

GV STRATUS Playout

Cloud-based software as a service for automation and monitoring

Operator Manual

M3021-9900-100

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Introduction

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Introducing GV STRATUS Playout

GV STRATUS Playout is a cloud-based, Software as a Service (SaaS) that relies on true cloud-computing technology coupled with SSP-3801 HD/SD solid state playout cards.

The GV STRATUS Playout service provides the distribution network for media management, metadata, and schedules from the cloud. The GV STRATUS Playout solution moves the IT infrastructure, platform, and software into the cloud while the media storage and playout cards remain on premise allowing you to retain full control of the location and movement of your media and devices.

GV STRATUS Playout is based upon the Microsoft Azure platform and will be hosted in a number of different data centers (US, Europe and Asia) allowing you to connect to the one closest for the fastest user experience. The web client provides easy access to the GV STRATUS Playout service through a standard Google Chrome browser from any computer. Through the web interface, you can monitor and control live channels, edit and create schedules, preview and manage media assets, and configure your account settings.

The Densité SSP-3801 is a solid state HD/SD playout server card that is housed in the Densité 3RU frame. It is essentially a “channel on a card”. The card pulls a copy of the playlist from the GV STRATUS Playout service, caches the required media from defined media storage locations, and then plays the media events on air according to the scheduled times or the manual control commands sent to the GV STRATUS Playout service through the GV STRATUS Playout web client.



Fig. 1-1: HD/SD Solid-State Playout card (SSP-3801) and GV STRATUS Playout web client

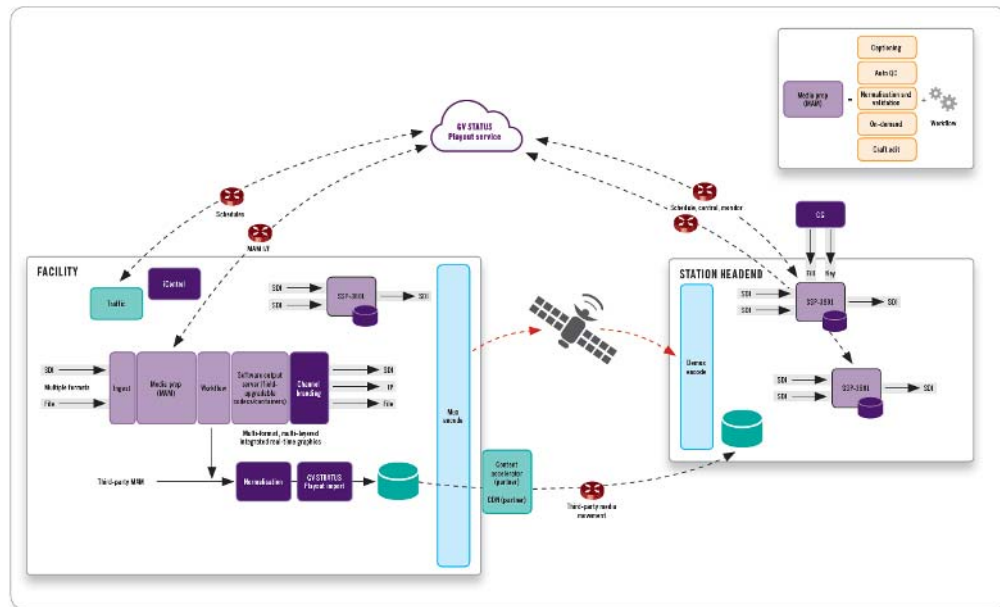


Fig. 1-2: GV STRATUS Playout components

For more information about the SSP-3801 card, refer to its documentation:

- SSP-3801 Installation and Configuration Guide (M931-9905-110)
- SSP-3801 User Guide (M931-9900-110)

Getting Started

Although the documentation is organized loosely around four typical roles (designated system administrator, system engineer, transmission operator, and ingest operator), this may not reflect the practices of your organization. Roles may be defined differently or assigned to multiple people. The following process is a general description of the steps for getting started.

The first step is a customer account is created for your organization on Master and Standby deployments and configured with the necessary security measures. An initial system administrator user profile is created and login instructions are provided to the person designated as the point of contact for the role of system administrator. For more information on the role of designated system administrator, see [Getting Started as the designated system administrator](#) on page 10.

Before going live, you will go through four phases: Installation, Configuration, and Preparation, Pre-production.

Phase 1: Installation and configuration of on-premise components

A system engineer must set up the on-premise components:

- 1 Install and configure the SSP-3801 cards as required. For more information, see SSP-3801 Installation and Configuration Guide. To register the cards as devices in your GV STRATUS Playout account, see [step 6](#) under Phase 2: Configuration.
- 2 Install and configure the traffic system and any other devices as required.

- 3 Synchronize the clocks with a time source so the SSP-3801 cards and GV STRATUS Playout web clients are in sync with each other and with the GV STRATUS Playout service. For more information, see [Synchronizing time between GV STRATUS Playout and the SSP-3801 cards](#) on page 18.

Phase 2: Configuration of your GV STRATUS Playout account

The designated system administrator must configure the settings for the account:

- 1 Define the user groups. The user groups determine what functionality a user is allowed to view in the interface and use. For more information, see [Configuring user groups](#) on page 18.
- 2 Create the user profiles. User profiles are the accounts for individual users. For more information, see [Configuring user profiles](#) on page 20.
- 3 Create the channel types. A channel type is a collection of settings applied as a group to a number of channels with common characteristics. For more information, see [Creating a new channel type](#) on page 22.
- 4 Configure the channels. For more information, see [Configuring channels](#) on page 32.
- 5 Create views. A view is a collection of channels that are viewed as a group. For more information, see [Grouping channels into a view](#) on page 37.
- 6 Register each SSP-3801 card as a device and assign it a channel, see [Setting up devices in GV STRATUS Playout](#) on page 39.

Phase 3: Preparation of assets and schedules

The designated system administrator or ingest operator must make sure that all the elements for building a playlist are ready:

- 1 Prepare the media files for broadcast and register them as assets. For more information, see [Registering and Managing Assets](#) on page 47 and [Registering media and importing schedules using the GV STRATUS Playout Gateway](#) on page 53.
- 2 Prepare and import the schedules. For more information, see [Working with Schedules](#) on page 93 and the BXF API specification.

Phase 4: Pre-production

The designated system administrator or system engineer must test the implementation to ensure that the broadcast will run smoothly:

- 1 Add schedules to channels. For more information, see [Appending a schedule to the playlist](#) on page 78.
- 2 Monitor and control the channels. For more information, see [Monitoring and Controlling the Broadcast](#) on page 71.

Getting Started as the designated system administrator

When your customer account is created and the initial administrator user profile is created, one person from your organization must be designated as the system administrator. This person is responsible for the following:

- Creating user groups to provide the appropriate level of access to the functionality available in the GV STRATUS Playout service and managing the user groups so they

continue to meet your organization's needs. For more information on user groups, see [Configuring user groups](#) on page 18.

- Creating and managing the user profiles required for the members of your organization granted access to the GV STRATUS Payout service, and ensuring that they are assigned to the appropriate user group. For more information on user profiles, see [Configuring user profiles](#) on page 20.
- Configuring the GV STRATUS Payout account and ensuring that the required on-premise components are installed and configured. For more information, see [Phase 1: Installation and configuration of on-premise components](#) on page 9 and [Phase 2: Configuration of your GV STRATUS Payout account](#) on page 10.
- Ensuring that all the schedules and assets that are required are available. For more information, see [Registering and Managing Assets](#) on page 47.
- Reporting issues to the STRATUS Monitoring team (technical support). Although multiple individuals may be assigned an Administrator-level user profile, the designated system administrator is sole point of contact for all communications with the STRATUS Monitoring team (technical support).

Getting Started as a transmission operator

Once the designated system administrator has configured the settings for the account, registered the assets, and imported the schedules, the transmission operators can begin putting channels on air. Transmission operators are responsible for the following:

- Controlling the channel's playlist. For more information, see [Monitoring a channel using Channel Control](#) on page 76.
- Monitoring the payout. For more information, see [Monitoring channels using the Monitor Wall](#) on page 72 and [Monitoring channels using the Channel Overview](#) on page 73.
- Editing the schedules. For more information, see [Working with Schedules](#) on page 93.

Opening and logging into the GV STRATUS Payout web interface

The designated system administrator creates the user profiles that determine your login information, the permissions that you have been granted in the service, and what pages and functionality you will be able to use. The login information you need is the email address that will serve as your user name and the password associated with that email address.

GV STRATUS Payout supports Single Sign-On (SSO) which enables customers to integrate their existing corporate identity service such as Active Directory or to use other popular identity providers such as Google SSO. The authentication service used for your account will have been set up as part of the pre-delivery process.

Google Chrome is the recommended browser for accessing the GV STRATUS Payout web client. Once you enter the web address of the GV STRATUS Payout portal provided to you by the designated system administrator, you will be prompted to provide your login information.

IMPORTANT

To access the GV STRATUS Payout web interface, a display with a minimum screen resolution of 1920 x 1080 pixels and the latest version of Google Chrome at 100% zoom in full-screen (F11) mode is recommended.

The pages and functionality made available to you might differ from that described in the user documentation since the interface is affected by the permissions granted to your user profile through the user group to which you belong. In most cases, the first page you will see is the Home page. For more information about the pages in GV STRATUS Payout, see [Overview of the web interface](#) on page 12.

To open the web interface:

- 1 Open a web browser.
- 2 In the address bar, type the URL of the GV STRATUS Payout Portal provided by the designated system administrator.
- 3 Click the identity provider account that you want to log in with.
- 4 On the login page, type the email address that serves as your user name for the service and type the password associated to your email address.
- 5 If more than one GV STRATUS Payout account is available to you, click the one you wish to access.

Overview of the web interface

The GV STRATUS Payout cloud services are accessed through the Google Chrome web browser. Once you have logged in to the service, you can navigate to the various pages using the top menu.

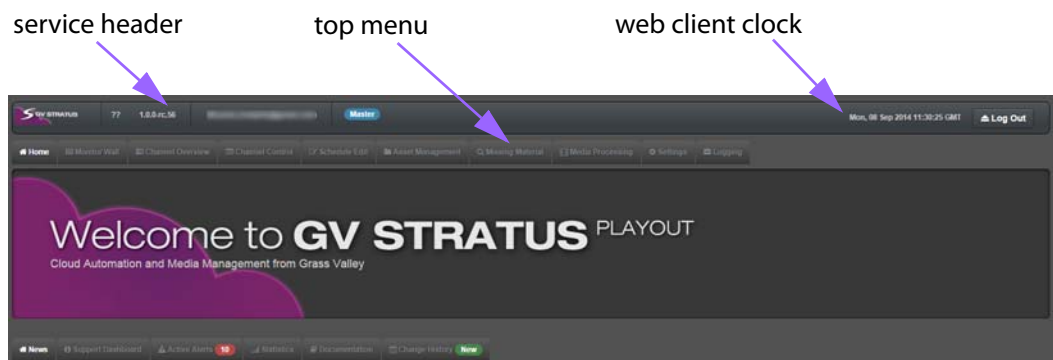


Fig. 1-3: Home page

GV STRATUS Payout always uses UTC time internally. The web client's internal time is displayed in the clock in the service header. This clock should always match actual UTC time. For convenience, however, some pages include the ability to display time using a different time zone.

Since the service may manage a large number of channels, the designated system administrator may divide the channels into logical groups, which are referred to as views.

Each view contains a limited number of channels which can be seen as a group on the Monitor Wall, Channel Overview, and Channel Control pages. A view provides a quick way to see a targeted subset of channels so an operator does not have to repeatedly scroll through all the channels to locate the ones of interest.

Colored callouts may appear in several areas on the web interface to call your attention to important information such as notifications and alerts in the service. For example, a callout will appear on the Missing Materials page to display the number of assets which are scheduled or calculated to go on air as a primary or secondary event, but whose media files have not been registered yet.

Since the web interface can be customized by the designated system administrator, some pages or other functionality may be hidden from view. The following describes the main pages that are available in the top menu by default:

Table 1-1: Main pages

Page	Description
Home	<p>The Home page contains the following tabs:</p> <ul style="list-style-type: none"> • News: provides a message board for designated system administrator to communicate with all users. For more information, see About the News tab on page 116. • Support Dashboard: displays the service status, known issues, and cloud response time for the cloud services. For more information, see About the Support Dashboard tab on page 118. • Active Alerts: lists the current alerts occurring on the devices in your account. For more information, see Viewing active alerts in the service on page 118. • Statistics: provides performance information for the channels in your account. For more information, see Viewing the statistics for the service on page 119. • Documentation: contains links to the manuals available for GV STRATUS Playout and the SSP-3801 card. For more information, see Downloading the end user documentation on page 119. • Change History: provides a frequently updated list of the changes made to the services. For more information, see Reading about changes in the service on page 119.
Monitor Wall	<p>The Monitor Wall is a page from which you can monitor a collection of up to 17 channels. For more information, see Monitoring channels using the Monitor Wall on page 72.</p>
Channel Overview	<p>The Channel Overview is a page from which you can monitor the playout of a collection of channels. For more information, see Monitoring channels using the Channel Overview on page 73.</p>
Channel Control	<p>The Channel Control page is intended for transmission operators to control live channels. For more information, see Monitoring a channel using Channel Control on page 76.</p>
Schedule Edit	<p>The Schedule Edit page allows operators to create or modify schedules. For more information, see Working with Schedules on page 93.</p>
Asset Management	<p>The Asset Management page provides an interface for searching for registered assets, editing their details, and previewing the available proxy media files. For more information, see Managing assets on page 48.</p>

Table 1-1: Main pages

Page	Description
Missing Material	The Missing Material page lists the assets for which the media file is either missing or has not yet been registered. For more information, see Reviewing missing material on page 68.
Media Processing	The Media Processing page lists the media files being processed by the File Processing Nodes. For more information, see Monitoring and managing media processing jobs on page 65.
Settings	The Settings page contains a menu pane of configurable settings for the service. For more information, see Configuring your account on page 17.
Logging	The Logging page provides a collection of logs and reports. For more information, see Viewing technical logs for the service (System Logs) on page 120, Viewing user operations (User Logs) on page 122 and Viewing transmission error logs (TX Error Logs) on page 122.

GV STRATUS Playout system requirements

Browser requirements

- The latest version of Google Chrome is recommended and supported.
- Other HTML5-compliant browsers are available and can be used, but are not officially supported.
- Internet Explorer is currently not supported.
- JavaScript must be enabled.
- Cookies must be enabled.
- Plugins, such as Java, Flash or Silverlight, are not required.

Client Requirements

Computer:

- A desktop with a wired Internet connection is recommended.
- Laptops, tablets, and other wireless devices may be used, if required. Mobile devices that support Google Chrome may be used and are subject to the same system requirements.
- An operating system supported by Google Chrome is required, which currently includes Windows, Mac OS and Linux. GV STRATUS Playout is browser dependent, but not platform dependent. For Windows-based systems, minimum recommended system requirements are Windows 7 with an Intel Core-based processor and 4GB RAM.

Screen:

- A display with a minimum screen resolution of 1920 x 1080 pixels is recommended to use Chrome at 100% zoom in full-screen (F11) mode. A screen resolution of 1920 x 1200 is recommended for non-full screen mode.
- Smaller resolution screens can be used with Chrome at a reduced zoom.

Clock:

For more information about synchronizing time, see [Synchronizing time between GV STRATUS Payout and the SSP-3801 cards](#) on page 18.

- The system clock on the computer from which the GV STRATUS Payout web client is accessed should be set to synchronize with a time source such as an NTP server or the station master clock acting as an NTP server.
- If the system clock on the web client's computer is set to local time, it must be set correctly using the appropriate time zone settings.
- The SSP-3801 cards and the system clock on the computer from which the GV STRATUS Payout web client is accessed should also be in sync with each other.

The system clock requirements do not apply to applications or systems interacting with GV STRATUS Payout through the API such as for systems running the GV STRATUS Payout Gateway, the File Processing Node or traffic (BXF) systems.

Configuring your account



This chapter contains the following sections:

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<i>Configuring user groups</i>	18
<i>Configuring user profiles</i>	20
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Synchronizing time between GV STRATUS Payout and the SSP-3801 cards

It is important that the time sources for the GV STRATUS Payout web client and the SSP-3801 cards are synchronized. If the clocks are not in sync, then some features may not behave as expected.

SSP-3801 card uses and displays time in UTC. It obtains the date from an NTP server and time from a choice of time sources. For more information, see SSP-3801 Installation and Configuration Guide. Its date and time are displayed at the top left of its web interface.

Both the GV STRATUS Payout cloud service and the web clients use UTC internally. Time management for the cloud service is not required, but each web client relies on the system clock on the computer from which the web interface is accessed to calculate the UTC date and time. The date and time calculated by the web client is displayed at the top right of the web interface beside the Log Out button. To ensure that the time is accurate, the system clock on the computer should be set to synchronize with a time source such as an NTP server or the station master clock acting as an NTP server. The system clock on the computer can be set to UTC or local time. If it is set to local time, it must be set correctly using the appropriate time zone settings. The time displayed at the top of both the GV STRATUS Payout and SSP-3801 card web interfaces should always match actual UTC time.

Since GV STRATUS Payout uses the system clock as a time reference for its functionality, it is important that the SSP-3801 cards and the system clock on the computer from which the GV STRATUS Payout web interface is accessed are also in sync with each other. If they are not, then some features that rely on timing such as Count To and Manual Take Delay may not give the expected results.

For both the card and the web client's system clock to be in sync, one of the following must be implemented:

- If the SSP-3801 cards are not synchronized to a station master clock, then the web client's system clock and the SSP-3801 cards should be configured to use the same NTP server as their time source, if possible.
- If the time source used by the SSP-3801 card can also function as an NTP server, then the web client system clocks should be configured to use the same time source as the card.

Although GV STRATUS Payout always uses UTC internally, some pages such as Channel Control, Schedule Edit, and Asset Management can display time in other timezones according to the Channel Type settings. For more information on Channel Types, see [Configuring channels](#) on page 32 and [Creating a new channel type](#) on page 22.

Configuring user groups

A user group defines what functionality is available to a group of users. By creating user groups, you can consistently apply the same settings to a number of user profiles rather than configuring each of them separately.

The service contains two pre-configured user groups:

- **Administrators:** the Administrators user group is configured with access to all functionality.

- **Users:** the Users user group is configured with access to all functionality, except the Settings page which is only accessible to Administrator-level user profiles.

User profiles configured as part of the Administrators user group are granted access to all the available functionality in the account, including making configuration changes on tabs available from the Settings page. Although multiple individuals may be assigned an Administrator-level user profile, the designated system administrator is sole point of contact for all communications with STRATUS Monitoring team (technical support).

User profiles configured as part of the Users user group are granted access to all functionality, except the Settings page. The Settings page is restricted to the Administrators user group only. When you create a new user group, it is based on the functionality available in the Users user group, but you determine what the users are able to access by selecting pages you want to remove from their view. The functionality that you place in the Disallowed list is hidden so the user profiles configured as part of that user group will no longer be able to see those pages when they log in to the service.

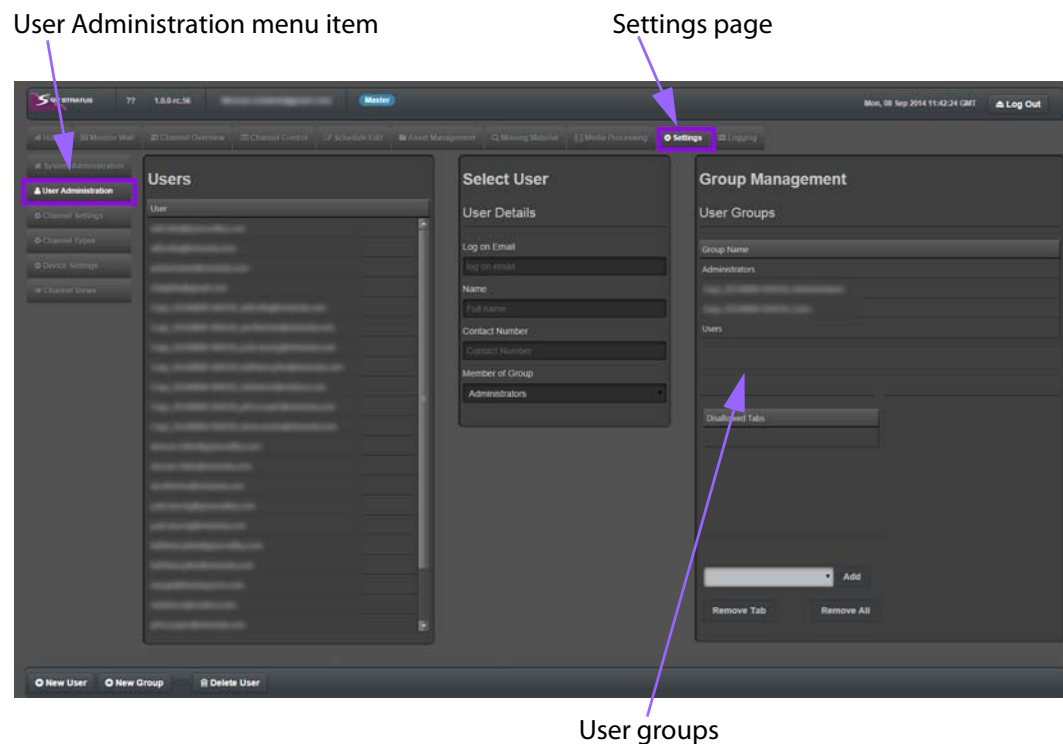


Fig. 2-1: Example of the User Administration page

Creating a user group

A user group defines what features are available to a group of users. When you create a new user group, it is based on the functionality available in the Users user group, but you can restrict that access by selecting which pages are visible and available to the user profiles assigned to the new user group when they log in to the service. For example, you can create a user group for transmission operators with monitoring capabilities only by hiding the Schedule Edit page.

To create a user group:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **User Administration**.
- 3 Click **New Group**.
- 4 In the **Enter group name** box, type an identifying name for the group.
- 5 Click **Create**.
- 6 In the **Group Management** pane, you configure the user group. Click the name of the user group you created.
- 7 The **Disallowed Tabs** box contains the pages that are hidden from the user's view. In the list below the box, click the name of a page that you want to hide and click **Add** to add a page to the list of hidden pages.
 - To remove a page from the list so it is available again, click the page in the **Disallowed Tabs** box and click **Remove Tab**.
 - To clear the list, click **Remove All**.
- 8 Click **Update Group**.

Modifying the user group

The Disallowed Tabs list determine what is visible to the user profile assigned to the user group. Pages in the list are hidden from view and therefore are not available for use. All pages that are not in the list are made available to all the users in the user group.

To modify a user group:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **User Administration**.
- 3 In the **Group Management** pane, click the name of the user group you want to modify.
- 4 The **Disallowed Tabs** box contains the pages that are hidden from the user's view. Change as required:
 - To add a page to the list: In the list below the box, click the name of a page you want to hide and click **Add**.
 - To remove a page from the list: In the **Disallowed Tabs** box, click the page you want to remove and click **Remove Tab**.
 - To clear the list: Click **Remove All**.
- 5 Click **Update Group**.

Configuring user profiles

A user profile is a record for a user in GV STRATUS Playout. It contains information such as the log on email, name, and contact information for the specific user. Each user profile is assigned to a user group which defines what functionality the user is allowed to view in the interface and use. The service contains two pre-configured user groups:

- **Administrators:** the Administrators user group is configured with access to all functionality.
- **Guests:** the Guests user group is configured with access to all functionality, except the Settings page which is only accessible to Administrators.

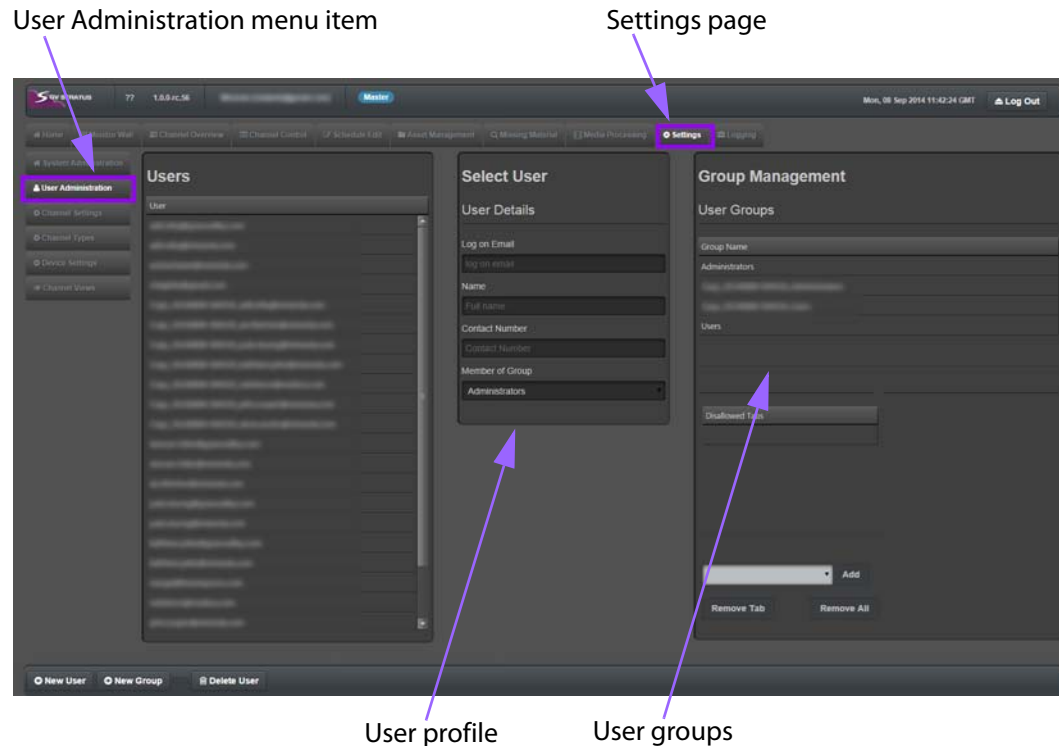


Fig. 2-2: Example of the Settings > User Administration page

Adding new users

New users are identified by the email they use to log in to the GV STRATUS Playout. By default a new user is assigned to the Guest user group, which restricts their access to many pages and buttons.

To add a new user:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **User Administration**.
- 3 Click **New User**.
- 4 In the **Enter user email address** field, type the email address for the user.
- 5 Click **Create**. The new user is highlighted in the **Users** list.
- 6 In the **User Details** section, enter the following:
 - In the **Name** field, type the name of the user.
 - In the **Contact Number** field, type a phone number where the user can be reached.
 - In the **Member of Group** list, click the user group to which you want the user to be assigned. The Guest group is assigned by default, but it can be changed to any available user group.
- 7 Click **Update User**.

Modifying the user details

To modify the user profile:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **User Administration**.
- 3 In the **Users** list, click the email address of the profile that you want to update.
- 4 In the **User Details** section, enter the following:
 - In the **Name** field, type the name of the user.
 - In the **Contact Number** field, type a phone number where the user can be reached.
 - In the **Member of Group** list, click the user group to which you want the user to be assigned.
- 5 Click **Update User**.

Deleting a user

To delete a user profile:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **User Administration**.
- 3 In the **Users** list, click the email address of the profile that you want to delete.
- 4 Click **Delete User**.
- 5 In the dialog box, type the code from the left box into the right box to confirm that you want to delete the user profile. The code changes to green when it is written correctly.
- 6 Click **Yes**.

Creating a new channel type

A channel type is a collection of defined settings that can be applied consistently across multiple channels. For example, you can define a channel type called East Coast which you can use for all the channels in that region rather than configuring each channel separately.

A channel type can also be used to affect how time is displayed in some pages. Although GV STRATUS Playout always uses UTC internally, some pages such as Channel Control and Schedule Edit display time according to their assigned Channel Type so operators can view time in the grids in their assigned timezone.

