Product Specification

Go!

Browser-based connected
Video Timeline Editor

Version History

Document Name: **Go! Product Specification v1.4**.{extension}

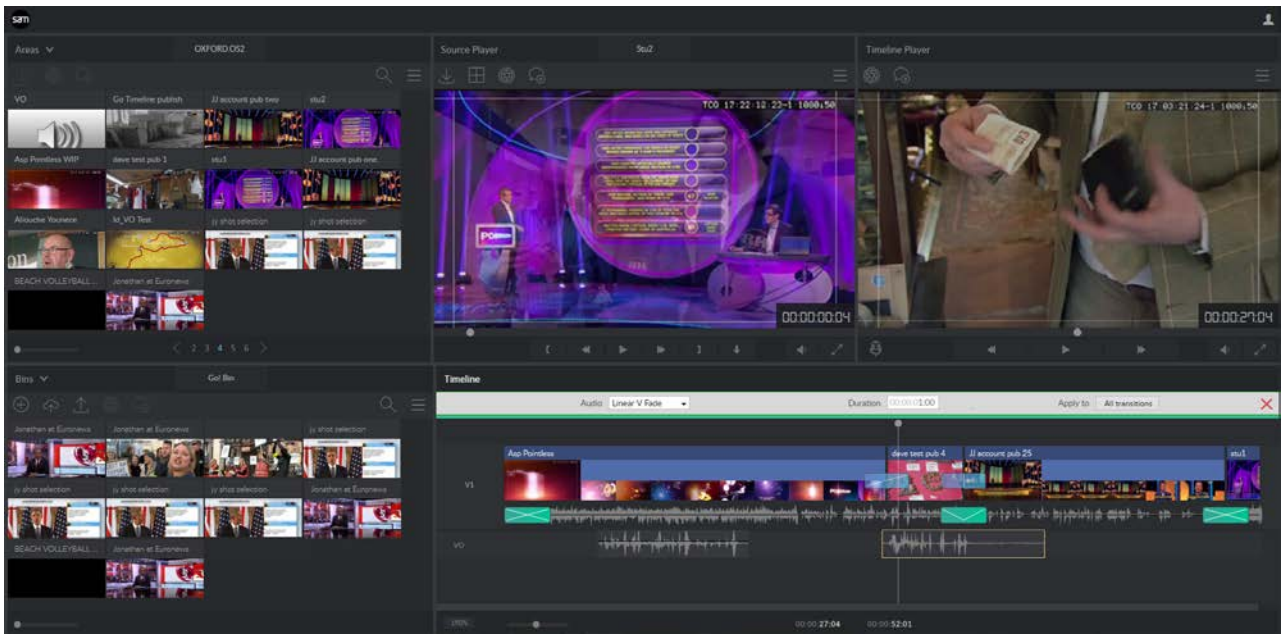
Version	Description	Date	Author
v1.4	Large update to include video and audio transitions, clip audio, LBR Pass-through.	14th October 2016	Steve Robinson
v1.3	Major update to include timeline, MP4 download, upload, VO record	19th July 2016	Steve Robinson
v1.2A	Further clarification on how network conditions effect video quality	11th March 2016	Steve Robinson
v1.2	Updated for latest release, support for user management, major performance fixes	1st March 2016	Steve Robinson
v1.1	Updated for Go final public release	9th November 2015	Steve Robinson
v1.0.1	Updated for with new SAM branding	12th September 2015	Steve Robinson
v1.0	Product Specification for the first release	24th July 2015	Steve Robinson

Any questions please email customersupport@s-a-m.com and we will do our best to help.

Contents

Overview

Go! allows broadcasters to view all of their content from any of their media libraries, remotely from a standards based desktop, tablet or smart phone web browser and build professional news package for social media publishing or broadcast.



Viewing their content remotely on even a poor quality internet connection, users can use a traditional timeline to build a news package from clips and sub-clips - including live recordings - upload local content, record a voice over, then publish to a SAM zone where the full quality content can either be played as-is, or loaded into an installed software SAM editor for further refinements and FX.

Go! also enables users to view and edit metadata, add and review comments and view logging.

Other features include:

- Download full or sub clips as MXF files or MP4 files
- Download a clip's audio as a .wav file, including a custom audio channel selection
- Take a high quality still frame and download as a JPEG
- Create and manage bins which can double as quick EDLs

Go! is designed to be productive and features a flat contemporary and uncluttered style designed for creative lower light environments.

Typical Workflow

A user will bring up Go! on a laptop or tablet away from the main facility, or in another remote location within the facility.

Using metadata, the user searches the configured search 'Areas' for clips, where the user can then select whole and sub clips and drag them to the timeline, building a rough cut edit. The user can access the tails of all the clips on the timeline - including live feeds and in-progress file ingests - and with frame accurate editing, produce a high quality news package.

The user can record a voice over in the browser from their device's preferred microphone directly to the timeline's dedicated VO track, or even shoot and use content from their mobile device.

Once the edit has been completed the user publishes to the target site.

Here, another editor running QTube Edit, Qube or even the Go! Plugin for Adobe Premiere Pro can pick up the edit and refine it with effects, text or other elements, or the clip can be played out directly using sQ Play or from 3rd party automation.

If the user also adds a specific category when publishing the timeline, Fileflow will export, if configured, the timeline as a flat MXF file onto a target 3rd party system.

System requirements

Client

Go! should operate in any modern, standards-based touch or desktop (with keyboard and mouse) web browser, regardless of platform or device type. However it does use some specific features of HTML5, CSS and JavaScript and so availability of these web platform features should be verified on the desired target device and platform:

- Scalable Vector Graphics (SVG)
- Media Source Extensions

Google Chrome and **Microsoft Edge** are recommended to fulfil these requirements on the largest number of devices, however **Google Chrome is preferred and recommended**.

Server

Go! **v1.4** requires HTTP Transformer software **v6.5** for the new feature listed in the Feature Release Matrix. Using Go! v1.4 on previous versions of the HTTP Transformer will operate but display errors when accessing a feature - such as MP4 download - not provided by the connected Transformer.

HTTP Transformer v6.5 comes pre-configured as a Windows Server 2008 R2 Virtual Machine and includes Go! v1.4, and has been verified running on top of the Microsoft Hyper-V 2012 R2 Core hypervisor.

Multiple Transformers may be deployed as a cluster with a load balancer providing smoother and more reliable performance and resilience for clients. However, enough bandwidth and processing power must still be provisioned in the system design to ensure all Go! and other concurrent Transformer clients have enough bandwidth to operate during maximum load workflows.

The HTTP Transformer is a software only product supplied as Virtual Machine, so please see the **1U PC specifications for customer supplied hardware** document for the latest recommendations for the Transformer hardware.

Load Balancer support

When used in conjunction with **HTTP Transformer v5.4 rev 8** ***or newer***, Go! supports two or more HTTP Transformer instances (physical or virtual) clustered together with one or more dedicated load balancers in front to enable the load of multiple clients be distributed across the Transformer cluster using a round-robin algorithm.

Specifically, SAM supports the Network Load Balancer built in to Windows Server 2012 R2 and has verified it against a four VM Transformer Cluster.

Please see the **HTTP Transformer Product Specification** more information about Load Balancers.

Network

An internet connection over LAN, WAN, 3G, 4G or Wi-Fi providing ***at least 1Mb/s*** reliable bandwidth is required between the device running Go! and the HTTP Transformer.

By default Go! uses adaptive streaming to ensure that users can preview video on virtually *any* wired or wireless connection. The user can view video as long the available bandwidth between the device and the server does not go below the configured lowest video bitrate for more than a few seconds. By default the lowest bitrate video stream is 300Kb, so allowing for the audio, thumbnails, TCP retries and other overhead traffic, at least 1Mb/sec or above and 50ms latency or lower is required for a good user experience.

For local workflows where latency is near zero and bandwidth is very high, the user can select LBR pass-through, where the LBR is passed through the Transformer directly from the sQ Server without any ABR transcoding. This increases the number of clients that can connect to a single Transformer, and reduced TTP (Time To Play) latency.

Please see the Latency section below for additional factors to consider

MXF downloads will still continue if bandwidth drops below 300Kb/s but will take longer to complete.

Video Streaming Quality

The HTTP Transformer attempts to provide the best quality video to the clients - see the **Adaptive Bitrate Streaming** section. Various factors - both obvious and hidden - play a part in the overall conditions of the network path between the originating Enterprise sQ System and the client.

These include:

- Disk, CPU and Network loading of the originating sQ Server
- The loading of the Transformer providing the video stream, and it's network conditions
- The performance and type of the Load Balancer between the HTTP Transformer and the Client
- The speed, jitter and latency of the network between the Load Balancer and Client, affected by factors including:
  - Packet Sniffing and Shaping
  - Network level Virus Scanning
  - Network hopping i.e. Transformer -> Load Balancer -> Private Network -> Public Internet -> 4G -> Wi-Fi -> Client
- Encryption, including VPN & HTTPS
- Local client conditions
  - Port activity scanning, Virus Scanning
  - Local CPU Activity
  - Poor quality video drivers
  - Out of date or unsupported client libraries, including Web Browsers and "C++ redist"
  - Too many 'tombstoned' or dormant applications (particularly on tablets and smart phones)
  - Insufficient RAM

While the system attempts to deliver the best quality possible, many normal circumstances will still have many of the above *hidden* factors, thus being unable to provide the maximum video quality.

Video Playback Reliability

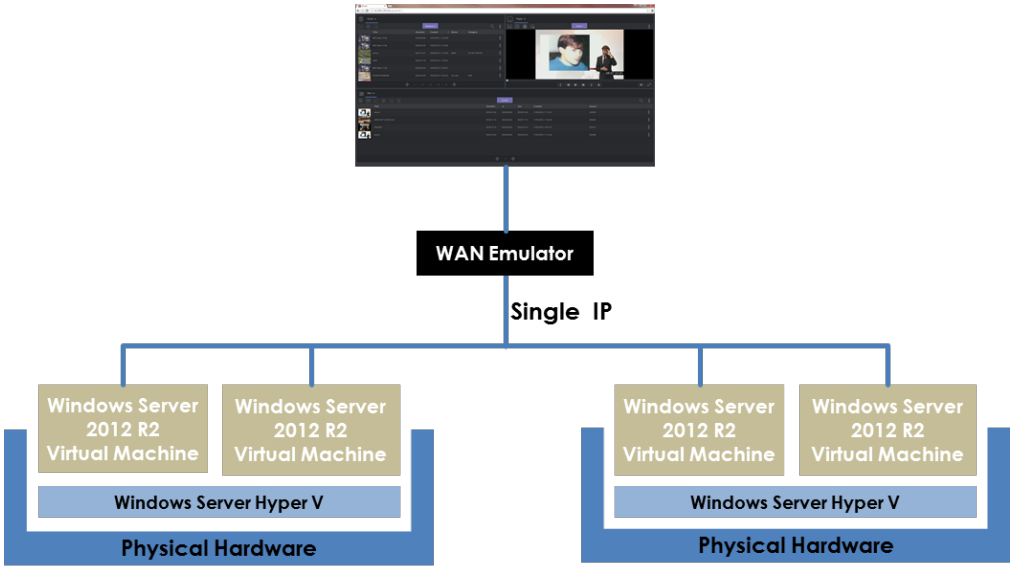
While every effort has been made to ensure fast, reliable and good quality playback over a variety of bandwidth and latency combinations, every factor of the connection including jitter and packet loss can contribute to a poor video streaming experience.

