

OOYALA LIVE USER GUIDE

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OOYALA LIVE OVERVIEW

Ooyala Live in concert with Ooyala Backlot provides an integrated interface to manage all the challenges of streaming video, including channel management on 24x7 or ad-hoc channels; multiple distribution formats over a variety of content distribution networks; live stream to popular social media, and more.

WELCOME TO OOYALA LIVE

Ooyala Live gives you a self-service portal for managing all aspects of your live streaming video. Integrated closely with Ooyala Backlot, Live provides a robust user interface and API to help you stream live video and audio and the ability to capture and re-broadcast critical moments of your live stream.

Save time, reduce cost, proactively engage customers, monitor quality, and more with Ooyala Live. From the moment you decide to become an Ooyala Live user, out technical staff works with you to determine your needs and feature availability. Feature available and cost are dependent on your contractual agreement with Ooyala.

Delivering Live Content

Syndicate Live Video to Social Media

Add Clips from a Live Stream

Schedules and Event

Add Playlists

Handle all live streaming and VOD from one platform, including transcoding, packaging, encryption, CDN integration, Backlot asset management, and live stream health and quality.

Ooyala Live supports syndication of live video to several social media video platforms. Ooyala Live now allows syndication to these social media. You can syndicate live video without the need to enable or create syndication rules. You can syndicate to 24x7 or ad-hoc channels.

- Facebook
- YouTube
- Twitter/Periscope
- Twitch

You can create short clips from a channel while it is running, save them to Backlot. This is a great way to share highlights or teasers from your live stream with viewers. To enable this feature for your account, please contact your Ooyala Customer Success Manager.

Create schedules to manage live events. View existing schedules from the **Schedules** page. You must have at least 1 channel to be able to create a schedule. Use the **Events** page to schedule the recording of segments from a channel's live stream for archiving and playback at a later time and date as a video on demand (VOD) asset.

You can stream prerecorded videos from Ooyala Backlot. To do this, you create a playlist of videos in Ooyala Live, add videos to the playlist, associate the playlist with a channel, and run the channel. When you no longer need a playlist, you can remove it. *To enable playlists for your account*,

please contact your Ooyala Customer Success Manager.

Ooyala Pulse Live Stream Integration (SSAI)

Ooyala Live offers integration with Ooyala Pulse to enable SSAI. Your Ooyala representative will onboard your Pulse account and integrate it with your Live account, which will have exclusive access to the Pulse account. Your ads will be automatically downloaded and transcoded (there is a Pulse service that searches for ads every 10 minutes).

Note: This capability supports only HTTP Live Streaming (HLS). Therefore, when you create your channel, use an HLS output template.

Ooyala Live is closely integrated with Ooyala Backlot. Ooyala Live customers must also have an Ooyala Backlot account. Live and Backlot share login credentials.

OOYALA LIVE RELEASE NOTES

For detailed information about all Ooyala Live releases, see Ooyala Live Release Notes on page 59.

RELATED LINKS

Live REST API Reference

Ooyala Live harnesses the power of big data to help broadcasters, operators and media companies personalize Linear TV and Live Event experiences through data driven programming and interactive playback. This API Reference describes the REST endpoints for channels, schedules, and events.

Ooyala IQ and Live Assets

Ooyala IQ currently captures all of the Ooyala IQ metrics for live assets.



BEFORE YOU START

Read about what you need to successfully use Ooyala Live, inclding supported browsers and supported formats.

- You must have an Ooyala Backlot account to be able to use Ooyala Live.
- Contact your Ooyala sales representative to activate Ooyala Live.
- An Ooyala representative will contact you to gather required techical information to onboard Ooyala Live.

SUPPORTED BROWSERS

- Internet Explorer 11 and Microsoft Edge
- Safari (latest version)
- · Chrome (latest version)
- Firefox (latest version)

SUPPORTED FORMATS

Format	DRM Support
HLS	 HLS + PlayReady (Discretix) HLS + PlayReady (Apple: Safari and iOS Devices) HLS + FairPlay Encrypted HLS
HDS	HDS + Adobe Access
DASH	DASH CENC Widevine ModularDASH CENC PlayReady
Smooth Stream	Smooth Stream + PlayReady

Note: If your transcoding is running on Azure, refer to Azure Support in *Delivery Protocols* for supported delivery formats.

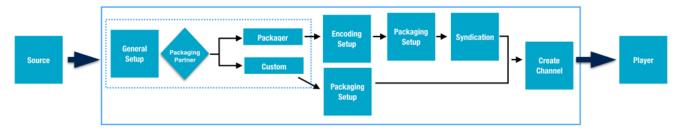


DELIVERING LIVE CONTENT

From a single self-service interface, create and update channels, schedules, events, playlists, and monitor channel output.

CONTENT DELIVERY WORKFLOW

Basic setup for delivering live content only requires having a single channel.



Use the Live Channel capabilities to manage and stream Live content.

24X7 OR ADHOC CHANNELS

Channels are the highest level logical container for content.

Considerations

- You must have at least one channel to stream content.
- Important: Channel set up depends on your network and the resources you use to stream live content.
- · Channels don't have to have schedules.
- Channels may contain schedule. Schedules contain events.
- **Important:** A channel must be stopped to enable live syndication of social media.

What You Can Do

Add channels.

- View all the channels you have created.
- View existing slates and upload new slates.
- View notifications.
- Start and stop channels.
- · Live syndication of social media.

HIGH AVAILABILITY (HA) CHANNELS

Considerations

- You must have at least two channels, either adhoc or 24x7, to create an HA channel.
- Associated subchannels are controlled by the HA channel.

What You Can Do

- Schedule and manage events on an HA channel.
- Hot swap HA subchannels.



CLIPPING

Considerations	What You Can Do
 You must have a profile that is enabled for clipping before you can see and enable clipping for a channel. The DVR setting for your channel also defines the size of the clipping buffer, for example a 30 DVR window gives you a 30 minute clipping buffer. 	 Capture segement of live streaming content and save them to Backlot for rebroadcasting. Clip from the clipping buffer which represents the last <i>n</i> minutes of the channels live stream.
•	

SCHEDULES AND EVENTS

Schedules—provide a time frame to which you add events to capture live streaming content.

Considerations	What You Can Do
 Schedules must have a default channel. The same schedule can be used on multiple channels. You must create a schedule before you can create events. Live syndication of social media does not require a schedule or event. Maximum event lenght: 	Add schedules.View schedules.Delete schedules.Change schedules.
Azure = 24 hoursElemental = 8 hours	

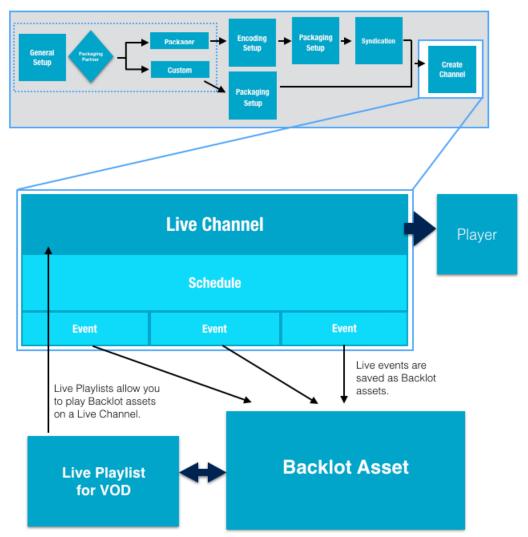
Events—specify the time a channels live stream is captured for rebroadcasting and archchiving in Backlot.

Considerations	What You Can Do
 You must have a channel before you can schedule an event. Maximum length for an event is 8 hours. The same event can be on multiple schedules. 	 Add events. Remove events. View event status. View event details. Start events. Stop events.

Tip:

Once you have added channels you can create schedules and events to record segments of what is streaming on the channel. Those events can be stored as Backlot assets.





Playlists allow you to stream Backlot assets on a Live Channel.

PLAYLISTS

Create playlists of prerecorded videos stored in Ooyala Backlot. Stream the playlist content on a Live channel.

Important: The Playlist feature must be enabled before you can use it. Contact Ooyala to enable playlists in Ooyala Live.

Considerations

- Your encoder profile must be enabled for playlists.
- Video used in your Live playlist must be stored in Backlot.
- To remove a Playlist you must remove the channel it is associated with.
- A channel can have only one playlist associated to it.

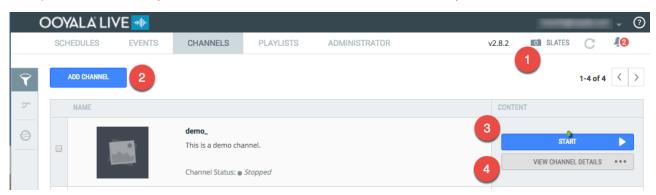
What You Can Do

- Create playlists.
- · Edit playlists.
- · Remove playlists.
- Manage and arrange playlists.



ADD A CHANNEL

Set up a channel so that you can create schedules and events then stream your live content.

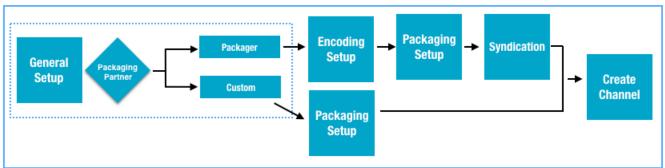


Call-out Number Description

- Important: You should add at least one slate before you add a channel. Typically, you are required to add a slate to each channel. To read more about slates, see *Slates*.
- 2 Click **ADD CHANNEL** to create a channel. The initial configuration of your Ooyala Live account constrains your choices when creating a channel.
- Click **START** to start a channel. If your channel is running, you can click **STOP** from the Channels page to stop your channel.
- 4 Click VIEW CHANNEL DETAILS to view and edit various channel details.

Add Channel Workflow

Here is the basic workflow for adding a channel. Your specific choices while adding a channel are constrained by the profile created at during the initial configuration of your Ooyala Live account. For this example we are using the **Ooyala Package**.



For additional details about channels, see *Considerations When Adding and Managing Channels* on page 50.

Important: If you choose **Custom** for the **Packaging Partner**, you will need URLs for the following package types.

- Dash—Dynamic Adaptive Streaming over HTTP is an adaptive bit-rate streaming technique that supports high quality streaming of media over the Internet.
- HLS—HTTP Live Streaming protocol implemented by Apple Inc., using standard HTTP transactions.

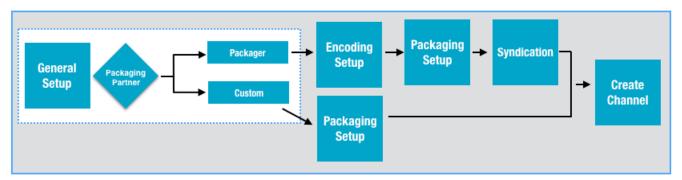


- HDS—HTTP Dynamic Streaming, is Adobe's protocol for adaptive bit-rate streaming for Flash Video.
- Smooth—IIS Smooth Streaming Transport Protocol is Microsoft's adaptive streaming technology.

Channel General Setup

Use an informational name and description for general setup. Consider a channel naming convention policy to more easily track the channels you create.

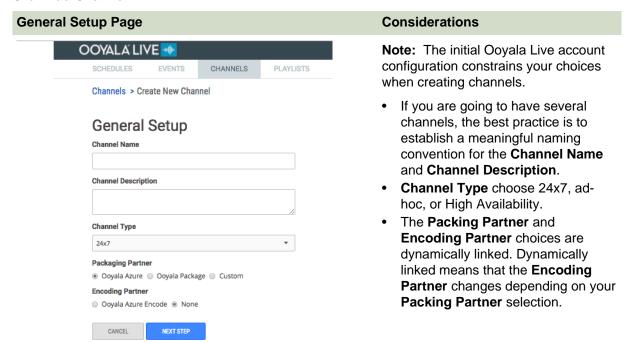
General Setup Workflow



Important: The settings during the initial Ooyala Live account configuration determine which packaging and encoding options are available. The options you select determine some of the options that appear on the following pages. This example follows the channel setup when the **Ooyala Package** is selected as the **Packaging Partner**.

Tip: In general you'll be required to include a slate when creating a channel. To read more about slates, see *Slates*.

- 1. Log in to your Ooyala Live account.
- 2. Go to the Channels tab.
- 3. Click Add Channel.





Important: How your Ooyala Live account was configured determines the available choices for **Packaging Partner**. For this example we are using the **Ooyala Package**.

4. Click NEXT STEP.

The next task is completing the *Encoding Setup*. Click any of the steps below to read more about that part of channel setup.

- Step 1: General Setup
- Step 2: Encoding Setup
- Step 3: Packaging Setup
- Step 4: Syndication
- Step 5: Create Channel

Channel Encoding Setup

Select encoding options for a new channel, or view and update the encoding options for an existing channel.

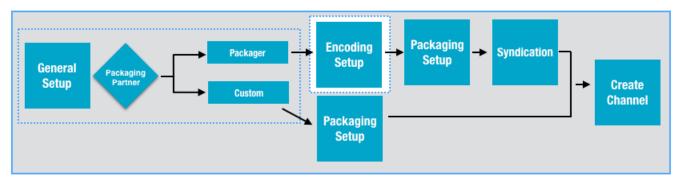
Important: The settings during the initial Ooyala Live account configuration determine which packaging and encoding options are available. The options you select determine some of the options that appear on the following pages. This example follows the channel setup when the **Ooyala Package** is selected as the **Packaging Partner**.

