Kaltura Management Console - Live Dashboard Overview

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The Kaltura Live Dashboard is a central location for all related live actions and information.The primary purpose of the dashboard is to support customers with a live workflow who want to actively monitor the health of their system. Users can quickly identify if there are components that are underperforming in the live streaming process and what the root cause may be. The dashboard helps give assurance to customers that want validation that the live broadcasting system is functioning at a satisfactory level.

The Kaltura Live Dashboard is accessed from the Kaltura Management Console (KMC) and is used for operating and monitoring live broadcasting with Kaltura.

https://kaltura.atlassian.net/wiki/spaces/PROD/pages/217292848/Live+Dashboard

Before the Live Event

1. Setup the Live broadcast: create a live entry
2. Connect your encoder: setup the encoder to provide a way to start streaming and previewing your stream - helps the broadcaster to ensure that their setup is properly working prior to going live.

During the Live Event

- The live stream is monitored from a QoS and engagement perspectives in real-time
- You can pause/resume/end the live event

After the Live Event

- Get information on the QoS and engagement for the entire event.

Prerequisites

The Kaltura Live Dashboard design assumes that explicit start/stop of live events is supported. Regardless if the encoder keeps broadcasting, there is a way to start/stop the live stream using Kaltura.

Terminology

- Encoder Status
  - Offline - The encoder is not sending a live feed to Kaltura.
  - Online - The encoder is sending a live feed to Kaltura
- Event Status
  - Off air - Viewers are not receiving live content. This status typically happens when live events have not started or have already finished.
  - Live - Viewers are receiving live content. This status his typically happens during a live event.

High Level Workflow

The Kaltura Live Dashboard:

- may be used for both regular live streaming (by the KMC admin) and Kaltura Webcasting events (by the Webcasting producer).
- is applicable only for "Kaltura Live" stream types and not for external streams or Akamai Universal streaming.
- is a standalone window accessible from the KMC
- includes monitoring of and focus on 3 phases of the live event (before/during/after).

Scenario 1 – Creating a Live Broadcast

≣ To create a live broadcast and open the Kaltura Live Dashboard

1. Login to KMC.
2. Upload a live stream entry.
3. Define the live stream type: Provide a Title, Description and additional settings (Transcoding Profile, Recording, DVR, etc.)
4. After clicking on "Create Live Stream", if the stream type is Kaltura Live, a pop-up window is displayed prompting the user to choose if they want to launch the Live Dashboard.
5. If the user selects "Yes", the dashboard appears (as a floating window) and displays the first steps of the live broadcast.

Scenario 2 – Setup and Preview

The producer wants to setup their encoder and preview the live stream, prior to going live. There are 5 main elements in this scenario.
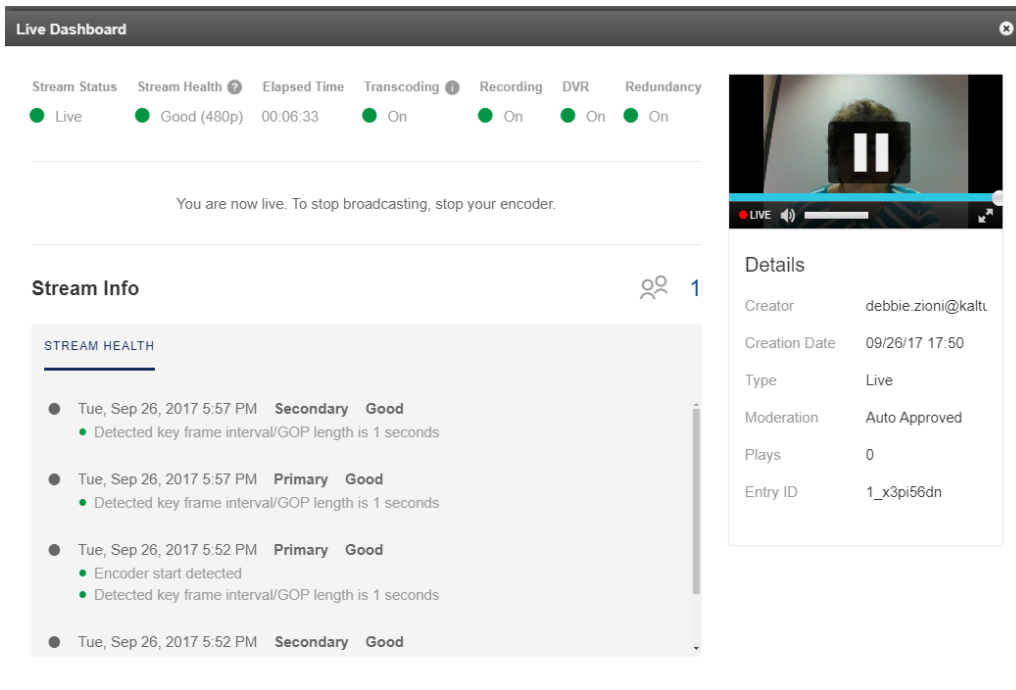
1. Live entry configuration - includes 2 tabs
   a. Basic tab - shows the entry name and description (and allows the user to edit those details)
   b. Settings tab - shows the cloud transcoding profile, DVR and recording options (and allows the user to edit those options)
2. Preview player
   a. When the encoder is offline - shows the encoder settings

