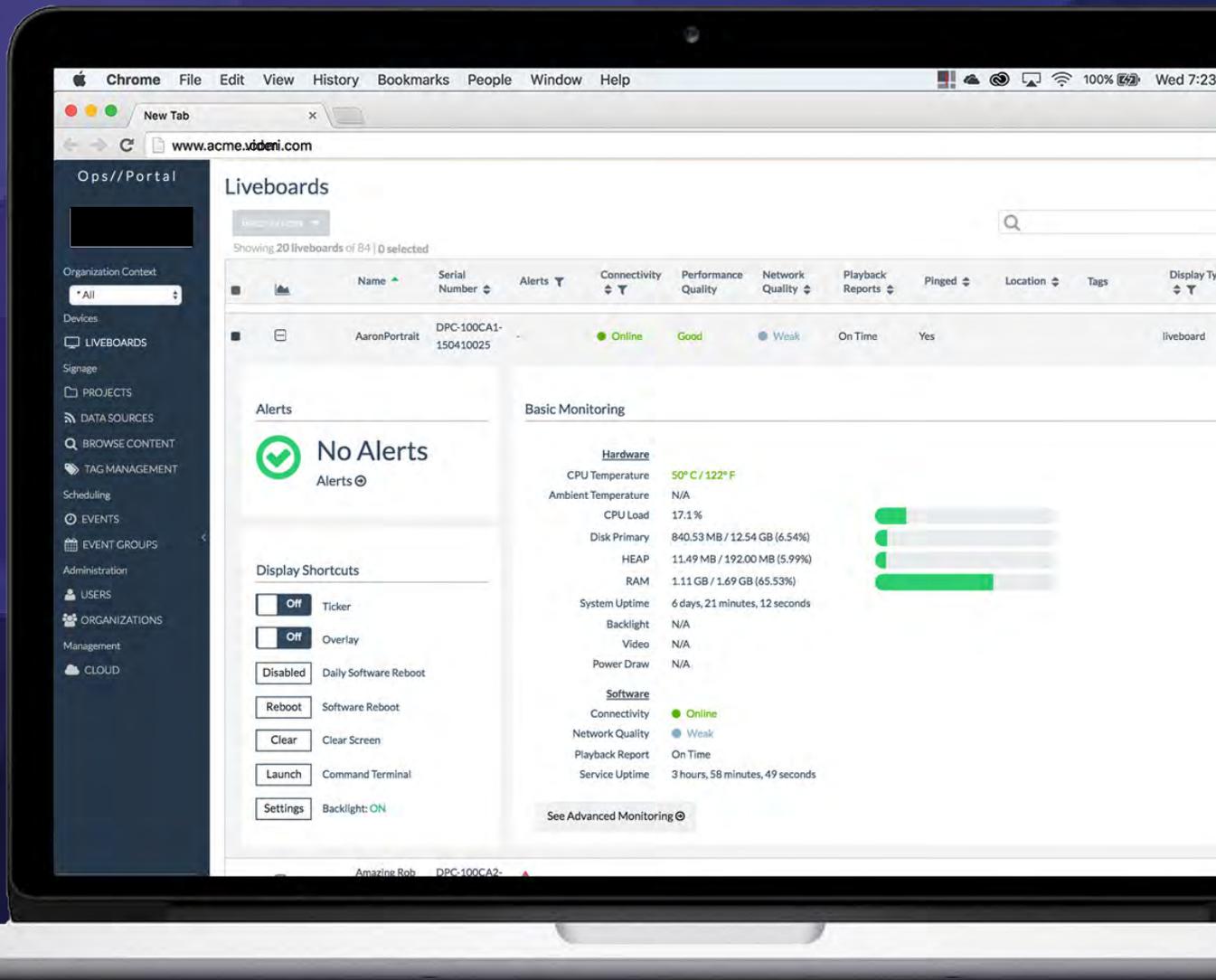
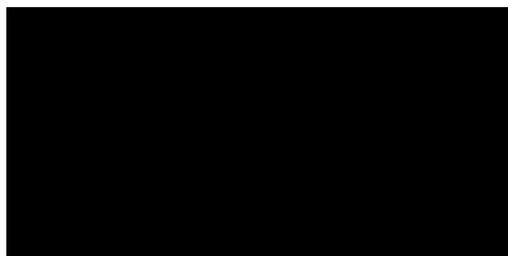


TECHNICAL OPERATIONS PORTAL USER GUIDE



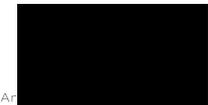
VLE Version 1.7.1

August 2017

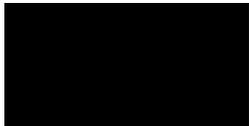


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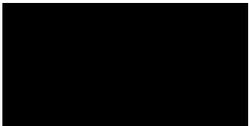
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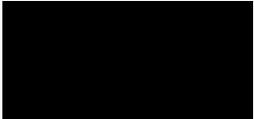
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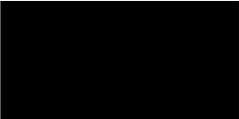
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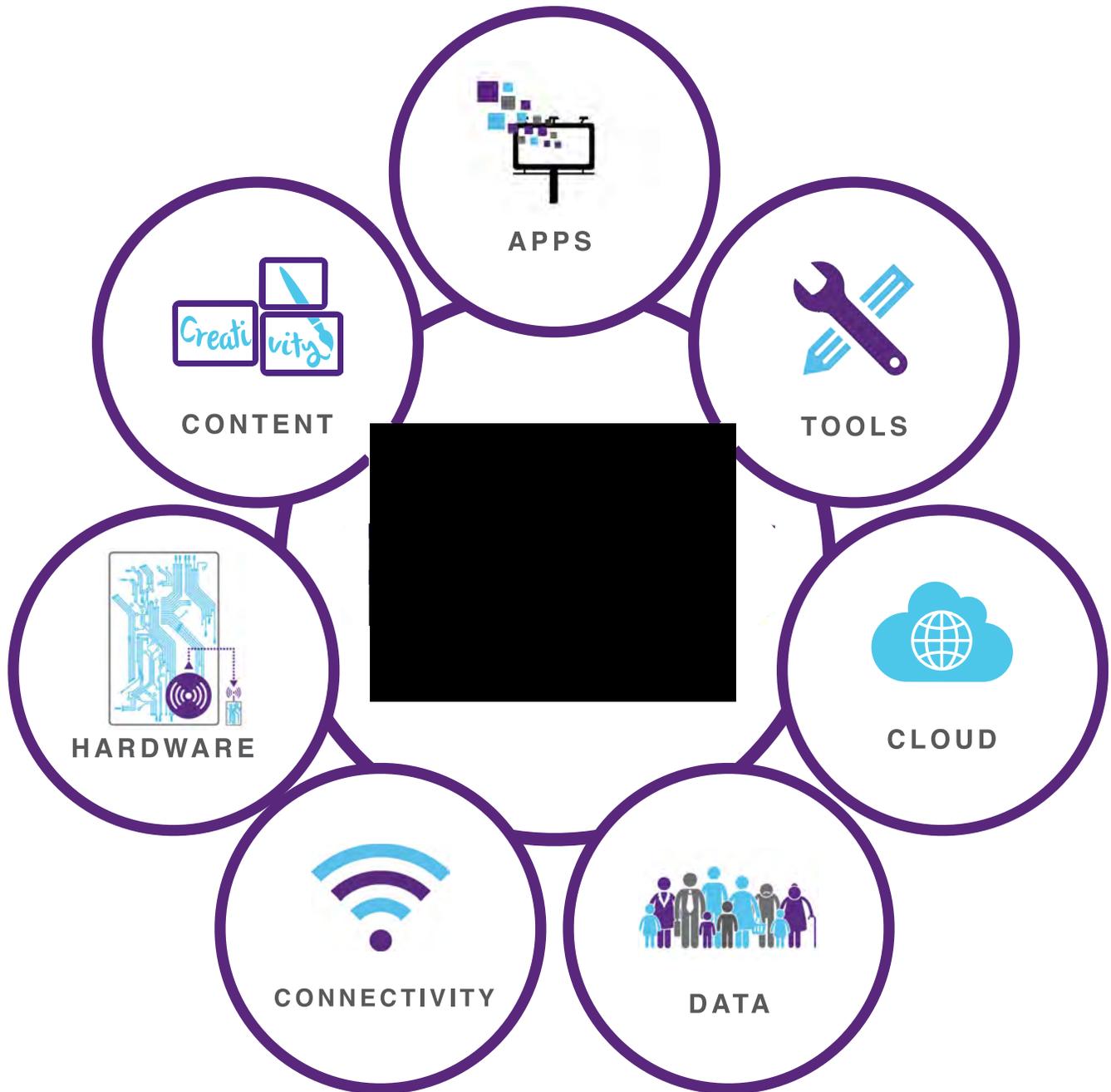
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OUR VISION WAS BORN
FROM BELIEF THAT
IMAGES HAVE THE
POWER TO MAKE US
FEEL, THINK, REFLECT,
AND CONNECT

We are on a mission to reimagine the surfaces that surround you. Our elegant, intelligent displays will bring the walls of your business environment to life with motion, connectivity and functionality. Imagine multiple displays creating dramatic, synchronized content. Imagine customer specific experiences triggered by their presence. Your walls can now display a dynamic mix of images and videos showcasing your products and messaging, curated Facebook or Instagram feeds featuring your brand and even automated infographics showing your top-selling items. All of this power is under your control, making this solution easy, engaging and impactful.



ECOSYSTEM

The [redacted] platform is comprised of seven essential elements; data, hardware, connectivity, the Cloud, a tool set, content, and apps. Each element enables the platform to effectively and efficiently deliver brand communications and advertising where appropriate to audiences in a simple, seamless and impactful manner.

OUR UNIQUE BENEFITS



HARDWARE

- The ON Liveboard is an elegant, thin, lightweight, low-power marketing and communications powerhouse that is available in a range of sizes and enclosures for varying environmental conditions
- ON Liveboards provide high-visual fidelity for the delivery of high-definition images, video and graphics which mirror the quality we're used to seeing in our homes and on tablets and smart phones
- ON Liveboards and ON.Module-equipped displays are smart devices connected to the Cloud, always listening to and aware of their environment and audience



CLOUD

- Our Cloud services reside on the robust and reliable Amazon Web Services infrastructure, simplifying device management and utilizing an SSL connection for each display to ensure security
- Combining connected Liveboards with our cloud infrastructure eliminates a complex constellation of expensive equipment and connectivity
- This approach enables you to scale your ON Liveboard network from 1 to 1 million devices
- The Cloud stores the dimensions of each ON Liveboard in the network and automatically resizes and renders content for the destination Liveboard before distribution
- All content is managed in the cloud, making global distribution as easy as local



CONTENT

- The [REDACTED] platform offers a new form of responsive content delivery for ON Liveboards in public spaces
- ON Liveboards are transformed into a creative canvas to deliver dynamic and engaging one-to-many user experiences through applications
- Content is limitless as your imagination, from static images to video and animations, to interactive applications that increase engagement with your audience



DATA

- [REDACTED] has created a data management platform (DMP) that synthesizes data from a wide array of sources and fuses them into understandable audience segments, enabling brands to more efficiently utilize available data
- Data is collected through Wi-Fi or beacon technology embedded in the ON Liveboards
- This data can be used to build an understanding of the people in your spaces, personalize messaging, and deliver targeted promotional or advertising messages



TOOLS

- Our set of content creation and management tools empower anyone to build and distribute dynamic and impactful creative content
- The Technical Operations Portal provides a single management pane for adding, removing and modifying users, organizations, and customer accounts
- The Technical Operations Portal also allows you to configure and schedule content distribution by display, location, tags or any other configuration that best fits your business needs
- The SmartStudio tool is a WYSIWYG editor that can ingest and manipulate your existing creative assets, add social and data feeds, and automatically format all content for output to your ON Liveboard network



AD.APPS

- AD.Apps are intelligent and autonomous programs which can control the messages and information on your ON Liveboards, using data from a range of sources and customizable conditions.
- AD.Apps can be simple or complex. An AD.app can be as basic as a container for a scheduled image or video, or a brand's social media feed. But things get interesting when you program rich-data connections to dynamically change content based on data triggers, like ads for sweaters when temperatures dip, or offers at restaurants based on current sports scores.
- AD.apps can even tie into third-party data sets, such as a point of sale system. Imagine a Liveboard in a retail store pushing ads depending on sales stock, or combining weather data with inventory information to feature ads for that location's best-selling summer dress when the temperature hits 80 degrees.



CONNECTIVITY

- ON Liveboards are designed and built to connect via Wi-Fi to the Internet and the Cloud
- Additionally, all ON Liveboards are can share a single Internet connection, and can connect with each other
- Speakers or other appliances can connect via Bluetooth

NEW FEATURES IN VLE 1.7.1

Basic Monitoring Metrics and Alerts Viewable in Liveboard Overview

To give level one technical support fast access to the critical information they need to monitor liveboards, the Tech Ops Portal now has a Basic Monitoring Metrics Drawer for each provisioned liveboard on the Liveboard Overview page.

When opened, the drawer shows :

- Alert status (and quicklink to the Alerts tab)
- Basic Hardware and Software metrics (player presence, CPU Temperature/Load, RAM, Heap, uptimes), and
- Display Shortcuts for various tasks (enabling EMS ticker, turning on debugging overlay, turning display off or rebooting display, launching command terminal).

Advanced Telemetry Metrics for Environment, Temperature, and More

Advanced metrics for level 2 support are now located on the Advanced Monitoring tab.

The Advanced Monitoring Tab adds specific metrics for environment (ambient and enclosure temperature, humidity, and ambient light) and power (backlight, video, overall powerdraw and consumption). The liveboard, playbacks and networks & sync metrics now have their own tabs.

You can now view history for each metric (including custom time range) and download a CSV log.

Merged & Simplified Liveboard Tabs

The following changes and simplifications have been made to Liveboard tabs:

- **Profile & Provisioning** tab and **Settings** tabs have been combined into one tab, **Profile & Settings** (Provisioning fields have been removed).
- The **Applications** and **Firmware** tabs have been combined into one tab, **About Device**.

Playlist Playback Changes (Items Per Pass)

When using **Items Per Pass** option for when directly scheduling a playlist, the playlist items will now be displayed for the dwell time of that liveboard on each pass (instead of the playlist items having to split the dwell time for each pass). Custom duration times for playlist items will now be respected (for directly scheduled playlists only; custom duration times for playlist items in an embedded playlist in a layout will still be ignored).

MANAGING AND MONITORING LIVEBOARDS

The pages found under the DEVICES header on the dashboard contain all the fields and settings necessary for configuring, managing, and troubleshooting your array of liveboards.

The liveboard is constantly reporting to the Technical Operations Portal, and metrics are updated with new data.

Advanced telemetry metrics will be available if the liveboard model has the proper sensors/capability to provide them. Consult your hardware manuals and/or the hardware team for more information.

If you see an N/A next to a metric, it could mean several things:

- the metric has not yet loaded
- if N/A persists more than a few seconds (and you see other metrics have loaded), the metric is likely not available because the liveboard doesn't have the capability to provide it
- the liveboard is offline.

Liveboard Overview Page

The Liveboard Overview page shows high level details of all liveboards managed (including active alerts and player presence metrics to quickly see liveboard health).

To view high level details of all liveboards managed:

- On the dashboard, under **Devices**, click **LIVEBOARDS**.

Name	Serial Number	Alerts	Connectivity	Performance Quality	Network Quality	Playback Reports	Pinged	Location	Tags	Display Type	Orientation
Amazing Rob Board	DPC-100CA2-152220012	1	Online	Good	Weak	On Time	Yes			liveboard	Landscape
Couch Middle (0003)	DPC-330TW1-155030003	-	Online	Good	Weak	On Time	Yes	Washington, DC	test	liveboard	Portrait
Yucef 4K	1d85e859	-	Online	Good	Weak	On Time	Yes	1751, rue Richardson, montreal	test	liveboard	Landscape
Moonshine	DPC-110CA2-160710547	-	Online	Good	Strong	On Time	Yes		pretzels	liveboard	
Couch Right (0022)	DPC-330TW1-155030022	-	Online	Good	Weak	On Time	Yes	Boston		liveboard	Portrait
AaronPortr...	DPC-100CA1-150410025	-	Online	Good	Weak	On Time	Yes			liveboard	Reverse Portrait

Player Presence Metrics

Player Presence Metrics show TechOps and LiveOps personnel critical information to quickly diagnose liveboard connectivity.

Player Presence metrics are shown in several locations:

- In columns on the liveboard Overview Page
- In the Liveboard Basic Monitoring Drawer on the Liveboard Overview page
- On the header section of the Liveboard Detail Page

Name	Serial Number	Alerts	Connectivity	Performance Quality	Network Quality	Playback Reports	Pinged	Location	Tags	Display Type	Orientation
4k final	DPC-430TW1-170210154		Offline	Poor	Weak	Unresponsive	No			liveboard	Reverse Portrait
78101X02C...	78101X02C...		Offline	Poor	Weak	Unresponsive	No			liveboard	Portrait
78101X0N6...	78101X0N6...		Offline	Poor	Weak	Unresponsive	No				

NOTE: If these metrics are not displayed on the Overview Page. Click EDIT (right side of page) to access the Column editing page and turn them on.

Liveboard Basic Monitoring Drawer

Alerts

No Alerts
Alerts

Display Shortcuts

- Ticker
- Overlay
- Daily Software Reboot
- Software Reboot
- Clear Screen
- Command Terminal
- Backlight: ON

Basic Monitoring

Hardware

- CPU Temperature: 59° C / 138.2° F
- Ambient Temperature: N/A
- CPU Load: 6.01%
- Disk Primary: 1.78 GB / 27.22 GB (6.53%)
- HEAP: 12.20 MB / 192.00 MB (6.36%)
- RAM: 313.03 MB / 1.69 GB (18.05%)
- System Uptime: 1 month, 1 week, 5 days, 3 hours, 25 minutes, 11 seconds
- Backlight: N/A
- Video: N/A
- Power Draw: N/A

Software

- Connectivity: ● Online
- Network Quality: ● Weak
- Playback Report: On Time
- Service Uptime: 3 weeks, 16 hours, 28 minutes, 33 seconds

[See Advanced Monitoring](#)

Liveboard Detail Page Header

Liveboard

Device Name: **Amazing Rob Board**
Organization: **Rob**
ID: 1
Serial Number: DPC-100CA2-152220012
XMPP Status: [{"current":{"id":"5988ff8f3d16764e1d2d1219","type":"ad"}}]

- CONNECTIVITY: ● Online
- NETWORK QUALITY: ● Strong
- PLAYBACK REPORTS: ● On Time
- PINGED: ● Yes

Schedule | Advanced Monitoring | Alerts 1 | Wifi | Downloads | Content | Command Terminal | Screenshot | Profile & Settings | About Device

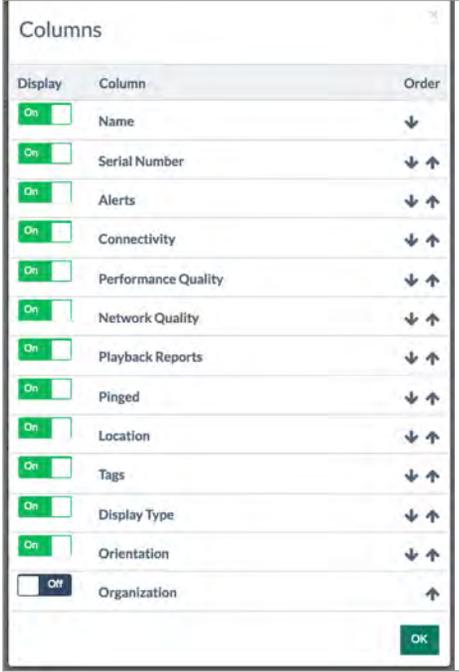


Table: Player Presence Fields

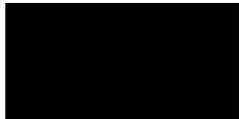
Presence Metric Type	Status	Meaning	Possible Source Causes
XMPP Connectivity Whether liveboard and server are communicating.	Online	The communication protocol between the device and server is enabled.	N/A
	Offline	The communication protocol between the device and server is disabled.	<ul style="list-style-type: none"> – Power outage – Disconnected board – Agent server is not responsive – Internet is down – Various XMPP Connectivity issues
Playback Reports Measured by frequency of reports being received by start time of asset playback.	On Time	The reports are being received within 0-15 minutes.	N/A
	Delayed	The reports are being received at an average wait time of 16-60 minutes.	<ul style="list-style-type: none"> – Degraded network link quality – Unusual network latency – Asset w/duration time longer than 16 minutes – The player may have become unresponsive – The player might be disconnected
	Unresponsive	No reports have been received in the last 60 minutes.	<ul style="list-style-type: none"> – The player may have become unresponsive – Network conditions may have deteriorated – The player might be disconnected – Asset w/duration time longer than 60 minutes
	No Schedule	All Schedules are cleared from the physical canvas board	N/A
Network Quality Measurement for the strength of Wi-Fi signal and ping time.	Strong	Your Wi-Fi is strong and the communication between your player and server is good.	N/A
	Average	Your Wi-Fi is weak and the communication between your player and server is good. OR Your Wi-Fi is good, but the communication between your player and server is weak.	<ul style="list-style-type: none"> – Wi-Fi coverage is diminished with some packet loss occurring – Location of liveboard is below ground (subway system for instance), causing signal strength to be weaker – Traffic shaping by Internet Provider. May require liveboard to be white listed on server – Wi-Fi antenna damage. If issue persists and no geographical issues are present. – Slow internet connection due to substandard router.
	Weak	The communication between your player and server is weak. Your Wi-Fi connection is weak too.	<ul style="list-style-type: none"> – Your device might be interfered by electromagnetic disturbances such as thick metal, concrete, etc. – Slow internet connection due to substandard router – Wi-Fi antenna damage
Pinged Message sent to the server to check if the player is alive.	Yes	Your device is responsive	N/A
	No	Your device has been unresponsive for more than 2 minutes.	<ul style="list-style-type: none"> – Player APKs are not up-to-date – The player has crashed
PERFORMANCE QUALITY	Good	An aggregate result of XMPP Connectivity, Playback Reports, Network Quality and Pinged.	
	Average		
	Poor		



Table: Other Liveboard Information Fields

Title	Information
Name	Liveboard name (from Profile & Settings Tab)
Serial Number	Unique DPC ID of liveboard
Alerts	Active liveboard alerts
Location	Device location (only shown if address is entered in Profile)
Tags	Tags assigned in Profile, can search by tags
Display Type	Filter by display types (only shown if Display Type is entered in Profile) <ul style="list-style-type: none"> – All – Liveboard – LiveboardX – Vision
Orientation	Liveboard orientation
Organization	Organization liveboard is assigned to
<p>Edit</p> <p><input type="button" value="EDIT"/></p>	<p>Custom settings for which fields will appear on this page and their order.</p> 

Task	Directions
Filtering by Column	<p>The Alerts, Display Type, Orientation and XMPP Connectivity columns are filterable.</p> <ul style="list-style-type: none"> – Click the column header and select the option to filter by. – To remove the filter, click the column header and select All. An easier way to remove the filters here which is to click the “Clear Filter X” button.
Filtering using Search	<p>You can search using information from the Name, and Tags fields.</p> <ul style="list-style-type: none"> – Start typing in the magnifying glass field at the top left of the page. The list will filter as you type. – To remove the filter, delete the text in the Search field.