It is highly recommended the network path between the server and client environments is profiled prior to deployment to ensure the network is of sufficient to deliver the required workflows.

Latency

For demos and operational deployment, a ***maximum* of 50ms latency** in recommended between the client hardware and the server cluster.

Tests have been carried out in the following system configuration resulting in the following performance characteristic in high latency - or worst case - scenarios. Lower latency will result in better figures and a better user experience:



Item	Test	Link speed	1300ms	1000ms	800ms	600ms	400ms	200ms	100ms
Thumbnails	Load time	44.7Mb/s	8	6	4	1.5	<1	<1	<1
Thumbnails	Load time	4 Mb/s	timeout	timeout	timeout	OK	3	OK	3
Video	Play time	44.7Mb/s	15	13-15	15	15	14	13	5
Video	Play time	4 Mb/s	timeout	timeout	timeout	OK	8	OK	8

Numbers are seconds. Thumbnails = 13 thumbnails in a search result list. Video = first segment to play.

Only with persistently *exceptionally* poor latency did the technology fail.

However even where latency did not cause a timeout, there is doubt whether a user will have the patience to work with such poor network conditions.

Delivery and Availability

Go v1.4 ships with HTTP transformer v6.5 together in a single pre-configured Windows Server 2008 R2 Virtual Machine (VM), installable on top of Microsoft Windows Hyper-V 2012 core edition

A legacy installer is not ordinarily provided for the HTTP Transformer, but can be provided on request. This may incur additional project management charges.

A separate package to install Go! on older HTTP Transformers is available.

User Management

From Go! v1.3 and HTTP Transformer v6.2, User Management is required to provide per user logins

Under normal operations a Go! user will have no knowledge of the management tools that other Media Management and Administrator users have access to. However under certain circumstance these 'super' users can affect other user's logons'.

Prevented Logon / disabled account

Each user's account can be enabled or disabled by the Administrator. This is to ensure that enough system bandwidth is available for a core subset of the users on the system.

If a user tries to logon while their account is disabled the user is informed their account is disabled.

Forced log off

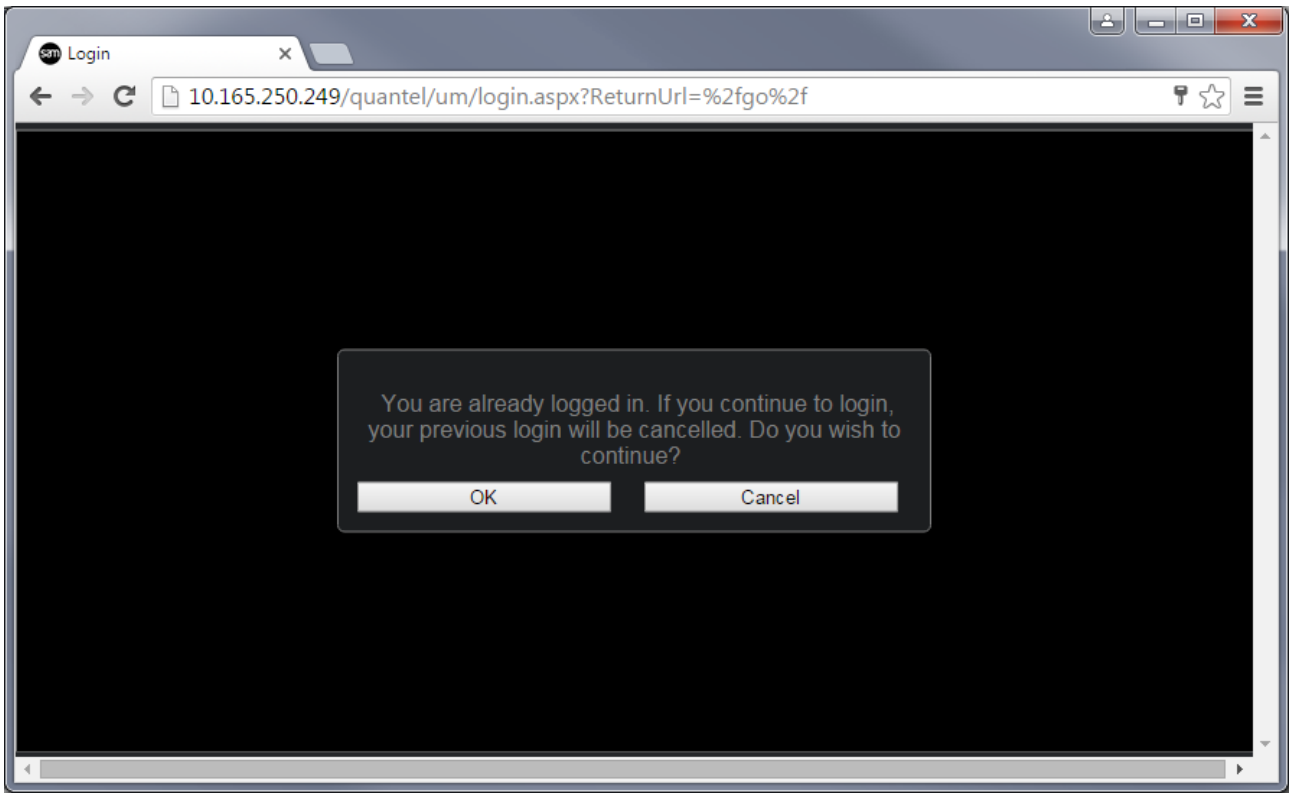
User can be temporarily 'kicked off' the system and prevented from logging on.

This is typically to reduce the user load on the system for a short period of time. If a user if kicked off they are returned to the logon screen with a message informing them the administrator had deliberately forced their log off.

They are automatically prevented from logging on for 5 minutes, or unless manually turned back on by a super user.

Enforced single logon

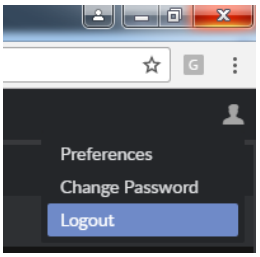
Each user can only be logged on to the system once at a time. If a session is started in one location, then the user moves and starts another session somewhere else before the first session has ended, the user will get the following message at logon:



Features

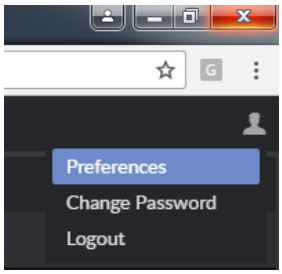
General

Logout



The user can log out from the current session by using the logout option by hovering over the top right user icon.

Preferences

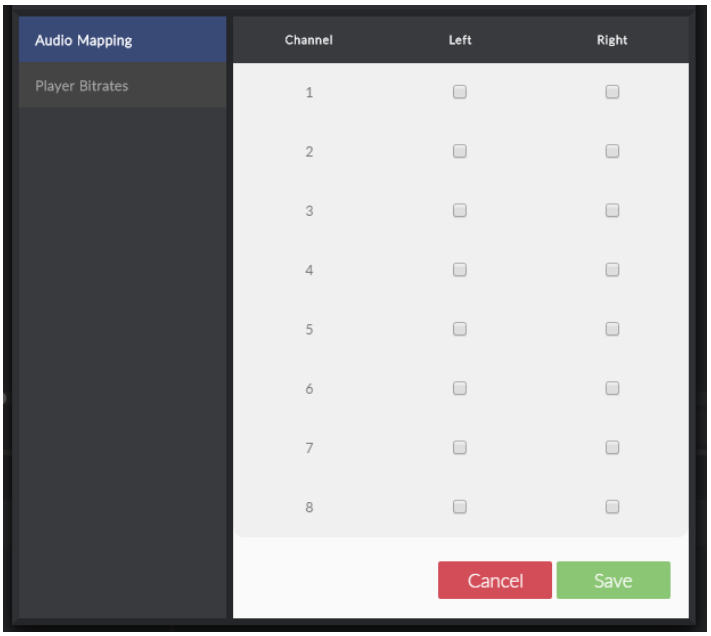


Hovering over the user icon on the top left provides access to the users preferences

The pop-up has the various per users setting grouped into tabs on the left (see below)

Audio Mapping

The audio channel configuration played in the player, downloaded as WAV and added to the bin can be customised by hovering over the user icon and selecting preferences.



The user can select which of the clips 8 audio tracks appears in the Left or right channel of the WAV file.

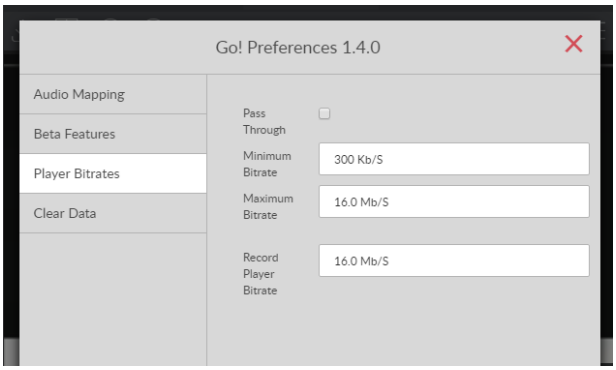
Note: The audio configuration applies to all clips. You cannot currently specify a different audio configuration for each clip in a bin.

Note: The Go! Production Suite, does not currently support 16 channel audio.