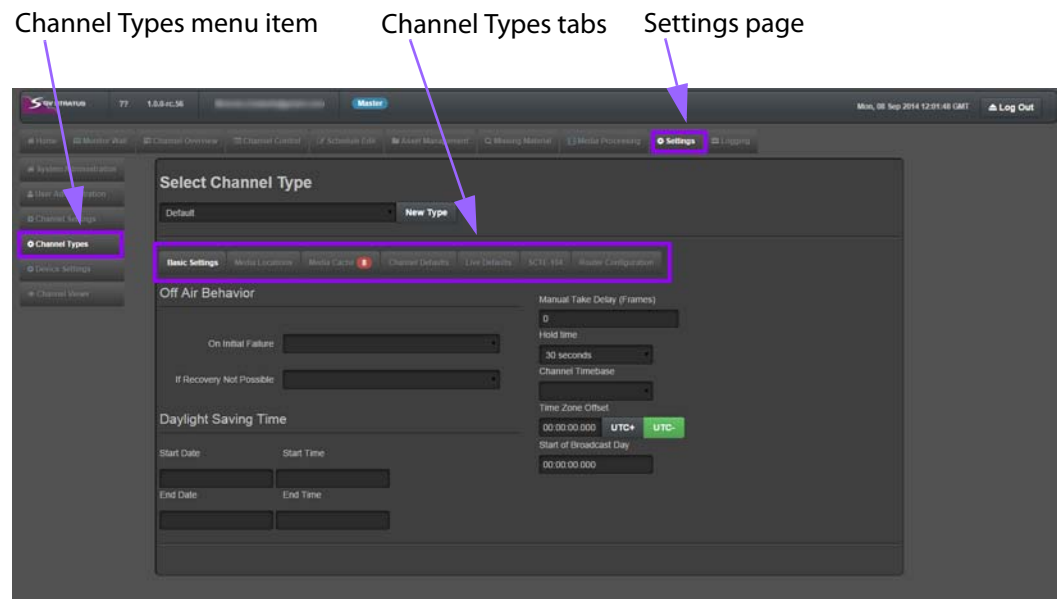


Fig. 2-3: Example of the Settings > Channel Types page

To create a new channel type:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Types**.
- 3 Under the **Select Channel Type** section, click **New Type**.
- 4 In the **Enter Type Name** box, type a name for the new channel type.
- 5 Click **Create**.

The channel type is created with default values. To change the values, see [Changing the channel type settings](#) on page 23.

Changing the channel type settings

When you change the settings in an existing channel type, all the channels configured with the channel type are automatically updated with the new values.

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Types**.
- 3 Under **Select Channel Type**, click the name of the channel type you want to change.
- 4 Click the tab that contains the settings that you want to change:
 - **Basic Settings:** determines the basic settings such as Channel Timebase, Off Air Behavior and time settings. To configure these settings, continue with [Configuring the basic settings for the channel type](#) on page 24.
 - **Media Locations:** add and order the locations where the media is stored. To list the media locations and provide the server credentials, continue with [Configuring the media locations for the channel type](#) on page 25.
 - **Media Cache:** manage the media downloads to the cache. To configure the settings, continue with [Configuring the media cache for the channel type](#) on page 26.

- **Channel Defaults:** configure the default transitions for logos and graphics and select the Evergreen content list and media persist list. To configure these defaults, continue with [Configuring the channel defaults for the channel type](#) on page 27.
 - **Live Defaults:** configure the transitions for the manually controlled logo, graphic, voiceover, or breakaway events. To configure these transitions, continue with [Configuring the live defaults for the channel type](#) on page 28.
 - **SCTE-104:** select how SCTE-104 messages are handled. To configure these settings, continue with [Configuring the SCTE-104 settings for the channel type](#) on page 29.
 - **Router Configuration:** specify the router sources available for the source events. To configure these settings, continue with [Specifying the router sources](#) on page 30.
- 5 When you have completed your changes, click **Update Channel Type**.

Configuring the basic settings for the channel type

To configure the basic settings:

- 1 If you are continuing to configure a selected channel type, skip to step 2. To open the Channel Settings page:
 - In the top menu, click **Settings**.
 - In the menu pane, click **Channel Types**.
 - Under **Select Channel Type**, click the name of the channel type you want to change.
- 2 Click the **Basic Settings** tab.
- 3 In the **On Initial Failure** list, click one of the following actions to occur after the initial three seconds of an off-air situation has expired and the off-air situation is not resolved
 - **Black:** displays a black screen with no graphics.
 - **Off Air Slide:** displays the full-screen graphic specified in the **Off Air Slide** field.
 - **Live A:** displays the live feed incoming from the SDI A port on the SSP-3801 card.
 - **Live B:** displays the live feed incoming from the SDI B port on the SSP-3801 card.
- 4 In the **Off Air Slide** field (if you selected the Off Air Slide option in the On Initial Failure list), click **Select** to locate the full-screen graphic to be broadcast if an off-air situation occurs. The screen graphic used as the off-air slide should be full-screen, in the required video standard for the channel, and be in OXT format.
- 5 In the **If Recovery Is Not Possible** list, select one of the following actions to occur 30 seconds after the On Initial Failure if the off-air situation is not resolved:
 - **Keep current off air state:** continues the action selected in the On Initial Failure list.
 - **Go to Evergreen:** places the Evergreen schedule on-air. For more information about Evergreen, see [About Evergreen Content](#) on page 70.
 - **Take Next:** places the next scheduled event on-air.
- 6 Under **Daylight Saving Time**, specify the daylight saving time settings for the configured time zone:
 - In the **Start Date** field, click in the field to open the calendar and select the date when Daylight Saving Time begins in the time zone. In the **Start Time** field, click in the field to open the list of times and select the time when Daylight Saving Time begins in the time zone.

- In the **End Date** field, click in the field to open the calendar and select the date when Daylight Saving Time ends in the time zone. In the **End Time** field, click in the field to open the list of times and select the time when Daylight Saving time ends in the time zone.
- 7 In the **Manual Take Delay (Frames)** list, select the number of frames of delay it takes for all the SSP-3801 cards associated to the channel type to receive data from GV STRATUS Playout. This value is used to ensure changes are applied simultaneously to all the cards.
 - 8 In the **Hold time** list, click the amount of time an event remains visible in the channel grid after it has played out. As long as the event appears in the channel grid, it is not visible in the Show History list of events.
 - 9 In the **Channel Timebase** list, click the frame rate in which the channel operates. The selected frame rate determines how the timecode is represented in the GV STRATUS Playout interface. If you change the Channel Timebase, it immediately changes the frame rate for all the channels (and their devices) configured with this channel type.
 - 10 Under **Time Zone Offset**, specify the time difference between local and UTC time so the time display for the channel will reflect the local time rather than the UTC time used internally.
 - 11 In the **Start of Broadcast Day** box, type the time in UTC that marks the beginning of the broadcast day.
 - 12 Continue configuring other settings on the other tabs or click **Update Channel Type**.

Configuring the media locations for the channel type

For the service to access the locations where the media files are stored, you must specify which servers contain the media. Since these server are likely to have security, you must also provide the login information so that the service can access the media files.

To define the media locations and server login parameters:

- 1 If you are continuing to configure a selected channel type, skip to step 2. To open the Channel Settings page:
 - In the top menu, click **Settings**.
 - In the menu pane, click **Channel Types**.
 - Under **Select Channel Type**, click the name of the channel type you want to change.
- 2 Click the **Media Locations** tab.
- 3 In the **Media Locations** section, click **Add** to add new locations where media files are stored.
- 4 In the **New Media Location** dialog box, type the URI for the media file and click **Create**. The format of the URI should be http://[URI], https://[URI], or smb://[URI].
- 5 Define the sequence that the card should follow to download the media. In the **Media Locations** section, select the URI and use the **Move Up** and **Move Down** buttons to change its position. Order the media locations closest to the card's location at the top of the list and the furthest to the bottom. To edit a URI, click the URI, click **Edit**, and type a new URI. To delete a URI, click the URI and click **Delete**.
- 6 In the **Media Credentials** section, click **Add** to add the login credentials for a media server.

7 In the **New Media Credentials** dialog box, type the required information in the following fields to enable access to the server that contains the media files and click **Save changes**:

- **URI**: type the path where the media files reside.
- **Domain**: type the name of the domain that stores the media files.
- **Username**: type the login name for the specified Domain.
- **Password**: type the password assigned to this username.

To edit a credential, click the credential, click **Edit**, and enter new information in the fields. To delete a credential, click the credential and click **Delete**.

8 Continue configuring other settings on the other tabs or click **Update Channel Type**.

Configuring the media cache for the channel type

Each channel is associated to a device to which an SSP-3801 card is registered. The SSP-3801 card features onboard storage space that allows you to store and preload media content locally so that it can be retrieved and broadcast smoothly and quickly. You can define how all the cards associated to the channel type manage their media caches and what actions they should take if the servers timeout and the media files cannot be accessed.

Note: Some basic validation is provided on the Media Cache tab to verify if the values provided fall within the range of acceptable values for the SSP-3801 card. A colored callout appears on the tab to call your attention to the number of validation errors detected on the tab. Each field that contains a validation error is identified with a warning icon. Hover over the warning icon to view the range of acceptable values for the field.

To configure the Media Cache settings:

- 1 If you are continuing to configure a selected channel type, skip to step 2. To open the Channel Settings page:
 - In the top menu, click **Settings**.
 - In the menu pane, click **Channel Types**.
 - Under **Select Channel Type**, click the name of the channel type you want to change.
- 2 Click the **Media Cache** tab.
- 3 In the **Missing Media Time Window** box, type the amount of time before broadcast to trigger the Missing Media alert if the media file cannot be found.
- 4 In the **Inaccessible Media Time Window** box, type the amount of time before broadcast to trigger the Inaccessible Media alert if the media file was found, but cannot be downloaded to the SSP-3801 card's storage space.
- 5 In the **Max segments per download** box, type the maximum number of blocks you can download per server at a time.
- 6 In the **Minimal Download Speed** box, type the minimum acceptable download speed for the media. An alert is triggered if the download speed falls below the specified threshold.

- 7 In the **Speed Test Period** box, type the number of seconds defining the length of the test period used to verify the actual download speed. The download speeds are tested throughout the specified duration and are averaged. The resulting value is compared to the Minimal Download Speed threshold to verify its performance.
- 8 In the **Max (Overall) Parallel Downloads** box, type the maximum number of downloads that can take place simultaneously.
- 9 In the **Max CIFS Parallel Downloads** box, type the maximum number (up to 4) of downloads that use the Common Internet File System protocol (CIFS) and MS Windows file sharing protocol (SMB).
- 10 In the **Max HTTP/HTTPS Parallel Downloads** box, type the maximum number of downloads that can take place simultaneously using the HTTP/HTTPS protocol.
- 11 Continue configuring other settings on the other tabs or click **Update Channel Type**.

Configuring the channel defaults for the channel type

The Channel Defaults tab contains the defaults transition durations for logos and graphics added to the schedule using the Add Secondary button on the Schedule Edit page.

These defaults do not apply to the logos and graphics supplied by BXF. If the transition durations are not specified by the BXF, then the values default to zero.

To configure the channel defaults:

- 1 If you are continuing to configure a selected channel type, skip to step 2. To open the Channel Settings page:
 - In the top menu, click **Settings**.
 - In the menu pane, click **Channel Types**.
 - Under **Select Channel Type**, click the name of the channel type you want to change.
- 2 Click the **Channel Defaults** tab.
- 3 In the **In Duration** box for **Logos**, type the total amount of time allocated for the Cut and Fade transition of the logo on screen to complete.
- 4 In the **Out Duration** box for **Logos**, type the total amount of time allocated for the Cut and Fade transition of the logo off screen to complete.
- 5 In the **In Duration** box for **Graphics**, type the total amount of time allocated for the Cut and Fade transition of the graphic on screen to complete.
- 6 In the **Out Duration** box for **Graphics**, type the total amount of time allocated for the Cut and Fade transition of the graphic off screen to complete.
- 7 In the **Evergreen Content** list, click the search button to choose the schedule containing the Evergreen content. Evergreen content is a library of videos that can be broadcast in place of a previously scheduled event that for some reason cannot be played. For more information on Evergreen content, see [About Evergreen Content](#) on page 70.
- 8 In the **Media Persist List**, click search button to choose a schedule containing a list of media files that you want to always be available on the SSP-3801 card. The Media Persist List is normally used for frequently used media files and those needed for the Manual Controls. The card automatically caches the listed media files, ignoring the

schedule details, so that files are readily available for broadcast and do not need to be repeatedly cached.

- 9 Continue configuring other settings on the other tabs or click **Update Channel Type**.

Configuring the live defaults for the channel type

The Live Defaults determine how a logo, graphic, voiceover, or breakaway event transitions on or off screen when they are manually controlled using the buttons on the Live Controls or Manual Controls toolbars on the Channel Control page.

To configure the live defaults:

- 1 If you are continuing to configure a selected channel type, skip to step 2. To open the Channel Settings page:
 - In the top menu, click **Settings**.
 - In the menu pane, click **Channel Types**.
 - Under **Select Channel Type**, click the name of the channel type you want to change.
- 2 Click the **Live Defaults** tab.
- 3 Under **Breakaway Transition**, configure how the Breakaway events (Breakaway-A, Breakaway-B, Breakaway Hold-A, and Breakaway Hold-B buttons) on the Channel Control page are handled:

Field	Description
Transition Type	Click the type of scene change affect to apply to the beginning of the breakaway event. When the button is green, it indicates the feature is enabled. You have the following choices: <ul style="list-style-type: none">• Cut: it switches from one event to another instantly• Mix: creates a cross-fade between the two events where the incoming event merges and replaces the outgoing event• V: the outgoing event fades to black and the incoming event fades in (Fade and Fade or V-Fade).• C.F: the outgoing event switches to black and the incoming event fades in (Cut and Fade).• F.C: the outgoing event fades to black and the incoming event appears instantly (Fade and Cut).
Duration	Type the total amount of time allocated for the transition to complete.

- 4 Under **Manual Graphic Transition**, configure how the manually controlled graphic events (Graphic and External Keyer buttons) on Channel Control page are handled:

Field	Description
Fade In	Type the time period over which the graphic appears on screen when the event is activated.
Fade Out	Type the time period over which the graphic disappears from screen when the event is deactivated.
Duck	Select how much to reduce the level of the background audio (in decibels).

Field	Description
Preset	Select how much to increase the level of the foreground audio (in decibels).
Opacity	Select the percentage of opacity between 0% (fully transparent) to 100% (fully opaque).

- 5 Under **Manual Voiceover Transition**, configure how the manually controlled voiceover event (Audio) is handled:

Field	Description
Fade In	Type the time period over which the volume of the voiceover event is raised to 100% when the event is activated.
Fade Out	Type the time period over which the volume of the voiceover event is lowered to 0% when the event is deactivated.
Duck	Select how much to reduce the level of the background audio (in decibels).
Preset	Select how much to increase the level of the foreground audio (in decibels).

- 6 Under **Manual Logo Transition**, configure how the manually controlled logo events (Logo 1 and Logo 2 buttons) are handled:

Field	Description
Fade In	Type the time period over which the logo appears on screen when the event is activated.
Fade Out	Type the time period over which logo disappears from screen when the event is deactivated.
Opacity	Select the percentage of opacity between 0% (fully transparent) to 100% (fully opaque).

- 7 Continue configuring other settings on the other tabs or click **Update Channel Type**.

Configuring the SCTE-104 settings for the channel type

The SCTE-104 standard allows you to receive trigger messages from the audio or video feed that flag the start and end points for commercial breaks. It allows you to receive trigger messages in the SDI (Serial Digital Interface) signal that you can use to control the playlist.

To configure the SCTE-104 settings:

- If you are continuing to configure a selected channel type, skip to step 2. To open the Channel Settings page:
 - In the top menu, click **Settings**.
 - In the menu pane, click **Channel Types**.
 - Under **Select Channel Type**, click the name of the channel type you want to change.
- Click the **SCTE-104** tab.

- 3 Select the **Act upon SCTE-104 splice request triggers** check box to execute and log received SCTE-104 splice messages. Clear the check box to ignore and not log the splice messages.
- 4 Select the **Block all SCTE-104 messages from being passed-through** check box to prevent all SCTE-104 messages from being sent through the PGM output on the SSP-3801 card to other downstream equipment. Clear the checkbox to allow SCTE-104 messages to be sent through the PGM output.
- 5 Continue configuring other settings on the other tabs or click **Update Channel Type**.

Specifying the router sources

The Router Configuration tab contains the list of router sources that can be used to configure the source events. The list of router sources and their mnemonics are obtained from the devices configured with router systems when their SSP-3801 cards are registered as a devices with GV Stratus Playout and the Sync Source Mnemonics button is clicked. For more information, see [Configuring the router for source events](#) on page 42.

Once you obtain the list of router sources that are available from the device, you can specify up to 16 router sources which can be chosen when you configure a source event in a schedule. The router sources are specified by assigning a router source to a box on the Router Configuration tab.

To configure the router sources:

- 1 If you are continuing to configure a selected channel type, skip to step 2. To open the Channel Settings page:
 - In the top menu, click **Settings**.
 - In the menu pane, click **Channel Types**.
 - Under **Select Channel Type**, click the name of the channel type you created for devices connected to a router.
- 2 Click the **Router Configuration** tab.
- 3 Assign a router source to each box as required. Each box represents a router source made available for a source event. To assign the router sources:
 - Click the box for the box you want to configure.
 - In the **Select Device** list, click one of the devices that is configured with a router.
 - Click the router source you want to assign to the box.
 - Click **Select**.
 - Repeat for each router source you want available.
- 4 Click **Update Channel Type**.

Editing media locations

To edit a media location:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Types**.
- 3 Under **Select Channel Type**, click the name of the channel type you want to change.
- 4 Click the **Media Locations** tab.

- 5 In the **Media Locations** section, select the location and click **Edit**.
- 6 In the **Edit Media Location** dialog box, change the URI address.
- 7 Click **Create**.
- 8 Click **Update Channel Type**.

Deleting media locations

To delete a media location:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Types**.
- 3 Under **Select Channel Type**, click the name of the channel type you want to change.
- 4 Click the **Media Locations** tab.
- 5 In the **Media Locations** section, select the location that you want to delete.
- 6 Click **Delete**. The media location is removed from the list; however, this does not delete the media file itself from its location.
- 7 Click **Update Channel Type**.

Editing media credentials

To edit a media credential:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Types**.
- 3 Under **Select Channel Type**, click the name of the channel type you want to change.
- 4 Click the **Media Locations** tab.
- 5 In the **Media Credentials** section, select the credential and click **Edit**.
- 6 In the **New Media Credentials** dialog box, change the credential settings.
- 7 Click **Save changes**.
- 8 Click **Update Channel Type**.

Deleting media credentials

To delete a media credential:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Types**.
- 3 Under **Select Channel Type**, click the name of the channel type you want to change.
- 4 Click the **Media Locations** tab.
- 5 In the **Media Credentials** section, select the credential you want to delete.
- 6 Click **Delete**.
- 7 Click **Update Channel Type**.

Configuring channels

Instead of configuring channels individually, GV STRATUS Payout uses channel types to define settings across a number of channels with common characteristics. A channel type defines settings such as off air behavior, media locations and credentials, and transition defaults, for example. All the channels configured with the channel type inherit the collection of settings from that channel type. Any changes made to the channel type are then also consistently applied to all the channels in the group. Only the name, location and assigned device are unique to the channel itself.

GV STRATUS Payout has one pre-configured channel type called Default which is automatically assigned to new channels. If all your channels use the same settings, then the Default channel type can be configured to suit those needs. Otherwise, you can create as many channel types as you require.

Channel Settings menu item

Settings page

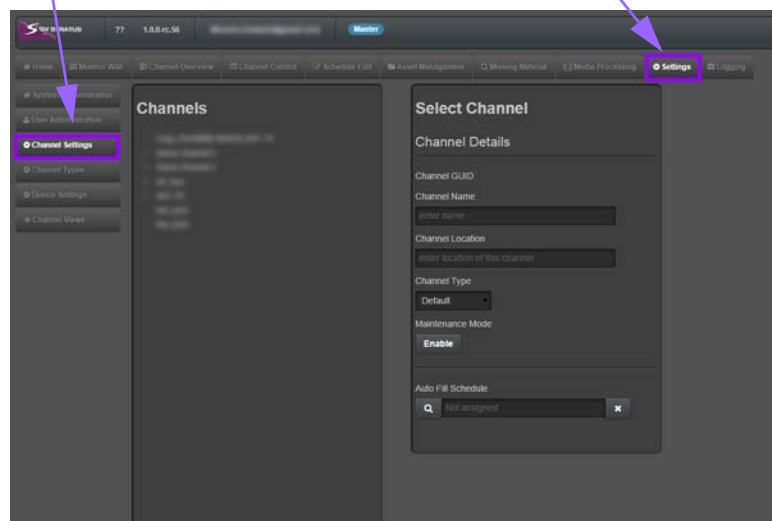


Fig. 2-4: Example of the Settings > Channel Settings

About channel hierarchies

Channels can be organized into a hierarchical structure so that changes made at the upper levels are propagated down to their associated channels without losing changes made locally on those channels. For example, a network channel can determine the playlist for the day. The playlist consists of several schedules with time slots left for local programming and commercials. As shown in Figure 2-5, the network propagates the playlist down to its associated regional branches which in turn propagate the playlist to their associated city branches. The regions insert their content into the designated time slots in the schedules and the changes are propagated to the cities, which in turn insert their own content. Any changes made to the playlist by channels higher in the hierarchy (parent channels) are automatically communicated to the lower channels (child channels) and updated on their devices. Changes are not propagated back up the hierarchy. If a channel is both a parent and a child like the regional branch in Figure 2-5, any change is propagated down to its child channels (city branches) but not up to its parent (network branch).

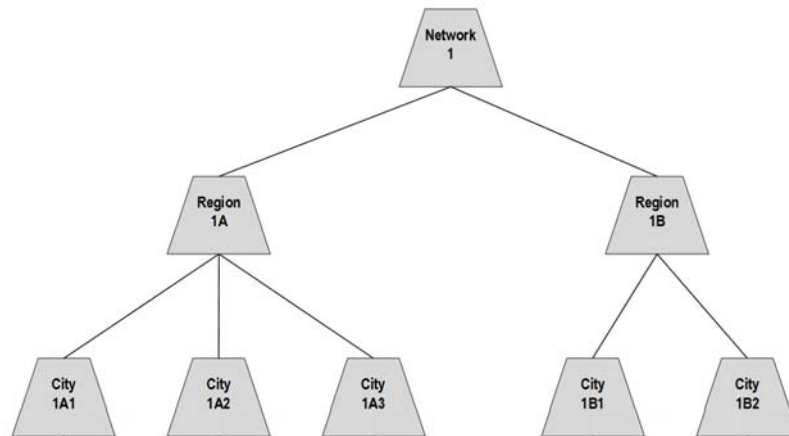


Fig. 2-5: Example of a channel hierarchy

Creating a new channel

Instead of configuring channels individually, GV STRATUS Payout uses channel types to define settings across a number of channels with common characteristics. When a channel is created, it is automatically assigned to the channel type called Default. You can change the channel type when you configure the Channel Details for the new channel. For more information about channel types, see [Creating a new channel type](#) on page 22.

To create a new channel:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Settings**.
- 3 Click **New Channel**.
- 4 In the **Enter Channel Name** box, type the name you want to give to the channel.
- 5 Click **Create**.
- 6 In the **Channels** list, click the name of the channel that you created.
- 7 In the **Channel Details** section, complete the basic information for the channel:
 - In the **Channel Location** box, type a label which can be used to identify the channel location or region, or any other useful label (optional).
 - In the **Channel Type** list, select the channel type that you want to assign to the channel. The channel type applies a set of defined settings to the channel. For more information, see [Creating a new channel type](#) on page 22.
 - For **Maintenance Mode**, click **Enable** if you want to prevent SSP-3801 alarm notifications from appearing in GV STRATUS Payout and on-air failures from appearing in the daily statistics. The alerts are still visible in the card's web interface.
 - In the **Auto Fill Schedule** section, click **Load** if you want to choose a schedule from which approximately 200 events are added to the playlist. If the schedule contains less than 200 events, the schedule is repeatedly appended to the playlist until it contains at least 200 events. The Auto Fill Schedule feature is used mostly to automatically fill the playlist with events to help you perform tests before launching the channel.

- 8 Click **Update Channel**.
- 9 Assign a device to the channel, as required. For more information, see [Setting up devices in GV STRATUS Playout](#) on page 39.

Modifying channel details

To update channel details:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Settings**.
- 3 In the **Channels** list, click the name of the channel that you want to modify.
- 4 In the **Channel Details** section, complete the basic information for the channel:
 - In the **Channel Name** box, type a name for the channel.
 - In the **Channel Location** box, type a label which can be used to identify the channel location or region, or any other useful label (optional).
 - In the **Channel Type** list, select the channel type that you want to assign to the channel. The channel type applies a set of defined settings to the channel. For more information, see [Creating a new channel type](#) on page 22.
 - For **Maintenance Mode**, click **Enable** if you want to prevent SSP-3801 alarm notifications from appearing in GV STRATUS Playout and on-air failures from appearing in the daily statistics. The alerts are still visible in the card's web interface.
 - In the **Auto Fill Schedule** section, click **Load** to choose a schedule that will be repeatedly appended to the playlist or click **Clear** to remove an existing schedule.
- 5 Click **Update Channel**.

Creating a channel hierarchy

Channels can be organized into a hierarchical structure so that changes made to the playlist at the upper levels are propagated down to their associated channels without losing changes made locally on those channels. For more information on channel hierarchies, see [About channel hierarchies](#) on page 32.

To create a channel hierarchy, you create a channel and then create channels below it. This creates a parent-child relationship between the channel (parent) and the channels created beneath it (children). When you append a schedule to the parent channel, it immediately propagates the change down to the child channels, therefore inheriting the playlist from the parent. Changes are not propagated back up the hierarchy so changes on a child channel do not affect the parent channel. For multiple levels, you create the levels one at a time from the top level down. Each time you need to create another level, you select a parent channel and create the children below it.

To create a channel hierarchy:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Settings**.
- 3 In the **Channels** list, click the name of the channel that you want to designate as the top level channel.
- 4 Click **New Child Channel**.

- 5 In the **Create New Child Channel** dialog box, type a name for the channel.
- 6 Click **Create**.
- 7 In the **Channels** list, click the name of the child channel you created.
- 8 In the **Channel Details** section, complete the basic information for the channel:
 - In the **Channel Location** box, type a label which can be used to identify the channel location or region, or any other useful label (optional).
 - In the **Channel Type** list, select the channel type that you want to assign to the channel. The channel type applies a set of defined settings to the channel. For more information, see [Creating a new channel type](#) on page 22.
 - For **Maintenance Mode**, click **Enable** if you want to prevent SSP-3801 alarm notifications from appearing in GV STRATUS Playout and on-air failures from appearing in the daily statistics. The alerts are still visible in the card's web interface.
 - In the **Auto Fill Schedule** section, click **Load** to choose a schedule that will be repeatedly appended to the playlist or click **Clear** to remove an existing schedule.
- 9 Click **Update Channel**.
- 10 Assign a device to the channel, as required. For more information, see [Setting up devices in GV STRATUS Playout](#) on page 39.

Implementing high availability for channels (channel failover)

To provide high availability for a channel, you can have two channels set up as a main and backup pair. Each channel is assigned to a device to support failover between the devices in case of a card failure or other failover condition on the on air channel.

The channels set up in a main and backup pair are identified by the following:

- The main and backup channels have the same name, but “-Backup” is appended to the backup channel's name.
- A small callout appears beside the channel's name above the channel grid on the Channel Control page to indicate if the channel is the main or the backup.

For more information on creating a main and backup pair, see [Setting up backup channels for failover](#) on page 36.

The channel on air is referred to as the active channel. The active channel, whether it is the main or the backup, is identified on both the Channel Overview and the Channel Control pages by a green indicator in the first column of the Channels list. If a failover was triggered, the indicator moves from one to the other; for example, it moves from the main channel to the backup to show that the backup channel is now the active channel and is on air.

The SSP-3801 cards associated to the devices should be connected to an HCO device, which provides an automatic method for managing the failover between the devices, or other system which handles the routing of the playout from the main to the backup. When the SSP-3801 cards associated to the devices are connected to an HCO device and they are configured in Auto Failover Mode, then the HCO device will automatically perform the failover to the backup channel when a failover condition occurs on the active channel. You can, however, override the HCO device by performing a manual failover. If the SSP-3801 cards associated to the devices are not connected to an HCO device, then the procedure for

handling the failover depends on how your system is configured and may require that you perform the failover manually from the Channel Control page by using the Failover button.

When an HCO device is connected, an HCO button appears beside the channel's name above the channel grid on the Channel Control page. The HCO button indicates that an HCO device is connected to the devices, but it also controls whether or not the HCO is in Manual or Auto Failover Mode. The HCO device should be in Auto Failover Mode so it can automatically perform the failover from the main device to the backup when a failure condition occurs. If it is in Manual Failover Mode, the button appears as "HCO: Manual". For more information about configuring an HCO device with the SSP-3801 cards, see the SSP-3801 card documentation set.

For more information on performing a manual failover, see [Performing a manual failover to a backup channel](#) on page 88 and [Resynchronizing a backup channel](#) on page 88.

