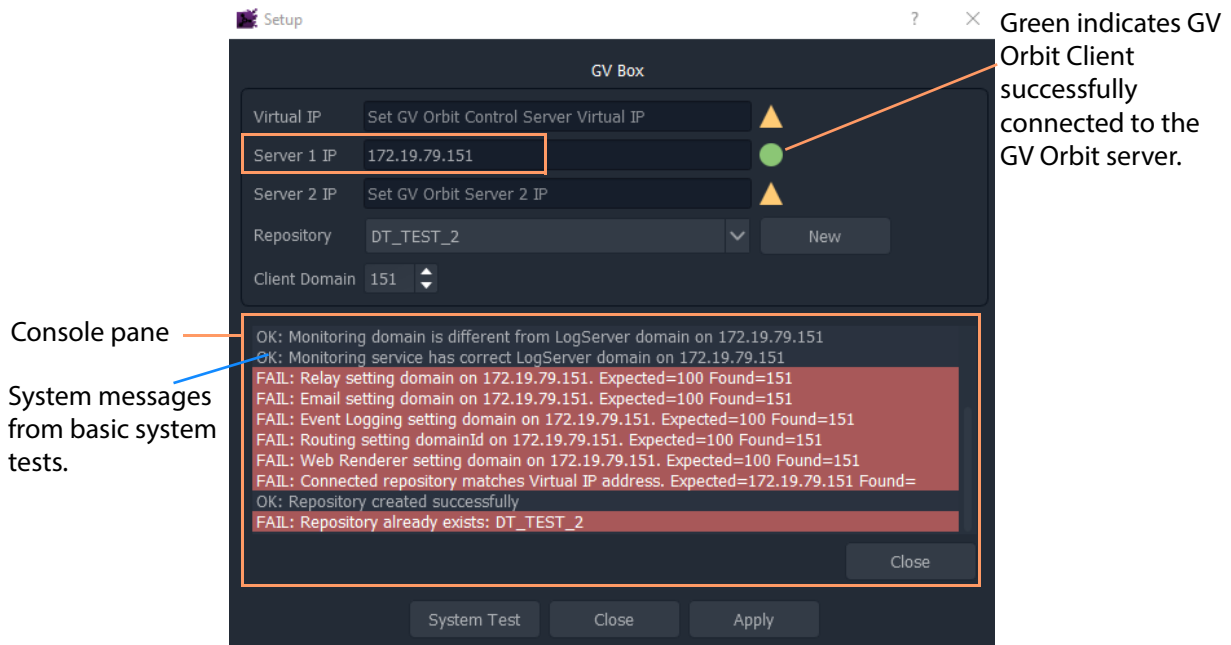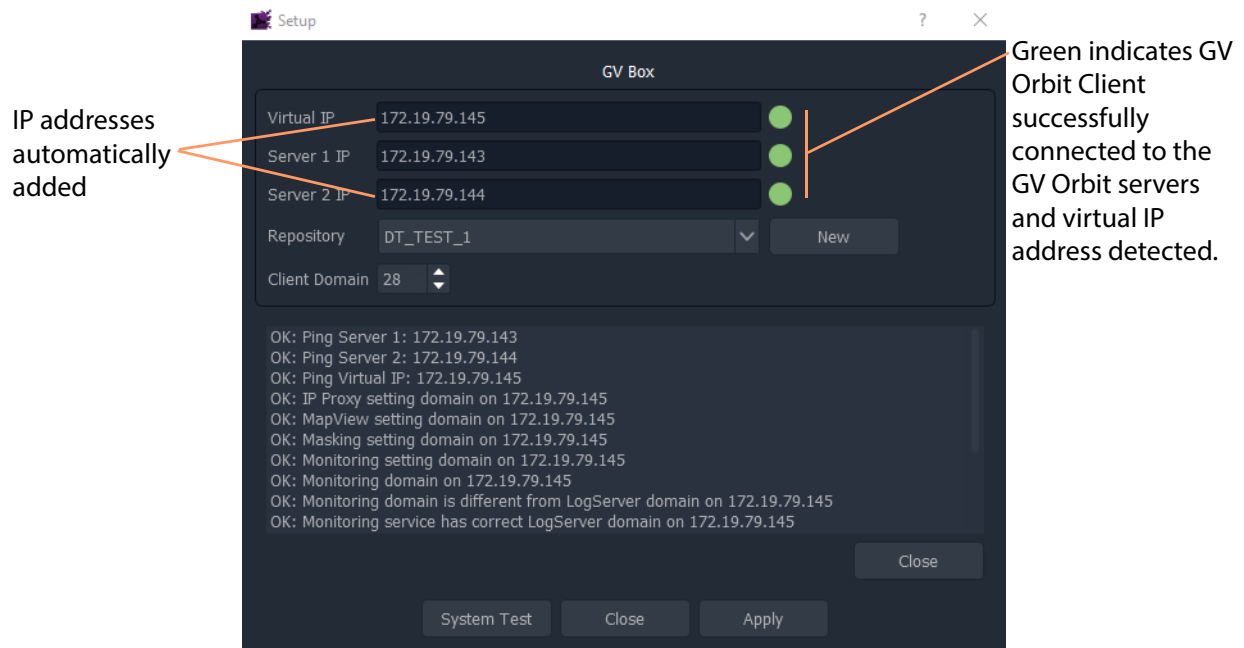
b) Dual GV Orbit Server Cluster

Fig. 2-35: C&M Project Setup Dialog:
a) Single GV Orbit Server;
b) Dual GV Orbit Server Cluster

Select a Repository

> **Note:** **Repository**:
> Projects may be locally stored on the client PC but, for deployment, a C&M project must be saved to the GV Orbit server (Pushed) into a **Repository**, one project per **Repository**. Multiple clients can access the same project.

> **Note:**
> The **Repository Manager** service, running on the GV Orbit server, can be configured on the server and each repository may be set up from there. Alternatively,
> a **New** repository may be created from the C&M Project's **Setup** dialog.
> Available **Repositories** are listed in a drop-down box in the **Setup** dialog.

> **Note:**
> **Pull** a project from a **Repository** to load the project from a server.
> **Push** a project to a **Repository** to save it back to the GV Orbit server.

2 In the **Setup** dialog, click **New**.

The **Create Repository** dialog is shown:

3 Enter a name for the new repository and click **OK**.

Alternatively, to select an *existing* repository:

4 Select a **Repository** in the 'Repository' drop-down list in the **Setup** dialog.

The C&M project will use the project from this **Repository**.
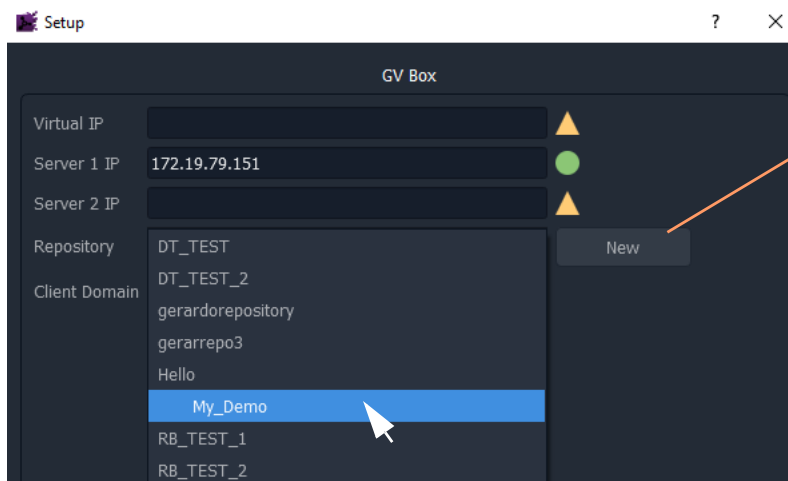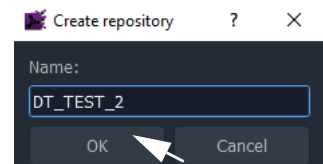
Fig. 2-36: Select a Repository in Setup Dialog

System Re-Test

5 Click **System Test** to *redo* the basic system tests.

For the basic system test, GV Orbit Client performs a:

- ping to each server;
- client-server communication check;
- services check on the server; and
- check of service Domain configurations (Monitoring and Log Server services).

The console pane in the **Setup** dialog may have shown some red messages which highlight differences between entered dialog settings and those of the GV Orbit system connected to. (For example, a Client Domain number difference.)
Re-do the basic system tests and the red messages should clear.

Single GV Orbit server   Dual GV Orbit servers and Virtual IP Address
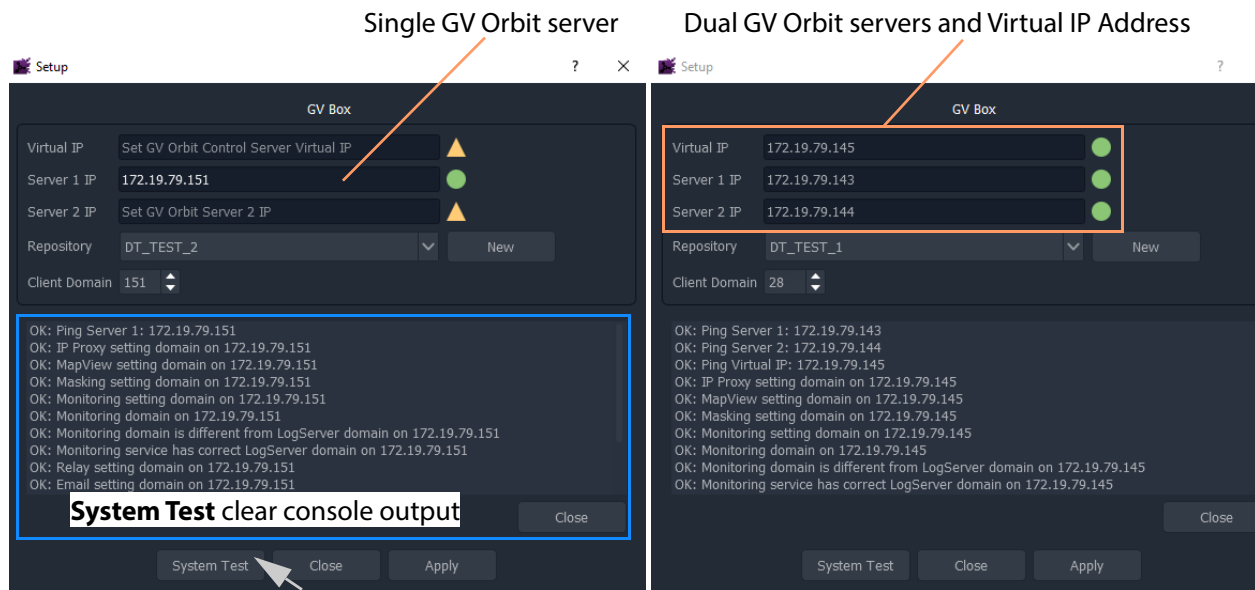
a) Single GV Orbit Server   b) Dual GV Orbit Server Cluster

Fig. 2-37: System Test Re-done and Console Output OK:
a) Single GV Orbit Server.
b) Dual GV Orbit Server Cluster.

Apply Settings

6 In the **Setup** dialog, click **Apply** to apply these settings to the project.

   Click **OK** to any pop-up message.

7 Click **Close** to close the dialog.

   The GV Orbit pulls the project etc. from the repository and shows the **Home Screen**.

> **Note:**
> When connecting to a **Repository**, the user may be prompted to **Pull** a project from a **Repository**, i.e. get a project from the server.
> **Pull** a project in order to either:
> - edit the project locally (any existing local project is overwritten); or
> - run the project locally (for example, to run operator screens).
>
> Do not **Pull** if a local project has been created/changed and it needs to be put into a **Repository**. This requires a **Push** to a repository.

Step 7.3: Further Setup

Following initial set up, a C&M project is ready for use. Project settings and variables are set up from the settings in a C&M Project's **Setup** window.

This sub-section describes how to adjust the project settings (including project variables) further, if any parameters need changing for some reason.

Step 7.3.1: Project Variables (Project -> Edit Variables)

C&M projects have a set of project variables that are set up when using the C&M Project **Setup** window to establish connection to a GV Orbit server. This done as part of creating a new C&M Project. (The **Setup** window is also accessed by selecting **Connections -> GV Server** in the main menu.)

The **Project Variables** enable GV Orbit Client workflows, and other user graphical screens, to communicate with GV Orbit services and server(s).

Note:

Most **Project Variables** hold default values consistent with the default GV Orbit server and GV Orbit services settings. Do not change the values of these variables unless the items have been changed from their default.

To access the project variables from the project **Home Screen**:

1 Click **Project -> Edit Variables...** in the main menu.

A **Variables** window is shown for the C&M project.

Path to launcher for GV Orbit Control Client

GV Orbit Control Client login credentials

Virtual IP address of GV Orbit servers

Network file name for IP endpoint configuration

Server 1 IP address

Server 2 IP address

RollCall 'Control' address of Routing Service on GV Orbit server(s)

Name	Type	Value
GVOC IP	String	172.19.79.145
GVOC Launcher	String	%APPDATA%\JWrapper\GVOrbitControlClient\GVOrbitControlClientWinLauncher.exe
GVOC Password	String	admin
GVOC User	String	admin
IP Network	String	default.net
Routing Address	Address	F110:01:06
Server IP 1	String	172.19.79.143
Server IP 2	String	172.19.79.144

Options ▾   New   New(N)   Delete

OK   Cancel   Apply

Fig. 2-38: C&M Project Variables Window

Note: For a multiviewer project there are fewer variables.

---

2 Click **OK** when project-variable value changes have been done.

3 Click **Project -> Save Project** in the main menu to save the project locally to disk.

4 Push the project to the repository when all changes are done.

Custom Project Variables

The **Variables** window also allows a user to create custom project variables for their own use. For example, the RollCall addresses of system devices, a company name, the TV channel/studio name, etc. These may each be set up as custom project variables and used in custom control and monitoring screens. Custom project variables can be created and deleted.

> CAUTION
> Do not delete any of the C&M project variables presented here.

Step 7.3.2: Client Domain Number (Connections -> GVOP)

To configure the **Client Domain** for the GV Orbit Client to use for the project:

1 Click **Connections -> GVOP** in the main menu.

The **GV Orchestration Protocol** dialog is shown.

Set the **Client Domain** number for the project to use. (Default is100.)

Select for multicast discovery of server IP addresses.
(Default is unicast discovery.)

Click to add a new IP address (for unicast discovery).

Select/deselect IP interfaces of the client PC to be used by GV Orbit Client.

Set multicast packet 'Time to Live' (TTL) - defines the number of "hops" that a network multicast message is allowed to do between IP network routers. The TTL value can limit the distance these messages travel within a network.

Fig. 2-39: GV Orchestration Protocol Dialog

2 Set the **Domain** number of the Client Domain that the C&M project will use. (Default is 100.)

3 Other project parameters can be changed in the dialog, see Figure 2-39.

4 Click **OK** to finish and close the dialog.

Step 7.3.3: Configure Network Window for RollCall-protocol Devices

5 Click **Connections -> RollCall -> Network Map** in the main menu.

The **Open Network** dialog is shown.

IP address of a server running a IP Proxy service, typically, a GV Orbit server.
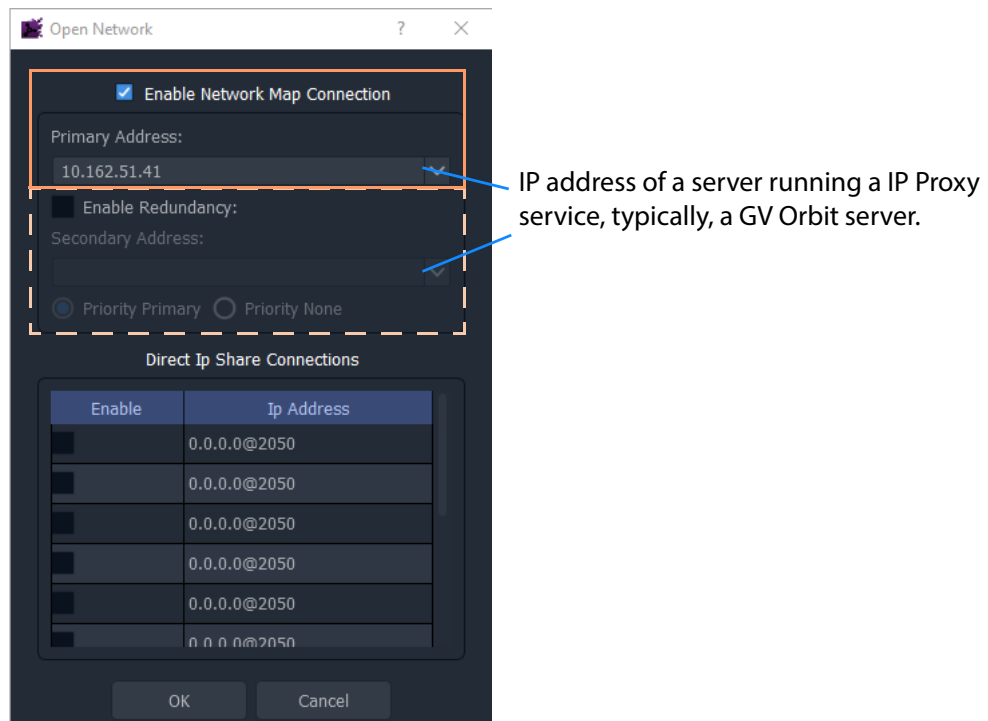
Fig. 2-40: Open Network Dialog

6 Enter the IP address of the server running an **IP Proxy** service as 'Primary Address'. Typically, this is the IP address of a GV Orbit server.

7 For a dual-redundant GV Orbit server system,
select **Enable Redundancy**
and enter the IP address of the second GV Orbit server.

8 Click **OK** to finish and close the dialog.

Step 7.3.4: Configure Network Window for Densité-protocol Devices

9 Click **Connections -> Densité** in the main menu.

The **iControl/Densité Configuration** dialog is shown.

IP address(es) of a server running a Densité Manager service, typically, a GV Orbit server.

Click **Add** to add a new IP address.
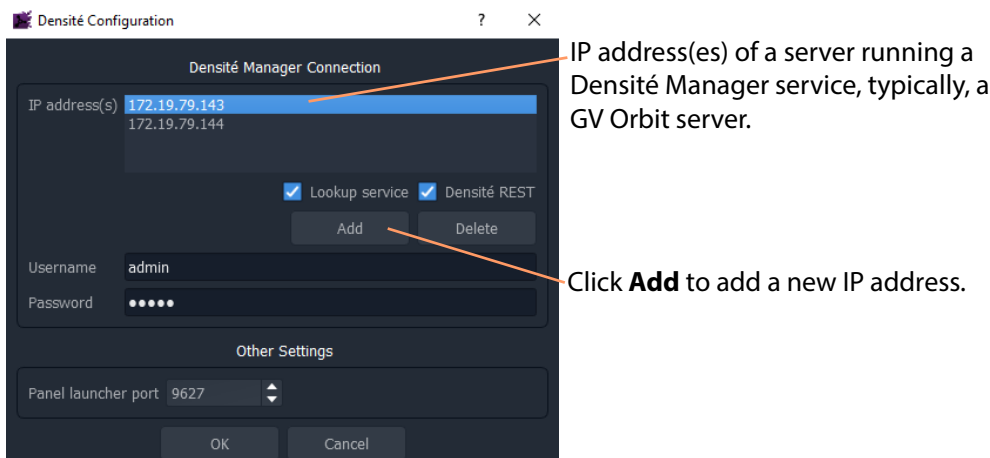
Fig. 2-41: iControl/Densité Configuration Dialog

10 Click **Add** and enter the IP address(es) of GV Orbit server(s) (which run a Densité Manager service), or add the IP address of a server.

11 Select 'Lookup Service' and 'Densité REST'.

12 Enter the **Username** and **Password** to access the Densité Manager service.

13 Click **OK** to finish and close the dialog.

Finally:

14 Click **Project -> Save Project** in the main menu to save the project locally.

15 Push the project to the repository when all changes are done. See Step 7.4: Saving and Pushing a Project, on page 47.

Step 7.4: Saving and Pushing a Project

Save Project (Locally)

To save a project locally to the folder on the client PC:

- Click **Project -> Save Project** in the main menu.

Push Project (Save to Server)

To push a project back into a repository (on the GV Orbit server):

- Click **Project -> Push**. (See Step 2.2.2: Push Project (Save to Server), on page 19.)
In the **Choose Project** dialog, select the project to be pushed and click **OK**.

Pull Project (Load from Server)

To pull a project from a repository (on the GV Orbit server):

- Click **Project -> Pull** in the main menu.

Close Project

To close a project that is open in GV Orbit Client:

- Click **Project -> Close Project** in the main menu.