Tip: Make sure you have at least one slate available. In general, a slate is required when creating a channel. To read more about slates, see *Slates*.

There are some features that have significantly different encoding setups.

Basic Channel Encoding Setup

Encoding setup enables basic parameters and features for the typical Live channel. Some of the parameters and features are only available with specific profiles.



1. Complete the Encoding Setup.



Encoding Setup Page OOYALA LIVE 🐠 **SCHEDULES EVENTS** CHANNELS **PLAYLISTS** Channels > Create New Channel **Encoding Setup Encoder Location** liveops_prod::USEUVA-DEMO-1 **Encoder Input Profile** Elemental Live Input Profile **Encoder Output Profile** Output 720p Ooyala Packaging 30fps 2ag-as NubWkyOtJdZCn6E Clipping Enabled Input 1 Type Name **NETWORK** input_1 Streaming Protocol **RTMP Encoder Mode** RTMP Push RTMP Pull Input Name Versioning ☐ Enabled

Name

input 2

Stream Count

6

NEXT STEP

Enter manually

Considerations

Note:

- The initial Ooyala Live account configuration constrains your choices when creating channels.
- Encoding Setup is dependent on the Packaging Partner selection you make.
- Encoder Location—
- Encoder Input Profile constrain or enable certain features.
 - Playlists—you must select a
 "Simulated Live Input" profile to
 add playlists that allow streaming
 of VOD assets from Backlot.
- Encoder Output Profile—
- Clipping—Clipping lets you take small segments or clips from your live stream and store them Backlot for rebroadcasting.

Important:

- Clipping is a profile dependent feature. You must have an Ooyala representative enable your Live profile for clipping before you will see the Clipping option.
- The Clipping buffer size is determined by the DVR window size.
- Input 1
 - Input Name Versioniong
- Input 2—is typically a video or image file your channle will stream if the live stream is interrupted.
- Output 1—
- For more information about the Encoding Setup page, see *Encoding* Setup on page 50.

2. Click NEXT STEP.

The next task is completing the *Packaging Setup*. Click any of the steps below to read more about them.

• Step 1: General Setup

Input 2

Input Path

Output 1

HLS-WEBDAV

PREVIOUS STEP

Type

FILE

Type

- Step 2: Encoding Setup
- Step 3: Packaging Setup
- Step 4: Syndication



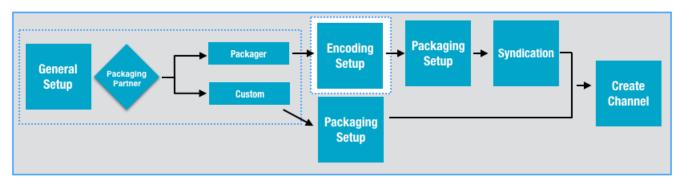
• Step 5: Create Channel

Any postrequisites for completing the task.

Playlist Channel Encoding Setup

Playlist Encoding Setup allows you to stream VOD assests from Backlot on your Live channel.

You must have a Live profile configured for simulated live streaming.



Complete the Encoding Setup.

Encoding Setup Page Considerations OOYALA LIVE Note: The initial Ooyala Live account configuration constrains your choices **SCHEDULES EVENTS** CHANNELS PLAYLISTS when creating channels. Channels > Create New Channel Encoding Setup—is dependent on the Packaging Partner selection **Encoding Setup** you make. **Encoder Location** Encoder Input Profile—constrain liveops_prod::USEUVA-DEMO-1-clip or enable certain features. **Encoder Input Profile Important:** You must select the * Simulated Live - Input for v2.9 "Simulated Live - Input" profile to **Encoder Output Profile** add playlists that allow streaming of 2.9.2 Elemental Transcoding 30 FPS * VOD assets. Clipping **Encoder Output Profile—** ■ Enabled **Clipping**—Clipping lets you take Playlist small segments or clips from your live stream and store them Backlot ¥ for rebroadcasting. Slate Important: Clipping is a profile Type dependent feature. You must have FILE file input 1 an Ooyala representative enable Input Path Enter manually your Live profile for clipping. Playlists— Output 1 Slate—is typically a video or image Type Stream Count file your channle will stream if the HLS-WEBDAV 5 live stream is interrupted. Output 1— PREVIOUS STEP For more information about the

2. Click NEXT STEP.

Setup on page 50.

Encoding Setup page, see *Encoding*

The next task is completing the *Packaging Setup*. Click any of the steps below to read more about them.

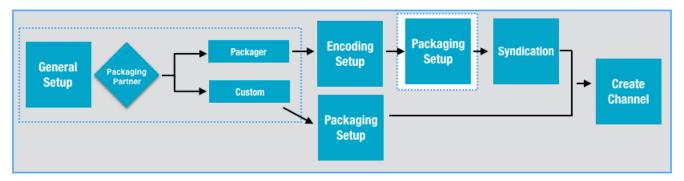
- Step 1: General Setup
- Step 2: Encoding Setup
- Step 3: Packaging Setup
- Step 4: Syndication
- Step 5: Create Channel

Any postrequisites for completing the task.

Channel Packaging Setup

Make packaging choices for a new channel, or view and update packaging choices for an existing channel.

Packaging Setup Workflow



Complete the Packaging Setup.

Packaging Setup



General Setup Page OOYALA LIVE 🐠 **SCHEDULES EVENTS CHANNELS PLAYLISTS** Channels > Create New Channel **Packaging Setup Packager Location** • liveops_prod::USEUVA-DEMO-1 **Packager Input Filter Template** elemental-delta-packaging-input **Packager Output Filter Template** elemental-delta-packaging-output • **DVR Settings** Limited DVR Hours Minutes 0 30 Input 1 Type webdav Output 1 Type Name hds filter_392 Output 2 Type Name filter_393 hls Output 3 Type Name dash filter_394

Considerations

- DVR settings: The DVR settings maximum time is 6 hours and 59 minutes.
- Clipping enabled channels: The DVR Settings time determines the size of the clipping buffer. A DVR window of 30 minutes provides a 30 minute clipping buffer.

The next task is completing the **Syndication Setup**. Click any of the steps below to read more about them.

- Step 1: General Setup
- Step 2: Encoding Setup
- Step 3: Packaging Setup

PREVIOUS STEP

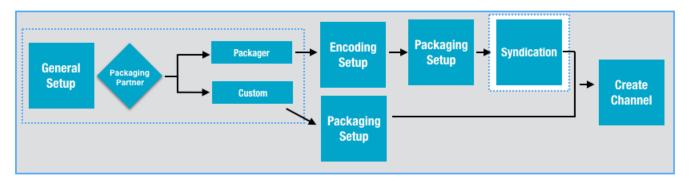
NEXT STEP

- Step 4: Syndication
- Step 5: Create Channel

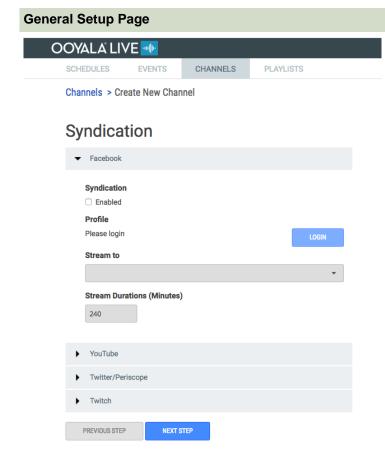
Channel Syndication Setup

Ooyala Live supports syndication of live video to several social media video platforms.

Any prerequisites for completing the task.



Complete the Syndication Setup page and click Next Step.



Considerations

Important:

- Live Syndication only works with the Ooyala Package as the Packaging Partner and Ooyala Encode as the Encoding Partner.
- A channel must be stopped to enable syndication.
- Server Side Ad Insertion (SSAI) is not supported by Ooyala Live syndication to social media.
- Enabling social media syndication does not start syndicating the stream. You must click start next to an enabled social media stream to start syndicating to a social media platform.
- Anything streaming on the channel is syndicated to any social media that has been enabled and is running. Schedules and events don't impact what is being syndicated.
- Ad-hoc channels that have scheduled events automatically stop 30 minutes after the last scheduled event. Any syndication that is running on the ad-hoc channel is stopped when the channel is stopped.
- Syndication to a 24x7 channel runs continuously until the syndication stream is stopped



General Setup Page

Considerations

or the channel is stopped. Facebook enforces a 240 minute maximum time limit for live syndication.

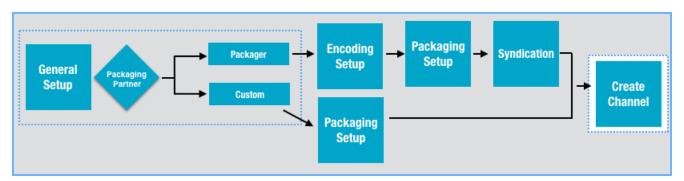
- You can enable syndication to social media as part of creating a new channel.
- You don't need stop your channel to stop and start syndicating a social media stream. Once your social media is enabled, you can start and stop syndicating to each social media stream without stopping your channel.

The final step to creating a channel is *Create Channel*. Click any of the steps below to read more about them.

- Step 1: General Setup
- Step 2: Encoding Setup
- Step 3: Packaging Setup
- Step 4: Syndication
- Step 5: Create Channel

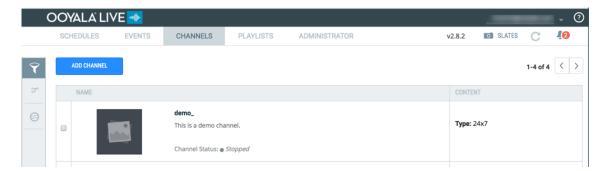
Channel Create Summary

Review your channel configuration and create your channel from this page.



Review the Summary information and then click Create Channel.

This action returns you to the Channels tab, which displays the status of the Channel.





The channel may take a few minutes to set up. While it is being created, the channel displays a default logo on the left. When the channel is running, the channel displays a thumbnail of its streams as the logo.

Important: Digital Rights Management is currently not available for sub-channels within a High Availability (HA) channel.

Click any step below to read more about creating a channel.

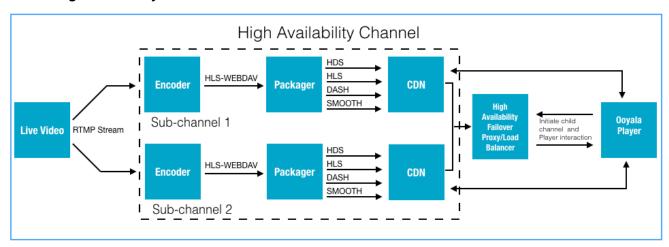
- Step 1: General Setup
- Step 2: Encoding Setup
- Step 3: Packaging Setup
- Step 4: Syndication
- Step 5: Create Channel

SETTING UP A HIGH AVAILABILITY CHANNEL

Set up a High Availability (HA) channel to ensure that your live content is always available.

HA Channels are a logical representation of multiple channels working in parallel to stream content to a common end point. Functions of a HA Channel include automatic failover and reliability.

Create High Availability Channel Workflow



CONSIDERATIONS FOR BASIC CONFIGURATION OF HA CHANNELS

• **HA Channel**—A virtual representation of a channel that combines and manages output from multiple 24x7 or ad-hoc channels.

Important: You must have two channels either 24x7 or ad-hoc that are compatible before you can create a HA channel.

- Sub-channel—A sub-channel of an HA channel can be either a 24x7 or ad-hoc channel. The priority 1 sub-channel streams content to HA channel. While the priority 2 sub-channel is running, its content is not being streamed to the HA channel.
- **Failover**—Failover occurs when one of the child channels stops running and all traffic is moved to the channel that is still running.
- Important: Before adding an HA channel, all ENCODING, PACKAGING, and SYNDICATION choices must be made in the sub-channels.
- HA sub-channels created with DRM enabled profiles must use the same DRM packaging output profile.

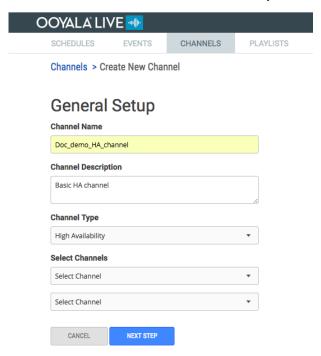
Create Live High Availability (HA) Channel

Create a High Availability (HA) channel to ensure automatic failover of critical live streams.

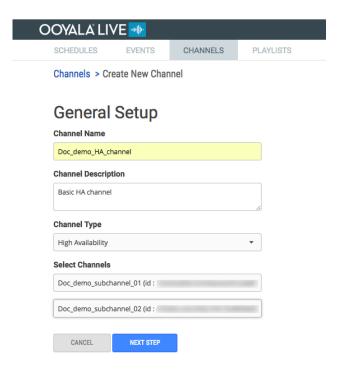
You must have at least 2 channels, either 24x7 or Adhoc, configured.

Because the sub-channels have already been created, you only need to select the channels you want to add to your HA channel.