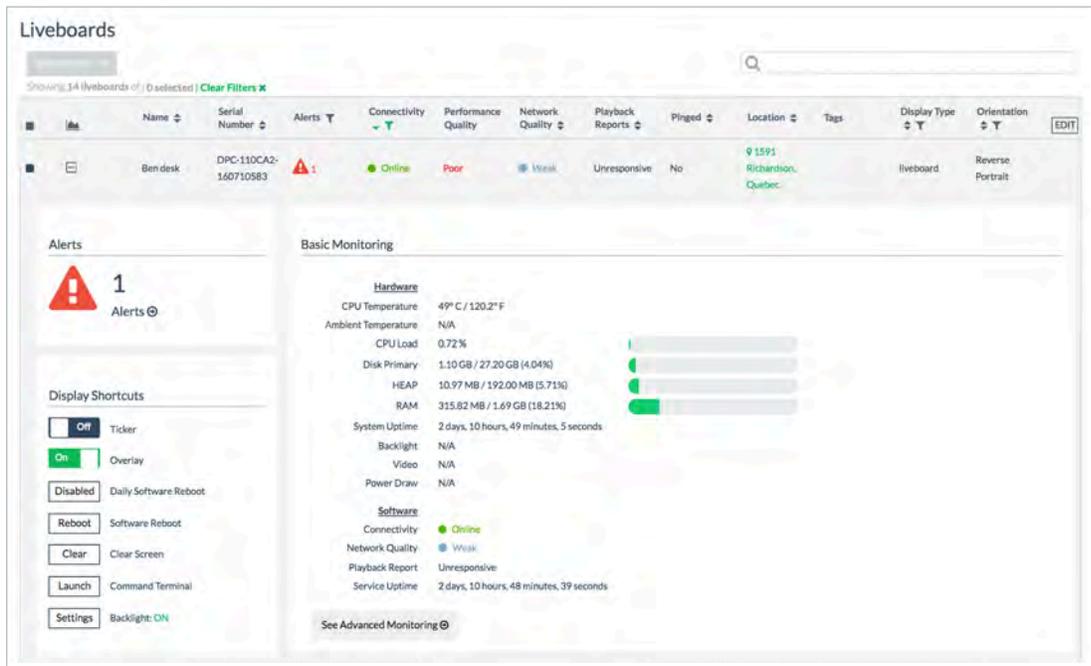
Basic Monitoring

- On the Liveboard Overview page, click **[+]** to expand the Liveboard Basic Monitoring Drawer.

The **Basic Monitoring Drawer** shows hardware and software metrics and information most important to level one support.

This drawer shows at a glance:

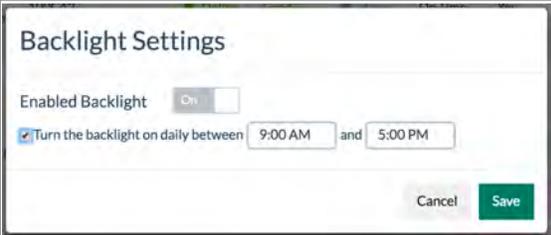
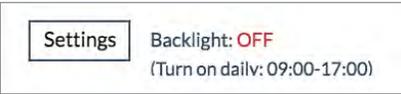
- Active Alerts (and a quicklink to the Alerts tab)
- Basic monitoring metrics (hardware and software) for a liveboard, with quicklink to Advanced Monitoring tab on the liveboard detail page
- Display Shortcuts to perform basic liveboard tasks (turn on EMS ticker, reboot liveboard, turn backlight off)



Display Shortcuts

Shortcut	Function	Directions
Ticker	Enabling EMS Ticker	To enable the Emergency Messaging System: <ol style="list-style-type: none"> Move the Ticker slider to ON. Click OK on the dialog. <p>NOTE: You will need to have created an EMS datasource and uploaded relevant content to display EMS content. See "Configuring Emergency Messaging."</p>
Overlay	Turns on a debugging overlay (same as the "show overlay" command from Command Terminal)	<ul style="list-style-type: none"> Move slider to ON. To remove overlay, move slider to OFF.
Daily Software Reboot	Defines daily time to reboot liveboard	To make the liveboard reboot every day: <ol style="list-style-type: none"> Click the Daily Software Reboot button. Check box for Enable a Daily Reboot, and enter the time to reboot (12 hr/AM/PM format). Click Save.



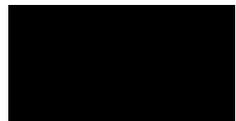
Software Reboot	Reboots liveboard immediately.	<ul style="list-style-type: none"> Click Reboot button. <p>Liveboard immediately reboots. Liveboard behavior after reboot depends on what was configured during provisioning (either show logo or show content that was playing before reboot).</p> <p>NOTE: You can change this behavior using the Set Boot Asset Mode in Command Terminal.</p>
Clear Screen	Removes all schedules from liveboard.	<ul style="list-style-type: none"> Click Clear button.
Command Terminal	Launches Command Terminal.	<ul style="list-style-type: none"> Click Launch button.
Backlight	Turn backlight on/off AND defines daily display time (turns off liveboard backlight)	<p>To save power, (or just keep the environment where the liveboard is in dark), you can turn the backlight off, or set the liveboard to turn off the backlight on the display for a certain period of time.</p> <ol style="list-style-type: none"> Click the Backlight > Settings, and move slide for Enabled Backlight to OFF position. To turn backlight off every day, check the box and enter the time the display should turn on, and the time the display should turn off (12 hr/AM/PM format).  <ol style="list-style-type: none"> Click Save. The shortcut display will now show the on/off time. 

Basic Monitoring Metrics

Basic Monitoring Metrics (Hardware)

NOTE: **Backlight**, **Video** and **Power Draw** metrics have color-coded shortcuts. If status is green, the shortcut goes to the associated telemetry page; if the status is red, the shortcut goes to the **Alerts** tab.

Field	Description
CPU Temperature	Processor temperature
Ambient Temperature	Temperature in immediate proximity of liveboard (a few inches)
CPU Load	Current CPU processor usage
Disk Primary	Local storage in use (on SD card)
HEAP	Current heap memory size
RAM	Current RAM usage
System Uptime	Liveboard uptime since last powered off
Backlight	Power used for backlight at high level: Good (Green), Bad (Red), and N/A (Grey)
Video	Power used to display content on screen at high level: Good (Green), Bad (Red), and N/A (Grey)
Power Draw	Snapshot of overall power draw at high level: Good (Green), Bad (Red), and N/A (Grey)



Basic Monitoring Metrics (Software)

These are the player presence metrics found elsewhere in the Tech Ops Portal.

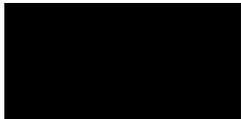
Field	Description
Connectivity	Whether liveboard and server are communicating.
Network Quality	Measurement for the strength of Wi-Fi signal and ping time.
Playback Report	Measured by frequency of reports being received by start time of asset playback.
Service Uptime	Super User Service Uptime

Advanced Monitoring

Advanced Monitoring is a new liveboard tab that contains detailed metric information and history for level 2 technical support.

There are Advanced Monitoring Tabs for:

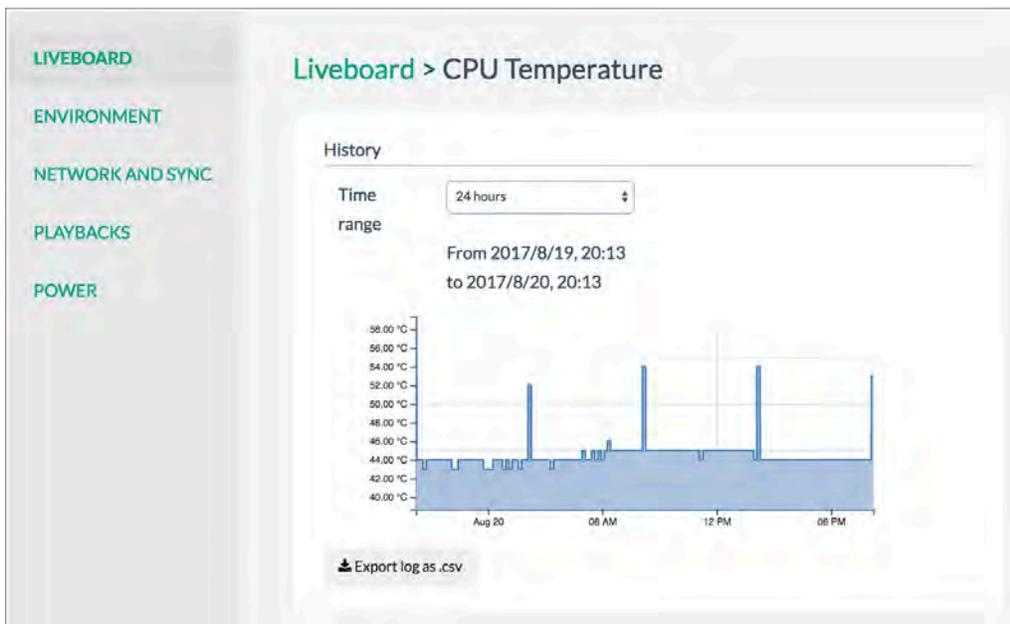
Tab	Metrics
Liveboard	<ul style="list-style-type: none"> System Uptime Service Uptime CPU Load CPU Temperature Disk Primary Heap RAM
Environment	<ul style="list-style-type: none"> Ambient Temperature (External Sensor) Ambient Light (External Sensor) PRT Air Temperature Enclosure Air Temp (Top) Enclosure Air Temp (Bottom) PRT Air Humidity
Network & Sync	<ul style="list-style-type: none"> SSID IP Address Network Quality Signal Strength Link Speed Link Quality Median Disconnect Time Ping Time Clock Synchronization <ul style="list-style-type: none"> – NTP Server – Reachability – Average RMS Offset – Last Synced
Playbacks	<ul style="list-style-type: none"> Playback Quality Last 5 Playbacks (list) Schedule Deliveries (list)
Power	<ul style="list-style-type: none"> Main <ul style="list-style-type: none"> – Power Draw – Power Consumption – DPC Power (5V) – Video Power (12V) – PRT Power (24V) – Power Supply Output (24V) – Backlight Power Auxiliary <ul style="list-style-type: none"> – Auxiliary (3.3V) – Auxiliary (5V) – Auxiliary (12V)



View/Export History for Individual Metric

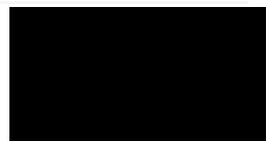
You can view history for almost all metrics (including custom time range) and download a .CSV log for that range. A metric with available history has a green arrow.

- Click the green arrow to open a history page.



From here you can:

- View different time ranges (24 hours, 14 days, one month, or custom range)
- Export the log of the selected time range (click **Export log as .csv**)



Viewing Advanced Liveboard Metrics

The Liveboard tab contains basic liveboard metrics previously on the **Monitoring** tab.

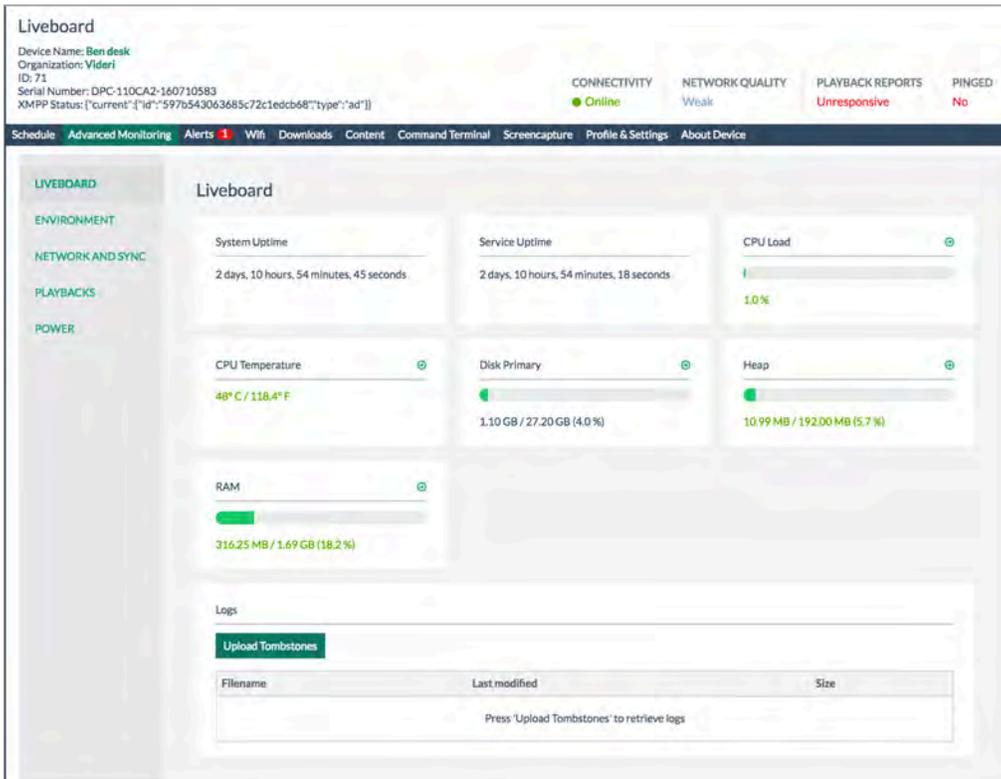


Table: Advanced Liveboard Metrics

Field	Description	Related Alerts
System Uptime	Liveboard uptime since last powered off	---
Service Uptime	Super User Service Uptime	---
CPU Load	Current CPU processor usage	DeviceCPULoad
CPU Temperature	Processor temperature	DeviceCPUTemperature
Disk Primary	Local storage in use (on SD card)	DeviceStorageSd1AvailableBytes
HEAP	Current heap memory size (MB)	DeviceHeapAvailableBytes
RAM	Current RAM usage (MB)	DeviceRAMAvailableBytes

Viewing Tombstones

Tombstones are only generated after a system crash.

1. Click **Upload Tombstones** to upload logs into a list.
2. Click desired log to download and view.



Viewing Advanced Environment Metrics

Environment metrics take input from external sensors (offboard sensors) and internal PRT sensors to show temperature, light and humidity data.

NOTE: Advanced environment metrics will only be available if the liveboard model has the proper sensors/capability to provide them. Consult your hardware manuals and/or the hardware team for more information.

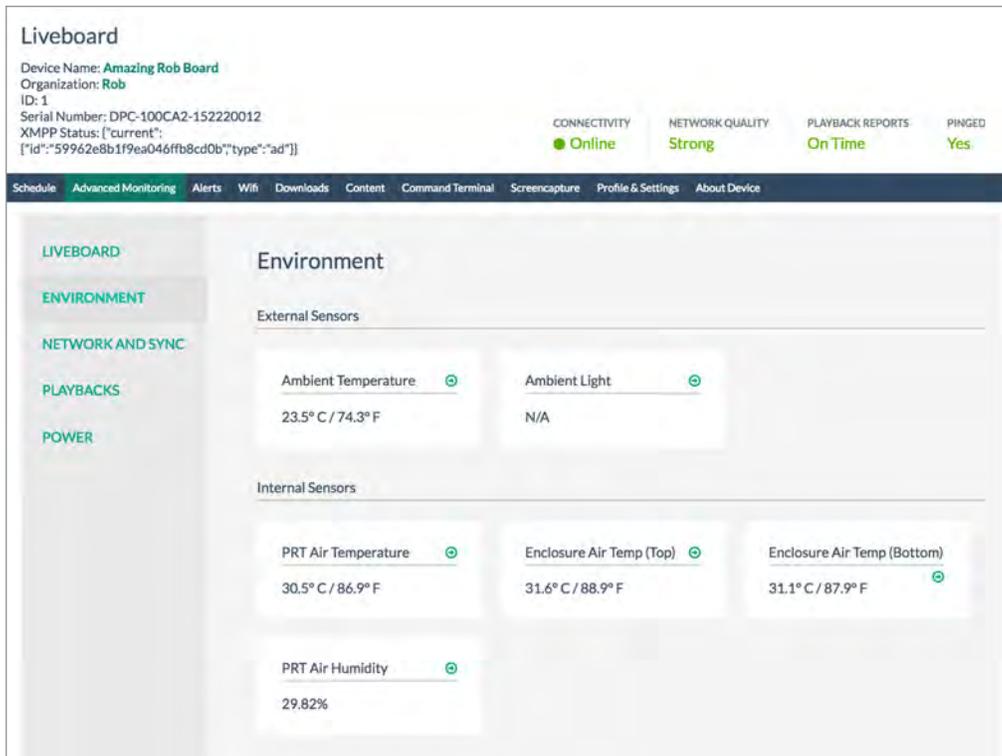
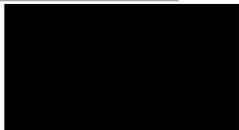