3 Further Information

Summary contents of this chapter:

Further Information

This chapter provides further information to get started with GV Orbit Client.

Project Home Screen

Lite	Professional	Enterprise
●	●	●

Home Screen Windows

The appearance of the GV Orbit Client project **Home Screen** varies according to project type and according to which GV Orbit Client windows are enabled and being shown. Use tool bar icons to show/hide windows.

Some tool bar icons to show/hide windows in the **Home Screen**:

- **Alarm History** window icon

- **Project** window icon

- **Network** window

- **Properties** window (shown when a C&M screen tab is selected)

- **Workflow** window
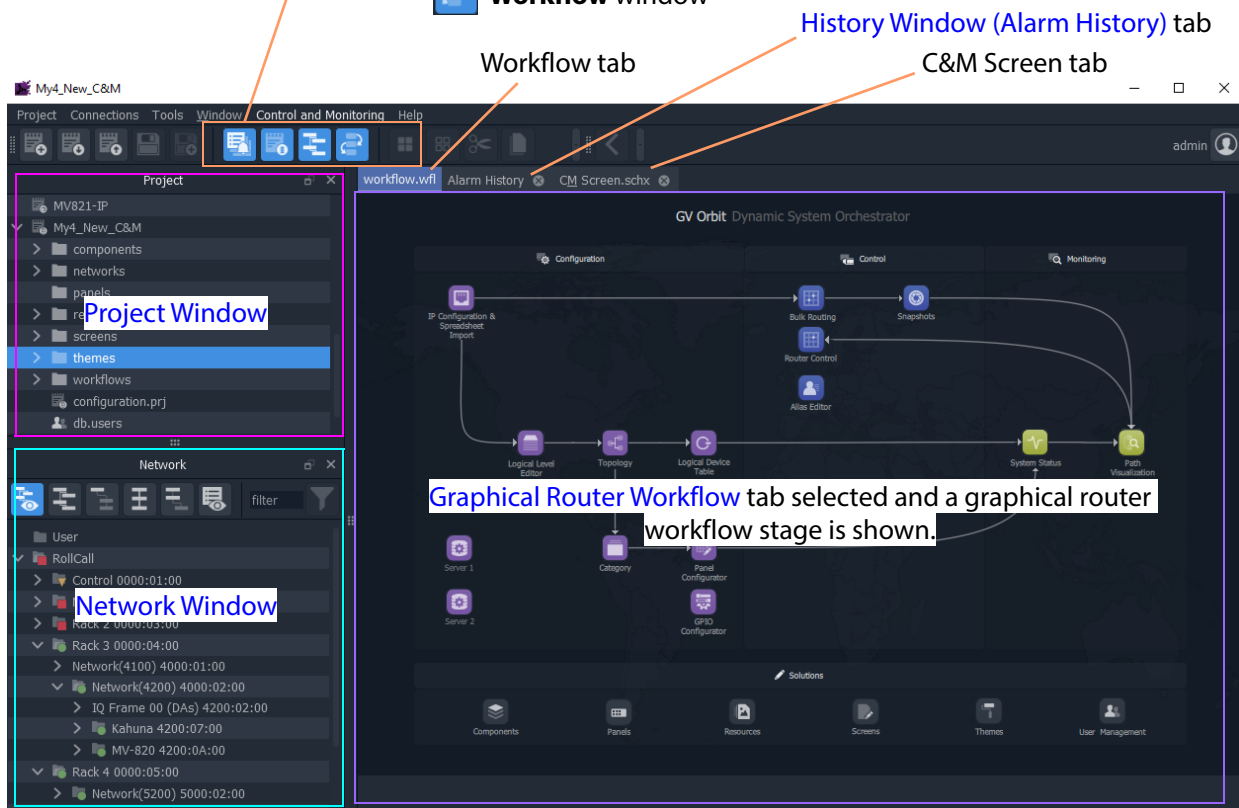
Fig. 3-1: GV Orbit Client Project Home Screen Windows

To close all windows and just see a default workflow:

- Click **Window -> Close All** in the main menu.

Table 3-1: Home Screen Windows

Window	Description	See
Project	A tree view of projects opened by the GV Orbit Client. Allows users to access aspects of the current project, or to load another project.	Project Window, on page 52.
Network	A view of devices/frames/services etc. in a GV Orbit system, presented in a tree-view or a list-view. A user can access device information and alarms.	Network Window, on page 53.
Alarm History	A list of alarms that have occurred across the system over time.	History Window (Alarm History), on page 74.
Properties	Shows the properties of the selected graphical widget when designing a graphical C&M project.	Properties Window, on page 56.
Workflow	A graphical presentation of all the tasks and functions available in GV Orbit. Click on an icon to access a task or a function.	Graphical Router Workflow, on page 77.

Project Window

The **Project** window lists the project currently open and any projects previously opened by the GV Orbit Client on the client PC.

The currently-open project is expandable in a tree view to show the various project items. The user can access and manage different aspects/functions of the project from this tree view item.

Currently-open project

Project is expanded

Project Items

Project items seen when a project is expanded include:

- **Components** - Graphical custom components that appear on GV Orbit Client graphical control and monitoring screens.
- **Networks** - IP End-point configuration files, used in IP routing control set up.
- **Panels** - Soft XY Router control panels, created with a wizard and user-customizable.
- **Resources** - Imported resource items used in the project (e.g. logo images etc.).
- **Screens** - C&M project user-defined graphical control/monitoring screens.
- **Themes** - The appearance of each graphical element on a GV Orbit custom graphical screen (multiviewer video wall screen, or C&M project control and monitoring screen) can have a style applied to it. A theme is a set of styles that can be applied to a project.
- **Workflows** - Workflow screen.
- **configuration.prj** - The GV Orbit project file. Select this file when opening an existing project in GV Orbit Client. Do not edit this file.
- **db.users** - Project users, user roles and their associated permissions can be managed. New user names and logins etc. can be set up.

> **Note:**
> Some project items are also accessible via icons in the router workflow window (see Graphical Router Workflow, on page 77).

Project Window Actions

Right-click on a **Project** window tree-view item to open, import, or create a new item.

For example, right click on:

- **Screens** - Select **New** to create a new user screen in a C&M project.
- **Walls** - Select **New** to create a new video wall in a multiviewer project.
- **Resources** - Select **Import File(s)** to import an image file into a project.
- **db.users**
    - Select **Open** to open the User Management window in a tab to set up users and roles.
    - Select **Import user database** to import users from another project.
- **<Project Name>** - Select **Rename** project to rename the project.

Network Window

The **Network** window shows a tree-view or a list-view of devices/frames/services etc. in a GV Orbit system. A user can access control screens, information and alarms about these items from the window. For more information, see Network Window for more information.

> **Note:**
> To set up the **Network** window for a project, see Network Window Views, on page 22 onwards.

Show/Hide Network Window

The **Network** window may be shown/hidden using a main tool bar icon, see Figure 3-7.

Click icon to hide/show the **Network** window (toggles).
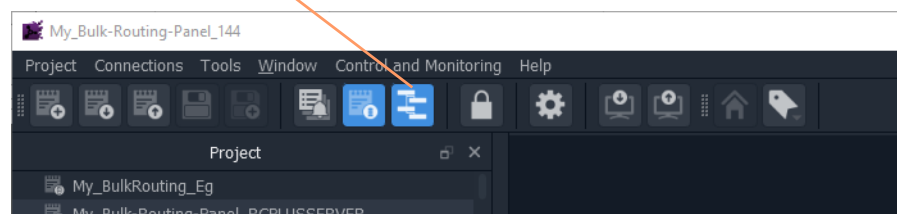
Fig. 3-2: Network Window Hide/Show

| a) Tree-View | b) List-View |
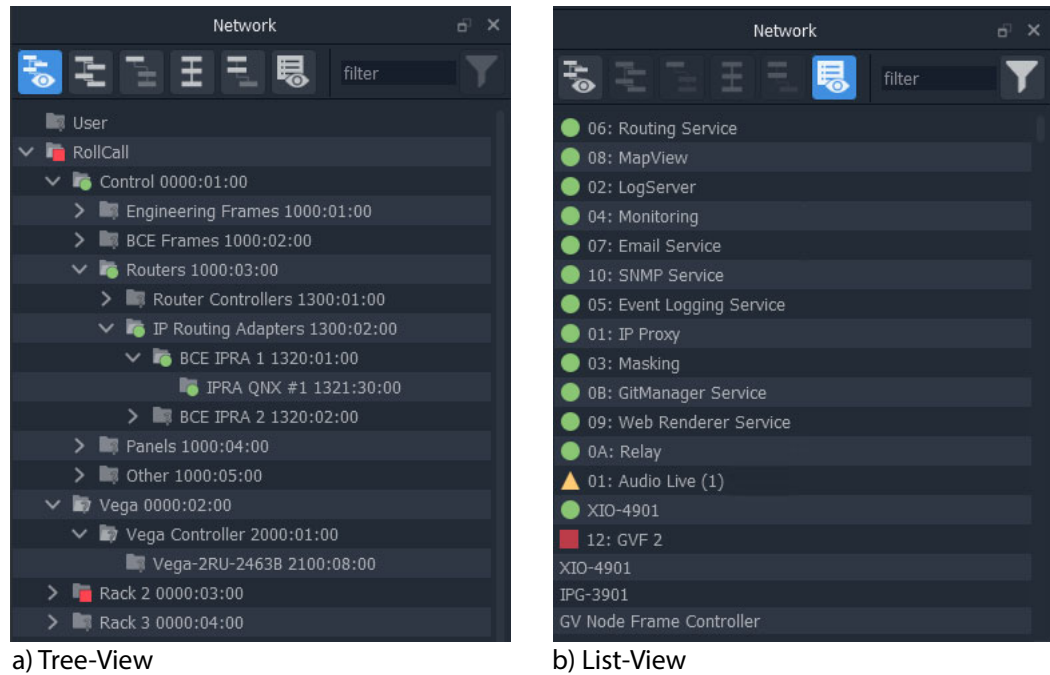
Fig. 3-3: Network Window Examples: a) Tree-View;   b) List-View.

Network Window Actions

Locate a device in the **Network** window and right-click on the item. The following actions are possible in GV Orbit:

- **Lite**, **Professional** and **Enterprise**:
    - Device Information - View information about a device.
    - Card Parameters - View Densité-protocol device parameters.
    - Device Control - View and change device configuration settings. (**Lite**: RollCall devices only.)
    - Upgrade Device - Upgrade (or downgrade) device software/firmware.
- And for **Professional** and **Enterprise** only:
    - Alarm List - Live Alarms/Status - View a list of a device's live status and alarms.
    - Alarm History for a Device - View the alarm history of a device.
    - Alarm Masking (Professional and Enterprise) - Mask device alarms.

History Window (Alarm History)

Lite	Professional	Enterprise
-	●	●

The GV Orbit Client **History** window can show the history of *system-wide* alarms and status messages which are read from the **Event Logging** service on the GV Orbit server.

> **Note:**
> The **History** window is similar to the window shown for Alarm History for a Device, on page 69.

For more information, see History Window (Alarm History).

View Alarm History for System-wide Alarms

To view the **Alarm History** for GV Orbit system-wide alarms:

1 Click the **Alarm History** icon in the main tool bar.

The **History** window appears in a tab. **Note:** The tab shows no specific device address when showing system-wide alarms.

Select the **History** tab to view it.

Time stamp	Current ...	Current value	Previous ...	Previous value	Alarm	Address
				All Devices		
			Time stamp range: 08/1/20 @ 12:13:00 - 08/1/20 @ 13:13:59		
08/1/20 @ 13:13:59	● OK	WARN:TPG	● OK	WARN:SD	INPUT_8_SDI_ERRCNT	B111:10:01
08/1/20 @ 13:13:59	▲ Minor	WARN:Address change	▲ Minor	WARN:Name Change	LOGGING_STATE	A111:0F:00
08/1/20 @ 13:13:59	● OK	OK	▲ Minor	WARN	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:59	● OK	0	● OK	1	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:58	▲ Minor	WARN	● OK	OK	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:58	● OK	1	● OK	0	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:57	● OK	0	● OK	2	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:57	● OK	OK	▲ Minor	WARN	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:56	▲ Minor	WARN	● OK	OK	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:56	● OK	2	● OK	1	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:55	● OK	001:01:30:00	● OK	001:01:29:00	RC_UPTIME	3291:20:0A
08/1/20 @ 13:13:55	● OK	1	● OK	0	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:54	● OK	0	● OK	1	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:51	● OK	1	● OK	0	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:50	● OK	OK	▲ Minor	WARN	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:50	● OK	0	● OK	3	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:49	● OK	OK	■ Critical	FAIL:LAN_2_STATE=FAIL:SFP_2_STATUS=FAIL:RX PWR LO	LAN_STATE	3291:20:07
08/1/20 @ 13:13:49	▲ Minor	WARN	● OK	OK	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:49	● OK	3	● OK	1	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:49	● OK	OK	■ Critical	FAIL:SFP_2_STATUS=FAIL:RX PWR LO	LAN_2_STATE	3291:20:07

1 2 3 4 5 6 7 8 9 10 ... ▶ ▶| 1 - 20 of 7650 items

Fig. 3-4: Alarm History Window Example

Properties Window

Lite	Professional	Enterprise
-	●	●

The **Properties** window shows the properties of a selected graphical widget or on-screen item when designing/editing a C&M screen in GV Orbit Client in 'Design' mode. The window may be shown when a C&M screen tab, or a multiviewer video wall, or other graphical GV Orbit project item is selected.

Run/Design Mode icon indicates GV Orbit Client is in 'Design' mode for graphical editing and design.

Properties Window

Selected Alarm List widget and its corresponding properties shown in **Properties** window
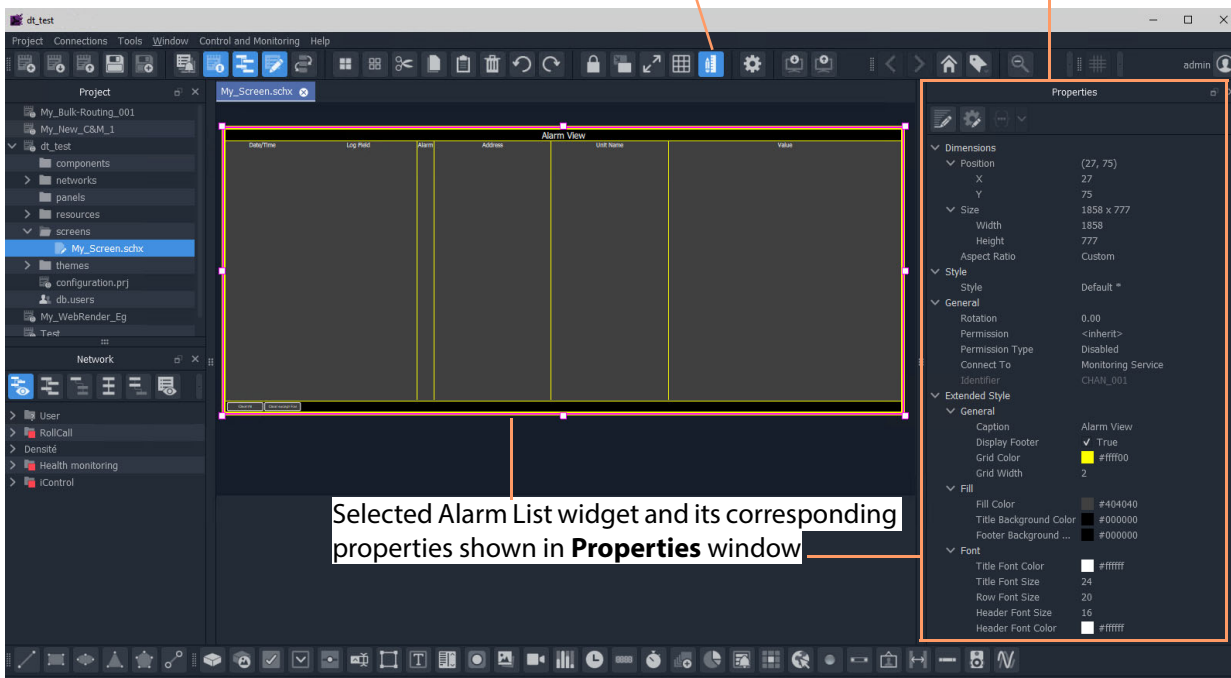
a) Example C&M Screen Running in 'Design' mode in GV Orbit Client

b) Example C&M Screen Running in GV Orbit Client

Alarm List widget showing live alarms in a system
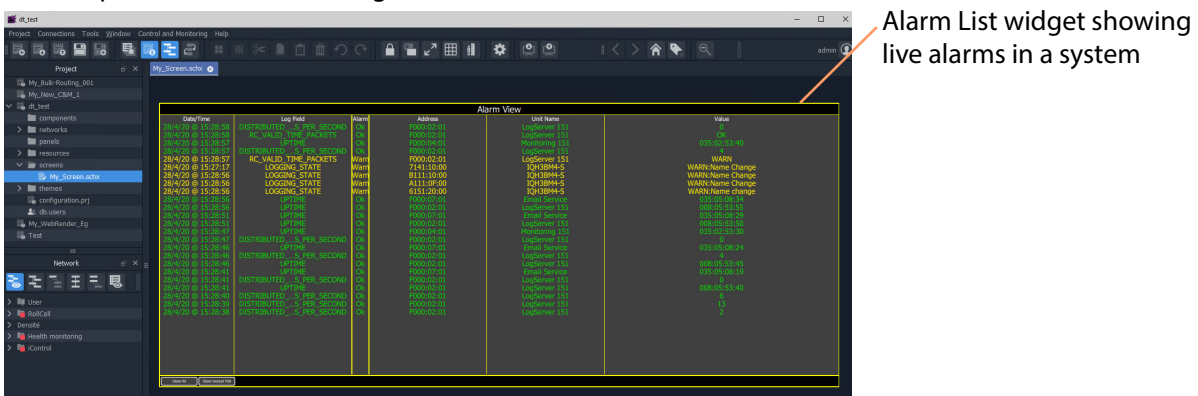
Fig. 3-5: Properties Window Example

Workflow Window

	Lite	Professional	Enterprise
	-	●	●

> **Note:**
> A **Workflow** window may be visible in GV Orbit **Lite** but it is *not applicable* to the GV Orbit **Lite** product version.

A workflow window shows a graphical presentation of all the tasks and functions available in GV Orbit **Professional** and **Enterprise** systems. The **Workflow** window is the stage which presents all the tasks and functions the system has to offer to the GV Orbit Client user. Click on a workflow icon for direct access to a task or a function.

View WorkFlow Stage

To view the **Workflow** stage:

1 Click the [icon] icon in the tool bar.

Workflow stage is then shown in a tab.

2 Select the workflow tab (if it is not already selected) to view it.

The workflow in Figure 3-6 is available to all new projects.

Workflow window icon   workflow.wfl tab   **Workflow** stage

Click on an icon to access a task item, see Graphical Router Workflow, on page 77.

Click on an icon to access GV Orbit project functions in GV Orbit Client, see Project Window, on page 52.
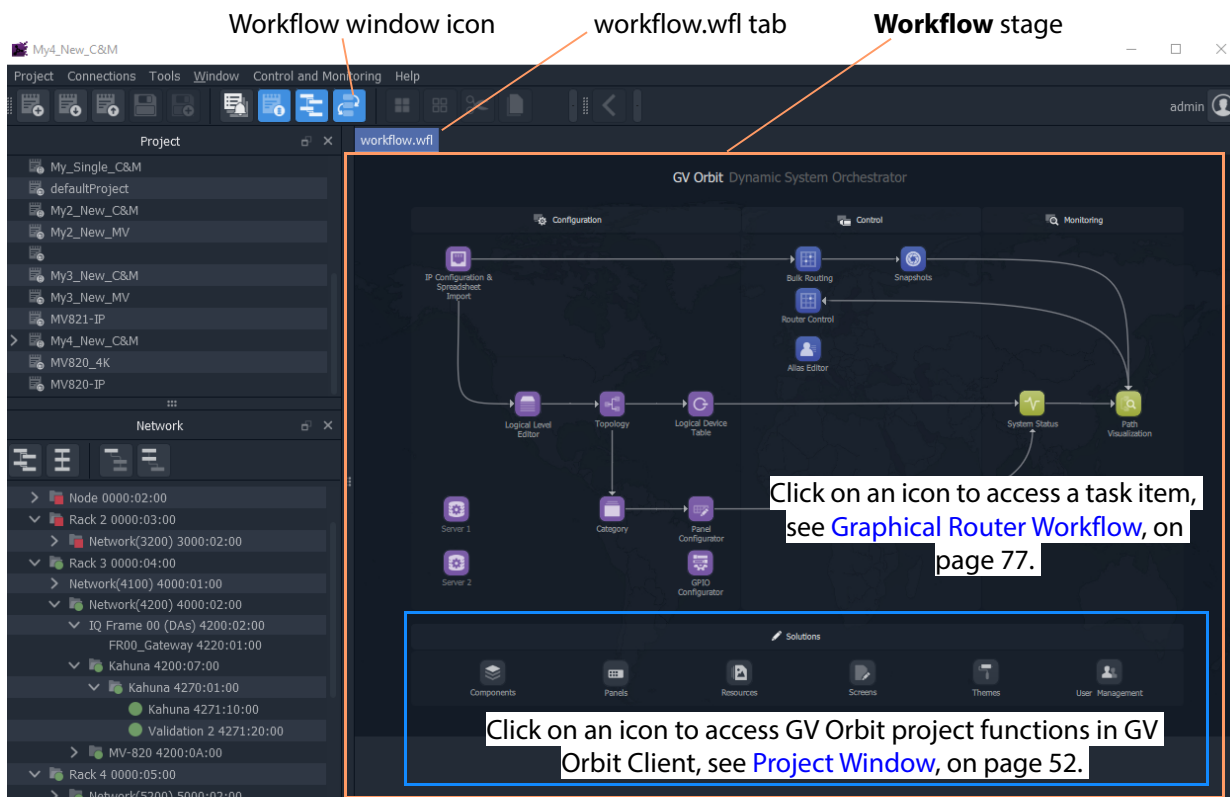
Fig. 3-6: Graphical Workflow Stage

The graphical **Workflow** stage makes it easy to understand how tasks and functions are related and each icon provides direct access to the task/function it represents.