Audio Waveforms

Please see the Experimental Features section

LBR pass through & player bitrates



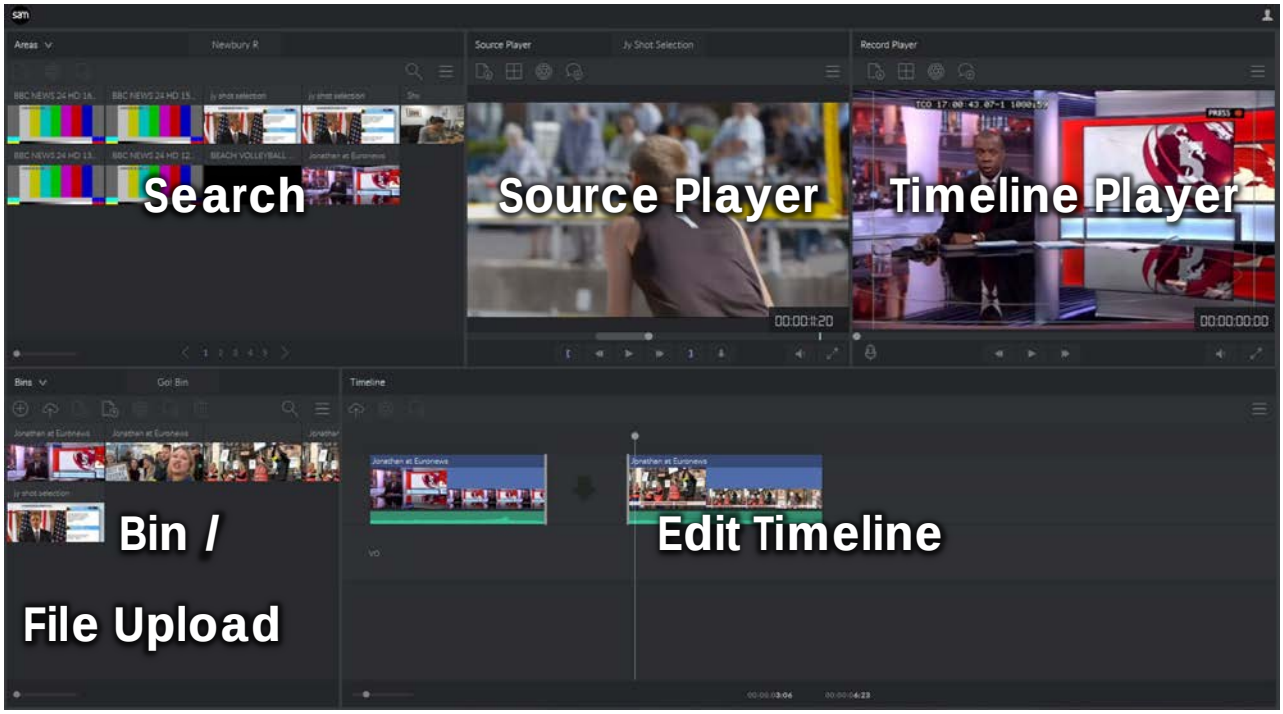
In some situations the latency and available bandwidth between Go! and the HTTP Transformer may vary so rapidly that the streaming algorithm is unable to accurately set the best streaming quality.

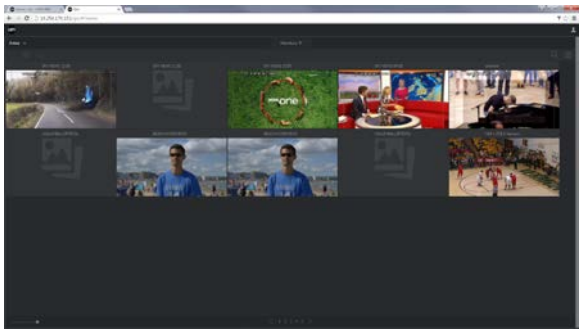
In the Player Bitrates section, the user can limit Go! to use a restricted range of bitrates and set a Timeline Player bitrate to ensure an improved user experience:

For local connections where ABR is not required, pass through can be enabled to stream the proxy directly from the sQ Server to Go! without Transcoding.

Flexible layout

The flexible panel layout allows the user to adapt Go! to their needs. Panels can be re-sized or even totally collapsed to effectively remove the panel from the workspace.

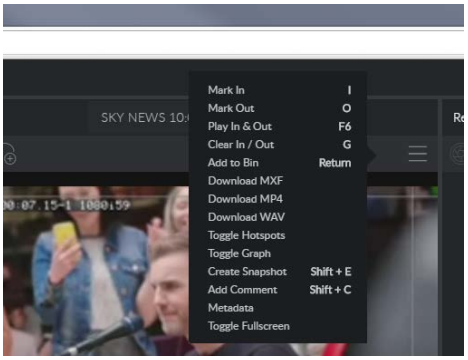




The above example has all panels collapsed except search panel, which has large thumbnails selected

This has the Bin and source player collapsed with a layout focused on Timeline editing and review

Additional Options Menu & Keyboard Shortcuts



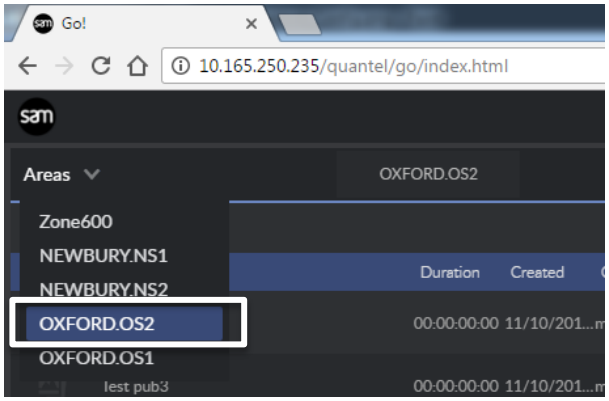
Each of the panels and all of the clips has an "Additional Options" menu.

The most common commands have keyboard shortcuts, as indicated.

Search Panel

Search Area selection

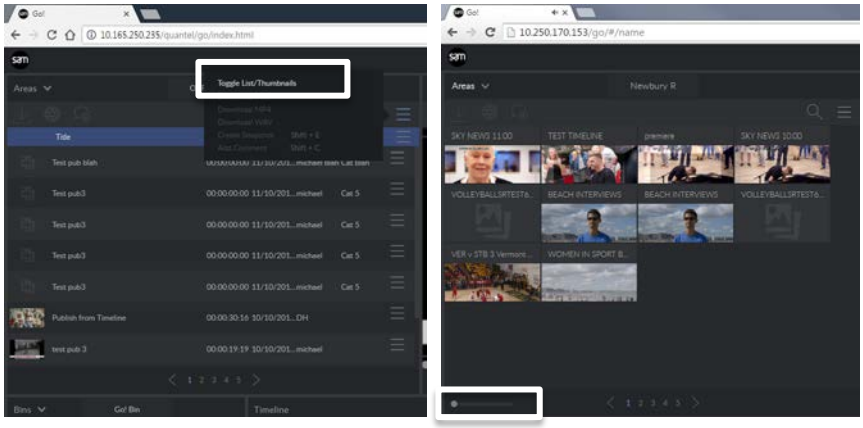
The SAM infrastructure - including Transformers, sQ Zones and sQ Servers - can be organized into Areas which users can search.



Any search areas that the user is allowed to view and search can be selected here.

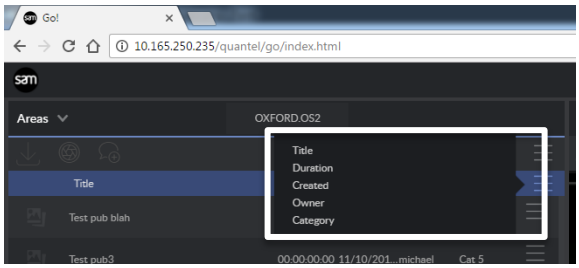
List / Thumbnail view

The menu of the search panel provides the ability to switch between list view and thumbnails view by the "*Toggle List/Thumbnails" option* in the panel menu, as shown below:



Thumbnails can be resized using the slider in the bottom left corner of the search area.

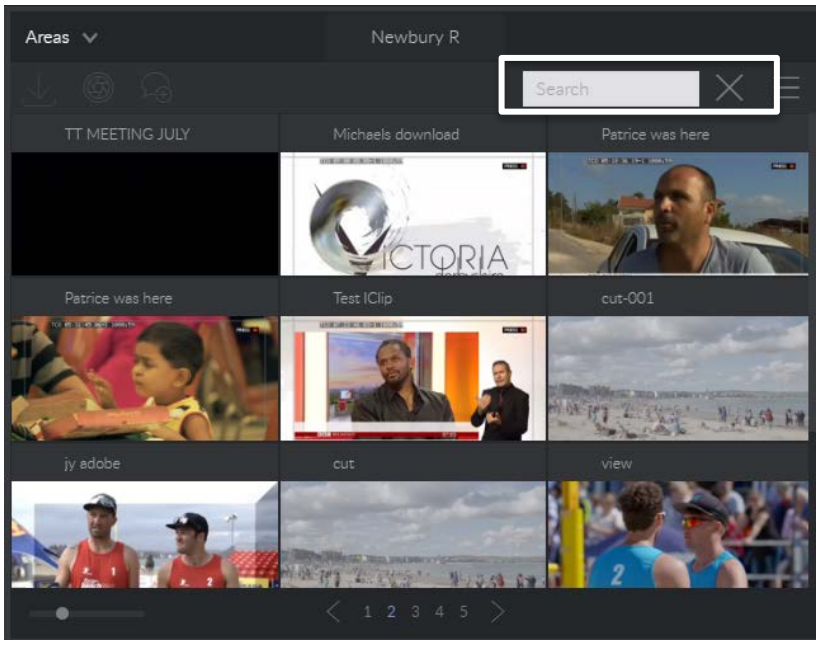
List view column picker



When in list view the columns can be customised by the menu on the right of the lis header

Searching

Clicking the search icon displays the search text box. Pressing X clears the search



The user can search for:

- Title
- Owner
- Category
- Duration
- Created (Date/Time)

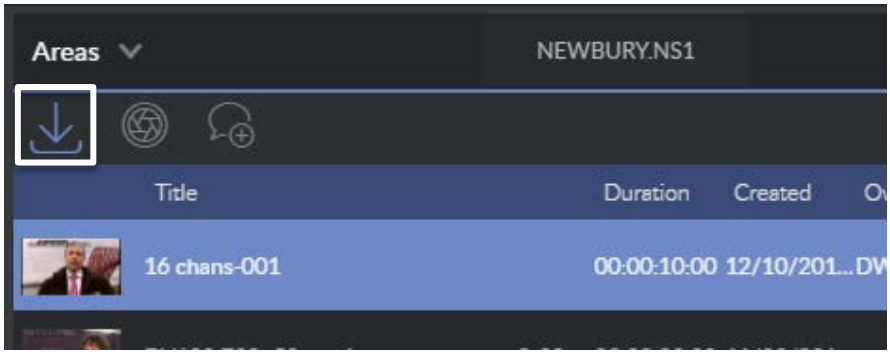
The wild card character * can be used at the start or end of the search term string to widen a search for partial matches.

Search results can be double clicked to preview in the source player, or dragged directly to the bin or Timeline for use in an edit.

Clip download

When a clip is selected the download button is enabled so the user can download the entire clip as a MXF OP1a file. The essence format is whatever the source format of the server is set to.