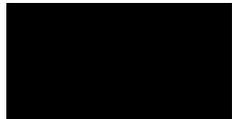
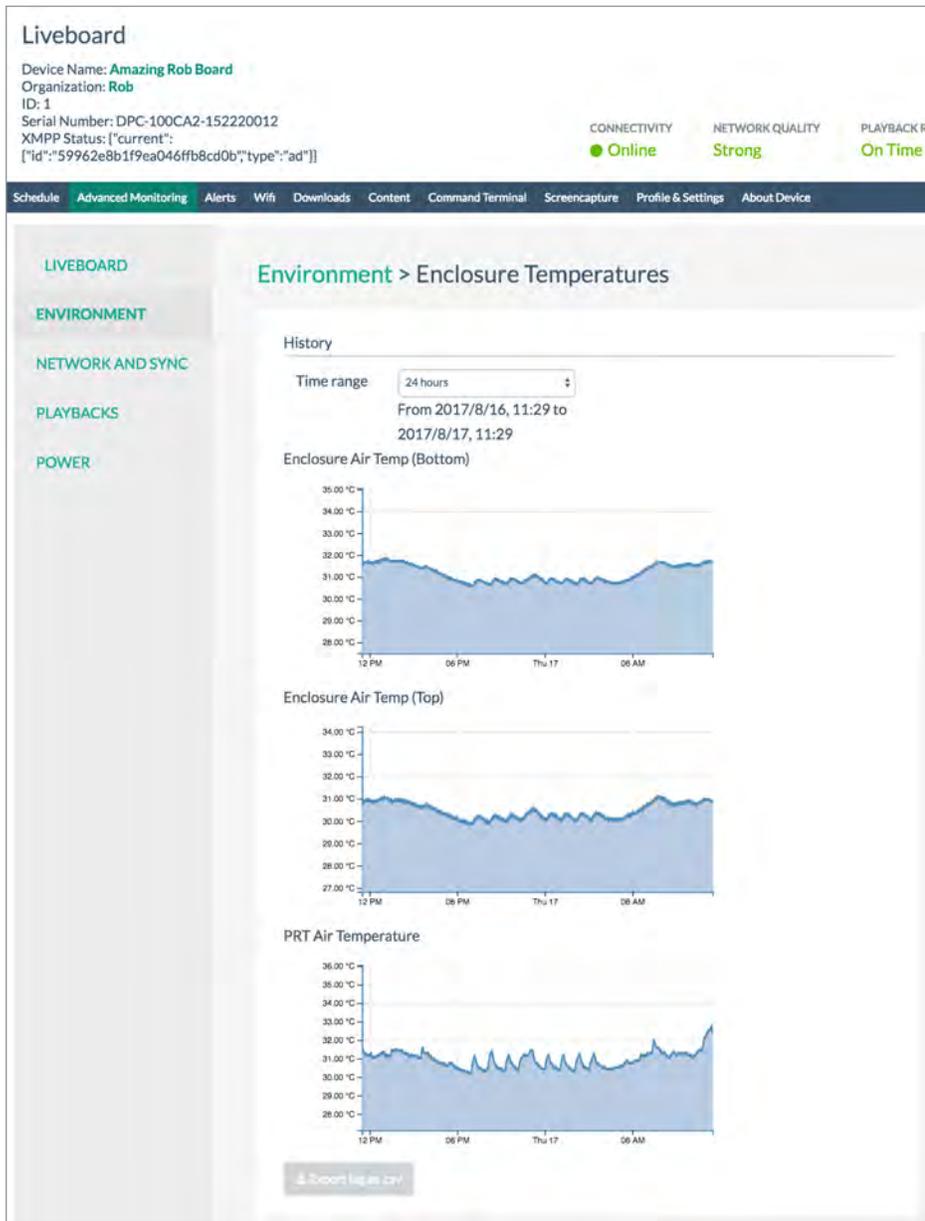
Table: Advanced Environment Metrics

Field	Description	Related Alert
External Sensors		
Ambient Temperature	Temperature in immediate proximity of liveboard (a few inches)	DeviceAmbientAirTemperature
Ambient Light	Measure of light (in lux units) in immediate proximity of liveboard, used in conjunction with liveboard Auto-brightness setting. NOTE: Only available if liveboard has lighting sensor.	---
Internal Sensors		
PRT Air Temperature	Air temperature detected by PRT unit	DeviceEnclosureAirTemperature (PRT)
Enclosure AirTemp (Top)	Air temperature inside liveboard enclosure (top of unit).	DeviceEnclosureAirTemperature (will be triggered if either Top or Bottom Enclosure Airtemp is outside of specs)
Enclosure AirTemp (Bottom)	Air temperature inside liveboard enclosure (bottom of unit).	DeviceEnclosureAirTemperature (will be triggered if either Top or Bottom Enclosure Airtemp is outside of specs)
PRT Air Humidity	Humidity in immediate proximity of liveboard	DeviceENVRelativeHumidity



Environment History

PRT AirTemperature, EnclosureAirTemp (Top) and EnclosureAirTemp (Bottom) are combined when shown in history (and in the exported CSV log).



Viewing Advanced Network & Sync Metrics

The Advanced Network & Sync Metrics page shows metrics associated with connectivity.

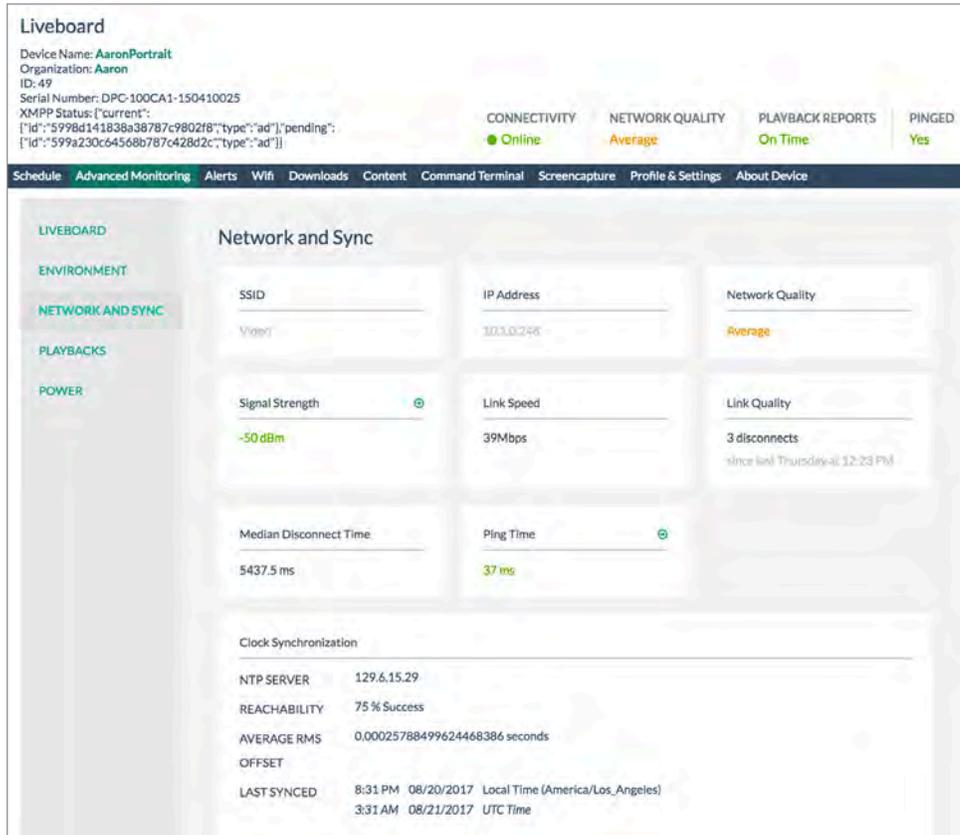
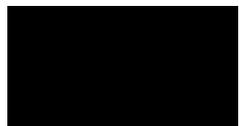


Table: Advanced Network & Sync Metrics

Field	Description	Related Alert
SSID	Liveboard SSID	---
IP Address	Liveboard IP Address	---
Network Quality	Measurement for the strength of Wi-Fi signal and ping time.	---
Signal Strength	Measurement for the strength of Wi-Fi signal	---
Link Speed	Connection speed	---
Link Quality	Number of disconnects since last indicated date.	---
Median Disconnect Time	Median disconnect time	---
Ping Time	Speed of liveboard (in ms) pinging cloud	DeviceNetworkPingTime
Clock Synchronization Metrics	Metrics that show whether the system clock is synchronized with the NTP server	---
NTP Server	Server that uses UTC to synchronize our devices' system clock	---
Reachability	Success rate registered on every received and missed packet from the source	---
Average RMS Offset	Long-term average of the offset value of the source	DeviceNTPRMSOffset
Last Synced	Last time this metric was registered	---



Viewing Advanced Playback Metrics

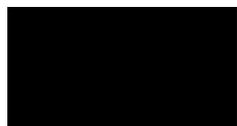
The Advanced Playback Metrics page has one metric, **Playback Quality** and shows Last 5 Playbacks and Schedule Deliveries.

NOTE: Last 5 Playbacks and Schedule Deliveries are also found on the **Liveboard > Schedule** tab.

The screenshot shows the 'Liveboard' interface for a device named 'Couch Right (0022)'. It includes a navigation menu with 'Schedule', 'Advanced Monitoring', 'Alerts', 'Wifi', 'Downloads', 'Content', 'Command Terminal', 'Screencapture', 'Profile & Settings', and 'About Device'. The 'PLAYBACKS' section is active, displaying 'Playback Quality' as 'No Schedule'. Below this, a table lists the 'Last 5 Playbacks' with columns for Playback ID, Name, Playback Type, and Last Played At. A 'Schedule Deliveries' table shows two delivered schedules with their respective IDs, statuses, last delivery attempts, and update times. At the bottom, there is a 'Playback Reports' section with a date range selector and a table of reports, including a 'download CSV' link and an 'EDIT' button.

Field	Description
Playback Quality	Frequency of reports being received by start time of asset playback. Same information as player presence metric Playback Reports .

Playbacks Tab	Information
Viewing Last 5 Playbacks	This section shows which content was played on a liveboard in the previous 90 seconds (data extracted from playback reports).
Viewing Delivered Events	This section shows the date and time of up to the last ten schedules delivered to the liveboard. When a schedule is edited, it's usually delivered immediately to the liveboard.

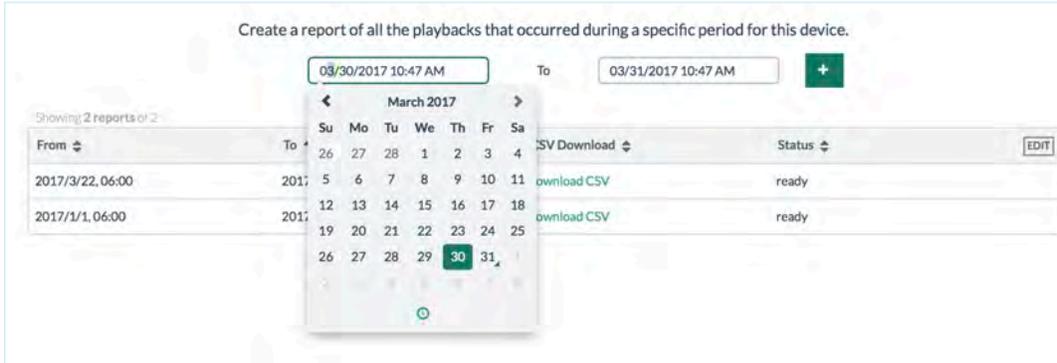


Running Playback Reports

Playback reports contain records of every asset playback for the liveboard in a selected range. Reports are now available for a defined range, and are generated asynchronously and delivered to a report list for later downloading.

To download a playback report:

1. On the dashboard, click **LIVEBOARDS > [LIVEBOARD] > Advanced Monitoring > Playbacks**.
2. Under the **Playback Reports** section, use the calendar to select a range for the report.



3. Click the green download button (+).
4. The playout report will first appear as PENDING in the list while it's being compiled, then show as READY. You can then click **Download CSV** to get the report.

Table: Playback Report Fields

Each row of the CSV represents information about the asset played on the liveboard (some fields may be blank).

Field	Description
Player	Liveboard DPC ID (from physical liveboard)
VLE	Liveboard ID (provided by the server environment the liveboard is provisioned to)
Layout	Layout ID that contains asset (if layouts are used)
External	Project ID of Project that contains asset
Project Name	Name of Project that contains asset
Start Time	Playback start time
End Time	Playback end time
Duration	Playback duration
Duration Rounded	Playback duration rounded up or down to nearest second
Player Name	Liveboard name on which the playback occurred
IMS Market	OFM field
Unit Number	OFM field
Contract	OFM field
Version	Core application that plays content
Asset	Asset ID
Customer File Name	Asset name
Asset URL	Asset storage URL



Player	View	Layout	External	Project Name	Start Time	End Time	Duration	Duration Rou	Player Name	Ims Market	Unit Number	Contract	Version	Asset	Customer File Name	Asset Uri
DPC-100CA1-150410025	13	null	365		2017-03-15T19:36:56	2017-03-15T19:37:04.101	8	8	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	365		2017-03-15T19:37:04	2017-03-15T19:37:12.103	8	8	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	365		2017-03-15T19:37:12	2017-03-15T19:37:20.104	8	8	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	365		2017-03-15T19:37:20	2017-03-15T19:37:28.095	7.99	8	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	365		2017-03-15T19:37:28	2017-03-15T19:37:36.104	8.01	8	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	365		2017-03-15T19:37:36	2017-03-15T19:37:44.099	8	8	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	365		2017-03-15T19:37:44	2017-03-15T19:37:46.306	2.21	2	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	0		2017-03-15T19:37:46	2017-03-15T19:38:16.188	29.88	30	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	0		2017-03-15T19:38:16	2017-03-15T19:38:26.220	10.03	10	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	0		2017-03-15T19:38:26	2017-03-15T19:38:56.034	29.81	30	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	0		2017-03-15T19:38:56	2017-03-15T19:39:26.031	30	30	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	0		2017-03-15T19:39:26	2017-03-15T19:39:34.051	8.02	8	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	0		2017-03-15T19:40:07	2017-03-15T19:40:35.853	28.6	29	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	0		2017-03-15T19:40:35	2017-03-15T19:41:05.860	30.01	30	AaronLandscape				AdSync			
DPC-100CA1-150410025	13	null	0		2017-03-15T19:41:05	2017-03-15T19:41:29.116	23.26	23	AaronLandscape				AdSync			

Viewing Advanced Power Metrics

The Power tab displays metrics relating to both main and auxiliary (supplemental) power sources. Power metrics (except Power Draw and Backlight Power) are shown in three units: voltage, current and power.

Liveboard
 Device Name: LiveOps 6x telemetry
 Organization: Live Ops
 ID: 141
 Serial Number: 78101X02C002649001ABJ202
 XMPP Status: [{"current":{"type":"ad","id":"59938be933397f4578f8b7b4"}]}

CONNECTIVITY: ● Online NETWORK QUALITY: ● Average PLAYBACK REPORTS: ● On Time PINGED: ● Yes

Schedule | **Advanced Monitoring** | Alerts | Wifi | Downloads | Content | Command Terminal | Screenshot | Profile & Settings | About Device

LIVEBOARD

ENVIRONMENT

NETWORK AND SYNC

PLAYBACKS

POWER

Power

Main

Power Draw

● 107.2 W

[View Power Consumers](#)

DPC Power (5V)

● Voltage: 4.97 V

● Current: 1.33 A

● Power: 6.59 W

Video Power (12V)

● Voltage: 11.99 V

● Current: 0.89 A

● Power: 10.61 W

PRT Power (24V)

● Voltage: 24.4 V

● Current: 0.89 A

● Power: 21.59 W

Power Supply Output (24V)

● Voltage: 24.48 V

● Current: 5.06 A

● Power: 123.91 W

Backlight Power

● 102.32 W

Auxiliary

Auxiliary (3.3V)

● Voltage: 3.33 V

● Current: 0.11 A

● Power: 0.37 W

Auxiliary (5V)

● Voltage: 4.97 V

● Current: 0.19 A

● Power: 0.92 W

Auxiliary (12V)

● Voltage: 11.92 V

● Current: 0.04 A

● Power: 0.48 W

Table: Advanced Power Metrics

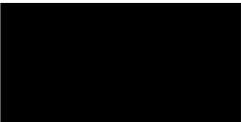
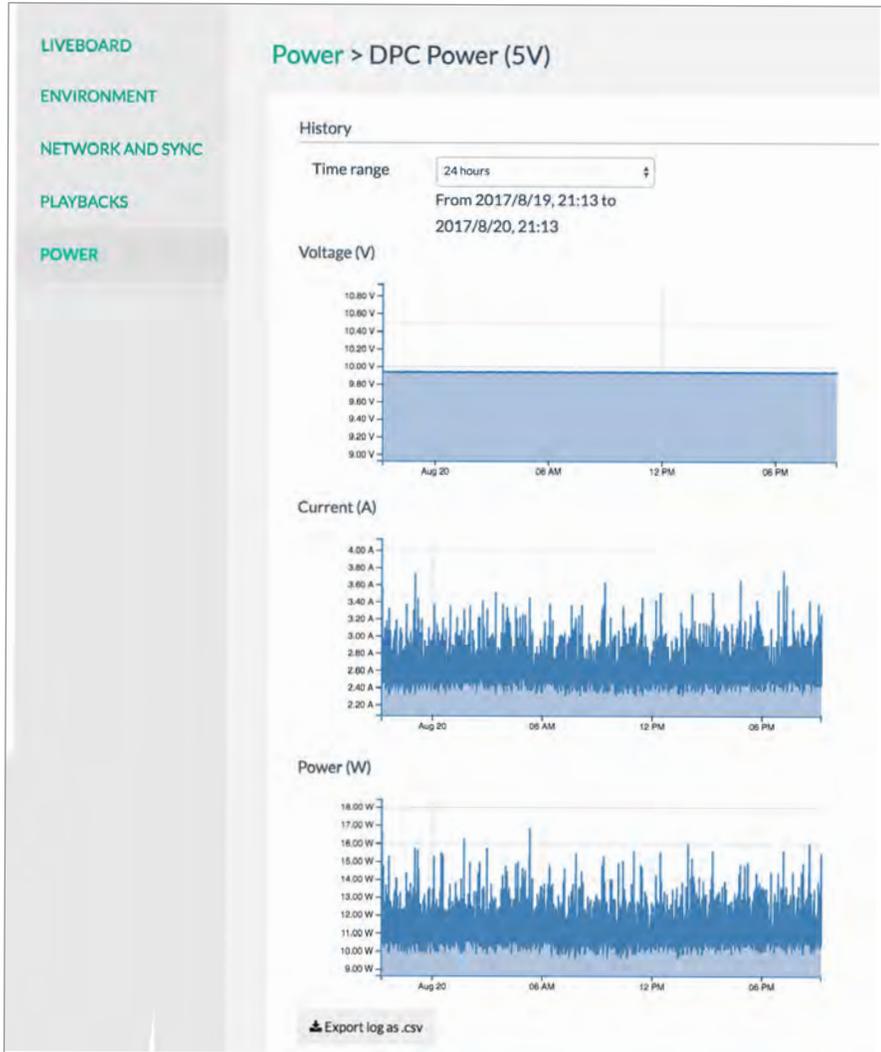
Field	Description	Related Alerts
Main		
Power Draw	Snapshot of power usage of entire device (in watts)	---
Power Consumption (only metric history)	Cumulative power usage of entire device in kilowatt hours (kWh) since the last midnight interval began	---

	DPC Power (5V)	Snapshot of power metrics used by DPC board	Device5vMainVoltage Device5vMainCurrent Device5vMainPower
	Video Power (12V)	Snapshot of power metrics for video	DeviceSystemIs12VGood (high-level status of video power) Device12vAMainVoltage Device12vMainCurrent Device12vMainPower
	PRT Power (24V)	Snapshot of power metrics for PRT	Device24vInputVoltage Device24InputCurrent Device24InputPower
	Power Supply Output (24V)	Snapshot of power supplied by PSU	Device24vPsuOutputVoltage Device24PsuOutputCurrent Device24PsuOutputPower
	Backlight Power	Power used by LED driver for backlight. Backlight Power is a compound metric calculated from two other metrics: PA.24V_PSU_OUTPUT.POWER (minus) PRT. 24V_INPUT.POWER.	DeviceSystemIsBluFault
Auxiliary			
	3V3_Auxiliary	NOT CURRENTLY IN USE Metrics from alternative power sources	Device3v3AuxiliaryVoltage Device3v3AuxiliaryCurrent Device3v3AuxiliaryPower
	5V_Auxiliary	NOT CURRENTLY IN USE Metrics from alternative power sources	Device5vAuxiliaryVoltage Device5vAuxiliaryCurrent Device5vAuxiliaryPower
	12V_Auxiliary	NOT CURRENTLY IN USE Metrics from alternative power sources	Device12vAuxiliaryVoltage Device12vAuxiliaryCurrent Device12vAuxiliaryPower



Power Metric History Page

A history page for any power metric will show voltage, current and power.



Configuring Basic Profile & Settings

When the liveboard is provisioned, it receives some basic settings like Wi-Fi network. However, there are some additional settings that you may want to configure on a new liveboard.