The workflow is optimized for carrying out the system configuration required:

- when re-purposing an existing routing infrastructure; or
- for the steps to set up a fresh, new routing environment.

Routing configuration and control is done via the GV Orbit Control application running on a GV Orbit server, which supports Grass Valley NP0017 and SW-P-08 protocols. Both IP and SDI routing etc. may be controlled. The GV Orbit Client communicates with the GV Orbit Control service via the GV Orbit Control Client, launched automatically from the GV Orbit Client.

Network Window

What is the Network Window?

The **Network** window shows a tree-view or a list-view of devices/frames/services etc. in a GV Orbit system. A user can access control screens, information and alarms about these items from the window.

Note:

To set up the **Network** window for a project, see Network Window Views, on page 22 onwards.
(See Step 3.2.1: Network Window Setup For RollCall Devices, on page 23; Step 3.2.2: View a Device Control Screen - RollCall Devices, on page 24; Step 3.2.3: Network Window Setup For Densité Devices, on page 25; and Step 3.2.4: View a Device Control Screen - Densité Devices, on page 26.)

Note: Automatically discovered devices:

For devices that are automatically discoverable by a GV Orbit system, these are shown in the **Network** window. For example, GV Fabric IP switch.

Show/Hide Network Window

The **Network** window may be shown/hidden using a main tool bar icon, see Figure 3-7.

Click icon to hide/show the **Network** window (toggles).
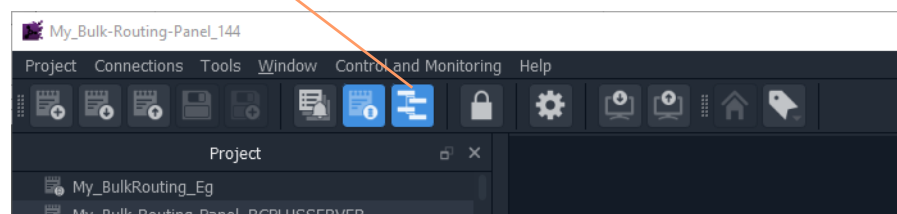
Fig. 3-7: Network Window Hide/Show

Tree-View and List-View

The tree-view and list-view forms of the **Network** window are shown in Figure 3-8.

The tree-view presents a hierarchical view of system devices/units/frames/services. See Figure 3-8a. The tree-view's expand/collapse controls are presented in Figure 3-8a.

The list-view is a flattened view, listing all system devices/units/frames/services. See Figure 3-8b. The list may be filtered, see Network Window List-View Filter for a description of the list-view filter controls.

Click to expand **all** of the tree-view.

Click to expand the **selected** part of the tree-view.

Click to collapse **all** of the tree-view.

Click to collapse the **selected** part of the tree-view.

Click to show List-View

Click to show Tree-View

List-view filter controls, see
Network Window List-View

a) Tree-View   b) List-View
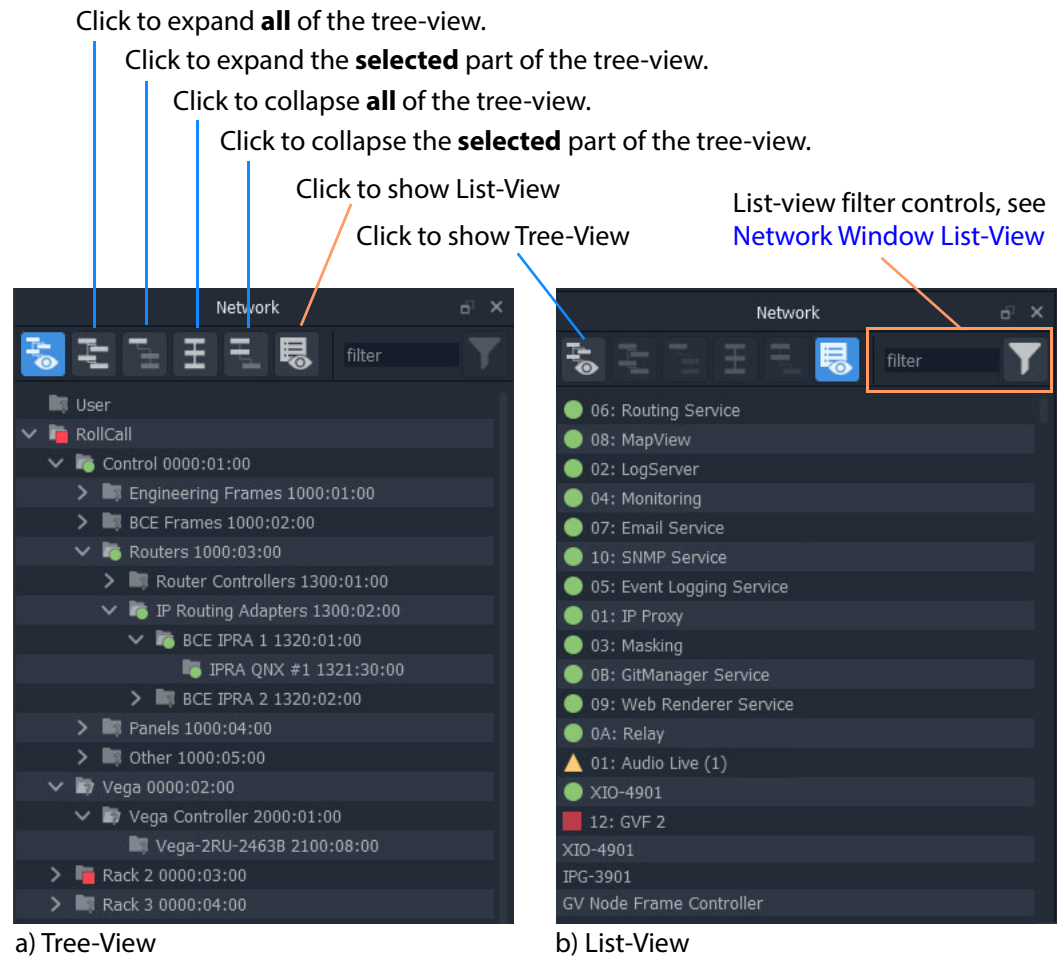
Fig. 3-8: Network Window: a) Tree-View;   b) List-View.

Network Window List-View Filter

In the **Network** window, the displaying of items in the list-view can be filtered. Filtering can be done:

• with a text string; and/or

• by card type; and/or

• by alarm state.

The filter controls are shown in Figure 3-9.

Filter text box

Filter icon

Filter drop-down menu

Filter on Device Type

Filter on Alarm State

Clear **Filter** text box filtering

Clear All Filtering
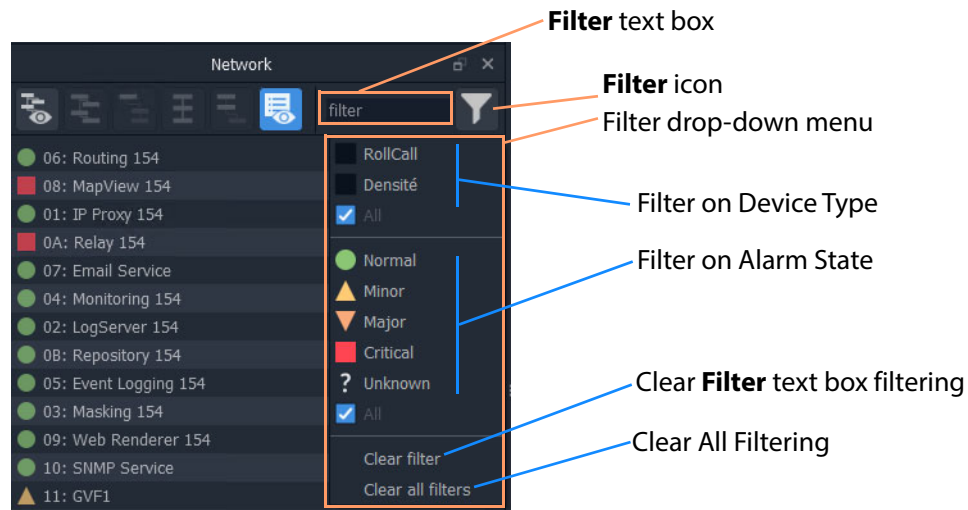
Fig. 3-9: List-View Filter Controls

Example 1: Filter List Item Name

To filter the **Network** window list-view for a particular device by its name:

1. Enter a fragment of text in the **Filter** text box. For example, "UCP or "XIO".

    The displayed names are those containing the entered text. See Figure 3-10b or c.
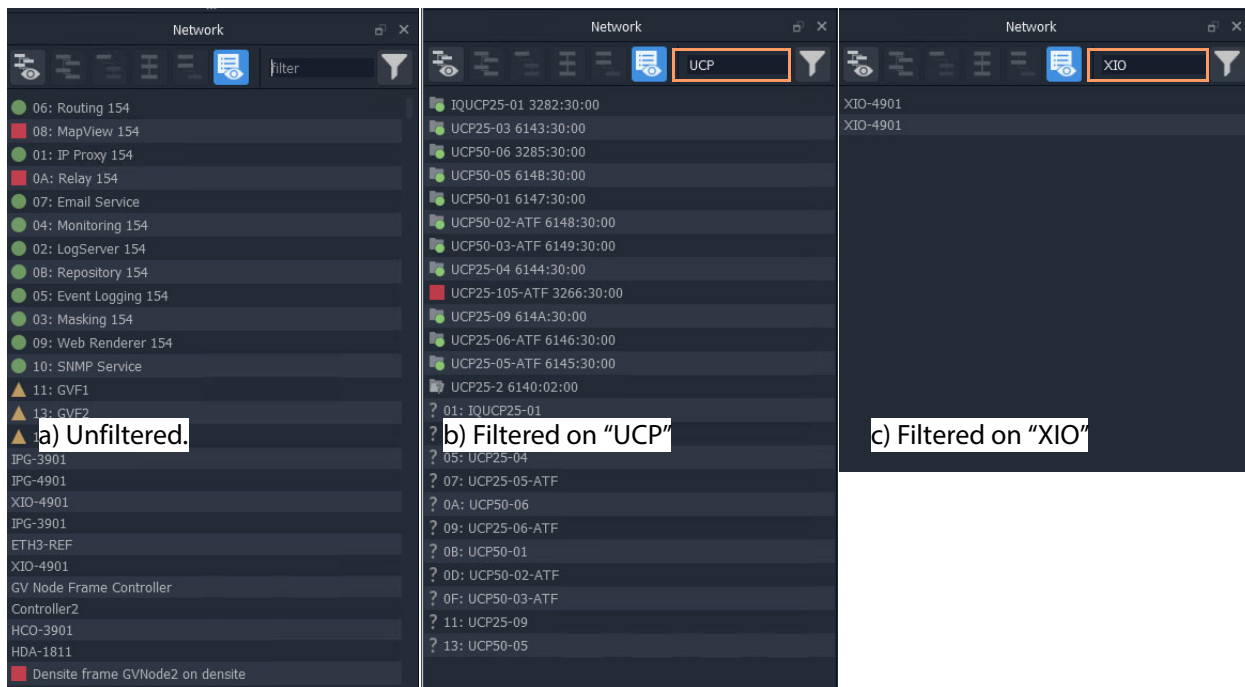
Fig. 3-10: List-View Filtered Names on Text

2. Click on the **Filter** icon and select 'Clear Filter'.

    The text box is cleared and the text--box filtering is cleared.

Example 2: Filter Device Type and then Alarm State

With all filters cleared, to filter on a device type and then their alarm states:

1 Click on the **Filter** icon and select 'RollCall'.

RollCall-protocol devices are shown. See Figure 3-11a.

2 Click on the **Filter** icon and select 'Minor.

'Minor Warning' RollCall-protocol devices are shown. See Figure 3-11c.

Filter icon indicates some filtering is active
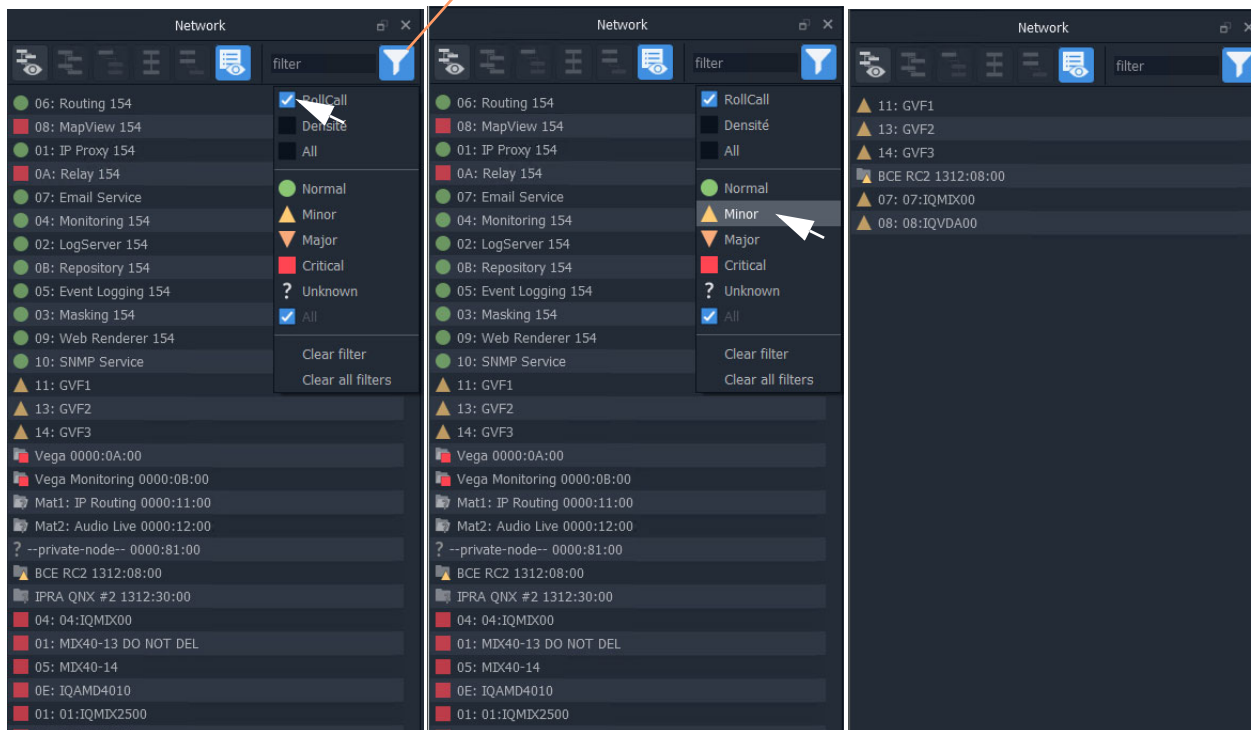
a) Filter RollCall-protocol devices   b) Select to Show Minor Warning   c) Minor Warning RollCall-
                                          Alarm States   protocol devices shown

Fig. 3-11: Filter on Device Type and then Alarm State

To clear the alarms:

3 Click on the **Filter** icon and select 'Clear All Filters'.

All filters are cleared and all devices are shown.

Network Window Actions

Locate a device in the **Network** window and right-click on the item. The following actions are possible in GV Orbit:

- **Lite**, **Professional** and **Enterprise**:
    - Device Information - View information about a device.
    - Card Parameters - View Densité-protocol device parameters.
    - Device Control - View and change device configuration settings. (**Lite**: RollCall devices only.)
    - Upgrade Device - Upgrade (or downgrade) device software/firmware.
- And for **Professional** and **Enterprise** only:
    - Alarm List - Live Alarms/Status - View a list of a devices' live status and alarms.
    - Alarm History for a Device - View the alarm history of a device.
    - Alarm Masking (Professional and Enterprise) - Mask device alarms.

Device Information

To inspect device information from the **Network** window (tree-view or list-view):

1. Right-click on a device and select 'Info'.

   Device information is shown in a **Details** pop-up window.
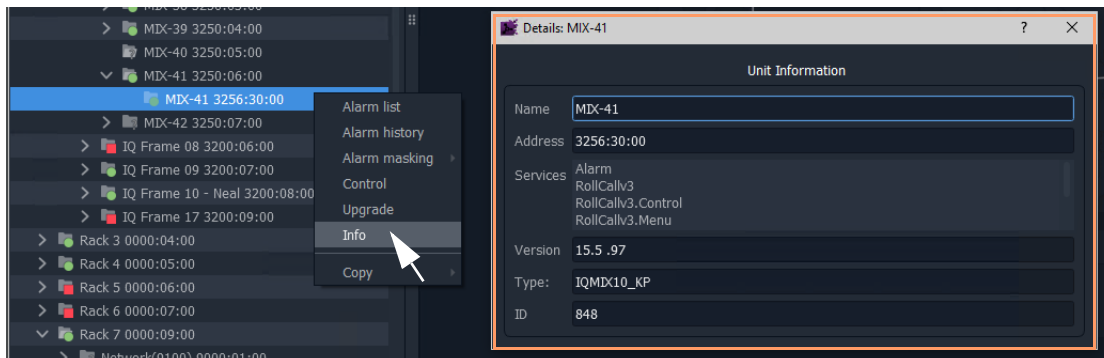
a) RollCall-protocol Device - Details window

b) Densité-protocol Device - Details window

Fig. 3-12: Device Info - Details Pop-up Windows

Card Parameters

To view a Densité-protocol device's parameter settings from the **Network** window:

1 Right-click on a Densité-protocol device and select 'Card Parameters**'**.

A summary of the device's parameter settings is shown in a tab. See Figure 3-13.

