make.tv

PLAYOUT

Quickstart

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01

INTRODUCTION

How to use this document?

This document gives you a basic overview how to use make.tv Playout.

Complemental to a general overview of the Playout features we will guide you through the functionality with screenshots of the UI and short description. After going through this document you should feel ready to start your first session on a server. :)

Have fun using make.tv Playout!

Your make.tv team

What is make.tv Playout?

The **make.tv Playout** is a Cloud Scheduler & Playout Solution enabling content owners to create TV programs with a mix of pre-produced content & livestreams, which can then be published to the desired destinations, such as Twitch, YouTube Live, TV/SAT and others.
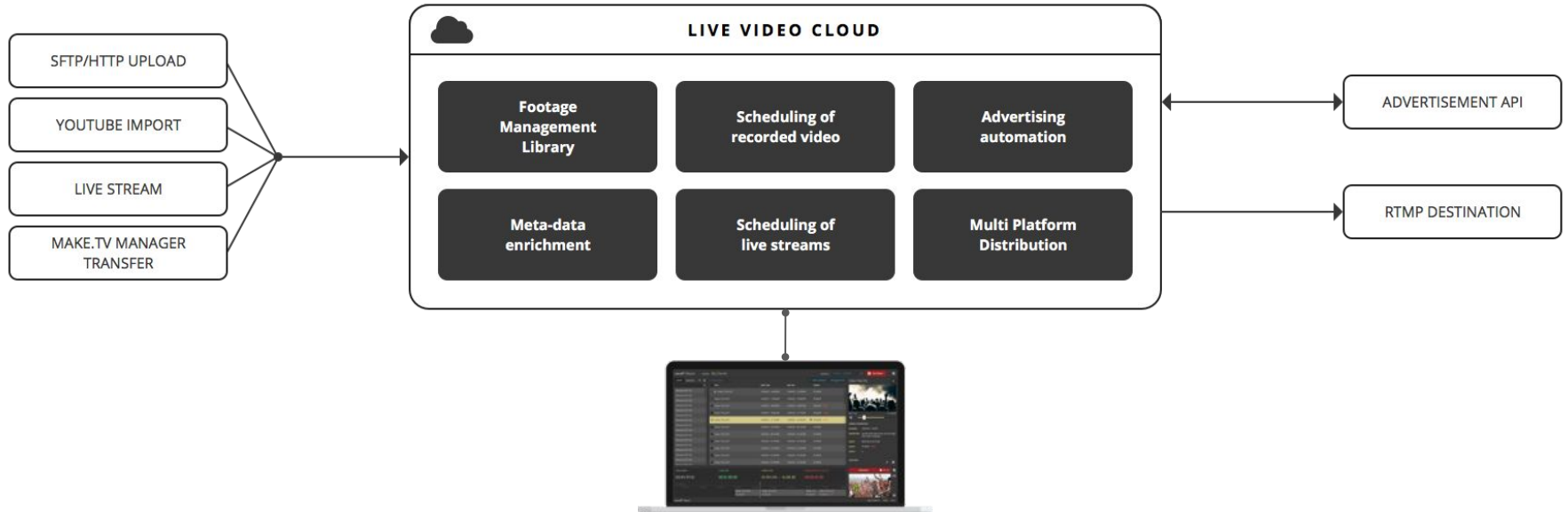
02

CHANGES IN 2.3.1

2.1 Summary

- **Livestreams as Elements**: We've implemented the Livestream-Feature. Now it is possible to add livestreams to the Library (new tab Livestreams). Livestreams can be delivered via PUSH directly to the Playouts server (RTMP PUSH URL is automatically generated by the server) or can be pulled from a public RTMP URL.

- You can use a livestreams wherever and as often as you want in the Playlist. In the Playlist and in the Timeline, livestreams are marked visually to differentiate them from normal On-Demand-Clips.

- If a livestream is running (on Air) you are able to select and trigger **Ad-Break-Calls** manually – all configured outputs will be triggered. In addition to the existing feature to skip the element (for instance if the event is over) you are now also able to add time to the Livestream (if the event takes longer than scheduled).

- **History Log**: We implemented a first version of the history log. The History is available via given FTP Access.

- **YouTube Playlist Download:** You are now able to download complete playlists from YouTube via the YouTube downloader.

- We also made **improvements on the server side** regarding some crashes happened in the past (Black Video Output / not responding GUI) to prevent deadlocks.

2.2 Playout Controls

While integrating the Ad-Break feature we needed to re-arrange the Playouts controls to ensure the interface displays its functions near their contexts. We created a cockpit-like interface at the bottom of the Playout where all important controls are now located.

Skip Element is positioned right above the center of the Timeline.

› 4.5.2 Skip Element

Dis-/Connect Outputs & Output States are slightly redesigned and located in the bottom right corner.