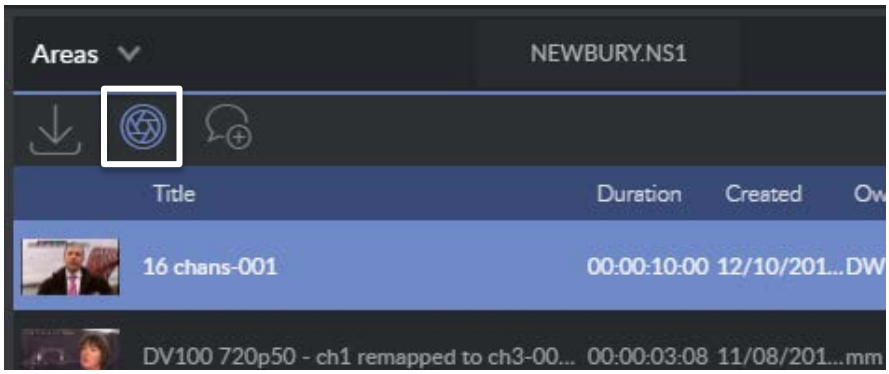
The user can also download the clip as a MP4 file from the menu.



Note: You cannot select multiple simultaneous clips and download at once

Snapshot

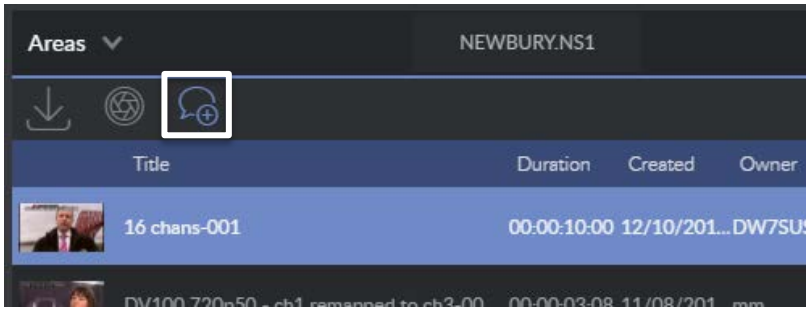
When a clip is selected the snapshot button is enabled so the user can grab a high quality still of the first frame of the clips and download as a JPEG image.

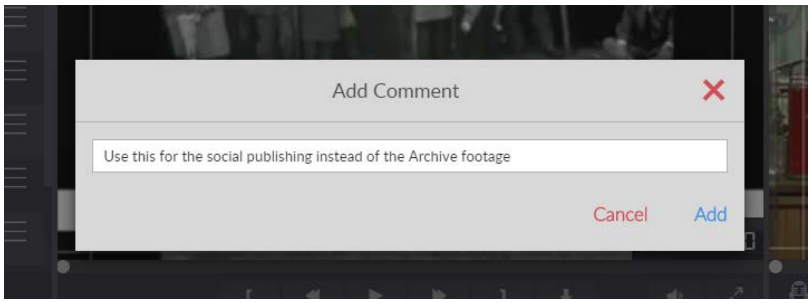


This is also available in the options menu for search areas panel.

Add comment

When a clip is selected the add comment button is enabled so the user can add a comment to the clip.





The comment is added to the first frame of the clip.

This is also available in the options menu for the search area panel

Note: Comments do not appear in the search result list and cannot currently be searched.

Download MXF / WAV / MP4

The video (with audio) or separate audio of the selected clips can be downloaded as a server format MXF, MP4 or WAV file. The video and audio format of the WAV and MXF is the same as the format stored on the sQ Server.

The MP4 bitrate and resolution is set in the desktop settings app of each HTTP Transformer.

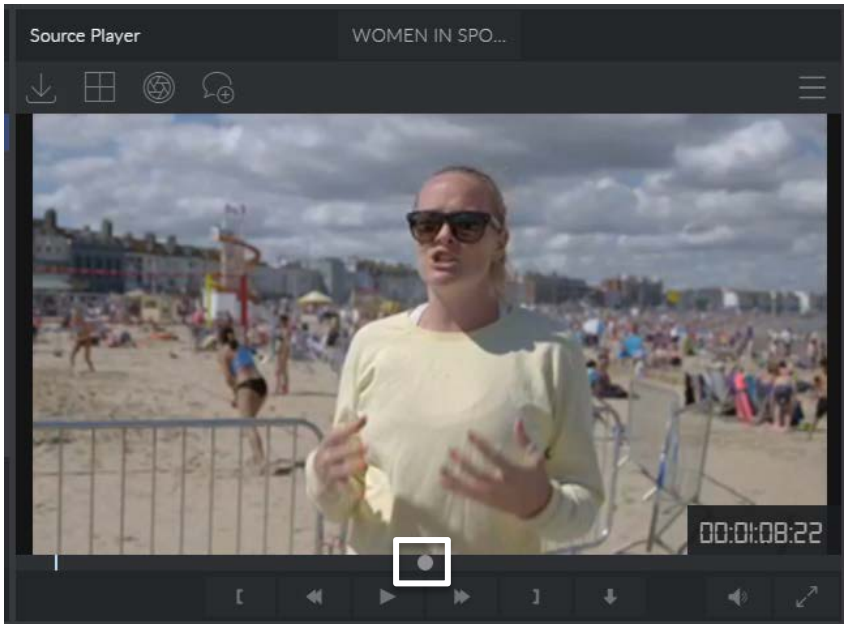
Source Player

The source player allows clips that are not on the timeline to be reviewed before being adding to an edit.

Clips are loaded into the player in three ways

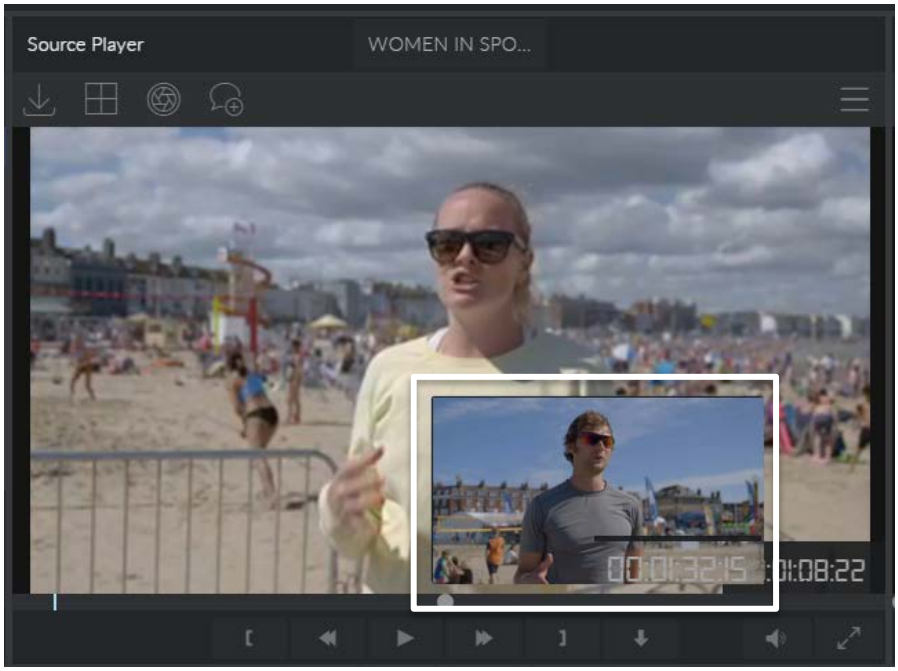
- Any clip row can be double clicked which will load and play the clip (list view only)
- Any thumbnail can be double clicked which will load and play the clip
- Any clip row or thumbnail can be dragged and dropped onto the player
- By selecting ‘Play’ from the menu.

The current play position in the clip is indicated by the round grey dot



The user can click anywhere on the player timeline to move the play head to that position.

Hovering the mouse over the player timeline shows a thumbnail of the frame, and the timecode for that frame is displayed in the thumbnail.



Clips loaded in the source player can be dragged to the bins panel or timeline to use in an edit. If in and out points are set, these are respected in the clip that is dragged.

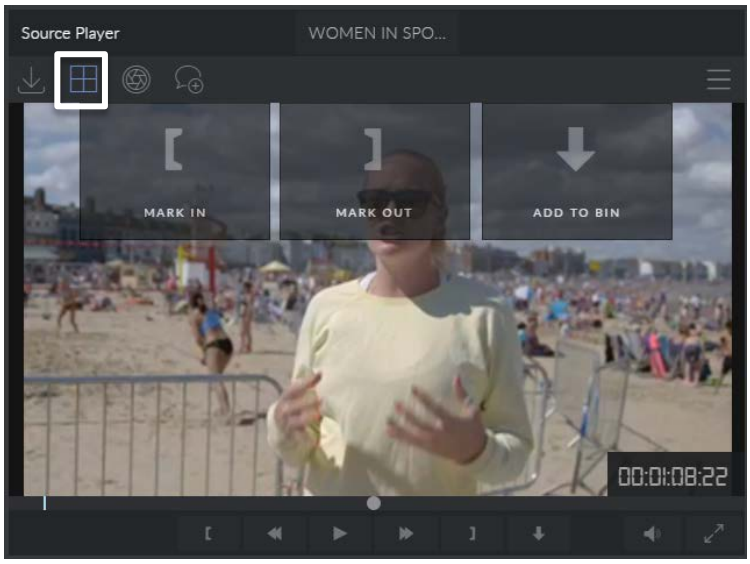
Clip / sub clip download

The whole clip can be downloaded as an OP1a MXF in the format the clip is stored as on the server using the button indicated below, or as an MP4 file or WAV from the menu.

If a sub clip is defined, only the sub clip is downloaded in the selected format.

Show Touch Hotspots

The grid icon enables large touch markers so when operating on a tablet, the in and out points can be easily made using touch, then easily added to the current bin



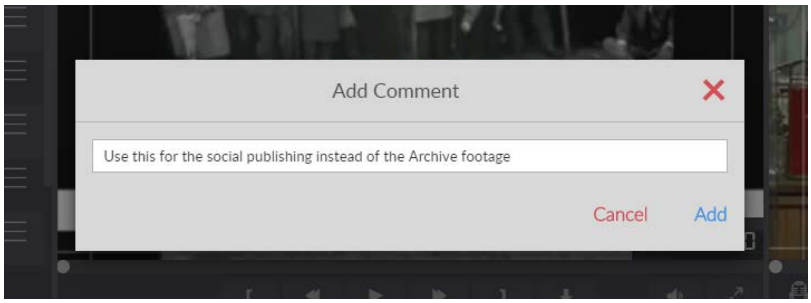
This option is also available from the player menu for the current loaded clip.