Setting up backup channels for failover

To provide high availability for a channel, you can create two channels with one serving as the backup for the other with or without using an HCO device, which can provide an automatic method for managing the failover between the devices. For more information, see [Implementing high availability for channels \(channel failover\)](#) on page 35.

Note: The SSP-3801 card is equipped with a mechanical bypass relay which sends the SDI IN A signal directly to the SDI Out (PGM) in cases of power loss, card failure or a manual bypass command. Although some disturbance in the payout may occur, the bypass relay allows time for the failover to be performed without a complete loss of signal.

To set up a backup for a channel:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Settings**.
- 3 Select the channel which will be designated as the main channel. For more information on creating channels, see [Creating a new channel](#) on page 33.
- 4 Click **New Backup Channel**. A channel with the same name appended with "-Backup" is created underneath the main channel.
- 5 Install and configure a main and backup pair of SSP-3801 cards and also the HCO device, if required.
- 6 Register the main SSP-3801 card as device. When you configure the device, select the name of the main channel in the Assigned Channel list. For more information about creating a device, see [Setting up devices in GV STRATUS Payout](#) on page 39.
- 7 Register the backup SSP-3801 card as device. When you configure the device, select the name of the backup channel in the Assigned Channel list.

About off air behavior

The Off Air Behavior settings define what happens if there is no playlist, you force the channel off air, or something goes wrong during the broadcast such as a loss of media, an empty playlist, a missing asset, or a hardware or software crash, for example. The Off Air Behavior settings are configured in the Basic Settings of the channel type. To configure the

settings, see [Configuring the basic settings for the channel type](#) on page 24.

When the channel encounters an off-air situation, one of the following occurs:

- If the channel was forced off air and no primary events are available in the playlist, the configured action in the On Initial Failure list is triggered immediately.
- If no primary event is on air but primary events are available in the playlist, there is a 3 second delay before the configured On Initial Failure action is triggered. During the first 2 seconds of the delay, the last frame of the last played clip remains on air. This allows time for the channel to resume the playout, if possible. If the channel is unable to resume playout after 2 seconds, it switches to a black screen for 1 second before triggering the configured On Initial Failure action.

The On Initial Failure action can be configured to output a black screen, output a live feed, or output a full-screen slide that announces that the broadcast is off-air. The On Initial Failure action can activate even in the event of a complete hardware or software crash on the device assigned to the channel.

If the off-air situation is still not resolved 30 seconds after the On Initial Failure action was triggered, the action selected in the If Recovery Not Possible list is applied. If a primary event is pending such as a failed event is being restarted, the card will delay triggering the If Recovery Not Possible action for up to 30 seconds to allow the possibility of a successful resumption of the playout.

Grouping channels into a view

A view is a collection of channels that are viewed as a group on the Monitor Wall, Channel Overview, and Channel Control pages. The configuration for the view determines which channels are included in the view, which user groups have access to the view, and what functionality is available on the Monitor Wall, Channel Overview, and Channel Control pages. The configuration also includes how the timeline is displayed on the Channel overview page by default and whether or not the secondary events are displayed on the Channel Overview and Channel Control pages by default.

GV STRATUS Playout provides a default view called All Channels which displays all the configured channels, but creating separate views provides a quick way to see a targeted subset of channels. For example, if an operator is monitoring a set of five channels, you can create a view containing those channels so the operator does not have to repeatedly scroll through all the channels to locate the ones of interest.

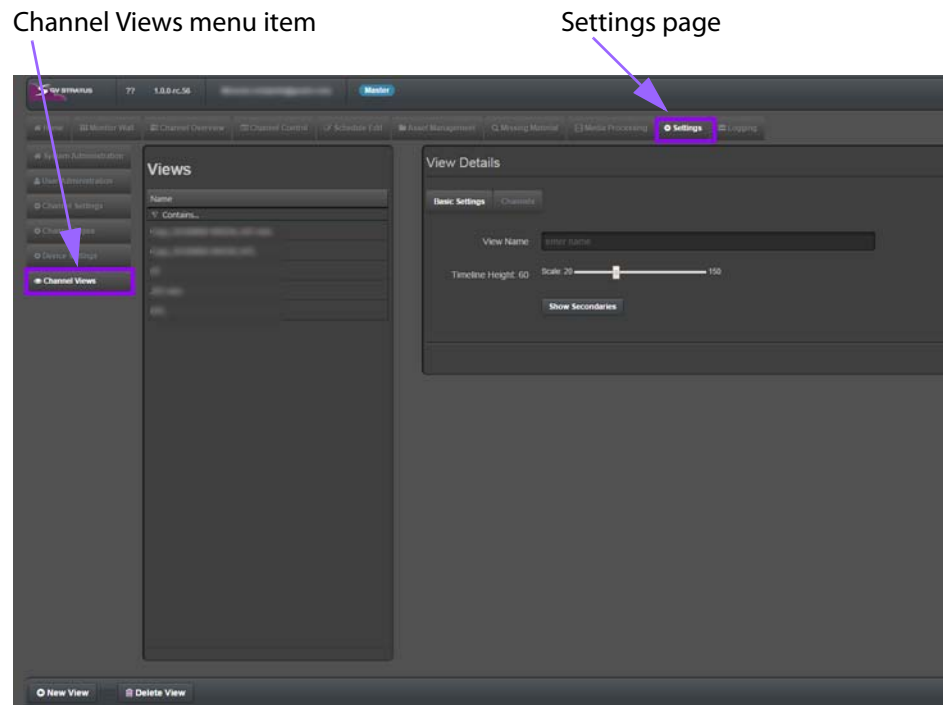


Fig. 2-6: Example of the Settings > Channel Views

Creating a new channel view

A view is a collection of channels that are viewed as a group on the Monitor Wall, Channel Overview, and the Channel Control pages. A view is also configured with a channel designated as the Primary Channel which is automatically opened in the Channel Control page when an operator switches to that page after having the view selected in the Monitor Wall or the Channel Overview. The primary channel is usually the parent channel in a channel hierarchy, but any channel can be selected according to your preference. For more information on channel hierarchies, see [About channel hierarchies](#) on page 32.

Views are assigned to user groups so that only members of those user groups are able to display the view on the Monitor Wall, Channel Overview, and Channel Control pages.

To create a view:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Views**.
- 3 Click **New View**.
- 4 In the **Create New View** dialog box, type a name for the view.
- 5 Click **Create**. The new view appears in the **Views** list.
Configure the view by entering the following information in the right pane.
- 6 Click the **Basic Settings** tab.
- 7 In **Timeline Height**, drag the slider to specify the scale of the timeline on the Channel Overview.

- 8 To display the secondary events in the timeline in the Channel Overview page by default, click **Show Secondaries**. When the button is green, the feature is enabled.
- 9 Click the **Channels** tab and select channels to be included in the view:
 - To select specific channels, click **Select Channels**. In the **Select Channels** dialog box, click the channels you want to include in the view and click **Select**.
 - To remove channels from the list, click the channels that you want to remove and click **Remove Selected**.
 - To select all the available channels, click **Add All**.
 - To remove all the channels currently in the view, click **Remove All**.
 - To reorder the channels, click the channel that you want to move and click **Move Up** or **Move Down** to choose the position of the channel in the list. Repeat until the list is in the desired order.
- 10 In the **Primary Channel** list, click the name of the channel which is displayed by default when you open the Channel Control page with this view selected on the Monitor Wall or Channel Overview.
- 11 In the **User Groups** section, select the user groups that will be able to have the view available on the Monitor Wall, Channel Overview, and the Channel Control pages:
 - To select the user groups, click **Select User Groups**. In the **Select User Groups** dialog box, click the user group you want to include and click **Select**. Repeat for each user group you want to add to the list.
 - To remove a user group from the list, click the user group that you want to remove and click **Remove Selected**.
 - To select all the available user groups, click **Add All**.
 - To remove all the user group currently in the list, click **Remove All**.
- 12 Click **Update View**.

Deleting a view

To delete a view:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Views**.
- 3 In the **Views** list, click the view that you want to delete.
- 4 Click **Delete View**.
- 5 In the **Delete View** dialog box, type the code from the left box into the right box to confirm that you want to delete the view. The code changes to green when it is written correctly.
- 6 Click **Yes**.

Setting up devices in GV STRATUS Playout

When you create a device, you are creating a record for an SSP-3801 card or an application in GV STRATUS Playout. Once the card or application is registered, it brings the card or application under management by GV STRATUS Playout. The card or application sends its status up to GV STRATUS Playout so you can easily monitor its health and be notified to any

alerts which may be occurring.

When you register an SSP-3801 card as a device, the device can then be assigned a specific channel and begin playout as soon as a schedule is appended to it and the first event is able to play. You can quickly view the system and input alerts listed on the Device Settings page and launch the card's web interface directly from the page. The overall health of the device is also displayed on the Monitor Wall, Channel Overview, and Channel Control pages. You can also prevent the card from raising alerts in GV STRATUS Playout by placing it in maintenance mode, which will prevent it from raising alerts.

When you register other applications as devices such as the GV STRATUS Playout Gateway and the File Processing Node, you do not assign the device to a channel. GV STRATUS Playout simply monitors its status and displays an alert if communication fails with the application.

When you create a device, the account remains in a pending state until the registration is completed from the card's or application's side. If the registration has not been completed after 5 minutes, the device account is deleted.

Device Settings menu item

Settings page

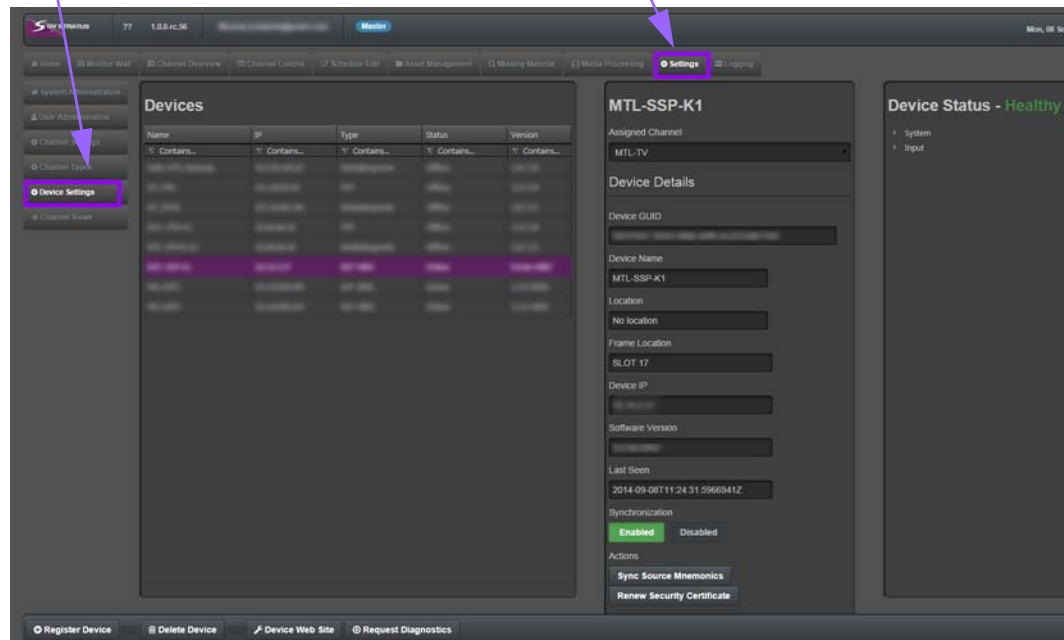


Fig. 2-7: Example of the Settings > Device Settings page

Creating a device

When you create a device, you create a record for an SSP-3801 card or an application in GV STRATUS Playout. Once the card or application is registered, it brings the card or application under management.

To create a record for a device:

- 1 In the top menu, click **Settings**.

- 2 In the menu pane, click **Device Settings**.
- 3 Click **Register Device**.
- 4 In the **Enter Device Name** box, type a name to identify the device.
- 5 Click **Create**. The name of the device that you created should be highlighted in the **Devices** list.
- 6 Copy the key in the **Ready to Connect** section.
- 7 Complete the registration through the card's or application's interface.
 - For the SSP-3801 card, use the card's web interface to view its System Identity settings and register the card. For more information, see the SSP-3801 Installation & Configuration Guide.
 - For the File Processing Node, see [Converting media using the File Processing Node application](#) on page 61.
 - For the GV STRATUS Playout Gateway, see [Registering media and importing schedules using the GV STRATUS Playout Gateway](#) on page 53.

Once the card or application is registered, the **Ready to Connect** section disappears from the **Device Details** pane. The device account remains in a pending state until the registration is completed from the card's or application's side. If the registration has not been completed after 5 minutes, the account is deleted.

- 8 If you are registering a SSP-3801 card, the device must be assigned to a channel. In the **Assigned Channel** list, click the channel you want to assign to the card.
The device is created with default values. To change the values, see [Viewing and updating device details](#) on page 41.

Viewing and updating device details

Most of the information listed under Device Details is obtained from the card or application registered with the device.

To update the device details for a card:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Device Settings**.
- 3 In the **Devices** list, click the name of the device that you want to update.
- 4 In the **Assigned Channel** list, click the channel you want to assign to the SSP-3801 card. If the device is registered with an application, the channel is not required.
- 5 In the **Device Name** field, type a name for the device as you want it to appear on the various pages.
- 6 In the **Location** box, type a label which can be used to identify the card's or application's location or any other useful label such as the Densité frame ID if the device is an SSP-3801 card (optional).
- 7 Under **Synchronization**, the buttons indicate whether the device is synchronized with GV STRATUS Playout. To synchronize a device that is disabled, click the **Enabled** button. When the button is green, the device is synchronized.
- 8 Click **Update Device**.

Viewing the status of a device

The SSP-3801 cards feature a comprehensive list of alarms that can raise an alert for the occurrence of an event, a change of status, or of a specific parameter value. These alarms can be configured with different alarm levels. When the card is registered as a device, the state of the alarms is communicated to GV STRATUS Playout. Other devices such as applications registered as a device are simply monitored and an alert is raised if the device goes offline.

The Device Status pane contains a list of the available alerts from the device and displays their current state. The overall health status of the device is determined by whether an alert is being raised on the device or not and its alarm level. A device is considered 'Healthy' if no alerts are occurring. If an alert is raised, the most urgent alarm state is displayed at the top of the Device Status pane. To obtain more details about the specific alert raised, you can click the arrows next to the alarm categories to reveal the lists of specific alerts and their states.

To view the state of a device:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Device Settings**.
- 3 In the **Devices** list, click the name of the device that you want to view.
- 4 View the information provided in the **Device Status** pane. Click the arrows in the pane to reveal the more details.

Configuring the router for source events

A source event is a primary event that streams a live feed from a specified router source supplied via a router connected to both the SDI A and SDI B inputs on a device's SSP-3801 card. For source events to function properly:

- Each device intended to playout source events must have an external video router connected to its associated SSP-3801 card.
- All connected router systems must be of the same type and configured in the same way.
- The source mnemonics must be same across all the devices.

For more information on configuring the router system, see the SSP-3801 documentation.

To configure the router:

- 1 Install and configure a router for each SSP-3801 card that you intend to have playout source events. The configuration of each router system must be the same. For more information on configuring the SSP-3801 card, see the SSP-3801 documentation set.
- 2 Create a channel type for all the channels whose devices are connected to a router. For more information on channel types, see [Creating a new channel type](#) on page 22.
- 3 Create a channel for each SSP-3801 card. Configure each channel with the channel type you created for devices connected to a router. For more information on creating channels, see [Creating a new channel](#) on page 33.
- 4 Register each SSP-3801 card as a device and assign it one of the channels you created for devices connected to a router. For more information on registering devices, see [Creating a device](#) on page 40.

- 5 Once the device are registered, click **Sync Source Mnemonics** from one of the devices connected to a router to obtain the router source mnemonics from the SSP-3801 card.
- 6 Specify the router sources available for the source events. For more information, see [Specifying the router sources](#) on page 30.
- 7 Create a view containing all the channels configured with the channel type you created for devices connected to a router. For more information on creating a view, see [Grouping channels into a view](#) on page 37.
- 8 Add source events to a schedule. For more information, see [Adding a primary event to a schedule](#) on page 94.

Opening a device's web interface

If the registered device is accessible through a web interface, you can launch its interface from the Device settings page.

To view the device's web interface:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Device Settings**.
- 3 In the **Devices** list, click the name of the device that you want to view.
- 4 Click **Device Web Site**.

Configuring the system administration settings

The designated system administrator has full administrative rights the entire system. The System Administration tab contains the global settings for GV STRATUS Playout.

System Administration menu item

Settings page

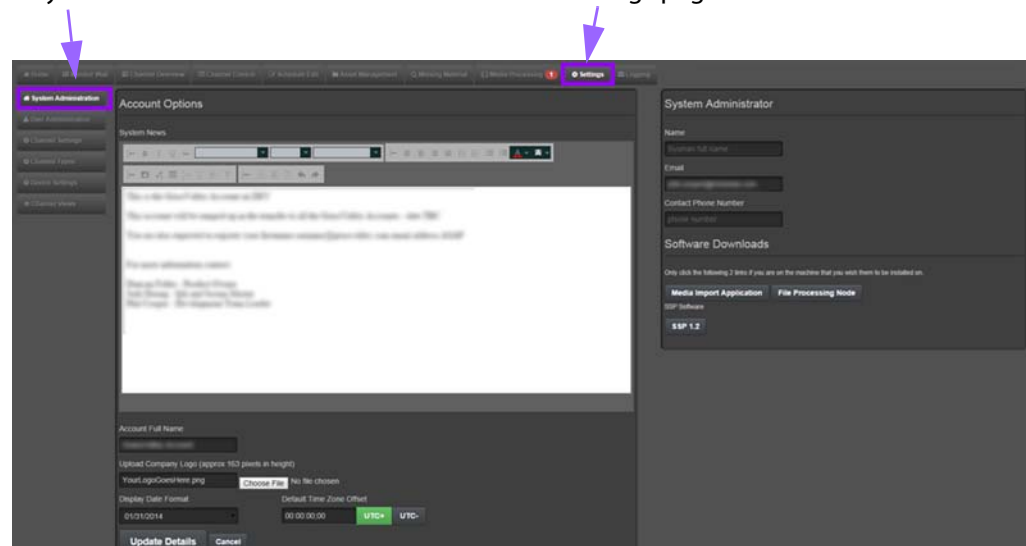


Fig. 2-8: Example of the Settings > System Administration page

Updating the News tab on the Home page

The News tab on the Home page is used by the Administrators to communicate information to all the users logging into GV STRATUS Payout. The System News text box in which you type the message you want to display is a simple HTML editor so it can include other items such as images or links to other web pages, for example.

To update the News tab:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **System Administration**.
- 3 In the **System News** section, type the text that you want to appear on the News tab on the Home page. Use the word processing tools in the toolbars above the text box to format the text.
- 4 Click **Update Details**.

Configuring the Home page banner

The banner on the Home page can be customized to display your logo and account name.



Fig. 2-9: Example of a company logo on the Home page

To configure the banner:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **System Administration**.
- 3 In the **Account Full Name** box, type the name of the site as you want it to appear on the Home page.
- 4 In the **Upload Company Logo** box, click **Choose File** and select the image file that you want to have appear on the Home page. The image should be a maximum of 163 pixels in height and be in the PNG format.
- 5 In the **Display Date Format** field, click the format you want to use to display the date on the Channel Control and Schedule Edit pages.
- 6 Click **Update Details**.

Configuring the contact details for the designated system administrator

To configure the designated system administrator's contact details:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **System Administration**.
- 3 In **System Administrator** section, configure the following:
 - In the **Name** box, type the name of the person designated as the point of contact for system administration issues.

- In the **Email** box, type the email address used to communicate system administration issues.
- In the **Contact Phone Number** box, type the telephone or cellphone number where the designated system administrator can be reached.

4 Click **Update Details**.

3 Registering and Managing Assets

This chapter contains the following sections:

<i>Managing assets</i>	48
<i>Registering media and importing schedules using the GV STRATUS Playout Gateway</i> ..	53
<i>Exporting the As Run logs using the GV STRATUS Playout Gateway</i>	60
<i>Converting media using the File Processing Node application</i>	61
<i>Monitoring and managing media processing jobs</i>	65
<i>Reviewing missing material</i>	68
<i>About Evergreen Content</i>	70

Managing assets

Media files are not stored directly in the cloud as part of the GV STRATUS Payout service. Rather than importing or uploading physical files into the service, the media files are stored on premise and are registered as assets with the service using the GV STRATUS Payout Gateway. An asset is a record for one media file containing its name (house number), title, the locations where it is available for download, and other editable properties. If a media file is registered from multiple locations, the asset is automatically updated with the URLs for each location. For more information on the GV STRATUS Payout Gateway, see [Registering media and importing schedules using the GV STRATUS Payout Gateway](#) on page 53.

The Asset Management page provides an interface from which you can search for assets, view and edit the properties provided for the asset, preview its proxy media file (if available) and view in which schedules the asset appears.

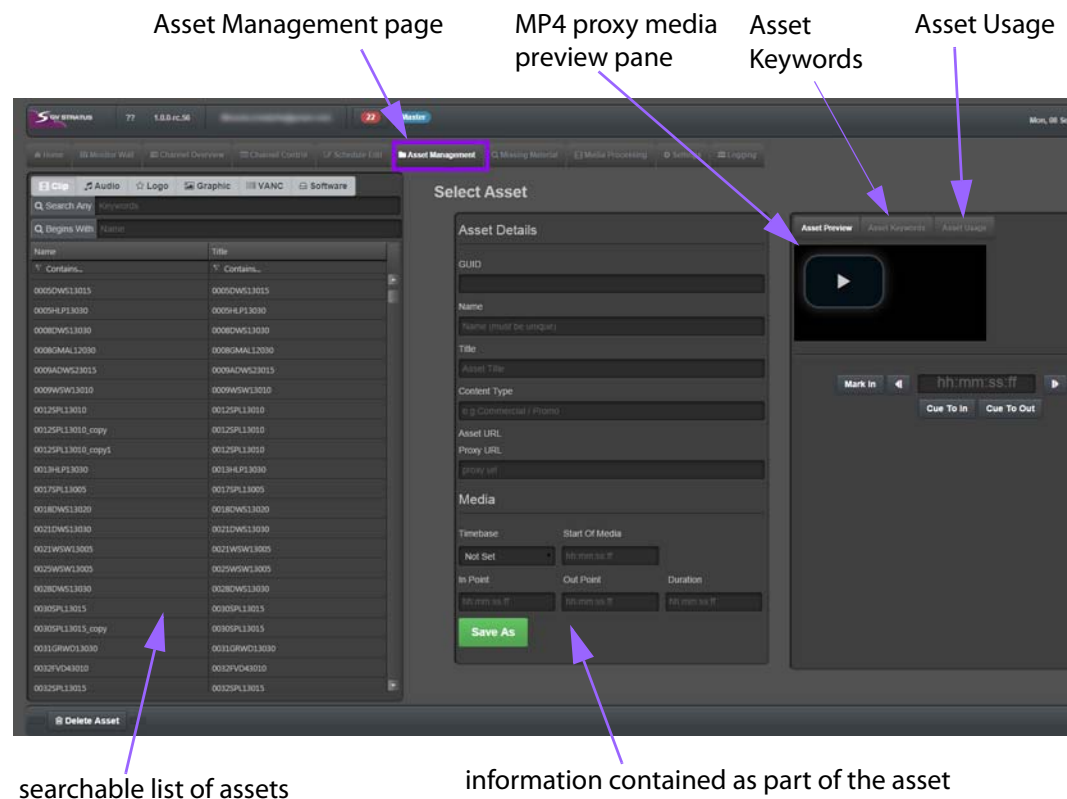


Fig. 3-1: Example of the Asset Management page

Editing an asset

An asset is a record containing information about a media file in the GV STRATUS Payout service. The asset contains a unique identification number (GUID), the name (or house number) for the media file, its title, the URLs for all the locations where it can be found, and properties such as its frame rate.

The GV STRATUS Playout Gateway will automatically create the asset when it registers the media file with the service. When a media file is registered, the file name minus the extension is compared to the asset names. If the file name matches the name of an existing asset, then the URL for its storage location is added to the existing asset. For example, if you register a media file called HN000123.mxf, it will search for an asset with the name "HN000123". If it finds an asset of that name, then the URL of the newly registered media file is added to the asset. For more information on the GV STRATUS Playout Gateway, see [Registering media and importing schedules using the GV STRATUS Playout Gateway](#) on page 53.

When you edit the properties of an asset in the **Asset Management** page, the changes are only stored in the asset and do not get saved back to the media file.

To edit an asset:

- 1 In the top menu, click **Asset Management**.
- 2 In the left pane, locate and click the asset that you want to modify. For more information on using the search fields, see [Searching for assets](#) on page 51.
- 3 In the **Asset Details** section, change the properties as desired:

Option	Description
Name	Type the name (or house number) of the media file. Make sure that the name matches the file name of the media file to be registered.
Title	Type the descriptive title for the media file.
Content Type	Type a label for the event such as commercial or promo, for example.
Timebase	Click the frame rate for the media file.
Start of Media	Type the timecode for the first frame of the media. The Start of Media (SOM) is the first frame of the media and the clip start timecode is the timecode label associated with that first frame. The clip start timecode may not necessarily start at 00:00:00;00 since many clips may have an offset start timecode; for example, when a show is split into multiple one-hour segments, the second segment may have a clip start timecode of 01:00:00;00.
In Point	Type the timecode for the first frame of the video that should be seen on screen relative to the clip start timecode. Often the In Point value is the same as the Start of Media (SOM); however, some media files may contain unwanted content at the start of the file that should not be displayed. In those cases a In Point timecode can be used to specify that playout should start after that unwanted content. If the In Point and Out Point times are both 00:00:00, the entire media file plays. Note: Illegal drop-frame timecodes are automatically rounded up to the nearest drop-frame timecode value; for example, 00:01:00;00 would be round up to 00:01:00;02.

Option	Description
Out Point	<p>Type the timecode for the last frame of the video that should be displayed on screen relative to the clip start timecode. The End of Media (EOM) is the last frame of video in the media relative to the clip start timecode.</p> <p>Often the Out Point and EOM are the same; however, if the media ends with content that should not be displayed such as black, a Out Point point can be set to ensure the clip ends before the unwanted content is displayed. If the In Point and Out Point times are both 00:00:00, the entire media file plays.</p> <p>Note: Illegal drop-frame timecodes are automatically rounded up to the nearest drop-frame timecode value; for example, 00:01:00;00 would be round up to 00:01:00;02.</p>
Duration	<p>Type the total amount of time allocated for the media file to play.</p> <p>Note: Illegal drop-frame timecodes are automatically rounded up to the nearest drop-frame timecode value; for example, 00:01:00;00 would be round up to 00:01:00;02.</p>

- 4 If the asset contains a MP4 proxy media file and it is accessible, the proxy file will be shown in the preview pane in the **Asset Preview** tab. When the proxy is available, you can do the following:
 - To view the proxy media file, click the **Play** icon. Click in the MP4 proxy media preview pane to start or stop the playback.
 - To jump to a specific timecode, type a timecode relative to the clip start timecode in the timecode field or click in the slider.
 - To move frame by frame through the proxy media file, click the arrow buttons on either side of the timecode field.
 - To set the In Point marker, scroll to the first frame of the video that should be seen on screen and click **Mark In** to transfer the timecode to the **In Point** field. To set the Out Point marker, scroll to the last frame of the video that should be displayed on screen and click **Mark Out** to transfer the timecode to the **Out Point** field.
 - To skip to the existing markers, click **Cue To In** to jump to the In Point marker and click **Cue To Out** to jump to the Out Point marker.
- 5 To add keywords to facilitate searching for the asset when you use the Search Any field, click the **Asset Keywords** tab and type a list of keywords separated by a vertical bar (|).
- 6 Click **Update Asset** to save the changes to the asset or click **Save As** to save a copy of the asset under a different name.

Viewing in which schedule the asset appears

The Asset Usage tab on the Asset Management page displays all the schedules that contain the asset and the time it is scheduled to play.