Configuring Liveboard Profile & Settings Options

- On the dashboard, click **LIVEBOARDS** > [click on desired LIVEBOARD] > **Profile & Settings**

Liveboard

Device Name: **Ben desk**
 Organization: **Videri**
 ID: 71
 Serial Number: DPC-110CA2-160710583
 XMPP Status: [{"current": [{"id": "597f56e287fd1f5976b7f65c","type": "ad"}]}]

CONNECTIVITY ● Online
NETWORK QUALITY Strong
PLAYBACK REPORTS On Time
PINGED Yes

Schedule Advanced Monitoring Alerts Wifi Downloads Content Command Terminal Screenshot Profile & Settings About Device

Profile

Liveboard Name:

Display Type:

Schedule Delivery Mode:

Schedule URL (optional):

Dwell Time (in secs.):

Number of Slots:

Reserved Slots:

Schedule Span (In Days):

Screen Type:

IMS Market:

Unit Number:

Owner:

Address: Stationary

Geo Location:



Tags:

Settings

Timezone:

HDMI Resolution:

Brightness: Automatic

Save & Delete

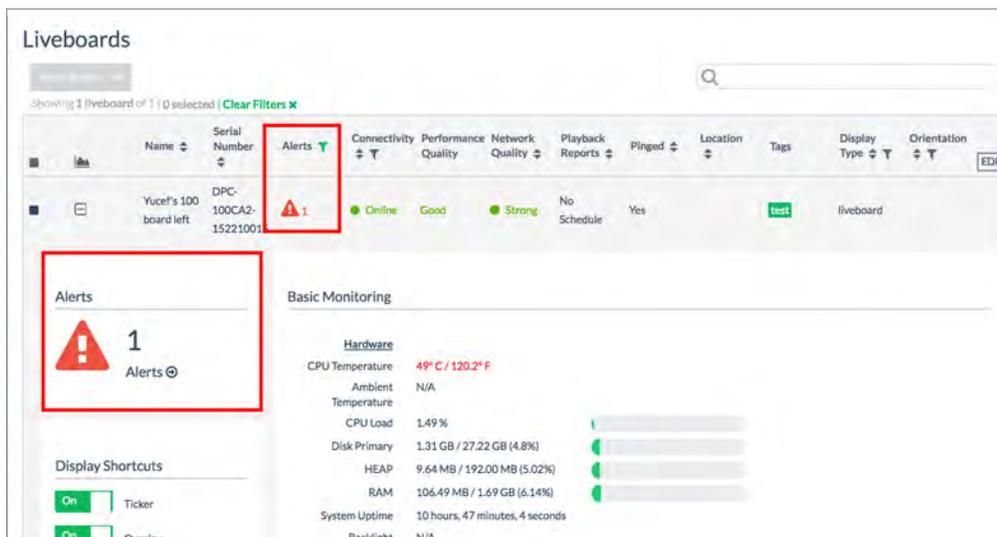


Settings Tab Tasks	Directions
Schedule Delivery Mode	Ensure that the Schedule Delivery Mode field is set to either CCDSE or CCDSE_S3, or there may be playback issues.
Dwell Time	If not set, liveboard Dwell Time will default to 8 seconds. You may change this value, but the minimum dwell time is 2 seconds. NOTE: Content in playlists can have custom durations that override a liveboard's dwell time.
Tags	The tags assigned to the liveboard here can be used with the new Rule Builder functionality to ensure only appropriate content will be displayed on this liveboard. NOTE: Admin users can create tags here. For more information, see the chapter, Tag Management . To assign tags to the liveboard: <ol style="list-style-type: none"> 1. Click in the Tags field, and start typing. A drop-down menu shows available tags. 2. Select tag to use. Repeat to add more tags. 3. Click Save.
Reserved Slots	Enter the slot numbers, separated by commas to be reserved for emergency messaging.

Viewing, Acknowledging and Silencing Alerts

Pre-configured Alerts are triggered by events on the liveboards, or lack of events on liveboards.

- The number of active alerts is shown in several places (Liveboard Overview/Alerts column, Liveboard Basic Monitoring drawer, and on the Liveboard Alerts Tab).



- Alerts on **Alerts History** list do not expire.
- When the condition that triggered the alert is no longer occurring, the alert will no longer be shown on the Alerts History list (this is a change from previous behavior, where an old alert would continue to be shown in Alerts History).

Liveboard

Device Name: **Amazing Rob Board**
 Organization: **Rob**
 ID: 1
 Serial Number: DPC-100CA2-152220012
 XMPP Status: ["current": [{"id":"59938b65b2e5434578073d1d","type":"ad"}]]

CONNECTIVITY: **Online** | NETWORK QUALITY: **Strong** | PLAYBACK REPORTS: **On Time** | PINGED: **Yes**

Schedule | Advanced Monitoring | **Alerts 1** | Wifi | Downloads | Content | Command Terminal | Screenshot | Profile & Settings | About Device

Alerts History

Showing 1 alert of 1

Alert Name	Severity	Message	Last Occurrence	Actions	EDIT
DeviceCpuTemperature	critical	Device DPC-100CA2-152220012 has been out of range for over 5 min: current value: 60	2017/8/15, 22:41	Acknowledge	

Items per page: 5

Silence Settings

[Create Silence](#)

Showing 0 silences of 0

Alert Name	Status	End	Actions	EDIT
No Results found.				

Items per page: 20

Alerts History (legacy)

Showing 3 alerts of 3

Device ID	Severity	Category	Message	First Occurrence	Occurrences	Last Occurrence	EDIT
DPC-100CA2-152220012	Medium	Cpu Temperature	1 Is CPU Temperature Is 83C	2017/5/15, 11:45	1	2017/5/15, 11:45	
DPC-100CA2-152220012		Presence	1 Is Offline	2017/5/16, 14:34	22	2017/8/13, 17:49	
DPC-100CA2-152220012	High	Show Ad Failed	1 Is 59776aee-8c8cdb Failed to Download From https://layout-Devvideri.com/player-Dist.zip Using HttpDownloadModel Because: ResponseCode: -1 Exception: EOFException	2017/7/26, 05:13	1	2017/7/26, 05:13	

Items per page: 20

Snooze Settings (legacy)

[Create Snooze](#) [Remove All](#)

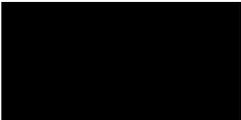
Category	End	Status	Actions
Cpu Temp	2017/08/15	Expired	Dismiss

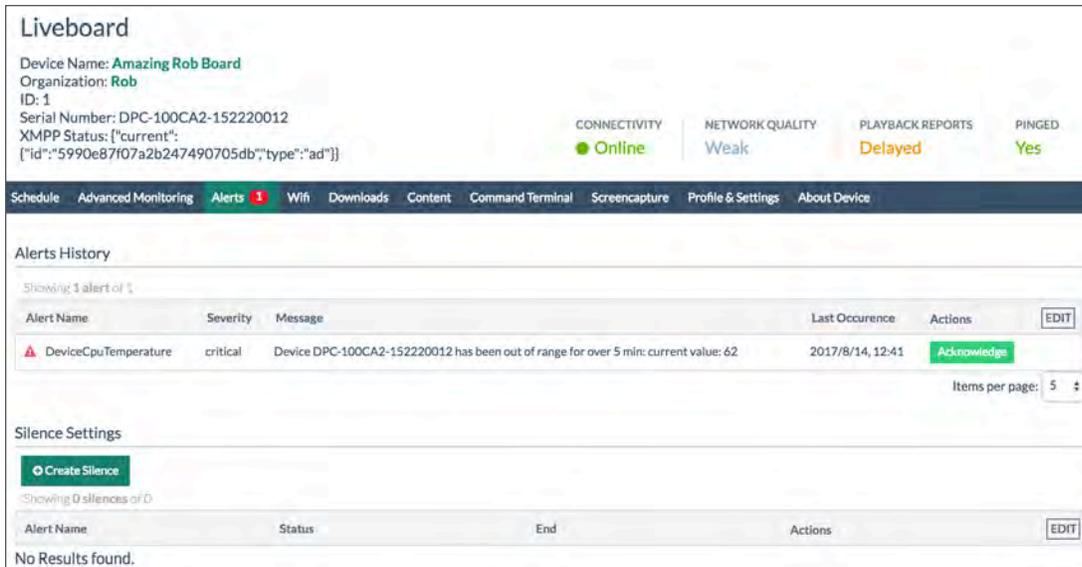
Acknowledging and Silencing an Alert

— Active alerts can be acknowledged from the Alerts tab, which puts them into "silence" mode.

To silence any alerts for a certain category:

1. On the dashboard, click **LIVEBOARDS > [LIVEBOARD] > ALERTS** tab.





2. Click **Create Silence** (below Silence Settings).
3. Select an **Alert Name** and choose the length of time to silence the alert, before the alert will be displayed in the Alerts History list.

NOTE: This time is IN ADDITION TO the alert settle time.



4. Click **Create**.

Dismissing Silenced Alerts

To dismiss a silenced alert:

- Click **Dismiss**.

NOTE: If the Alert had been auto-silenced by clicking **Acknowledge**, the Alert will reappear on the **Alert History** list.

Silenced Alert Names

The "alert settle time" is the time an alert condition must persist before the alert is triggered.

Alert Name	Alert Trigger Conditions	Alert Settle Time
DeviceCpuTemperature	Liveboard CPU temperature is: <ul style="list-style-type: none"> — less than -4°F/-20°C OR — greater than 176°F/80°C 	5 minutes
DeviceCpuLoad	CPU load is greater than 0.99	5 minutes
DeviceHeapAvailableBytes	Heap is less than 10% max heap	5 minutes
DeviceRamAvailableBytes	There's less than 10% of RAM available	5 minutes

DeviceNetworkPingTime	Ping time is greater than 1000 ms for two minutes	2 minutes
DeviceStorageSD1AvailableBytes	Less than 10% of Primary SD card free space is available	10 minutes
DeviceEnvRelativeHumidity	Relative humidity is greater than 90%.	10 minutes
DeviceNtpRmsOffset	Value greater than .05 seconds	1 minute
DeviceSystemIs12vGood	Video power status good/bad	n/a
DeviceSystemIsBluFault	Backlight has a problem	n/a
DeviceEnclosureAirTemperature (PRT)	Enclosure air temperature from PRT is: <ul style="list-style-type: none"> – less than 32°F/0°C OR – greater than 140°F/60°C 	30 minutes
DeviceEnclosureAirHumidity (PRT)	Enclosure air humidity from PRT is: <ul style="list-style-type: none"> – less than 10% OR – greater than 90% 	60 minutes
Device5vMainVoltage	Voltage is less than 4.75 V or greater than 5.25 V	10 minutes
Device5vMainCurrent	Current is less than 0.5 A or greater than 2.4 A	10 minutes
Device5vMainPower	Power is less than 2.5 W or greater than 12 W	10 minutes
Device12vMainVoltage	Voltage is less than 11.4 V or greater than 12.6 V	10 minutes
Device12vMainCurrent	Current is less than 0.1 A or greater than 2.4 A	10 minutes
Device12vMainPower	Power is less than 1.2 W or greater than 28.8 W	10 minutes
Device24vInputVoltage	Voltage is less than 22.8 V or greater than 25.2 V	10 minutes
Device24vInputCurrent	Current is less than 0.4 A or greater than 12.5 A	10 minutes
Device24vInputPower	Power is less than 12 W or greater than 300 W	10 minutes
Device24vPsuOutputVoltage	Voltage is less than 22.8 V or greater than 25.2 V	10 minutes
Device24vPsuOutputCurrent	Current is less than 2 A	10 minutes
Device24vPsuOutputPower	Power is less than 50 W or greater than 590 W	10 minutes
DeviceAmbientAirTemperature (offboard sensor)	Ambient air temperature from offboard sensor is: <ul style="list-style-type: none"> – less than 32°F/0°C OR – greater than 122°F/50°C 	10 minutes
DeviceEnclosureAirTemperature (offboard sensor)	Enclosure air temperature from offboard sensor is: <ul style="list-style-type: none"> – less than 32°F/0°C OR – greater than 140°F/60°C <p>Alert will be triggered by these values from either the Enclosure AirTemp (Bottom) or Enclosure AirTemp (Top) metric</p>	10 minutes
ALERTS NOT CURRENTLY IN USE		
Device3v3AuxiliaryVoltage	Voltage is less than 3.1 V or greater than 3.5V	10 minutes
Device3v3AuxiliaryCurrent	Current is greater than 2 A	10 minutes
Device3v3AuxiliaryPower	Power is greater than 6.6 W	10 minutes
Device5vAuxiliaryVoltage	Voltage is less than 4.75 V or greater than 5.25 V	10 minutes
Device5vAuxiliaryCurrent	Current is greater than 2.4 A	10 minutes
Device5vAuxiliaryPower	Power is greater than 12 W	10 minutes



Device12vAuxiliaryVoltage	Voltage is less than 11.4 V or greater than 12.6 V	10 minutes
Device12vAuxiliaryCurrent	Current is greater than 2.4 A	10 minutes
Device12vAuxiliaryPower	Power is greater than 28.8 W	10 minutes
DeviceNoPlaybackError	Scheduled content was not displayed	1 minute
DeviceHotspot1Temperature	Primary hotspot temperature is: <ul style="list-style-type: none"> – less than -4°F/-20°C OR – greater than 176°F/80°C 	10 minutes
DeviceHotspot2Temperature	Primary hotspot temperature is: <ul style="list-style-type: none"> – less than -4°F/-20°C OR – greater than 176°F/80°C 	10 minutes
DeviceHotspot3Temperature	Primary hotspot temperature is: <ul style="list-style-type: none"> – less than -4°F/-20°C OR – greater than 176°F/80°C 	10 minutes

Snoozed Alerts (Legacy Alerts)

The alerts found in the Legacy Alerts section will be removed in future releases.

NOTE: Active Legacy Alerts will NOT be included in the active alert count found on Basic Monitoring area on the Liveboard Basic Monitoring Drawer or on the Alerts Tab count.

- Triggered Legacy Alerts are processed by the Tech Ops Portal and critical alerts are passed to Pager Duty service which then notifies Live Ops personnel.
- For all legacy alert categories except PRESENCE, alerts will only be triggered and passed to Pager Duty if there have been no previous alerts in the same category within the past 6 hours for a given liveboard.
- Alerts on **Alerts History (legacy)** list will expire 7 days from the first occurrence.
- Snoozed legacy alerts are not passed to Pager Duty.

Table: Legacy Alert Categories

Alert Category	Alert Trigger Conditions
Cpu Load	CPU load is greater than 0.95
Cpu Temperature	Liveboard CPU temperature is greater than 75°F/24°C
Crash	Any crash on the liveboard
Disk IO Error	SD card (liveboard storage) corruption has been detected
Disk Primary	Primary SD card free space is less than 100MB
Disk Secondary	Secondary SD card free space is less than 100MB
Failed Download	A liveboard download was not completed, (either cancelled or cannot complete due to network conditions).
Heap	Heap is less than 38.4MB (20% max heap)
Layout Error	Problem with an object on a layout (possibly a datasource connected to an object)
Presence	Either of the following conditions: <ul style="list-style-type: none"> – Liveboard goes offline for more than three minutes – Liveboard goes offline more than three times in three minutes
Ram	There's less than 500MB of RAM available
Schedule Generation Failed	N/A
Show Ad Failed	Scheduled content is not shown

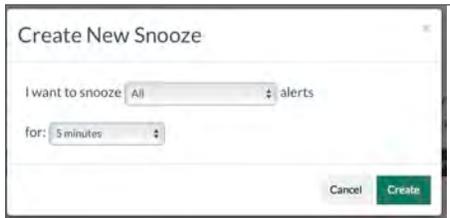


Snoozing an Alert (legacy)

1. On the dashboard, click **LIVEBOARDS > [LIVEBOARD] > ALERTS** tab.



2. Click **Create Snooze** (below Snooze Settings).
3. Select an alert category type and choose the length of time to snooze, before the alert will be displayed.



4. Click **Create**.

Removing Snoozed Alerts

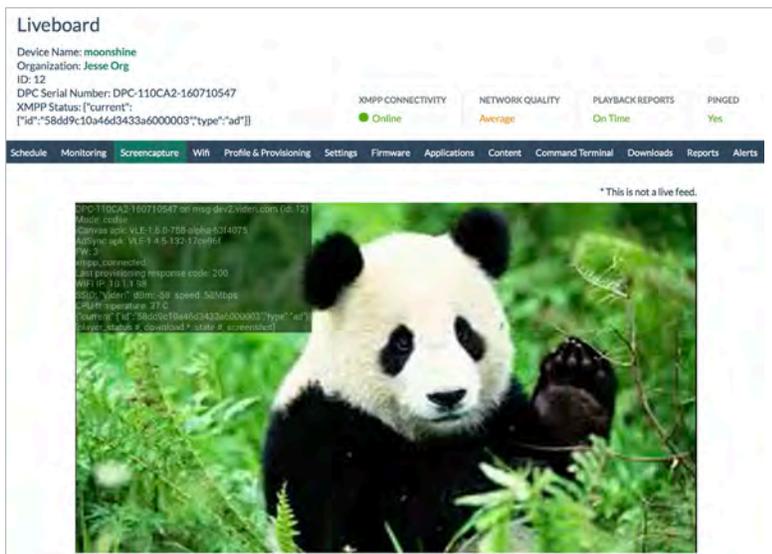
To remove the snooze on an alert:

- Click **Remove** or **Remove All**.

Viewing Current Liveboard Content (Screenshot)

Selecting **Screenshot** tab shows the current content of the liveboard (only if it's online).

NOTE: This is not a live feed of what is happening onscreen. There is a delay of approximately 10-15 seconds. The screen will go black between updates.



Viewing Liveboard Schedule

- On the dashboard, click **LIVEBOARDS > [LIVEBOARD] > SCHEDULE**.

Liveboard

Device Name: **AaronPortrait**
 Organization: **Aaron**
 ID: 49
 Serial Number: DPC-100CA1-150410025
 XMPP Status: [{"current":{"id":"597e73aba6f4d26055cf2a26","type":"ad"}}]

CONNECTIVITY ● Online NETWORK QUALITY Weak PLAYBACK REPORTS Unresponsive PINGED No

Schedule Advanced Monitoring Alerts 1 Wifi Downloads Content Command Terminal Screencapture Profile & Settings About Device

▶ Resume Schedule

◀ < 2017/7/30 > ▶

1 Day View 7 Day View

0:001:002:003:004:005:006:007:008:009:0010:0011:0012:0013:0014:0015:0016:0017:0018:0019:0020:0021:0022:0023:00

Slot 1: Event: Kasey - Portrait Starts - Ends: 00:00:00 - 00:00:00

Legend: Event Playlist Event Event Tag Mismatch Domination Event Critical Alert Event

Last 5 Playbacks

Playback ID	Name	Playback Type	Last Played At (Last playback end time)
5968bc5d243a1c15b9d3a84c		layout	2017/07/30, 21:05:30
5968bc5d243a1c15b9d3a84c		layout	2017/07/30, 21:05:40
5968bc5d243a1c15b9d3a84c		layout	2017/07/30, 21:05:10
5968bc5d243a1c15b9d3a84c		layout	2017/07/30, 21:05:20
5968bc5d243a1c15b9d3a84c		layout	2017/07/30, 21:04:50

Schedule Deliveries

Schedule ID	Status	Last Delivery Attempt	Updated At
597e73aba6f4d26055cf2a26	delivered	2017/7/30, 18:00	2017/7/30, 18:00
597d22280e184a5d9f353a22	delivered	2017/7/29, 18:00	2017/7/29, 18:00

Danger Zone

Remove Manually Assigned Events

Schedule Tab Tasks	Information
Viewing Scheduled Events	Events are shown by slots in a 24 hour period. <ul style="list-style-type: none"> Click the arrows on the date rectangle to move forward or backwards by a day Click this icon on an event to launch the event's details page
Resuming the Schedule	The Resume Schedule command can be used to resume playing scheduled content on this liveboard in situations when: <ul style="list-style-type: none"> an application has been directly played a liveboard has been cleared the PLAY command (from pop-out panel or Command Terminal) has been used to play alternate content)
Removing All Manually Scheduled Events	Click Remove All Manually Scheduled Events to remove all manually-scheduled events from this liveboard. To remove dynamically-scheduled events, edit the Rule Builder variables to no longer include this liveboard, or delete the event altogether from the event details page.
Viewing Playback and Deliveries	The last five playbacks are shown, as well as recent schedule deliveries. This information is also shown on the LIVEBOARDS > [LIVEBOARD] > Advanced Monitoring > Playbacks .

Rev August 23, 2017
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Viewing WiFi Data

The WiFi tab gives detailed information about liveboard connectivity.

- On the dashboard, click **LIVEBOARDS > [LIVEBOARD] > WiFi**.

The screenshot shows the 'Liveboard' interface for a device named 'AaronPortrait'. At the top, there are status indicators for 'CONNECTIVITY' (Online), 'NETWORK QUALITY' (Weak), 'PLAYBACK REPORTS' (Unresponsive), and 'PINGED' (No). Below this is a navigation bar with tabs for 'Schedule', 'Advanced Monitoring', 'Alerts' (1), 'Wifi', 'Downloads', 'Content', 'Command Terminal', 'Screencapture', 'Profile & Settings', and 'About Device'. A 'Turn On AP Mode' button is visible. The 'Current Network' section shows details for the 'Viderl' network, including IP Address (10.1.0.248), Link Speed (13Mbps), and Signal Strength (-48 dBm). The 'All Networks' section is a table listing various networks with their SSIDs, Channel #, Security, Signal Strength, and Options.

SSID	Channel #	Security	Signal Strength	Options
Viderl	Channel #11	PSK	-48 dBm	Connect, Disable, Forget
Viderl	Channel #6	PSK	-50 dBm	Connect, Disable, Forget
	Channel #5	PSK	-58 dBm	Connect, Configure
	Channel #11	PSK	-49 dBm	Connect, Configure
	Channel #6	PSK	-51 dBm	Connect, Configure

Viewing Downloads

The Downloads tab will show both active downloads and the most recent downloads.

- On the dashboard, click **LIVEBOARDS > [LIVEBOARD] > About Device**.

The screenshot shows the 'Liveboard' interface with the 'Downloads' tab selected, indicated by a '10' badge. The 'Active Downloads' section contains a table with columns for Name, Local File Path, Progress, and Size. The '50 Recently Completed Downloads' section shows a list of files, with the first one being '/storage/emulated/0/icanvas/webAd/5995b996-230b3c.zip'.