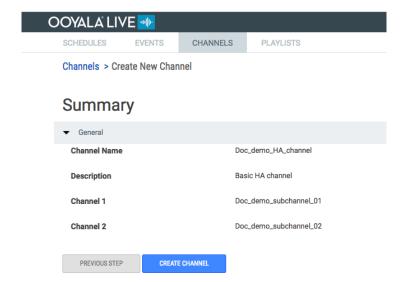
1. Add a Channel Name and Channel Description then select High Availability for the Channel Type.



2. Select 2 similar channels from the **Select Channels** drop-down list, and click **NEXT STEP**.



3. Click CREATE CHANNEL



How to Identify a High Availability (HA) Channel

On the **Channels** page you can view High Availabilty channels and related subchannels.

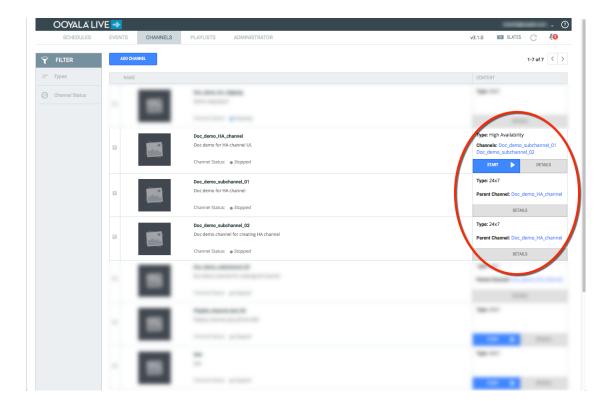
Any prerequisites for completing the task.

Provide context for the task you are about to explain.

Go to the Channels summary tab.

An HA channel has the name of its sub-channels, and each sub-channel has the name of its **Parent Channel**.





Swap High Availability (HA) Channels

Swap sub-channels of an HA channel without stopping any of the channels

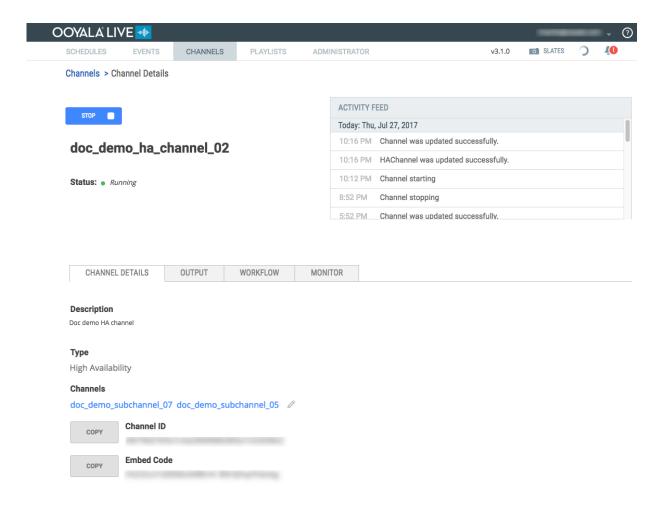
You must have at least 2 channels, either 24x7 or Adhoc, configured.

To swap channels within an HA channel all channels must be in the same state. For hot swapping a channel all the the channels must be in a running state.

Considerations when swapping sub-channels:

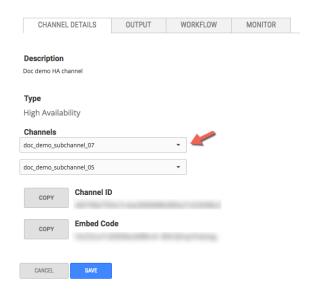
- If you are using DRM enabled channels, both sub-channels must use the same DRM packaging output profile.
- In order to preserve scheduled HA events when swapping out subchannles, there can't be any events scheduled in the future on the channel you are swapping into the HA channel.
- 1. Got to the Channel Details page for the HA channel.



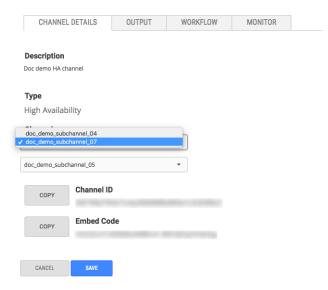


- 2. Click the edit icon next to the sub-channels.
- 3. Click the dropdown list for the channel you want to swap.

Important: The top dropdown list is the Priority 1 channel and the second dropdown list is the Priority 2 channel.



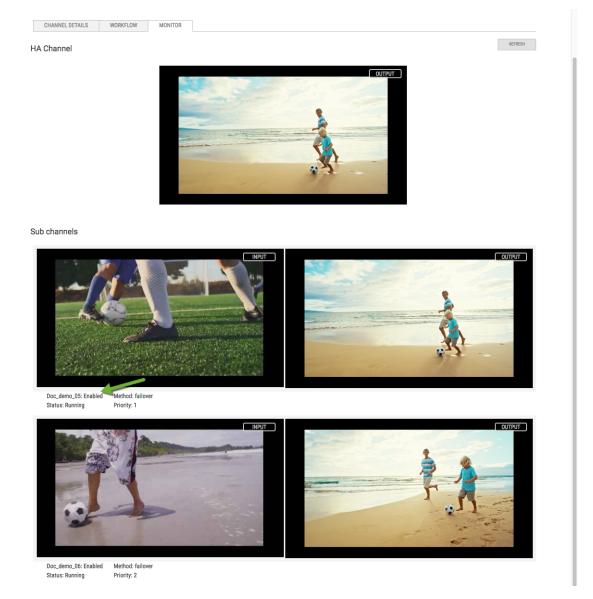
All channels available for swapping are listed for both the Priority 1 and the Priority 2 channel.



4. Click SAVE.

Go to the monitor tab of the HA channel and verify that the channel was swapped and the correct one is playing.

Tip: If the new sub-channel isn't playing in the HA Channel monitor window, click REFRESH.



Note:

- The Priority 1 sub-channel streams the content of the HA channel.
- The Priority 2 sub-channel is in a warm standby mode in case the Priority 1 sub-channel fails.

Important: Swapping out a sub-channel does not stop the channel. To avoid transcoding charges, stop any channel that is no longer one of the HA sub-channels that you need.

ADD A SCHEDULE

Create schedules to manage live events. View existing schedules from the **Schedules** page. You must have at least 1 channel to be able to create a schedule.

Schedule Considerations

- Schedules contain events.
- You must create a schedule before you can create events.
- Schedules must have a default channel. The default channel for a schedule can't be a High Availability (HA) channel.



· One schedule can be used for multiple channels.

Add a Schedule

- 1. Go to the SCHEDULES tab.
- 2. Click ADD SCHEDULE.
- 3. Enter the Schedule Name.
- 4. Select the Default Channel.
- 5. Click ADD.
 - · View a Schedule

Hover over the CONTENT cell, and click VIEW SCEDULE DETAILS.

Create an Event

Add events to this schedule, see "Add an Event."

ADD AN EVENT

Use the **Events** page to schedule the recording of segments from a channel's live stream for archiving and playback at a later time and date as a video on demand (VOD) asset.

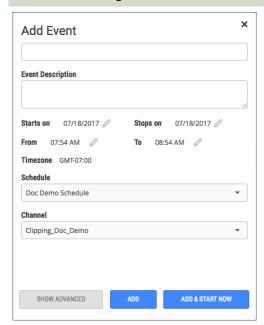
Events are created within schedules.

Tip:

- Ad-hoc Auto Start Channel—We try to automatically start any ad-hoc channel 30 minutes prior to a scheduled event if the channel is stopped.
- Ad-hoc Channels With Future Events—Ooyala Live tries to start stopped ad-hoc channels automatically 30 minutes prior to scheduled events.
- Ad-hoc Channels Without Future Events—Ad-hoc channels are automatically stopped after an event state is stopped and there are no events schedule within the next 30 minutes.
- Extend Event End Time—You can edit the End Time of an event while it is running to extend the
 event.
- Add Time Before Auto-Trim—When you schedule an event, you can add more time before auto
 trimming starts. This gives you additional time to manually select what you want to be trimmed and
 archived.
- 1. Log in to Ooyala Live and go to the **EVENTS** tab.
- 2. Click ADD EVENT.



Add Event Dialog



Considerations

Understanding Add Event

- Event Name—It is recommended that you use a naming convention so that you can quickly identify or search on a unique event.
- Event Description—Include details that help to uniquely identify this event.
- Starts on and Stops on—The dates that the actual linear stream will be available to any player that uses the embed code for the event. Once the event starts it can take a little time before the stream actually becomes available for the end user to see the playback. The start and stop dates are constrained by time limit of an event.
- From and To—Adjust the start and stop time as needed. The maximum length for an event is 8 hours.

Tip: If you're not sure how much time you need to capture an event, add several minutes to the beginning and end of the time you want to capture. If the event ends early, you can stop the event from the **EVENTS** summary page.

- **Schedule**—Add your event to one of the listed schedules.
- Channel—You will see the default channel for the schedule associated with the event, but you can select any available channel.

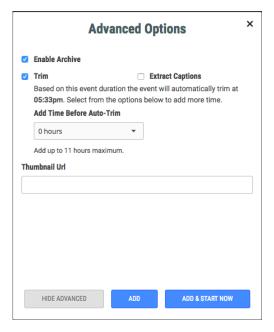
Important: You can schedule an event on a stopped channel; however, if the channel doesn't start before a scheduled event, the event will fail.

- SHOW ADVANCED—Click to display the Advanced Options dialog.
- ADD—Click to add the event to the selected schedule.
- ADD&START NOW—Click to add the event to the selected schedule and immediately start the event.

Add an Event to HA Channel

 Use the embed code to broadcast the event as a remote asset.





Considerations

Important:

 Ad-hoc channel auto-start is not supported for HA channels.

Archive and Trim Events

- Enable Archive—The check box is selected (checked) by default. This means you are creating a VOD asset. If you do not want an archive to be available, deselect this option. Events that are not archived are available for broadcasting for a limited period of time.
- Trim—Select Trim to indicate that the archive will not be available to play until it has been trimmed. You can let it automatically trim to the size of the available buffer, or go to the monitor tab of the event to trim the video segment yourself. Trimming removes content from the beginning and end of the video segment. The event is available for trimming immediately after the event ends. Trimming is done before the video segment is transcoded or archived. Trimming is only available for archive enabled events.

• Add Time Before Auto-Trim:

Add more time before an event is automatically trimmed. The amount of extra time you can add is constrained by the length of your event. The default autotrim time is the event duration plus 1 hour.

The maximum amount of time that you can add is 11 hours for an event less than or equal to 1 hour. For an 8 hour event you can add a maximum of 4 hours before auto trimming starts.

 Important: The maximum amount of time you can extend the auto-trim start time is constrained by the duration of the event.

```
(event duration) + (more
time to auto-trim) +
(default time before
```



Add Event Dialog

Considerations

```
auto-trim) = (time
before auto-trim)
```

```
(4:00:00) +
(4:00:00) + (1:00:00)
= 9:00:00
```

For an event with the maximum duration of 8 hours, you can extend the time to auto-trim by 4 hours maximum.

- Extract Captions—Only available for archive enabled events. After the VOD asset is in Backlot, captions are uploaded and associated with the event's Embed Code which is the same as the VOD asset's Content ID.
- Thumbnail Url—If you did select to create an archive, you can add a thumbnail for preview by providing the Thumbnail Url.

Non-archived Events

 You can specify how long the event is available for playback by updating the **Hours** and **Minutes** in the Advanced Options dialog. The maximum allowable persistence of a non-archived event is 24 hours (1440 minutes).

Tip: Enable Archive must not be selected to allow you to set the hours and minutes the event will be available for playback.



3. Click ADD.

Trim Live Event

Trimming events is only available for event with **Enable Archive** selected. Trimming events allows you to view and select what portion of the event you want to archive.

Important: Events are automatically trimmed to the length of entire event if you don't choose to trim the event yourself.



Only

1. Add an event with **Trim** selected.

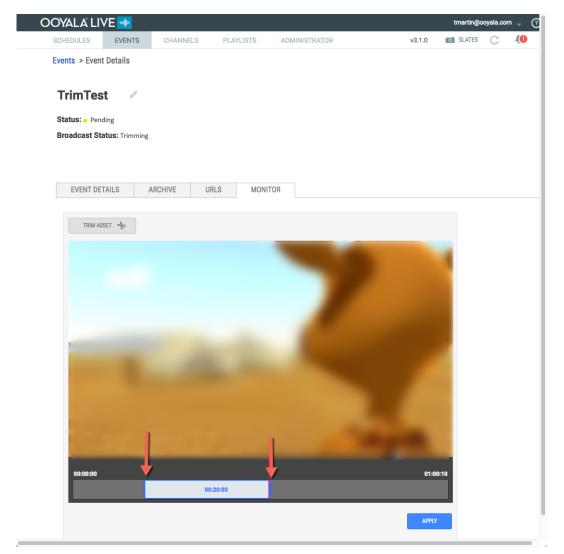


To learn more about adding and event, see Add an Event.

- 2. Go to the EVENTS details page and find your event. .
 - (2) After your event has finished, it goes into **Pending** state.



- (2) When the **Event Status** is **Trimming**, you have time to go and trim the event yourself. **Event Auto Trim in** indicates the time you have to manually trim the event before it is automatically trimmed for you.
- 3. Click **DETAILS** for your event.
- **4.** Go to the **MONITOR** tab on the event details page.
- 5. Drag the controls at either end of the clip to select what you want to archive.