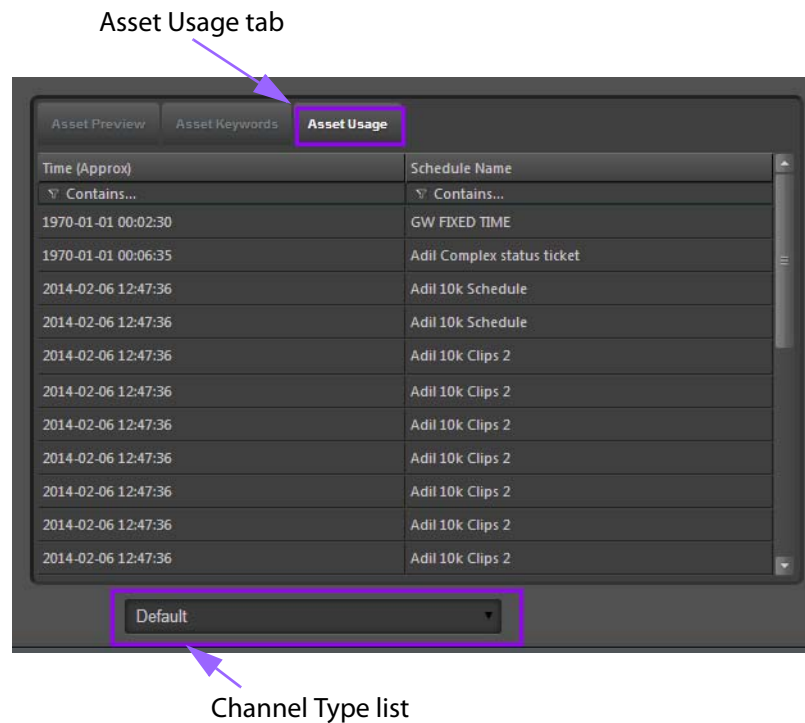


Fig. 3-2: Asset Usage on the Asset Management page

To view the schedules containing a selected asset:

- 1 In the top menu, click **Asset Management**.
- 2 In the left pane, locate and click the asset. For more information on using the search fields, see [Searching for assets](#) on page 51.
- 3 Click the **Asset Usage** tab. The list of schedules containing the asset appears.
- 4 The time in the **Time** column is displayed according to the selected Channel Type. To change the Channel Type, select the desired Channel Type from the list.

Note: To filter the Time column, use the format YYYY-MM-DD HH:MM:SS.

Searching for assets

You can search for assets by using a combination of search features available on the Asset Management page.

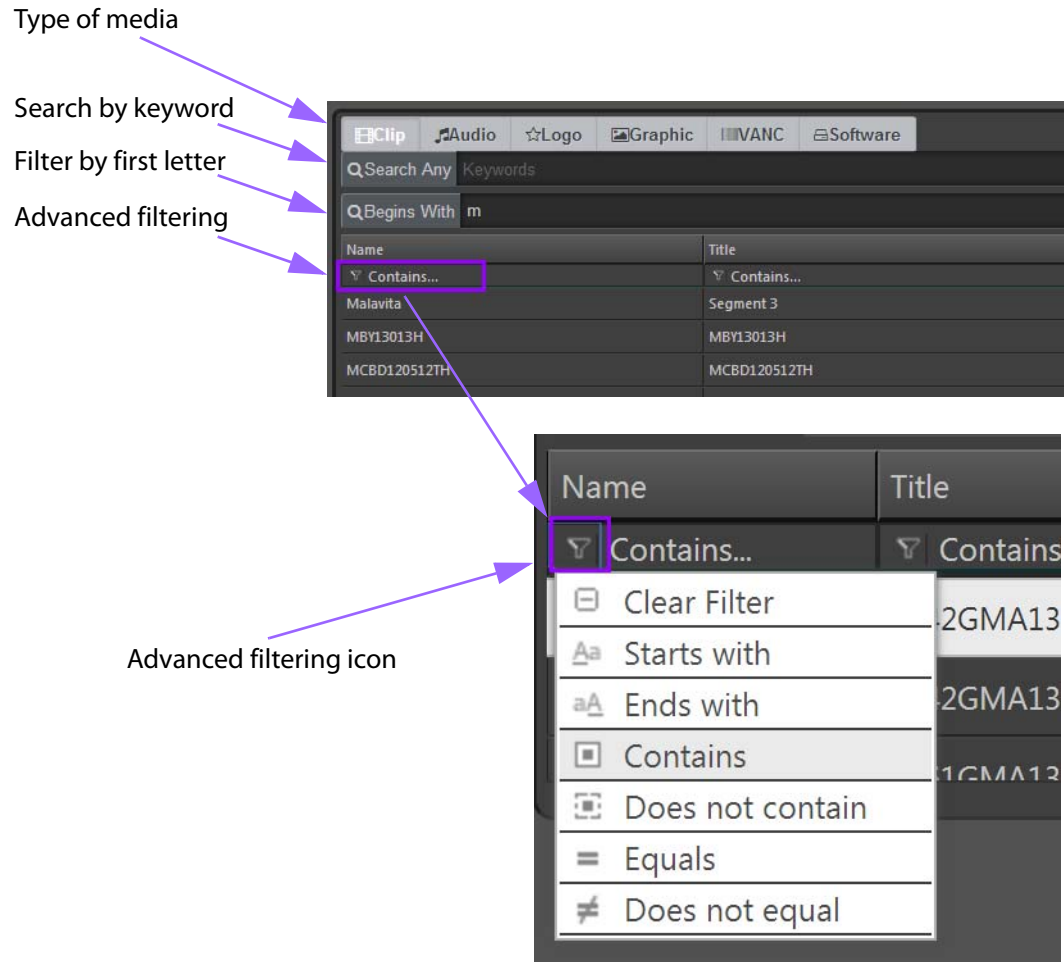


Fig. 3-3: Searching for assets on the Asset Management page

To view assets:

- 1 In the top menu, click **Asset Management**.
- 2 Click the type of media that you want to search.
- 3 Do one of the following:
 - To search using keywords, type a keyword in the Search Any field.
 - To filter the list according to the first character of the asset name, type the character in the Begins With field.
 - To view the entire list, click in either search fields and press **Backspace**.
- 4 To further filter the list in a column, click the advanced filtering icon, select the type of filter you want to use, and type the characters to be used with the selected filter in the field beside the icon.

Deleting an asset

When you delete an asset from the Asset Management page, it removes the record of the media file from GV STRATUS Playout service, including the unique identification number and name for the media file and the URLs for all the locations where it can be found. When

the asset record is deleted, the GV STRATUS Payout service sends a request to an online GV STRATUS Payout Gateway to perform the deletion of the media file. The GV STRATUS Payout Gateway that responds to the request will perform the deletion of the media file if its Allow Media Deletes checkbox is selected and the URL listed in the asset's Media Locations field matches the URI entered in the GV STRATUS Payout Gateway's Inbox Uri field. If they match, then the URL is converted to an SMB address and the GV STRATUS Payout Gateway deletes the media file in that location.

To delete an asset:

- 1 In the top menu, click **Asset Management**.
- 2 In the left pane, click the name of the asset that you want to delete.
- 3 Click **Delete Asset**.
- 4 In the dialog box, type the code from the left box into the right box to confirm that you want to delete the asset. The code changes to green when it is written correctly.
- 5 Click **Yes**.

Registering media and importing schedules using the GV STRATUS Payout Gateway

GV STRATUS Payout Gateway is an application used to register media files as assets and import schedules. It monitors a designated watch folder for new files and then automatically performs the operations as required by the type of file and the application's configuration to enter the data into the GV STRATUS Payout service.

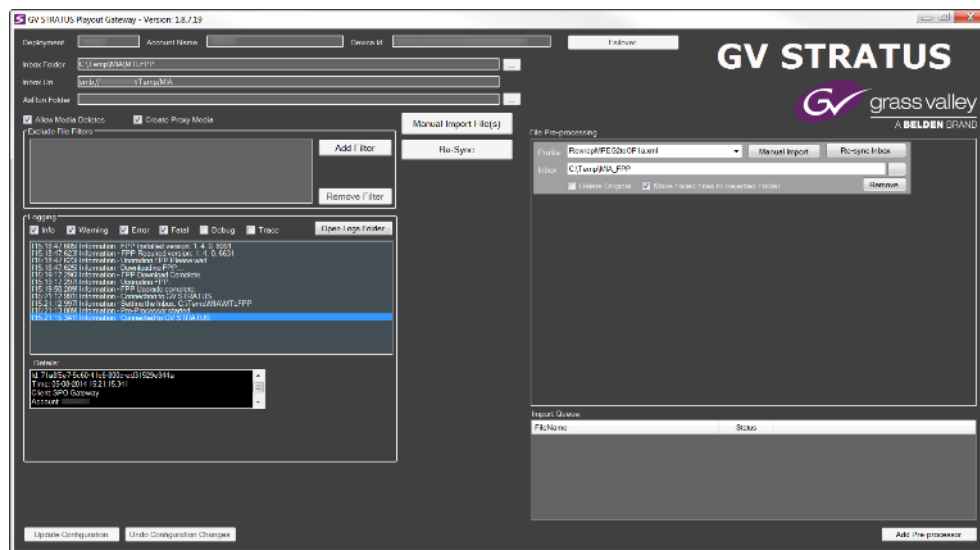


Fig. 3-4: GV STRATUS Payout Gateway

Media files

When a new media file is placed in the watch folder, it is automatically registered in the GV STRATUS Payout service as an asset. It is recommended that you organize your media files in the watch folder in a hierarchy of folders with meaningful names. When the media files

are registered, the folder names are converted into keywords associated to the media files and stored as metadata with the asset. These keywords facilitate the search for media files in the Asset Management page and in the file selection dialog boxes.

To be compatible with the SSP-3801 card, verify the supported formats for media files in the SSP-3801 User Guide. If your media files are not in a compatible format, you can convert the media files to a supported format using the File Pre-processing job that you can add when you configure the watch folder (see [Configuring the watch folder](#) on page 56) or you can use the File Processing Node application (see [Converting media using the File Processing Node application](#) on page 61).

iTX Asset XML

GV STRATUS Playout Gateway includes limited support for importing asset metadata via the import version of the iTX Asset XML schema. When an Asset XML file is placed in the watch folder, the asset metadata is imported and registered as an asset in the GV STRATUS Playout service. For more information on import Asset XML, please refer to the iTX documentation set.

The following Asset XML fields are supported:

- AssetType (only Video, Audio, Graphic, and Logo types are supported)
- Name
- Title
- FrameRate (all are supported)
- InPoint (TimeFormat can be Frames, Miliseconds, Ticks, or Timecode)
- Duration (TimeFormat can be Frames, Miliseconds, Ticks, or Timecode)
- Uid (stored as an external reference in the registered asset)
- MediaLocations: LocationType (only iTX and Proxy are supported) and MediaPaths

iTX XML schedules

GV STRATUS Playout Gateway also supports iTX XML schedules. When an iTXXML schedule (.xml or .itxml) is placed in the watch folder, it is automatically imported, converted into a GV STRATUS Playout schedule, and named according to the schedule name in the iTXXML file (not the file name itself). If a schedule with the same name already exists, the existing schedule is overwritten with the imported schedule. For more information on iTX XML schedules, please refer to the iTX documentation set.

The following iTX event types are supported:

- TXMediaEvent: converts to a Clip primary event
- TXLiveEvent: converts to a Live primary event supplied via the SDI A port on the associated device
- TXCommentEvent: converts to a Comment event
- TXAudioEvent: converts to an Audio Clip secondary event
- TXGraphicEvent: converts to a Graphic secondary event
- TXLogoEvent: converts to a Logo secondary event
- TXVANCEvent: converts to a VANC secondary event

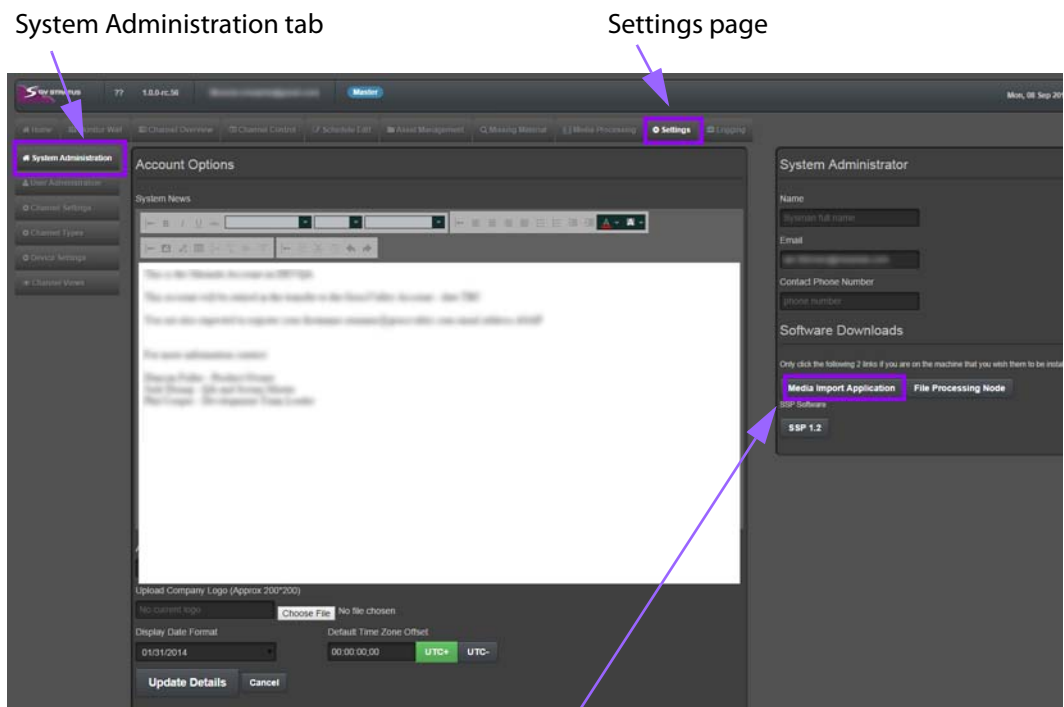
Installing the GV STRATUS Payout Gateway

The GV STRATUS Payout Gateway can be installed on any computer in the network. Once installed, it must be registered as a device in GV STRATUS Payout. The GV STRATUS Payout Gateway instance is monitored by the GV STRATUS Payout service and will raise an alert if it goes offline.

You can install and register GV STRATUS Payout Gateway instances on different computers in your network to monitor multiple watch folders. You may want to set up watch folders on multiple computers to support multiple instances of the File Processing Node application or to import the same media files from different locations. To monitor multiple watch folders, repeat the process for each location. In each location install a GV STRATUS Payout Gateway instance, designate a watch folder, and configure the GV STRATUS Payout Gateway instance to monitor the designated folder.

To install the GV STRATUS Payout Gateway:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **System Administration**.
- 3 Under **Software Downloads**, click the **GV STRATUS Payout Gateway** button.



Download the GV STRATUS Payout Gateway

- 4 If you do not have the listed prerequisite software installed, click **Install** and then install the application. Otherwise, click **launch** to open the GV STRATUS Payout Gateway.
- 5 Before you can proceed, you must register the GV STRATUS Payout Gateway as a device in GV STRATUS Payout, but you do not need to assign it to a channel. For more information, see [Creating a device](#) on page 40. Copy the key provided for the device.
- 6 Once you have created the device in GV STRATUS Payout, you need to provide the key to the GV STRATUS Payout Gateway so it can register itself with the device that you

created. To complete the registration, provide the required information in the **Enter registration code** dialog box:

- In the **Deployment** list, click the name of the deployment to which you are registering the GV STRATUS Payout Gateway.
 - In the **Code** field, paste or type the key provided by GV STRATUS Payout when you created the device.
 - Click **OK**.
- 7 Verify that the registration was completed. In GV STRATUS Payout open the Settings > Device Settings page and find the device you created in the Devices list and verify that it no longer shows as PENDING in the IP column. It should display the IP address of the computer where the GV STRATUS Payout Gateway was installed.

Note: If you intend to create proxy media or convert files into a format supported by the SSP-3801 card, you must also install the File processing Node.

Configuring the watch folder

The watch folder is a folder in your network which stores the media files that are ready to be registered. The watch folder is specified in the Inbox Folder field. The GV STRATUS Payout Gateway monitors that folder for new media files and when files are discovered they are automatically registered as assets in the GV STRATUS Payout service.

The Import Queue displays the status of files being added to the watch folder. As a file is being added, its state will change from "Waiting" as it attempts to access the file to "Complete" when the file has finished being imported into the watch folder. Once the import is complete, the GV STRATUS Payout Gateway begins the process of registering the media file as an asset.

The SSP-3801 cards must be able to access the contents of the watch folder so they can download the media files to their stores for payout. If the SSP-3801 card is unable to access the watch folder from the network, then the media files must be hosted in a web server (or a folder with HTTP or HTTPS access) and its address must be provided in the Inbox Uri field. In particular, if you want to include proxy media with the media files that you register, you must provide HTTP or HTTPS access to the watch folder and point to that folder using the HTTP/S address in the Inbox Uri field.

If you want to exclude certain files or folders from being automatically registered as an asset, you can create a filter using the star character (*) as a wildcard. For example, if you wanted the GV STRATUS Payout Gateway to ignore all the files in a folder called "Unedited", you can create a filter for "**\Unedited*" which would exclude all the files with that pattern in the path.

If the media files are not in a format supported by the SSP-3801 card, you can set up a file pre-processor job to instruct a File Processing Node to convert the media files before they are moved to the watch folder. You can either set up a job to automatically process any file added to a specified folder or you can choose to manually import a file. The file pre-processor job is a request containing a selected profile, the location of the media files to be converted, and the location of the watch folder.

When the GV STRATUS Playout Gateway detects that a file was added to the folder specified in the In Box field or you selected a file by clicking the Manual Import button, the job is sent to an available File Processing Node. The File Processing Node then obtains the media file from the specified folder, processes it according to the selected profile, and then saves the converted file in the watch folder. Once the media file arrives in the watch folder, the GV STRATUS Playout Gateway begins the process to register it as an asset.

Note: If you intend to create proxy media or convert files into a format supported by the SSP-3801 card, the GV STRATUS Playout Gateway must have a access to a File processing Node.

To configure the watch folder:

- 1 Launch the GV STRATUS Playout Gateway.
- 2 In the **Inbox Folder** field, type the path to the folder designated as the watch folder or click the browse button to choose a folder on the network.
- 3 In the **Inbox Uri** field, type the URI (using SMB, HTTP, or HTTPS) to the shared folder or web server for cases when the SSP-3801 card will be unable to access the watch folder from the network. You can also type a path to a shared folder using \\[server][shared folder] and it will be converted to an SMB URI.

Note: If you intend to create proxy media for the media file being registered, the folder specified in the Inbox Folder field must have HTTP or HTTPS access and you must enter its HTTP address in the Inbox Uri field.

- 4 If you want to allow media files to be deleted from the watch folder, select the **Allow Media Deletes** checkbox.
- 5 If you want to automatically create MP4 proxy media for the media files, select **Create Proxy Media**. The GV STRATUS Playout Gateway sends a processing request to an available File Processing Node to produce a proxy copy of the media file and then registers the proxy media file.
- 6 In the **Exclude File Filters** section, you can create filters to exclude certain files or folders from being automatically registered as an asset. To create a filter:
 - Click **Add Filter**.
 - In the dialog box, type the string representing the path to the folder or the file name that you want to exclude using the star character (*) as the wildcard.
- 7 If you want to automatically transcode, trans-wrap, or perform some other processing functions on the media files before they are registered with the GV STRATUS Playout service, click the **Add Pre-processor** button and complete the File Pre-Processing section as required.
 - In the **Profile** list, click the profile appropriate for the conversion that you need to perform. The types of profiles available depend on which profiles were configured on your account.

Note: Do not use a pre-processor to create proxy media files. Use the Create Proxy Media checkbox.

- In the **In Box** field, type the path to the folder from which the pre-processor obtains the media files to be converted or click the browse button to choose a folder on the network.
- If you want to delete the original media files after they have been converted, select the **Deletes Original** checkbox.
- If you want to have any file that fails to be processed moved to a separate folder, select the **Move Failed Files to Rejected Folder** checkbox. When the checkbox is selected and a file fails, the file is moved to the **_REJECTED** folder located in the folder defined in the **Inbox** field of the **File Pre-processing** section. Files stored in the **_REJECTED** folder are not automatically reprocessed or deleted. Once you have identified and fixed the issue that caused the file to fail, move it back to the **Inbox** folder to be processed.

8 Click **Update Configuration**.

Registering multiple media locations in the asset

If you want to register multiple locations for a media file in the asset, you can:

- Manually register the media file from each location.
- Configure a watch folder in the different locations.

When GV STRATUS Playout receives multiple registrations with the same file name, it compiles the registrations under one asset. Therefore, the asset is registered with one media file and a choice of locations from which it is available. The SSP-3801 card will automatically select the most efficient location from which to download the media file.

Importing media files manually into the watch folder

To import a media file:

- 1 Launch the GV STRATUS Playout Gateway.
- 2 Configure the following:
 - If you want to allow media files to be deleted from the watch folder, select the **Allow Media Deletes** checkbox.
 - If you want to automatically create MP4 proxy media for the media files, select **Create Proxy Media**.
- 3 Click **Manual Import File(s)**.
- 4 Select the media files that you want to register.
- 5 Click **Open**.

Synchronizing the registered media files

The **Re-Sync** button launches a process that scans the watch folder and re-registers the media files with GV STRATUS Playout. Synchronizing the watch folder should rarely be required. It might be necessary in cases when media files were added to the watch folder while the GV STRATUS Playout Gateway was offline.

To re-sync the media files:

- 1 Launch the GV STRATUS Playout Gateway.

- 2 Click **Re-Sync**.

Synchronizing the file pre-processing jobs

The Re-Sync Inbox button is used to trigger the GV STRATUS Playout Gateway to reprocesses all the media files in the folder defined in the Inbox field of the File Pre-processing section, except for those in the _REJECTED folder. The GV STRATUS Playout Gateway uses the profile from the job where the Re-Sync Inbox button was clicked and sends new jobs to the queue for each media file in the Inbox folder. As File Processing Nodes become available, they acquire jobs from the queue and begin processing them. Once the converted media files arrive in the watch folder, the GV STRATUS Playout Gateway begins the process to register the new files as assets.

To re-sync the jobs:

- 1 Launch the GV STRATUS Playout Gateway.
- 2 In the **File Pre-processing** section, click **Re-sync Inbox** in the job containing the profile that you want to use.

Note: Do not use a pre-processor to create proxy media files. Use the Create Proxy Media checkbox.

Removing a file pre-processing job

To remove a job:

- 1 Launch the GV STRATUS Playout Gateway.
- 2 Click the **Remove** button in the job instance that you want to delete.

Importing media files manually into the file pre-processing job folder

When you click the Manual Import button, the GV STRATUS Playout Gateway sends a processing request to an available File Processing Node to convert the media file using the selected profile and then save the converted file in the watch folder.

To select a media file to convert:

- 1 Launch the GV STRATUS Playout Gateway.
- 2 Configure the following:
 - In the **Profile** list, click the profile appropriate for the conversion that you need to perform. The types of profiles available depend on which profiles were configured on your account.

Note: Do not use a pre-processor to create proxy media files. Use the Create Proxy Media checkbox.

- If you want to delete the original media files after they have been converted, select the **Deletes Original** checkbox.
- 3 Click **Manual Import**.
 - 4 Select the media files that you want to register.

- 5 Click **Open**.

Performing a failover to the backup (Standby) account

In most instances your account will be set up on a pair of deployments with one acting as the backup (Standby) for the other account (Master) in case a failure. If the Master account experiences failures, the Stratus Monitoring team may perform a failover to the Standby account, in which case the Standby becomes the Master.

When a failover occurs, the instances of the GV STRATUS Playout Gateway which are registered with the original Master account are no longer connected to the active deployment. To switch a GV STRATUS Playout Gateway instance to the new Master account, you must manually perform the failover.

To perform the failover:

- 1 Launch GV STRATUS Playout Gateway.
- 2 Click **Failover**.

Exporting the As Run logs using the GV STRATUS Playout Gateway

Although GV STRATUS Playout Gateway is an application used to register media files as assets and import schedules, it can also be used to export the As Run logs from your account. As Run logs are the records of what played out, meaning events with a Done status, on each channel during a broadcast day. The broadcast day for each channel is determined by its channel type, and is calculated as 24 hours starting from the timecode entered as the Start of Broadcast Day. For more information on channel types, see [Creating a new channel type](#) on page 22.

When the AsRun Folder is configured in the GV STRATUS Playout Gateway instance and GV STRATUS Playout Gateway is running, the As Run logs are exported every hour. In the specified AsRun folder, a folder is created for each active channel into which a file is stored for the As Run log for each broadcast day. Although the As Run History appears on the Channel Control page in the time standard selected in the Channel Type, the time standard in the exported logs is in UTC. The As Run log file uses a standard flat file format with the entries using the following format:

```
start time|event type|name|title|duration|in point|out point|customData|
```

As the As Run logs are exported each hour, that day's file is updated with the new entries. A check is performed 5 hours into the new broadcast day for any events that began the previous day, but ended in the next. If events as such are found, they are added to the previous day's file to ensure that the file is complete. Each file contains the Done events for 24 hours starting from the timecode set as the Start of Broadcast Day in the channel's Channel Type.

For information on installing GV STRATUS Playout Gateway, see [Installing the GV STRATUS Playout Gateway](#) on page 55.

To configure the watch folder:

- 1 Launch the GV STRATUS Playout Gateway.
- 2 In the **AsRun Folder** field, type a path to the folder where you want to store the As Run logs or click the browse button to choose a folder on the network.

3 Click **Update Configuration**.

Converting media using the File Processing Node application

The File Processing Node can perform transcoding, trans-wrapping, and other processing functions for a variety of video, graphic, or audio files. To simplify this complex process, common processing configurations have been developed and offered as a set of profiles from which you can choose instead of attempting to set up the correct configuration for each conversion. For custom profiles, please contact your Grass Valley representative.

Supported Formats

The following table summarizes the media formats that are supported by the File Processing Node and can be converted into the formats supported by GV STRATUS Playout and the SSP-3801 card. To be compatible with the SSP-3801 card, verify the supported formats for media files in the SSP-3801 User Guide. For more information about audio format conversions, please consult your Grass Valley representative.

Table 3-1: Supported media file formats

Format	File Extension	Res.	VBI Data Support	VANC Data Support	Timecode Data Extraction	Aspect Ratio Extraction
MPEG2 Program Stream	.MPG .MPEG	SD/HD	Encoded as active picture (SD Only)	CC (608), AFD stored in MPEG User Data	None	None
MPEG2 Transport Stream	.MPG .MPEG .TS	SD/HD	Encoded as active picture (SD Only)	CC (608), AFD stored in MPEG User Data	None	None
MXF (MPEG2)	.MXF (OP1A/OP1B)	SD/HD	Encoded as active picture (SD Only)	SMPTE 436M	Media Timecode	None
MXF AVC-Intra	.MXF	HD				
XDCam (IMX/D10)	.MXF (SMPTE RDD3)	SD	Encoded as active picture (SD Only)	SMPTE 436M	Media Timecode	None
XDCamHD	.MXF (SMPTE RDD9)	HD	N/A	SMPTE 436M	Media Timecode	None
XDCamHD422	.MXF (SMPTE RDD9)	HD	N/A	SMPTE 436M	Media Timecode	None
DV (DV25)	.MOV .MXF	SD	None	None (MOV) SMPTE 436M (MXF)	Media Timecode	None

Table 3-1: Supported media file formats

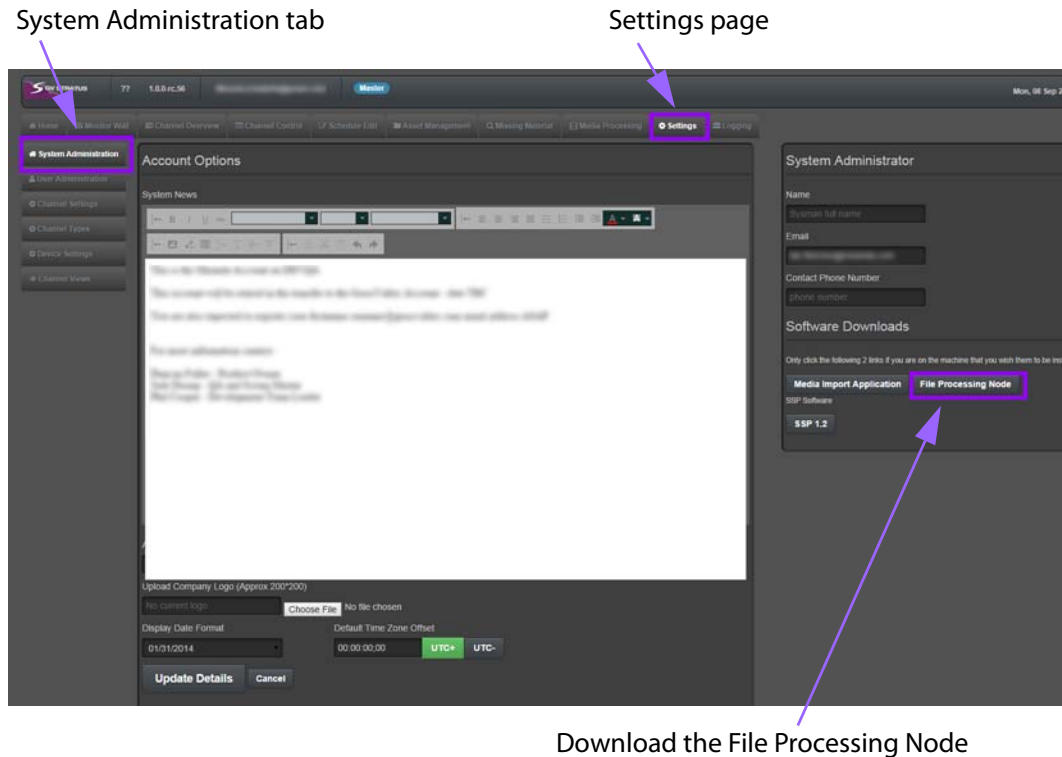
Format	File Extension	Res.	VBI Data Support	VANC Data Support	Timecode Data Extraction	Aspect Ratio Extraction
DVCPPro	.MOV .MXF	SD	Encoded as active picture	None (MOV) SMPTE 436M (MXF)	Media Timecode	None
DVCPProHD (50/100)	.MOV .MXF	HD	N/A	None (MOV) SMPTE 436M (MXF)	Media Timecode	None
Omneon Spectrum/ Mediadeck	.MOV .MXF (OP1A/OP1B)	SD/HD	Encoded as active picture (SD Only)	None (MOV) SMPTE 436M (MXF)	Media Timecode	None
GrassValley GXF	.GXF	SD/HD	Encoded as active picture (SD Only)	SMPTE 360M (RDD9 data not supported)	Media Timecode	None
Leitch/Harris LXF	.LXF	SD/HD				

Installing the File Processing Node application

The File Processing Node application can be installed on any computer in the network. Once installed, it must be registered as a device in GV STRATUS Payout. The File Processing Node application is monitored by GV STRATUS Payout and will raise an alert if it goes offline.