› 4.10 Connect Outputs

15/04/25
11:00   12:00   13:00   14:00   15:00   16:00   17:00   18:00   19:00

Video Title XYZ
01:30:00

Live Stream Example 1   LIVE
02:30:00

Video Titl...
00:45:00 +...

Video Title XYZ
02:30:00 +180s

TOTAL LENGTH
03:04:37:51

PLAYED TIME
00:01:30:00

CURRENT TIME
15/04/25 – 15:28:30

REMAINING TIME TILL NEXT CLIP
00:00:01:30

30s   Ad Break

OUTPUTS

01 02 03 04 05 06 07 08 09 10

03

FEATURES

3.1 Core Features

- plan & publish your content 24/7 live

- 100% cloud based - open the make.tv Playout from everywhere in your browser.

- output to twitch & custom RTMP-servers

- footage storage in native file-format

- real-time transcoding to desired output-Format

- setup commercial breaks and trigger automatic through third party APIs (twitch support)

- update playlist item metadata information automatically to your destination platform

- template features

- live stream as part of the playlist support

- SFTP-Batch-Upload

- PNG overlay

- automated update of file and channel information

- filter by tags & sort

- bulk copy/paste operations

- sub-playlists – including loop functions with custom end date

- output to multiple platforms

3.2 Uploading Media

Footage that should be used in the Playout must be always uploaded to the Playout-System. You can use standard upload tools like FTP- or SFTP-Uploader to make your files available.

In addition to the uploaded file you have always to upload another metadata info. The metadata file should have the same name like the uploaded video file. So if the video file is named "test123.mp4" the metadata file should be named "test123.xml".

In future versions it will be possible to manage the content of the Playout library using the **make.tv Manger***.*

Example of a metadata file:

```xml
<videoFile xmlns="http://www.make.tv/smt/playout/input">
    <title><![CDATA[12-way test video sftp upload]]></title>
    <description><![CDATA[testing 123]]></description>
    <gameData>
        <title>Unknown</title>
    </gameData>
</videoFile>
```

3.3 Real Time Transcoding

Within the make.tv Playout footage stays always in the original format. That means that the Playout is doing a **live transcoding to the desired output format**.

If your desired output format is for instance 720p50 (H.264, CBR, 3,5 MBit Data-Rate-Video, AAC Audio 160 KBit / RTMP Container) the make.tv Playout transcodes the required footage from the currend playlist element in realtime to the desired output format. Original footage remains untouched.

The big advantage here is, that you can instantly switch your Playout to another destination which maybe needs to use another resolution and framerate like 1080p25 — so you are free to do this without the need to transcode all your footage again.

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USER INTERFACE

User Interface

The **Library** contains all available footage you can use in your playlist.

Controls to **Schedule** and **Start/Stop** the Playout.

The **Playlist** is the place to drag your footage and schedule playlist elements.

The **Cockpit** offers all important controls as well as helpful information like total length or remaining time till next clip displayed in the **Timeline**.

Use the **Output Preview** to monitor the current video output.

4.1 Playlist

To build your playlist, simply **drag files from the library to the playlist**.

You can move elements in the playlist or you can copy and paste elements to other positions.

If you select multiple items you are able to proceed bulk operations like multi paste or copy to template.

4.2 Filter the Library

If you have a lot of items in the Playout library you can use our integrated filter functions.

You can filter the library with a fulltext filter or by given tags, creation date, name or footage-duration.

