

# Real-time Analytics

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## Overview of Real-time Analytics

Real-time Analytics is a management tool that provides powerful information about live streams in a user-friendly KMC interface – informing real-time decision-making through interactive dashboards that visualize trends and track quality metrics for both current and past live events.

Real-time Analytics enables you to track and display analytical information for bandwidth usage, video content usage and to produce user and community reports for the last 7 days. You can extract and analyze data from the publisher level to information for a specific user as well as from account's content level to any specific entry.

- Includes **Status-at-a-Glance**: See and share Kaltura Live session utilization and status
- Assists in **Resource Planning**: Monitor utilization and plan for the future (increase video engagement and quality of service metrics)
- Simplifies **Troubleshooting**: Quickly identify problems / root causes related to live streaming errors
- Real-time and historical information about Kaltura live events activities and quality metrics, including interactive dashboards to visualize trends such as:
  - Real-time information on live events that are taking place right now
  - Detailed information about live events after they've taken place
  - Kaltura Real-time Analytics inquire those events by presenting audience behavior and live playback characteristics such as the stream bitrate, buffer time or audience geo-locations and others.

As a reference for analytics terms and definitions, please see the [Advanced Analytics Terminology](#) article.

## What type of data is collected, analyzed and presented in aggregated form?

The Kaltura Player collects real-time player data about the audience experience for any given viewer watching a “Kaltura Live Streaming”

- Active users - number of unique users viewing the live stream playback (including DVR playback, if available)

- Buffering users - number of users that are experiencing buffering issues
- Latency time - the difference between the live stream playback time and the viewers time in the player playback
- Bitrate played - quality of live stream sent from the viewer's device
- Geo-IP data - viewer's city location
- Upstream Details - information of the streamed video to the Kaltura platform

The information is captured and analyzed every **10 seconds** throughout the duration of a Kaltura Live Streaming event. Data is aggregated and summarized to include measurements of partner's current live or past live events in the last 7 days.


The [Real-time Analytics dashboard](#) updates every **30 seconds** without the need to refresh.

## Real-time Analytics Use Cases

The following are samples of use cases for using the Real-time Analytics Dashboard for live entries:

- Live Channel (24/7) - similar to TV, an entry that broadcasts continuously.
- Single broadcast Live entry - broadcasts once and then the entry is "closed".
- Reusable live entry - an entry that is used repeatedly to broadcast different content. Each time it starts to broadcast it is essentially a different entry from a content perspective, for example, Sales-Summit 2019, where all the summit sessions are broadcasted to the same entry,

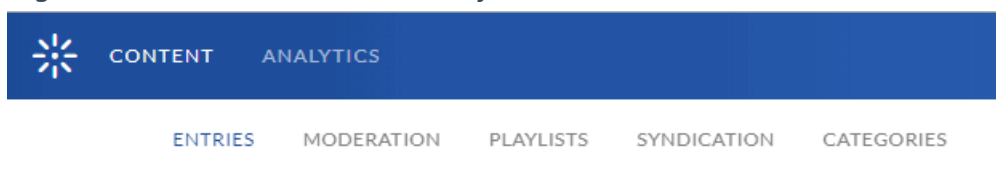
## Accessing the real-time homepage and dashboard

 The Real-time Dashboard is only available to customers that have the Real-time Analytics option enabled on their account. Contact your Kaltura representative to enable the Real-time Analytics feature for your account.

The Real-time homepage contains all the live entries that have data.

To view all the live (real-time) entries for the account:

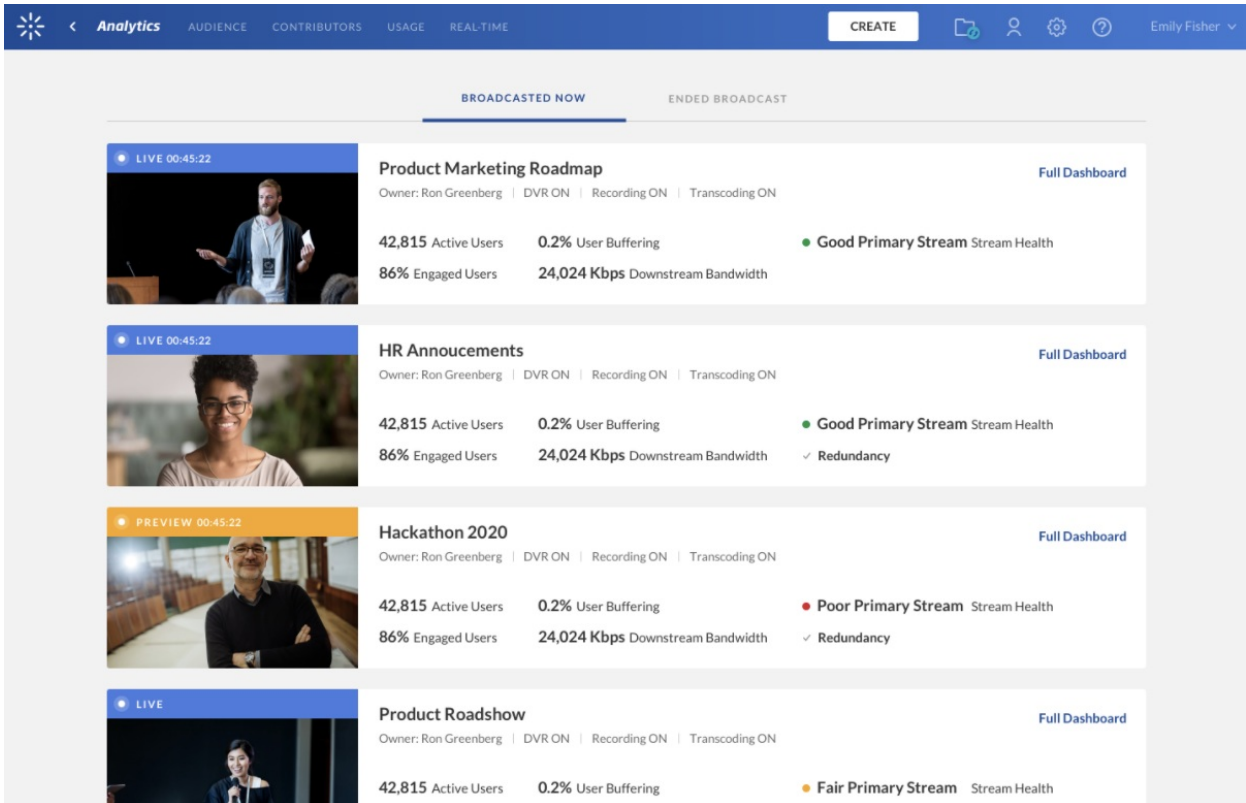
1. Log into the KMC and select Analytics.



In the Analytics homepage, select Real-time.

The Real-time homepage (Entries table) displays all of the entries for the past 7 days (an accumulation of 168 hours ) and current live entries. The page is divided into two sections: Broadcasting Now & Broadcast Ended.

Events that are currently being broadcasted will be in the Broadcasting Now section and events that have finished will be in the Broadcast Ended section.



The screenshot shows the 'BROADCASTED NOW' tab of the Kaltura Real-time Analytics dashboard. It displays a list of four broadcasted entries, each with a thumbnail, title, owner, and various performance metrics. The entries are:

Entry Type	Entry Title	Owner	Active Users	User Buffering	Engaged Users	Downstream Bandwidth	Stream Health	Redundancy
LIVE 00:45:22	Product Marketing Roadmap	Ron Greenberg	42,815	0.2%	86%	24,024 Kbps	Good Primary Stream	
LIVE 00:45:22	HR Announcements	Ron Greenberg	42,815	0.2%	86%	24,024 Kbps	Good Primary Stream	✓
PREVIEW 00:45:22	Hackathon 2020	Ron Greenberg	42,815	0.2%	86%	24,024 Kbps	Poor Primary Stream	✓
LIVE	Product Roadshow	Ron Greenberg	42,815	0.2%			Fair Primary Stream	

## Broadcasting Now

In the Broadcasting Now section you will be able to see the entry configuration & metadata: Owner, DVR, Recording & Transcoding. In addition, per entry, you can find the ingest information indicating the stream health as ingested by the Kaltura Live platform, for more information visit this [link](#).