To install the File Processing Node:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **System Administration**.
- 3 Under **Software Downloads**, click the **File Processing Node** button.



- 4 If you do not have the listed prerequisite software installed, click **Install**. Otherwise, click **launch** to open the File Processing Node application.
- 5 Before you can proceed, you must register the File Processing Node application as a device in GV STRATUS Payout, but you do not need to assign it to a channel. For more information, see [Creating a device](#) on page 40. Copy the key provided for the device.
- 6 Once you have created the device in GV STRATUS Payout, you need to provide the key to the File Processing Node application so it can register itself with the device that you created. To complete the registration, provide the required information in the **Enter registration code** dialog box:
 - In the **Deployment** list, click the name of the deployment to which you are registering the File Processing Node application.
 - In the **Code** field, paste or type the key provided by GV STRATUS Payout when you created the device.
 - Click **OK**.
- 7 Verify that the registration was completed. In GV STRATUS Payout open the Settings > Device Settings page and find the device you created in the Devices list and verify that it no longer shows as PENDING in the IP column. It should display the IP address of the computer where the File Processing Node application is installed.

Setting up a job to convert a media file to compatible format

The File Processing Node can run multiple processing jobs in parallel depending on the capabilities of the host computer or you can install and register File Processing Node applications on different computers in the network to build a media rendering farm.

To simplify the process, the complex configurations required to perform various processing functions have been reduced to a set of profiles representing the most common transcoding or trans-wrapping functions. Instead of attempting the configuration for each conversion, you simply set up a job by selecting the media file you wish to convert, selecting the location of the GV STRATUS Payout Gateway's watch folder, and choosing the appropriate profile. If the existing profiles do not meet your needs, please contact your Grass Valley representative about creating a custom profile.

When jobs are created, they are submitted to a processing queue that is monitored by all the registered File Processing Nodes. All the pending and in progress jobs are displayed on the Media Processing page in the GV STRATUS Payout web client. For more information, see [Monitoring and managing media processing jobs](#) on page 65. As a File Processing Node becomes available, it acquires a job from the queue and begins processing it. Each File Processing Node displays the status of the jobs they are processing in the Logging pane.

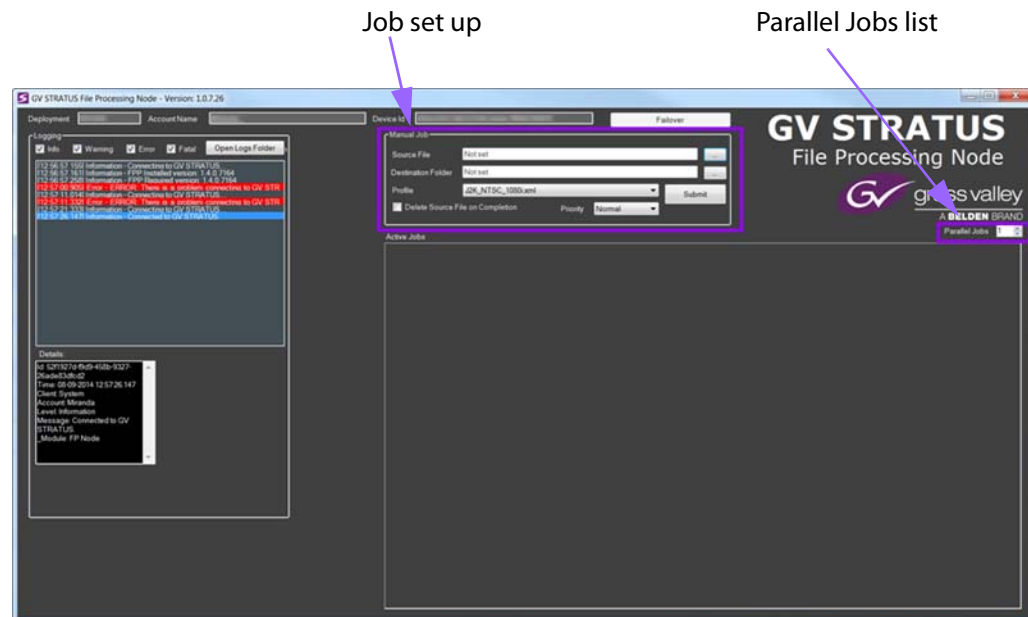


Fig. 3-5: File Processing Node

To set up a job:

- 1 The number of jobs that can be run simultaneously depends on the speed of the host computer. In the **Parallel Jobs** list, select the number of jobs that can be run in parallel.
- 2 Click the browse button for the **Source File** field and select a media file that you want to convert.
- 3 Click the browse button for the **Destination Folder** field and select the folder designated as the watch folder for the GV STRATUS Payout Gateway.
- 4 In the **Profile** list, click the profile appropriate for the conversion that you need to perform. The types of profiles available depend on which profiles were configured on your account.

Note: Do not use a pre-processor to create proxy media files. Use the Create Proxy Media checkbox in the GV STRATUS Payout Gateway.

- 5 If you want the original media file to be deleted after it is processed, select **Delete Source File on Completion**.
- 6 In the **Priority** list, click the level of priority that you want to assign to the job. The priority of the job determines the order the media files are processed by the available File Processing Nodes. High priority jobs are processed first, followed by those set as normal, and then those set as low.
- 7 Click **Submit**.

Performing a failover to the backup (Standby) deployment

In most instances your account will be set up on a pair of deployments with one acting as the backup (Standby) for the other account (Master) in case a failure. If the Master account experiences failures, the Stratus Monitoring team may perform a failover to the Standby account, in which case the Standby becomes the Master.

When a failover occurs, the instances of the File Processing Node which are registered with the original Master account are no longer connected to the active deployment. To switch a File Processing Node instance to the new Master account, you must manually perform the failover.

To perform the failover:

- 1 Launch the File Processing Node.
- 2 Click **Failover**.

Monitoring and managing media processing jobs

If your media files are not compatible with the SSP-3801 card, you can convert them to a supported format using the File Processing Node application (see [Converting media using the File Processing Node application](#) on page 61) or the GV STRATUS Playout Gateway (see [Registering media and importing schedules using the GV STRATUS Playout Gateway](#) on page 53).

The Media Processing page displays any pending or in progress pre-processing jobs originating from the File Processing Node or GV STRATUS Playout Gateway instances registered as devices in your account. As jobs are submitted to the processing queue, they appear in the Media Processing Jobs table. When a File Processing Node becomes available, it automatically selects a job from the processing queue, and the processing status is displayed on the Media Processing page.

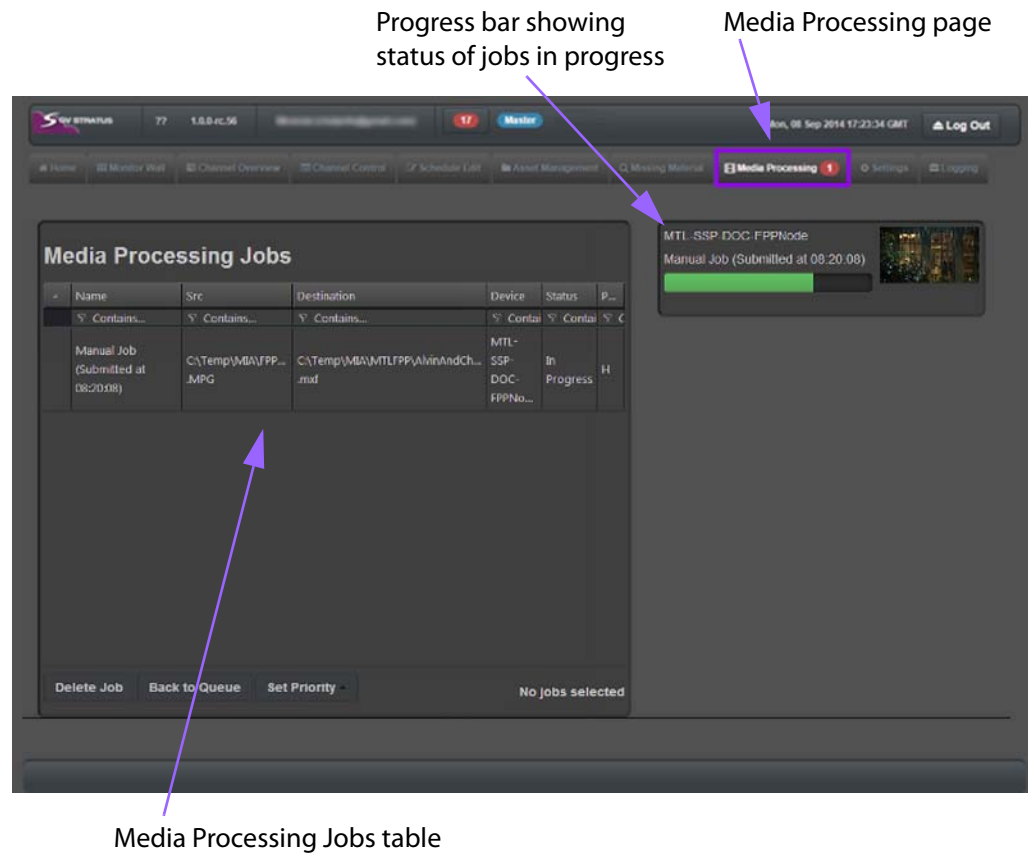


Fig. 3-6: Example of the Media Processing page

To view the media processing jobs:

- 1 In the top menu, click **Media Processing**.
- 2 To filter a column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.

Setting job priority

The priority of the media processing job determines the order the media files are processed by the available File Processing Nodes. High priority (H) jobs are processed first, followed by those set as normal (N), and then those set as low priority (L). Prioritizing the jobs may be useful in cases when a large number of jobs are waiting in the processing queue and certain media files are needed more urgently than the others.

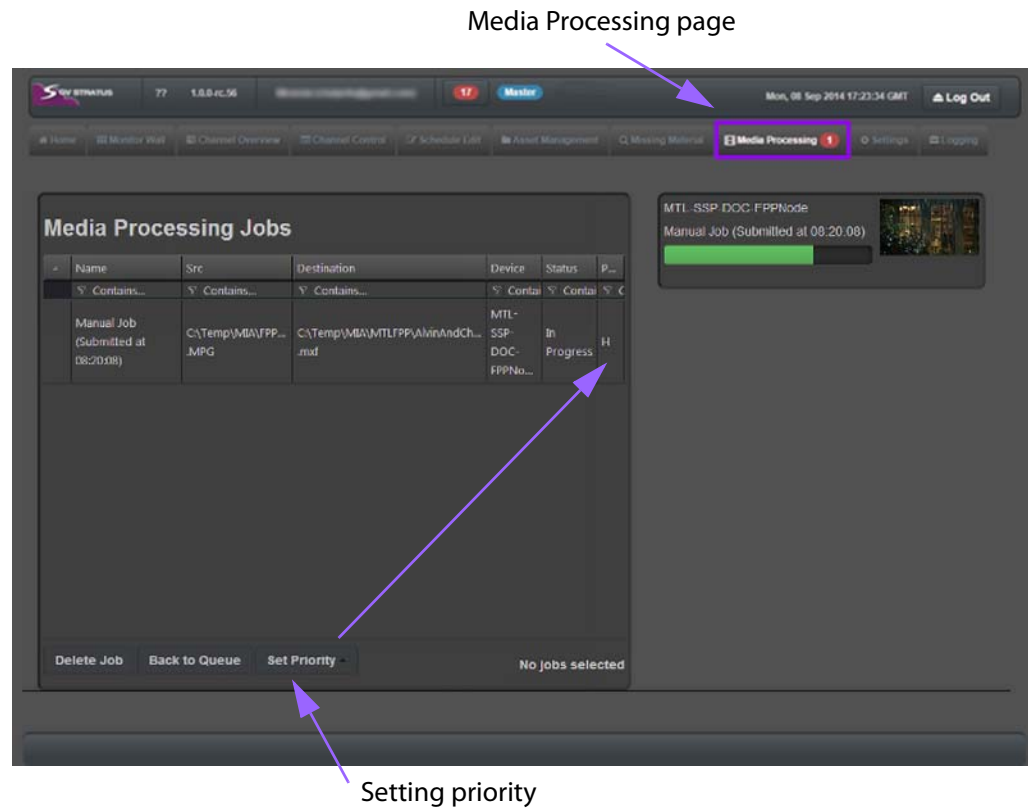


Fig. 3-7: Example of the setting priority for a job on the Media Processing page

To view the media processing jobs:

- 1 In the top menu, click **Media Processing**.
- 2 In the **Media Processing Jobs** table, click the job whose priority you want to modify.
- 3 Click **Set Priority**.
- 4 Click the level of priority to set for the job.

Canceling a job and send it back to the processing queue

When you cancel a job, the File Processing Node that undertook the job stops processing the media file and sends the original job back to the queue. Canceling a job may be useful when you want to liberate a File Processing Node to take a higher priority job or to force the job to a different File Processing Node.

To view the media processing jobs:

- 1 In the top menu, click **Media Processing**.
- 2 In the **Media Processing Jobs** table, click the job that you want to cancel.
- 3 Click **Back to Queue**.

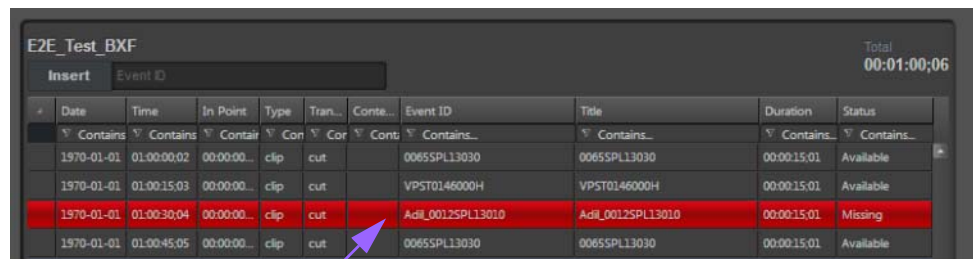
Deleting a job

To delete a media processing job from the processing queue:

- 1 In the top menu, click **Media Processing**.
- 2 In the **Media Processing Jobs** table, click the job that you want to delete.
- 3 Click **Delete Job**.

Reviewing missing material

The Missing Material page displays a list of assets which remain unregistered in GV STRATUS Playout, but are referenced by a primary or secondary event in a schedule or playlist. If an asset appears in the list, you must register the asset before the event is scheduled to go on air or ensure that it is replaced by another asset. For more information on registering assets, see [Registering media and importing schedules using the GV STRATUS Playout Gateway](#) on page 53.



Date	Time	In Point	Type	Tran...	Conte...	Event ID	Title	Duration	Status
1970-01-01	01:00:00:02	00:00:00...	clip	cut		0065SPL13030	0065SPL13030	00:00:15:01	Available
1970-01-01	01:00:15:03	00:00:00...	clip	cut		VPST0146000H	VPST0146000H	00:00:15:01	Available
1970-01-01	01:00:30:04	00:00:00...	clip	cut		Adil_00125PL13010	Adil_00125PL13010	00:00:15:01	Missing
1970-01-01	01:00:45:05	00:00:00...	clip	cut		0065SPL13030	0065SPL13030	00:00:15:01	Available

Missing asset

Fig. 3-8: Example of an event containing an unregistered asset

An asset is identified as missing whether or not the schedule is appended to a channel. It appears in the Missing Material list when one of the following occurs:

- A schedule is added to GV STRATUS Playout containing a primary or secondary event for which the associated asset is not yet registered.
- A primary or secondary event for which the associated asset is not yet registered is appended or inserted into a schedule.
- A primary or secondary event for which the associated asset is not yet registered is appended or inserted into a channel's playlist.

Regardless how many schedules or channels contain the missing asset, the Missing Material list only contains the one instance of the unregistered asset. The list is ordered by earliest transmission time (from past to future) so the most urgent assets are at the top of the list by default so it is easy to identify the assets that must be registered first.

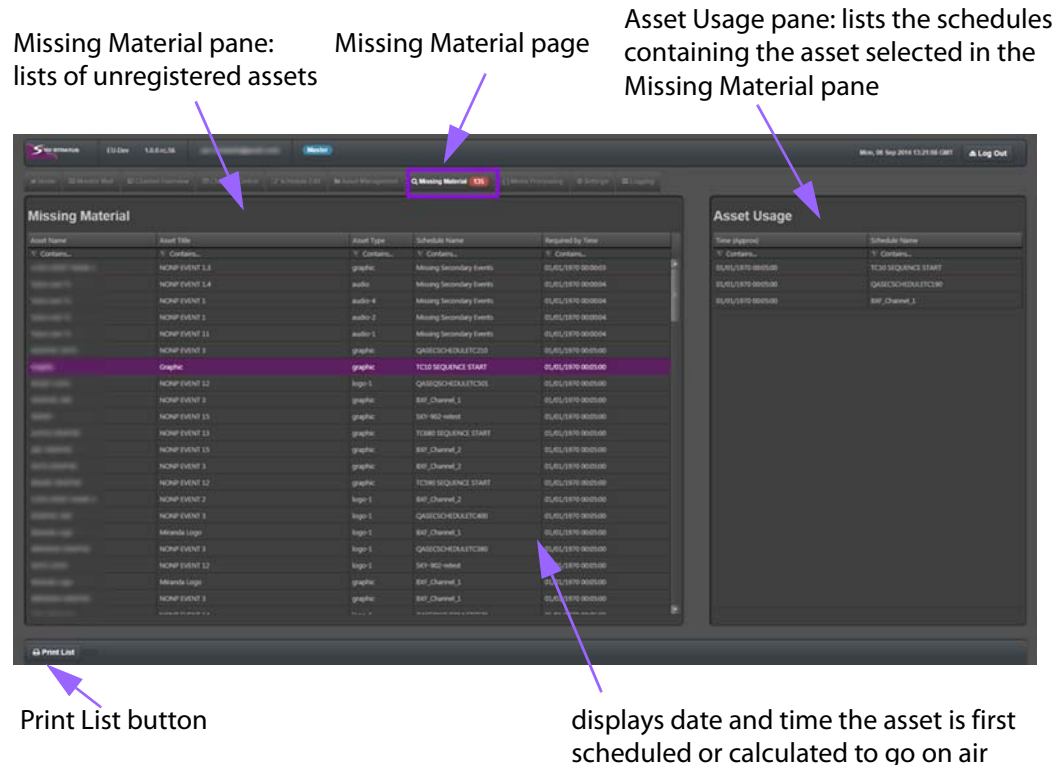


Fig. 3-9: Example of the Missing Material page

When you select a missing asset from the list, the Asset Usage pane displays all the schedules (identified by schedule name) or channel playlists (identified by channel name) that contain that asset as well as the date and approximate time that it is scheduled or calculated to go on air.

An asset is removed automatically from the Missing Material list when:

- The asset is registered in GV STRATUS Playout.
- All events referencing the asset have been deleted or the assets for all events referencing the asset have been replaced.
- The schedules or playlists containing the unregistered asset are deleted or emptied.

To view missing assets:

- 1 In the top menu, click **Missing Material**.
- 2 In the **Missing Material** list, view the **Required by Time** column to see the earliest time the asset is required.
- 3 To see which schedules and playlists in which the missing asset appears and approximate time it is scheduled to play, click an asset and view the list in the **Asset Usage** pane.

Printing the list of missing assets

To print the list:

- 1 In the top menu, click **Missing Material**.

2 Click **Print List**.

An HTML page of all the missing assets is created. It can be printed from the browser.

About Evergreen Content

Evergreen content is material that is always relevant. In this case, the Evergreen content is a library of videos that can be broadcast in place of a previously scheduled event that for some reason cannot be played. The Evergreen media and schedules are managed by GV STRATUS Playout; however, the media and schedule are cached on the device's associated SSP-3801 card.

The Evergreen content plays according to two schedule modes depending on the situation in the playlist:

- **Indefinite Media Scheduling mode:** plays a continuous cycle of Evergreen videos scheduled in the order of the least-played to the most-played. If multiple videos have the same playout count, those videos will each be selected in a random order until all with the same playout count are played before continuing to the video with the next least-played count. This mode is launched when there is an indefinite period to fill with content such as when the playlist is empty.
- **Timed Media Scheduling mode:** plays Evergreen videos prioritized by how well the video fits within the off-air period and its playout count. An off-air situation may occur when an event in an otherwise valid playlist fails to play. This results in an off-air situation of a definite duration before another valid primary event is scheduled to play. To fill the time slot, precedence is given to a single event that fits within the given period with priority given to events that have not been played in the longest time. If a match is not found, the off-air period is divided in half and attempts are made to fill the new time slots. The process repeats until the time slots are less than an hour and no matches are found. If this occurs, then it reverts to a cycle of videos scheduled in the order of the least-played to the most-played until the off-air period is filled or exceeded to ensure continuity of the playout. This mode is launched when there is a gap in the playlist between valid events.

If the channel is configured to play Evergreen content during an off-air situation, it will access the local cache and play the Evergreen content as required by the situation.

4

Monitoring and Controlling the Broadcast

This chapter contains the following sections:

<i>Monitoring channels using the Monitor Wall</i>	72
<i>Monitoring channels using the Channel Overview</i>	73
<i>Monitoring a channel using Channel Control</i>	76
<i>About Event Status and Colors</i>	89

Monitoring channels using the Monitor Wall

The Monitor Wall is a page from which you can monitor a collection of up to 18 channels. The collection of channels is referred to as a view, which is configured by the designated system administrator. The Monitor Wall displays a confidence monitor for each channel assigned to the selected view.

Below each confidence monitor is a button that serves two functions. It provides a shortcut to the Channel Control page (see [Monitoring a channel using Channel Control](#) on page 76), which allows you to quickly switch to a page that provides tools to control the live channel; and it displays the health status of the channel by changing color. The color of the button indicates the level of the alerts on the channel's associated device:

Table 4-1: Alert level colors

Alert levels	Description
Red	Indicates at least one critical or major alert is occurring and immediate action is required
Amber	Indicates at least one minor alert is occurring and action may be required
Grey	Indicates the channel health is normal and no action is required

For more information on alerts, see [Viewing active alerts in the service](#) on page 118.

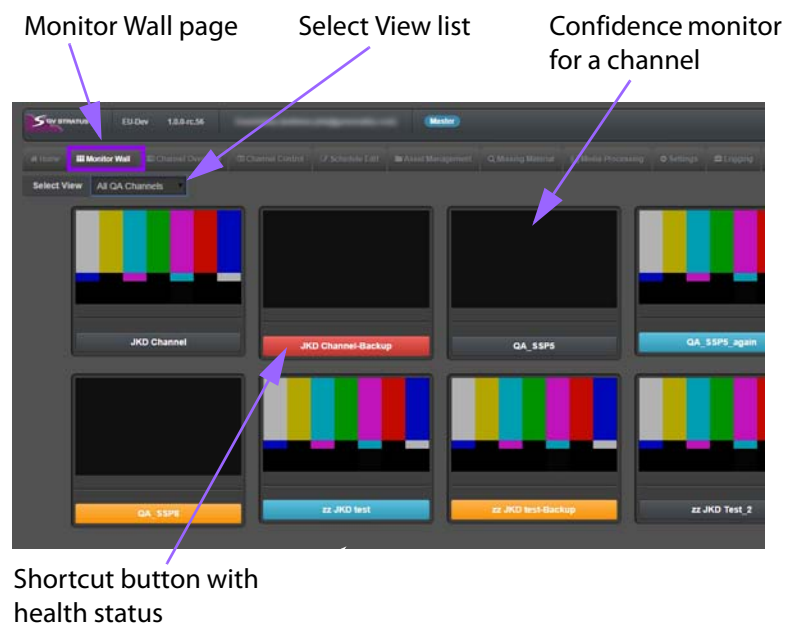


Fig. 4-1: Example of the Monitor Wall page

To view the Monitor Wall:

- 1 In the top menu, click **Monitor Wall**.
- 2 In the **Select View** list, click the view that you want displayed on the **Monitor Wall** page.
- 3 To control the live channel, click the confidence monitor or button of the channel that you want to control. The **Channel Control** page opens with the channel selected.

Monitoring channels using the Channel Overview

The Channel Overview is a page from which you can monitor the playout of a collection of channels. The collection of channels is referred to as a view, which can be configured by the designated system administrator. The Channel Overview contains a confidence monitor and a timeline that displays the status of the events as the playlist is played out for each channel in the selected view.

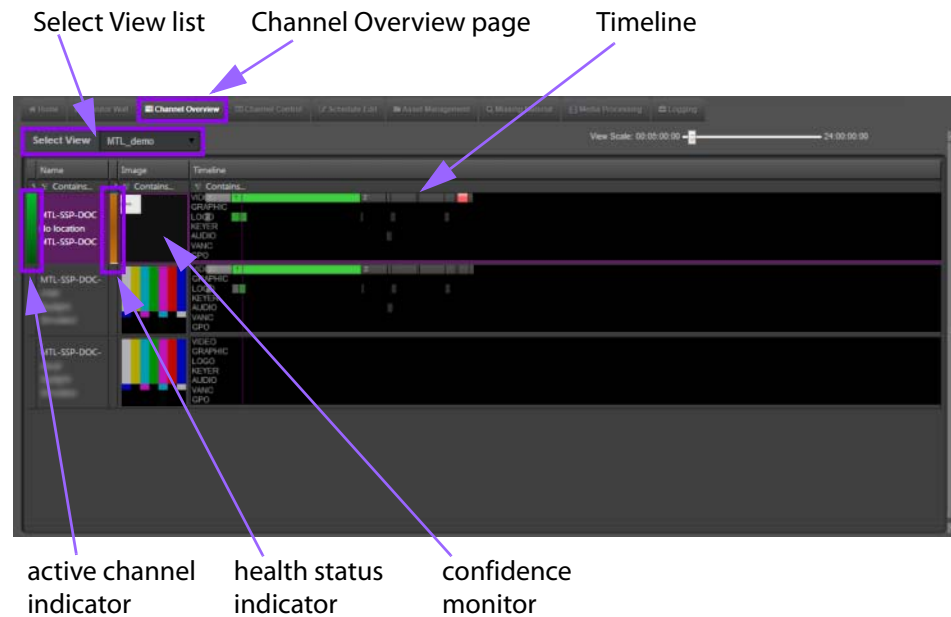


Fig. 4-2: Example of the Channel Overview page

The names of the channels in the view are flanked by two indicators:

- The first column contains an indicator that identifies the active channel when a channel is configured as a main and backup pair. For more information on main and backup pairs, see [Setting up backup channels for failover](#) on page 36.
- The column to the right of the channel name contains colored indicators which display the health status of the device assigned to the channel. The overall health status of the device is determined by whether an alert is being raised on the device or not and its alarm level:

Table 4-2: Alert level colors

Alert levels	Description
Red	Indicates at least one critical or major alert is occurring and immediate action is required
Amber	Indicates at least one minor alert is occurring and action may be required
Grey	Indicates the channel health is normal and no action is required

For more information on alerts, see [Viewing active alerts in the service](#) on page 118.