In the "explorer" view you access an extended version of the library to handle your files and folders.
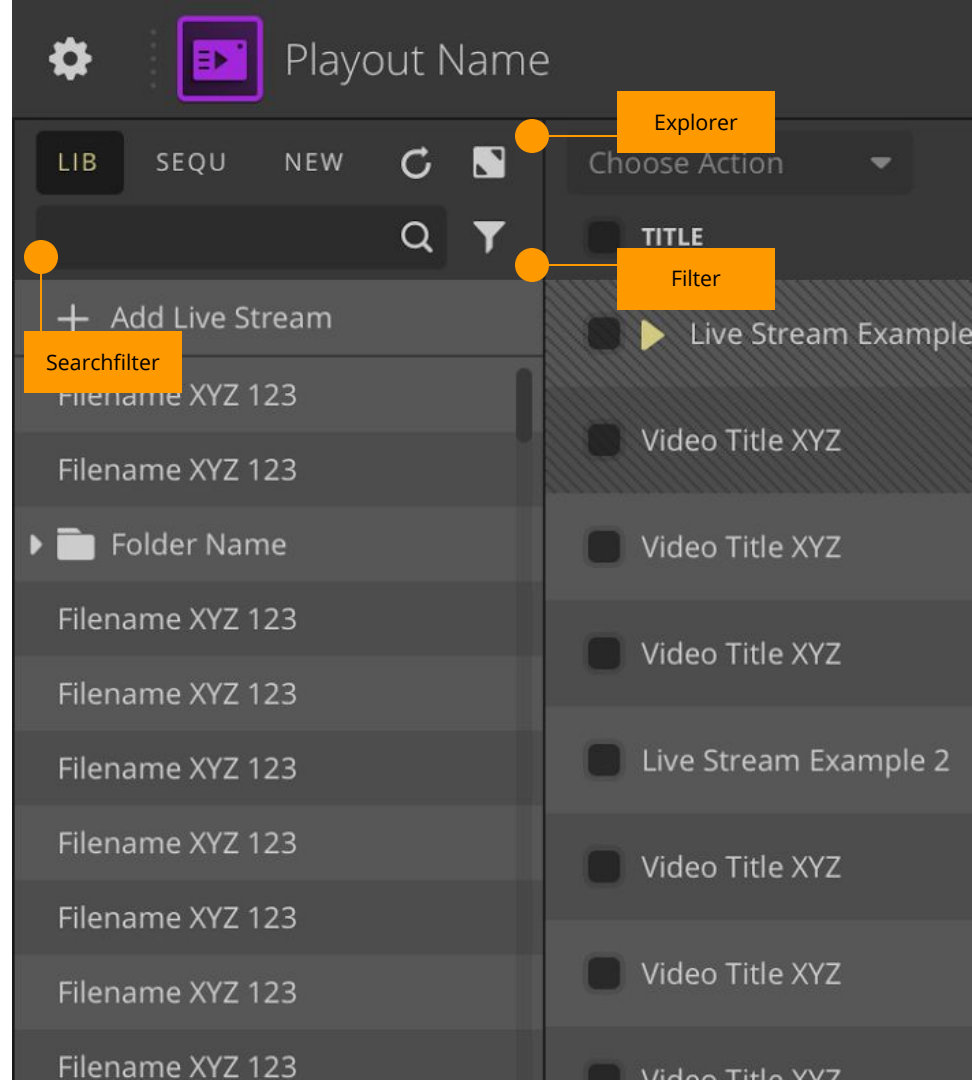
4.3 Inspector

By clicking on a specific element in the library or in the playlist an inspector view displays all known metadata of the selected item. Available Infos are:

1. Name
2. Description
3. Technical Infos (File-Length, Resolution, Frame Rate, Bitrate, ...)
4. Tags
5. Configured Ad-Events

LENGTH

01:30:00	+1h
02:30:00	
00:45:00	+90s
02:30:00	+180s
01:30:00	
01:30:00	
01:30:00	
01:30:00	
01:30:00	
01:30:00	
01:30:00	

LIVE Holi Festival (englisch)

00:17:37   01:30:00

GENERAL INFORMATION

FILENAME	15/01/07 – 16:07h
DESCRIPTION	sample description that can be longer than other metadata
IN/OUT	00:07:30 to 01:37:30
LENGTH	01:30:00 +60s
EVENTS	2

FUNCTIONS

0s   ▶ Ad Break   ⟷ OUTPUTS

4.3.1 Edit Metadata

By clicking the edit symbol on a playlist item a dialogue opens with which you are able to edit the meta-data of the element or add new meta-data information.

4.3.2 Trim & Fill-In

The same dialogues allows you to **set custom in- and out-points** to use just a part of the given footage.

Elements can be used as fill-ins. After activating this option you have to select an end date and time. Fill-In elements can buffer lost time of the playlist before.

Especially if you have live streams in your playlist your scheduled times might move, resulting from a live event that is stopped or started earlier. For these cases you are able to configure fill-in elements that have a fixed end time. The used footage here should be longer than scheduled in the playlist. In the case that you have to fill time from a shorter live-stream before, the filler element fills the time till the configured end time.

If there is time to cut of, resulting from a maybe longer live stream or a skipped element, the filler element plays the configured end time. **The next element in the playlist will start always exactly at the configured time and date.**

4.4 Events

Before you can use ad-events in your playlist you have to pre-configure these events first. To do this click on the "**Manage Events**" Button on the upper right side of the Playouts interface.

The general event-manager is opening. Here you can configure new event calls like ad 30 seconds ad-break for instance.

Further on you can configure how long the playback should delay while the actual commercial spots are playing. If you set the delay to 0 seconds the playback keeps on running even if a mid roll spot is triggered to the destination platform.

4.4.1 Add Events

Now you are ready to schedule your events within your playlist & elements.

With the commercial break inspector (2nd tab: **Events**) of the dialogue you are able to configure the positions where your ad-breaks should happen.

Just drag & drop the event you want to use in the list. By clicking on the timecode field the current timecode of the video inspector is used in the field. Resulting the selected ad-event is pulled out by the system when this timecode is reached.

4.5 Livestreams

Livestreams can be used as regular playlist elements.