6. Click APPLY.

7. Monitor the status of the trimmed event from the **EVENTS** details page.

Broadcast the trimmed event by using the event's embed code. You can also go to Backlot to broadcast the asset with a content ID equal to the event embed code.

Tip: An event's embed code is equal to an asset ID in the *Backlot REST API* or the content ID in *Backlot web UI*.

Note: The DVR window size of a trimmed event is re-sized to match the size of the final event. This synchronizes the size of the event with the DVR window of the event, providing a seamless broadcast transition from the event to the archived asset.

Add Event to High Availability (HA) Channel

Events can be viewed as a remote asset for a limited amount of time, or events can be saved as a VOD asset for rebroadcasting.

There are some unique considerations for creating events on an HA channel.

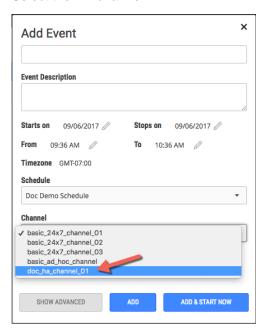
Note:

 For an HA channel event, the longest event time recorded by a sub-channel is used to create the Ooyala Backlot asset. This ensures that the most complete event is used for creating Backlot assets from HA channels.

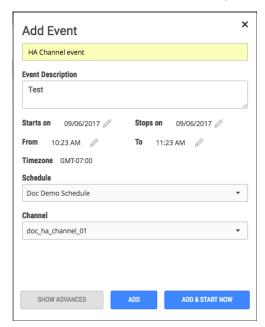


Tip: The Embed Code for an archived Ooyala Live Event is equivalent to the Ooyala Backlot asset's Content ID.

- 1. Log in to Ooyala Live and go to the **EVENTS** tab.
- 2. Click ADD EVENT.
- 3. Select the HA channel.



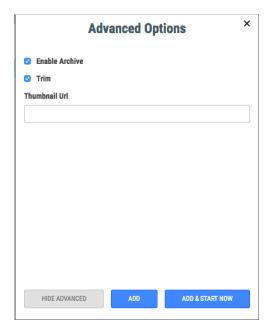
4. Enter a name for the event, a description, and set the date and time of the event.



- 5. Click SHOW ADVANCED.
- **6.** Click **Trim** to enable manual trimming of the event.

Important:

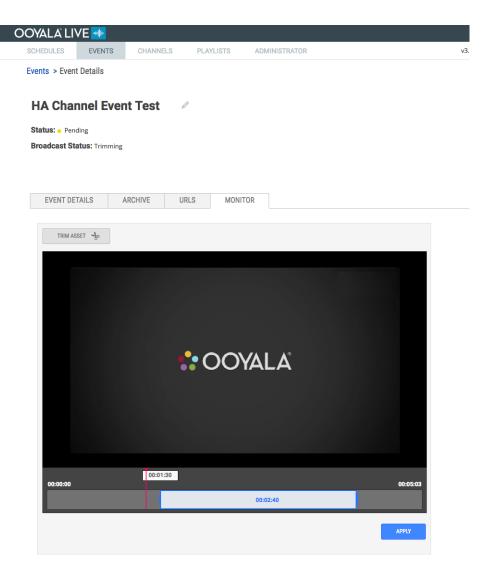
- Enable Archive must be selected if you want to save the event as a Backlot asset.
- Select **Trim** to be able to trim the event from the HA **Monitor** page.



7. Click ADD.

You have a limited time to manually trim an event before it is automatically trimmed by Ooyala Live. When the event **Status** is **Pending** and the **Broadcast Status** is **Trimming**, you can manually trim the event from the **EVENTS MONITOR** page.

Go to the **MONITOR** page for the event your want to trim.



- 1. Click TRIM ASSET.
- **2.** Drag the ends of the blue box to select the portion of the event you want to save.
- 3. Click APPLY.

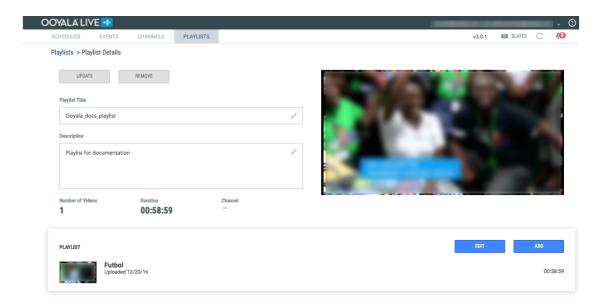
Ooyala Live transcodes and uploads the selected video as an asset in the Backlot account associated with the Live account.

ADD PLAYLISTS

You can stream prerecorded videos from Ooyala Backlot. To do this, you create a playlist of videos in Ooyala Live, add videos to the playlist, associate the playlist with a channel, and run the channel. When you no longer need a playlist, you can remove it. *To enable playlists for your account, please contact your Ooyala Customer Success Manager.*

To work with playlists, it helps to understand what each of the following elements on the **Playlist Details** does.





- Update button: Applies changes to the information on the Playlist details page.
- Remove button: Deletes the playlist, not the video associated with it.
- Playlist Title: The title of the playlist.
- **Description**: A description of the playlist.
- Number of Videos: The number of videos in the playlist.
- Duration: The total runtime of all the videos in the playlist.
- **Channel**: The name of the channel associated with the playlist. The colored indicator shows the state of the channel: running (green), error (red), or starting/pending (gray).
- The playlist's preview image, which is borrowed from the first video in the playlist.
- Playlist: The list of videos, with the Edit and Add buttons.
- Edit button: Opens the Edit Playlist window, which you can use to edit a playlist
- Add button: Opens the Add videos to playlist window, which you can use to add videos to the playlist.

Considerations:

- You must add a Playlist to a Channel at the time you add the channel, see Channel Encoding Setup on page 12 You must select the "Simulated Live - Input" profile to add playlists that allow streaming of VOD assets.
- To remove a Playlist, you must first delete the associated channel.

Add Playlist

Playlists let you stream video assets from Ooyala Backlot on an Ooyala Live Channel.

Any prerequisites for completing the task.

Provide context for the task you are about to explain.

- 1. After Ooyala creates this input profile for your account, open Ooyala Live and click the Playlists tab.
- 2. Click the New Playlist button.
- 3. In the Create a Playlist window, enter a meaningful title and description and click the Create button. An empty playlist appears on the page under the Playlist tab. The playlist displays a placeholder thumbnail image and the number 0 to indicate that it has zero videos.

Any postrequisites for completing the task.



Add Videos to a Playlist

Add as many as 64 videos to your playlist to simulate live streaming.

Any prerequisites for completing the task.

Provide context for the task you are about to explain.

- 1. Click the empty playlist that appears on the page under the **Playlist** tab.
- 2. In the Playlist Details page that opens, click the Add button.
- 3. In the **Add videos to playlist** window that opens, use **Search** to locate relevant videos from Ooyala Backlot.
- 4. Scroll down or up the search results, select videos, and click the Add Videos button. When there are more than 20 search results and you scroll to the bottom of the current results, the window displays additional results. The preview image of the first video in the list becomes the preview image for the playlist. The videos appear on the Playlist Details page.

Edit a Playlist

Add or delete videos from your palylist while the channel is running or stopped.

Any prerequisites for completing the task.

Provide context for the task you are about to explain.

- 1. **Optional**: If the channel associated with the playlist is running, and you want to change the first or second asset playing, stop the channel.
- 2. In Ooyala Live, click the Playlist tab.
- 3. Click the playlist.
- 4. On the Playlist details page, click the Edit button.
- 5. In the **Edit Playlist** window that opens, you can scroll, drag and drop videos, or delete videos using the trashcan icon.
- **6.** When you finish, click the **Apply** button.

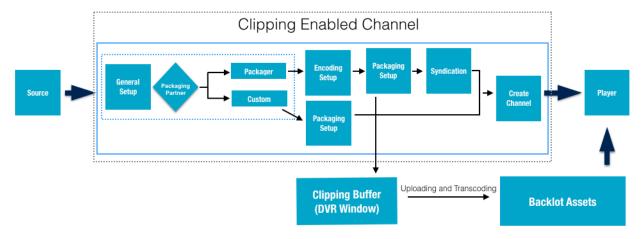
ADD CLIPS FROM A LIVE STREAM

You can create short clips from a channel while it is running, save them to Backlot. This is a great way to share highlights or teasers from your live stream with viewers. To enable this feature for your account, please contact your Ooyala Customer Success Manager.

Create a new channel that has clipping enabled and create the clips. The DVR Window size determines the size of the clipping buffer.

Live Clipping Workflow





1. You must add a channel that has been enabled for clipping.

Important: Clipping is a profile dependent feature. An Ooyala representative must enable your Live profile for clipping before you will see the Clipping option.

- 2. Log in to Live and make sure the Clipping enabled channel is running.
- 3. Go to the Clipping tab in the channel's details view.

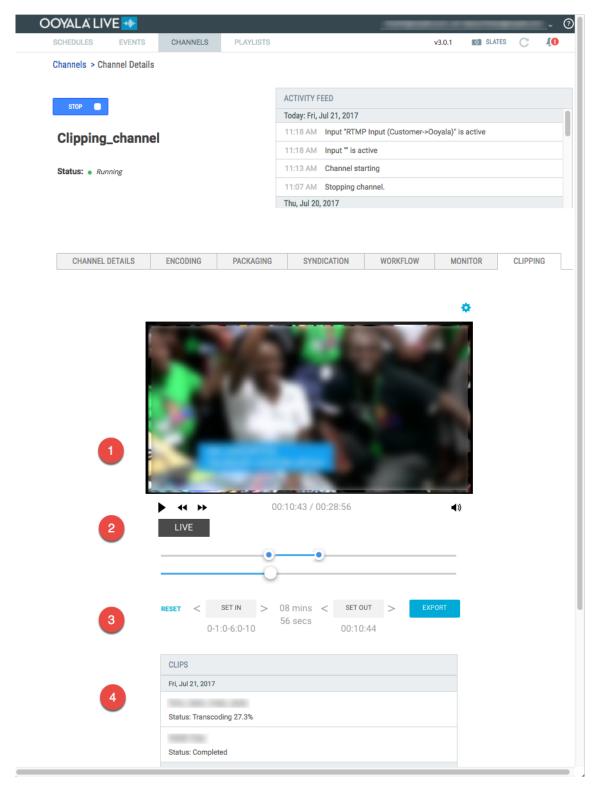
Understanding the Clipping Tab

- 1.) **Preview window and video controls** this window displays the contents of the DVR window.
- 2.) Clip sizing tool—the slider bar on the bottom let's you select the SET IN and SET OUT time relative to the buffer sized. The top bar illustrates the size of the clip you selected.
- 3.) **Clip controls**—use the clip sizing tool and controls to select what you want from the buffer.
 - 1. Slide the button on the sizing tool to where you want to start and stop the clip.
 - 2. Click the appropriate button.
 - **3.** Click **EXPORT** to save the clip to Backlot. You must provide a title and description for your clip. Click **SUBMIT**, to process the clip.
- 4.) Status—clips have 4 statuses.
 - 1. Creating
 - 2. Uploading
 - 3. Transcoding
 - 4. Completed

Things to think about

- Your DVR window size determines the clipping buffer size.
- A clips maximum size is always slightly shorter than the size of the buffer.





- 4. Slick the segment you want to clip from the buffer.
- 5. Click EXPORT.

Tip: Clips are stored as assets in your Backlot account.

SYNDICATE LIVE VIDEO TO SOCIAL MEDIA

Ooyala Live supports syndication of live video to several social media video platforms.

Ooyala Live now allows syndication to these social media. You can syndicate live video without the need to enable or create syndication rules. You can syndicate to 24x7 or ad-hoc channels.

- Facebook
- YouTube
- Twitter/Periscope
- Twitch

Live Syndication Considerations

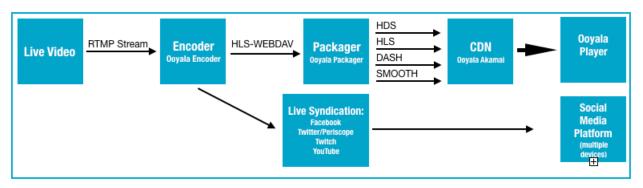
Important:

- Live Syndication only works with the Ooyala Package as the Packaging Partner and Ooyala Encode
 as the Encoding Partner.
- A channel must be stopped to enable syndication.
- Server Side Ad Insertion (SSAI) is not supported by Ooyala Live syndication to social media.

Tip:

- Enabling social media syndication does not start syndicating the stream. You must click start next to an enabled social media stream to start syndicating to a social media platform.
- Anything streaming on the channel is syndicated to any social media that has been enabled and is running. Schedules and events don't impact what is being syndicated.
- Ad-hoc channels that have scheduled events automatically stop 30 minutes after the last scheduled event. Any syndication that is running on the ad-hoc channel is stopped when the channel is stopped.
- Syndication to a 24x7 channel runs continuously until the syndication stream is stopped or the channel is stopped. Facebook enforces a 240 minute maximum time limit for live syndication.
- You can enable syndication to social media as part of creating a new channel.
- You don't need stop your channel to stop and start syndicating a social media stream. Once your social
 media is enabled, you can start and stop syndicating to each social media stream without stopping your
 channel.