The events in the playlist are represented by blocks that move from right to left on the timeline as they playout. Depending on how the view was configured, the timeline may

show or hide the secondary events. The blocks are labeled with the name of the event and change color to reflect their state as they move through the timeline. For more information about the states and their colors, see [About Event Status and Colors](#) on page 89.

Although the Channel Overview is primarily designed for monitoring, it does contain a toolbar containing controls that allow you some control over the channels in the view. To begin using the controls and controlling the layout, you must click the names of the channels that you want to control. Once at least one channel is selected, the toolbar is displayed at the bottom of the page. Any actions performed using the controls on the toolbar affect all the channels you have selected in the view.

Note: A clip may take up to 15 seconds to cue depending on the file size, structure (indexing), and bit rate.

For more control over a channel, you can click its confidence monitor which also acts as a shortcut to the Channel Control page. For more information on the Channel Control page, see [Monitoring a channel using Channel Control](#) on page 76.

To open the Channel Overview:

- 1 In the top menu, click **Channel Overview**.
- 2 In the **Select View** list, click the view that you want displayed on the **Channel Overview** page.

Changing the scale of the timelines

The Channel Overview contains timelines for each channel in the selected view. The View Scale located at the top-right of the page controls the time period displayed in all the timelines on the page. You can change the time period used by dragging the arrow left or right to change the scale, and therefore the details, seen in the timelines.

To change scale in the timelines:

- 1 In the top menu, click **Channel Overview**.
- 2 In the **Select View** list, click the view that you want displayed on the **Channel Overview** page.
- 3 Drag the slider on the **View Scale** left or right to select the scale displayed in all the timelines in the view. The scale ranges from periods of 5 minutes to 24 hours.

Controlling the layout of events

The Channel Overview page contains a toolbar of controls that provides some control over the channels in the view displayed on the page. To begin using the controls and controlling the layout, you must click the names of the channels that you want to control. Once at least one channel is selected, the toolbar is displayed at the bottom of the page. Any actions performed using the controls on the toolbar affect all the channels in the view simultaneously.

Note: A clip may take up to 15 seconds to cue depending on the file size, structure (indexing), and bit rate.

To control the playout on the Channel Overview:

- 1 In the top menu, click **Channel Overview**.
- 2 In the **Select View** list, click the view that you want displayed on the **Channel Overview** page.
- 3 In the **Name** column, select the channels that you want to control.
- 4 Use the following controls as required:

Control	Description	Next Actions
Breakaway Selected	Switches the playout from the playlist on all the selected channels to the live feed incoming from the SDI A port on their associated devices. The scheduled events continue to play off-screen while the live feed is broadcast. To stop broadcasting the live feed, click Return Selected .	Return Selected
Return Selected	Resumes the playout of the playlist on all the selected channels at the point they would have been if the live feed had not interrupted the playout.	none
Drop Next Selected	Removes the next event in the schedule from all the selected channels.	none
Hold Selected	Prevents the next events on all the selected channels from going on-air. The events currently on-air continue to play past their duration. Depending on the type of event on-air, the timeline reflects the increased duration of the event or the playlist falls into an off-air situation until the Take Selected button is clicked. Note: If a fixed event follows the event on hold, the fixed event and its related events will still go on air at the fixed time and thus canceling the hold. For more information on fixed events, see About the behavior of automatic and fixed primary events on page 103.	Cue Selected Take Selected
Take Selected	Places the next events on all the selected channels on-air immediately. The events must be in a Cued state before you can place them on-air.	none
Cue Selected	Cues one or more events to allow the next primary events, their related secondary events, and any subsequent automatic events in all the selected channels to go on air safely when Take Selected is clicked. For more information on automatic events, see About the behavior of automatic and fixed primary events on page 103.	Take Selected

Monitoring a channel using Channel Control

The Channel Control page is intended for transmission operators to control live channels. It offers a number of features that allow you to monitor and control the playout of a specific channel.

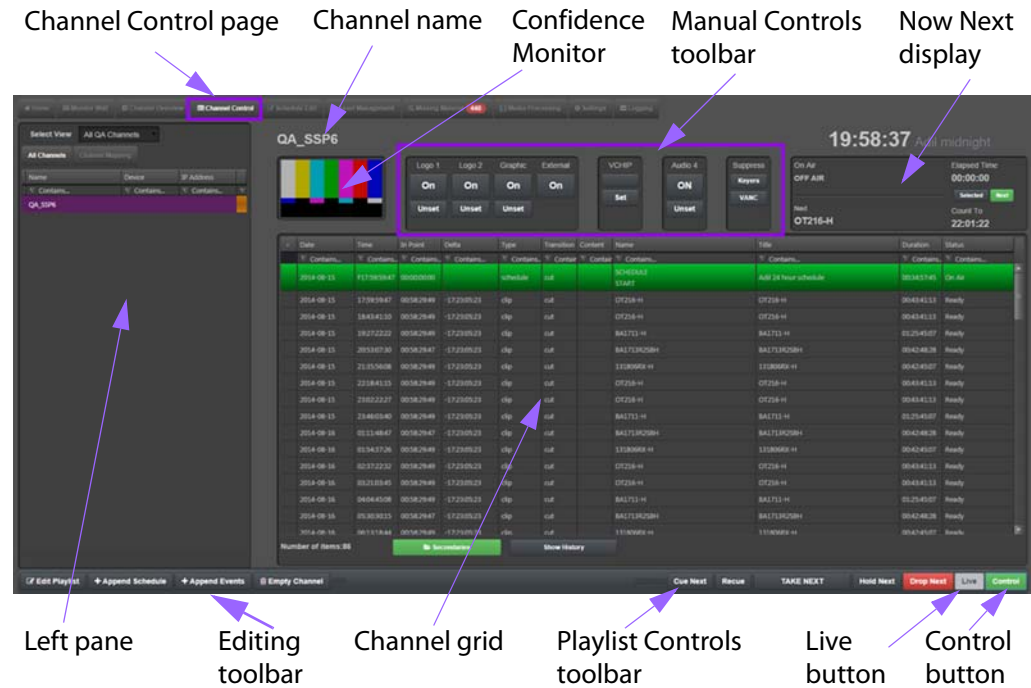


Fig. 4-3: Channel Control page

The Channel Control page contains the following:

Table 4-3: Channel Control page features

Feature	Description
Select View	Located in the left pane, it contains a list of the views configured in the service. A view is a collection of channels that are grouped together for quick access. For more information on views, see Grouping channels into a view on page 37.
All Channels	<p>Located in the left pane, it contains a table of all the channels available in the selected view. Each channel is identified by its name, the device assigned to it, and its IP address. In addition, the list contains two indicators.</p> <p>The first column contains an indicator that identifies the active channel when a channel is configured as a main and backup pair. For more information on main and backup pairs, see Setting up backup channels for failover on page 36.</p> <p>The last column contains colored indicators which display the health status of the device assigned to the channel. The overall health status of the device is determined by whether an alert is being raised on the device or not and its alarm level:</p> <ul style="list-style-type: none"> • Red means at least one critical or major alert is occurring and immediate action is required. • Amber means at least one minor alert is occurring and action may be required. • Grey means the channel health is normal and no action is required.
Channel Mapping	Located in the left pane, it contains a list of the channels available in the selected view organized by their hierarchies. If the selected channel is part of a channel hierarchy, the designation 'parent' or 'child' appears beside the channel name above the channel grid. For more information on channel hierarchies, see About channel hierarchies on page 32.
Confidence Monitor	Contains a small screen that displays a low bit rate video stream from the device or key frames updated every second from the event on air.
Manual Controls	Located next to the confidence monitor, it contains controls that allow you to enable or disable secondary events in the playout.
Now Next display	Shows the clock for the channel, its assigned Channel Type, the elapsed time of the current event on air and a count down to the next event or to a selected event in the playlist.
Channel grid	Displays the playlist for the channel in a table. The table contains information about the events such as their titles, their duration and their status as they are played out. Events that are considered done, such as those with the status Done or Skipped status, continue to appear at the top of the channel grid for the amount of time defined as the Hold Time. The Hold Time is configured as part of the Channel Type. For more information about Channel Types, see Changing the channel type settings on page 23.

Table 4-3: Channel Control page features

Feature	Description
Playlist Controls toolbar	Located on the bottom right of the page, it contains controls such as Take Next, for example. The controls allow you to manually change when events are placed on air. Hidden by default, the toolbar is revealed when you click the Control button.
Live Controls toolbar	Located on the bottom right of the page, it contains controls such as Breakaway-A, for example. The controls allow you to manually interrupt the playlist to broadcast a live event. Hidden by default, the toolbar replaces the Playlist Controls when you click the Live button on the Playlist Controls toolbar.
Editing Controls toolbar	Located on the bottom left of the page, it contains controls that allow you to make limited changes to the playlist or switch to the Schedule Edit page.

Viewing a channel in the Channel Control page

To view a channel in the Channel Control page:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Click the channel you want to display.

Appending a schedule to the playlist

The Append Schedule button allows you to add a selected schedule to the playlist. Schedules can be added back to back or nested within other schedules, but a specific schedule cannot appear more than once in the channel grid. When a schedule is added to the playlist, it appears in the channel grid identified with Schedule Start and Schedule End markers. GV STRATUS Payout automatically updates the channel's device with the changes.

Once the first event in the schedule starts to play, the Schedule Start marker displays a status of On Air and remains at the top of the channel grid until the scheduled events are done. The schedule on air is also identified as being "Live" in the Schedule Edit page to alert other operators that the schedule is actively being broadcast on one or more channels.

Note: If the schedule was appended to an existing playlist and the appended schedule starts with a Fixed/True Time event that would cause a significant overrun with the current running schedule, then the event is automatically changed to Auto/Follow On. For more information on event time modes, see [Editing Event Details for primary events](#) on page 98.

To append a schedule to the channel grid:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Click the channel you want to display in the Channel Control page.
- 5 Click **Append Schedule**.
- 6 In the **Select Schedule** dialog box, click the schedule that you want to append to the playlist. To filter the names, click **Contains** at the top of the column and type the text or characters you want to use in the filter.
- 7 Click **Select**.

Note: A clip may take up to 15 seconds to cue depending on the file size, structure (indexing), and bit rate.

Appending events from a schedule to the playlist

The Append Events button allows you to add the individual events from the selected schedule to the playlist. The appended events are no longer referenced to the schedule. Although a schedule cannot appear more than once in the playlist, the individual events can.

Note: A clip may take up to 15 seconds to cue depending on the file size, structure (indexing), and bit rate.

To append:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or characters that you want to use in the filter.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Click the channel you want to display in the Channel Control page.
- 5 Click **Append Events**.
- 6 In the **Select Schedule** dialog box, click the schedule that contains the events you want to append to the playlist.
- 7 Click **Select**.

Emptying the channel

The Empty Channel button allows you to delete the playlist from the channel. When you empty the channel, the playout of any events currently on air are stopped and also deleted.

To empty:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Click **Empty Channel**.
- 5 In the **Empty Channel** dialog box, click **Yes**.

Editing the playlist on a specific channel

You can make live edits to the playlist currently in progress on the Channel Control page by clicking the Edit Playlist button. When you click Edit Playlist, it opens the Schedule Edit page in a special mode that allows you to edit the playlist playing on the channel. Changes that you make while in this special mode are specific to the channel and do not get saved to the schedule itself, and therefore do not affect other channels playing the same schedule. However, if the channel you are editing is a parent channel, the changes are propagated down to its child channels. Changes made on a child channel do not affect the parent channel.

When the Schedule Edit page is in the special mode, the name of the schedule that is normally displayed at the top of the channel grid is replaced by the name of the channel that you editing and the channel grid is highlighted to draw your attention to it being in a different mode.

Note: A clip may take up to 15 seconds to cue depending on the file size, structure (indexing), and bit rate.

To edit the playlist:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Click **Edit Playlist**. The Schedule Edit page opens in the special mode.
- 5 Make the changes to the playlist as required.

Showing and hiding secondary events

The Secondaries button allows you to show or hide the secondary events from the channel grid. When the Secondaries button is green, it is enabled and the secondary events are displayed in the channel grid. When the button is grey, the secondary events continue to appear in the playout, but they are not visible in the channel grid.

To show or hide the secondary events in the channel grid:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Click **Secondaries** to show or hide the events. When the button is green, the secondary events are shown in the channel grid.

Viewing the history of the channel

The Show History button allows you to view the As Run History grid, which is a record of what previously played out on the channel. When the Show History button is green, it is enabled and switches the channel grid from the current running schedule to the history for that channel for that day. When the button is grey, it is disabled and the channel grid displays the currently running schedule.

To view the channel history:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Click the channel you want to display.
- 5 Click **Show History**.
- 6 In the **Date** field, type the date that you want to view or click the arrow to select a date from the calendar.

Adding a comment to the As Run History grid

As you are reviewing the record of the events that played out, you can choose events from the As Run history grid and add comments to them.

To add a comment:

- 1 In the top menu, click **Channel Control**.

- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Click the channel you want to display.
- 5 Click **Show History**.
- 6 In the grid, click an event to which you want to add a comment.
- 7 Click **Add Comment**.
- 8 In the **Comment** field, type the comment as you want it to appear in the Title column in the As Run History grid.
- 9 In the **Additional Notes** field, type any additional text that you want included with the comment.
- 10 Click **Store Comment**.

Controlling the playout of events

The Channel Control page contains a toolbar of controls, called Playlist Controls, that allows you to make changes in the playlist. The toolbar is normally hidden to prevent accidental activation of the controls. To begin using the Playlist Controls and controlling the playout, you click the Control button. When Control is enabled, the button is green and the Playlist Controls are displayed below the channel grid. Changes in the playlist made using the Playlist Controls affect not only the selected channel, but also any child channels associated to it.

Note: Only one operator at a time can have control of the channel. When other operators view the channel from their screens, the name of the operator currently in control of the channel is displayed beside the Control button. If another operator clicks the Control button, that operator gains control and the original operator loses control of the channel.

To control the playout:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Use the following Playlist Controls as required:

Control	Description	Next Actions
Cue Next	<p>Cues one or more events to allow the next primary event, its related secondary events, and any subsequent automatic events to go on air safely when Take Next is clicked.</p> <p>For more information on automatic events, see About the behavior of automatic and fixed primary events on page 103.</p> <p>Note: A clip may take up to 15 seconds to cue depending on the file size, structure (indexing), and bit rate.</p>	Take Next
Recue	<p>Takes the event off-air and places it on hold at the On-air threshold. The previous event is replaced on air in progress until the Take Next button is clicked.</p> <p>This is usually only used in the case that an event was accidentally placed on-air too early.</p>	Take Next
Take Next	<p>Places the next event on-air immediately.</p> <p>The event must be in a Cued state before you can place it on-air.</p>	Cue Next
Hold Next	<p>Prevents the next events from going on-air.</p> <p>The event currently on-air continues to play past its duration. Depending on the type of event on-air, the channel grid reflects the increased duration of the event or the playlist falls into an off-air situation until the Take Next button is clicked.</p> <p>Note: If a fixed event follows the event on hold, the fixed event and its related events will still go on air at the fixed time and thus canceling the hold. For more information on fixed events, see About the behavior of automatic and fixed primary events on page 103.</p>	<p>Cue Next</p> <p>Take Next</p>
Drop Next	<p>Removes the next event in the schedule.</p> <p>If the event remains dropped at the moment it was to go on-air, it appears as skipped in the channel grid to confirm it was not played.</p>	none

Breaking away to a live event

The Channel Control page contains a toolbar of controls, called Live Controls, that allows you to interrupt the playlist with a live event. The Live Controls toolbar is normally hidden to prevent accidental activation of the controls. To use the Live Controls, you must first take control of the channel by clicking the Control button and then clicking the Live button to reveal the Live Controls toolbar.

When Control is enabled, the button is green and the Playlist Controls are displayed below the channel grid, including the Live button. When you click the Live button and it is green, it is enabled and the Playlist Controls are replaced by the Live Controls toolbar. Changes in

the playlist made using the Live Controls affect not only the selected channel, but also any child channels associated to it.

Note: Only one operator at a time can have control of the channel. When other operators view the channel from their screens, the name of the operator currently in control of the channel is displayed beside the Control button. If another operator clicks the Control button, that operator gains control and the original operator loses control of the channel.

To interrupt the playlist with a live feed:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Click **Control** to reveal the Playlist Controls if the toolbar is not visible.
- 5 Click **Live** to open the Live controls toolbar.
- 6 Use the following Live Controls as required:

Control	Description	Next action
Breakaway-A	Switches the playout from the playlist to the live feed incoming from the SDI A port on the associated device. The scheduled event continues to play off-screen while the live feed is broadcast. To stop broadcasting the live feed, you can click Return or Return Take .	Return or Return Take
Breakaway Hold-A	Switches the playout from the playlist to the live feed incoming from the SDI A port on the associated device and places the on-air event on hold. To stop broadcasting the live feed, you must click Return Take . Note: If you click Return, the screen will go black. If the next event has not been placed on air after two seconds, the off-air behavior is triggered.	Return Take
Breakaway-B	Switches the playout from the playlist to the live feed incoming from the SDI B port on the associated device. The scheduled event continues to play off-screen while the live feed is broadcast. To stop broadcasting the live feed, you can click Return or Return Take .	Return or Return Take

Control	Description	Next action
Breakaway Hold-B	Switches the playout from the playlist to the live feed incoming from the SDI B port on the associated device and places the on-air event on hold. To stop broadcasting the live feed, you must click Return Take . Note: If you click Return, the screen will go black. If the next event has not been placed on air after two seconds, the off-air behavior is triggered.	Return Take
Return	Resumes the playout of the playlist at the point it would have been if the live feed had not interrupted the playout.	none
Return Take	Starts the playout of the event from the moment it was stopped to stream the live feed. It plays as if the event was paused while the live feed was broadcast.	none

Using Join in Progress to compensate for a time delta

The JIP button enables you to compensate for a time delta in the schedule. A time delta is a discrepancy between the planned duration of a schedule and its actual duration on air. This can occur in situations such as when an event was placed on hold. If the event on hold remains on hold past its time to go on air, the time delta appears as a value in the Delta column in the channel grid, which will reflect the difference between the scheduled time of the event and the actual time the event went on air. As long as the channel is in hold, the time delta will increase and affect the remaining events in the schedule.

To absorb the time delta, you need to make an adjustment later in the schedule. You can make the adjustment by selecting an event which is long enough to cover the time difference, is at least 60 seconds in duration, and can support losing the required amount of time to allow the time delta to be absorbed. After clicking the event you are using to absorb the time delta, the JIP button appears. When you click the JIP button, the selected event will be identified by "(JIP)" in the Duration column in the channel grid. When the JIP event comes to air, the beginning of the event is cut the amount of time equal to the time delta, therefore absorbing the time difference. After the JIP event, the Delta column should be empty.

For example, you had an event on hold that resulted in a time delta of 10 seconds. You click a clip later in the schedule that is 60 seconds long and click the JIP button. When it comes time for the clip to air, the clip starts 10 seconds in. After the clip plays, the values in the Delta column are cleared.

To absorb a time delta:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:

- **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 In the channel grid, click the event that you want to use to absorb the time delta. It must be long enough to cover the time difference, be at least 60 seconds in duration, and can support having its beginning cut the amount of time equal to the time delta.
 - 5 Click **JIP**.

Viewing the count down to a specific event

The Count To timer on the Now Next display has two modes: Next and Selected. When the Next mode is enabled, the Next button is green and the Count To timer displays a countdown to when the next event in the schedule will go on air. When the Selected mode is enabled, the Selected button is green and the timer counts down to when the event you have selected in the channel grid will go on air.

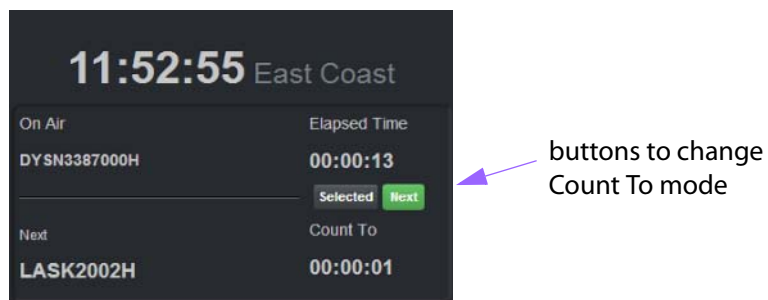


Fig. 4-4: Example of the Now Next display

To view the count down to a selected event:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:
 - **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 In the channel grid, click the event for which you want to see the countdown.
- 5 Click **Selected**. The timer changes to display the countdown for the selected event to go to air.
- 6 To return the **Count To** timer to show the countdown to the next scheduled event, click **Next**.

Manually enabling or disabling secondary events in the playout

The Channel Control page contains a toolbar of controls, called Manual Controls, that allows you to manually enable or disable secondary events in the playout. These manual events do not appear in the channel grid or in the timeline on the Channel Overview page when they are triggered. They operate in parallel with the events in the scheduled playlist.

If the channel displayed in the Channel Control page is a parent channel, the controls are also triggered on the child channels although the specific secondary event triggered may be different from channel to channel. For more information on channel hierarchies, see [About channel hierarchies](#) on page 32.

When triggered, it normally takes about one second for the associated device to react to the command and have the change reflected in the playout. The buttons change color to reflect their state. A button turns amber to indicate the control was triggered and turns green to indicate that the action was acted upon by the device.

Table 4-4: Manual Controls

Control	Description
Logo Graphic Audio	Each control is a pair of buttons. The On button controls whether or not the secondary event is present in the playout and indicates its state. When the On button is green, its corresponding event is present in the playout. The On button is paired with a status button which switches between Unset and Ready depending on the availability of its associated secondary event. The secondary event associated to the control must be available, and therefore in a Ready state, before it can be placed on air. The secondary event can either be scheduled in the playlist or manually configured on the control.
External	The External button places the graphic overlay available from SDI In Fill & Key port on the associated device on air when enabled. When the On button is green, it is present in the playout.
VCHIP	The VCHIP section contains two buttons. The Set button is used to select the content advisory setting. The other button displays the currently set rating system and rating. When the rating button is green, the rating is present in the playout.
Keyers	The Keyers button in the Suppress section is used to hide the Graphic, Logo, and External Keyer events from the playout. When the button is green, all Graphic, Logo, and External Keyer events are hidden.
VANC	The VANC button in the Suppress section is used to control whether or not the Vertical Ancillary Data Space (VANC) files are being embedded in the playout. When the VANC button is green, the VANC files such as SCTE-104 triggers are disabled.

To manually control the secondary events:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Select View** list, click the view that you want displayed in the left pane.
- 3 Click one of the following:

- **All Channels:** to select a channel from a list of all the channels in the selected view. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
 - **Channel Mapping:** to select a channel from list of all the channels in the selected view organized by their channel hierarchies.
- 4 Use the Manual Controls as required:
 - If the button is green, click to disable it.
 - If the button is grey, click to enable it.

To manually select a media file for a button in an Unset state:

- 1 Click the control's corresponding **Unset** button.
- 2 In the **Search Any** field, type part of the name of the media file you are searching for to display only the files containing those characters in their filename.
- 3 In the **Begins With** field, type the beginning of the file name you are searching for to display only the files containing those characters in the beginning of their filename.
- 4 In the list of results, click the desired file. To filter the column, click **Contains** in the column you want to search and type the text or character that you want to use in the search.
- 5 Click **Select**.

Resynchronizing a backup channel

When you have a channel set up as a main and backup pair, the playlists on both the main and backup channel should be in sync. To see if the playlists are in sync, you can view the timeline for both channels on the Channel Overview page if both the main and the backup channels are included in the same view. If they are not in sync, the backup can be resynchronized with the main channel by using the Resync button on the Channel Control page. The Resync button triggers the backup device to obtain a fresh copy of the main channel's playlist from GV STRATUS Playout. For more information about backup channels, see [Implementing high availability for channels \(channel failover\)](#) on page 35.

To resync the backup channel:

- 1 In the top menu, click **Channel Control**.
- 2 In the **Channels** list, click the name of the backup channel that you want to resync.
- 3 Click **Resync**.

Performing a manual failover to a backup channel

To provide high availability for a channel, you can have two channels set up as a main and backup pair. Each channel is assigned to a device to support failover between the devices in case of a card failure or other failover condition on the on air channel. The SSP-3801 cards associated to the devices may also be connected to an HCO device, which provides an automatic method for managing the failover between the devices, or other system which handles the routing of the playout from the main to the backup. For more information about backup channels, see [Implementing high availability for channels \(channel failover\)](#) on page 35.

When the SSP-3801 cards associated to the devices are connected to an HCO device, the HCO device should be in Auto Failover Mode so it can automatically perform the failover from the main device to the backup when a failure condition occurs. If you choose to manually perform the failover, it forces the HCO device into Manual Failover Mode. You can also switch to Manual Failover Mode without performing a failover by just clicking the HCO button. This might be useful when you are performing maintenance on the backup device since having it in Manual Failover Mode will prevent the automatic switching from the main to the backup before the backup is ready. It is important, however, to remember to return the HCO device to Auto Failover Mode once the maintenance is finished.

If the SSP-3801 cards associated to the devices are not connected to an HCO device, then the procedure for handling the failover depends on how your system is configured and it may require that you perform the failover manually.

To perform a manual failover to the backup channel:

- 1 In the top menu, click **Channel Control**.
- 2 Resynchronize the backup channel with the main channel. For more information, see [Resynchronizing a backup channel](#) on page 88.
- 3 In the **Channels** list, click the name of the channel on which you want to perform the failover.
- 4 Click **Failover**.
- 5 Perform the required maintenance on the device that experienced the failover condition.
- 6 When the device is ready, you can perform the manual failover from the backup channel back to the main channel by selecting the name of the backup channel in the **Channels** list and clicking the **Failover** button.
- 7 If the SSP-3801 cards associated to the devices are connected to an HCO device, you must reset the devices to Auto Failover Mode. Click the **HCO: Manual** button.

About Event Status and Colors

You can see representations of the playlist as the events playout on both the Channel Overview page and the Channel Control page. On the Channel Overview page, the events are displayed as a timeline (see [Monitoring channels using the Channel Overview](#) on page 73). On the Channel Control page, the events are displayed in a channel grid. As the events move down the timeline or the channel grid, the color of the events change to indicate their status.

Table 4-5: Event status colors

Status color	Description
Red	The event cannot be broadcast for reasons such as the event is not yet available from the cache or the event was not found. It can also mean that the event ended earlier than its allocated duration.
Dark Orange	The event is cueing up.
Orange	The event is cued up and ready to be played.
Purple	The event is not on-air due to a Breakaway event or is unable to resume playing after the breakaway event ends.

Table 4-5: Event status colors

Status color	Description
Dark green	The event is about to go on air.
Green	The event is being broadcast.
White/Grey	The event is not active.

Table 4-6: Event status types

Status	Description
Waiting	The media file is in an initial state waiting for checks to be performed.
Accessible	The media file is accessible, but has not been cached.
Missing	The media file is missing from the defined location.
Inaccessible	The location for the media file is not accessible.
Caching	The caching process has started, but a progress report is not available yet.
Caching (%)	The caching process is in progress and is reporting a percent (%) value of completion.
Ready	The event is ready for playout.
Not Ready	The event is not ready for playout.
Cueing	The event is being cued.
Cued	The event has been cued.
Commit	The event is committed to playout (occurs just before playout begins).
On Air	The event is on air.
Off Air	The event is not playing.
Breakaway	The event is being interrupted by a live feed.
Suppressed	The event is suppressed from playing in the playout.
Done	Playout finished successfully.
Partial	Part of the event failed to play.
Dropped	The event is set as dropped from the playlist. It no longer appears in the timeline, but remains visible in the channel grid.
Skipped	The event was skipped in the playout. An event can become skipped when a dropped event enters the pre-roll window or when a playlist is appended with events that are in the past. Skipped events do not appear in the timeline, but remain visible in the channel grid.
Failed	The event failed to play.
Evergreen	The event was unable to play and is being replaced by Evergreen content.
Standby	The primary media file was unable to play and has been replaced by the configured standby media file.
Un-dropped	The event was dropped, but has been un-dropped from the playlist.