To do this click on "**Add Livestream**" in the upper right position of the playlist surface.

In the next step you have to configure name, description, PULL URL and duration of your livestream.

After saving you can use your livestream as a normal playlist item. When the start-time of the configured livestream is reached, the Playout will pull the stream from the configured URL for the duration set.

4.5.1 Extend Duration

If a livestream event takes longer than the configured duration you can extend the duration by **adding one hour**.

TIME	LENGTH		
04/25 – 15:30:00h	01:30:00		+1h
04/25 – 18:00:00h	02:30:00		Extend Duration
04/25 – 18:46:30h	00:45:00	+90s	↻
04/25 – 21:19:30h	02:30:00	+180s	↻
04/25 – 22:49:30h	01:30:00		↻
04/25 – 00:19:30h	01:30:00		↻
04/25 – 01:49:30h	01:30:00		↻
04/25 – 01:49:30h	01:30:00		↻
04/25 – 01:49:30h	01:30:00		↻

4.5.2 Skip

You can **skip** livestreams to go on with the next playlist item in the library if your livestream ends earlier as scheduled.
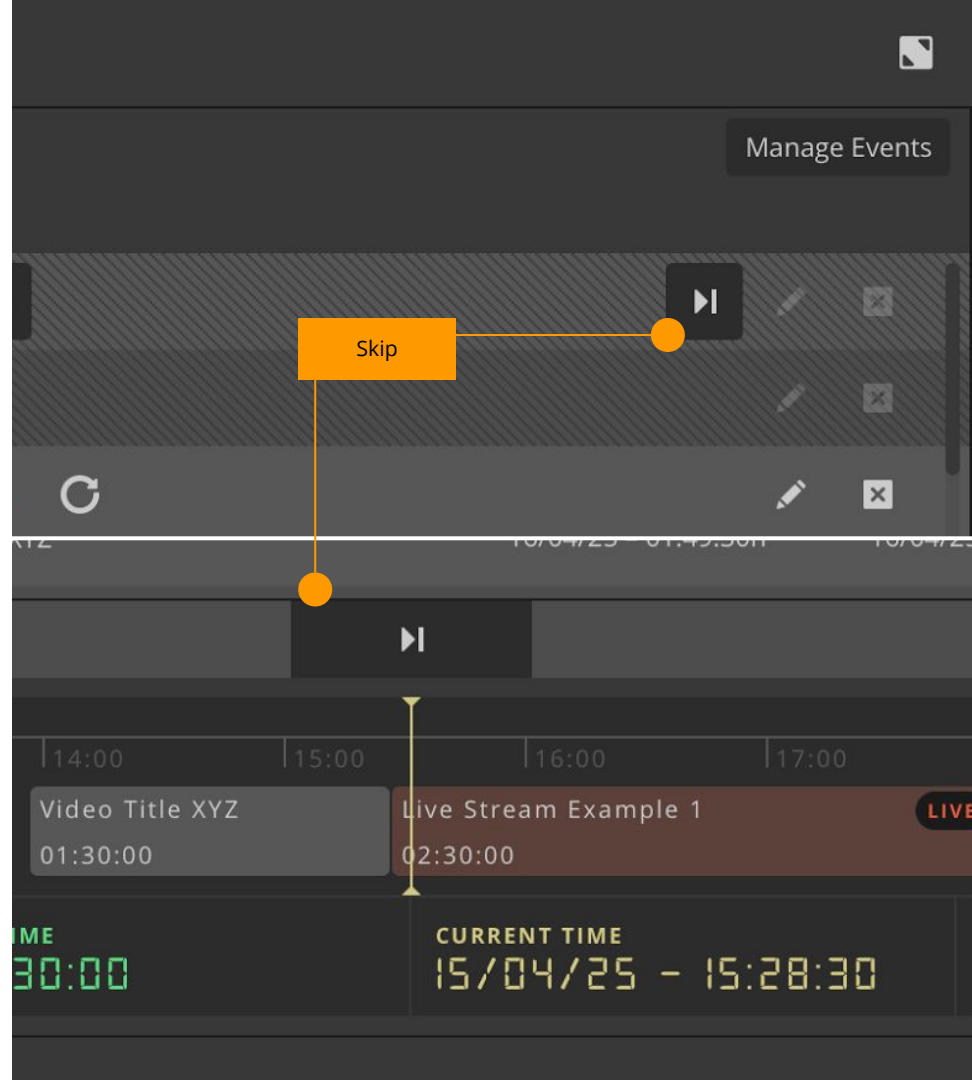
4.5.2 Ad Breaks

During livestreams you might want to control Ad-Calls manually. By choosing the duration and afterwards triggering the event you can do so.

The Output-Preview will give you information on the Ad-Break status.

4.6 Sequences

Starting from the playlist you are able to select multiple items.