Create Snapshot

The user can grab a high quality still of the frame of the current timecode and download as a JPEG image.

This option is also available from the player menu for the current loaded clip.

Add Comment

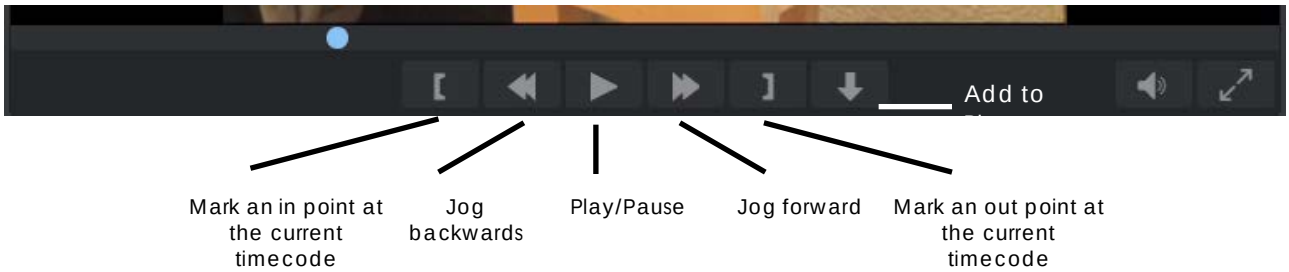


The user can add a comment to the clip currently loaded into the player, at the currently selected or paused frame.

This option is also available from the player menu for the current loaded clip.

Transport control

When a clip is loaded it is cued on the first frame. The player transport controls and player timeline can be used to navigate and view the video.



Repeatedly pressing jog forward and backs change the speed by x2, x4, x8 and x16.

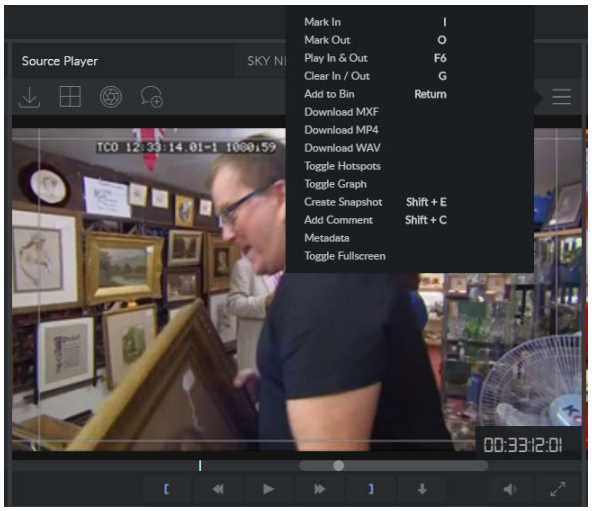
Creating a sub clip (mark in and out)

The user can mark in and out points when the player is paused or in playback to create a sub clip on the player timeline.

The Add to Bin button (see above) adds either the whole clip to the current bin, or the sub clip if in and out points are defined.

Additional options menu

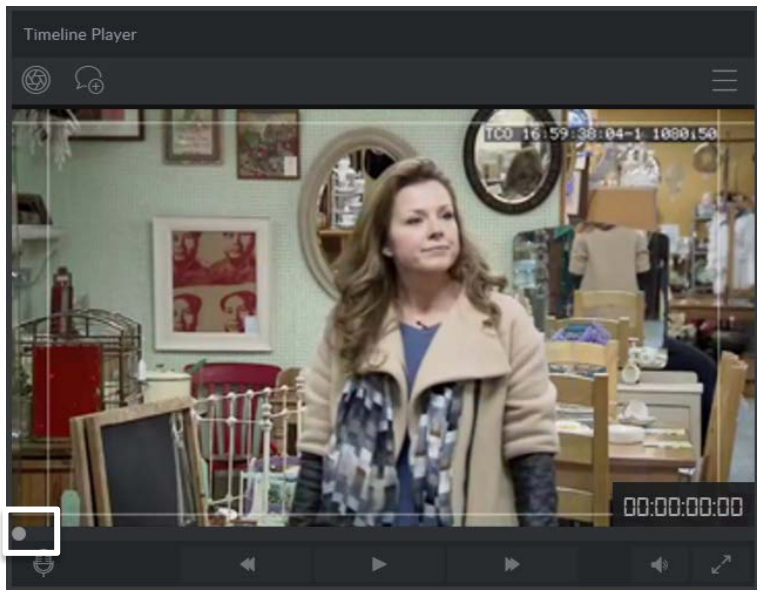
The menu in the player provides access to all the main features and some additions:



Timeline Player

The Timeline player appears in the top right on the layout and always plays the contents of the timeline.

The current timeline playhead position is indicated by the round grey dot



The user can click anywhere on the player timeline to move the play head to that position.

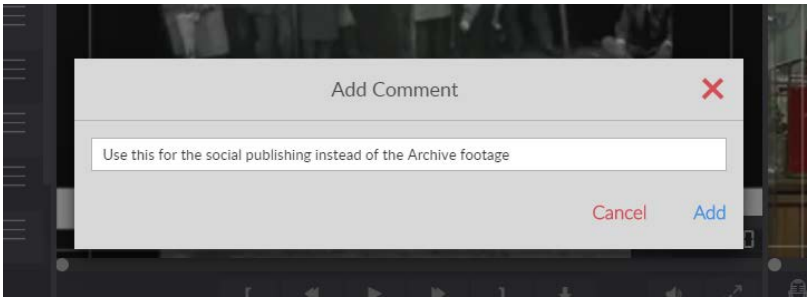
Hovering the mouse over the player timeline shows a thumbnail of the frame, and the timecode for that frame is displayed in the thumbnail.

Create Snapshot

The user can grab a high quality still of the frame of the current timecode and download as a JPEG image.

This option is also available from the player menu for the current loaded clip.

Add Comment

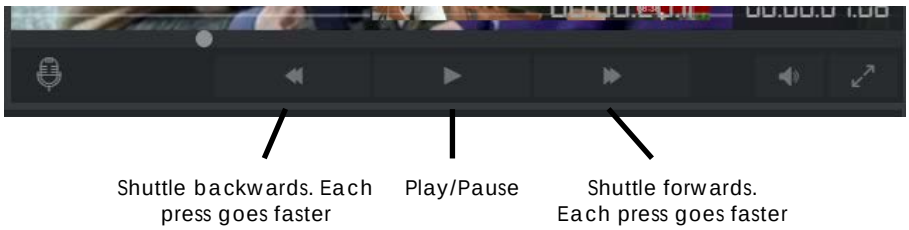


The user can add a comment to frame at the play-head, while either paused or playing.

This option is also available from the player menu for the current loaded clip.

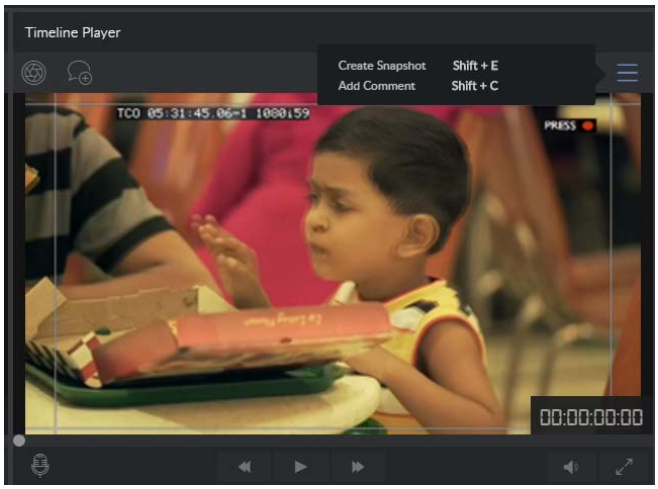
Transport control

When a clip is loaded it is cued on the first frame. The player transport controls and player timeline can be used to navigate and view the video.



Additional options menu

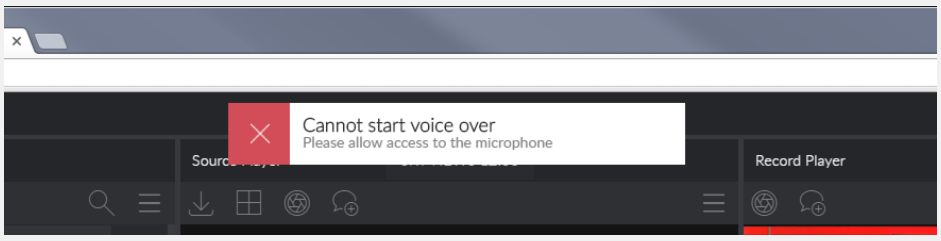
The menu in the player provides access to the features in the panel:



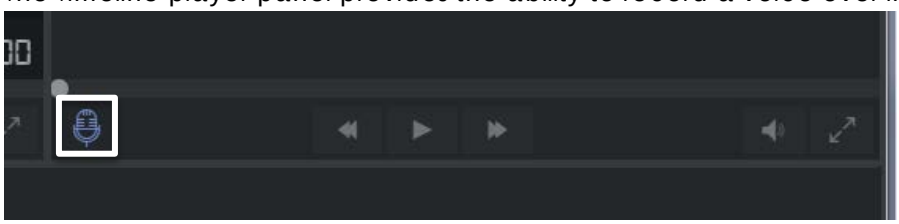
Voice Over Recording

Note: Google Chrome is only able to access the default microphone from HTTPS-enabled servers, so ensure the system is correctly setup with certified SSL certificates to provide verified HTTPS connectivity.

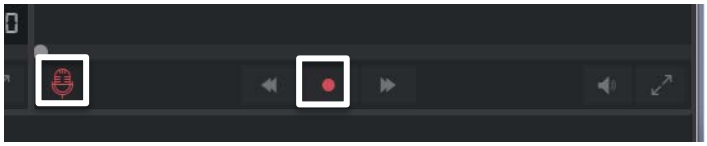
Go! is only able to detect that the microphone is not available, displaying the following error:



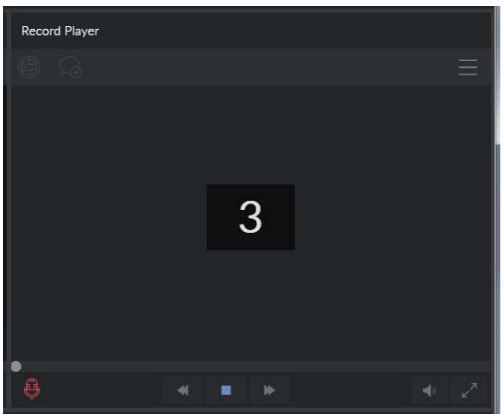
The Timeline player panel provides the ability to record a voice over in Go!