Name	Local File Path	Progress	Size
2843cf2df67b498cfe4584099afaf5capk		100%	0 / -1
1c453d3179f3b989d514e78678c8d94.jpg		100%	0 / -1
4e4619ada6f3701edfa59d37d9e8fab5-8.mp4		100%	0 / -1
b46c8466d089054057605634b99a2fda.jpg		100%	0 / -1
88eda3e350c72be12018cdf3f39b61a4f-67.mp4		14%	49035836 / 349269210
ee8575d4e0b3939ded8b08cc478812d-15.mp4		100%	0 / -1
a0164df2918bd91963087c49dfa3e3bf.mp4		100%	0 / -1
eadfca0f699f6bd609d8d8c74ee2207d.mp4		100%	0 / -1
89fc20e7ecac88bcd0b93b59235f5eb.apk		100%	0 / -1
a6fe30045c7f931b81a3e2580b21ea44.mp4		100%	0 / -1

50 Recently Completed Downloads

File
/storage/emulated/0/icanvas/webAd/5995b996-230b3c.zip

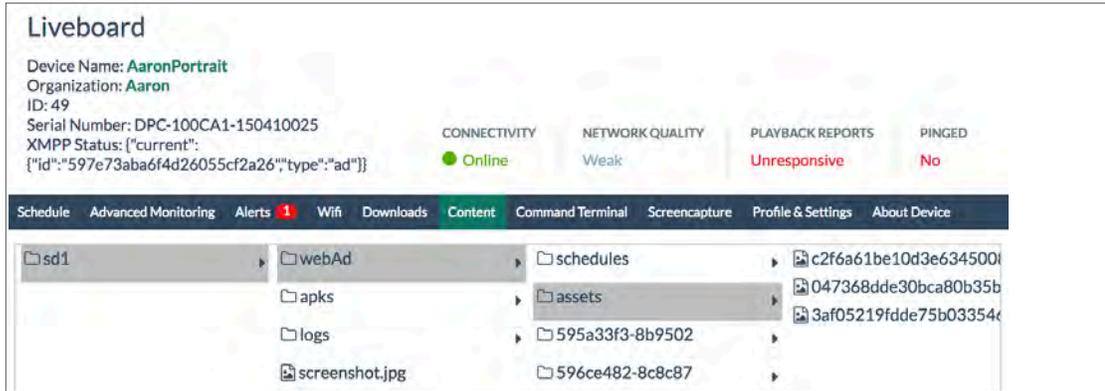


Viewing/Deleting Local Content

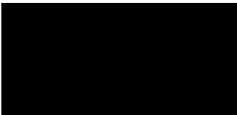
- On the dashboard, click **LIVEBOARDS > [LIVEBOARD] > CONTENT**.

The **Content** tab is where you can view and delete the contents of the local storage card.

NOTE: Deleting assets from the **Content** tab/SD card only deletes local assets. Assets remain in the cloud, unless they are deleted from the **Assets** tab for a project.



Content Tab Tasks	Directions
Deleting Files from the Local Storage Card	<p>WARNING: Deleting assets from the SD card can lead to undesired behavior with the hardware and software.</p> <p>To delete content from local storage:</p> <ol style="list-style-type: none"> Click the main folder, and keep drilling down until you find the file to delete. Click on it, then click Delete. Click OK from the confirmation dialog.



Viewing About Device (Firmware & Applications)

- On the dashboard, click **LIVEBOARDS > [LIVEBOARD] > About Device**.

Applications that appear on this tab have been uploaded through PROJECTS to the appropriate project. After an application is scheduled, it will be downloaded and installed locally as needed, and will appear on the “All Installed Packages” list.

Liveboard

Device Name: **Ben desk**
 Organization: **Videri**
 ID: 71
 Serial Number: DPC-110CA2-160710583
 XMPP Status: [{"current": [{"id": "597f56e287fd1f5976b7f65c", "type": "ad"}]}

CONNECTIVITY
● Online

NETWORK QUALITY
Strong

PLAYBACK REPORTS
On Time

PINGED
Yes

Schedule
Advanced Monitoring
Alerts
Wifi
Downloads
Content
Command Terminal
Screenshot
Profile & Settings
About Device

Firmware Information

Build ID	dpc3xx-jb4.3_bd1.0.0_vle23.1.1.483
Release Version	4.3
Incremental Version	526
Mac Address	70:b3:d5:33:c5:90
Part Number	VVIS.HDMI
Hardware Info	DPC-110Rev01

Upload Firmware File

Firmware File

Download

Install Firmware

Firmware Install File

Install

Videri Packages

Name	Package	Version	VersionCode	Installed	Updated	
AdSync	com.videri.adsync	VLE-1.5.1-112-release-bd183e9	101	2016/9/15, 12:00	2017/2/2, 10:32	<input style="width: 80%; border: 1px solid #ccc;" type="text" value="Choose Update File"/> Update
SuperUserService	com.videri.superuserservice	VLE-1.4.5-34-embedded-5dd340b	50	2015/12/17, 10:07	2017/3/22, 15:09	<input style="width: 80%; border: 1px solid #ccc;" type="text" value="Choose Update File"/> Update
ICanvasPlayer	com.videri.icanvasplayer	VLE-1.7.2-alpha-880-e618784	101	2015/12/17, 10:07	2017/7/28, 08:29	<input style="width: 80%; border: 1px solid #ccc;" type="text" value="Choose Update File"/> Update

Install/Update any Package

.apk File URL

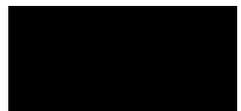
Upload & Install

All Installed Packages

Name	Package	Version	Version Code	Installed	Updated	
Package Access Helper	com.android.defcontainer	4.3-526	18	2015/12/17, 10:26	2017/3/22, 15:18	🗑️
Android System	android	4.3-526	18	2015/12/17, 10:22	2017/3/22, 15:16	🗑️
Settings	com.android.settings	4.3-526	18	2015/12/17, 10:27	2017/3/22, 15:19	🗑️ ▶️



Applications Tab Tasks	Information
Uploading Applications	To upload applications, see the Chapter, Creating Signage .
Playing Applications	<p>WARNING: When you play an application from this area, it will override any content playing on the liveboard.</p> <p>Click the green play triangle on the row of the application to play. It will continue playing until you:</p> <ul style="list-style-type: none"> – Assign another application to play – Schedule some new content – Run the CLEAR command (from Command Terminal or pop out panel) – Click RESUME SCHEDULE on the LIVEBOARDS > [LIVEBOARD] > SCHEDULE tab
Deleting Applications	<p>WARNING: DO NOT DELETE iCANVASPLAYER, ADSYNC, or SUPERUSERSERVICE APPLICATIONS. These are the “core” applications of the liveboard.</p> <ul style="list-style-type: none"> – Click the trash can icon on the row of the application to delete.
Uploading Firmware	WARNING: UPLOADING FIRMWARE SHOULD ONLY BE PERFORMED BY QUALIFIED ADMIN
Installing Firmware	WARNING: INSTALLING FIRMWARE SHOULD ONLY BE PERFORMED BY QUALIFIED ADMIN



DATA SOURCES

Datasources provide input for dynamic event scheduling using Rule Builder and are also used in regular expression logic in the Creative Studio to change content in layouts.

Version 1.7 Datasource Improvements

We've made several improvements to make datasources more powerful and easier to use:

- Datasources are now independent from projects (but tied to organizations). Click DATASOURCES on the dashboard.
- Datasource options have now been expanded, with XML, HTML and TXT options added to existing RSS and CSV datasources.
- Sanitizers and formatters of several types are now available directly on the datasource details page. Datasource sanitizers allow you to select content from the datasource feed through an XPath selector, apply filtrations (by numerical or alphabetical value, or regular expressions) and apply a formatting method (Replace, Concatenate, SubString, Insert, ToLower and ToUpper).
- When datasources are used in the new Rule Builder functionality, the datasource detail page will show which event(s) the datasource has been used in (and provide a quick link to it).

Version 1.7 Upgrade Note

Due to the extensive improvements performed on the datasource service, all datasource references in layouts will need to be recreated after 1.7 deployment or they will not function.

Datasource Types

There are several types of data sources that can be used, both dynamic (RSS/XML/HTML feed) and static (CSV, TXT). You can also create a Dead Drop (linked to an FTP site).

Adding an RSS/XML/HTML Datasource

1. Click **dashboard > DATA SOURCES**.
2. Click **Generate Datasource**.
3. Enter name.
4. Enter feed URL.
5. Ignore **Special Handling Logic** (it's proprietary backend code).
6. In **Update Interval**, enter the update interval in seconds. Default is 300 (five minutes). The datasource is created to start getting updates immediately.
7. In **Connectivity Hysteresis**, enter a value greater than the **Update Interval**.
8. Click **Save**.

Data Sources

Datasources Dead Drops

DATA SOURCE GENERATION

NAME: CA Top Stories

URL: http://rss.cbc.ca/lineup/topstories.xml

MIME TYPE: **RSS/XML** CSV HTML TXT

SPECIAL HANDLING LOGIC: None

UPDATE INTERVAL (SECONDS): 300

CONNECTIVITY HYSTERESIS (SECONDS): 3600

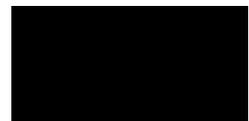
Cancel Save

Generate Datasource

Showing 3 data sources of 3

Name	Tags	Last Error Time	Last Error Message	Last Update	Next Update	# sanitizers	Status	Actions
HTML source 1				2017/5/12, 16:36	2017/5/12, 16:41	0	enabled	

Field	Description
Name	Datasource name
URL	URL of RSS, XML or HTML datasource
MIME TYPE	Datasource type
Special Handling Logic	Emergency Messaging options
UPDATE INTERVAL (SECONDS)	Time after which the datasource will update. Default is 300 (five minutes). The RSS Data Source is created to start getting updates immediately.
CONNECTIVITY HYSTERESIS (SECONDS)	Time period after which Tech Ops Portal will assume that the datasource has gone stale. NOTE: This value should be greater than the Update Interval value.
After saving, more properties appear	
Status	Datasource status (active/inactive)
URL/Source	Datasource URL
File	JSON File URL (with Launch icon)
Enable Updates	ON/OFF slider



Getting familiar with RSS Fields

Depending on how you will be using the RSS feed in the future, it's helpful to take a look at the feed and see what headers it contains. Every RSS feed is different, but most will have these basic headers:

- **Name:** Name of the RSS Feed
- **Description:** Description of RSS Feed
- **Title:** Entry title
- **Summary:** Short summary of entry (often similar to title)

View the content of an RSS feed:

1. Click **dashboard > DATA SOURCES**.
2. Click the Data Source.
3. Click the Launch icon next to the **FILE** field. A tab will open with sample content from the RSS feed.

Here's an example of an RSS feed from ESPN of Top News Stories.

This feed is pretty simple: name, description of the feed, then entries composed of title, summary and URL information.

```
{
  "type": "application/rss+xml",
  "name": "ESPN Top News Feed",
  "data": {
    "description": "Latest TOP news from ESPN.com",
    "etag": null,
    "feed_url": "http://sports.espn.go.com/espn/rss/news",
    "last_modified": "2015-06-18T19:36:50.000Z",
    "title": "ESPN.com - TOP",
    "url": "http://espn.go.com",
    "entries": [
      {
        "title": "Sources: Hawks to buy out Ferry, promote coach",
        "summary": "Sources: Hawks to buy out Ferry, promote coach",
        "url": "http://espn.go.com/nba/story/_/id/13106051/atlanta-hawks-promote-mike-budenholzer-team-president-leading-departure-gm-danny-ferry",
        "entry_id": "13106051"
      },
      {
        "title": "Dez makes surprise visit to Cowboys practice",
        "summary": "Dez makes surprise visit to Cowboys practice",
        "url": "http://espn.go.com/dallas/nfl/story/_/id/13106765/dez-bryant-makes-surprise-visit-dallas-cowboys-practice",
        "entry_id": "13106765"
      },
      {
        "title": "Spurs' Duncan: $20M loss won't influence choice",
        "summary": "Spurs' Duncan: $20M loss won't influence choice",
        "url": "http://espn.go.com/nba/story/_/id/13105201/tim-duncan-san-antonio-spurs-alleges-lost-more-20-million-financial-adviser",
        "entry_id": "13105201"
      },
      {
        "title": "Payton lauds first female official: 'She's ready'",
        "summary": "Payton lauds first female official: 'She's ready'",
        "url": "http://espn.go.com/nfl/story/_/id/13107668/sean-payton-new-orleans-saints-endorses-sarah-thomas-first-female-official-nfl",
        "entry_id": "13107668"
      },
      {
        "title": "De La Hoya: Won't unretire to fight Mayweather",
        "summary": "De La Hoya: Won't unretire to fight Mayweather",
        "url": "http://espn.go.com/boxing/story/_/id/13105601/oscar-de-la-hoya-not-interested-floyd-mayweather-rematch",
        "entry_id": "13105601"
      }
    ]
  }
}
```

Keep these fields in mind when you go to the section, *"Connecting a data source to an element."*

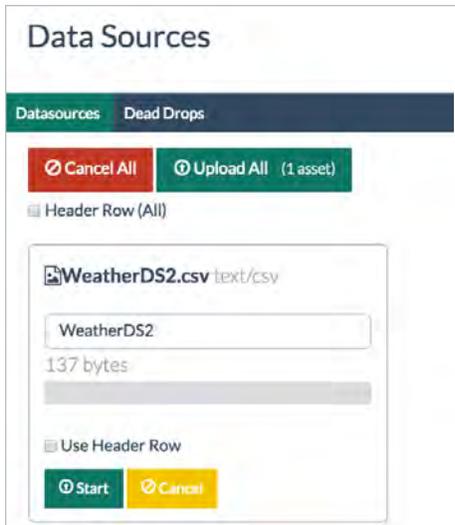
Adding a Static Datasource (CSV, TXT)

CSV or TXT files are considered "static" in that they require manual updating in the Tech Ops Portal. You might use a CSV for a datasource when you have information that will be updated periodically, such as the prices on a menu board. It is also helpful to define a CSV datasource to configure when offline content will be displayed.

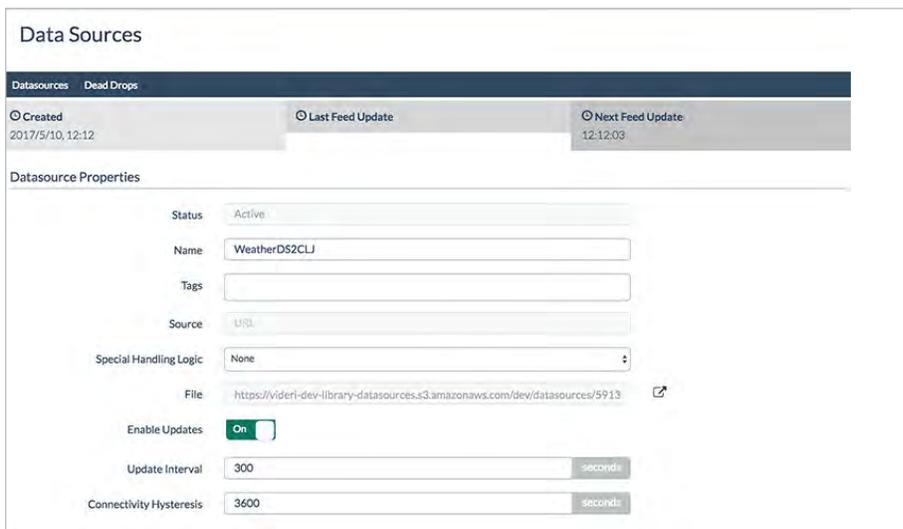
To upload a CSV/TXT file as a data source:

1. Go to **dashboard > DATA SOURCES**.
2. Click **Generate Datasource**.
3. Drag the CSV/TXT file onto the space. The upload page appears.





4. Rename the file if desired.
5. **OPTIONAL:** If using a CSV, if you check “**Use Header Row**,” the column headers will be displayed in the Tech Ops Portal interface when you are working with the data source.
6. Click **Start**. The file is uploaded, and appears in the list at the bottom of the Datasources overview page.
7. Click on the link to see the datasource details.



Updating the CSV or TXT File in a Data Source

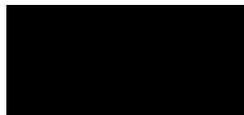
1. Update the file as needed. **NOTE:** Ensure it has the exact same filename as the one currently in the Datasource.
2. Go to **dashboard > DATASOURCES**.
3. Drag the updated file onto the top of the page. The upload asset overlay appears.
4. Click **Start**. Although you will not get a confirmation, the file will be updated. To check, you can click on the Data Source (from the Datasource Overview page), then click the launch icon next to **File**. A new tab will open showing the contents of the file.



Editing/Deleting an RSS/XML/HTML Datasource

- On the **Data Sources** overview page, click the row of the datasource to edit.

Task	Directions
Assign Tags	<p>NOTE: Admin users can create tags here. For more information, see the chapter, Tag Management.</p> <ol style="list-style-type: none"> 1. Click in the Tags field, and start typing. As you type, a list will auto-complete with matching tags. 2. Select tag to use. Repeat to add more tags. 3. Click Save.
Disable Datasource	To disable the datasource, slide the Enable Updates slider to the OFF position, then click Save .
View Source File	In the File field, click the Launch icon to open a browser window with the raw code. <p>NOTE: We recommend you view the JSON code using a formatter (such as Google Chrome's JSON Formatter extension).</p>
View Raw Data	Under the <i>Data Sanitization</i> header, view data in the RAW DATA window.
Delete Datasource	<ol style="list-style-type: none"> 1. Check that datasource is not in use (look under <i>Usage</i> heading). 2. Click Delete then OK in confirmation dialog.



Data Sources

Datasources **Dead Drops**

Created	Last Feed Update	Next Feed Update
2017/5/12, 16:39	16:45:51	18:50:51

Datasource Properties

Status: Active

Name: CA Top Stories

Tags:

Source: <http://rss.cbc.ca/lineup/topstories.xml>

Special Handling Logic: None

File: <https://vident-dev-library-datasources-s3.amazonaws.com/dev/datasources/>

Enable Updates:

Update Interval: 300 seconds

Connectivity Hysteresis: 3600 seconds

Data Source Sanitization

Order Selector Add Sanitizer

This datasource will not be sanitized.

```

Raw Data
1 <?xml version="1.0" encoding="UTF-8"?>
2 <rss version="2.0">
3 <channel>
4 <title>
5 <![CDATA[CBC | Top Stories News ]]>
6 </title>
7 <link>http://www.cbc.ca/news/?cmp=rss</link>
8 <description>
9 <![CDATA[
10 FOR PERSONAL USE ONLY
11 ]]>
12 </description>
13 <language>en-ca</language>
14
15 1 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
    
```

Usage

This datasource isn't used in a rule.

Save & Delete

Delete Save As... Save

Adding an FTP Site Data Source (Dead Drop)

Use an FTP as a data source to easily update an image on a layout, whenever the image in the FTP directory changes.

To configure an FTP directory as a data source:

1. Go to **dashboard > DATASOURCES**.
2. Click **Dead Drops** tab.
3. Click **Add Dead Drop**.

The screenshot shows a web interface titled "Data Sources" with a sub-tab "Dead Drops". Below the tab is a section titled "ADD A DEAD DROP" containing several input fields:

- NAME:** A text input field with the placeholder "Name".
- HOST:** A text input field with the placeholder "Host".
- USER:** A text input field with the placeholder "User".
- DIRECTORY:** A text input field with the placeholder "Directory".
- SPECIAL HANDLING LOGIC:** A dropdown menu currently showing "None".
- UPDATE INTERVAL:** A text input field with the placeholder "Update Interval" and a "SECONDS" button to its right.
- CONNECTIVITY HYSTERESIS:** A text input field with the placeholder "Connectivity Hysteresis" and a "SECONDS" button to its right.
- PATTERN:** A text input field with a single asterisk "*" as a placeholder.
- PASSWORD:** A text input field with the placeholder "Password".

 At the bottom of the form area, there is a "SAVE & DELETE" label and two buttons: a dark blue "Cancel" button and a green "Save" button with a floppy disk icon.

4. Enter the information about your FTP directory in the fields.
5. Click **Save**.

Table: Dead Drop Fields

Field	Description
Name	Dead Drop name
Host	FTP Host URL
User	Username for host
Directory	Path to FTP directory
Special Handling Logic	Emergency Messaging options
Update Interval (seconds)	Time (in seconds) after which the Tech Ops Portal will check for updated content in the FTP folder.
Connectivity Hysteresis	Time period after which Tech Ops Portal will assume that the datasource has gone stale.
Pattern	File type allowed (within permitted image types). For example, *.PNG.
Password	Host password
After saving, more properties appear	
Tags	Assigned tags
Last Update	Time/date of last update
Last Message	Last success or failure message
Protocol	ftp
RSS Feed	N/A
Artefacts Count	Dead Drop asset count



Datasource Sanitization

You can define one or more data sanitizers for each datasource.