Right-click and select 'Card Parameters',
a summary of card parameters is shown in a tab
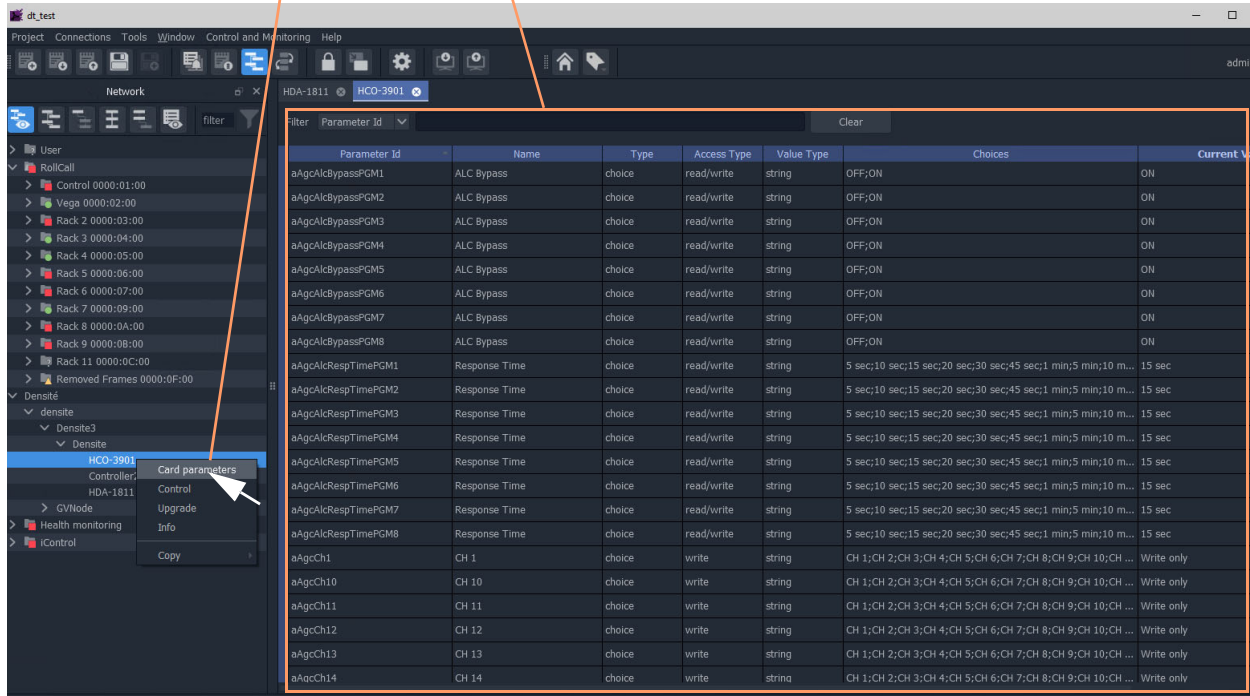
Fig. 3-13: Card Parameters Tab

2 Click on a column heading to sort the listed parameters on a column.

3 Use the filter controls to restrict the shown listed items. See Figure 3-14.

Example: Filtering on parameter name containing 'Resp'
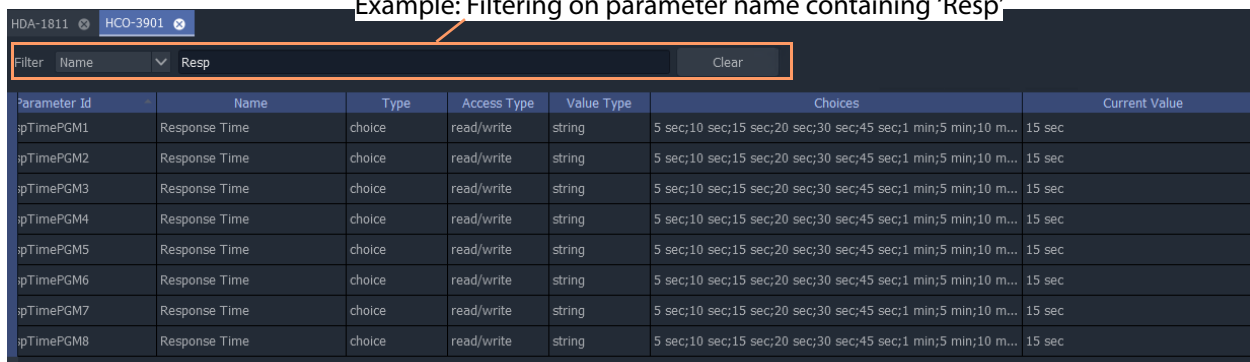
Fig. 3-14: Example Filtered Card Parameters

4 Read/Write card parameters can be entered via the 'Current Value' column.

Device Control

To inspect a device's configuration settings from the **Network** window:

1 Right-click on a device and select 'Control**'** to view the device's control screen. (See Step 3.2: Configuration of Densité and RollCall Devices, on page 22.)

> **Note:** For GV Fabric IP Switch devices, the control screen that is opened in the GV Orbit Client window is the device's web page.

Upgrade Device

To upgrade a device from the **Network** window:

1 Right-click on a device and select 'Upgrade' to open the device's upgrade screen. (See Step 4: Device Upgrade, on page 27.)

Alarms

See Alarms section for more information.

Alarms

> **Note: Alarms in GV Orbit v1.2 onwards:**
> In GV Orbit systems, alarms are handled 'behind the scenes' with internal addresses. These addresses have changed for GV Orbit v1.2.0 onwards:
>
> - **v1.2.0 onwards**: Alarm-addresses for Densité-protocol devices are now aligned with the respective device/card address.
> - **Earlier than v1.2.0**: Densité-protocol device alarm-addresses are separate and are *not* aligned to device addresses.
>
> CAUTION
> As a result of this alarm addressing change, when upgrading to GV Orbit v1.2.0 onwards, addresses specified for alarms must be changed. This applies to custom operator panels of C&M projects and to Alarm Behaviours.

Alarm List - Live Alarms/Status

Professional and **Enterprise** only.

Alarm List Window

To inspect live alarms and status of a device/frame/service from the **Network** window:

1 Right-click on a device item in the **Network** window and select '**Alarm List'**.

   The live status and alarms reported by the device/frame/service are listed in an **Alarm List** window. See examples shown in Figure 3-15a and b, and Figure 3-16a and b.

Sort by alarm name
Sort by value
Sort by status
Sort by mask
Sort by invert
Sort by recent

Click to select sorting of listed alarms from drop-down menu.

Clear filters on all columns.

Filter on a column (Name or Value or State).

a) Alarm List for a system device, XIP device

b) Alarm List for an Auto-discovered GV Fabric IP Switch

Fig. 3-15: Example Alarm List Windows for:
a) System Device (XIP)
b) GV Fabric IP Switch.

a) Alarm List for a GV Orbit Server

b) Alarm List for a GV Orbit Service

Fig. 3-16: Example Alarm List Windows for:
a) GV Orbit Server;
b) GV Orbit Service.

Alarm List Window Masking

In the **Alarm List** window, alarms can be masked:

- at a *device-level;* or
- individual alarms for a device can be masked (*alarm-level*).

Right-click on an item in the **Alarm List** window to see masking options. See Alarm Masking (Professional and Enterprise), on page 71 for further information on masking.

Right-click options
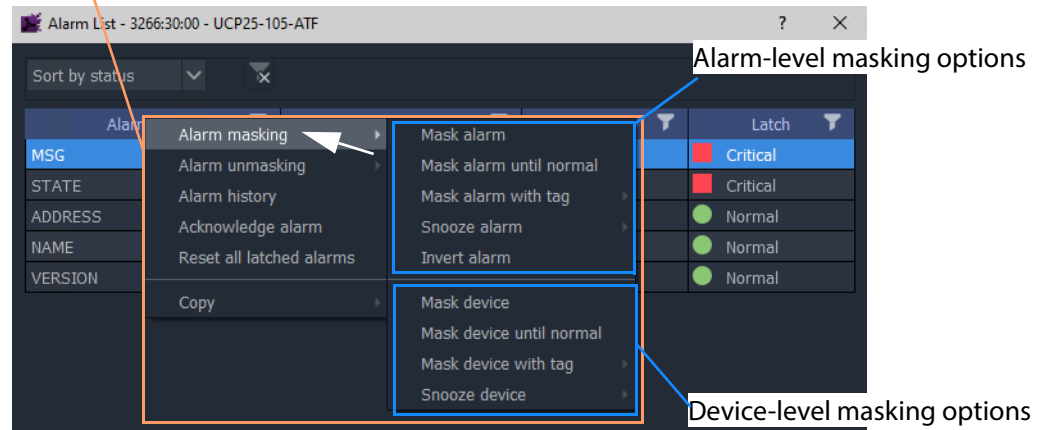
Fig. 3-17: Alarm List Window Right-Click Options

Alarm History for a Device

Professional and **Enterprise** only.

> **Note:**
> The **Alarm History** window uses the following GV Orbit services:
> IP Proxy, Log Server, Monitoring, Event Logging, and Densité Manager.
> These services are all required for **Alarm History**.

To inspect the history of device status and alarms from the **Network** window:

1 Right-click on a device in the **Network** window and select '**Alarm History**'.

The status messages and alarms etc. reported by the device are listed in a new **History** window tab. The address of the device is shown in the window tab. See Figure 3-18.

2 Click the search icon (🔍) in the **History** window.

The **Search Parameters** dialog is shown.

3 Select a **Log Data Source** from the drop-down menu.

> **Note:**
> The **Log Data Source** drop-down menu lists the **Event Logging** filters that are set up on the GV Orbit server's **Event Logging** service.
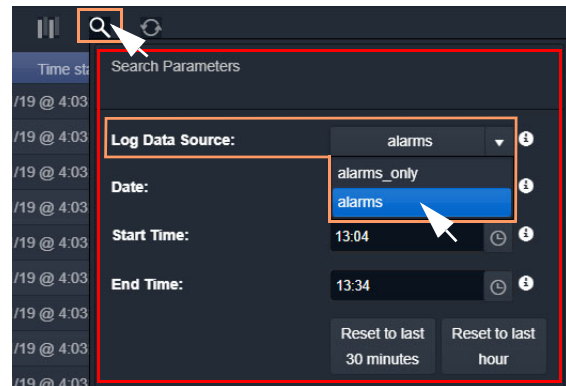
This selects an alarm data source to view in the window.

> **Note:**
> See History Window (Alarm History), on page 74 for further information on data sources and the controls in this tab window.

4 To close the **Search Parameters** dialog,
(re-)click on the search icon (or click somewhere else in the **History** window).

The selected data source is shown in the **History** window.
(See History Window (Alarm History), on page 74 for further information.)

Address of device shown in tab   Click to filter on a column (Name or Value or State)
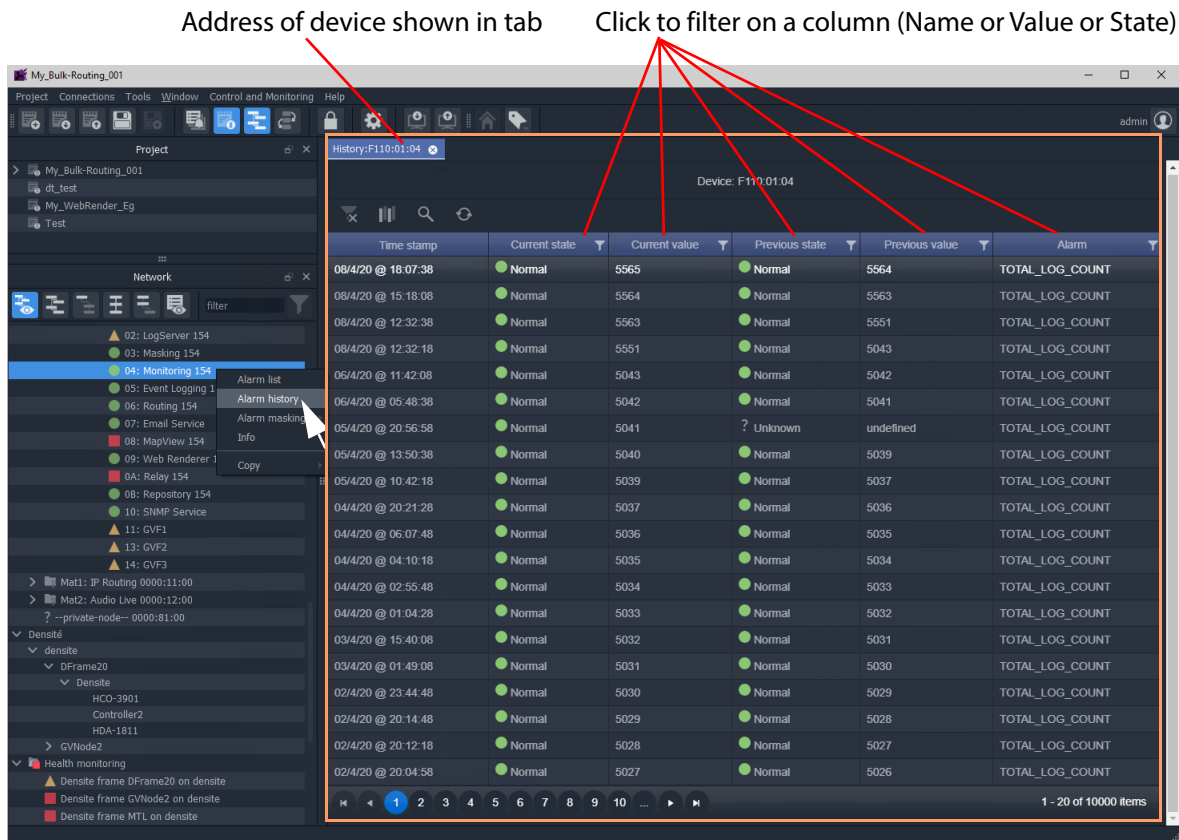
(See History Window (Alarm History), on page 74 for further information on the **History** window.)

Fig. 3-18: Example History Window

> **Note:** Masked alarms are shown "grayed-out" in the **History** window.

Alarm Masking (Professional and Enterprise)

Alarm masking may be done on a device (**device-level** masking), or it may be done on a an individual alarm from a device (**alarm-level** masking):

- **Device-level** masking/unmasking can be done from the **Network** window, or from the **Alarm List** window for a device.
- **Alarm-level** masking/unmasking may be done from a device's the **Alarm List** window.

Device-level masking is applied separately and additionally to any alarm-level masking. For example, if an alarm-level mask is applied to alarm A for a device and then a device-level mask is applied to the device, when the device-level mask is removed, the alarm-level-mask will still apply.

Apply a Device-Level Mask

To mask alarms associated with a device, from the **Network** window:

1 Right-click on a device, select 'Alarm Masking'. See Figure 3-22.

'Mask device until normal' is grayed-out for devices with OK status.
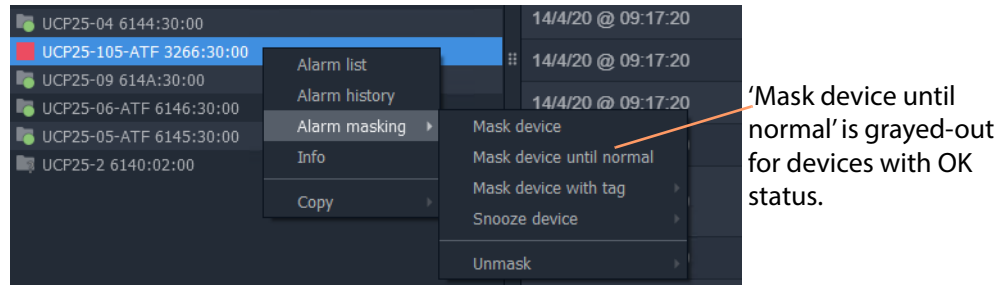
Fig. 3-19: 'Alarm Masking' Menu Options

2 Select one masking option from:

- **Mask Device** - Mask all alarms from a device/unit/frame/service.
- **Mask Device Until Normal** - Mask alarms from a device/unit until alarm state is OK ('green'). I.e. mask a device/unit until any fault/error is corrected.
  Note: This menu item is grayed-out for devices with an OK Alarm state.
- **Mask Device with Tag** - Mask a device with a **Masking Tag**. See Alarm Masking Tags.
- **Snooze Device** - Mask alarms from a device/unit for a period of time. See Alarm Masking Snooze Times.
- **Unmask** - Unmask a device or a set of tagged devices.

> **Note:** Masking or unmasking menu options may be grayed-out in the menu.

Apply an Alarm-Level Mask

Mask an alarm from a device, from the device's **Alarm List** window. See Figure 3-17 on page 69.

Alarm Masking Tags

A set of device(s) can be masked with a **Masking Tag**.
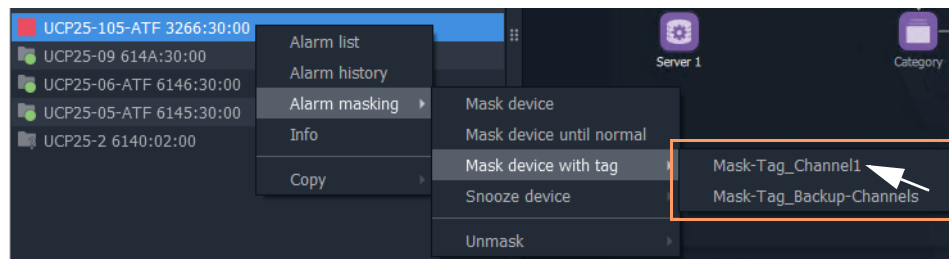
Fig. 3-20: Mask a Device with a Masking Tag

Masking Tags are created in the 'Tools > Options > Monitoring' dialog from the main menu and provide the user with a flexible, multiple and layered masking facility.
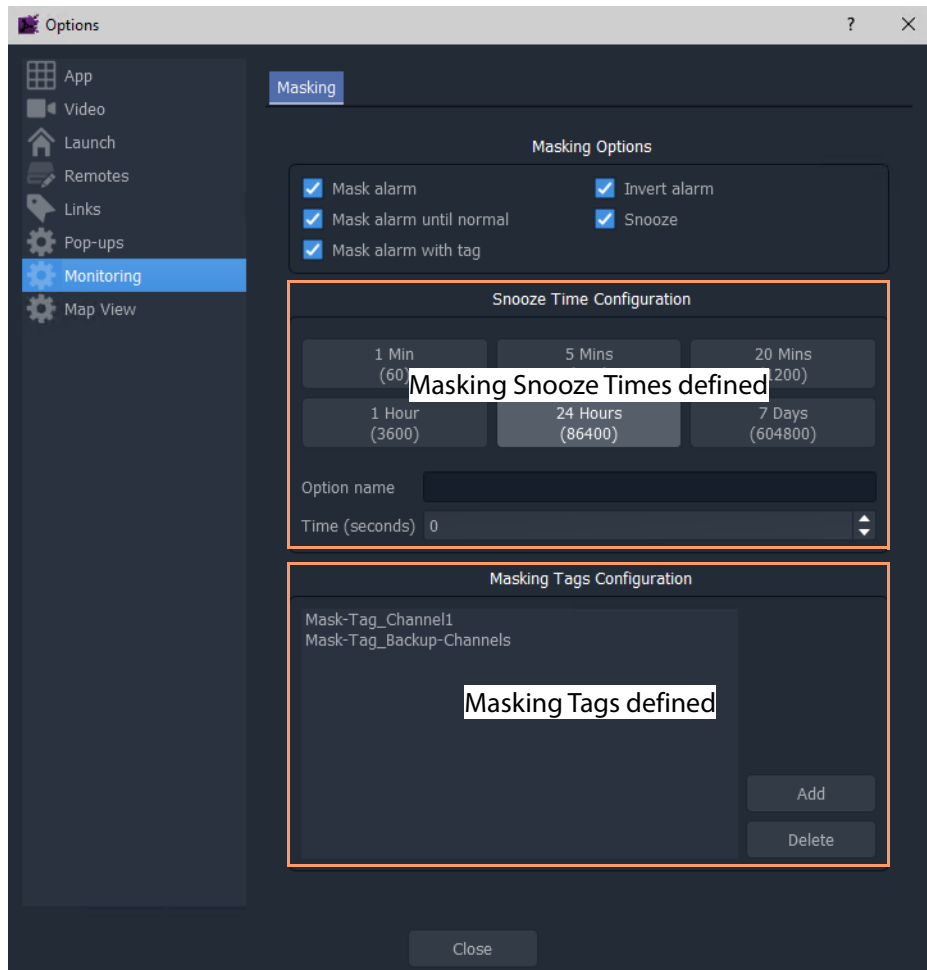
Fig. 3-21: Tools > Options > Monitoring Dialog

Alarm Masking Snooze Times

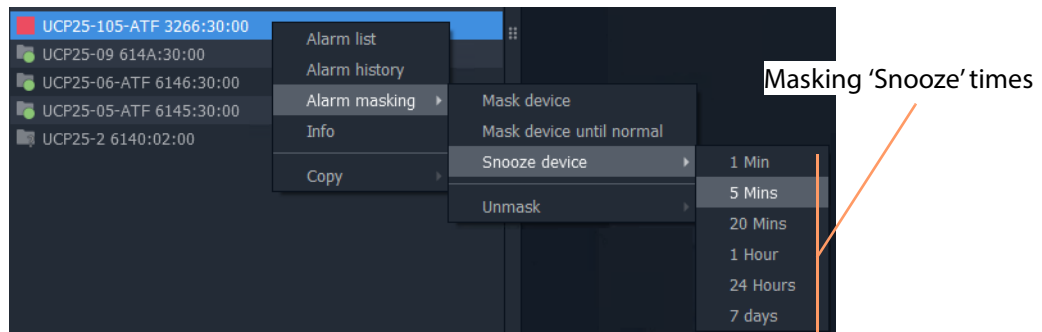Alarms for a device/unit/frame/service may be masked for a period of time.

Fig. 3-22: Masking Snooze Times

The selectable masking snooze times are configurable, see 'Tools > Options > Monitoring' in main menu in Figure 3-21 on page 73.

History Window (Alarm History)

Lite	Professional	Enterprise
-	●	●

The GV Orbit Client **History** window can show the history of *system-wide* alarms and status messages which are read from the **Event Logging** service on the GV Orbit server.

> **Note:**
> The **History** window is similar to the window shown for Alarm History for a Device, on page 69.

> **Note:**
> By default, the **History** window sources event log data from the event log store which is set up as default in the **Event Logging** service.
>   (I.e. the event log for which the **Default Index** setting is selected.)
> A user can change the event log data source for an **History** window   (I.e. change **Log Data Source** in the **Search Parameter** dialog.)