Live Syndication Workflow



SYNDICATE LIVE VIDEO TO FACEBOOK

Syndicate live video to Facebook without the need to enable syndication in Ooyala Live.

Before You Start

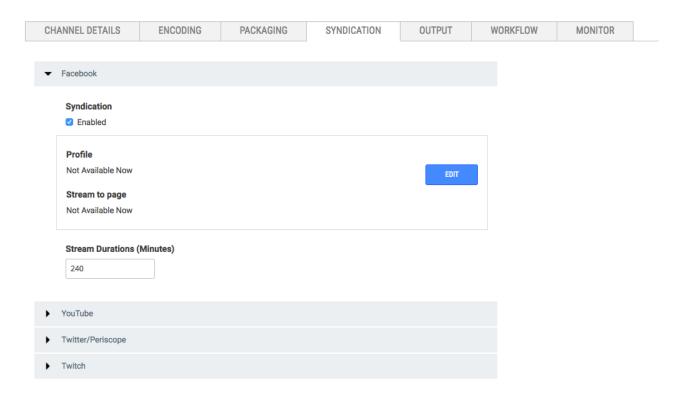


Here are some considerations about Live Syndication to Facebook:

Important:

- Live Syndication only works with the Ooyala Package as the Packaging Partner and Ooyala Encode
 as the Encoding Partner.
- A channel must be stopped to enable syndication.
- Server Side Ad Insertion (SSAI) is not supported by Ooyala Live syndication to social media.
- **Tip:** Once you have enabled Facebook syndication on your channel, you can start and stop the Facebook stream without stopping your channel. This allows you to switch to a different page on Facebook without stoping your channel.
- It's a best practice to log out of all active Facebook session on the browser running Ooyala Live.

Facebook Tab View



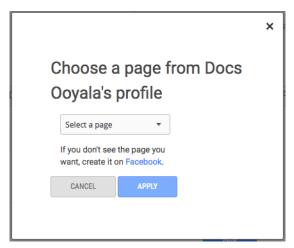
Configure Facebook Syndication

- 1. Log in to the Live UI.
- 2. Click CHANNELS.
- 3. Hover over the channel's type, and click VIEW CHANNEL DETAILS.
- 4. Go to the **SYNDICATION** tab.
- 5. Expand Facebook.
- 6. Check Enabled.
- 7. Click LOGIN.





8. Select an existing Facebook page, or create a new Facebook page.



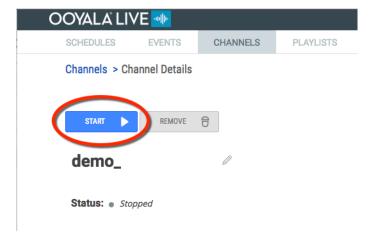
- 9. Click APPLY.
- 10. Enter Stream Duration if you want a value less than 240 minutes.

Note: The stream duration must be from 1 to 240 minutes. The default is 240 minutes.

11. Click SAVE.

Facebook is now configured. To start syndicating to Facebook, you need to start the channel and the Facebook syndication stream.

12. To start the channel, click **START** in the upper left of your browser.





Ooyala Live configures the channel for syndication to all enabled social media. This may take several minutes.

Click the play button for Facebook, Stopped to start syndicating to Facebook.

Important: Before starting Facebook syndication, log out of all active Facebook session on the browser running Ooyala Live.

SYNDICATE LIVE VIDEO TO YOUTUBE

Syndicate live video to Youtube with just the stream key and RTMP URL for your account.

Before You Start

You need to know the Stream Key and RTMP URL for the account you want to syndicate to.

Important: You must be a YouTube partner to be able to stream live video to your YouTube account. Here is a link to the *YouTube Partner Program Overview*.

Here are some considerations about Live Syndication:

Important:

- Live Syndication only works with the Ooyala Package as the Packaging Partner and Ooyala Encode
 as the Encoding Partner.
- A channel must be stopped to enable syndication.
- Server Side Ad Insertion (SSAI) is not supported by Ooyala Live syndication to social media.

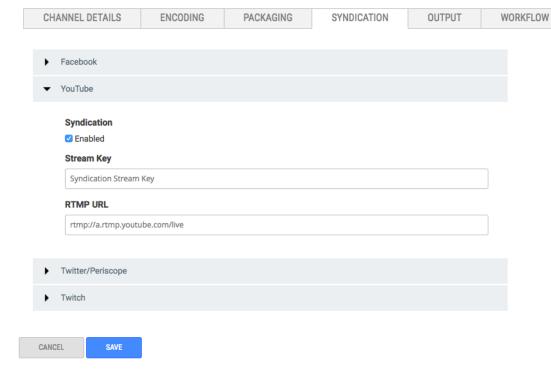
Find Your YouTube RTMP URL and Stream Key

- · Log in to your YouTube account.
- Go to the "Creator Studio."
- Open the "Live Streaming" section in "Creator Studio."
- Find the "ENCODER SETUP" section.
- Copy and save the "Server URL" and the "Stream name/key."

Note: The "Server URL" is the RTMP URL in Ooyala Live.

Configure YouTube Syndication



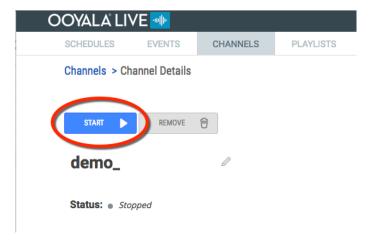


How to Syndicate to YouTube

- **1.** Log in to the Live UI.
- 2. Click CHANNELS.
- 3. Hover over the channel's type, and click VIEW CHANNEL DETAILS.
- 4. Click SYNDICATION.
- 5. Expand YouTube.
- 6. Check Enabled.
- 7. Enter the Stream Key.
- 8. Enter the RTMP URL.
- 9. Click SAVE.

YouTube is now configured. To start syndicating to YouTube, you need to start the channel and the YouTube syndication stream.

10. To start the channel, click **START** in the upper left of your browser.





MONITOR

Ooyala Live configures the channel for syndication to all enabled social media. This may take several minutes.

11. Click the play button, Stopped to start syndicating to YouTube.

SYNDICATE LIVE VIDEO TO PERISCOPE

Syndicate live video to Periscope with just the stream key and RTMP URL.

Before You Start

You need to know the Stream Key and RTMP URL for the account you want to syndicate to.

Find the Server URL and Stream Key

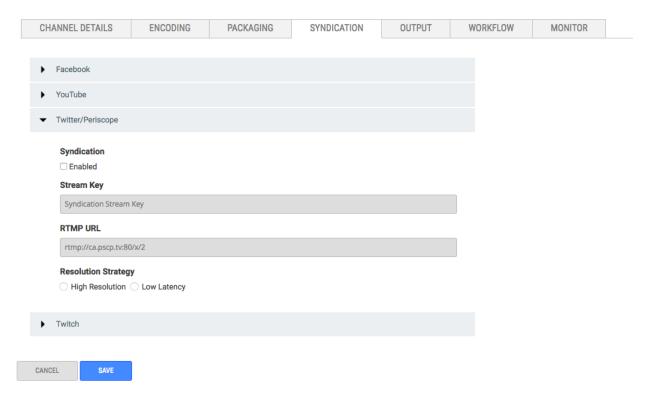
- Enter the following URL in a browser.
 - https://www.periscope.tv/account/producer
- Log in with your Twitter crendentials.
- Be sure to copy and save the "Server URL" and the "Stream Name / Stream Key."

Here are some considerations about Live Syndication:

Important:

- Live Syndication only works with the Ooyala Package as the Packaging Partner and Ooyala Encode
 as the Encoding Partner.
- A channel must be stopped to enable syndication.
- Server Side Ad Insertion (SSAI) is not supported by Ooyala Live syndication to social media.

Twitter/Periscope Tab View



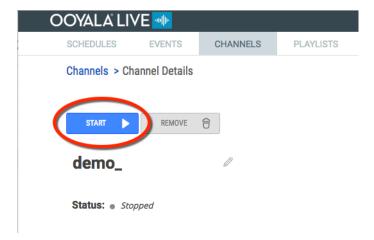
Configure Twitter/Periscope Syndication



- **1.** Log in to the Live UI.
- 2. Click CHANNELS.
- 3. Hover over the channel's type, and click VIEW CHANNEL DETAILS.
- 4. Click SYNDICATION.
- 5. Expand Twitter/Periscope.
- 6. Check Enabeld.
- 7. Enter the Stream Key.
- 8. Enter the RTMP URL.
- 9. Click SAVE.

Twitter/Periscope is now configured. To start syndicating to Twitter/Periscope, you need to start the channel and the Twitter/Periscope syndication stream.

10. To start the channel, click **START** in the upper left of your browser.



Ooyala Live configures the channel for syndication to all enabled social media. This may take several minutes.

11. Click the play button for Twitter/Periscope, stopped , to start syndicating to Twitter/Periscope.

SYNDICATE LIVE VIDEO TO TWITCH

Syndicate live video to Twitch with just the stream key and RTMP URL.

Before You Start

You need to know the Stream Key and RTMP URL for the account you want to syndicate to.

Find Twitch Stream Key

Enter the following URL in a browsers.

https://www.twitch.tv/yourusername/dashboard/settings/streamkey

Replace "yourusername" with the user name for your Twitch account.

- · Log in with your Twitch crendentials.
- Follow the prompts to get the "Stream Key."
- · Be sure to copy and save the "Stream Key."

Find Twitch RTMP URL

Enter the following URL in a browser.



https://bashtech.net/twitch/ingest.php

This is a list of the ingest servers or RTMP URLs for Twittter.

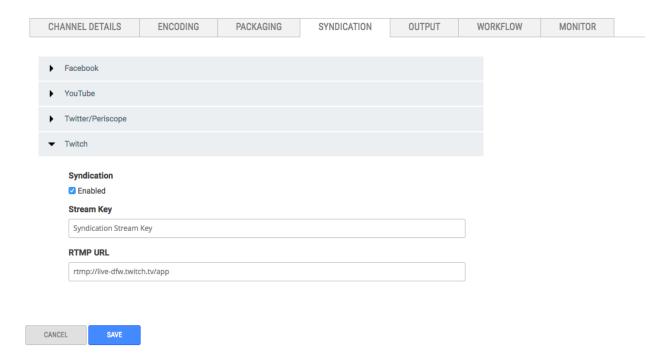
Copy and save the RTMP URL geographically nearest to you.

Here are some considerations about Live Syndication:

Important:

- Live Syndication only works with the Ooyala Package as the Packaging Partner and Ooyala Encode
 as the Encoding Partner.
- A channel must be stopped to enable syndication.
- Server Side Ad Insertion (SSAI) is not supported by Ooyala Live syndication to social media.

Twitch Tab View



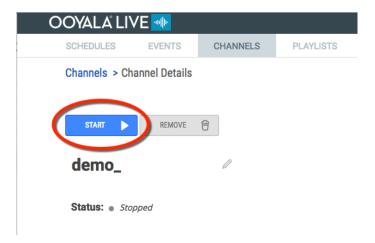
Configure Twitch Syndication

- **1.** Log in to the Live UI.
- 2. Click CHANNELS.
- 3. Hover over the channel's type, and click **VIEW CHANNEL DETAILS**.
- 4. Click SYNDICATION.
- 5. Expand Twitch.
- 6. Check Enabled.
- 7. Enter the Stream Key.
- 8. Enter the RTMP URL.
- 9. Click SAVE.

Twitch is now configured. To start syndicating to Twitch, you need to start the channel and the Twitch syndication stream.

10. To start the channel, click **START** in the upper left of your browser.





Ooyala Live configures the channel for syndication to all enabled social media. This may take several minutes.

11. Click the play button for Twitch, Stopped to start syndicating to Twitch.



OOYALA PULSE LIVE STREAM INTEGRATION (SSAI)

Integrate Ooyala Pulse with Ooyala live for seamless server-side ad insertion (SSAI).

Ooyala Live offers integration with Ooyala Pulse to enable SSAI. Your Ooyala representative will onboard your Pulse account and integrate it with your Live account, which will have exclusive access to the Pulse account. Your ads will be automatically downloaded and transcoded (there is a Pulse service that searches for ads every 10 minutes).

Note: This capability supports only HTTP Live Streaming (HLS). Therefore, when you create your channel, use an HLS output template.

With *Personalized SSAI*, the ad server customizes the ads it displays to each individual user. It is possible that many users may get the same set of ads in the same order, but the decisions are still made individually for each user.

When you create a channel for a personalized ad (personalized for users), you must create a publishing rule called SSAI in your Backlot account (see *Creating Publishing Rules*).

Note: It is recommended that you use Ooyala Player V4, which supports playback in HLS. Ooyala Player V3 does not support HLS on the web.

To integrate Pulse ads in your live stream, follow these steps in the Ooyala Live UI:

- 1. In General Setup, select Ooyala Package and Ooyala Encode and click Next Step.
- 2. Select the **Encoding Setup** according to your profile and click **Next Step**.
- 3. In Packaging Setup > Packager Output Filter Template, select any compliant output package. For example, if you select HLS_Only your Output Type will be hls. Click Next Step.