Pressing the microphone icon puts the Timeline Player into VO record mode:



Note: Go! does not currently provide volume level meters so you must ensure suitable level control prior to recording the voice over



Pressing the Red Record Button starts a 3 second countdown, and the record icon turns into a stop icon so you can stop the VO record at any time.

The recorded VO is automatically added to the timeline VO track at the playhead location.

Bins Panel

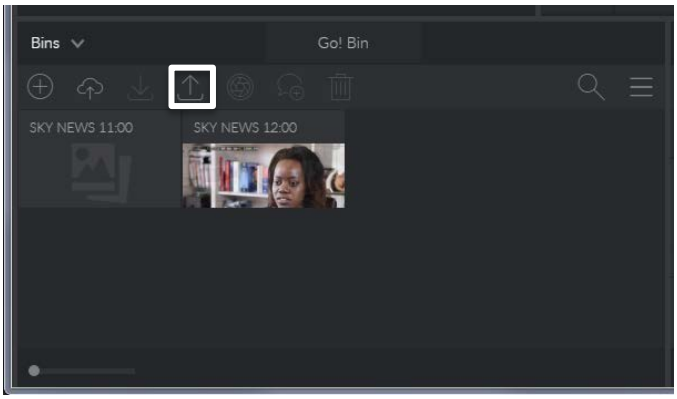
The Bins panel lives on the bottom left of Go!

A default bin called **Go!** is always available and selected by default if no other bin has been created and selected.

The currently selected bin is the bin that whole clips and sub clips are added to when 'add to bin' is chosen in the Area and Player panels.

All available bins can be viewed and switched between by selecting a bin from the bins Menu.

Upload Files



Professional camera files and files from mobile phones can be uploaded.

On the desktop you can drag and drop files directly onto the bin to trigger the upload or press the file upload icon to browse the local file system.

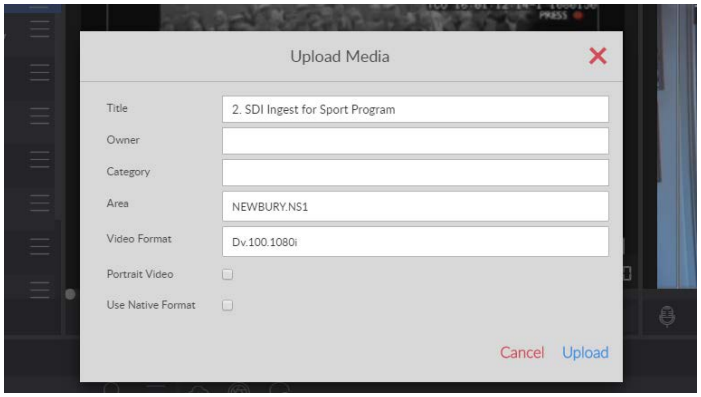
On tablets and phones the file upload icon allows the user to either select an existing local file, or record a new video

Note: A long standing bug on Chrome for Android prevents the file picker appearing - only new video can be recorded and uploaded.

Only MXF, MOV and MP4 extensions can be uploaded

Only one file can be uploaded at a time per client, and files are queued up on the HTTP Server which imports one at a time.

As well as the Area to upload to, the Title, Owner and Category metadata can be specified.



The preferred format for the default zone is selected by default.

Note: Changing the Area does not change the preferred format to that of the newly selected zone

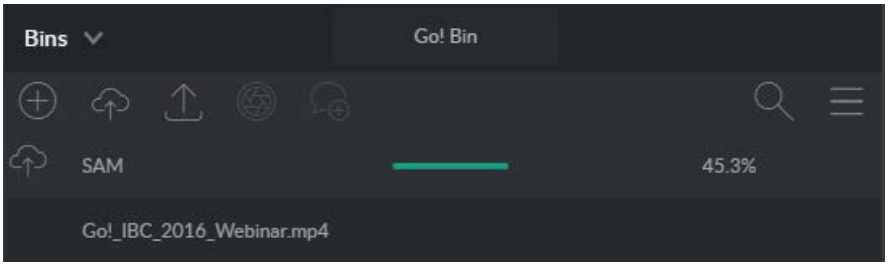
If **Portrait Video** is selected the aspect ratio and orientation of the source portrait video is preserved within an HD 16:9 frame with left / right black bars. Otherwise the portrait video is stretched to fill an HD frame.

The source file format is not automatically detected therefore all files uploaded are always transcoded into the selected server format.

However, if the user knows the file is already in server preferred format, they can select the **Use Native Format** options to bypass transcoding.

Note: If **Use Native Format** is selected for a non-native file, the import will fail.

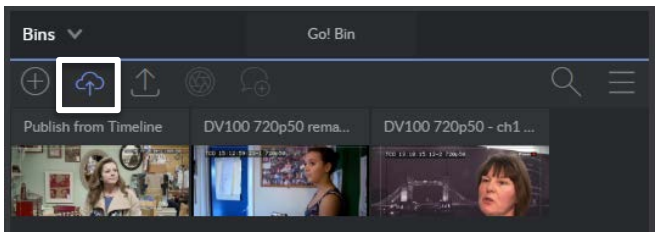
The upload progress is shown at the top of the bins panel.



Once uploaded the File ingest, which may include transcoding. The ingest progress is shown in a spinning dot in the top right of the Go.

Publish Bin

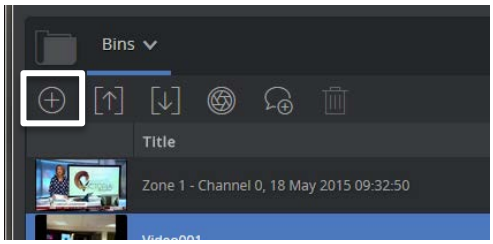
The order of the clips and sub clips in the bin can be published as an EDL



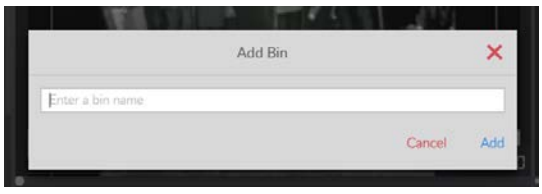
The user can select a name for the new edit, the target Area, and set the Title, Owner and Category metadata:

Add new Bin

The Create Bin button enables the user to create a new bin.

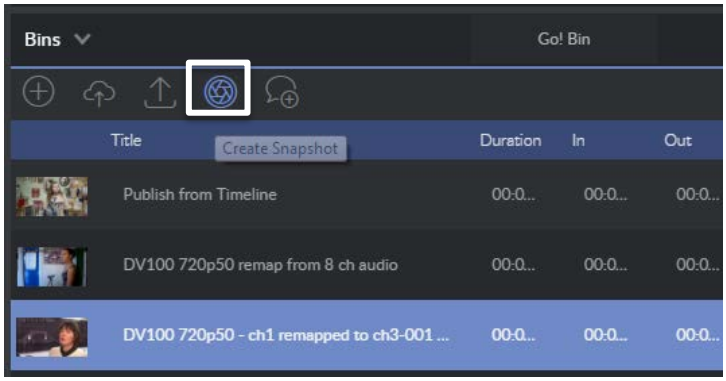


The user can give the new bin a preferred name



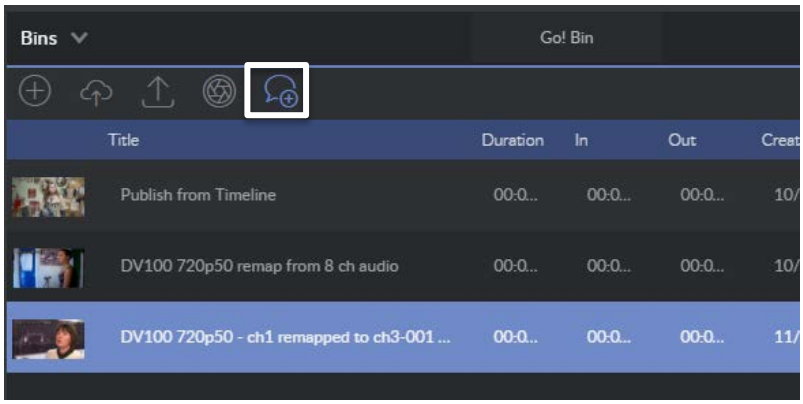
Create a snapshot

Pressing the snapshot icon takes the first frame of the selected clip or sub clip and downloads it as a JPEG.



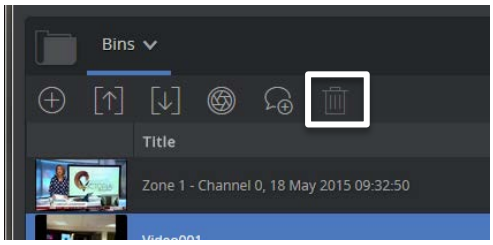
Add Comment

The user can add a comment to the clip currently loaded into the player.



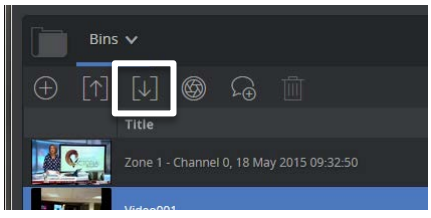
Delete clip

When one or more clips are selected the Delete clip(s) icon enables. Clicking this deletes selected clips from the bin. There is a confirmation dialogue to prevent against accidental deletion.



Download as MXF

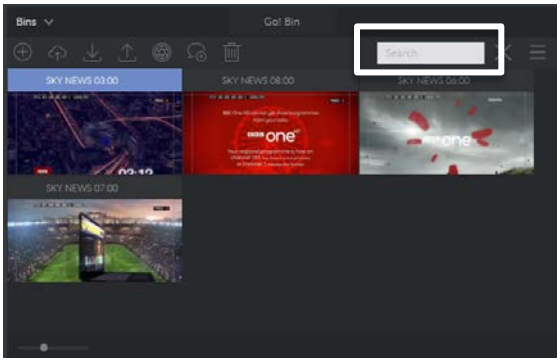
The download MXF icon downloads the entire bin as a single flat MXF file.



If the clips are in different formats or resolutions then all the source frames are transcoded to the format and resolution of the first frame of the first clip

All audio tracks in the original clip are downloaded in the MXF file.