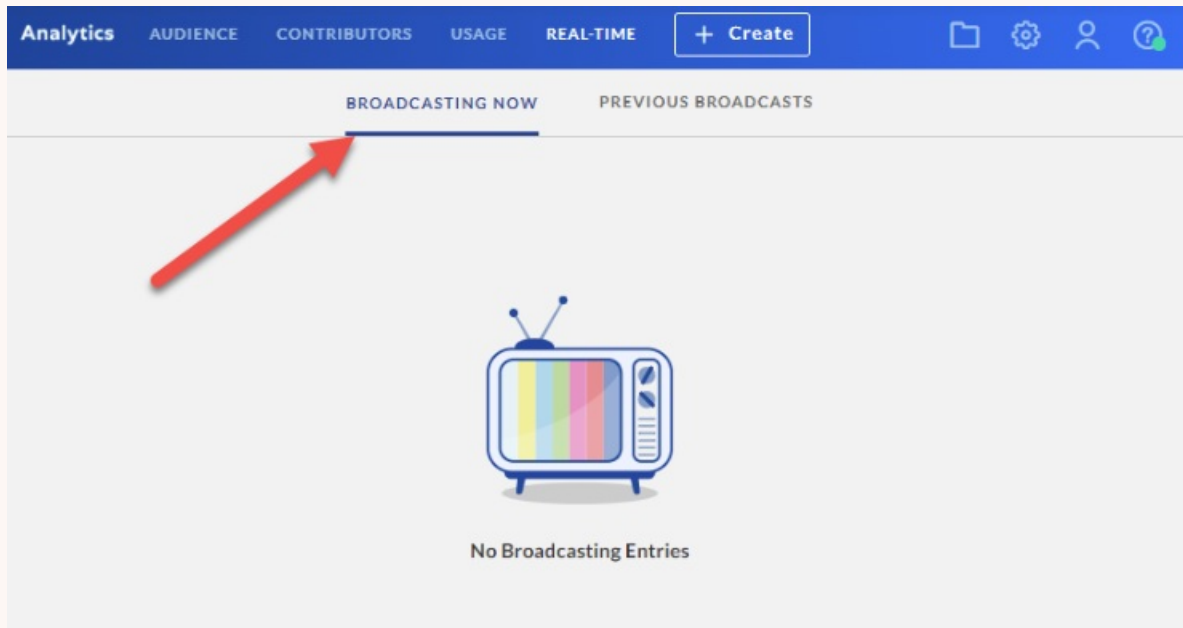
The Broadcasting Now page will show per entry a player that will play the stream being broadcasted. This will allow you to easily monitor all your streams health and content from one place. Clicking on any of the list items will navigate the page to the [Real-Time Analytics](#) for that entry.

Similar to the Broadcasted Ended tab, the same five metrics are shown in the Broadcasting Now tab:

- Peak Users - Highest number of users within a session.

- Engaged Users - Real-time percent of users from the active users that have good or high engagement (where the tab is in focus and the audio is turned on).
- Users Buffering - The percent of time the player was buffering from the total amount of time viewed.
- AVG. Downstream Bandwidth - Sum of downloaded video segments size / time to download video segments.
- Ending Time - Time when the broadcast ended.

⚠ A Webcast entry that has started will not show in Broadcasting Now if there are no Active users ie if no one is actively watching the Live entry. The table will be empty and the message “No Broadcasting Entries” will appear.