Defining a Data Sanitizer

1. Go to **dashboard > DATA SOURCES** and click on a datasource to open its details page.
2. Click **Add Sanitizer**.

The screenshot shows the 'Data Source Sanitization' configuration page. At the top right, there is a green 'Add Sanitizer' button. Below it is a table with one row for a 'New Sanitizer'. The table has columns for 'Order' (1) and 'Selector'. Below the table is a form with the following fields:

- Sanitizer Name:** A text input field.
- XPath Selector:** A text input field containing the value '/'. Below it is a 'Suggestions' area with a '+ txt' button.
- Filter:** A dropdown menu with the text '--- select filter method ---'.
- Formatter:** A dropdown menu with the text '--- select formatting method ---'.

At the bottom right of the form, there are three buttons: 'Delete' (red), 'Save As...' (green), and 'Save' (green).

3. Use the **XPath Selector** field to drill down to the path expressions to extract. The *Suggestions* area will display the best choices.
4. Select Filter and Formatting options, and click **Save**.

Table: Filter and Formatting Options

Field	Options	Description
Filter		
	Select numerical values	
	Select alphanumeric values	
	Select based on regular expression defined	
Formatter		

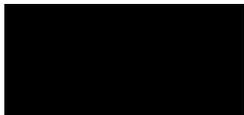


	<p>Replace Must define search value and replace value</p>	<p>Returns a copy of a string with the all occurrences of pattern substituted for the second argument. The pattern is typically a Regexp; if given as a String, any regular expression metacharacters it contains will be interpreted literally, e.g. '\\d' will match a backslash followed by 'd', instead of a digit.</p> <ul style="list-style-type: none"> – pattern: If replacement is a String it will be substituted for the matched text. It may contain back-references to the pattern's capture groups of the form \\d, where d is a group number, or \\k<n>, where n is a group name. If it is a double-quoted string, both back-references must be preceded by an additional backslash. However, within replacement the special match variables, such as \$&, will not refer to the current match. – replacement: Value to replace with.
	<p>Concat Must define text to append</p>	<p>Concatenates the given object to give selector. value: Value concatenate.</p>
	<p>Substring</p>	<p>Returns a substring containing length characters starting at the index. If passed a range, its beginning and end are interpreted as offsets delimiting the substring to be returned.</p> <ul style="list-style-type: none"> – Start: Beginning of the sub string. – Length: Number of character to extract.
	<p>Insert</p>	<p>Returns a string where insert value is appended at that index given by start.</p> <ul style="list-style-type: none"> – Index: Index to insert at. – Text: String to insert.
	<p>ToLower</p>	<p>Returns a copy of a string with all uppercase letters replaced with their lowercase counterparts. The operation is locale insensitive—only characters “a” to “z” are affected.</p> <p>NOTE: Case replacement is effective only in ASCII region.</p>
	<p>ToUpper</p>	<p>Returns a copy of a string with all lowercase letters replaced with their uppercase counterparts. The operation is locale insensitive—only characters “a” to “z” are affected.</p> <p>NOTE: Case replacement is effective only in ASCII region.</p>

Viewing Sanitized Data

When a data sanitizer has been defined for a datasource, you can view the sanitized data in two places:

- From datasource overview page (click EYE icon  on row of datasource)
- From datasource details page (shows RAW DATA vs. SANITIZED DATA at bottom of window).



Raw Data	Sanitized Data
1 <?xml version="1.0" encoding="UTF-8"?>	1 <?xml version="1.0" encoding="UTF-8"?>
2 <rss version="2.0">	2 <rss version="2.0">
3 <channel>	3 <channel>
4 <title>	4 <title>
5 <![CDATA[CBC Top Stories News]]>	5 <![CDATA[CBC Top Stories News]]>
6 </title>	6 </title>
7 <link>http://www.cbc.ca/news/?cmp=rss</link>	7 <link>http://www.cbc.ca/news/?cmp=rss</link>
8 <description>	8 <description/>
9 <![CDATA[
10 FOR PERSONAL USE ONLY	
11]]>	
12 </description>	
13 <language>en-ca</language>	9 <language>en-ca</language>
14 <lastBuildDate>Tue, 18 Apr 2017 21:48:21 EDT</lastBuildDate>	10 <lastBuildDate>Tue, 18 Apr 2017 21:48:21 EDT</lastBuildDate>
15 <copyright>	11 <copyright>
16 <![CDATA[Copyright: (C) Canadian Broadcasting Corporation, http://	12 <![CDATA[Copyright: (C) Canadian Broadcasting Corporation, http://
17 </copyright>	13 </copyright>
18 <docs>	14 <docs>
19 <![CDATA[http://www.cbc.ca/rss/]]>	15 <![CDATA[http://www.cbc.ca/rss/]]>
20 </docs>	16 </docs>
21 <image>	17 <image>
22 <title>CBC.ca</title>	18 <title>CBC.ca</title>
23 <url>http://www.cbc.ca/rss/image/cbc_144.gif</url>	19 <url>http://www.cbc.ca/rss/image/cbc_144.gif</url>
24 <link>http://www.cbc.ca/news/?cmp=rss</link>	20 <link>http://www.cbc.ca/news/?cmp=rss</link>

NOTE: This datasource sanitization comparison window will only appear for datasources ingested as of version 1.7.

Viewing Datasource Usage

The *Usage* area on the datasource details page shows a list of the events in which the datasource is used in a rule. Click the Launch icon  to jump to the event.

Where	Name	
Event	Monkey	
Event	Monkey	
Event	Penguin	
Event	Penguin	
Event	Shark	
Event	Butterfly	
Event	Rays	
Event	Rays	

Note: Datasources being used in layouts are not listed.

CREATING SIGNAGE

Signage Terminology

- **Organization:** Organizations contain Projects and have liveboards assigned to them.
- **Projects:** Projects contain assets, layouts, playlists, schedules and event groups and are the access point to Creative Studio functionality.
- **Assets:** Assets are images, videos, applications.
- **Containers:** Containers are layouts, playlists, schedules and event groups.
- **Layouts:** Layouts are created in Creative Studio, and are combinations of assets, text, or other elements.
- **Creative Studio:** Creative Studio is a web-based application (accessible through Technical Operations Portal) for creating content-rich digital signage layouts.

Creating Signage Process

Here are the basic steps to creating signage in Technical Operations Portal/Creative Studio:

1. Create Projects within the Organization.
2. Add Assets to the Project.
3. Create a layout and launch Creative Studio.
4. Design the layout, adding assets and connecting data sources to assets if desired.

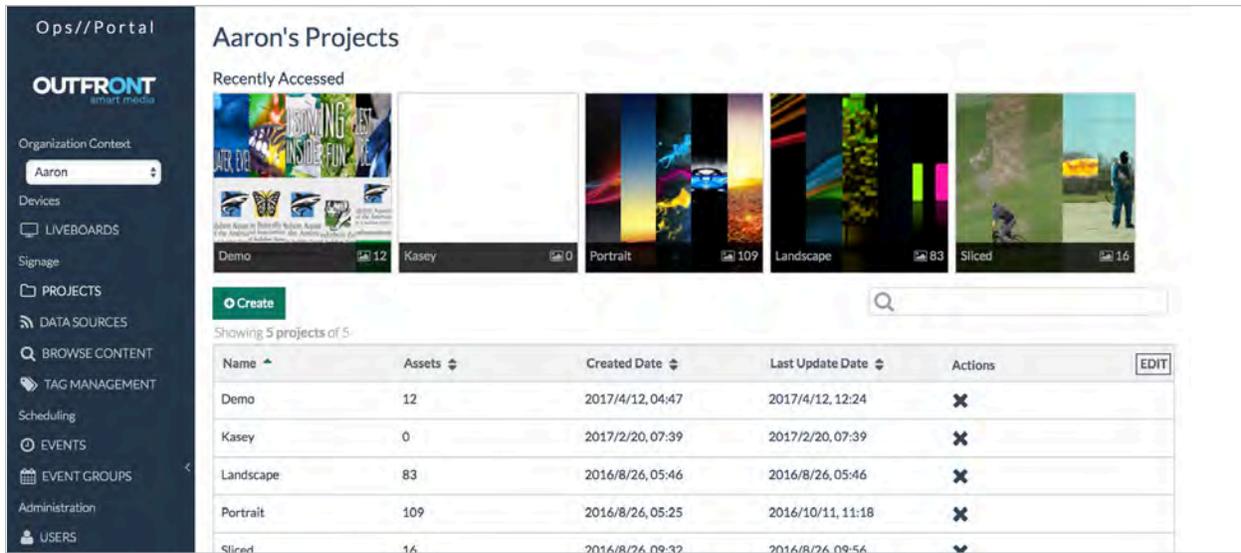
After uploading assets and designing layouts, read the chapter, **Scheduling** to learn how to schedule assets and layouts.

Projects

Viewing Projects Overview Page

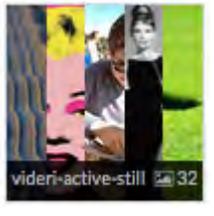
To see projects:

1. Pull down the **Organization Context** menu and select an Organization.
2. Click **PROJECTS**. All projects for that organization are shown.



Project Icon Information

A project icon is shown for recently accessed projects. The project icon shows the Project name and how many assets are contained within.



Filtering Project List

To search for projects by name (filter project list):

- Click inside the magnifying glass field, and start typing. The list of projects will filter as you type.

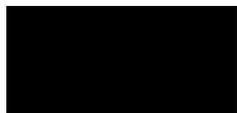
Creating a Project

To create a project:

1. On the dashboard, under **Organization Context**, select an Organization from the drop-down menu.
2. On the dashboard, click **PROJECTS**.
3. Click **Create**.

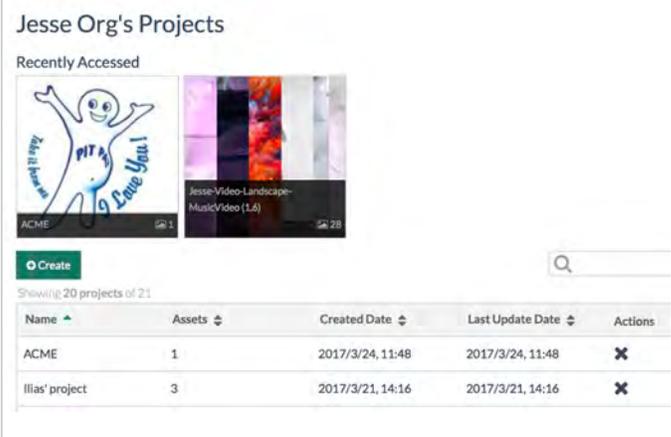
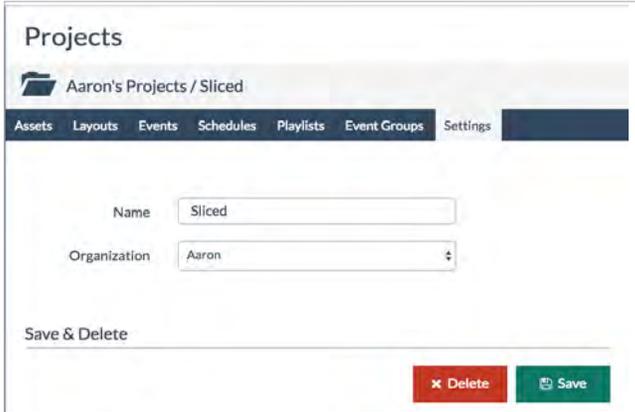


4. Name the project, and click **OK**.



Deleting a Project

You can delete a project from the overview page or the details page.

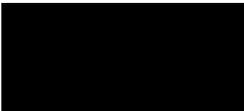
Deleting a Project	Information															
<p>Deleting a Project from the Overview Page</p>	<ol style="list-style-type: none"> 1. Click PROJECTS. 2. Find the row of the project to delete, and click the X icon (under Actions heading).  <p>The screenshot shows a project overview for 'Jesse Org's Projects'. It includes a 'Recently Accessed' section with two thumbnails. Below is a 'Create' button and a search bar. A table displays 20 projects of 21. The table has columns: Name, Assets, Created Date, Last Update Date, and Actions. The 'ACME' project is highlighted, and an 'X' icon is visible in the Actions column.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Assets</th> <th>Created Date</th> <th>Last Update Date</th> <th>Actions</th> </tr> </thead> <tbody> <tr> <td>ACME</td> <td>1</td> <td>2017/3/24, 11:48</td> <td>2017/3/24, 11:48</td> <td>X</td> </tr> <tr> <td>Ilias' project</td> <td>3</td> <td>2017/3/21, 14:16</td> <td>2017/3/21, 14:16</td> <td>X</td> </tr> </tbody> </table>	Name	Assets	Created Date	Last Update Date	Actions	ACME	1	2017/3/24, 11:48	2017/3/24, 11:48	X	Ilias' project	3	2017/3/21, 14:16	2017/3/21, 14:16	X
Name	Assets	Created Date	Last Update Date	Actions												
ACME	1	2017/3/24, 11:48	2017/3/24, 11:48	X												
Ilias' project	3	2017/3/21, 14:16	2017/3/21, 14:16	X												
<p>Deleting a Project from the Details Page</p>	<ol style="list-style-type: none"> 1. On the dashboard, click PROJECTS > [PROJECT] > Settings tab.  <p>The screenshot shows the 'Projects' settings page for 'Aaron's Projects / Sliced'. It has tabs for Assets, Layouts, Events, Schedules, Playlists, Event Groups, and Settings. The 'Settings' tab is active. There are input fields for 'Name' (Sliced) and 'Organization' (Aaron). At the bottom, there is a 'Save & Delete' section with a red 'Delete' button and a green 'Save' button.</p> <ol style="list-style-type: none"> 2. Click Delete, then click OK from the confirmation dialog. 															

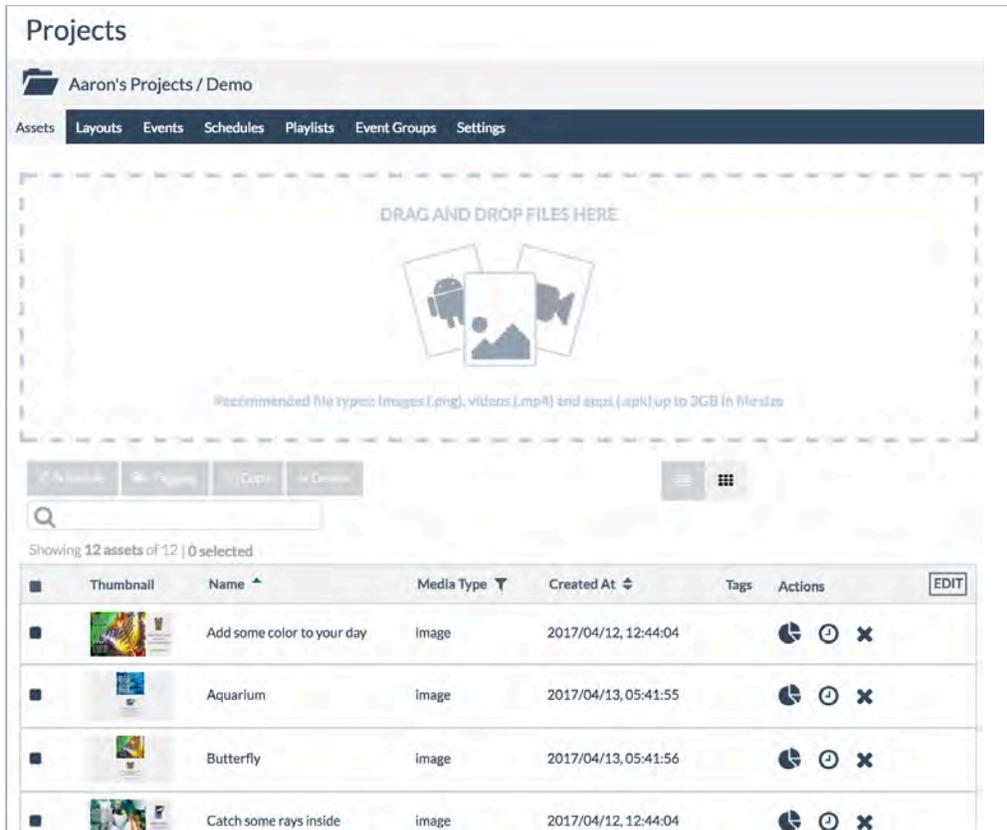
Assets

Viewing Assets Overview Page

To view all assets in a project:

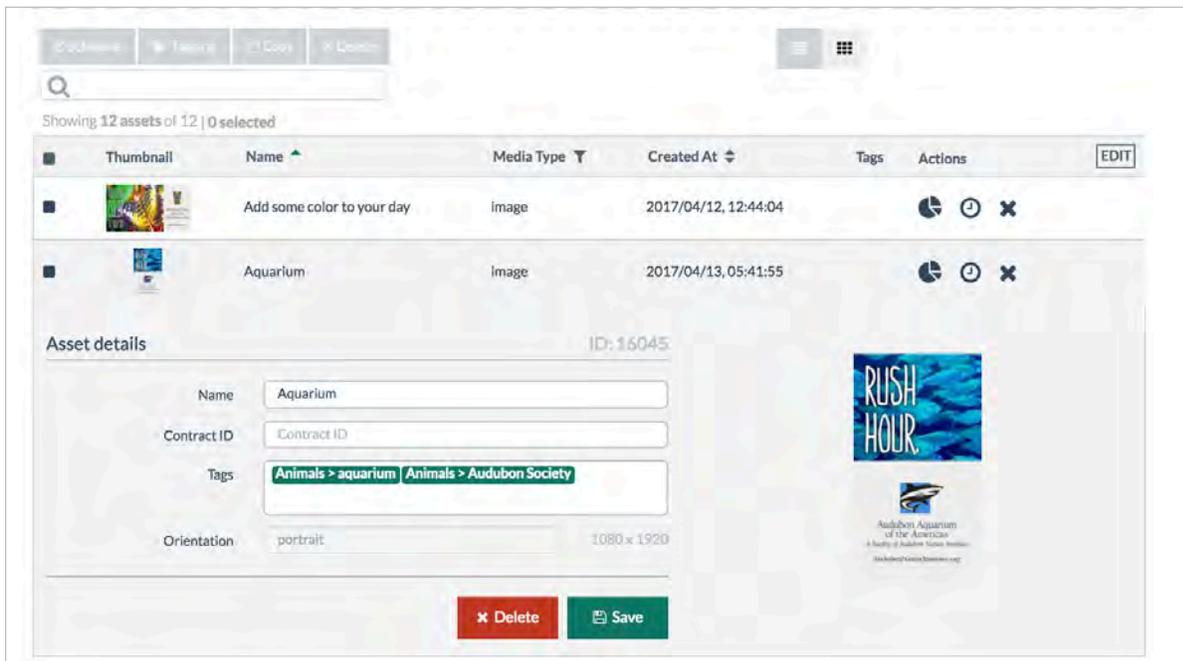
- Click **PROJECTS > [PROJECT] > Assets** tab.
- To filter assets by name (or tags), start typing in the magnifying glass field; list will filter as you type.





Viewing Asset Details

- To view Asset details, click on the row of the desired Asset. The Asset Details page appears.
- Click on any other tab to close the Asset details page.

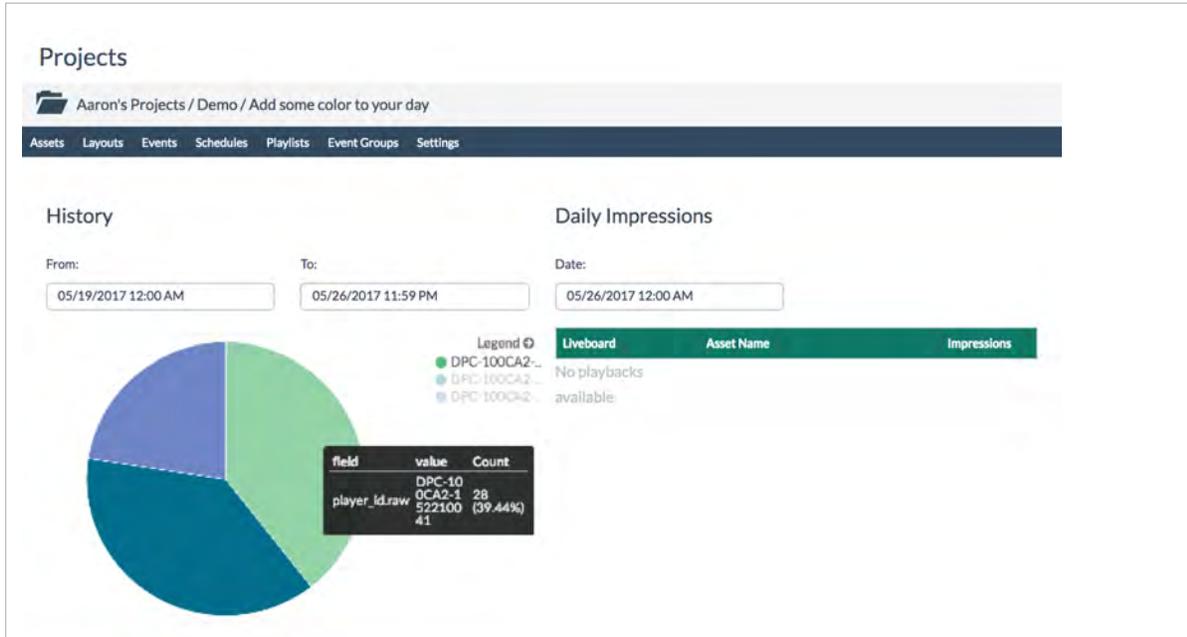


Viewing Asset Impressions

Asset impressions in the Tech Ops Portal are the number of plays of a particular asset.