A GV Orbit **Professional** or **Enterprise** user can:

- Select an event log data-set to use from the event log store.
- Search for messages from a particular time period.
- Filter what is shown in the pages (for example, to just display minor alarms).

> **Note: Log Data Sources:**
> A **History** window sources log data from the GV Orbit system event log store. All events are logged by an **Event Logging** service running on the GV Orbit server (see Event Logs, on page 101). Depending on a log data-set's configuration, some and/or all events and alarms are logged. A store may be selected as the log data source for display in the **History** window.

View Alarm History for System-wide Alarms

To view the **Alarm History** for GV Orbit system-wide alarms:

1 Click the **Alarm History** icon in the main tool bar.

The **History** window appears in a tab. **Note:** The tab shows no specific device address when showing system-wide alarms.
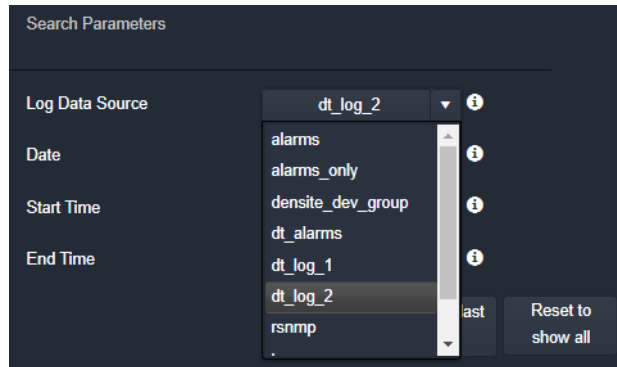
Select the **History** tab to view it.
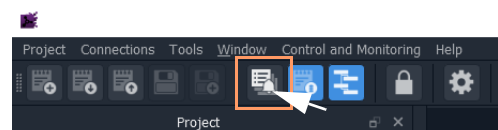
Search Parameters Dialog

The **Search Parameters** dialog appears in the **History** window for both system-wide alarms or for device alarms.
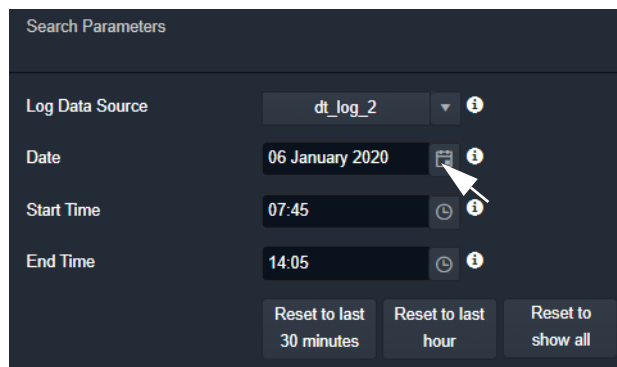
1 Click on the search icon ( ).

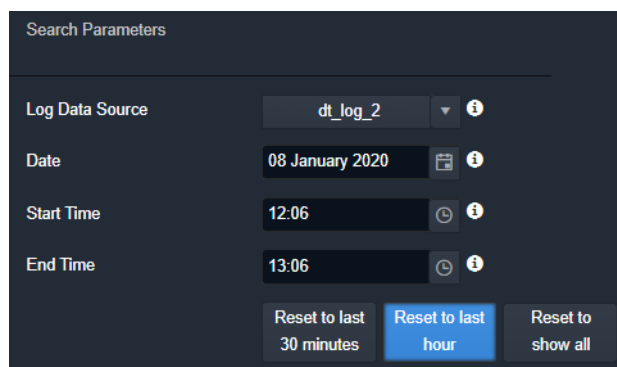The **Search Parameters** dialog is shown. See Figure 3-23.

2 Set **Log Data Source** to the log data-set to use from the event log store.

a) Select **Log Data Source** to display.

b) Select **Date** and **Start Time** and **End Time** of messages to display.

c) Display only messages from the last hour.

Fig. 3-23: Search Parameters Dialog

3 Select the date and time period to display.
This can be done by:

- setting **Date**, **Start Time**, and **End Time**; or by

- selecting to see a last period (**Reset to last 30 minutes**, or **Reset to last hour**).

All event logs, including alarm messages, are listed in time stamp order, most recent first. See Figure 3-24.

State alarm icons:

●	OK
▲	Minor
▼	Major
■	Critical
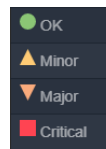
Click to:

• Clear column filter settings.

• Hide/show columns.

• Show Search Parameters 🔍 dialog, to select log file and time period to display. See Figure 3-23.)

• Refresh data in the table.

• Click ▼ in a column heading on to filter displayed data on a column.

All Devices						
Time stamp range: 08/1/20 @ 12:13:00 - 08/1/20 @ 13:13:59						
Time stamp	Current ... ▼	Current value ▼	Previous ... ▼	Previous value ▼	Alarm ▼	Address ▼
08/1/20 @ 13:13:59	● OK	WARN:TPG	● OK	WARN:SD	INPUT_8_SDI_ERRCNT	B111:10:01
08/1/20 @ 13:13:59	▲ Minor	WARN:Address change	▲ Minor	WARN:Name Change	LOGGING_STATE	A111:0F:00
08/1/20 @ 13:13:59	● OK	OK	▲ Minor	WARN	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:59	● OK	0	● OK	1	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:58	▲ Minor	WARN	● OK	OK	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:58	● OK	1	● OK	0	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:57	● OK	0	● OK	2	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:57	● OK	OK	▲ Minor	WARN	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:56	▲ Minor	WARN	● OK	OK	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:56	● OK	2	● OK	1	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:55	● OK	001:01:30:00	● OK	001:01:29:00	RC_UPTIME	3291:20:0A
08/1/20 @ 13:13:55	● OK	1	● OK	0	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:54	● OK	0	● OK	1	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:51	● OK	1	● OK	0	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:50	● OK	OK	▲ Minor	WARN	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:50	● OK	0	● OK	3	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:49	● OK	OK	■ Critical	FAIL:LAN_2_STATE=FAIL:SFP_2_STATUS=FAIL:RX PWR LO	LAN_STATE	3291:20:07
08/1/20 @ 13:13:49	▲ Minor	WARN	● OK	OK	RC_VALID_TIME_PACKETS	F000:02:01
08/1/20 @ 13:13:49	● OK	3	● OK	1	DISTRIBUTED_WRITES_PER_SECOND	F000:02:01
08/1/20 @ 13:13:49	● OK	OK	■ Critical	FAIL:SFP_2_STATUS=FAIL:RX PWR LO	LAN_2_STATE	3291:20:07

|◄ ◄ ① 2 3 4 5 6 7 8 9 10 ... ► ►| 1 - 20 of 7650 items

Alarms which are masked are shown "grayed-out"

Page navigation

Click to go to:

• first page.

• previous page.
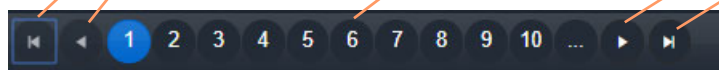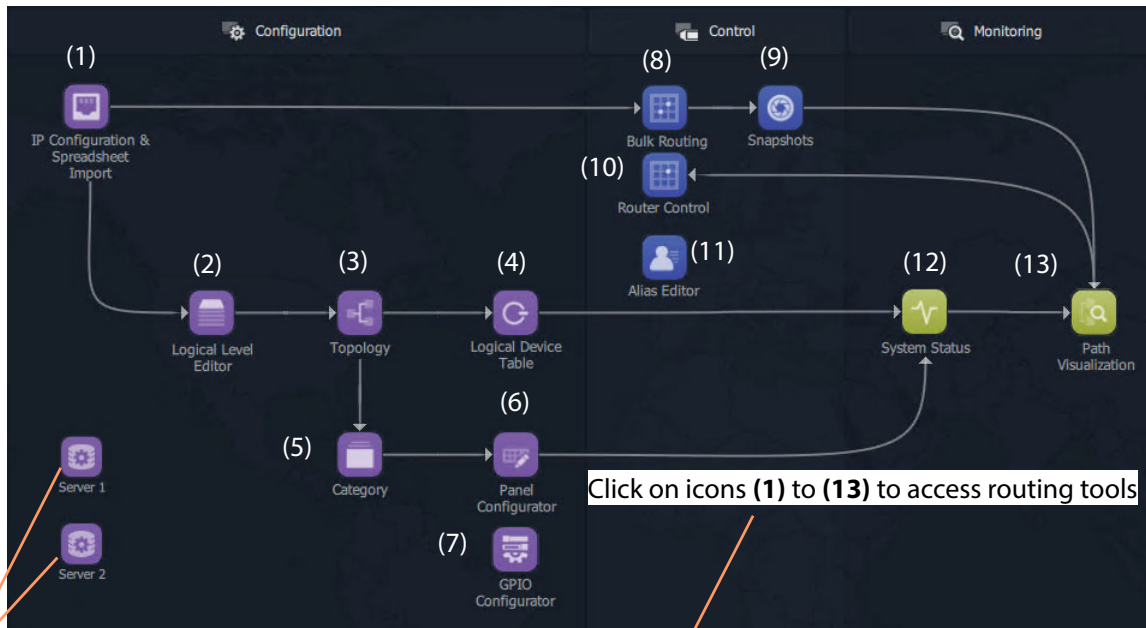
• a page

• next page.

• last page.

|◄ ◄ ① 2 3 4 5 6 7 8 9 10 ... ► ►|

Fig. 3-24: Alarm History Window (History Tab Selected)

Graphical Router Workflow

Lite	Professional	Enterprise
-	●	●

The factory-set **Workflow** stage shows a graphical workflow for routing system configuration and control with clickable icons to access tools via GV Orbit Control Client.

Click on server icons to access landing pages for each GV Orbit server.

Each icon **(1)** to **(13)** is described in the Steps for Graphical Router Workflow Stage Icons table, on page 78.

Fig. 3-25: Graphical Router Workflow Stage - with Icons (1) to (13)

Table 3-2: Steps for Graphical Router Workflow Stage Icons

Steps relating to icons in Figure 3-25 Graphical Router Workflow Stage - with Icons (1) to (13), on page 77

(1) IP Configuration and Spreadsheet Import

Access the IP Routing endpoint configuration editing tool and a new, default GV Orbit IP Routing project:

1 Click the **Comms Setup** button:
  - Select **Routing System** controller type to be 'GVC', (to work with the GV Orbit server).
  - Select **Domain** number for IP End-point setup (default '101').
  - Leave the GVC domain number at its default (105).
  - Select the client PC network **IP interfaces** to use.

  Click **OK**.

  GV Orbit Client will discover IP End-points and list them.

2 Click on the **Devices** tab to see the listed devices.

3 Click **Export** to export the discovered IP end-point devices and their current settings. (A spreadsheet file, .xlsx file, is exported and this shows the spreadsheet file format. Settings include: device names, router port numbers, source/destination IP flows, and multi-cast IP addresses etc.)

4 Edit the spreadsheet file to change settings and/or add more IP end-point devices.

5 Click **Import** to import IP End-point device settings via a spreadsheet.

6 **Project -> Save Project** from the main menu. Close the IP Endpoint Editor tab.
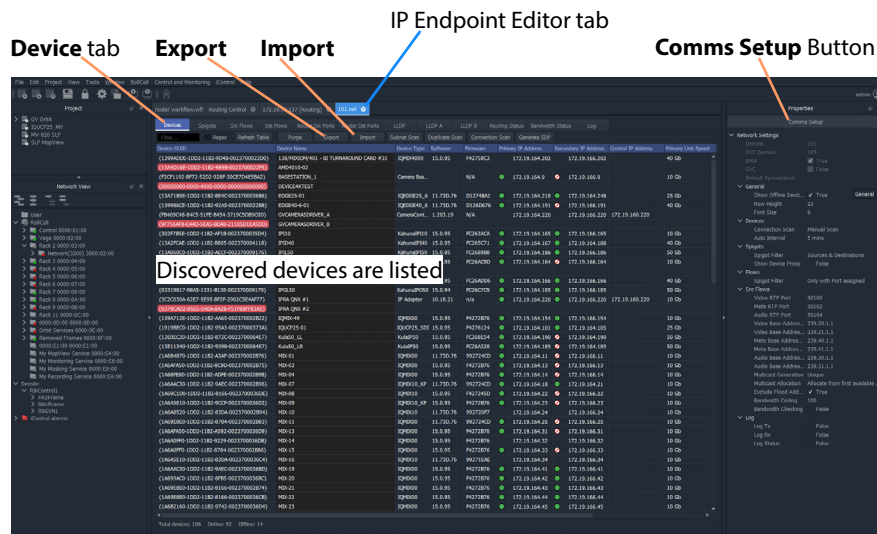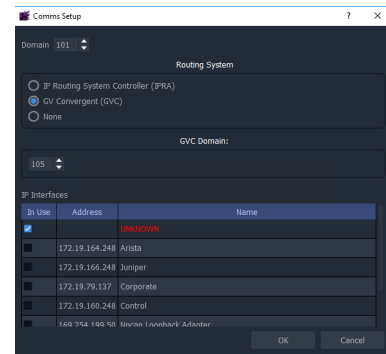
Fig. 3-26: IP Endpoint Configuration Editor tab in GV Orbit Client (Device sub-tab shown)

This screen also allows:
- Manual configuration of end-points, if required.
- Review IP End-point settings, edit settings, validate settings, make engineering routes, if required.
- Monitor bandwidths at device interfaces, if required.

Note: SDI 'end-point' configuration etc. is set up via GV Orbit Control in the remaining controls on the router workflow.

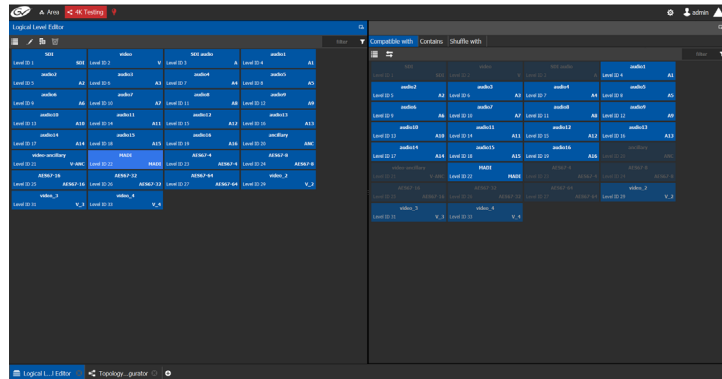*Table 3-2: Steps for Graphical Router Workflow Stage Icons (continued)*

(2) Logical Level Editor

Access logical route editor tool in GV Orbit Control Client. For the target router:

- Define, review, edit logical routing levels. For example, levels for audio channel(s), video channels, SDI video, ancillary data etc.
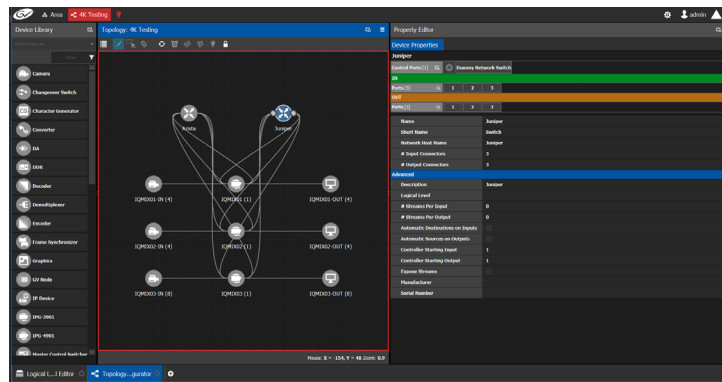

(3) Topology

Access router topology configurator tool in GV Orbit Control Client:

- Define router topology with the logical levels. I.e. how physical and logical devices are arranged in the broadcast facility.
- Select topology to use.

(4) Logical Device Table

Access the logical devices editor tool in GV Orbit Control Client:

- Define logical devices in a table.
- Configure levels and IP streams.
- Configure audio shuffled streams and break-away streams.
- Create virtual crosspoints and logical destinations devices.
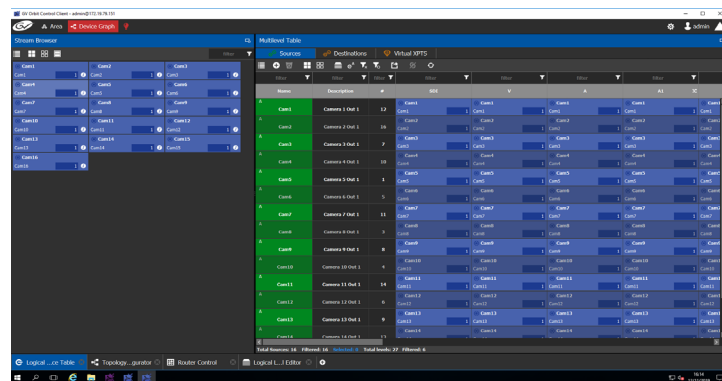
Table 3-2: Steps for Graphical Router Workflow Stage Icons (continued)

Steps relating to icons in Figure 3-25 Graphical Router Workflow Stage - with Icons (1) to (13), on page 77

(5) Category

Access the Category
Configurator tool in GV Orbit
Control Client:

• Manage sources and
destinations with groups (or
categories) based on type or
usage. This is useful when there
are multiple resources.
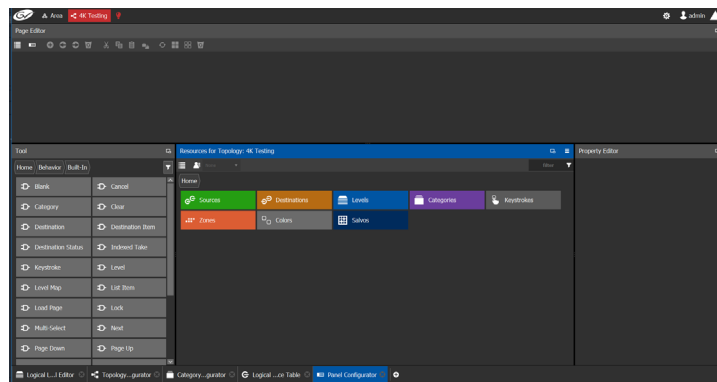Categories allow
sources/destinations to be
accessed quickly on a routing
control panel.
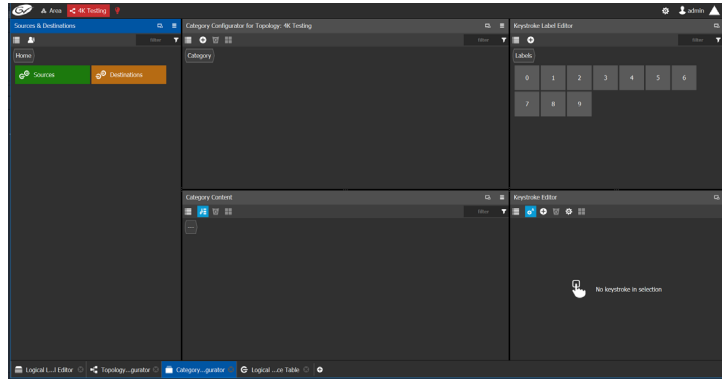
(6) Panel Configurator

Access the Panel Configurator
tool in GV Orbit Control Client:

• Create soft router control panel
designs.
• Add buttons and behaviors to a
routing control panel.
• Push the design to soft or hard
panels.

(7) GPIO Configurator

Access the GPIO Configurator
tool for GPIs and GPOs on
supported panels (e.g. GPI-
1501) with GV Orbit Control
Client:

• Add rules for GPIs to trigger
events such as a salvo or routing
a source to a destination.
• Add rules for GPOs to activate
on combinations of conditions.
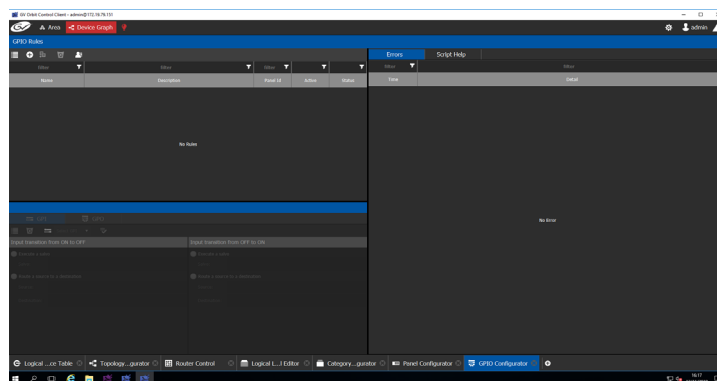
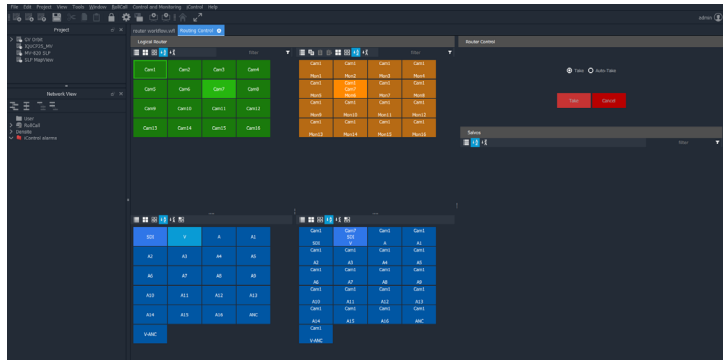*Table 3-2: Steps for Graphical Router Workflow Stage Icons (continued)*

(8) Bulk Routing

Access the Bulk Routing Control Panel tool in GV Orbit Client:

- Make routes between sources and destinations.
- Form break-away routes and shuffled routes.
- Execute salvos.