Step	Time	In Place	Days	Type	Transit	Channel	Version	Title	Duration	Status
94/17/2004	03:00:00	00:00:00		schedule	out			K_morning	00:00:00	On Air
94/17/2004	03:00:00	00:00:00		clip	out	MTL_red_73p00		MTL_red_73p00	00:00:00	On Air
94/17/2004	03:00:00	00:00:00		clip	out	MTL_red_73p00		MTL_red_73p00	00:00:00	Ready
94/17/2004	03:00:00	00:00:00		clip	out	MTL_blue_73p00		MTL_blue_73p00	00:00:00	Ready
94/17/2004	03:00:00	00:00:00		clip	out	MTL_red_73p00		MTL_red_73p00	00:00:00	Ready
94/17/2004	03:00:00	00:00:00		clip	out	600809031000_MFL		600809031000_MFL	00:00:00	Ready
94/17/2004	03:00:00	00:00:00		clip	out	MTL_red_68p00		MTL_red_68p00	00:00:00	Ready
94/17/2004	03:00:00	00:00:00		clip	out	6_MFL_004		6_MFL_004	00:00:00	Ready
94/17/2004	03:00:00	00:00:00		clip	out	MTL_red_73p00		MTL_red_73p00	00:00:00	Ready
94/17/2004	03:00:00	00:00:00		clip	out	6007031000_MFL		6007031000_MFL	00:00:00	Ready
94/17/2004	03:00:00	00:00:00		clip	out	MTL_blue_68p00		MTL_blue_68p00	00:00:00	Inaccessible

Fig. 4-5: Example of event status and colors in the channel grid

5 Working with Schedules

This chapter contains the following sections:

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Editing schedules

The Schedule Edit page is a three pane interface that allows you to build and edit schedules. The left pane contains the list of existing schedules. The middle pane is a schedule grid in which you add or edit the primary and secondary events. The right pane displays the details of an event selected in the schedule grid.

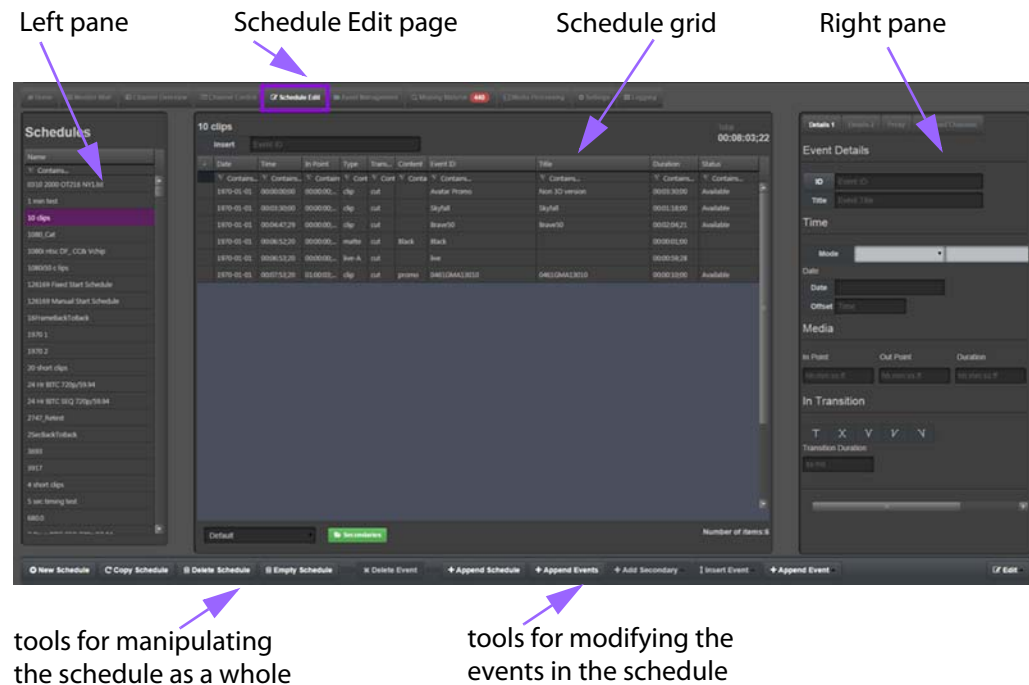


Fig. 5-1: Example of the Schedule Edit page

Adding a primary event to a schedule

Primary events are main events that are added to a schedule. They usually occupy the entire playout screen and command the bulk of the attention on screen. A primary event can be one of the following:

- **Clip:** is a digital video MXF file that may be sourced from a remote URI. If the MXF file contains regular partitions with indexes, its media can play out as it is being downloaded. A clip may take up to 15 seconds to cue depending on its file size, structure (indexing), and bit rate.
- **Live:** streams a live feed that is supplied via the SDI A or SDI B ports on the associated device's SSP-3801 card. The Live feed content is supplied for as long as the event lasts, but it cannot be paused or restarted.
- **Source:** switches to the specified router source to stream the live feed supplied via a router connected to both the SDI A and SDI B inputs on the associated device's SSP-3801 card. The Source event is only available when the schedule is displayed using a Channel Type configured for devices connected to a router. For more information, see [Configuring the router for source events](#) on page 42.

- **Still:** displays a static image on the PGM output on the associated device's SSP-3801 card for the entire length of the event. The stills are preloaded into one of the hardware-based stores on the card before being output to the PGM. You can add a transition effect that reveals the Still image. For example, you can use a Still event to display a Technical Difficulties message. Still images should always be large enough to match the output resolution, must be opaque, and be in OXT format.

Note: When stills are used in the schedule, only Logo 1 will be available since stills require the use of a hardware-based store on the associated device in order to function.

- **Black:** produces a black matte on the PGM output on the associated device's SSP-3801 card for the entire length of the event. You can add a transition effect that reveals the matte. For example, you can use a Black event to fade a video image to black. A Black event is always full screen (same size as the output resolution) and opaque.
- **Comment:** displays a row containing a comment into the schedule grid. The comment is used to provide information only and does not have any affect on the timing of the schedule nor in the playout.
- **Unknown Event:** creates a placeholder for a clip as a primary event in the schedule. The Unknown Event option is not a primary event, but it behaves like one so you can add a clip to the schedule when the actual media file is not available yet. When the media file is finally registered as an asset, the time slot is updated automatically with the correct references and timing.

Note: Events with a duration of 24 hours or longer are not supported.

You have two ways that you can add primary events to the schedule. By using the Append Event button, you can add the events to the end of the schedule. By using the Insert Event button, you can add the event anywhere inside the schedule.

To add an event to the schedule:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to edit.
- 3 Depending on where you want the event added, choose one of the following:
 - To add the event to the end of the schedule, click **Append Event**.
 - To add an event inside a schedule, in the schedule grid click the media file below which you want to insert the event and click **Insert Event**.
- 4 Click one of the following:

Option	Description	Additional procedures
Clip	Adds a digital video (MXF file) as a primary event to the schedule.	<p>To choose the media file:</p> <ol style="list-style-type: none"> 1 In the Search Any field in the Select Media dialog box, type the keywords that will identify the file. Keywords can be part of the name of the media file you are searching for or other metadata associated with the media file when it was registered as an asset. 2 In the Begins With field, type the beginning of the file name you are searching for to display only the files containing those characters in the beginning of their filename. 3 In the list of results, click the desired file. 4 Click Select.
Live	Adds a placeholder as a primary event to the schedule for a live feed supplied through the SDI A or SDI B port on the SSP-3801 card associated to the channel's device (default: SDI A).	<p>To choose the port for the live feed:</p> <ol style="list-style-type: none"> 1 In the schedule grid, click the Live event you created. 2 In the Event Details pane, click the Details 1 tab. 3 Under Physical input, select the SDI port for the live feed. Click: <ul style="list-style-type: none"> • A: to use the SDI A port • B: to use the SDI B port 4 Click Update Event.
Source	Adds a placeholder as a primary event to the schedule for a live feed supplied by a router connected to both the SDI A and SDI B inputs on the associated device's SSP-3801 card.	<p>To choose the router source for the live feed:</p> <ol style="list-style-type: none"> 1 In the schedule grid, click the Source event you created. 2 In the Event Details pane, click the Details 1 tab. 3 Under Router Source, click the Src button to select the router source. Click the router source and click Select. 4 Click Update Event.

Option	Description	Additional procedures
Still	Adds a full-screen static image as a primary event to the schedule.	<p>To choose the media file:</p> <ol style="list-style-type: none"> 1 In the Search Any field in the Select Media dialog box, type the keywords that will identify the file. Keywords can be part of the name of the media file you are searching for or other metadata associated with the media file when it was registered as an asset. 2 In the Begins With field, type the beginning of the file name you are searching for to display only the files containing those characters in the beginning of their filename. 3 In the list of results, click the desired file. 4 Click Select.
Comment	<p>Adds a row containing a comment into the schedule grid.</p> <p>The inserted comment has no affect in the timing of the schedule. It can be used to provide information to operators or to divide the schedule into sections.</p>	<p>To add a comment:</p> <ol style="list-style-type: none"> 1 In the Enter Comment field in the Create Comment dialog box, type the comment that you want to add to the schedule. 2 Click Create.
Unknown Event	Adds a placeholder for a clip as a primary event in the schedule.	<p>To create the placeholder:</p> <ol style="list-style-type: none"> 1 In the Enter Clip Name field in the Create Unknown Event dialog box, type the name of the media file that you want to add to the schedule. 2 Click Create.
Black	Adds a full-screen, opaque, black matte as a primary event in the schedule (default: 1 minute duration).	<p>To choose the duration of the matte event:</p> <ol style="list-style-type: none"> 1 In the schedule grid, click the Black event you created. 2 In the Event Details pane, click the Details 1 tab. 3 Under Duration, type the duration for the matte event. 4 Click Update Event.

- 5 If desired, you can modify other details for the events inserted into the schedule. To modify the details, see [Editing Event Details for primary events](#) on page 98.

Inserting a clip in the schedule

You can quickly add a clip to the end of the schedule or within the schedule using the Insert field at the top of the schedule grid. When you begin typing in the Insert field, clips with file

names beginning with those characters appear so the desired clip can be quickly selected and added to the schedule.

To add a clip to the schedule:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to edit.
- 3 You can append the clip to the end of the schedule or insert the clip inside the schedule. Choose one of the following:
 - If you want to append the clip to the end, click in the **Insert** field, type the first characters of the file name, and then click the desired clip.
 - If you want to insert a clip inside the schedule, first click the event in the schedule grid that you want the new clip to follow, click in the **Insert** field, type the first characters of the file name, and then click the desired clip. The clip will be appended after the selected event.

Editing Event Details for primary events

The Event Details pane contains the properties for the event. The properties shown in the Event Details pane change depending on the type of primary event selected. Modifications made to the properties are only applied to the event once the Update Event button is clicked. To discard the modifications, click elsewhere in the schedule grid without clicking the Update Event button.

The Event Details pane is divided into tabs:

- Details 1: contains the specific properties for the event type.
- Details 2: contains the common properties for the event types.
- Proxy: contains the proxy media file for the selected Clip event, if it is available.
- Assigned Channels: contains a list of the channels to which the schedule is appended.

To edit the details of a primary event:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to edit. To filter the names, click **Contains** at the top of the column and type the text or characters you want to use in the filter.
- 3 In the schedule grid, click the primary event that you want to edit.
- 4 In the **Event Details** pane, click the **Details 1** tab and edit any of the following as required depending on the type of event selected:

Option	Procedure
ID	<p>Displays the Event ID or replaces the asset in the event with another asset of the same type, except Live and Source events. Live events can be replaced with Clip events. Source events cannot be replaced using the ID button.</p> <p>To replace the event:</p> <ol style="list-style-type: none"> 1 Click the ID button. 2 In the Search Any field in the Select Media dialog box, type the keywords that will identify the file. Keywords can be part of the name of the asset you are searching for or other metadata associated with it when it was registered. 3 In the Begins With field, type the beginning of the file name you are searching for to display only the files containing those characters in the beginning of their filename. 4 In the list of results, click the desired file. 5 Click Select. 6 Click one of the following as required: <ul style="list-style-type: none"> • Confirm Replace: to replace the asset in the selected event with the newly selected asset. • All occurrences in this schedule: to replace the asset in all instances of the event in the schedule with the newly selected asset. <p>Note: The All occurrences in this schedule option is not supported for replacing a Live event with a Clip event.</p>
Title (All types)	<p>Type a new title for the primary event.</p> <p>The title appears in the schedule grid in the Title column.</p>
Mode (All types)	<p>Select one of the following:</p> <ul style="list-style-type: none"> • Auto/Follow On: the event starts to play immediately after the previous primary event ends. • Manual Hold: the event remains on hold until an operator manually clicks the Take Next button in the Channel Control page when the channel is live. Events configured as Manual Hold are marked in red in the Time column of the schedule grid. • Fixed Manual: the event is inserted at a specified date and time and placed on hold until an operator manually clicks the Take Next button in the Channel Control page when the channel is live. In the Date field, select the date when you want the event to be scheduled. In the Time field, type the time when you want the event to payout. Events configured as Fixed Manual are marked in red in the Time column of the schedule grid. • Fixed/True Time: the event starts to play at a specified date and time. In the Date field, select the date when you want the event to be scheduled. In the Time field, type the time when you want the event to payout. Events configured as Fixed/True Time are marked in green in the Time column of the schedule grid and their timecodes are prefixed with the letter "F".

Option	Procedure
SCTE-104 Triggerable (All types)	<p>Click the SCTE-104 Triggerable button to control whether or not the SCTE-104 triggers are embedded in the playout.</p> <p>When the button is green, the SCTE-104 triggers are enabled and the event will be reactive to the SPLICE_START_NORMAL and SPLICE_START_IMMEDIATE SCTE-104 commands.</p>
In Point (Clip)	<p>Type the timecode for the first frame of the video that should be seen on screen relative to the clip start timecode.</p> <p>The Start of Media (SOM) is the first frame of the media and the clip start timecode is the timecode label associated with that first frame. The clip start timecode may not necessarily start at 00:00:00;00 since many clips may have an offset start timecode; for example, when a show is split into multiple one-hour segments, the second segment may have a clip start timecode of 01:00:00;00.</p> <p>Often the In Point value is the same as SOM; however, some media files may contain unwanted content at the start of the file that should not be displayed. In those cases a In Point timecode can be used to specify that playout should start after that unwanted content.</p> <p>If the In Point and Out Point times are both 00:00:00, the entire media file plays.</p> <p>Note: Illegal drop-frame timecodes are automatically rounded up to the nearest drop-frame timecode value; for example, 00:01:00;00 would be round up to 00:01:00;02.</p>
Out Point (Clip)	<p>Type the timecode for the last frame of the video that should be displayed on screen relative to the clip start timecode.</p> <p>The End of Media (EOM) is the last frame of video in the media relative to the clip start timecode.</p> <p>Often the Out Point and EOM are the same; however, if the media ends with content that should not be displayed such as black, a Out Point point can be set to ensure the clip ends before the unwanted content is displayed.</p> <p>If the In Point and Out Point times are both 00:00:00, the entire media file plays.</p> <p>Note: Illegal drop-frame timecodes are automatically rounded up to the nearest drop-frame timecode value; for example, 00:01:00;00 would be round up to 00:01:00;02.</p>
Duration (All types)	<p>Type the total amount of time allocated for the event to play. Events with a duration of 24 hours or longer are not supported.</p> <p>Note: Illegal drop-frame timecodes are automatically rounded up to the nearest drop-frame timecode value; for example, 00:01:00;00 would be round up to 00:01:00;02.</p>

Option	Procedure
In Transition (All types)	<p>Select the type of scene change affect to apply to the beginning of this event. You have the following choices:</p> <ul style="list-style-type: none"> • Cut: switches from one event to another instantly • Mix: creates a cross-fade between the two event where the incoming event merges and replaces the outgoing event. • V: the outgoing event fades to black and the incoming event fades in (V-Fade). • C.F: the outgoing event switches to black and the incoming event fades in (Cut and Fade). • F.C: the outgoing event fades to black and the incoming event appears instantly (Fade and Cut). <p>Note: Since two stills cannot play at the same time, you cannot use Mix as a transition between two stills in the schedule.</p>
Transition Duration (All types)	Type the total amount of time allocated for the transition to complete.
Physical input (Live)	<p>Select the SDI port for the live feed. Click:</p> <ul style="list-style-type: none"> • A: to use the SDI A port • B: to use the SDI B port <p>A live feed is streamed from the SDI A or SDI B port on the SSP-3801 card registered to the channel's device.</p>
Router Source (Source)	<p>Select the router source for the source event:</p> <ul style="list-style-type: none"> • Click the Src button. • Click the router source. • Click Select.

5 In the **Event Details** pane, click the **Details 2** tab and edit the following:

Option	Procedure
Event GUID	Displays the Globally Unique Identifier (GUID) for the media file.
Asset Location	Displays the location from which the media file is downloaded to the device prior to playout.
Content Advisory	<p>To change the rating:</p> <ol style="list-style-type: none"> 1 Click Edit to open the Content Advisory selection dialog box. 2 In the Rating system list, click the rating system you want to employ. 3 In the Rating list, click the rating. 4 Click Save Changes.
Content Type	Type a label for the event such as commercial, for example. Normally this is set in the asset metadata or imported from BXF.
Advertiser(s)	Displays the Advertiser property, if existing, for the event in a schedule imported from BXF.

Option	Procedure
Product Name(s)	Displays the ProductName property, if existing, for the event in a schedule imported from BXF.
Custom Data	Displays the CustomData property, if existing, for the event in a schedule imported from BXF.
Standby Content	<p>Define the backup media file in case the file defined in the Asset Location fails. The standby content will replace the scheduled asset on air if the scheduled media file is not present or is not fully cached unless it is in the AS-03 file format. Media files in the AS-03 file format can play out while caching.</p> <p>If the standby content is played out, the name of the standby content appears in the Name column in the channel grid, but the title of the original event remains. In the As Run History grid, the name of the scheduled asset appears, but the Title column contains a notation that the scheduled content was switched to the standby content and lists the name of the file. For more information on the As Run History grid, see Viewing the history of the channel on page 81.</p> <p>To choose the media file:</p> <ol style="list-style-type: none"> 1 Click the browse button. 2 In the Search Any field in the Select Media dialog box, type the keywords that will identify the file. Keywords can be part of the name of the media file you are searching for or other metadata associated with the media file when it was registered as an asset. 3 In the Begins With field, type the beginning of the file name you are searching for to display only the files containing those characters in the beginning of their filename. 4 In the list of results, click the desired file. 5 Click Select.
Event Notes	Type an explanatory note for the event. The note only appears in the specific schedule in which it was written.

- 6 In the **Event Details** pane, click the **Proxy** tab if you want to view or edit the clip's proxy media file. If the asset contains a MP4 proxy media file, the proxy file will be shown in the preview pane. When the proxy is available, you can do the following:
 - To view the proxy media file, click the **Play** icon. Click in the MP4 proxy media preview pane to start or stop the playback.
 - To jump to a specific timecode, type a timecode relative to the clip start timecode in the timecode field or click in the slider.
 - To move frame by frame through the proxy media file, click the arrow buttons on either side of the timecode field.
 - To set the In Point marker, scroll to the first frame of the video that should be seen on screen and click **Mark In**. To set the Out Point marker, scroll to the last frame of the video that should be displayed on screen and click **Mark Out**. The In Point and Out Point are saved as part of the event and are not stored as part of the asset so they only affect the selected event in the schedule.

- To skip to the existing markers, click **Cue To In** to jump to the In Point marker and click **Cue To Out** to jump to the Out Point marker.

Note: The proxy media file in the Proxy tab is not guaranteed to be frame accurate.

- 7 In the **Event Details** pane, click the **Assigned Channels** tab to view the list of channels that include the schedule in their playlist.
- 8 Click **Update Event**.

About the behavior of automatic and fixed primary events

Primary events can be configured as automatic or fixed depending on the Time Mode selection when they were added to the schedule. The Time Mode contains four modes, two of which are automatic and two are fixed:

- **Auto/Follow On:** the event starts to play immediately after the previous primary event ends.
- **Manual Hold:** the event remains on hold until an operator manually clicks the Take Next button in the Channel Control page when the channel is live.
- **Fixed Manual:** the event is inserted at a specified date and time and placed on hold until an operator manually clicks the Take Next button in the Channel Control page when the channel is live.
- **Fixed/True Time:** the event starts to play at a specified date and time.

Primary events configured as Auto/Follow On or Manual Hold are considered automatic events since they do not have a date and time set for when they should play. They follow the primary event immediately before it in the schedule. As a result, the start time automatically adjusts according to any changes to the previous primary event's time or duration. If no primary event already exists in the schedule, the event's start time is converted to a Fixed/True Time start time.

Fixed primary events, meaning those configured with the Fixed Manual or Fixed/True Time mode, have a scheduled time to go on air. They play at their configured date and time regardless of whether the previous primary event in the schedule has changed its time or duration.

Therefore, an automatic event acts as if it is grouped with the previous primary event and they behave as a unit while fixed events act independently of the previous events.

These modes also affect how a primary event behaves when a playlist control is used. When a control is clicked, the behavior of the events in the schedule is determined by whether the affected event and those following it are automatic or fixed. For example, if Hold Next is clicked to hold an automatic primary event, it is put on hold as well as all the following automatic primary events. If a fixed primary event exists in the schedule, it will play at its designated time regardless of what is or is not on hold in the schedule and effectively cancel the hold. The fixed event will play as well as any following events as if Hold Next had not been clicked at all.

Adding secondary events to the schedule

Secondary events either play at the same time as primary events or appear super-imposed over existing video events. For example, you can add a logo graphic over a video event and you can add a voiceover that plays at the same time as a video or still image. Primary events always take priority over secondary events so if a conflict occurs between the resources the primary event takes precedence. For this reason, times set for secondary events are always relative to the times set for their parent primary event; therefore, any edits effecting the time of a primary event also affects its associated secondary events.

These secondary events include:

- **Logo:** displays a logo graphic on top of your primary event; for example, a small graphic that appears in a corner or a side of the display area. A logo is an uncompressed cel animation or still (in OXT or OXA format) less than 252MB in size created using the Miranda Media Conversion Suite. Since a logo must be preloaded into one of the two available hardware-based stores on the associated device's SSP-3801 card before it can be played, only two logo events are supported in the schedule at a time.

Note: When stills are used in the schedule, only Logo 1 will be available since stills also require the use of a hardware-based store on the associated device in order to function.

- **External Keyer:** applies a fill and key graphic overlay over the primary event. The fill graphic can hide portions of the primary event. A key signal can be used to control the transparency of the overlay. The External Keyer event is sourced from the SDI In Fill & Key port on the associated device's SSP-3801 card.
- **Graphic:** displays a animated image (GMJ format) over the primary event. The J2K-based graphic is decoded by an ADV212 chip and streamed from the SSD on the associated device's SSP-3801 card. Graphics are designed to load instantly, can be of any size, and can use transparency, but must be full-screen as the ADV212 does not support rasters sized smaller than the screen.
- **Audio Clip:** plays an audio-only or voiceover event (WAV format) stored in the media cache either as a foreground or background layer while a primary event occurs.
- **GPO:** allows access to the GPIO pins on the associated device's SSP-3801 card to trigger external hardware downstream.
- **VANC:** adds a Vertical Ancillary Data Space (VANC) file that embeds data in a video event, which is not displayed within the screen's viewing area.
- **Update:** schedules an SSP-3801 card software upgrade.

To add a secondary event:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to edit.
- 3 In the schedule grid, click the primary event to which you want to add a secondary event.
- 4 Click **Add Secondary**.
- 5 Choose one of the following:

Option	Procedure	Additional procedures
Logo	<p>Displays a logo graphic on top of your primary event; for example, a small graphic that appears in a corner or a side of the display area.</p> <p>Note: When stills are used in the schedule, only Logo 1 will be available since stills also require the use of a hardware-based store in order to function.</p>	<p>To choose the media file:</p> <ol style="list-style-type: none"> 1 In the Search Any field in the Select Media dialog box, type the keywords that will identify the file. Keywords can be part of the name of the media file you are searching for or other metadata associated with the media file when it was registered as an asset. 2 In the Begins With field, type the beginning of the file name you are searching for to display only the files containing those characters in the beginning of their filename. 3 In the list of results, click the desired file. 4 Click Select.
External Keyer	<p>Applies a fill and key graphic overlay over the primary event.</p>	<p>None</p>
Graphic	<p>Displays a animated image (GMJ format) over the primary event.</p>	<p>To choose the media file:</p> <ol style="list-style-type: none"> 1 In the Search Any field in the Select Media dialog box, type the keywords that will identify the file. Keywords can be part of the name of the media file you are searching for or other metadata associated with the media file when it was registered as an asset. 2 In the Begins With field, type the beginning of the file name you are searching for to display only the files containing those characters in the beginning of their filename. 3 In the list of results, click the desired file. 4 Click Select.

Option	Procedure	Additional procedures
Audio Clip	Plays an audio-only event (WAV format) stored in the media cache either as a foreground or background layer while a primary event occurs.	<p>To choose the media file:</p> <ol style="list-style-type: none"> 1 In the Search Any field in the Select Media dialog box, type the keywords that will identify the file. Keywords can be part of the name of the media file you are searching for or other metadata associated with the media file when it was registered as an asset. 2 In the Begins With field, type the beginning of the file name you are searching for to display only the files containing those characters in the beginning of their filename. 3 In the list of results, click the desired file. 4 Click Select.
GPO	Allows access to the GPIO pins on the device's SSP-3801 card to trigger external hardware downstream.	None

Option	Procedure	Additional procedures
VANC	Adds a Vertical Ancillary Data Space (VANC) file that embeds data in a video event, which is not displayed within the screen's viewing area.	<p>To choose the media file:</p> <ol style="list-style-type: none"> 1 In the Search Any field in the Select Media dialog box, type the keywords that will identify the file. Keywords can be part of the name of the media file you are searching for or other metadata associated with the media file when it was registered as an asset. 2 In the Begins With field, type the beginning of the file name you are searching for to display only the files containing those characters in the beginning of their filename. 3 In the list of results, click the desired file. 4 Click Select.
Software	Schedules an SSP-3801 card software upgrade. When the upgrade process is completed, the card will reboot itself and interrupt the playout.	<p>To choose the file:</p> <ol style="list-style-type: none"> 1 In the Search Any field in the Select Media dialog box, type the keywords that will identify the file. Keywords can be part of the name of the file you are searching for or other metadata associated with the file when it was registered as an asset. 2 In the Begins With field, type the beginning of the file name you are searching for to display only the files containing those characters in the beginning of their filename. 3 In the list of results, click the desired file. 4 Click Select.

- 6 If desired, you can modify other details for the events inserted into the schedule. To modify the details, see [Editing Event Details for secondary events](#) on page 107.

Editing Event Details for secondary events

The Event Details pane contains the properties for the event. The properties shown in the Event Details pane change depending on the type of secondary event selected. Modifications made to the properties are only applied to the event once the Update Event button is clicked. To discard the modifications, click elsewhere in the schedule grid without clicking the Update Event button.

The Event Details pane is divided into three tabs:

- Details 1: contains the specific properties for the event type.
- Details 2: contains the common properties for the event types.

- Assigned Channels: contains a list of the channels to which the schedule is appended.

To edit the details of a secondary event:

- In the top menu, click **Schedule Edit**.
- In the left pane, click the schedule you want to edit.
- In the schedule grid, click the secondary event that you want to edit.
- In the **Event Details** pane, click the **Details 1** tab and edit any of the following as required depending on the type of event selected:

Option	Procedure
ID	Displays the Event ID.
Title (All types)	Type a new title for the secondary event. The title appears in the schedule grid in the Title column.
Mode (All types)	Determine how the secondary event is offset from the primary event. Select one of the following: <ul style="list-style-type: none"> Start Plus: the secondary event starts after the start of the primary event with the difference between the two events specified by the amount of time in the Offset field. Start Minus: the secondary event starts before the start of the primary event with the difference between the two events specified by the amount of time in the Offset field. End Plus: the start of the secondary event is automatically calculated so it ends by the amount of time specified in the Offset field after the end of primary event. End Minus: the start of the secondary event is automatically calculated so it ends at the time specified in the Offset field before the end of primary event. Parent Duration: the duration of the secondary event is calculated automatically so it starts after the start of the primary event by the amount of time specified in the Offset field and ends by the amount of time specified in the Offset field before the end of primary event.
SCTE-104 Triggerable (All types)	Click the SCTE-104 Triggerable button to control whether or not the SCTE-104 triggers are embedded in the playout. When the button is green, the SCTE-104 triggers are enabled and the event will be reactive to the SPLICE_START_NORMAL and SPLICE_START_IMMEDIATE SCTE-104 commands.
Offset (All types)	Type the amount of time used to determine the start or end of the secondary event as determined by the selected Mode. Note: Illegal drop-frame timecodes are automatically rounded up to the nearest drop-frame timecode value; for example, 00:01:00;00 would be round up to 00:01:00;02.
Duration (All types)	Type the total amount of time allocated for the secondary event to play. Note: Illegal drop-frame timecodes are automatically rounded up to the nearest drop-frame timecode value; for example, 00:01:00;00 would be round up to 00:01:00;02.