Search Bin

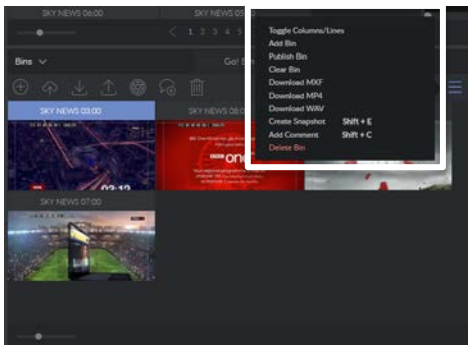


Clicking the search icon displays the search box with the cursor present ready for the user to search the bin

Like the Area search, the thumbnails can be resized with the slider bottom left

Additional options

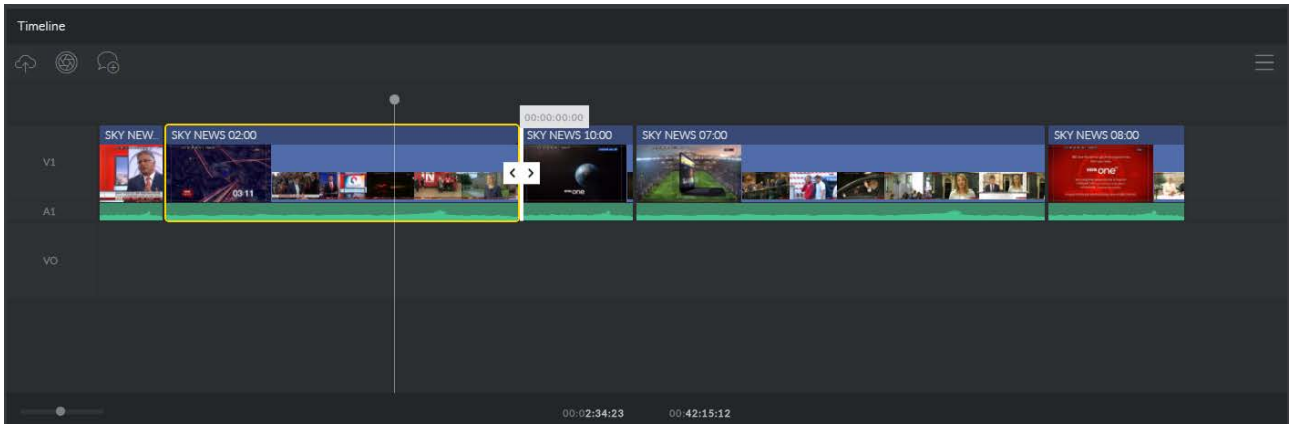
At the far right of the Bins panel are the additional options for the bins and selected clips in the bin



This provides other actions, some of which are disabled depending on whether or not a clip is selected. Where applicable keyboard shortcuts for the various operations are indicated

- Switch between detail and thumbnail views
- Add a new bin
- Publish current bin
- Clear current bin
- Download as flat MXF
- Download as Flat MP4
- Download multi-track WAV
- Download first frame snapshot of selected sub clip
- Add comment to selected clip
- Delete current bin

Edit Timeline

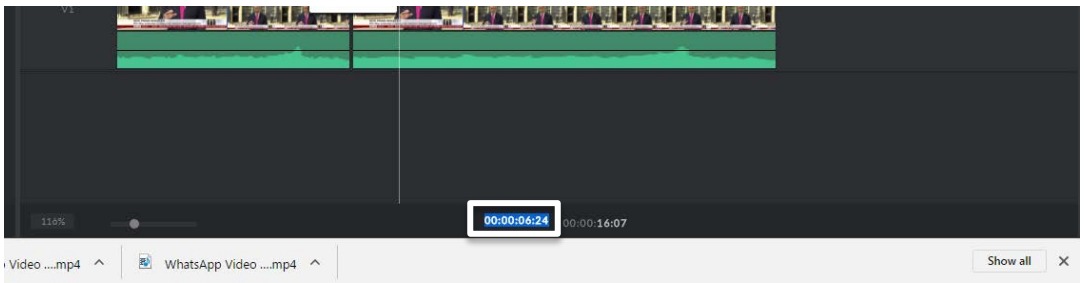


Go! provides an edit timeline with the following general edit features:

- Clips from anywhere in the UI can be dragged on to the timeline where they become segments of your edit.
- Existing segments on the timeline can be reordered using drag and drop
- If audio is present in the segment an example waveform is displayed
- Selected segments have a yellow border (shown)
- Double clicking any timeline segment moves the playhead to the start of that segment
- Hovering at the start or end of a segment shows a trim handle (shown)
  - You can drag the trim handle to shorten the preceding segment, or change the start time of the next segment
  - It displays the segments current location source timecode
- Each segment displays thumbnails (shown)
- The Timeline can be zoomed in and out using the bottom left border slider
- Toolbar icons
  - Publish timeline
    - Includes any local media and VO
  - Create snapshot of the current playhead location
  - Add comment at the playhead location

Playhead Timecode indicator

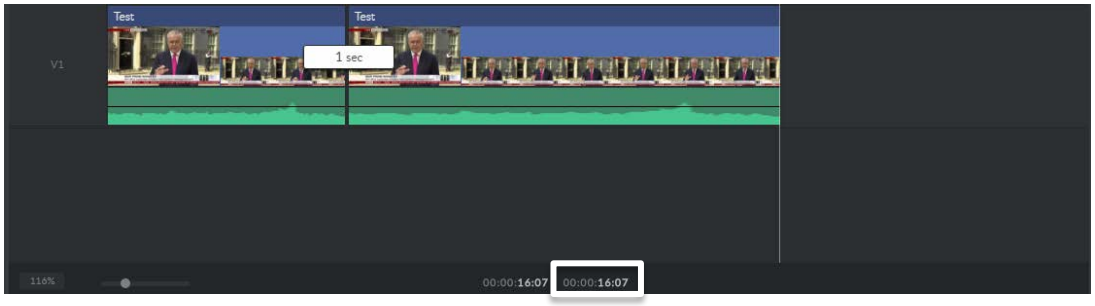
The timecode position of the playhead is the *left* timecode of the two centred on the timeline:



Double clicking this (indicated) allows a specific playhead location to be entered.

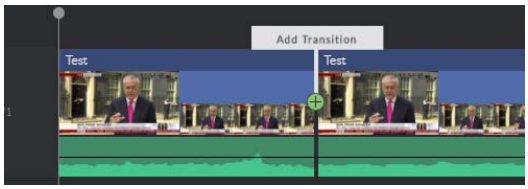
Timeline duration

The total duration of the video on the timeline is indicated by the *right* of the two timecodes centred on the timeline:

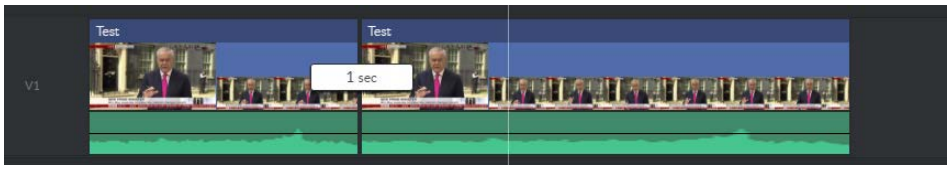


Video Transitions

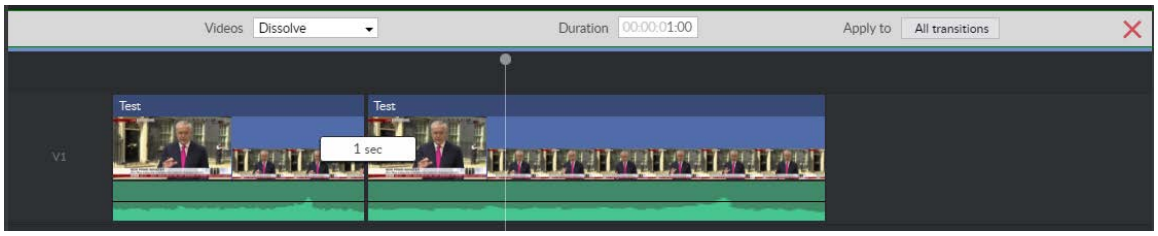
At the beginning and end of each video segment on the timeline, including between two segment, a small green button appears when you hover the over segment boundary:



Clicking this adds a default 1 second crossfade transition between the segment



Double clicking this brings up an edit transition tool bar:



This allows the user to

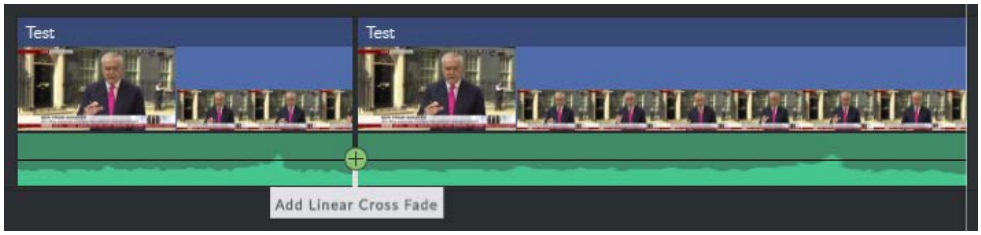
- Change the type of transition from
  - Crossfade
  - Wipe
  - Cut (removes transition)
- Edit the duration in **`hh:mm:ss:ff`**

Changes are applied immediately to the selected transition. You can optionally apply the new settings to all the existing transitions on the timeline.

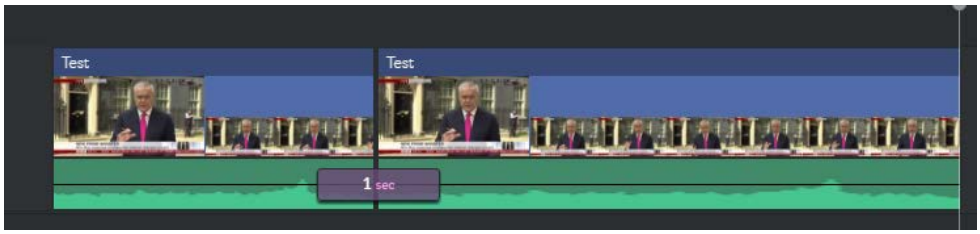
Note: the duration of transitions is not indicated in the rectangular transition box.