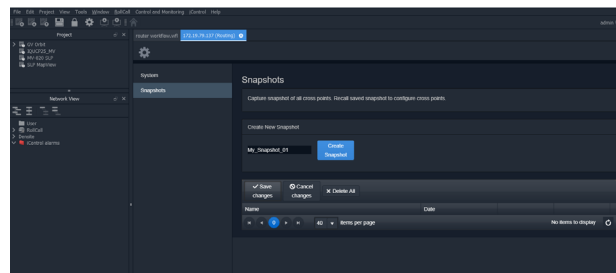For an introduction to the Bulk Routing Control panel, see Bulk Routing Control Panel, on page 83.

(9) Snapshots

Access the Snapshots tab of the GV Orbit Routing Service that runs on the GV Orbit server:

- Recall routing snapshots.
- Create and save new snapshots.

(10) Router Control

Access the Router Control Panel tool in GV Orbit Control:

- Make routes between sources and destinations.
- Create and execute salvos.
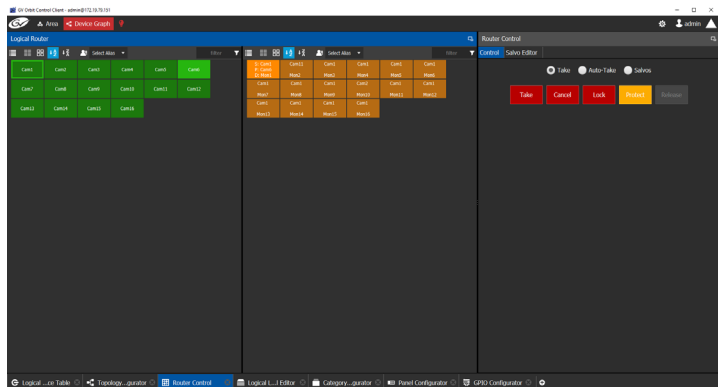
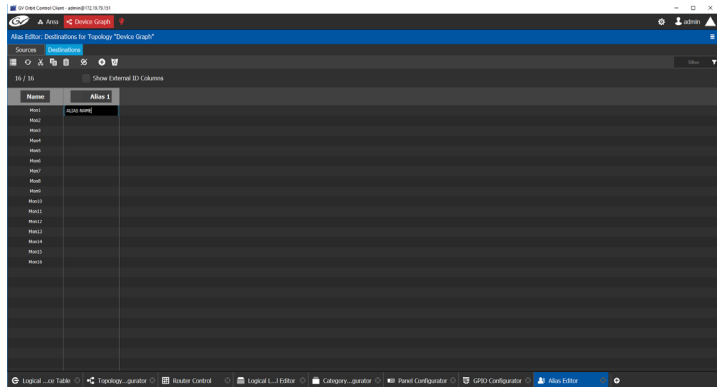*Table 3-2: Steps for Graphical Router Workflow Stage Icons (continued)*

Steps relating to icons in Figure 3-25 Graphical Router Workflow Stage - with Icons (1) to (13), on page 77

(11) Alias Editor

Access the Alias editor tool in
GV Orbit Control:

• Assign aliases to sources and
  destinations
  (to support shorter length
  names, other languages, or
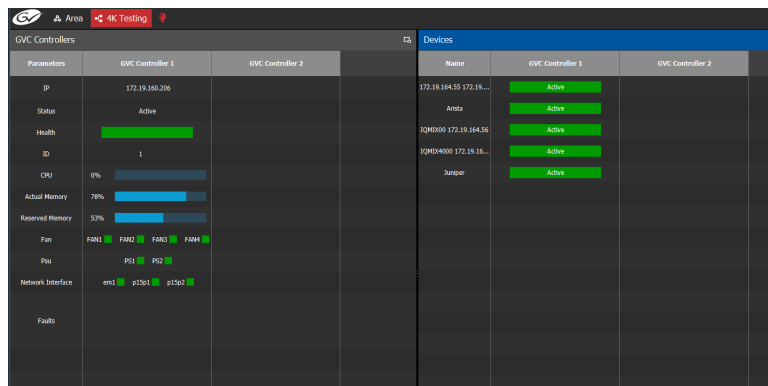 different production staff
  needs).

(12) System Status

Access the System Status
screen of the GV Orbit
Control router controllers:

• Monitor the health of GV
  Orbit Control router
  controller(s).
• View device health for a
  selected topology.
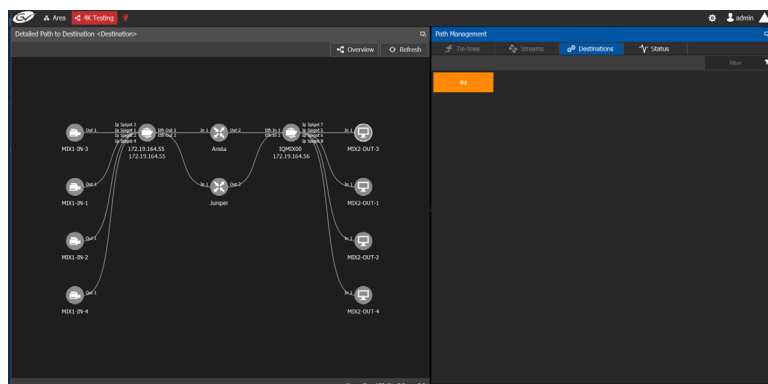• Manual fail-over, if
  required.

(13) Path Visualization

Access the Path Manager
screen of GV Orbit Control:

• View source-destination
  paths of routed streams.
• View Tie-Line usage
  information, including %
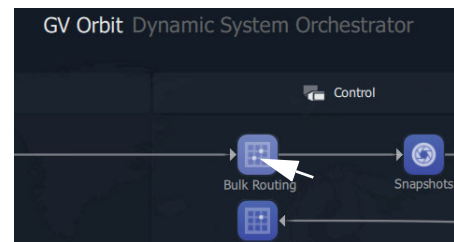 bandwidth used.

Bulk Routing Control Panel

Lite	Professional	Enterprise
-	●	●

The Bulk Routing Control Panel is a built-in router control panel accessible from the **Network** window in GV Orbit Client. It requires the GV Orbit **Routing** service to be running on GV Orbit server(s). IP routing or traditional (e.g. SDI) routing may be controlled.

Open Bulk Routing Panel

1. Open an existing C&M project and set the GV Orbit Client window size to 1920x1080.

2. Click on the **Bulk Routing** icon in the **Router Workflow** stage.

   A Bulk Routing Panel is shown in a window tab in the GV Orbit Client.
   See Figure 3-27.

Fig. 3-27: Example Bulk Routing Panel

Troubleshooting

If problems are encountered when opening a Bulk Routing Panel, carry out the following checks:

1 Check that the project's **Client Domain** is set for the GV Orbit system.

(Click **Connections -> GVOP** in the main menu.
Set **Client Domain** to be the system's 'Client Domain' number.)

2 The project's **Routing Address** project variable (a RollCall address) should be set to the **Routing** service's **Logging Address**. To verify this:

- To see the project variables, click **Project -> Edit Variables** in the main menu.
- To see the **Routing** service's **Logging Address**:
Log into the GV Orbit server and access the **Routing** service's 'System' configuration screen. (See GV Orbit Server Login, on page 98, and Accessing Services Configuration Screens, on page 100.)

To save any changes made to the project settings:

3 Click **Project -> Save Project** in the main menu to save the project locally.

4 Click **Project -> Push** to push and save the project to the GV Orbit server.

Alternative Open Bulk Routing Panel

The Bulk Routing Panel may also be opened from the **Network** window in GV Orbit Client:

1 Display the **Network** window tree-view (click [icon] in the main tool bar to toggle displaying the window) and expand the tree-view.

2 In the **Network** window,
locate the '**Routing** service' item.
(The item's name is the **Routing** service's "Logging Name".)

3 Right-click on the **Routing** service item and select **Open Panel**.

A Bulk Routing Panel is shown in a window tab in the GV Orbit Client. See Figure 3-27 on page 83.
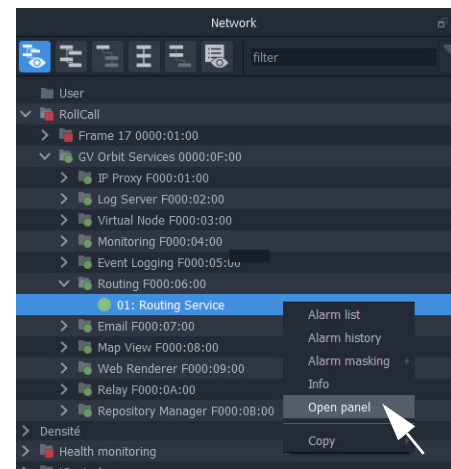
Note: A '**Routing** service' item appears in the GV Orbit **Network** window when a **Routing** service is running on the connected GV Orbit server and is configured to talk to a router controller.

Bulk Routing Panel 'Source' and 'Destination' buttons are annotated with router port names obtained through the **Routing** service.
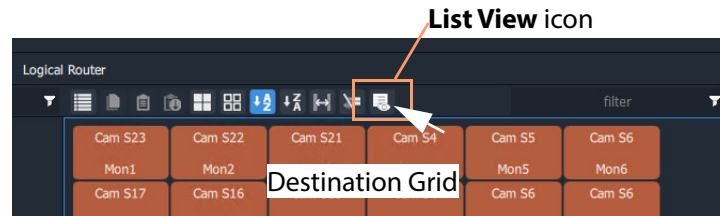

Bulk Routing Panel - List View

List View is a level-centric view of a Bulk Routing Panel, allowing a user to focus on routing to Destination Levels. **List View** presents all of the destinations in a 'list' format; each list item is a Destination with all of its Levels.

To access **List View** mode:

1 Open the Bulk Routing Panel and set the GV Orbit Client window size to 1920x1080.

2 In the Destination Grid's tool bar, click on the **List View** icon.

This toggles between the normal Bulk Routing Panel view and the **List View** mode.

The **List View** is shown. See Figure 3-28.

Fig. 3-28: Bulk Routing Panel - List View

For information on the Bulk Routing Panel's **List View**, refer to the *GV Orbit Routing Panel User Guide* (see Related Documentation, on page iii).

Bulk Routing Panel Operation

Refer to the *GV Orbit Routing Panel User Guide* (see Related Documentation, on page iii).

Routing Snapshots

Snapshots of all routes and crosspoints in a GV Orbit system can be taken and restored. This is done from the **Routing** service configuration screen on the GV Orbit server.

1   Go to the GV Orbit Client workflow.wfl **Workflow** window.

2   Click on the **Snapshots** icon.

The GV Orbit server window is shown in a tab.
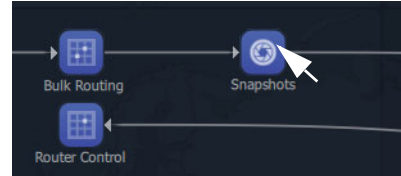
3   Scroll down the server window on the left and locate the 'Services' section and select 'Routing'.

The **Routing** service configuration screen is shown.

4   Select the 'Snapshots' side-tab on the left.

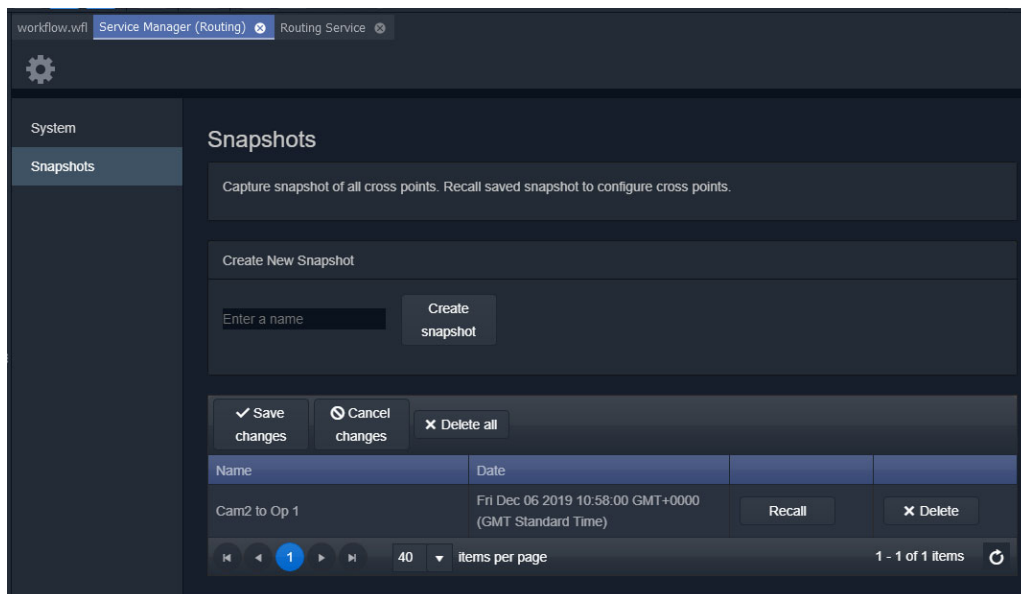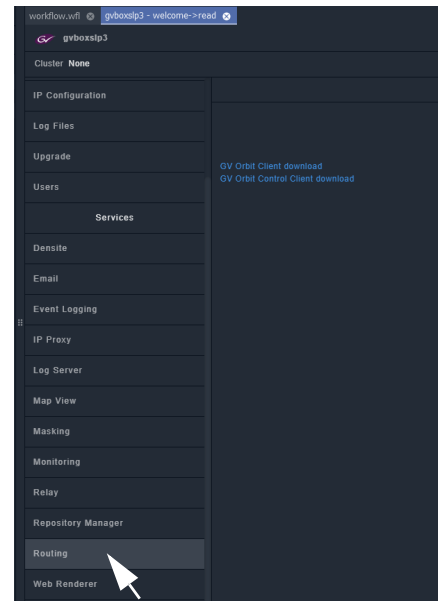The **Routing** service's **Snapshots** screen is shown. See Figure 3-29.

Fig. 3-29: Routing Service Snapshots Configuration Screen

To Take a Routing Snapshot

In the **Routing** service **Snapshots** screen:

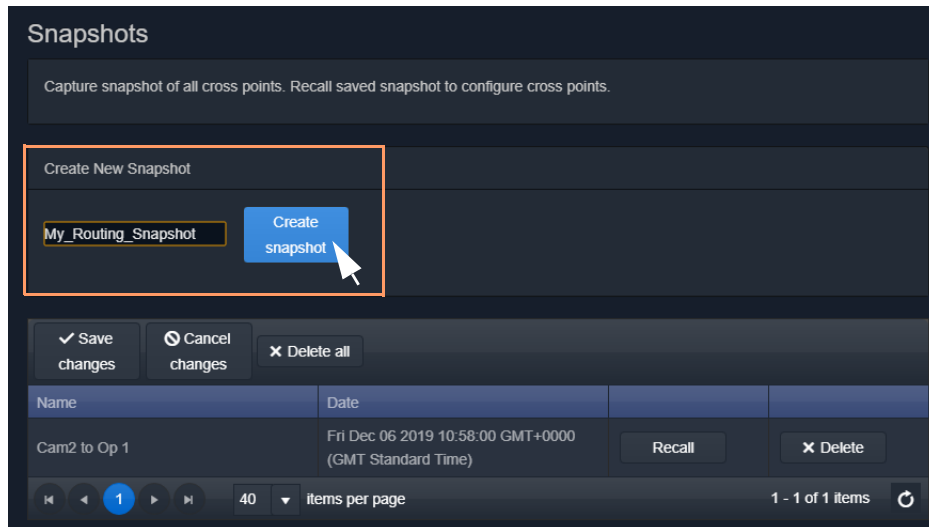1 Enter a name for the new snapshot.

2 Click **Create Snapshot**.

Fig. 3-30: Routing Service Snapshots Configuration Screen

A snapshot of all routes and crosspoints is taken. And the new snapshot appears in the list.
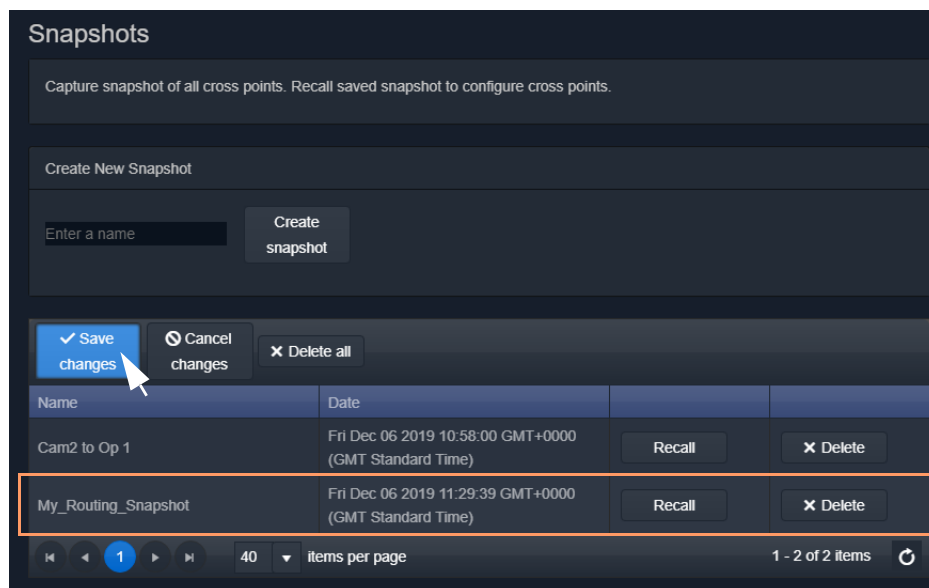

Fig. 3-31: New Snapshot Item in List

3 Click **Save Changes**.

To Recall a Snapshot

In the **Routing** service **Snapshots** screen:

1 Find a snapshot in the list and click **Recall**.

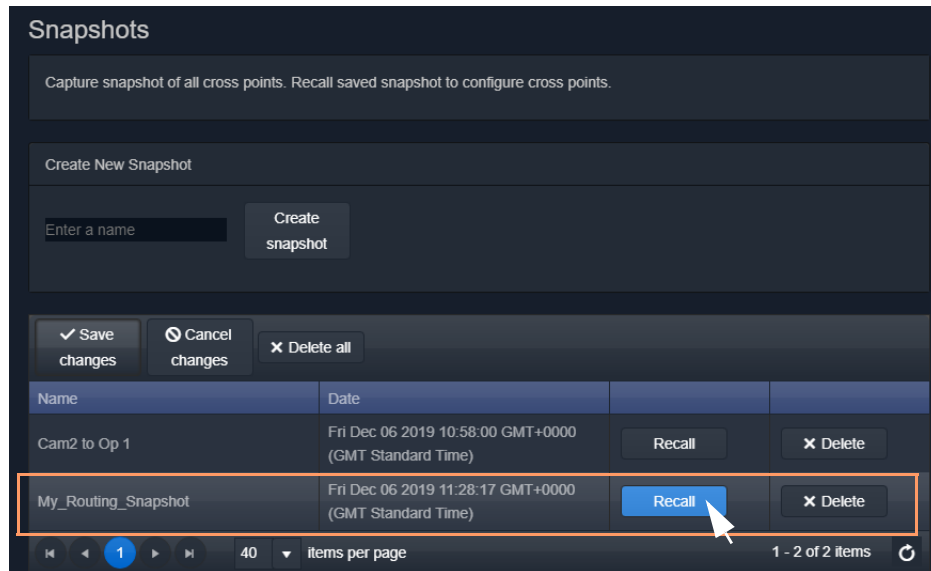The signal routing and crosspoint settings present when the snapshot was taken are restored.

Fig. 3-32: Recall Snapshot

Simple Custom Monitoring Screen Example

Lite	Professional	Enterprise
-	●	●

A simple custom graphical operator screen is presented here. The example described is a monitoring screen using a C&M project; device status is monitored by the screen. This requires a configured C&M project, a configured GV Orbit server, and the following minimum GV Orbit services to be running:

- IP Proxy.
- Log Server.
- Monitoring.
- Densité.