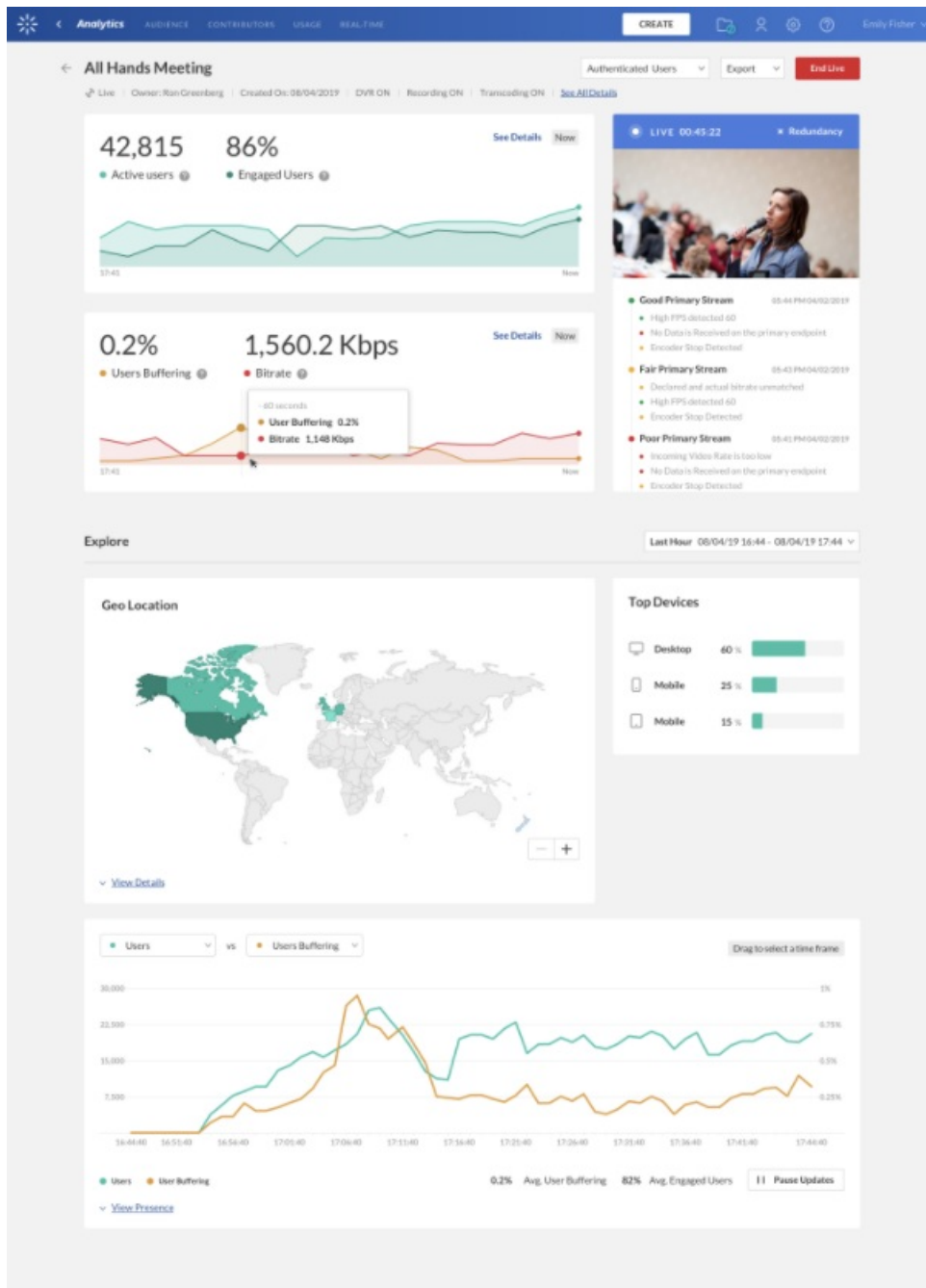
## Broadcast Ended

Five basic metrics are displayed that correlate with the metrics in the Real-time Analytics Dashboard:

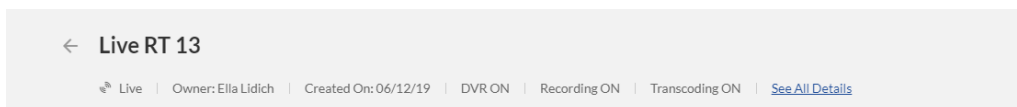
- Peak Users - Highest number of users within a session.
- Engaged Users - Real-time percent of users from the active users that have good or high engagement (where the tab is in focus and the audio is turned on).
- Users Buffering - The percent of time the player was buffering from the total amount of time viewed.
- AVG. Downstream Bandwidth - Sum of downloaded video segments size / time to download video segments.
- Ending Time - Time when the broadcast ended.