In the second step the action tab on top of the list can be used to **create a new sequence** out of the selected playlist items. This sequence contains all the selected elements including all meta-data and ad-events.

The sequence folder can be dragged into the playlist again. Hereby a sub-playlist is created that contains all elements from the sequence folder.

4.6.1 Loop Sub-Playlists

Within a playlist you are able to create sub playlists. Even dragging a template element or folder from the library to the playlist automatically creates a sub playlist.

The sub playliste also has a loop option. If this is selected you have to set up an end time and date of your loop. Your sub-playlist is then looped till this selected time and date.
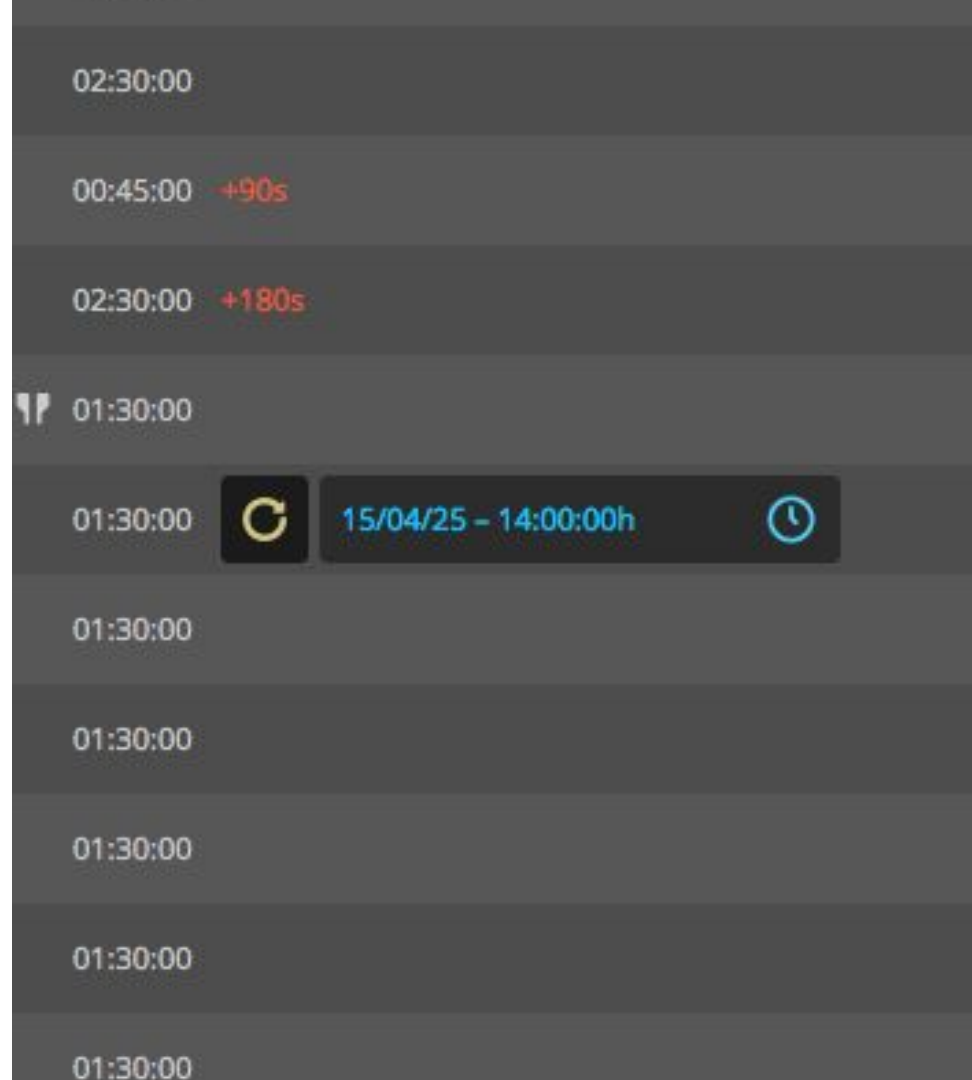
4.7 Outputs

The Playout is able to distribute to multiple outputs.