Note: Details of non-compliant output packages are also listed. However, if you select a non-compliant output package you will not be able to click the ad **Enabled** check box in the next step.

- 4. On the Ad Setup screen, click the Enabled checkbox and click Next Step.
- 5. Select a Slate that will ensure the entire ad break is filled. If applicable click Personalize Ads. Fill in Tags and Categories as applicable to your campaign in Pulse for personalized ads. Click Next Step and review the Summary: your channel will be created at this point.

Note: When you upload a Slate you can check a box indicating whether it is an **Ad Slate**, which must be an MP4 video at least 5 seconds in length, cannot be an image.

- **6.** Once you have confirmed the channel is up and running, you can visit your test page, where you will see an **Ad Insert** button that you can use. Set the duration of the ad break and click **Start**.
- 7. You will be provided with a standalone ad test page with the Ooyala Player Token enabled: this test page allows you to view the ads that a user would see during an ad break. On that test page, click the **Optional** tab and specify a tag used for personalized ads. For each tag you specify, you will see a unique personalized ad associated with that tag.

To insert third-party ads mid-roll into a Live stream, first use Pulse to add a third-party ad for a campaign goal. Then, create an SSAI channel for the Pulse campaign that has the third-party ad.

- 1. In Pulse, add a third-party ad for a campaign goal:
 - a. In the Add a new ad for goal... dialog, click the tab.
 - **b.** In the **3rd Party Ad URL (VAST)** field, enter the URL of the ad's VAST file. For testing purposes, you can use http://aptest.adtech-union.tv/proxy/distributor/v2?rt=vast_3.0&t=midroll2.
 - c. Click Save.
 - **d.** Wait from 5 to 10 minutes for the changes to take effect.
- 2. Insert the third-party ad into an Ooyala Live stream.



- a. In Ooyala Live, create an SSAI channel for the Pulse campaign that has the third-party ad.
- **b.** Insert an ad break.
- **c.** Start the SSAI channel, play some of the ads, verify the slate that was played, and stop the channel.

Note: The first time a specific third-party ad is encountered; it does not play because it has not been transcoded. Instead, it is submitted for transcoding. After transcoding, when it the third-party ad is encountered, it plays.

To change an ad slate for an SSAI channel:

- 1. In Live, if only one ad slate exists, upload a new ad slate.
- 2. Wait up to 10 minutes for the ad to be transcoded.
- 3. View the status of the new ad slate.
- 4. In Live, click View channel details.
- 5. Click the Ad Settings tab.
- **6.** Change the **Ad Slate** parameter to the new ad slate.
- 7. Start the channel, insert an ad break, and verify that the new ad slate has been played.



CONSIDERATIONS WHEN ADDING AND MANAGING CHANNELS

The initial configuration of you Ooyala Live account determines many of you choices and default options for creating and managing live channels.

To create a channel, see Setting Up a Channel.

GENERAL SETUP CONSIDERATIONS

Slates

Videos that play when the live stream fails or is not available. A Slate must be at least 30 seconds long.

Tip: Slates are required for each channel. Upload a slate before you start to add any channels. The type of slate you can use depends on your Live Account configuration.

Supported formats:

Video: .mov, .mp4

• Image:

CHANNEL STATE AND ACTIONS

Action	Channel Running	Channel Stopped
Enable syndication	No	Yes
Add event to a schedule	Yes	Yes
Start an event	Yes	No

ENCODING SETUP

The **Encoding Setup** is available when the **Packaging Partner** is **Ooyala Package**. The following information includes considerations, tips, and general knowledge needed to understand and successfully configure encoding for your channel.

Encoder Location	The Encoder Location is a geographic location for an encoder. A default encoder location is set during the initial configuration of you Live account. Other available encoder locations are listed in the Encoder Location drop-down list. Encoding costs are based on geographic region.
Encoder Input Profile	Select whether to use one or two inputs where the secondary input provides fail-over content.
	The default Elemental Input Profile option requires two inputs: Input 1 takes your primary content. Input 2 takes your non-ad fail-over content. When the Input 1 stream is interrupted during a live event, the



Encoder Output Profile

video output stream displays fail-over content from **Input 2**.

The **Packaging Partner** selected in general setup determines encoding options. Only one encoding option is available at a time.

Packaging Partner	Encoding Option
Ooyala Package	elemental-live-delta
Ooyala Akamai	elemental-live-akamai
Custom	No encoding page is displayed.

Input 1

- Type
- Name
- Streaming Protocol
 - RTMP—option (Real-Time Messaging Protocol)
 - RTP—option (Real-Time Transport Protocol)
- Encoder Mode
 - RTMP Push—indicator, the encoder pushes the content to input 1.
 - RTMP Pull—indicator, the encoder relies on Input 1 to pull the input stream.
- Input Name Visioning—this setting guarantees that using multiple encoders at different times for the same channel won't cause ingest breaking. The default is not enabled.

These are slates or play-list that are shown when **Input 1** fails.

- Type—you can use a slate in either .mov or .mp4 format. If your account has play-lists enabled, you can specify a play-list for Input 2 fail-over
- Name—the name will always be "Input 2."
- Input Path—is the full path for the location of the file or play-list.

Note: Set **Enter manually** to enter the fully qualified path to the file you want to use for your slate. The file must be located on the same server that is running your Live account.

- Type— the protocol for the output, such as HLS-WEBDAV (HTTP Live Streaming - Web Distributed Authoring and Versioning).
- **Stream Count**—the number of content streams being output by the channel.

Input 2

Output 1



PACKAGING SETUP

During the Create New Channel process, on the General Setup page, setting Packaging Partner to Ooyala Package, and clicking Next Step displays the Packaging Setup page.

Channel Type

- Ad-hock runs for a finite period.
- 24x7runs continuously.
- Packager Location: Ooyala sets up capabilities in the system for your provider account. Each geographic region has an associated cost in your account. The defaults are set up in the drop-down lists.
- Packager Input Filter Template: Select one of the available templates.
- Packager Output Filter Template: Select one of the available templates.
- DVR Settings: Limited DVR automatically archives the channel for on-demand playback. No DVR disables this capability.
- Input 1: Displays the packager input type (e.g., Type: webdav).
- Output 1: Displays the packager output type (e.g., Type: hds, Name: hds_package).
- Output 2: Displays the packager output type (e.g., Type: hls, Name: hls_package)

The following parameters are available when Packaging Partner is set to Ooyala Akamai:

Channel Type: Select the type of channel:

Ad-hoc runs for a finite period.

24/7 runs continuously.

- Channel Account/Location: Ooyala sets up capabilities in the system for your provider account. Each
 geographic region has an associated cost in your account. The defaults are set up in the drop-down
 lists.
- Config Name: Select one of the available names.
- **Input Formats**: Displays the format of the current input (e.g., **RTMP**).
- Output Formats: Displays the format of the current output (e.g., HLS,HDS).
- Ingest Password: Enter the authentication password for pushing content to Akamai.
- DVR Settings: Limited DVR automatically archives the channel for on-demand playback. No DVR disables this capability.
- Primary Contact, Secondary Contact: Select the name of your primary and secondary contacts at Ooyala.
- **Primary Encoder**, **Secondary Encoder**: Set to **200.29.181.5**. This ensure that the edge server to Akamai will be closest as established via a least path algorithm.

The following parameters are available when **Packaging Partner** is set to **Custom**:

- DASH—Dynamic Adaptive Streaming over HTTP (DASH)
- HLS—Apple HTTP Live Streaming (HLS) URL.
- HDS—Adobe HTTP Dynamic Streaming (HDS) URL.
- Smooth—Microsoft Smooth Streaming URL.

SYNDICATION CONSIDERATIONS

Supported Social Media

- Facebook
- Periscope/Twitter
- Twitch
- YouTube



Enable or Modify Social Media Stream

The channel must be stopped in order to enable or modify social media streaming configuration.

Tip: You can enable a social media stream at the same time you add a channel.

Starting and Stopping Syndication

Once a social media stream is enabled and the channel is running, you can start or stop each social media stream.



OOYALA LIVE FAQ

Have questions? Take a look at what other Ooyala customers are asking about.

Q: Can I add Facebook integration to an existing Ooyala Live channel?

A: Facebook integration can be added to all channels created after Live release 1.4.0.

Q: I may sometimes, but not always, want to stream to a Facebook page. Am I required to provide Facebook authentication each time I start the channel? Will I be able to stream to a Facebook page if I do not provide Facebook authentication?

A: When Ooyala Live starts a channel, it checks if it has the access token for the Facebook account associated with the channel. If not, Ooyala Live will prompt the user to sign in. Note that Ooyala Live does not store any Facebook account credentials.

Q: What happens with the syndications rules assigned to Backlot while using the playlist? Are these overridden?

A: Nothing changes with the syndication rules.

Q: How does the transcoding on the fly for this playlist works? is it using the source file?

A: Simulated Live is supported where the source is HLS. So as long as the rendition has HLS, that will be the ingest for the Elemental Live encoder.

Q: Are the analytics gathered reflected in the playlist embed code or in the asset?

A: Today the analytics is reflected in the playlist embed code. We have plans to add asset embed code support in Q1, 2017.

Q: Does the Server side Ad insertion work for this feature?

A: Yes, it does. Simulated Live is only available for Elemental servers, and it supports SSAI.

Q: Does Facebook syndication work for Simulated Live?

A: Yes, it does. Simulated Live is only available for Elemental servers, as is Facebook Live syndication.

Q: Is there a slate for playlists?

A: There is a slate and it will only apply if the playlist is empty.

Q: If elemental is using m3u8, what happens to the assets that do not have an HLS stream?

A: If the asset does not have an HLS stream URL, you will not be able to add it to the playlist.

Q: If elemental is using m3u8, does reprocessing occur on the fly or is only using the chunks? If the reprocessing is on the fly, does this means Elemental uses the highest bitrate that is found? What happens with assets that don't have the same bitrates?

A: Elemental is reprocessing on the fly, the source is m3u8, and it uses the highest bitrate of the source. The output is always the same bitrate. If the source and the highest bitrate are different, you will probably see a change in quality in the output.

Q: Is the file input loop for slates configurable to true or false?

A: The loop is always set to true and cannot be configured.

Q: How accurate is trimming with Live to VOD?



- **A:** Trimming is accurate to within the segment size.
- Q: How long after an event that is set to archive does the trimming automatically occur?
- **A:** Automatic trimming occurs one hour after the event plus the duration of the event.
- Q: What is the maximum time permitted for Live to VOD?
- A: 8 hours for Ooyala package, 24 hours for Azure. Live to VOD is not supported for Akamai.

OOYALA LIVE GLOSSARY

Find and understand all the terminology behind Ooyala Live.

Ad-hoc Events Unplanned events that typically only have short

notice before the stream is live for consumer

viewing.

Archive A saved recording of the Ooyala Live event or

program, made available through Backlot, that uses the same embed code as the Live event or program. The Archives for both Azure Media Services and Akamai SecureHD are not proper assets, in that we cannot retrieve them as an asset to ingest into our VOD transcoding system and cannot syndicate or import into an editing system to

create clips.

AssetA generic term referring to video and other types of

content.

Channel Channels enable live streaming, including the

ingestion through the CDN to the end playback device. A channel receives live input streams from a live transcoder and makes them available for streaming. A channel can also have multiple programs. A channel is not exposed to a player, except via an embed code. For example, there is no specific concept as a channel in the CMS related to the new Live Platform; there is usually 1 - 1 relationship between a channel and a schedule. Events depend on a Channel. Thus, an ad-hoc event will be streamed on a Channel. Typical operations are that providers will have a channel

configured that will persist even though it may only

be used for streaming ad-hoc events.

DVR Digital Video Recorder. When creating an Ooyala

Live event, setting the **DVR Duration Override** override the duration of the archive for DVRs.

Dynamic Ad Insertion (DAI)The ability to stitch ad content into video streams by

modifying the video manifest before the content is

delivered to the player.

Dynamic Manifest Management (DMM)The ability to dynamically generate manifests based

on business rules. Required for DAI.

Egress The path from the CDN back to the Origin. The

higher the effectiveness of the CDN's caching within its delivery network, the lower the Egress bandwidth

used.

Embed Code Ooyala-specific content or asset ID. On the Live

Platform, each channel and event has a unique embed code. Note that recorded archives will have the same embed code as the source live event or

program.

Encoding An Ooyala Live encoder converts the source audio

and/or video into one of the acceptable live stream formats in a single bitrate for input into Ooyala Live.

Entry or Ingest Point The URL address configured to receive the output

of the encoder that is streaming the live source

video.

Event The point in time that is recorded from the

streaming content of a channel.

Ingress The path for the input stream from the Ooyala Live

encoder to the Entry Point.

Linear Generally a constant video stream as in 24/7

broadcast TV, and may also include a channel that is only streaming live content a portion of each day.

Live Real-time streams from an actual live event, i.e.,

from camera to end-user; sometimes used as a broader term for live events, simulcast of broadcast

streams, etc.

Live Origin A central location from which a CDN can retrieve

encoded video content, manifests, and a DVR

buffer.

Live-to-VOD Refers to a broad-range of uses, such as the

creation of live clips and archive recordings of live

events.

Monitoring Monitoring the stream directly using telemetry data,

as well as Ooyala Live itself.