To access the Real-time Dashboard of a specific entry

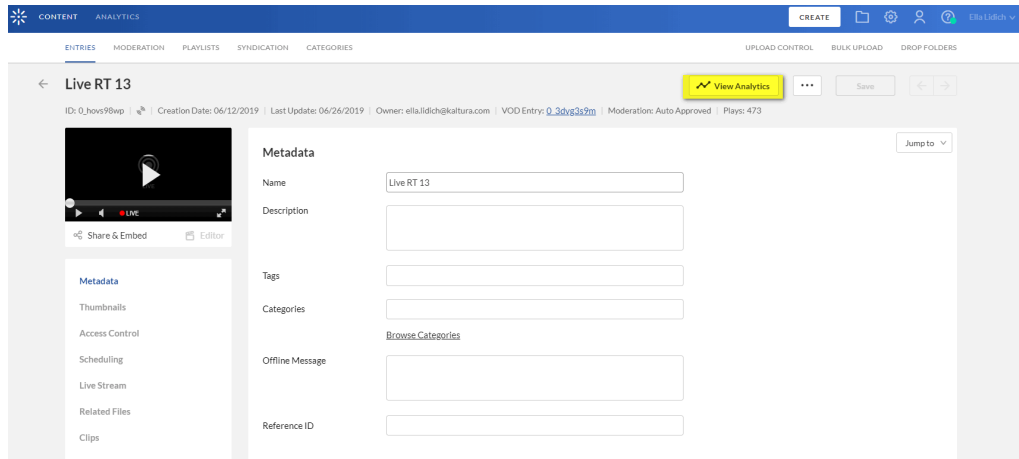
- Access the Real-time Home page.
- Click on an entry title. The Real-time Dashboard is displayed.



- To see the relevant KMC entry information
  - Click See all Details.




- To return to the Real-time Dashboard
  - Click View Analytics.

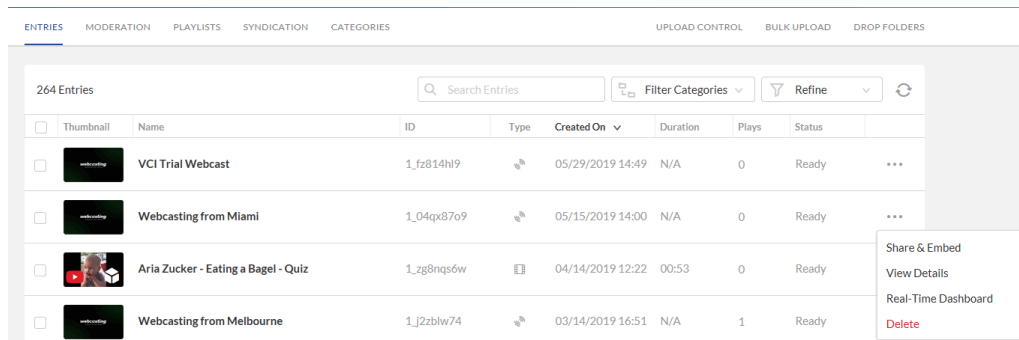


- You can also access the Real-time analytics dashboard through the KMC Entries table only if this feature has been enabled for you by your Kaltura representative.

To access the Real-time Dashboard through an entry in the KMC:

 This option is only available on accounts that have the Real-time Analytics feature enabled.

1. Login to KMC.
2. Go to the Entries table and select Real-time Dashboard from the Actions menu. This option is only available for users that have the Real-time Dashboard option enabled on their account for live entries.



- When the feature is enabled, you will only see the components of the Real-time Dashboard and no components of the legacy "Live" dashboard for all the "live" type entries. **All** live data is displayed in the KMC Entries table as opposed to the newer Real-time Home Page display that displays entries for the last 7 days only. The legacy KMC Live Entries table does not have an indication (red dot) whether the entry is currently broadcasting.

For additional information see:

- [Real-time Analytics Dashboard](#)