To open this dialog click on the settings button in the lower right area next to the preview monitor. In the next step you are able to **switch ON/OFF, add or modify outputs**. This is also possible while a Playout is running. Changes are instantly taken over and pushed out to the configured destination.
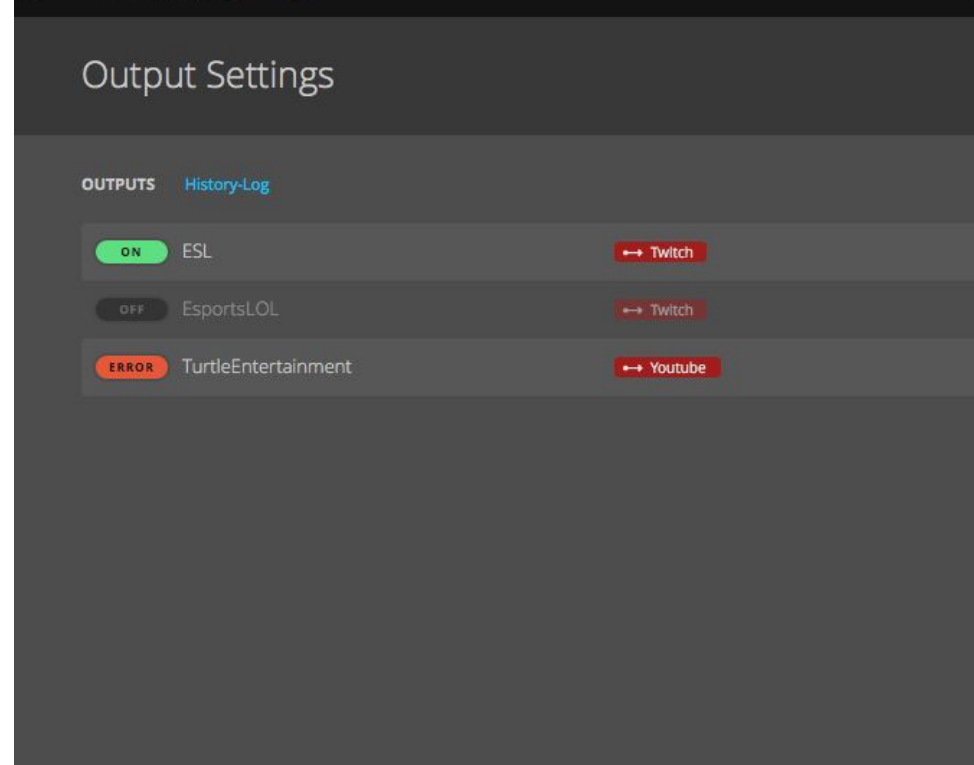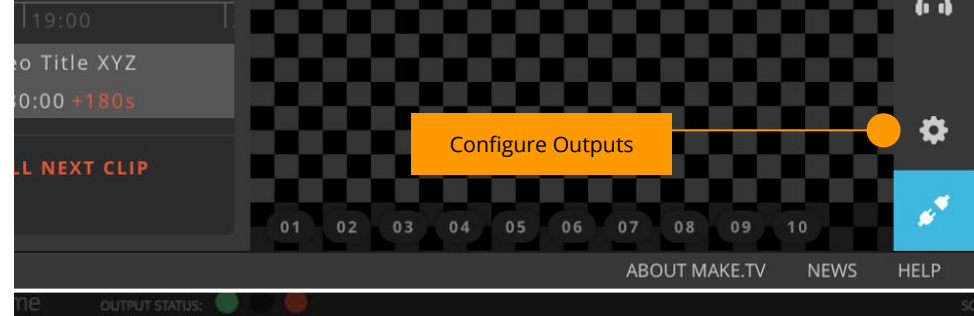
4.7.1 New Output

To configure a twitch output first select "new output" and then the output type or platform.

A new dialog appears. Title, description, RTMP push URL, channel name, API URL, API-Token is mandatory for a twitch output.

In addition you can configure a global game category. If this option is "ON" - all elements in the playlist are pushed with this game category. Alternatively you can set the category for every library item individually.

Another option is to set up a general API offset. With this option you can compensate a known API delay from the API-trigger to the ad-break at the user client video player.

OUTPUT STATUS:

Edit Output: (Twitch) Gaming Channel

OUTPUT INFORMATION

Title

Gaming Channel

Title

stage test server

Push URL

rtmp://live-fra.twitch.tv/app/live_ABCDEFGHIJK

Channel

gaming_channel

SET GLOBAL CATEGORY

Global Category

Category

API INFORMATION

API URL

https://api.twitch.tv/target

API Token

123456abcedfg

Cancel

4.7.2 Output-Type: Twitch

1.   RTMP-URL consists of ingest-servers and stream-key.

2.   Choose one of the listed ingest-servers that is closest to the
      Playout server from › Twitch-Status.
      (http://twitchstatus.com/)

3.   Stream-Key can be obtained on your › Twitch Dashboard.
      (http://www.twitch.tv/dashboard)

4.   A final RTMP-URL will look like this: rtmp://live-fra.twitch.
      tv/app/live_86401128_pgUDJngPdP9kaKPzxxxxxxxxx

5.   For API-access you have to › grant access for the Playout
      server.
      (https://api.twitch.tv/kraken/oauth2/authorize?
      response_type=token&client_id=klf2ofecm1j0z42ozbzxb2jhmnw3zag&redire
      ct_uri=http:
      //localhost&scope=channel_editor+channel_commercial+channel_read)