To view asset impressions:

- Click **PROJECTS > [PROJECT] > ASSETS** tab > on asset row, click the Impressions icon  .



Uploading Assets

Approved Asset Formats

The following asset formats are allowed in the system.

NOTE: If you attempt to upload an unapproved media format, you will see an error.

Table: Approved Asset Formats

Media Type	Approved Formats
Still Images	PNG 24 bit, RGB colorspace Compression enabled
Video	MP4 container format 1080p H.264 Main Profile @30fps, no B-frame, constant bitrate, 10-30 Mbps
Audio	Multi-channel PCM – 48 kHz, 16-bit, stereo (Little Endian) (5.1 stereo if available) AAC 22khz stereo @ 112kbps. NOTE: We do not support pure audio files, only audio within videos.
Applications	Android Application Package (APK)

Table: Transcoded Video Containers and Codecs

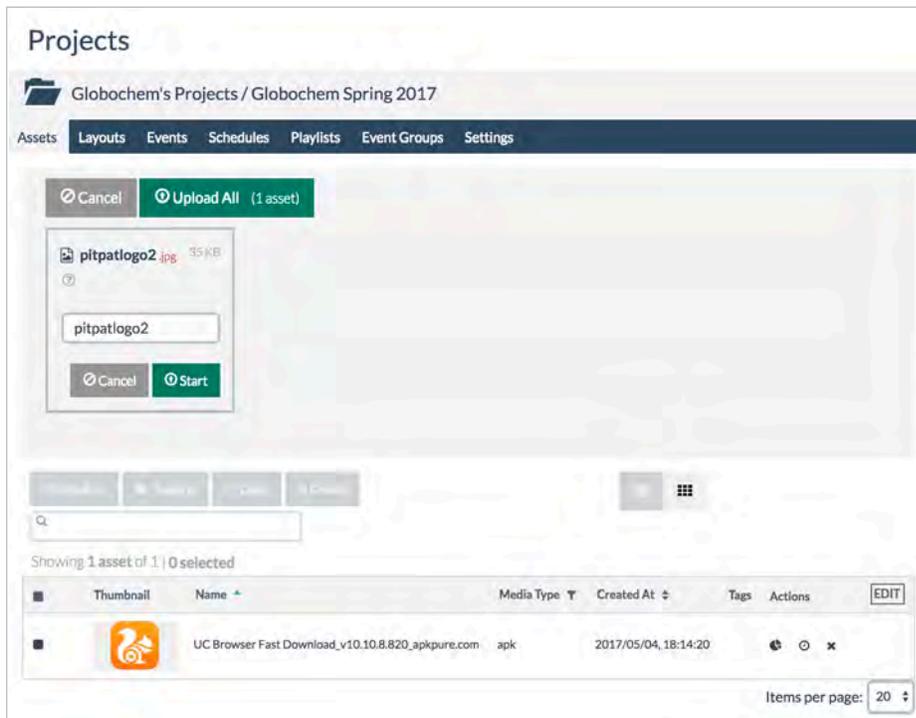
NOTE: The following additional formats are supported by the ingestion engine but not recommended. The system will transcode them to the recommended format. Use at your own risk.



Container	Codec	Description
3g2	mpeg	QuickTime/MPEG-4/Motion JPEG 2000 format
3gp	mpeg	QuickTime/MPEG-4/Motion JPEG 2000 format
3gpp	h263	Files with the .3gpp extension, differs from .3gp and .3g2
avi	dvsd	AVI format
f4v	h264	Video for Adobe Flash Player
flv	h264	
h264	h264	raw H.264 video format
m4v	h264	raw MPEG-4 video format
mkv	h264	Matroska file format
mov	mpeg	QuickTime/MPEG-4/Motion JPEG 2000 format
mp4	mpeg	QuickTime/MPEG-4/Motion JPEG 2000 format
mpeg	mpeg	MPEG-1 System format
mts	h264	Advanced Video Coding High Definition - Sony/Panasonic HD camcorder format
ogv	theo	Files with the .ogv extension, differ from .ogg
webm	vp8	

To upload single or multiple asset(s):

1. On the dashboard, click **PROJECTS > [PROJECT] > ASSETS** tab.
2. Drag and drop an asset file(s) onto the Assets tab. The “Drop files here” rectangle appears on the page.

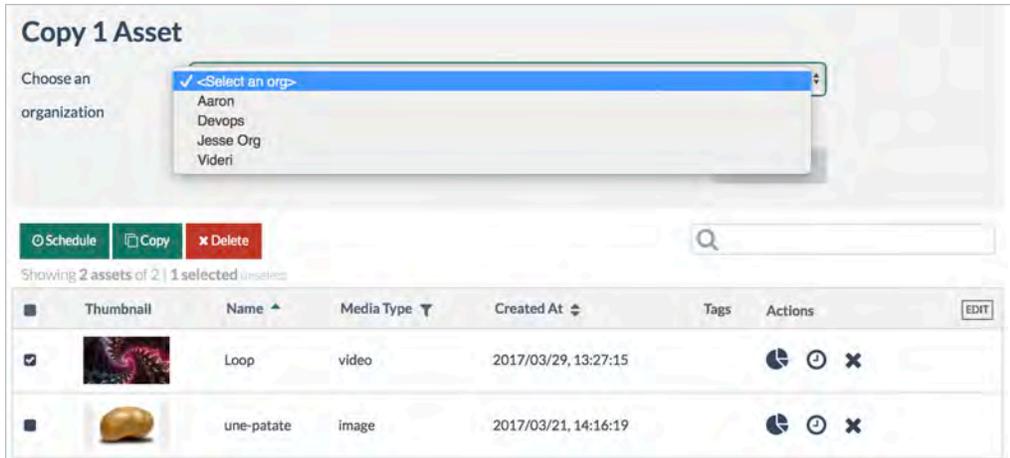


3. Change the asset name(s) if desired by typing them in the field(s).
4. Click **Start** or **Upload All**. The asset appears on the asset list for the project.
5. Click any of the **Project** tabs to close the Asset details page.



Copying Assets Between Projects

1. Click **PROJECTS > [PROJECT] > ASSETS** tab.
2. Find the row of the asset(s) to copy and check the checkbox(es).
3. Click **Copy**.

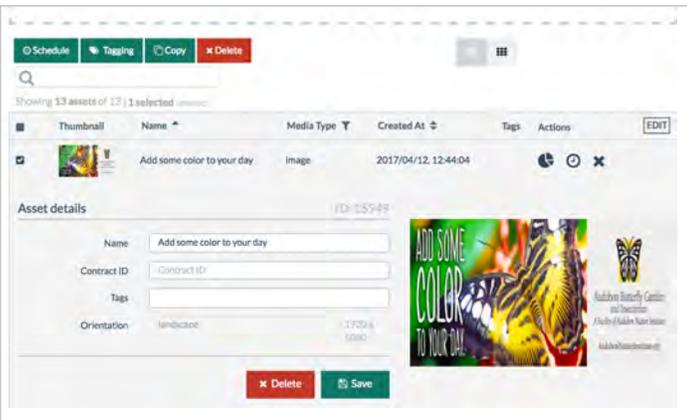


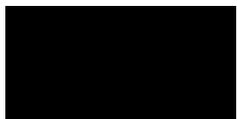
4. **Choose an Organization** from the dropdown menu and choose a project from the **Choose a Project** drop-down menu.
5. Click **Copy to Project**. The assets are copied to the other project.

Deleting an Asset

You can delete an asset from the overview page or the details page.

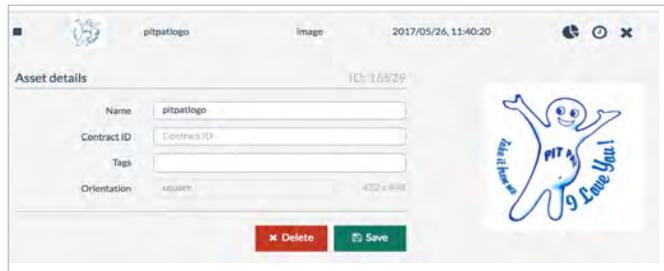
NOTE: Deleting an Asset from these areas means deleting it from the Cloud, so it cannot be downloaded by liveboards.

Deleting Assets	Information
<p>Deleting an Asset from the Overview Page</p>	<ol style="list-style-type: none"> 1. PROJECTS > [PROJECT] > ASSETS tab. 2. Find the row of the asset to delete, and click the X icon (under <i>Actions</i> heading). 3. Click OK from the confirmation dialog. 



Deleting an Asset from the Asset Details

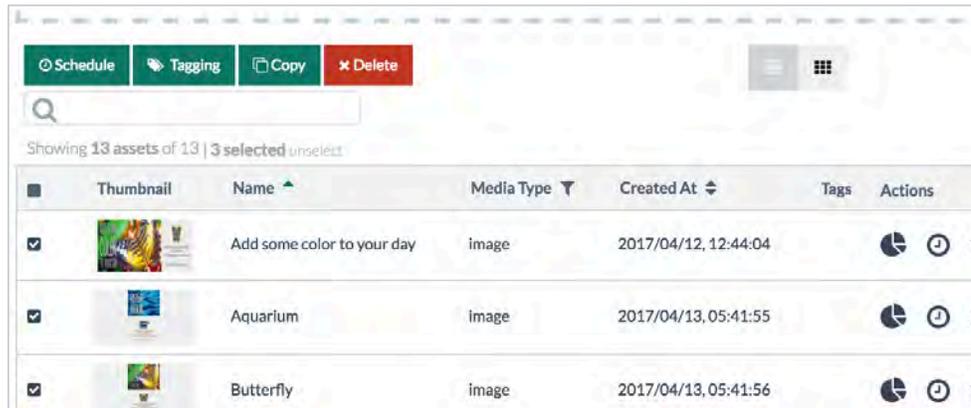
1. On the dashboard, click **PROJECTS > [PROJECT] > Settings** tab.



2. Click **Delete**, then click **OK** from the confirmation dialog.

Deleting Multiple Assets

1. Select the checkboxes for asset(s) to delete, then click **Delete**.



2. Click **OK** from the confirmation dialog.

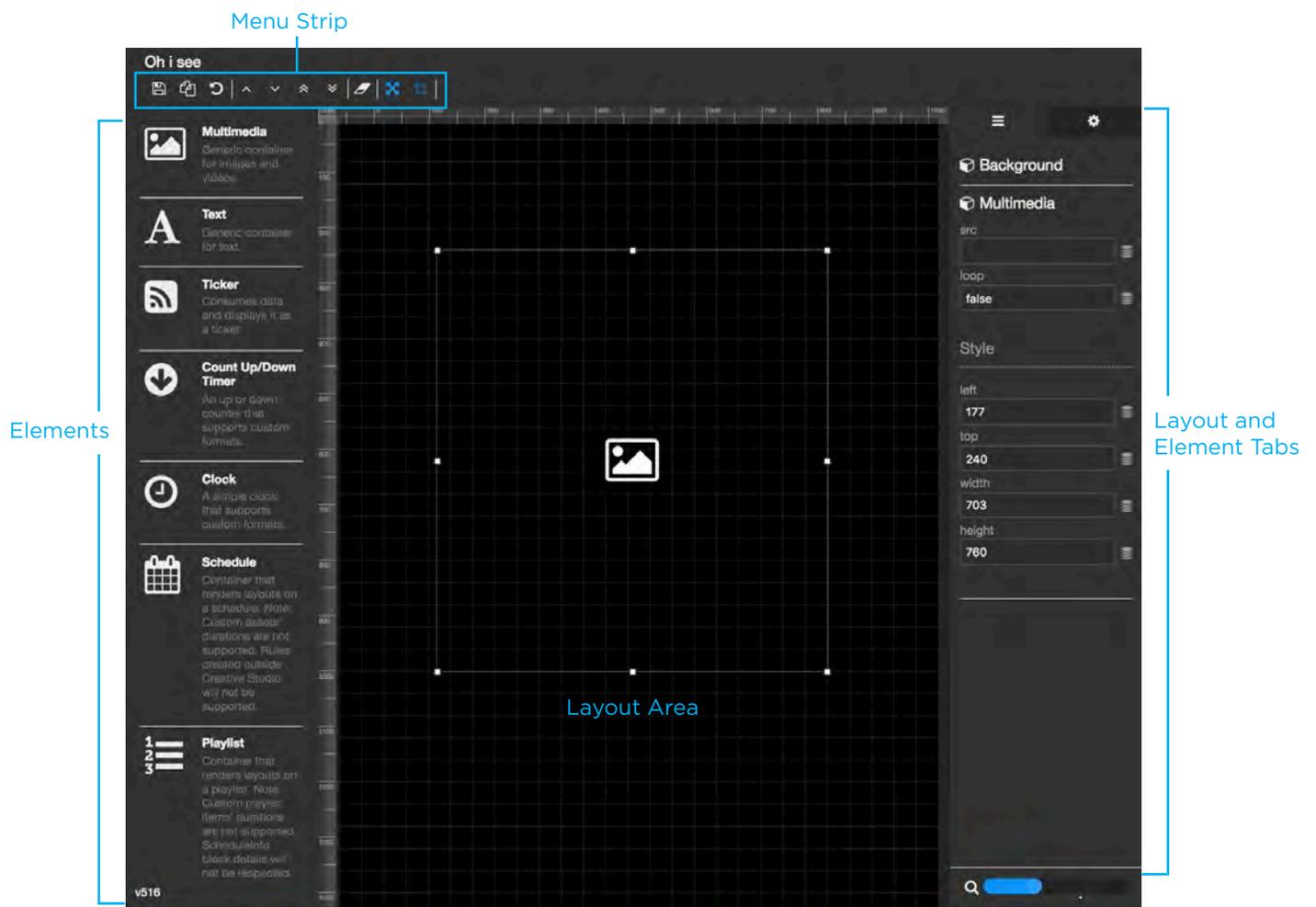
Layouts and Creative Studio

The Creative Studio is a web-based application for creating content-rich layouts for digital signage. It is launched from a layout within the Tech Ops Portal.

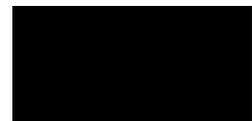
Launching Creative Studio

1. Click **PROJECTS > [PROJECT] > LAYOUTS** tab.
2. Click on an existing layout, or click **Create** button.
3. Enter layout name, and click **OK**. A layout icon appears.
4. Click the middle of the Layout icon. Creative Studio launches on a new browser tab.

Creative Studio Components

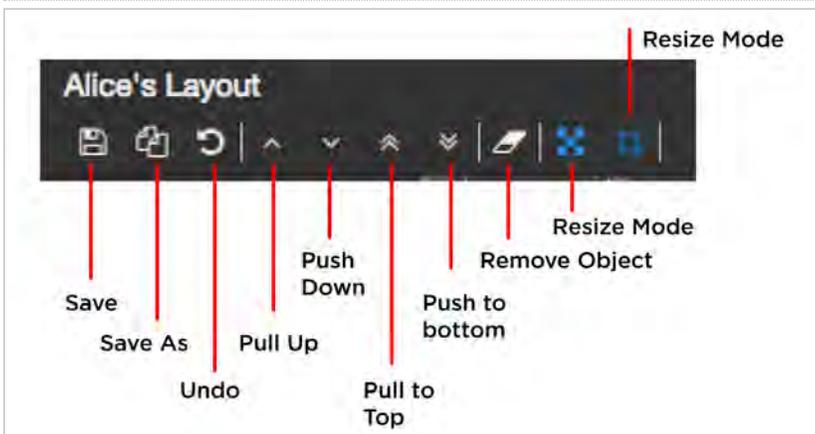


- There are rulers (in pixels) around the layout area
- When you are moving a item around the layout area, there is a soft "snap" to the grid



Left Panel (elements)	Layout Area (middle)	Right Panel (layers and element tabs)
<p>This panel shows all the elements that can be placed on a layout.</p> <ul style="list-style-type: none"> – Multimedia: images and videos – Text: styleable text blocks – Ticker: Scrolling text – Count Up/Down Timer – Clock: digital clock object – Schedule: embeds schedule container into layout – Playlist: embeds playlist container into layout 	<p>This section shows the contents of the layout.</p>	<p>The right panel shows Layers and Layout information tabs.</p> <p>Layers tab shows:</p> <ul style="list-style-type: none"> – The layered order of the elements on the layout (the first element in the list is the bottommost element) – The settings for each element on the layout <p>Layout information tab shows:</p> <ul style="list-style-type: none"> – Name, dimensions and other layout settings

Creative Studio Menu



Using the Zoom Slider

The Zoom Slider zooms the view in and out of the layout board.

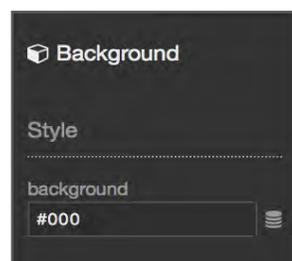
- Drag the slider right to zoom in, and left to zoom out.
- The white dot represents 100% view on the layout.

Defining Background Color

NOTE: Even if you intend the background to ultimately be black, changing the background to a slightly different color helps you to see the layout edges while designing.

To define a background color for the layout:

1. On the right panel, click the **Layers** tab.
2. Click the **Background** field.
3. Enter a hexadecimal value for the background color.
4. Click the **Save** icon in menu bar.

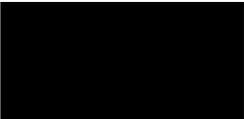


Defining Layout Size

The layout size should match the physical size of the liveboard the layout will be displayed on. If the physical panel differs from the size of the layout, the system will align the layout to the top left corner and fill any extra space with black.

Layout Settings

Field	Description
Name	Layout Name
Width	Layout Width
Height	Layout Height
Show Rulers	Option to show rulers on layout area
Rulers color	Color picker to choose rulers color
(Rulers) Opacity	Slider to define rulers opacity
Show grid	Checkbox to show grid on layout area
Snaps to grid	Checkbox to turn on option that objects will "snap" to grid when moving them
Snap Tolerance	How close the object has to be to gridlines to "snap" to it
Width	Grid square width (in pixels)
Height	Grid square height (in pixels)
Grid Color	Color of gridlines
Grid Opacity	Opacity of grid

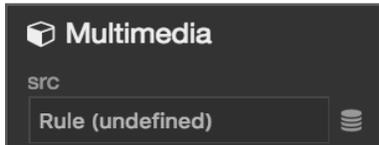


Adding Elements to the Layout

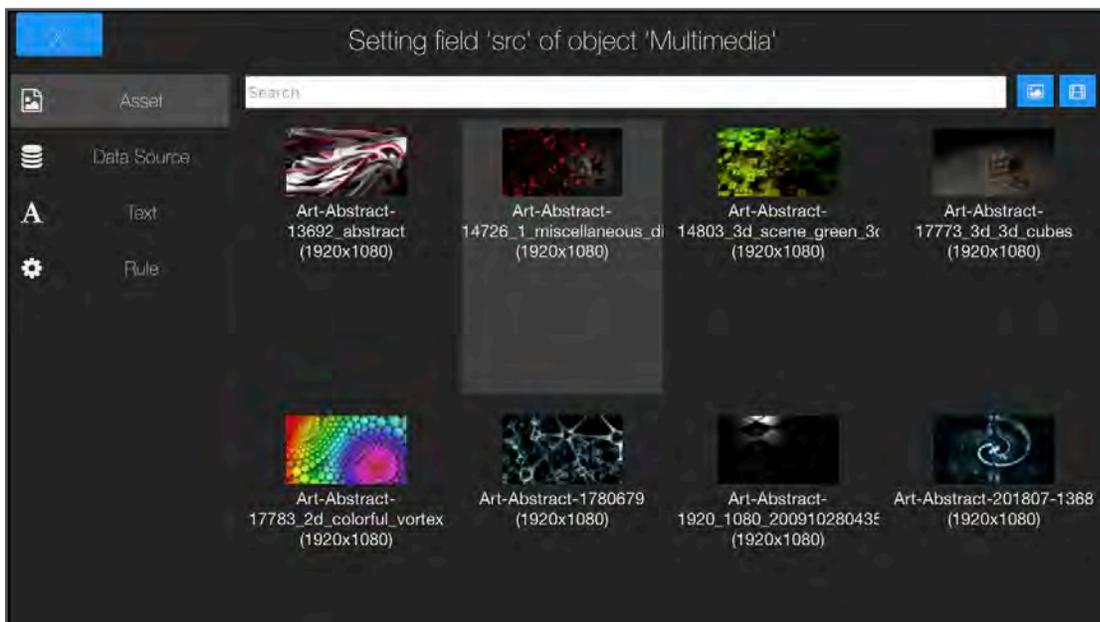
Adding a Multimedia Element (image or video)

To add a multimedia element:

1. In the left panel, click on the Multimedia area, and drag a block into the layout area. A generic block appears.
2. In the right panel, under the **Multimedia** heading, click the **DATASOURCE** icon (the thing that looks like a cake).