Quality of Service (QoS) Metrics reflecting the playback characteristics of

the video stream from the perspective of the end-

device, e.g. buffering.

Remote Asset Video assets as represented within the CMS

system (Backlot), addressed using an embed code,

and can be an event or channel.

RepackagingConverting streams of a single format into different

formats for delivery such as DASH and HLS; repackaging is the same process as transcoding or packaging for VOD. DRM may also be applied

during repackaging.

Schedule An EPG container for Events that are streamed on

a channel.

Single Sign On (SSO)

Ooyala Live integrates with Backlot and provides

the administrator with Single Sign On capability. The Ooyala Live sign-in uses the same account credentials for user authentication as Backlot. Login syntax is identical to Backlot's such that the "Username" is the user's email address and

password is the password of the user.

Slate A still image that is used for display within the

player during times that the end-user is not intended to view the live stream; slates can be encoded, and the stream in the outbound stream or the

playback device can switch the user's video window to display the slate.

Metrics reflecting the availability of the video stream as it exists within the encoding/transcoding video pipeline.

Converting a single bit-rate input stream into multiple bit rate streams of the same format; transcoding merely creates multiple streams from one, modifying the bit rate, and possibly frame size and resolution, but generally not the frame rate and not the format (one H.264-encoded RTMP stream becomes several RTMP streams of differing quality bitrates/frame sizes).

The archive is a recording of a live event (or program) and retains the same embed code of the live event (or program). Because live events typically will have the live source stream active before the actual start of the event, it may be desirable to trim the pre- and post-event content removed from the saved archive. Trimming preserves the embed code.

Transcoding

Trimming

OOYALA LIVE RELEASE NOTES

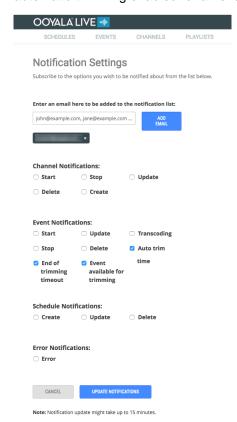
Read the most up-to-date information about Ooyala Live features.

OOYALA LIVE V3.7.0 RELEASE (2018-02-23)

This Ooyala Live release updates HA Event scheduling, event auto trimming scheduling, and how Ooyala Live creates VOD assets. It also includes bug fixes.

Fixes and Enhancements

- Add time before auto trimming starts: You can now add more time before auto trimming starts for scheduled events. The default time before the auto trimming feature trims and archives a scheduled event is 1 hour. You can now add up to 11 hours before scheduled events are automatically trimmed. The amount of time you can add is constrained by the duration of the scheduled event. See, Archive and Trim Event.
- Improved notifications: You can now turn on notifications to get emails to remind you when you have automatic trimming enabled for an event.



- Transcoding continues when channel is stopped: You can now stop a channel with VOD assets that are uploading or transcoding without impacting the asset. Previously your channel had to be running until the VOD asset processing was complete. Now we allow you to stop your channel as soon the VOD asset has started to be processed.
- Scheduled HA events are preserved when swapping sub-channels: You can now swap out subchannels and still preserve future scheduled events. See, Swap High Availability (HA) Channels on page 22

Known Issues



- **Incompatible or invalid profile:** If you change any profile of an existing channel, your channel might go to an error state if the updated profile is invalid or incompatible with other channel profiles. If your channel goes to error state and you are unable to stop the channel, you should contact Ooyala support for assistance.
- Renaming events more than one time: If you rename a HA live event more than one time while it is running, the names of the sub-events on the sub-channels will be different from the final name of VOD asset. The VOD asset will have the correct name of the last edit to the HA event name.
- Stopping and starting HA channels with events in the future may cause event errors: If you have future events schedule on HA channels that are stopped and restarted, your HA events may go to an error state if you hot swap the sub channels and start the events earlier than the scheduled time.
- Warning about losing events when deleting a channel not shown: You can stop a channel once all events are in a pending or transcoding state; however, if you try to delete a channel that has pending or transcoding events, you will not get any warning and your events will be lost.

OOYALA LIVE V3.6.2 PATCH RELEASE (2018-01-17)

This Ooyala Live patch release updates HA Event URL formatting. No new features are introduced in this release.

OOYALA LIVE V3.6.1 RELEASE (2018-01-11)

This Ooyala Live patch release updates Ooyala Live API required fields and backend deployment changes. No new features are introduced in this release.

You can read the API Docs Release Notes here.

OOYALA LIVE V3.6.0 RELEASE (2018-01-04)

Fixes and Enhancements

Set event persistence for non-archived events.

You can now specify how long non-archived events remain available for playback, see Add an Event in the Ooyala Live User Guide.

OOYALA LIVE V3.5.0 RELEASE UPDATE (2017-12-22)

Fixes and Enhancements

Digital Rights Management (DRM) supported for HA channels.

After extensive testing on multiple devices, operating stems, and browsers, High Availability (HA) channels now support the use of DRM enabled channels as sub-channels.

Important: All HA sub-channels created with DRM enabled profiles must use the same DRM packaging output profile.

For more details about Ooyala Live HA channels, read Setting Up a High Availability Channel on page 19.

OOYALA LIVE V3.5.1 PATCH RELEASE (2017-12-11)

This Ooyala Live patch release updates billing related to event trim times. No new features are introduced in this release.

OOYALA LIVE V3.5.0 (2017-12-04)

Fixes and Enhancements



- We are in the process of updating the Ooyala Live REST API documentation. While we are making the updates, you'll have a couple of options for accessing our API documentation.
 - The latest Live API documentation can be accessed here Ooyala Live REST API.
 - The latest Ooyala Live REST API documentation includes recently exposed API endpoints. You can browse the descriptions of new endpoints and even "Try it out." We will migrate existing Live API endpoint documentation to this new format overtime.
 - Existing API documentation can be accessed here Ooyala Live REST API Reference.

The existing Ooyala Live REST API Reference will be available until we have completed all of the content migration to our new Live API documentation format. There are no plans to add any new API endpoints to this documentation.

Known Issues

- When trimming events on channels that use Azure, the trimming controls trim 10 second increments of the video.
- If an event name change is made while an event is running, the archive asset name in Ooyala Backlot might not be updated with the latest event name.
- We have notice infrequent intermittent issue when High Availability events don't start at the scheduled time.

OOYALA LIVE V3.4.1 (2017-11-08)

Fixes and Enhancements

This release includes a backend update to return additional channel IDs in an API request. There are no new features in this release.

OOYALA LIVE V3.4.0 (2017-11-06)

Fixes and Enhancements

This release includes fixes and enhancements to channel workflow and stability. There are no new features in this release.

- Corrected issue with channel clipping that potentially could cause some channels to stick in the stopping state for some customers.
- The DVR window now has a 60 second minimum duration.
- Corrected retry logic for Live to VOD transcoding for some customers.
- Resolved issue about a channel failing to start immediately after being stopped.

OOYALA LIVE V3.3.2 (2017-11-01)

This is a patch release only. No new features were introduced in this release. Minor updates were made to support backend utility API.

OOYALA LIVE V3.3.1 (2017-10-11)

Improved Security for Encrypted HLS (eHLS) Live Streams

We made improvements to ensure timely encryption of live streams over eHLS.

OOYALA LIVE V3.3.0 (2017-10-04)

Fixes and Enhancements



- Trim and Archive High Availability (HA) Events: Trimming and archiving events on an HA channel is supported. Schedule an event on an HA channel to ensure that your event is captured as a VOD asset. See, Add Event to High Availability (HA) Channel.
- **DVR Window Syncs with Trimmed Event:** The DVR window size of a trimmed event is now re-sized to match the size of the final event. This synchronizes the size of the event with the DVR window of the event, providing a seamless broadcast transition from the event to the archived asset.
- Playlists Successfully Created but Not Visible: Corrected issue related to playlist being created, but not being visible in the Ooyala Live UI. Playlists are now created and properly displayed in the UI.

OOYALA LIVE V3.2.1 (2017-08-24)

Fixes and Enhancements

 Add Channel with Custom Packaging Partner: Corrected issue that didn't allow users to add channels with Custom selected for Packaging Partner.

OOYALA LIVE V3.2.0 (2017-08-15)

New Feature

• Auto-start Ad-hoc Channels With Scheduled Events: Ooyala Live now tries to start ad-hoc channels in a **Stopped** state 30 minutes prior to a scheduled event. This applies only to ad-hoc channels in the stopped state. Events must be scheduled at least 40 minutes prior to the event start time.

Note: If Ooyala is unable to start the channel, a notification is sent to you and the Ooyala Technical Support team.

OOYALA LIVE V3.1.0 (2017-08-04)

New Feature

 High Availability (HA) Channels: You can now create High Availability channels, and events on those channels, from the Ooyala Live User Interface. An HA channel provides reliability and failover protection. You can hot swap running channels into your existing HA channel to manage all your critical content needs.

Important: The following features are not available in the initial release of HA Channels.

- DRM Channels are not supported as sub-channels. This means you can't use a DRM channel as a sub-channel for HA channels.
- · Archiving is not supported. Currently Live Events cannot be archived to Ooyala Backlot.

Fixes and Enhancements

- On Premises Encoder Improvements: On-premise conductors that control the ground encoders now work with SDI.
- HTTPS Stream Conflicts and Mixed Content: HTTPS streams can now be selected unrestricted from underlying mixed content issues.
- Azure Maximum Limit: Fixed issue with the Azure Maximum Limit not being returned correctly.
- URL Reuse on Elemental: Fixed conflict with reusing endpoints associated with older (cached) content.

OOYALA LIVE V3.0.0 (2017-06-29)

- An issue that inadvertently allowed events to be created in the past was identified and corrected. Now it is not possible to create an event in the past.
- Ooyala Live added back-end infrastructure supporting high availability (HA) channels.
- **DVR Duration Override** is no longer supported for Events.



OOYALA LIVE V2.9.0 (2017-06-12)

- Ooyala Live support for on premises Ooyala Ground Encoder and Ground Repackaging are available in Ooyala Live release v2.9.0. There were also other internal enhancements and bug fixes in this release.
- Improved accuracy of clipping and trimming.

OOYALA LIVE V2.8.2 (2017-05-25)

Ooyala Live now supports live video syndication to YouTube.

LIVE VIDEO SYNDICATION TO YOUTUBE

With just the **Stream Key** and **RTMP URL** you can quickly and easily start streaming broadcast quality live video to YouTube.

Important: You must be a YouTube partner to be able to stream live video to your YouTube account. Here is a link to the *YouTube Partner Program Overview*.

OOYALA LIVE V2.8.1 (2017-05-10)

- · Live UI enhancements for social media syndication.
- Added support for Delta S3 Event to overcome NAS stability issues.

OOYALA LIVE V2.8.0 (2017-03-29)

Ooyala Live now supports live syndication to Facebook, Twitter's Periscope app, and the Twitch app.

LIVE VIDEO SYNDICATION TO SOCIAL MEDIA

Facebook

Ooyala Live has simplified streaming live video on Facebook. Without stopping the channel, users can update the title and description, log in to different Facebook accounts, and change the Facebook page being used for syndication.

Important: Be sure to log out of all Facebook accounts on the browser you are using for Ooyala Live before starting syndication. You can get stuck in an authentication error loop.

For details on how to stream live video from Ooyala Live to Facebook, see *Syndicate Live Video to Facebook* on page 39.

Periscope/Twitter

Ooyala Live now supports syndication of live video to Twitter's Priscope App. For details on how to stream live video from Ooyala Live to Periscope, see, *Syndicate Live Video to Periscope* on page 44.

Twitch

Ooyala Live now supports syndication to the Twitch live streaming video platform. For details on how to stream live video from Ooyala Live to Periscope, see *Syndicate Live Video to Twitch* on page 45.

Known Issues

Running Multiple Facebook Accounts and Syndication

When accessing multiple Facebook accounts from the same browser used for Ooyala Live, you can get an error condition that won't allow you to start syndicating to Facebook.

• Error Condition:



- Facebook syndication has been configured on a channel for a specific Facebook account.
- Syndication to Facebook is stopped.
- You log in to a different Facebook account on the same bower that Ooyala Live is running.
- You try to start syndication to Facebook.
- · A flashing error message is displayed.

Corrective Action:

- Log out of any Facebook session on the browser that is running Ooyala Live.
- · Refresh your browser.
- Start Facebook syndication.

OOYALA LIVE V2.7.0 (2017-02-09)

New Features and Enhancements

In addition to many infrastructural improvements to performance and stability, this release provides the following added feature:

• Easy Encoding Location Migration Previously, in order to change the encoder region of a channel, you had to create a new channel. With this release, you can contact your Ooyala technical support and quickly change the encoder region of a channel to another one of the same type. This means that if you are having connection issues to the encoder region, Ooyala technical support can simply stop the channel and move it to a different encoder region. If you have lost access to a Tokyo encoder region, you can quickly change the channel to use a Seoul encoder region instead. Contact your Ooyala account manager help setting up this new capability.