6.   Copy and paste the token-part from the address-bar into the
      Playouts output settings.

4.7.3 Output-Type: YouTube

1. Open the › YouTube Live Dashboard.
    (https://www.youtube.com/live_dashboard)

2. Copy Server-URL and Streamname into the Playouts output settings.

3. Channel-ID can be obtained by looking at the channel-link on the bottom right of the page.

4. It will look like this: http://www.youtube.com/channel/UCGPds92h0F7CVyJ4eEz7wOA/live

5. The Channel-ID is the part between "channel/" and "/live", copy and paste it into the Playouts output settings.

6. To setup API-access for Youtube, please save the output now and then click on edit of the just saved youtube-ouput.

7. You will now find a link at the bottom of the overlay which leads you to a authentication-page of google. Please grant access for the Playouts server and copy the provided code into the "api code" field. Save and edit again to check if the API access was setup successfully.

4.7.4 Output-Type: Azubu

1. Go to your › Azubu Account Settings.
    (http://www.azubu.tv/account#!/tab/settings)

2. Select "**Stream Details**" - **Static**. Click on "**Generate New**"
    and copy the provided key to the Playouts output settings.

3. Save the output first, then edit it again to enter username
    and password for API-access.

4.7.5 Output-Type: Hitbox

1. Go to livestream-settings to obtain an RTMP-URL and streamname and also enter you channel-name.

2. Save it, then edit it again. You will now find a URL to grant access for the Playouts server. After granting access, please copy the token-part of the URL displayed in the address-bar of your browser and paste it into the api-code field of the Playouts output settings.

3. Save it, then edit to check if the API access was configured successfully.

4.8 Schedule Playlist

Every playlist must have a start time. You can configure this in the **upper right part** of the interface.

The Playout start time is the time when the first element of the playlist should start.

All other start- and end-times of playlist elements are calculated on the basis of the first element.

4.9 Start Playout

To start the Playout use the button in the **upper right area** of the interface.

With this action the Playout starts. Corresponding to the selected start time and the current time the playback jumps to the right playlist element and element time and starts pushing out streams in the configured output format to all configured and activated output destinations.

If the current time is before the configured start time the Playout is starting but not pushing streams to the configured outputs. If the start time is reached, **the push to the configured destinations is started automatically**.

If the current time is after the configured start time the Playout is starting at the corresponding position but the push of the configured outputs is not starting automatically. **This has to be done manually by pushing the "Connect" Button on top of the preview monitor**.
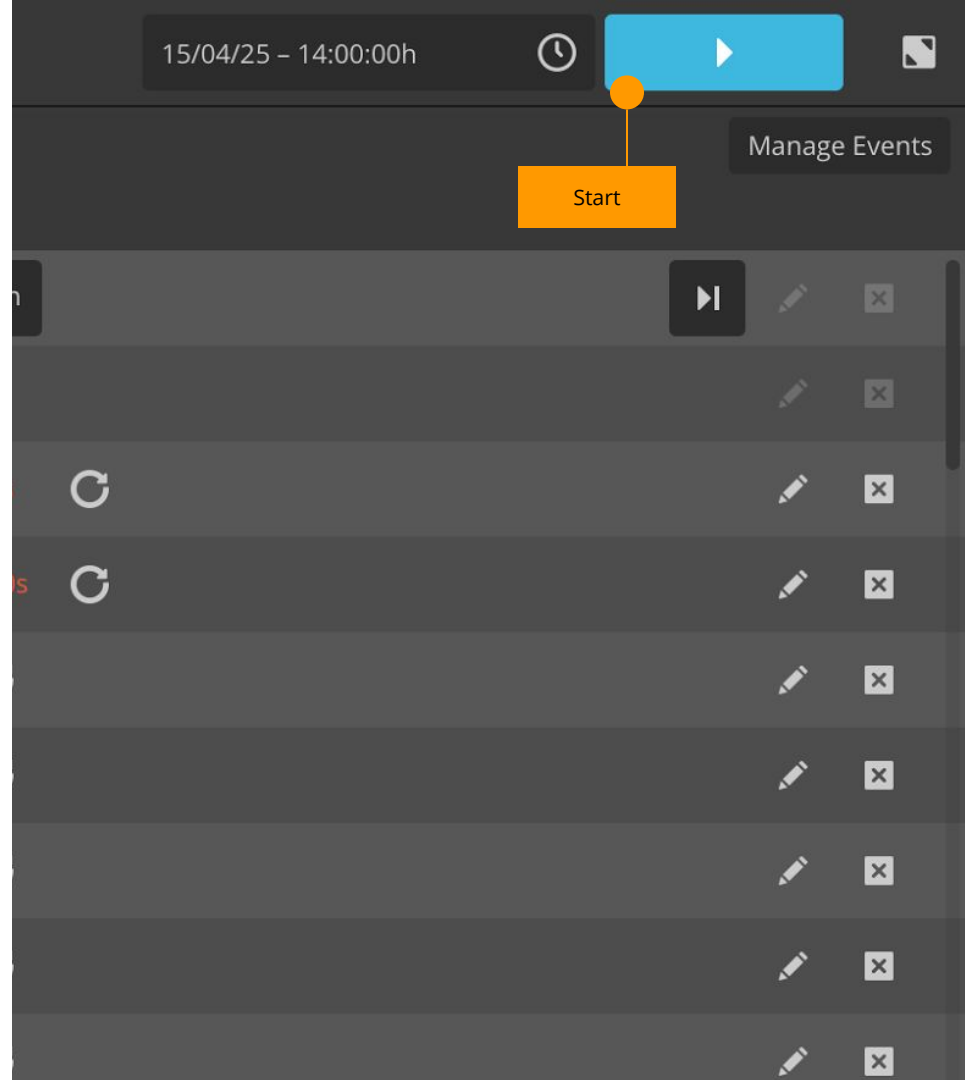
4.10 Connect Outputs