Option	Procedure
In Duration (Logo, Graphic)	Type the time period of the transition over which the secondary event comes into full effect as the event begins; for example, the amount of time for a logo to fully appear.
Out Duration (Logo, Graphic)	Type the time period of the transition over which the secondary event disappears as the event ends; for example, the amount of time for a logo to fully disappear.
Logo Options (Logo)	<p>To configure for each of the two available logos:</p> <ol style="list-style-type: none"> 1 Select the number identifying if the selected logo is designated as Logo 1 or Logo 2. 2 For the Key Level slider, drag the slider left or right to determine the percentage of opacity between Off (fully transparent) to 100 (fully opaque). 3 For the Logo Priority slider, drag the slider left or right to determine the placement of the event in relation to other overlapping events. Lower numbers push the event further into the background. Higher numbers bring it more into the foreground.
Audio Options (Audio clip)	<p>To configure the audio event:</p> <ol style="list-style-type: none"> 1 Select the player for the audio event. 2 For the Background slider, drag the slider left or right to determine the level of the background audio (in decibels). 3 For the Audio Gain slider, drag the slider left or right to determine the level of the foreground audio (in decibels). 4 Under Outputs, click the channel pair to output.
GPO Select (GPO)	Click to select number identifying which the GPIO pins to trigger on the associated device's SSP-3801 card.

- 5 In the **Event Details** pane, click the **Details 2** tab and edit any of the following as required depending on the type of event selected:

Option	Procedure
Event GUID	Displays the Globally Unique Identifier (GUID) for the media file.
Asset Location	Displays the location from which the media file is downloaded to the device prior to playout.
Content Advisory	<p>To change the rating:</p> <ol style="list-style-type: none"> 1 Click Edit to open the Content Advisory selection dialog box. 2 In the Rating system list, click the rating system you want to employ. 3 In the Rating list, click the rating. 4 Click Save Changes.
Content Type	Type a label for the event such as commercial, for example. Normally these are set in the asset metadata or imported from BXF.
Event Notes	Type an explanatory note for the event. The note only appears in the specific schedule in which it was written.

- 6 In the **Event Details** pane, click the **Assigned Channels** tab to view the list of channels that include the schedule in their playlist.
- 7 Click **Update Event**.

Showing or hiding the secondary events in the schedule grid

You can choose to show or hide the secondary events in the schedule grid. When the **Secondaries** button is enabled, the schedule grid displays the secondary events in rows alongside their associated primary events. Showing or hiding the secondary events in the schedule grid has no effect on the actual playout of the events.

To show secondary events in the schedule grid:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to view.
- 3 Click **Secondaries**. When the button is green, the button is enabled and the secondary events are displayed in the schedule grid.

Deleting an event

To delete an event:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to edit.
- 3 Click the event in the schedule grid that you want to delete.
- 4 Click **Delete Event**.

Dropping or un-dropping an event

When you drop an event from the schedule, it is labeled as “Dropped”, but remains as part of the schedule. If the event remains dropped at the moment it is to go on-air, the dropped event is not played out and appears as “Skipped” in the Show History grid on the Channel Control page to confirm it was not played. If you decide that a dropped event should be aired, you can choose to un-drop the event.

These features can be useful when you have a choice of several events for a time slot, but are unsure which should be placed in the playlist. The events can be left in a dropped state until decision is made and the chosen event can be un-dropped.

To drop or un-drop an event:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to edit.
- 3 Click the event in the schedule grid that you want to drop or un-drop.
- 4 Click **Edit**.
- 5 Click one of the following as required:
 - **Drop**: to label the event as “Dropped” so it does not go to air when the schedule is appended to a channel.
 - **Un-Drop**: to remove the “Dropped” label from the event.

Rearranging events in the schedule grid

You can move primary events in the schedule by using cut or copy and then pasting the event in a new position or you can simply drag the event into place. If you want to move a group of events together such as a primary event and its associated secondary events, ensure that you have selected all the events before you cut, copy, or drag them. Secondary events alone cannot be dragged under a new primary event, but they can be cut and pasted.

To cut, copy or paste an event:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to edit.
- 3 Click the event in the schedule grid that you want to edit.
- 4 Click **Edit**.
- 5 Click one of the following as required:
 - **Cut**: to remove the event from the schedule.
 - **Copy**: to make a copy of the event.
- 6 Click an event in the schedule grid below which you want to place the event and click **Paste**.

Exporting the schedule

You can export the schedule displayed in the schedule grid into a browser window or as a file of comma-separated values.

To export the schedule into a document:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to export.
- 3 Click **Edit**.
- 4 Click one of the following as required:
 - **Print List**: to display the schedule in the browser. Once in the browser, you can use the browser's functionality to print the schedule.
 - **Export to CSV**: to export the schedule as .csv file. Click **Export** to download the file.

Creating a new schedule

When you click New Schedule, a blank schedule is created. Once the schedule is created, you can add events or existing schedules to the new schedule. Schedules are automatically saved as you make modifications.

To create a new schedule:

- 1 In the top menu, click **Schedule Edit**.
- 2 Click **New Schedule**.
- 3 In the **Enter Schedule Name** box, type a name to identify the schedule.
- 4 Click **Create**.

An empty schedule is created. The new schedule is highlighted in the left pane and its name appears at the top of the schedule grid.

- 5 Add events to the schedule by using the following buttons:
 - **Append Schedule:** to add an existing schedule to the end of the schedule.
 - **Append Events:** to add the events from an existing schedule to the end of the schedule.
 - **Insert Event:** to insert a primary event within the schedule.
 - **Append Event:** to add a primary event to the end of the schedule.
 - **Add Secondary:** to add a secondary event to a primary event.

Copying a schedule

The Copy Schedule button enables you to create a copy of the schedule currently open in the schedule grid. This is useful when you want to make modifications to a schedule without losing the original schedule since schedules are automatically saved as you make changes.

To copy a schedule:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to copy.
- 3 Click **Copy Schedule**. The **Copy Schedule** dialog box opens.
- 4 In the **Enter New Schedule Name** field, type a name for the schedule.
- 5 Click **Create**.

Appending a schedule to a schedule

When you append a schedule to another schedule, it is as if you are nesting a copy of a schedule within a schedule. This can be useful when you want to assemble a master schedule from a series of smaller schedules or reuse the smaller schedules in different master schedules. The same schedule cannot be added twice to a schedule. The nested schedule retains references to the original schedule and changes made in the original schedule are automatically updated in all the nested copies of the schedule.

If you do not want the nested schedule to retain a reference to the original schedule, you can add just the events from the schedule to the schedule, see [Appending the events from a schedule to another schedule](#) on page 113.

To append a schedule:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to edit.
- 3 Click **Append Schedule**.
- 4 In the **Select Schedule** dialog box, click the schedule that you want to add to the schedule open in the schedule grid.
- 5 Click **Select**.

The selected schedule is appended after the last schedule or event in the schedule grid.

Appending the events from a schedule to another schedule

When you append the events from a schedule to another schedule, the references to the original schedule are not retained. If changes are made to the original schedule, they will not be updated in the schedules where the events were appended.

To append events:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to edit.
- 3 Click **Append Events**.
- 4 In the **Select Schedule** dialog box, click the schedule that contains the events you want.
- 5 Click **Select**.
The events from the selected schedule are appended after the last schedule or event in the schedule grid.

Displaying a different timezone in the schedule grid

You can change the schedule grid so it displays the schedule in the timezone in which it will be aired. The timezone is configured as part of a channel type and each channel is assigned a channel type. By changing the channel type selected for the schedule grid, you can quickly convert the dates and times displayed in the schedule grid to its configured timezone. The selected channel type is not saved with the schedule. It only affects how the dates and time are shown in the schedule grid.

To change the timezone:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to view.
- 3 In the list box at the bottom left of the schedule grid, select a channel type with the timezone that you want to use.

Emptying a schedule

When you empty a schedule, you remove all the events that it contained. The schedule is not deleted and remains in the schedule grid, but it is cleared of all events.

To empty a schedule:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to empty.
- 3 Click **Empty Schedule**.
- 4 In the **Empty Schedule** dialog box, click **Yes**.

Deleting a schedule

When you delete a schedule, it is completely removed from the service.

To delete a schedule:

- 1 In the top menu, click **Schedule Edit**.
- 2 In the left pane, click the schedule you want to delete.
- 3 Click **Delete Schedule**.
- 4 In the **Delete Schedule** dialog box, type the code from the left box into the right box to confirm that you want to delete the schedule. The code changes to green when it is written correctly.
- 5 Click **Yes**.

6

Administrating the Service

This chapter contains the following sections:

- About the Home page* 116
- Downloading the latest SSP-3801 software updates* 120
- Viewing technical logs for the service (System Logs)* 120
- Viewing user operations (User Logs)* 122
- Viewing transmission error logs (TX Error Logs)* 122
- Requesting a diagnostics report from a device registered to a card* 123
- Renewing a device's security certificate* 124
- Testing response time for the web client, the service, and the SSP-3801 cards* 124

About the Home page

The Home page is the welcome page of your account in the GV STRATUS Payout service. It offers a number of tabs designed for communicating various kinds of information. When new information is made available on any of the tabs, a small callout appears in the tab's heading to draw attention to it:

- **News:** is a message board for the designated system administrator to communicate information about your account in the GV STRATUS Payout service.
- **Support Dashboard:** displays information about the state of the GV STRATUS Payout service. It may also contain notices sent from the GV STRATUS Payout service representative regarding important information about the service.
- **Active Alerts:** displays current alerts occurring on the devices in your account.
- **Statistics:** displays performance information for your account.
- **Documentation:** offers links to the PDF versions of the SSP-3801 card documentation.
- **Change History:** provides a frequently updated list of the changes made to the service.

Home page

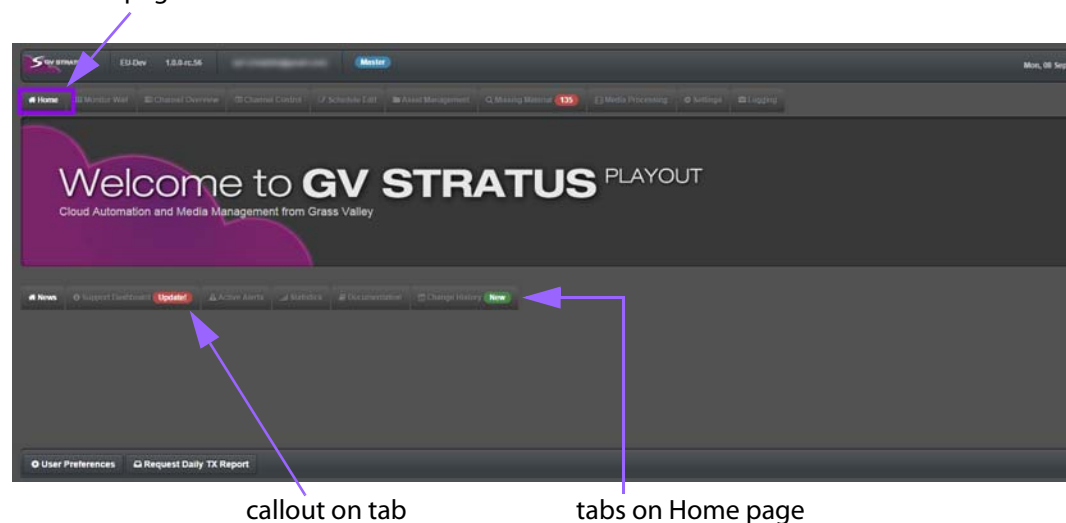


Fig. 6-1: Example of the Home page

About the News tab

The News tab is a message board for the designated system administrator to communicate with all the operators using the account. It can be used to inform users about changes in procedures or other events that affect your account in the GV STRATUS Payout service. For information about displaying information on the News tab, see [Updating the News tab on the Home page](#) on page 44.

Configuring Your Audio and Email Notifications

The service includes a variety of audio and email notifications that you can choose to enable. The audio notifications provide sound prompts through the computer or device

you are using to view the GV STRATUS Playout web interface. The email notifications are sent to your specified email address.

To configure notifications:

- 1 In the top menu, click **Home**.
- 2 Click **User Preferences**. The **User Preferences** window opens.
- 3 In the **Full Name** box, type your name.
- 4 In the **Business Contact Number** box, type the phone number where you prefer to be reached.
- 5 In the **Alternate Email** box, type an email address to which you want the email notifications sent.
- 6 In the **Audio** section, select the sound notifications that you want to receive:
 - **Voice Counts:** select the check box to have a voice countdown to the next event on air. This countdown is played in sync with the Count To timer shown in the Now Next display when you have the Channel Control page open.
 - **Notifications:** select the check box to play a sound when you have the Channel Control page open to a live channel and the associated device has raised alerts.

Note: If you want to receive sound notifications for alerts on devices but do not want certain devices to trigger sound notifications, you can place problematic devices in Maintenance Mode. For more information on Maintenance Mode, see [Modifying channel details](#) on page 34.

- 7 In the **Email Alerts** section, select the check boxes beside the types of alerts for which you want to receive email notifications.
 - **Critical Alerts:** to be notified when critical alerts are triggered.
 - **Major Alerts:** to be notified when major alerts are triggered.
 - **Minor Alerts:** to be notified when minor alerts are triggered.
 - **Daily TX Reports:** to receive the daily transmission report.
- 8 Click **Save Changes**.

Requesting a daily transmission report

You can choose to receive a report containing a summary of the system performance, including:

- **Total Hours:** the total number of hours of primary events transmitted in the last 24 hours over all of the channels
- **Total Outage:** the total number of hours of service failure.
- **Uptime:** the percentage of time the service was available.
- **Details:** provides the breakdown of the Total Hours, Total Outage, and Uptime for each channel in operation.

To begin receiving the daily transmission report:

- 1 In the top menu, click **Home**.
- 2 Click **Request Daily TX Report**. The report will be sent to the email address configured in your User Preferences.

Viewing the status and response time for the service

The Support Dashboard tab contains information about your GV STRATUS Payout service and is intended as a tool to be used when the designated system administrator is in contact with STRATUS Monitoring team (technical support). It includes the following information:

- **Service Status:** communicates information about the state of the GV STRATUS Payout service. It may also display news about upcoming features or hints and tips about using the service.
- **Known Issues:** informs the designated system administrator about the top issues identified in the service that have already been communicated to the STRATUS Monitoring team.
- **Cloud Response Time:** displays the response time of the GV STRATUS Payout service in milliseconds and a trend graph of the response time over the last 24 hours.

To view the Support Dashboard:

- 1 In the top menu, click **Home**.
- 2 Click the **Dashboard** tab.
- 3 To view the details of a known issue, click the row containing the issue in the **Known Issues** table. The details are displayed below the Known Issues table.
- 4 To zoom into the **Cloud Response Time** graph, click in the graph and scroll using the mouse wheel to increase or decrease the zoom level. To pan, click in the graph and drag your cursor left or right as desired.

Viewing active alerts in the service

The Active Alerts tab lists the current alerts occurring on the devices in the service. Each alert is described in a table showing the time the alert was raised, the level of the alert, the type of alert, the name of the device, and details of what is causing the alert. An indicator appears on the Active Alerts tab when new alerts are added to the list.

You can also receive email notification of the alerts in the service. For more information, see [Configuring Your Audio and Email Notifications](#) on page 116.

To view the Active Alerts:

- 1 In the top menu, click **Home**.
- 2 Click the **Active Alerts** tab.

Canceling Alerts

To cancel Active Alerts:

- 1 In the top menu, click **Home**.
- 2 Click the **Active Alerts** tab.
- 3 Do one of the following:
 - To cancel one alert: In the **Active Alerts** table, click the alert that you want to cancel and click the **Cancel Alert** button.
 - To cancel all the alerts: Click the **Cancel All Alerts** button.

Viewing the statistics for the service

The Statistics tab provides performance information about the GV STRATUS Playout service as well as any known performance issues being experienced by either the GV STRATUS Playout service or Microsoft Azure.

The Today's Transmission Statistics pane contains the daily statistics for all channels and each channel separately. The statistics are displayed both as a list and pie chart and include the following data compiled over the last 24 hours:

- Transmitted Events: the number of events broadcast.
- Total Hours: the total number of hours of playout.
- Skipped Events: the total number of skipped events.
- Failed Events: the total number of failed events.
- Outage Duration: the total number of hours of service failure.
- Performance: the percentage of time the service was available.

The Transmission Statistics History pane contains the statistics for the overall service over the last 30 days.

You can also receive email notification of the statistics. For more information, see [Requesting a daily transmission report](#) on page 117.

To view the Statistics:

- 1 In the top menu, click **Home**.
- 2 Click the **Statistics** tab.
- 3 In the list, click the channel for which you want to view the statistics.

Downloading the end user documentation

The Documentation tab contains links to the current versions of the GV STRATUS Playout and SSP-3801 end user documentation.

To download the documentation:

- 1 In the top menu, click **Home**.
- 2 Click the **Documentation** tab.
- 3 Click the link to download a PDF version of the following guides:
 - GV STRATUS Playout Operator Guide
 - SSP-3801 Installation and Configuration Guide
 - SSP-3801 User Guide

Reading about changes in the service

The Change History tab provides a frequently updated list of the changes made to the service. A green indicator appears on the Change History tab to signal you when a new change has been added to the list.

The tab is divided into three panes. The left pane contains a list of the released versions of GV STRATUS Playout as well as a "Pending" version containing a list of the changes due to be released in the next version. When you click a version, the middle pane displays the

individual changes made in that version. The list shows the types and a summaries of the changes that were made with the most recent changes at the top. If you want to read more details about the change, you can click on a specific change and the full report will appear in the right pane.

To read a release note:

- 1 In the top menu, click **Home**.
- 2 Click the **Change History** tab.
- 3 In the left pane, click the version number of the release you want to view.
- 4 In the middle pane, click the change that you want to read about.

The right pane displays the details about the change that you selected.

Printing the Release Notes

The Release Notes document is a compilation of all the changes made in a particular version of the service. You can produce

To print the release notes:

- 1 In the top menu, click **Home**.
- 2 Click the **Change History** tab.
- 3 In the left pane, click the version number of the release you want to print.
- 4 Click **Print Release Note**.

Downloading the latest SSP-3801 software updates

You can download the installer for the latest SSP-3801 software update. Once the installer is downloaded you can schedule an update for the SSP-3801 cards associated to the devices in your service.

To download the latest software update:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **System Administration**.
- 3 Click **SSP 1.2**.

Viewing technical logs for the service (System Logs)

The System Logs tab, available on the Logging page, allows you to display the information, error, and warning messages logged by the GV STRATUS Payout service on the account on a specified date over a selected one hour time range. The System Logs pane contains a table of each entry on the selected time. The following columns are of particular use when investigating an error.

- **Type:** displays whether the entry was an Information, Error, or Warning message.
- **Client:** displays the device, User email address, or other source from which the message originated.
- **Message:** displays the header of the message, which provides a short description of the operation.

- **Details:** displays the body of the message, which provides the contextual information for the operation.
- **Duration:** displays the number of milliseconds it took for the operation to complete.

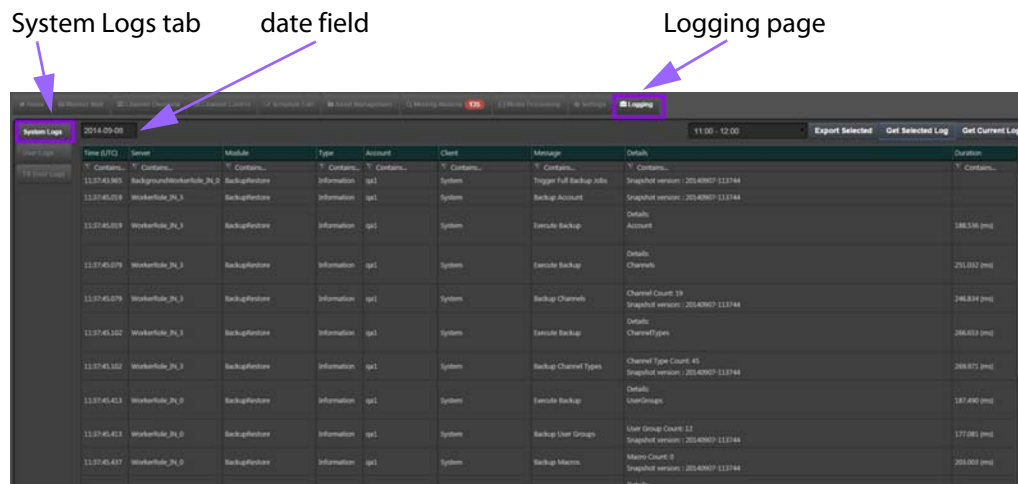


Fig. 6-2: Example of the System Logs page

To review system logs:

- 1 In the top menu, click **Logging**.
- 2 In the menu pane, click **System Logs**.
- 3 Open the log using one of the following options:
 - To view the log for the current date, click **Get Current Log**.
 - To view the log for a specific date, click the date in the date field, click the hour in the time field, and then click **Get Selected Log**.

Exporting a system log

The system logs can be exported to the following formats: CSV, JSON, and XML.

To export a log:

- 1 In the top menu, click **Logging**.
- 2 In the menu pane, click **System Logs**.
- 3 Select the log that you want to export. Click the date in the date field, click the hour in the time field, and then click **Export Selected**.
- 4 In the **Select File Extension** dialog box, click the format to which you want the data exported.
- 5 Click **Export**.
- 6 When the data has been exported to the desired format, the **Export Complete** dialog box opens. Click **Yes** to download the file.

Viewing user operations (User Logs)

The User Logs tab, available on the Logging page, allows you to display the operations performed by users on the account on a specified date. The level of detail in the log is determined by the user profile used to log in to the account. When an Administer-level user profile opens a User Log from a specific date, the log displays all the operations performed by all the user profiles in the account on that given day. When any other user profile is used, the User Log only contains the operations performed by that specific user profile in the account on that given day.

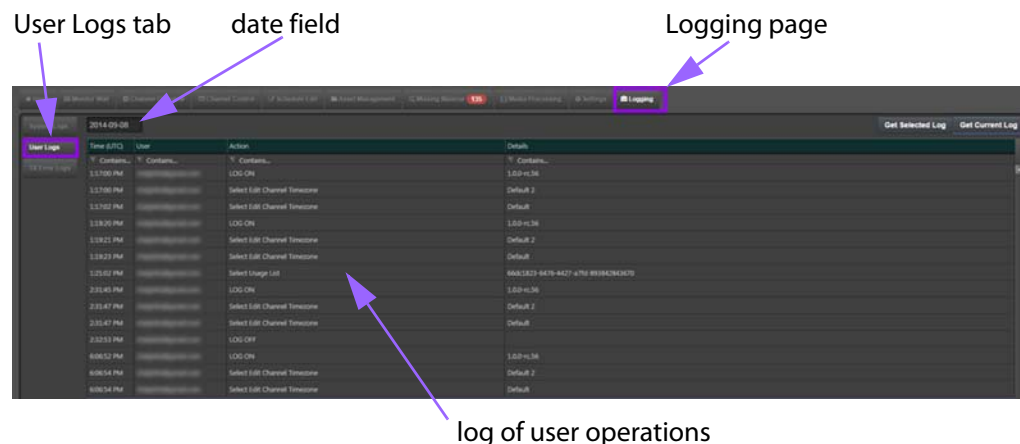


Fig. 6-3: Example of the User Logs page

To review logs:

- 1 In the top menu, click **Logging**.
- 2 In the menu pane, click **User Logs**.
- 3 Open the log using one of the following options:
 - To view the log for the current date, click **Get Current Log**.
 - To view the log for a specific date, click the date field to open the calendar, click the date that you want to view, and then click **Get Selected Log**.

Viewing transmission error logs (TX Error Logs)

The TX Error Logs tab, available from the Logging page, allows you to display the transmission errors logged in the account on a specified date. A transmission error occurs when a channel encounters an off-air situation. The TX Error Log pane contains a table of each transmission error on the selected date. The following columns are of particular use when investigating an error.

- **Time:** displays the time the transmission error occurred on the selected date.
- **Client:** displays the name of the device on which the transmission error occurred.
- **Message:** displays one of the following descriptions as the cause of the transmission error:
 - on air item failed
 - not ready at on air point

- item duration difference
- item skipped
- item failed
- item dropped
- **Details:** contains details about the transmission error such as the listing the schedule that contained the event that went off air and the asset that was associated with the event.

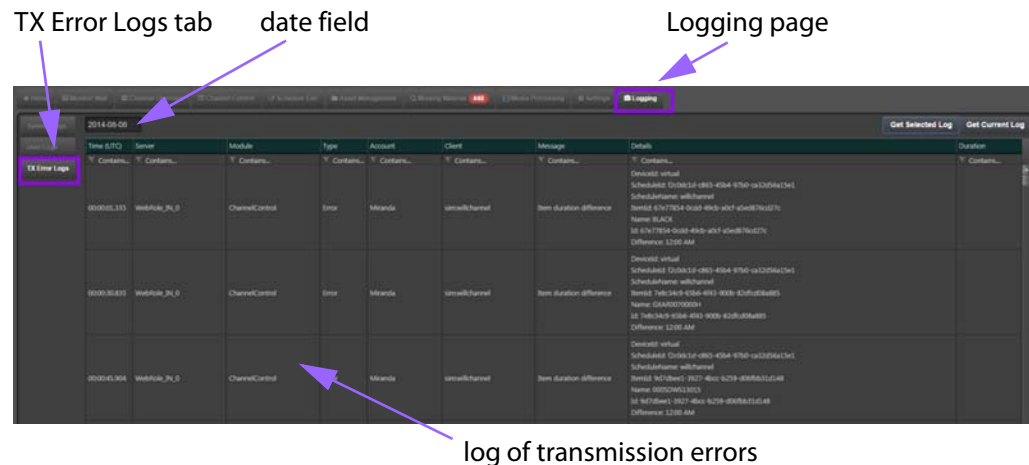


Fig. 6-4: Example of the TX Error Logs page

To review logs:

- 1 In the top menu, click **Logging**.
- 2 In the menu pane, click **TX Error Logs**.
- 3 Open the log using one of the following options:
 - To view the log for the current date, click **Get Current Log**.
 - To view the log for a specific date, click the date field to open the calendar, click the date that you want to view, and then click **Get Selected Log**.

Requesting a diagnostics report from a device registered to a card

The SSP-3801 card can provide a diagnostic archive that contains detailed technical information about the card, its processes, and about the Densité 3 frame hosting the card. When you click Request Diagnostics, you will receive an email containing a link from which you can download the diagnostic archive.

To request the diagnostics:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Device Settings**.
- 3 Click **Request Diagnostics**.

Renewing a device's security certificate

When an SSP-3801 card is registered a device, it receives a signed security certificate that is used to authenticate it against the GV STRATUS Payout service. Three months before the security certificate is due to expire, it is automatically renewed. However, you can force an early renewal of the security certificate at any time as long as the existing certificate is still valid. This can be useful when there are technical problems with the issuing certificate or to test if the certificate renewal mechanism is functioning correctly.

To manually renew the certificate for a device:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Device Settings**.
- 3 In the **Devices** list, click the name of the device that you want to update.
- 4 Click **Renew Security Certificate**.

Note: The button will not reflect the state of the certificate renewal.

Testing response time for the web client, the service, and the SSP-3801 cards

The Test Device Response Time button on the Channel Settings page is a tool you can use to measure the response time between the GV STRATUS Payout web client, the GV STRATUS Payout service, and an SSP-3801 card. Once clicked, it measures two values, the cloud response time and the round trip response time, and displays them on the Channel Settings page.

The cloud response time measures the time it takes for the GV STRATUS Payout service to receive a message sent from the GV STRATUS Payout web client. A typical cloud response time is approximately 250 milliseconds.

The round trip response time measures the time it takes for a message to travel from the GV STRATUS Payout web client to the GV STRATUS Payout service to an SSP-3801 card and then back again without taking into account the time required to actually process a command. A typical round trip response time is approximately 500 milliseconds.

To test the response time for a device:

- 1 In the top menu, click **Settings**.
- 2 In the menu pane, click **Channel Settings**.
- 3 In the **Channels** list, click the name of the device that you want to test.
- 4 Click **Test Device Response Time**. The results for the Cloud Response and Round Trip Response appear next to the button.



Technical support

For technical assistance, please contact the STRATUS Monitoring team (technical support):

Skype: mir-sposupport

Telephone: +44 118 952 3443

e-mail: sposupport@grassvalley.com

Related documentation

To access the most recent updates to this document, or to access other user documentation, please visit the Support Portal (<http://www2.grassvalley.com/support/software/index>).

Customer service and sales

For customer service or sales information, please contact a Grass Valley, A Belden Brand sales office. Visit our web site at <http://www.grassvalley.com/sales> to find office nearest to you.

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You can also contact the corporate headquarters at:

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