- Primary and secondary RTMP URLs
- Stream name
- Export to FMLE button
- When the encoder is online - shows a preview player of the live feed
- Stream health box
  - shows the stream health as received by Kaltura servers
  - when the encoder is offline - displays "offline"
  - when the encoder is online - shows Good/Fair/Poor and a tooltip with the received resolution (e.g. 720p)
- Message box - Displays activity and informative message when applicable (for example: we are not receiving enough video, please check your bandwidth/encoder)
- Preview and Embed - link that opens the "Preview and Embed" screen for the selected entry
- Action buttons
  Go Live button
- Starts the actual live broadcast (for example, viewers start to see the content) and starts the recording (if enabled)
- Clickable only if the stream health is good/fair (The Go Live button is grayed out if the status is offline or the system health is poor.)
- clicking this button will take the user to the 2nd step of the dashboard - Live stream monitoring (see scenario #3)
- Close button - closes the dashboard (for cases when where the live streamer want to prepare the live setup, but

not go live yet)

Scenario 3 – We are live, what's going on?

The Kaltura LIve Dashboard focuses on visualizing QoS and user engagement. All of the information presented is real-time

There are 5 main elements displayed to the producer:

1. Entry info box - The Details pane includes basic and settings about the entry:
   a.
      a. Static entry info
         a. entry ID
         b. entry name and description
         c. Cloud Transcoding - on/off (with tooltip showing the actual transcoding profile name)
         d. Recording - on/off
         e. DVR - on/off
         f. Redundancy - on/off (with tooltip showing seamless failover if enabled)
2. Stream health
   - Good/Fair/Poor with a tool tip displayed with the received resolution (e.g. 720p)
   - messages box

- Event progress
   1. Elapsed time - showing the increment time the live broadcast has been running
   2. End live button - clicking this button will end the current live broadcast
      - An "are you sure" confirmation message appears before ending the broadcast
- Stream preview - shows a player playing the live feed, as the end user would see it.
- Stream info box
   1. Analytics tab

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   a. number of current viewers
   b. average bitrate served to end users
   c. graph of i and ii over time
2. Stream health tab
   - chronological messages describing changes to the stream health during the live broadcast
- Advanced/stats for nerds view
  - allows to get a lot of technical information that can be copied and pasted for support/debugging purposes

Scenario 4 - Ending a Live Broadcast

▤ To end the live broadcast

1. Click on the "End Live" button.
   The following pop up warning message is displayed. "Are you sure you want to end the live broadcast?This action can not be undone".
2. If confirmed, the live entry will be unpublished (end users will see a message that the live broadcast has ended) and the producer is directed to the preview page (scenario #2).