Create a New Monitoring Screen Schematic

1 Open the C&M Project and show the **Project** window and the **Workflow** window with the **Workflow** stage.

2 On the workflow stage, click on the **Screens** icon.
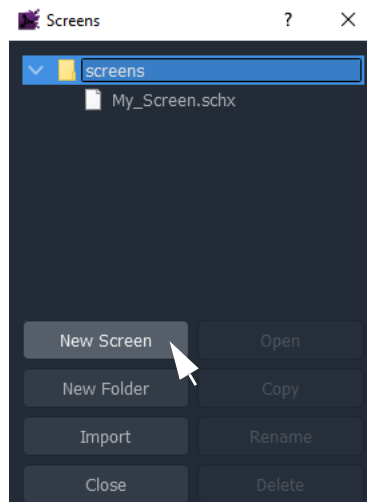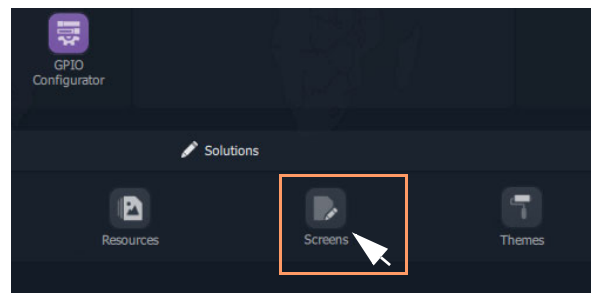
The **Screens** dialog is shown.

Fig. 3-33: Screens Dialog

3 Click **New Screen**.

The **New Screen** dialog is shown.

4 Enter a name for the new screen schematic and click **OK**.

A new, blank custom screen schematic is created. The new, blank schematic is shown in a window tab in GV Orbit Client. See Figure 3-34.

> **Note:**
> A custom screen schematic is shown in GV Orbit Client; this is the 'stage' on which the schematic is:
> - designed when GV Orbit Client is in **Design Mode**; and
> - run and operated when GV Orbit Client is in **Run Mode**.

Schematic stage

Run Mode icon (Showing project is in **Design Mode**)

Note: Drag 'handle' to the right to reveal more tool bar icons
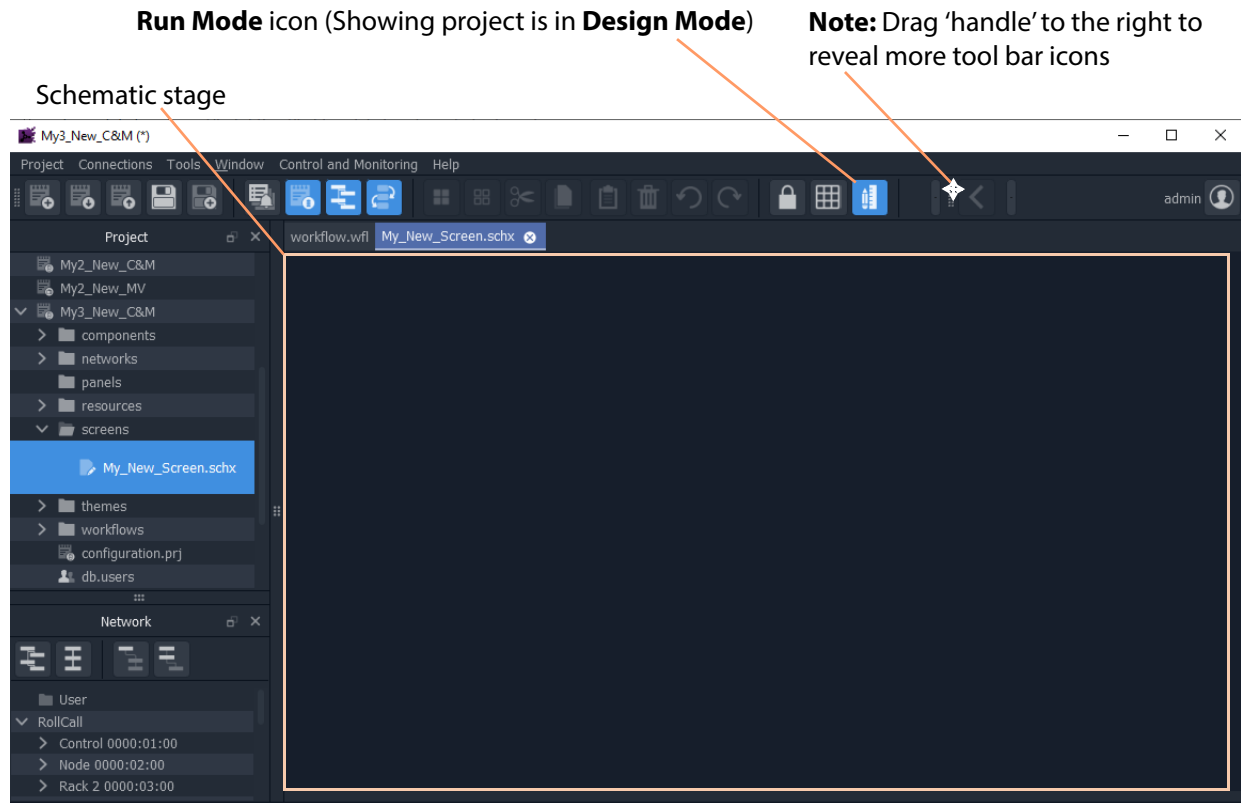
Fig. 3-34: New, Blank Custom Schematic

5 Click the **Run Mode** tool bar icon to select GV Orbit Client **Design Mode**. See Figure 3-35.

> **Note:** A project's 'mode' toggles between **Run Mode** and **Design Mode**.

Click to *exit* Run Mode

a) Icon appearance when in **Run Mode**

Click to *enter* Run Mode

b) Icon appearance when in **Design Mode**

Fig. 3-35: Run Mode / Design Mode Tool Bar Icon

> **Note:**
> In **Design Mode**, a project may be edited (for example, a video wall may be modified).
> In **Run Mode**, a project monitors log and alarm data and displays updated custom operator screens in real-time.

Add Monitoring

A control and monitoring (C&M) screen will monitor items in a system with individual or aggregate alarms for a device (or collection of devices), or an individual alarm (or collection of alarms). This is quick and easy to achieve with GV Orbit Client.

Items to be monitored can be dragged onto a C&M screen either from the **Network** window or from an **Alarm List** window. One or more devices or device alarms can be monitored.
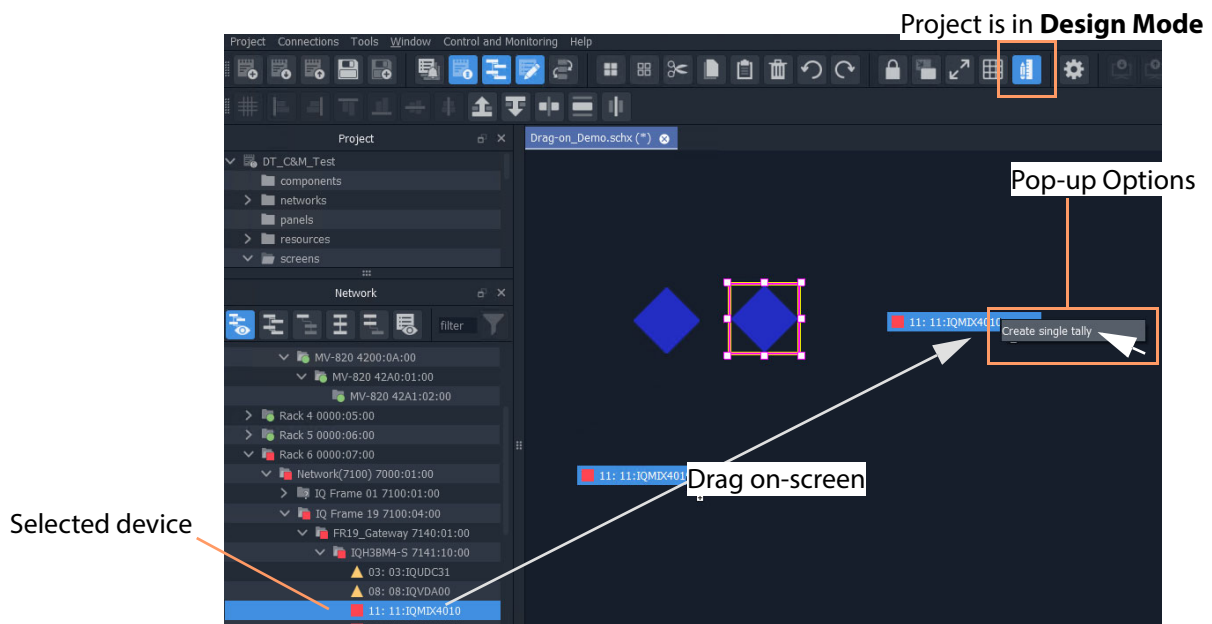
Add Monitoring of Devices

For a C&M screen schematic open in GV Orbit Client in **Design Mode**:

1 Expand the **Network** window to find a RollCall- or Densité-protocol device to monitor.

2 Drag a device onto the C&M screen schematic, and release.

At release, GV Orbit Client pops up a list of options. These control what will be created from the drag. See Figure 3-36a.
(Figure 3-36b shows the resulting Run Mode screen appearance, see later steps.)
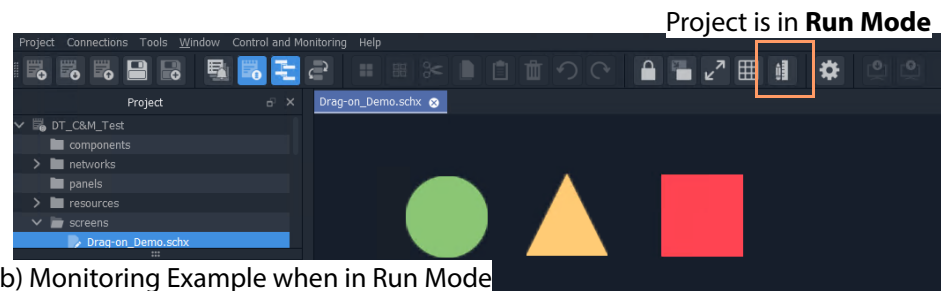
Fig. 3-36: Drag Device Monitoring onto the Schematic:
a) Drag on Devices;   b) Monitoring Shown when in Run Mode

3 Click 'Create Single Tally' in the pop-up options list.

GV Orbit Client then infers a default, graphical Tally widget on the schematic which is automatically set up to graphically indicate the overall status of the device when in Run Mode.

4 Drag on more devices, as required.

(Figure 3-36b shows what the graphical items may look like in **Run Mode**.)

This has quickly added simple device alarm state monitoring to the C&M project.

> **Note: Add Device:**
> Dragging a device onto the schematic and releasing it on top of an *existing* monitoring Tally widget will *add* the device to the screen widget, thus creating an aggregate alarm.

Add Monitoring of Alarms

Device alarm monitoring can also be added:

1 Expand the **Network** window to find a device to monitor.
Then right-click on the device item and select 'Alarm List'.

The device's alarms are all shown in a pop-up **Alarm List** window.

2 Select one or more alarms in the **Alarm List** window and drag them onto the C&M screen schematic, and release.
(To select more than one alarm item, click on an item to select it, and select more with CTRL-click.)

At release, a list of options pops up which will control what will be created from the drag. See Figure 3-37.

> **Note:** Pop-up Options:
> These pop-up options are described in 'Drag-On' Options, on page 94.

Pop-up options:

Create multiple labels
Create multiple tallies
Create multiple stateful labels
Create single aggregate tally

Alarm List window

Selected alarms

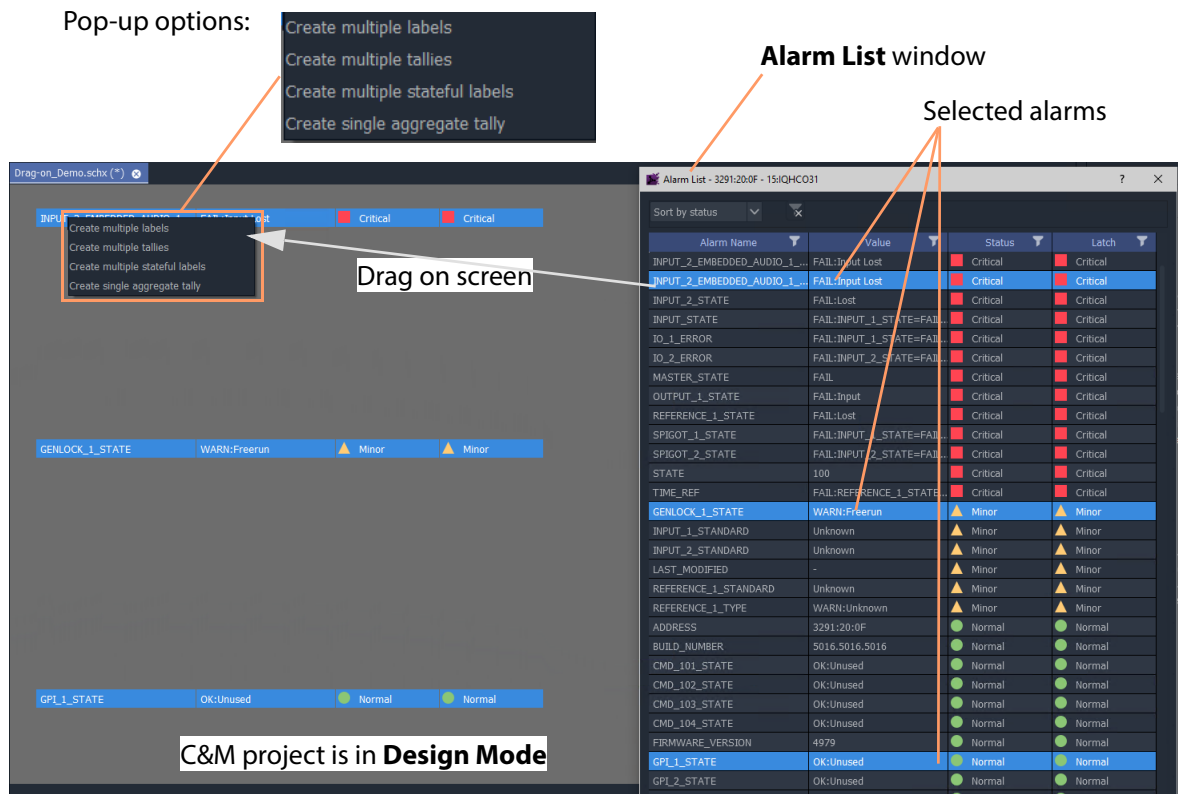Drag on screen

C&M project is in **Design Mode**

Fig. 3-37: Drag Alarm Monitoring onto the C&M Screen Schematic

3 Select the pop-up option required.

GV Orbit Client then infers graphical monitoring widget(s) on the schematic which are automatically set up to indicate the alarm status.

This has quickly added simple device alarm monitoring to the C&M project.

Note: Add an Alarm:
Dragging an alarm (from the same or from a different device) onto an existing monitoring widget will add the alarm to the screen widget.

Note: Right-click Drag:
Right-click dragging will use the last pop-up option selected and will avoid the user having to select the same pop-up option each time.

Note: Label Style Change:
A text label is difficult to see against a black background. In this case, change the label's appearance by selecting it and changing its 'Style' property value, see Text Label Style Change, on page 95.

When all monitoring widgets have been added, proceed to Save and Push Project, on page 96.
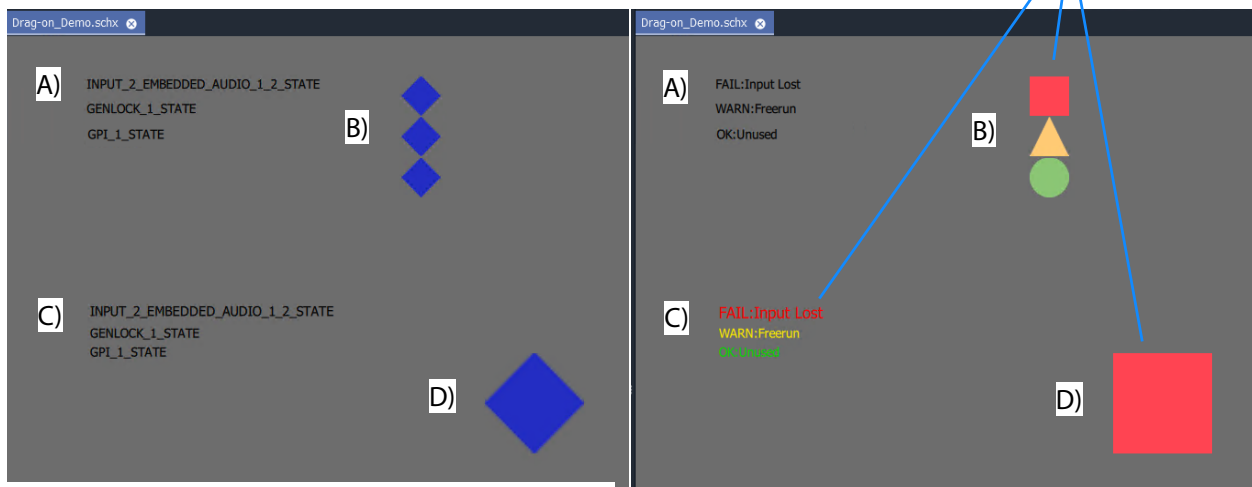
'Drag-On' Options

The pop-up options for creating graphical, on-screen from the 'drag-on' item(s) are shown in Table 3-3. Figure 3-38b and Figure 3-38c show the result of each option **Design Mode** and in **Run Mode** respectively.

Table 3-3: 'Drag-On Options

|	Option	Description
A)	**Create multiple labels**	Creates a text label per item.
B)	**Create multiple tallies**	Creates a graphical Tally widget per item, to show the individual alarm state of each item.
C)	**Create multiple 'stateful' labels**	Creates a colorful text label per item, where the text color indicates each individual alarm state.
D)	**Create single aggregate tally**	Creates one graphical Tally widget to show a combined, aggregate alarm state of all the dragged-on items.

a) Result of options A), B), C), and D) in **Design Mode**   b) Result of options A), B), C), and D) in **Run Mode**

Fig. 3-38: Dragged-on Monitoring Options A), B), C), and D) in:
*a) Design Mode;*
b) Run Mode.

Text Label Style Change

When creating a text label with this 'drag-on' method, the resulting default label may be difficult to see (for example, if against a black background). In this case, change the appearance of the text label by changing its 'Style' property value, see Figure 3-39a and Figure 3-39b.
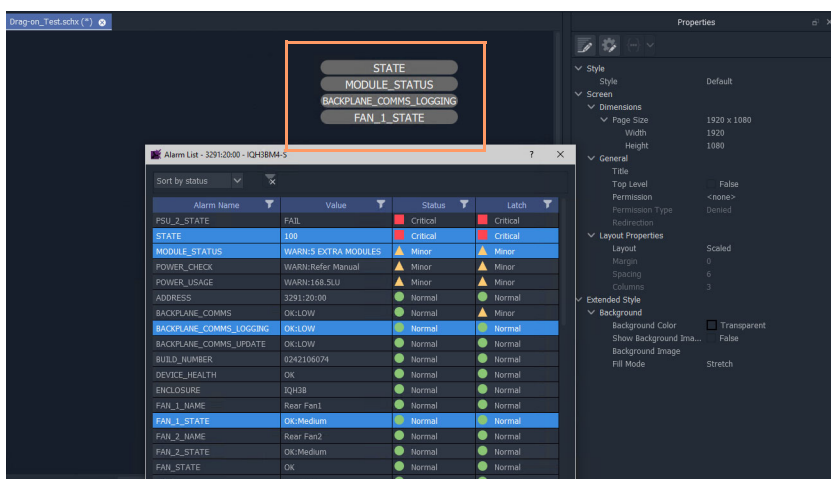
- Select the label(s) on the schematic.

  In the **Properties** box, click on the Style'-property's value (see Figure 3-39a).