Audio Transitions

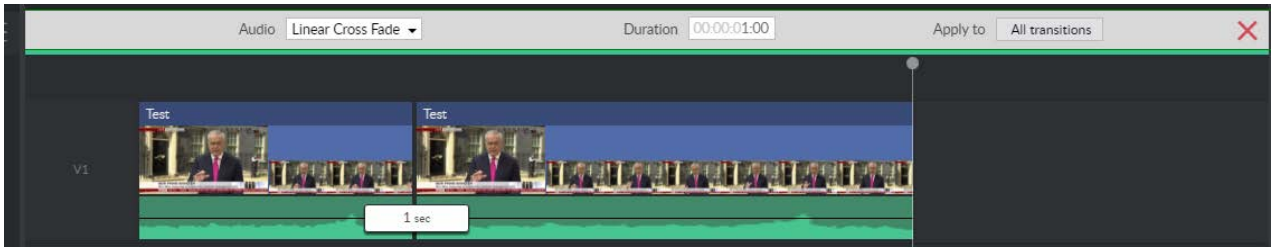
At the beginning and end of each piece of audio on the timeline, including between two segments, a small round green button appears when you hover the over segments boundary:



Clicking this adds a default 1 second crossfade transition between the segments:

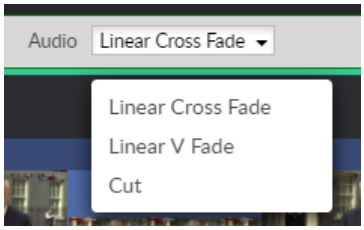


Double clicking this brings up an edit transition tool bar:



This allows the user to:

- Change the type of transition from
  - Linear Cross fade
  - Linear V Fade
  - Cut (removes transition)

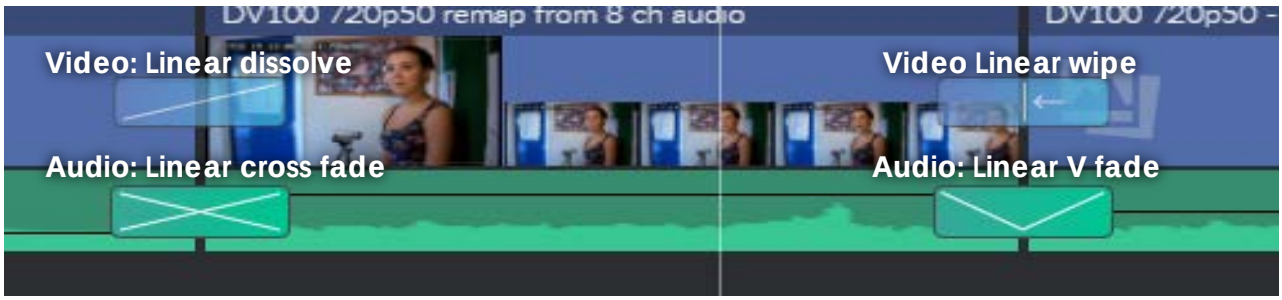


- Editing the duration in **`hh:mm:ss:ff`**

Changes are applied immediately to the selected transition. The user can optionally apply the new settings to all the transitions on the audio

Transition type indicators

When a transition is added it is represented by a rectangular box joining the two segments. It provides a simple visual identifier of the transition used:

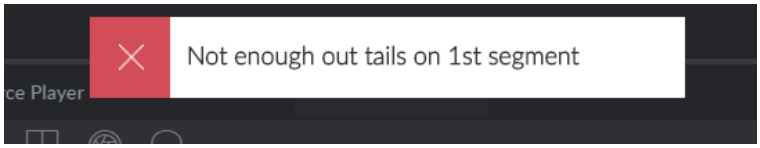


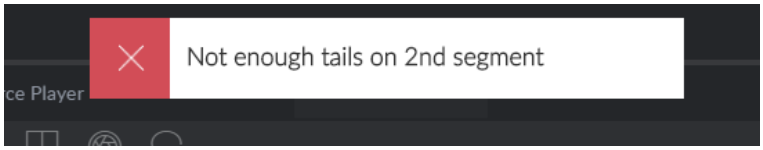
Note: the width of the transition indicator does not represent the duration of the transition.

Tails warning

When adding a transition there needs to be enough tails on each segment for the fade or wipe

If default duration is 1s, so if there is not at least 1secon of tails on each clip, the user is presented with a warning.



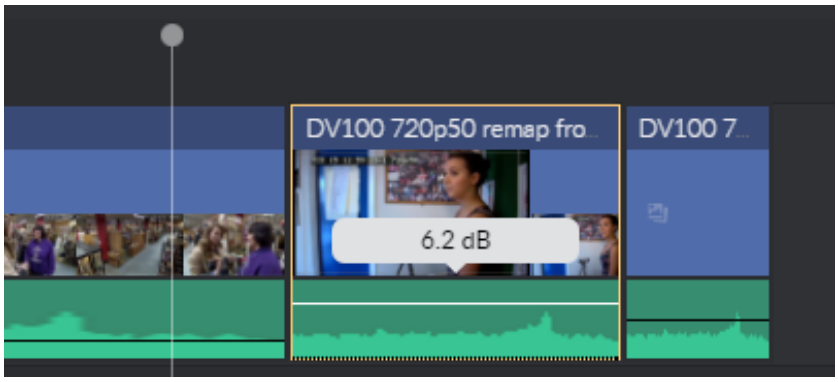


Per clip audio

On the audio row of each timeline segment is a black horizontal line which represent 0db of gain or attenuation of the clips audio.

Dragging the black line up or down will either amplify or attenuate the clips's audio level.

Coupled with audio cross fades, users can do audio work for most news packages.



Other information

Upgrading Go!

While Go! is dependent on the HTTP Transformer API and runs on the HTTP Transformer as a web application, Go! can be updated quickly and independently from the underlying Transformer installation.

If a new version of Go! requires a newer version of the Transformer API, the Transformer software will need upgrading. Each Transformer installation also includes the latest Go! version.

Deliberately mis-matching Go! and HTTP Transformer versions

Go! is developed in tandem with the HTTP Transformer, and new Go! features often depend on the latest HTTP Transformers API.

However, in many cases UI improvements and new editing features are not dependant on HTTP Transformer features, and so the Go! application may be upgraded on the web server without changing the Transformer application itself.

In this case some new features that require a newer HTTP Transformer will not work and will produce error messages, however UI-only changes should work as expected.

Diagnostics

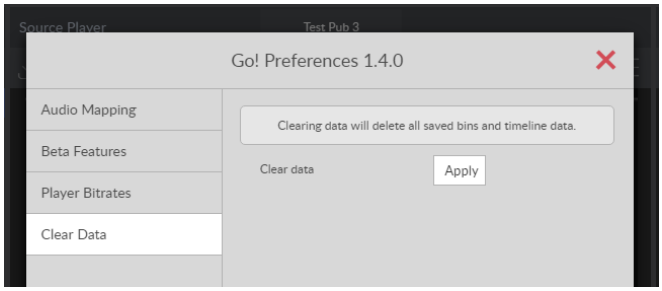
Video Streaming

If experiencing unusually poor quality video (please see **System Requirements | Network** for more information), Go! can overlay statistics about the video stream it is receiving onto the player by using the **Toggle Graph** option from the player's Additional Options menu. These are displayed in red in the top left corner.

Resetting the Local Environment (Clear data)

The contents of the timeline, bins as well as other settings like column configuration and LBR pass-through are all stored in the Go! application storage, managed by the browser.

In some rare circumstances, normally relating a newer version of Go! changing what needs to be stored in the application storage, the application storage may get corrupted leaving to strange behaviour and general lead Go! to not operate correctly.



In this case go to the user preference and select Clear Data.

This removes all saved data from the application storage and should solve most 'strange behaviour' issues.

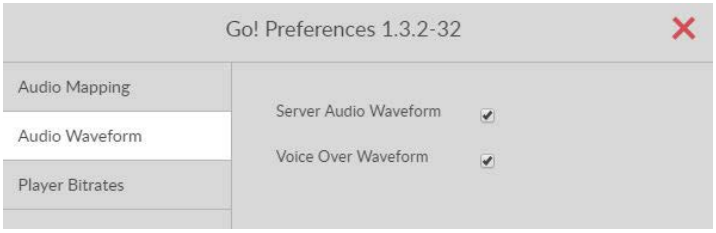
Experimental Features

Go! uses the latest browser features, and as such, some Go! features that rely on these cutting-edge browser technologies may not be stable enough for operational deployment.

In some cases they have been included but disabled by default for customers to evaluate and provide feedback if desired.

Audio waveforms

In the user preferences, turn on audio waveforms to have Go! download the uncompressed wave data for each audio segment and draw the waveform on the timeline.



On slow connections this may take a while and hamper other operations, including video streaming.

Warning: This is known to cause instability and Go! application crashes in *some* instances. If the crashes are unrecoverable you will need to clear the application cache in the browsers F12 developer tools.

Publish to social media

When coupled with a installation of SAM Momentum and configure with specific workflows, Users can send video, stills and a custom comment to enabled social media platforms

White theme

A white theme is included. This is incomplete and may result in many features being unavailable or unstable. It is intended to generate feedback rather than be used operationally.

Feature release matrix

The table below indicates when key features were introduced or deprecated:

Feature	Introduced	Deprecated	Notes
Searching	v1.0		
Adaptive Video Preview	v1.0		
Whole and Sub clip MXF & WAV download	v1.0		
Bin creation	v1.0		
Metadata editing & Adding comments	v1.0		All comments are '**F5'** type
Logout	v1.1		
Audio Channel selection	v1.1		
Load balanced Server infrastructure	v1.1		Requires v5.4 rev 5
Managed User Logons	v1.2		Requires: - Transformer v5.4 rev 5 - User Management v1.0
Whole & sub clip MP4 download	v1.3		Requires Transformer 6.2
UGC upload and standard conversion	v1.3		Requires Transformer 6.2
Timeline editor	v1.3		Requires Transformer 6.2
Voice over record	v1.3		Requires Transformer 6.2
Video Transitions	v1.4		Requires Transformer 6.5
Audio Transitions	v1.4		Requires Transformer 6.5
Per Clip audio level	v1.4		Requires Transformer 6.5
LBR Pass through	v1.4		Requires Transformer 6.5

Additional Documentation

The following related documents are available on request:

- **Go Production Suite**
  - Go! Production Suite System Design and Pricing Guidelines
  - Go! Production Suite User Management Installation Guide
  - Go! Production Suite Remote User Management User Guide
- **Go!**
  - Go! Product Specification
  - Go! User Guide
- **QTube**
  - QTube Edit Product Guide
  - QTube Edit Installation Guide
- **HTTP Transformer:**
  - HTTP Transformer Product Specification
  - HTTP Transformer API Documentation
  - HTTP Transformer API Authentication Migration Guide
  - 1U PC requirements for customer supplied hardware

- **Go! Plugin for Adobe Premiere Pro**
  - Go! Plugin for Adobe Premiere Pro Product Specification
  - Go! Plugin for Adobe Premiere Pro FAQ
  - Go! Plugin for Adobe Premiere Pro Manual Install Guide

Limitations

SAM Go! is designed for creating video timelines using video situated remotely, all from a web browser.

For those who wish to switch to Go! from QTube Browser there are some differences in features:

MOV Download

While you can now download a selected clip or sub clip as H264 essence in an MP4 wrapper, you cannot download in a MOV wrapper.

Add another SAM Site

Areas in other SAM sites can appear in the areas panel; however these cannot be manually added by the user.

These can only be configured by system administrators on the server side and presented to the user as is.

Cannot publish to place holders

Placeholders are not specifically identified, and you cannot publish to them in Go!.