You can connect and disconnect all outputs at once using the button in the **bottom right corner**.
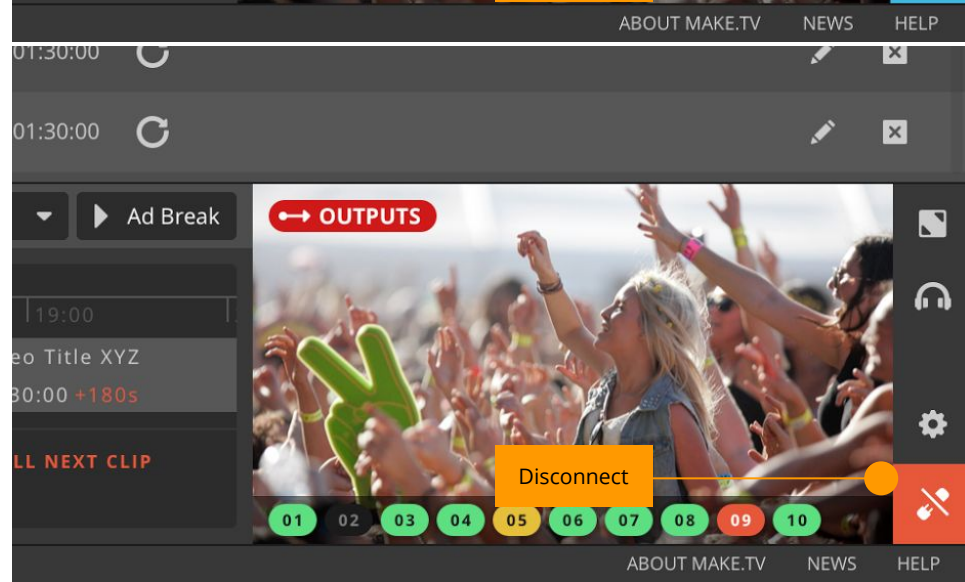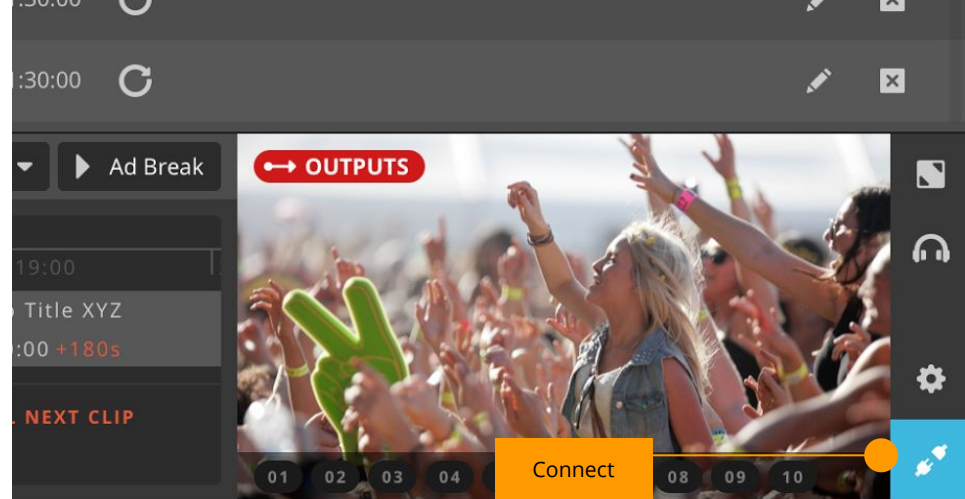
4.11 Output Preview

To monitor the output in higher resolution the Playout allows you to expand the output preview by using the fullscreen button in the top right corner of the panel.

To minimize the view again click on the button again.

Contacts

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