  A drop-down menu is shown.
- Select a Style value from the drop-down menu, for example 'Solid Caption'.
- Click 'Yes' in the dialog that is shown.
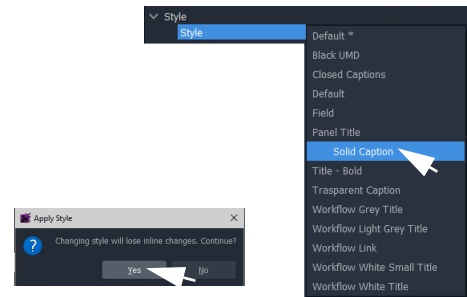
The label appearance has been changed (see Figure 3-39b).
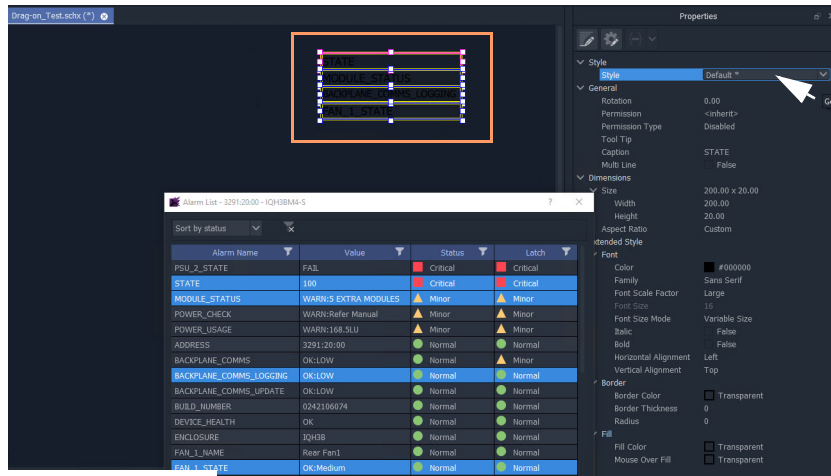
a) Selected Labels

b) New Text Label Style

Fig. 3-39: Changing Text Label Style Property

Save and Push Project

When all the required device/alarm monitoring is added to the C&M project screen:

1 Click **Project -> Save Project** in the main menu to save the project locally.

2 Click **Project -> Push** to push the project to the GV Orbit server repository.

Run Custom Monitoring Screen

1 Click the **Design/Run Mode** tool bar icon to take GV Orbit Client out of 'Design Mode' and into 'Run Mode':

GV Orbit Client runs the C&M project and gets device status information to display on the custom monitoring screen's **Lamp** widgets, which illuminate red/yellow/green to show device status. See Figure 3-40.

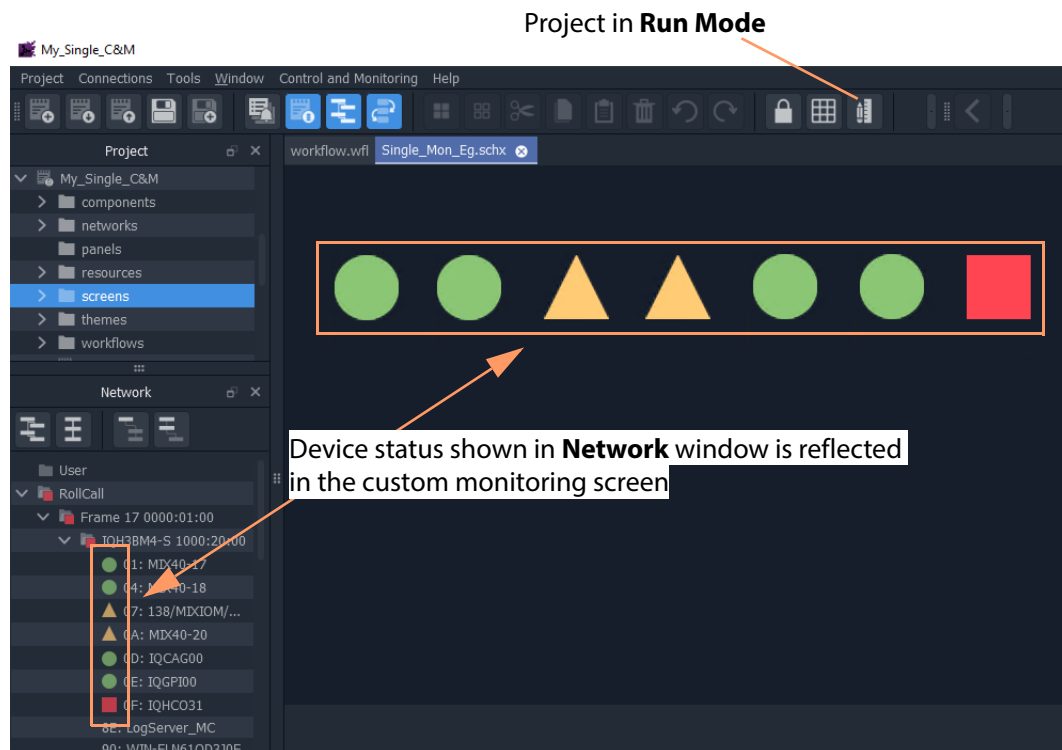Icon when in **Run Mode**

Fig. 3-40: Simple Custom Monitor Example Running in GV Orbit Client

Note: Tally Widget graphics:
The graphics shown by these Tally widgets are:

Shape		Alarm Status
	Green circle	OK

	Yellow/amber triangle	Minor Warning
	Orange inverted triangle	Major Warning
	Red square	Failure/Error
	Blue diamond	Unknown

2 To go back to 'Design Mode', click the **Design/Run Mode** icon again.

3 To save the project locally,
   click **Project -> Save Project** from the main menu.

4 To push the project back to the GV Orbit server:
   - click **Project -> Push** from the main menu;
   - select the project name in the list (it may already be selected/highlighted); and
   - click **OK**.

5 To close the project, click **Project -> Close Project**.

6 To close the GV Orbit Client application, click **Project -> Exit**.

GV Orbit Server Login

Lite	Professional	Enterprise
-	●	●

This section describes how to log into a GV Orbit server from either the GV Orbit Client or with a web browser. When logged in, various configurations can be viewed, including settings for the GV Orbit services. For more details, please refer to the *GV Orbit Admin Guide* in Related Documentation, on page iii.

From GV Orbit Client

With a GV Orbit C&M project open in GV Orbit Client, to open a GV Orbit server's **Home** stage, either:

- click **Project -> URLs** in the main menu and select the GV Orbit server item; or
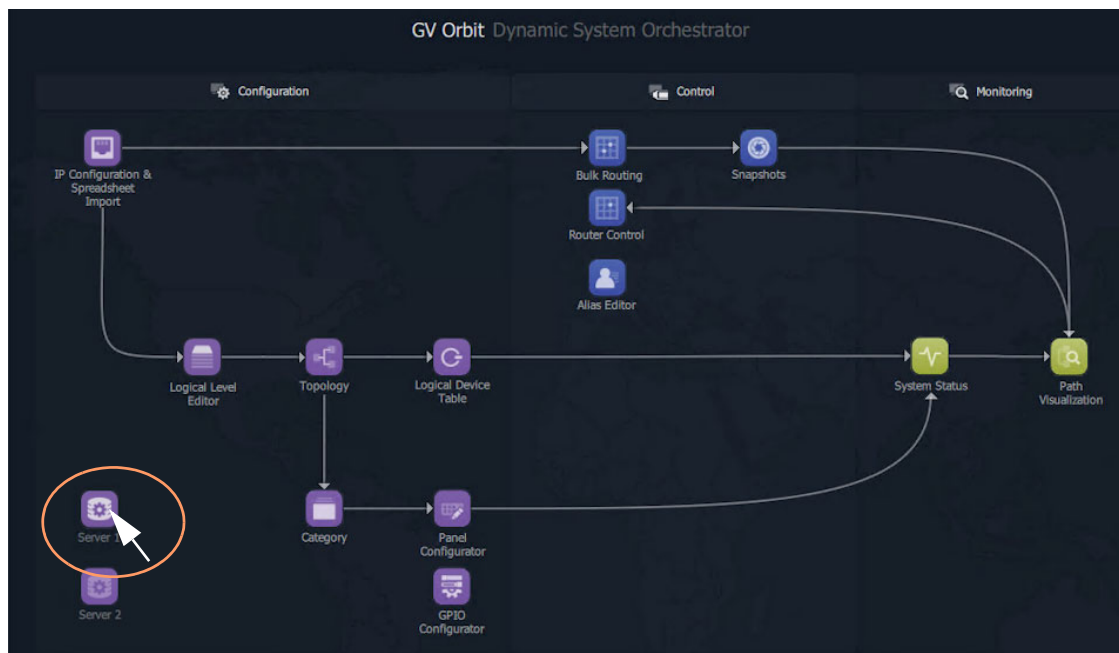- click on a server icon in the **Workflow** stage (e.g. **Server 1**).

Fig. 3-41: Click on Server Icon in Workflow Stage

The GV Orbit server **Admin Login** screen is then shown. See Figure 3-42.

From a Browser

The instructions below show an example of how to access a GV Orbit server. For more details, please refer to the *GV Orbit Admin Guide* in Related Documentation, on page iii.

- Enter the IP address of a GV Orbit server into a web browser (Chrome recommended).

  The GV Orbit server **Admin Login** screen is shown. See Figure 3-42.
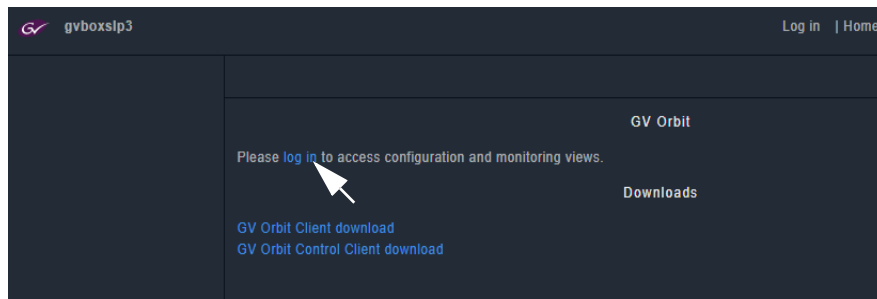
Server Admin Login Screen

Fig. 3-42: GV Orbit Server Admin Login Screen

> **Note:**
> The GV Orbit Client and GV Orbit Control Client installers may also be downloaded from the GV Orbit server **Admin Login** screen.

1   Click **Log in**.

A login screen is shown.

2   Enter the **User ID** and **Password** (the default user ID is 'admin' with password 'admin'). Click **Login**.

The GV Orbit server **Home** stage is shown. See Figure 3-43.
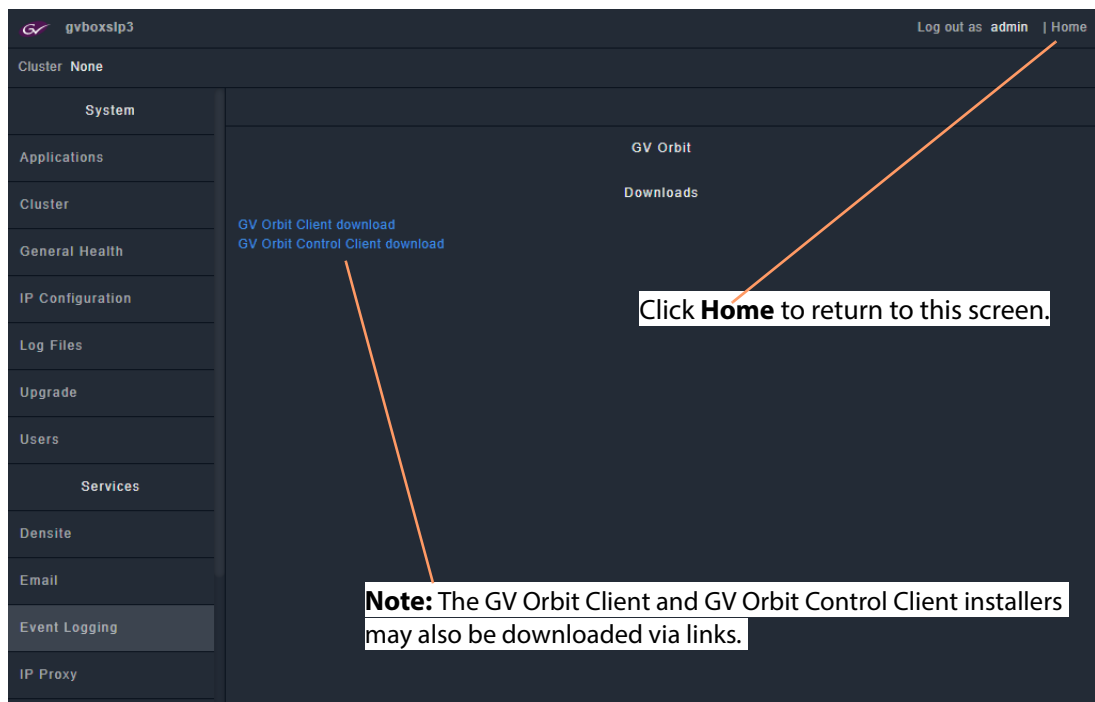
GV Orbit Server Home Stage

Click **Home** to return to this screen.

Note: The GV Orbit Client and GV Orbit Control Client installers may also be downloaded via links.

Fig. 3-43: Example GV Orbit Server Home Stage

Accessing Services Configuration Screens

Services should be set up by the GV Orbit system administrator. Services running on the GV Orbit server are configured via their configuration screens accessible from the GV Orbit server **Home** stage.

For information about the server and services, please refer to the *GV Orbit Admin Guide*. See Related Documentation, on page iii.

Logs

Lite	Professional	Enterprise
-	●	●

Logs are kept for system device status/alarm messages (events) and also for applications/services running on the GV Orbit server.

- Event Logs - In an operating GV Orbit system, GV Orbit device/service status, alarm messages and events are logged by a GV Orbit service running on a GV Orbit server. Events etc. are logged to an event log data set. This is set up when configuring the **Event Logging** service on the server.

- Server Application and Service Log Files - Each application/service running on the GV Orbit server also has a set of log files.
Please refer to the *GV Orbit Admin Guide* in Related Documentation, on page iii, for further information about the GV Orbit server and the available log files.

Event Logs

Instructions for quickly viewing event log files are presented here.
For full log file instructions, please refer to the *GV Orbit Admin Guide*.

A new GV Orbit system is set up with a default log file configuration. To set up custom event logging in the GV Orbit system, a new event log file configuration can be set up for the **Event Logging** service. This can be done on the GV Orbit server:

1   Log into a GV Orbit server. (See GV Orbit Server Login, on page 98.)
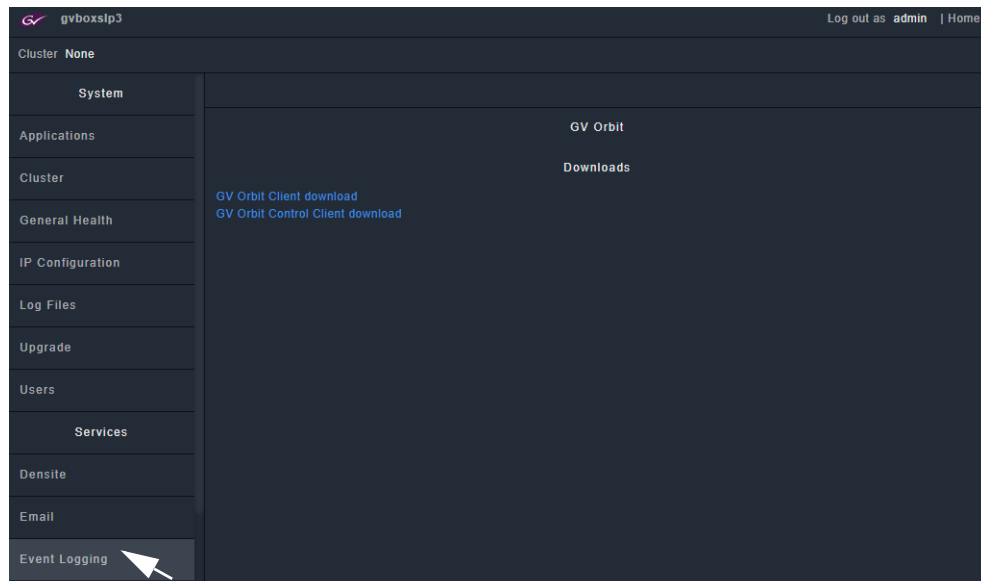   And view the GV Orbit server **Home** stage.

Fig. 3-44: Select Event Logging from the GV Orbit Server Home Stage

2   Select **Event Logging**. (Scroll down on the left-hand side, if required.)

   The **Event Logging** service configuration screen on the GV Orbit server is shown.

3   Click on the **Event Log Setup** tab.

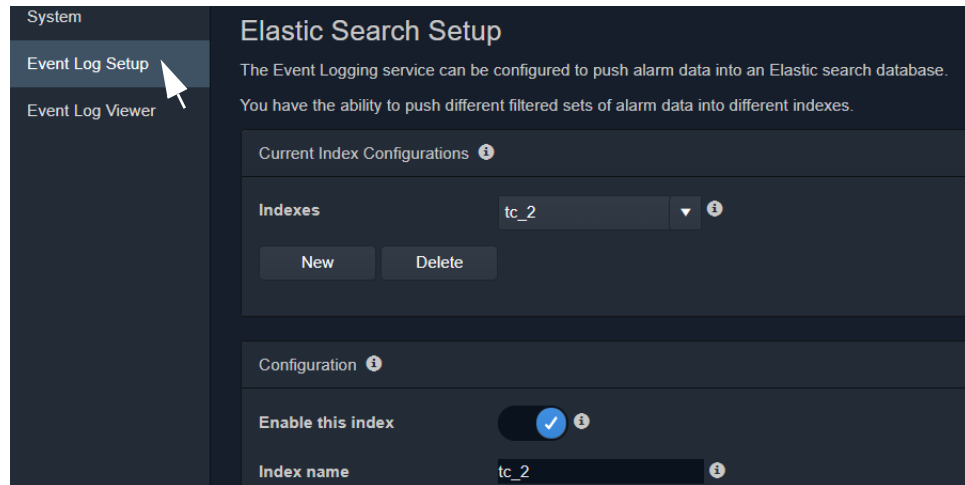The **Elastic Search Setup** tab for the **Event Logging** service is shown.

Fig. 3-45: Event Logging Service - Search Setup Tab

New log data-sets can be created. For more information, refer the **Event Logging** service information in the *GV Orbit Admin Guide* in Related Documentation, on page iii.

Example New Event Log

To quickly create a new event log:

1   Click **New** to view the **Event Logging** service dialog.

2   Enter a name (identifier) for a new event log file configuration (index). For example, 'chan_001'. (The name acts as an identifier for the event log data-set to be created.)

> **Note:** Event log naming rules:
> - Lowercase only
> - Cannot include \, /, *, ?, ", <,>, |, ` ` (space character), ,, #
> - Cannot start with -, _, +
> - Cannot be . or ..
> - Cannot be longer than 255

3   Click **OK** in the dialog.

The **Index name** field shows the new event log file configuration name.

4   Select **Enable this index**.

5   At the bottom of the screen, set **Delete Data After (days)** to '7'.
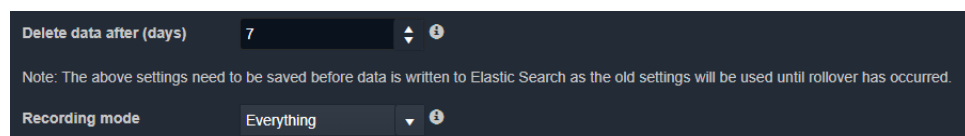
Log data will be kept for 7 days.

Fig. 3-46: Event Logging Service - Search Setup Screen Controls

6   Set **Recording Mode** to 'Everything'.

7   Click **Save**.

This has set up a new event log to record all events, alarms and log messages.

View Event Log

Event log data may be viewed from the:

- Event Log Viewer (on GV Orbit Server); or
- Alarm History Window (in GV Orbit Client).

Event Log Viewer (on GV Orbit Server)

1 Select the **Event Log Viewer** tab for the **Event Logging** service.

A log viewer screen is shown. (See Event Log Viewer Screen, on page 103.)

Alarm History Window (in GV Orbit Client)

1 Open a C&M project in the GV Orbit Client.

2 View the **Alarm History** window (click on the **Alarm History** window tool bar icon) and select the required tab. (See History Window (Alarm History), on page 74.)

This is a log viewer screen. (See Event Log Viewer Screen, on page 103.)

Event Log Viewer Screen

In the log viewer screen:

1 Click on the **Search Parameters** icon (🔍).

The **Search Parameters** dialog is shown.

2 Set **Log Data Source** to the required event log name in the drop-down list.

3 Select **Reset to last 30 minutes**. (To show the last 30 minutes of log messages.)

4 Re-click on the **Search Parameters** icon (🔍) to close the dialog and view the resulting logged data.

> **Note:**
>
> For information about viewing the event logs, please refer to the *GV Orbit Admin Guide* in Related Documentation, on page iii.

Further Information
View Event Log   –

Grass Valley Technical Support

For technical assistance, contact our international support center, at 1-800-547-8949 (US and Canada) or +1 530 478 4148.

To obtain a local phone number for the support center nearest you, please consult the Contact Us section of Grass Valley's website (www.grassvalley.com).

An on-line form for e-mail contact is also available from the website.

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