OOYALA LIVE V2.6.0 (2017-01-12)

New Features and Enhancements

Segment snapping when trimming Live to VOD

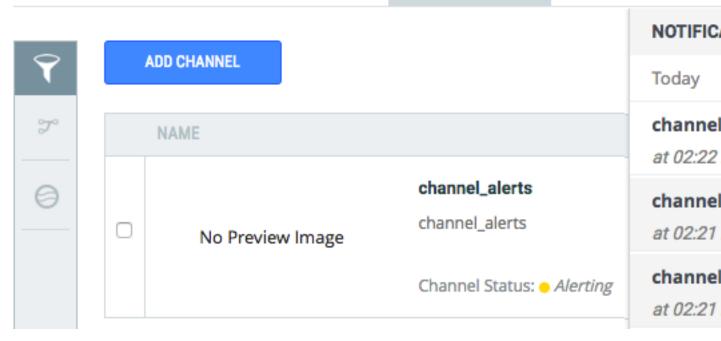
For customers editing live streaming content for VOD, previously, when a Live to VOD video was trimmed, the UI let them set trim values to the second. This gave the impression that the VOD platform would accept trim values to that accuracy, which it does not. Now, trimming snaps to the segment boundaries of the associated Live channel's encoding profile. This new feature is automatically applied when you trim video content.

To modify a channel's encoding profile (often 6 or 10 seconds), contact Ooyala Support.

Notifications Improvement

For monitoring their channels for alerts on channels with Ooyala Encode and Ooyala Package, Ooyala Live has a new channel status called 'alerting'. This status is activated when there are any alert conditions. This new feature is automatically applied. You do not need to modify a channel's profile.





Alerts are captured from Encoder and Packager and displayed in the notifications area. When the alert is resolved (automatically or by human intervention) the channel returns to 'running' state.

Typical alert conditions could include:

- · Problems with Encoder input or output
- Problems with Packager input or output

This feature facilitates improved debugging. Further debugging information has also been added to email notifications. In case of an issue, provide the debugging information in the email to Ooyala Support.

Known Issues

- When filtering events by On-Air state or Off-Air state, the results returned might not be accurate.
- On the Events page, when you select a different date range, pagination for the events does not work.
- For a trimmed asset, the event start and stopped times do not match the event duration while the event is in Stopping, Off-Air state. Duration will be correct when the event reaches Stopped, Off-Air state.

OOYALA LIVE RELEASE - VERSION 2.5.1

New Features and Enhancements

 A hot fix has been added to ensures that slates are available on new deployments after a customer initiates a credential swap.

OOYALA LIVE RELEASE - VERSION 2.5.0

New Features and Enhancements

- The UI has been modified to improve the user experience for setting the start and endpoints for clipping.
- When there are more than 20 search results for videos and you scroll to the bottom of the current results, the window displays additional results. The preview image of the first video in the list becomes the preview image for the playlist. The videos appear on the **Playlist Details** page.



Prefetching ads is now enabled for all users

As with any platform, Ooyala Pulse maintains a specific capacity at any given time. Once the max limit of ad requests per second is reached, ads might not be returned during ad breaks to viewers.

Prefetching makes those requests in advance helping to prevent your ads from bottle-necking during high-capacity periods. Ooyala Live holds those requests for a rolling 20 minutes, and then schedules a new pre-fetch.

Important:

There is no extra charge for prefetching.

Prefetching is only available in Personalized Ad mode. A channel that does not use personalized ads cannot be changed to a personalized ad channel.

For channels using Personalized ads that you have already created, you need to turn prefetching ON to use prefetching.

To turn on prefetching:

- 1. Change the state of the channel to "Stopped".
- 2. In the channel details, select Personalized Ads.
- 3. Change the value for Ad Prefetch Mode to Auto or On.

The following are the options available for Prefetching:

- AUTO (recommended)- Ooyala Live begins prefetching for your channel only manages the number of prefetch requests to prevent them from exceeding the ad providers' request limits. This is important if you have a large number of consumers on your steaming channel.
- ON Your channel will always prefetch every 20 minutes whether or not is a high capacity period.
- OFF Ooyala never performs prefetching. During high capacity periods, your consumers might not see your ads.
- The ooyala.log is no longer employed. It is replaced with the Ooyala Ingestion Log REST API (https:// api.ooyala.com/v2/ingestion) that lets users search for log information based on various criteria. Currently, this API gives users the ability to filter ingestion log information by time period (basic and manifest-based users) or status (manifest-based user only). In the future, the API can be expanded to allow additional filtering options.

OOYALA LIVE RELEASE - VERSION 2.4.1

New Features and Enhancements

 A hot fix has been added to support legacy URLs if assets were created before Ooyala V4 Player integration.

OOYALA LIVE RELEASE - VERSION 2.4.0

New Features and Enhancements

- Real-time live clipping has been added to Ooyala Live. Clipping allows the customer to create frameaccurate clips. See Add Clips from a Live Stream on page 36 for more information.
- Under the Playlist tab, the Add videos to playlist search feature can now return more than 100 results. Scrolling to the bottom of the search results loads the next set of results.
- Under Channel Details, the Clipping tab provides a slider to set the beginning and end of a clip. It also displays a list of the past three days of clips, including the clip's current status.

OOYALA LIVE RELEASE - VERSION 2.3.0

New Features and Enhancements



 You can now stream prerecorded videos from Ooyala Backlot. To do this, you create a playlist of videos in Ooyala Live, add videos to the playlist, associate the playlist with a channel, and run the channel. For more information, see Stream Prerecorded Videos.

OOYALA LIVE RELEASE - VERSION 2.2.0

New Features and Enhancements

- Third party ads are now supported with server-side ad insertion.
- · Channel Ad slate edit capability is now supported.

Known Issues

- AES event archiving is not currently supported.
- Discretix does not work with Elemental Delta 1.7.2.

OOYALA LIVE RELEASE - VERSION 2.1.0

New Features and Enhancements

- Ooyala Live uses a new logo. See <u>Delivering Live Content</u> on page 7 for more information.
- The Event Details page displays a new DVR Window field. This field displays the value of the DVR
 Duration Override field located on the Advanced tab of the Add Event dialog.
- When Facebook Syndication is enabled, the Stream Duration (Minutes) defaults to 240 minutes; the
 maximum allowed by Facebook. Previously, it defaulted to 90 minutes. For channels that were created
 during previous releases, the Stream Duration (Minutes) still defaults to 90 minutes. However, you
 can change this value to 240 minutes.
- Ooyala Player V4 can display Adobe HTTP Dynamic Streaming (HDS) and Dynamic Adaptive Streaming over HTTP (DASH) on the **Channel** > **Monitor** page.
- Support has been added for Microsoft PlayReady (PR) content protection with Dynamic Adaptive Streaming over HTTP (DASH) and Common Encryption (CENC), with playback support in Ooyala Player V4.
- The **Slates** manager supports .mov files. For example, when you use **Add Slate** to upload a file, you can upload a .mov file.
- When you use the **Add Event** dialog, the **Enable Archive** field is enabled by default. Previously, **Enable Archive** was not enabled by default.
- Email notifications for channels, events, schedules, and errors are now supported. To enable email
 notifications, hover over your login name in the upper right corner of the Live window and select
 Notification Settings from the menu that appears. Then, in the Notifications Settings page that
 opens, add comma-separated email addresses and select the notifications you want sent. Finally, at
 the bottom of the page, click Update Notifications. The notifications feature will begin working within
 approximately 15 minutes.

Resolved Issues

- To help fix an issue with public profiles being deleted, profiles can be reassigned while a channel is stopped. While a channel's Status is Stopped, on the Encoding page you can use Encoder Input Profile and Encoder Output Profile to select a different profile. Similarly, on the Packaging page, you can use Packager Input Filter Template and Packager Output Filter Template to select a different template.
- Previously, the channel displayed duplicate listings for each output that had DRM enabled. For newly
 created channels, on the channel's **Packaging** page, the **Output Format** fields displays each output
 format once. Similarly, the **Create New Channel** dialog, on the **Packaging Setup** page, the dialog
 displays each output once. Channels that were created during previous releases may still display
 duplicate listings.



2016-07-01 RELEASE

New Features and Enhancements

- UI enhancements have been added for Channels, Events, and Schedules.
- The user is now prompted to select an ad slate during ad channel creation.
- RTP ingest is now supported for Ooyala Packaged Channels.
- Event creation is now validated.
- HLS with FairPlay DRM is now supported for Ooyala Packaged Channels.
- DASH CENC with PlayReady is now supported for Ooyala Packaged Channels.
- The user can now create and start events directly from the **Events** page.
- Ad hoc channels will automatically stop if there are no upcoming events in the next 30 minutes.
- The following Azure support has been added:
 - Live channel and event management.
 - DRM/Encryption:
 - Smooth stream + PlayReady
 - DASH CENC + PlayReady
 - DASH CENC + Widevine Modular
 - HLS + FairPlay
 - eHLS
 - DVR
 - Live to VOD
- The archive limit for events has been increased to 8 hours.
- Live to VOD support without ads has been added for Ooyala packaged channels.
- Server Side Ad Insertion (SSAI) support has been added for Player V4 via the Player V4 SSAI Pulse plugin. To access the plugin, see Ooyala-hosted Player V4 Resources. For more information about SSAI, see Ooyala Pulse Live Stream Integration (SSAI) on page 48.

Resolved Issues

- There were issues with enabling Facebook Syndication. Those issues have been resolved.
- There were issues with encrypted HLS streams. Those issues have been resolved.
- There were issues with the Akamai package channel creation page. Those issues have been resolved.

Known Issues

- There is a known issue with Azure encrypted HLS streams. They may buffer excessively, causing streams not to play back smoothly.
- VOD asset trimming on events created on Azure Live Channels is not working properly in either Auto START/STOP and Manual START/STOP.
- MP4 File duration generated by Elemental Delta after the event ends is not accurate in comparison to the event duration that was originally selected.
- Closed caption extraction and uploading to Backlot when performing Live to VOD with Ooyala Package channels is not currently supported.

2016-05-31 RELEASE

Ooyala Live Release - Version 1.4.0

New Features and Enhancements

This release includes a new Ooyala-Facebook live integration (ooyala.com/facebooklive) that enables Ooyala Live customers to publish instantly to a Facebook page using Facebook's Live Graph API. Ooyala



offers integration with Facebook Live as a free add on. Check with your Ooyala representative to determine if your current Ooyala Live setup supports Facebook syndication.

See Ooyala-Facebook Live Stream Integration for details.

2016-05-13 RELEASE

Ooyala Live Release - Version 1.3.0

New Features and Enhancements

- The time-to-keep duration has been extended to 72 hrs for Elemental Delta.
- The Stream Picker has been renamed as the Input Selector, is only displayed as needed, and only displays input tables that are needed.

Resolved Issues

 There was an issue in which trimming duration did not display properly in production. This issue has been resolved.

2016-04-15 RELEASE

Ooyala Live Release - Versoin 1.2.1

Resolved Issues

There was an issue where a non-admin user was unable to create a channel with Ad insertion. This
issue has been resolved.

2016-04-04 RELEASE

Ooyala Live Release - Version 1.2.0

New Features and Enhancements

- Support has been added for HLS with Discretix PlayReady DRM.
- The Live UI has been enhanced to display both input streams and output streams.

Resolved Issues

- There was an issue in which for **elemental-delta**, the scheduled event transcoding time was incorrectly computed as the time required to transcode the MP4 asset. This computation has been corrected and is now computed as the length of the MP4 asset created by **elemental-delta** (the duration of the scheduled event).
- There was an issue that occurred during Packaging Setup when creating Akamai and elementaldelta packaging channels. In such cases the DVR Settings did not properly display all possible options. This issue has been resolved.
- There was an issue that occurred **Packaging Setup** in which the **Channel Type** did not properly display all possible options. This issue has been resolved.
- There was an issue in which alerts from the encoder were not displayed. This issue has been resolved.

Known Issues

- DVR does not work for HDS event streams.
- Event lengths have a 4-hour maximum if Live to VOD enabled, and are limited to 8 hrs when Live to VOD is disabled.

2016-03-24 RELEASE

Ooyala Live Release - Version 1.1.1



The following new features and enhancements have been implemented in this release of Ooyala Live:

- For channels, support had been added for characters from additional language alphabets.
- The user interface for the test channel page has been enhanced.
- There was an issue in which channel creation was blocked. This issue has been resolved.
- There was an issue in which ingest URLs for channels created before version 1.0.4 were not displayed. This issue has been resolved.

2016-03-17 RELEASE

New Features and Enhancements

- The *Ooyala Live REST API Reference* is now available. This will allow external services to perform create, read update, delete (CRUD) actions for events, channels and schedules.
- Support has been added for eHLS with a key rotation option.
- Support has been added for multiple network inputs for a single channel, providing input redundancy.
- Channel stream versioning is now available, allowing you to use multiple encoders at different times but for the same channel.
- Every time a channel is started it fetches the profile data. This allows you to update the profile for a channel without creating a new one. This applies to all channels created with Ooyala Live v.1.1.0 and later.

Ooyala Live Resolved Issues

- There have been adjustments to the user interface for greater consistency and improved look and feel.
- The 2GB file size limitation has been changed to 9 EB.
- There was an issue in which DVR duration for events set by users was not propagating correctly. This
 issue has been resolved.

Known Issues

- DVR does not work for HDS event streams.
- Event lengths have a 4-hour maximum if Live to VOD enabled, and are limited to 8 hrs when Live to VOD is disabled.