The Source dialog box opens.



3. Select **Asset** from the choices on the left side. The assets available in the project are shown. To narrow your options:
 - type in the search field
 - click the image button  to show only images
 - click the video button  to show only videos
4. Click the asset to place on the layout. The asset is placed on the layout and is selected.

NOTE: When a video element is placed, player controls are shown in Creative Studio, but will not be shown when the video is played on the liveboard.



Multimedia Element Settings	
Field	Description
Src	Asset content
Loop	Whether video content will play continuously
Top/Left	Distance in pixels from the top and left borders of the layout
Width	Multimedia element width in pixels
Height	Multimedia element height in pixels

Multimedia

src

Rule (undefined)

loop

false

Style

left

0

top

0

width

1080

height

1920

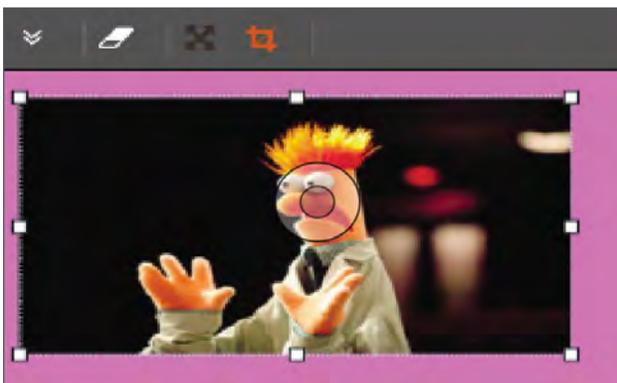
Resizing an Image

You can resize an image manually, or by exact measurements.

Resizing an Image Manually

To resize an image or video:

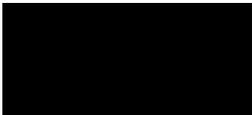
1. Ensure the layout is in **Resize Mode** (click Resize icon .
2. Click on an image/video to select it.



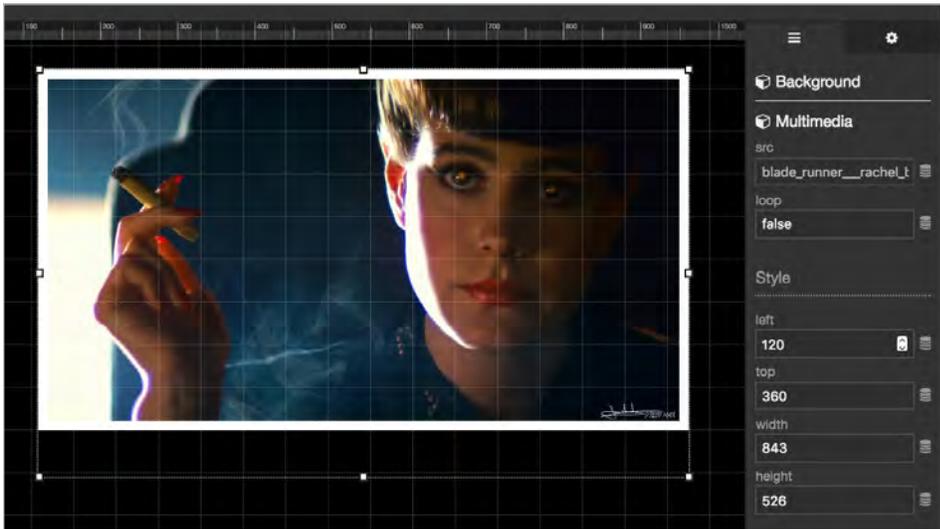
3. Pull the handles on top, bottom, left and right to resize the image/video.
4. Click **Save** icon.

Resizing Using Exact Measurements

If you want to be sure to resize the image/video exactly, use the width/height fields.



1. With the image/video selected in **Resize** mode, click the Layers tab.
2. Click the **Multimedia** layer.



3. Calculate the final dimensions of the resized image/video. For example, to make it bigger, multiply both width and height by two, and enter those dimensions in the width/height fields.
4. Click the **Save** icon.

Cropping an Image or Video

You can crop an image or video manually, or by exact measurements.

Cropping an Image or Video Manually

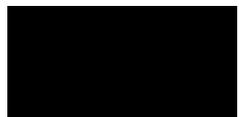
To crop an image or video:

1. Switch to **Crop Mode** (click Crop icon ).
2. Click on an image/video to select it.



3. Pull the handles on top, bottom, left and right to crop the image/video. You'll still see the rest of the image, but won't after you leave Crop Mode.
4. Click **Save** icon.
5. Click the **Resize Mode** icon  to switch back to regular mode.

Cropping Using Exact Measurements



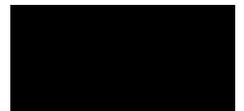
In Crop Mode, you can also crop by exact numbers.

1. With the image/video selected in **Crop** mode, click the Layers tab.
2. Click the Multimedia section, then scroll down to the **Crop** section.



3. Use the up/down arrows for each side of the image to crop it (positive numbers crop into the image).
4. Click the **Save** icon.

NOTE: After cropping using either method, the border/handles on the image stay at the original uncropped size, and can still be used to resize the image.



Adding a Text Block Element

To add a text block:

1. In the left panel, click the Text element and drag it into the layout area. A generic text block appears.
2. In the right panel, click on the heading for the **Text** layer.
3. Replace the generic text with the desired text.
4. Use the other options in the Text settings panel to style the text.

Field	Description
Text	Text block content
Font Size	Font size (default is 20 pixels)
Letter spacing	Space between letters (kerning)s
Line height	Space between lines of text (leading)
Text Align	Text alignment within block (left, center, right)
Font Family	Font
Color	Hexadecimal value for text color
Background	Hexadecimal value for text background color (transparent by default)
Top/Left	Distance in pixels from the top and left borders of the layout

Text

text
 Are you a replicant Mr. De

Style

font size
 60

letter spacing
 0

line height
 1.2

text align
 left

font family
 Roboto-Regular

color
 #ffffff

background
 transparent

left
 538

top
 630



Adding a Count Up/Down Timer

1. In the left panel, click on the **Count Up/Down Timer** element and drag it into the layout area. A generic timer block appears.
2. In the right panel, use the options to configure the timer.

Count Up/Down Timer Settings

Field	Description
count both ways	Defines whether a countdown stops at zero (false) or counts the reverse way after reaching zero (true)
format	Default format is H/m/s. Can add/change text in between. Other values are: <ul style="list-style-type: none"> — %Y - year — %M - month — %W - week — %d - day — %h - hour — %m - minute — %s - second
target date	The target date/time for the counter. <ul style="list-style-type: none"> — A target date in the future will have the counter count down to that date. — A target date in the past will count up from that time.
font size	Font size for countdown text
letter spacing	Space between letters (kerning)
line height	Space between lines of text (leading)
font family	Countdown text font
color	Hexadecimal value for countdown text color
background	Hexadecimal value for countdown text background color (transparent by default)
top/left	Distance in pixels from the top and left borders of the layout

EXAMPLE: To set a countdown for today:

1. In **Target Date**, enter today's date in the MM/DD/YYYY format.
2. Then use the arrow key to move the cursor right to expose the time settings.
3. Click on the hour, and either type or use the up/down arrow to change.
4. Repeat this for minutes and for AM/PM.

OR

You can click the DOWN arrow to expose the Calendar and pick a date.



Adding a Clock Element

1. In the left panel, click on the **Clock** element and drag it into the layout area. A generic clock element appears.
2. In the right panel, use the options to format the clock.

Clock Element Settings	
Field	Description
format	Default format is hh:mm:ss. Can add/change text in between. Other values are: <ul style="list-style-type: none"> – d: day – YYYY: year – YY: year – MM: zero prefixed month – WW: zero prefixed week – M: month – W: week – h: hour – hh: zero prefixed hour – H: 24 hour – HH: zero prefixed 24 hour – m: minute – mm: zero prefixed minute – s: second – ss: zero prefixed second – DD: day of month – dd: day of week in words (english only) – Z: time offset from Zulu/UTC – ZZ: time offset from Zulu/UTC with no colon
font size	Font size for clock text
letter spacing	Space between letters (kerning)
line height	Space between lines of text (leading)
font family	Clock text font
color	Hexadecimal value for clock text color
background	Hexadecimal value for clock text background color (transparent by default)
top/left	Distance in pixels from the top and left borders of the layout

Clock

format

Style

font size

letter spacing

line height

font family

color

background

left

top



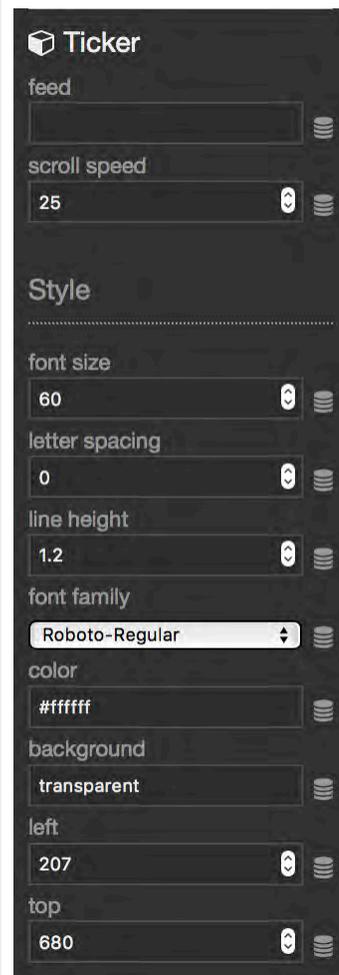
Adding a Ticker Element

1. In the left panel, click on the **Ticker** block and drag it into the layout area. A generic ticker element appears.
2. In the right panel, use the options to configure the ticker.

A ticker element shows scrolling text in a block. The source can be user-entered text, or information from a data source.

Ticker Element Settings

Field	Description
feed	Source of ticker content (data source, text, rule)
scroll speed	Speed of ticker scrolling
font size	Font size (default is 20 pixels)
letter spacing	Space between letters (kerning)
line height	Space between lines of text (leading)
font family	Ticker text font
color	Hexadecimal value for ticker text color
background	Hexadecimal value for ticker text background color (transparent by default)
top/left	Distance in pixels from the top and left borders of the layout

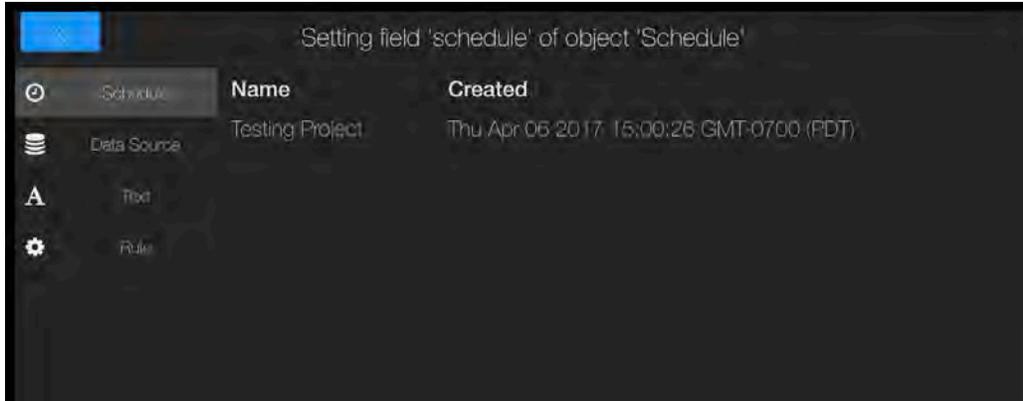


Adding a Schedule Container Element

NOTE: When you embed a schedule container in a layout, custom duration values will be ignored, and the liveboard's dwell time will be used. Additionally, any event-based rules or schedule info blocks will be ignored. Layout engine rules must be used to apply rules-based functionality in layouts.

To add a schedule container element:

1. In the left panel, click on the **Schedule** Element and drag it into the layout area. A black block appears.
2. In the right panel, click on the heading for the SCHEDULE layer (to open it), then click on the DATASOURCE icon (the thing that looks like a cake).
3. The dialog box opens.



4. Click **Schedule** from the choices on the left side. The schedules available in the current project are shown.
5. Click the schedule to embed.
6. The schedule is placed and is selected.

Schedule Settings

Playlist settings are for schedule source, schedule object size and placement. You can place manually, or enter specific values here.

Field	Description
schedule	Source of the schedule object
top/left	Distance in pixels from the top and left borders of the layout
width	Width of playlist object in pixels
height	Height of playlist object in pixels

Schedule

schedule

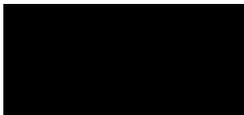
Style

left

top

width

height



Adding a Playlist Element

NOTE: When you embed a playlist in a layout, custom duration values will be ignored, and the liveboard’s dwell time will be used. Additionally, any schedule info blocks will be ignored. Layout engine rules must be used to apply rules-based functionality in layouts.

To add an playlist element:

1. In the left panel, click on the **Playlist** Element and drag it into the layout area. A black block appears.
2. In the right panel, click on the heading for the PLAYLIST layer.
3. In the right panel, under the PLAYLIST heading, click on the DATASOURCE icon (the thing that looks like a cake).
4. The dialog box opens.



5. Click **Playlist** from the choices on the left side. The playlists available in the current project are shown.
6. Click the playlist to embed.
7. The playlist is placed and is selected.

Playlist Settings

Playlist settings are for playlist source, playlist object size and placement. You can place manually, or enter specific values here.

Field	Description
playlist	Source of the playlist object
top/left	Distance in pixels from the top and left borders of the layout
width	Width of playlist object in pixels
height	Height of playlist object in pixels

Playlist

playlist

Style

left

212 ⬅️ ➡️

top

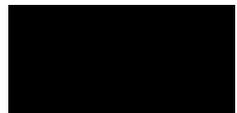
715 ⬅️ ➡️

width

300 ⬅️ ➡️

height

300 ⬅️ ➡️



Arranging Elements in Layers

You can move elements forward and backward in layers on the layout.

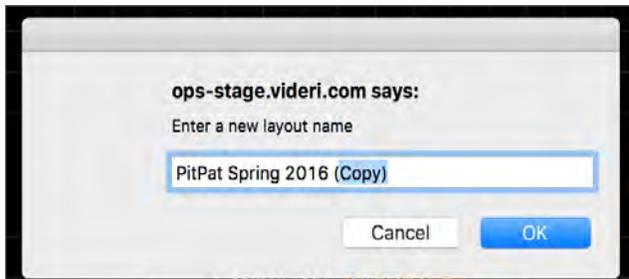
- To move an element forward: click 
- To move an element backward: click 
- To move an element to the front; click 
- To move an element to the back: click 

NOTE: When viewing layers in the right panel, the layer at the top of the list is the one farthest back (Background will always be at the top, and cannot be moved).

Saving a Layout As Another Name (Save As)

To save a layout as another name (Save As):

1. Click the **Save As** icon 



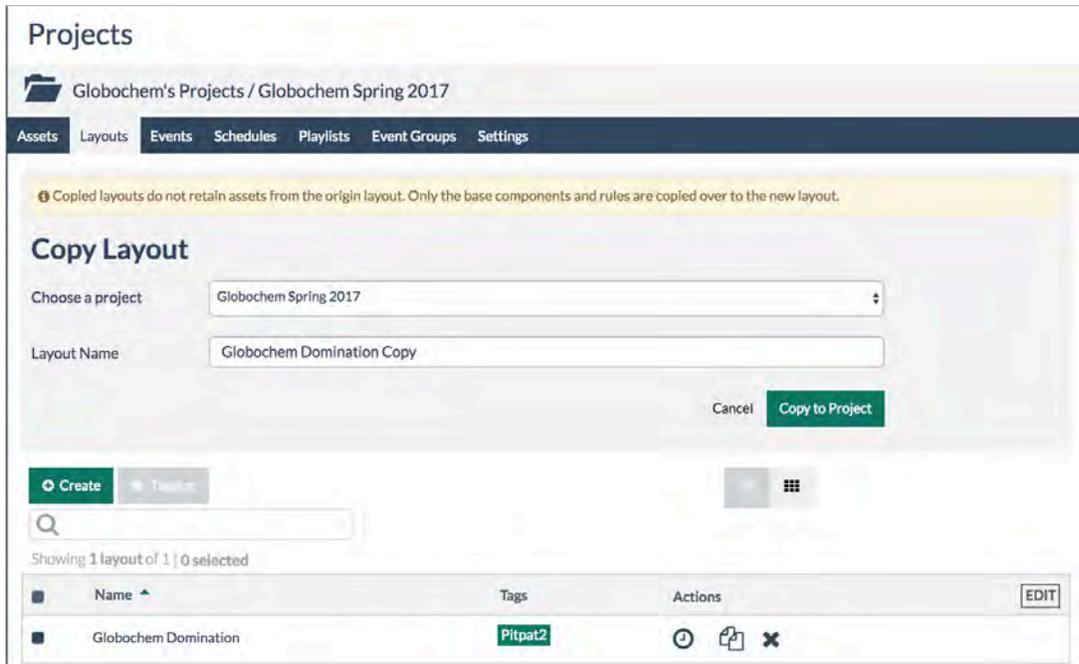
2. Name the alternate layout, and click **OK**.

NOTE: The original layout stays open. The new layout you named is located in the same project folder as the original.

Copying Layouts Between Projects

1. Click **PROJECTS > [PROJECT] > Layouts** tab.
2. Find the row of the layout to copy, and click the copy icon .





3. Choose a project from the **Choose a Project** drop-down menu.
4. Enter a name for the copied Layout in the **Layout Name** field.
5. Click **Copy to Project**.

WARNING: Only the layout size, base components (text, ticker, etc) and rules will be copied to the new layout. Assets will NOT be copied with the layout.

Connecting Data Sources to Empower Layout Elements

Version 1.7 Migration Warning

All datasource references in layouts will need to be recreated after 1.7 deployment or they will not function. Any datasource references that were not recreated will be displayed as a URL on a layout.

The power in the Creative Studio is connecting layout elements to data sources. Most attributes of an element can be configured dynamically (height, width, position, color, font, etc) based on data source output.

Almost every setting for every element in the Creative Studio can be hooked up to a data source. Some examples of how this ability can be used:

- A menu board design with prices as text elements. The text elements can be connected to cells on a CSV file. So when prices are updated, you only need update the CSV file and prices will automatically update.
- A multimedia object attached to an RSS feed that can change based on temperature reported (an ad for hot chocolate when temperature dips below 40 degrees, an ad for iced tea when it goes above 80 degrees).
- A picture of a sun, that can grow larger as the temperature rises (temperature data tied to the height and width values of an image)
- A layout that will change based on an ESPN feed that reports the winner of a game
- An image connected to an FTP directory that will update whenever the contents of that FTP directory is updated

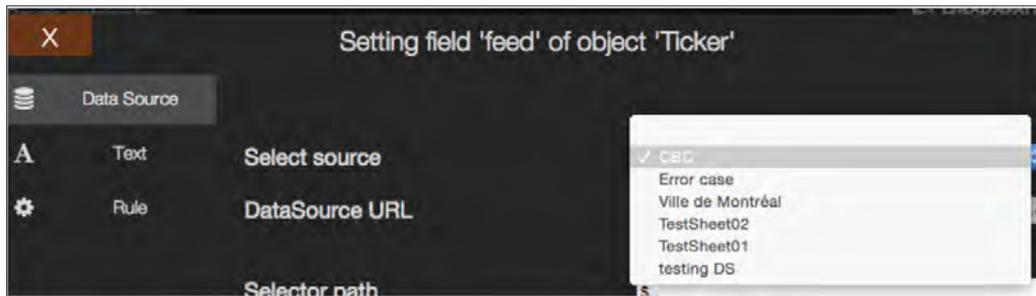
You can connect a datasource to a layout element to change the element as data from the datasource comes in. Or, you can have an element refer to information from a static data source, such as a CSV. There are several parts to set up this process:

- Creating the data source (see the chapter, **Data Sources**).
- Connecting the data source to the element in Creative Studio
- Configuring a rule using the rules engine in Creative Studio to describe the actions to be taken

Connecting a Data Source to an Element

Connecting a Ticker Element to an RSS Feed

1. Launch Creative Studio.
2. Ensure you have created an RSS Data Source.
3. In the left panel, click and drag a Ticker element, into the layout area. A generic block appears.
4. In the right panel, under the **Ticker** heading, click on the DATASOURCE icon (looks like a cake). The data source dialog box opens.
5. In the left panel, click **Data Source**.
6. From **Select Source**, pull down the menu and select the RSS Data Source you created earlier.

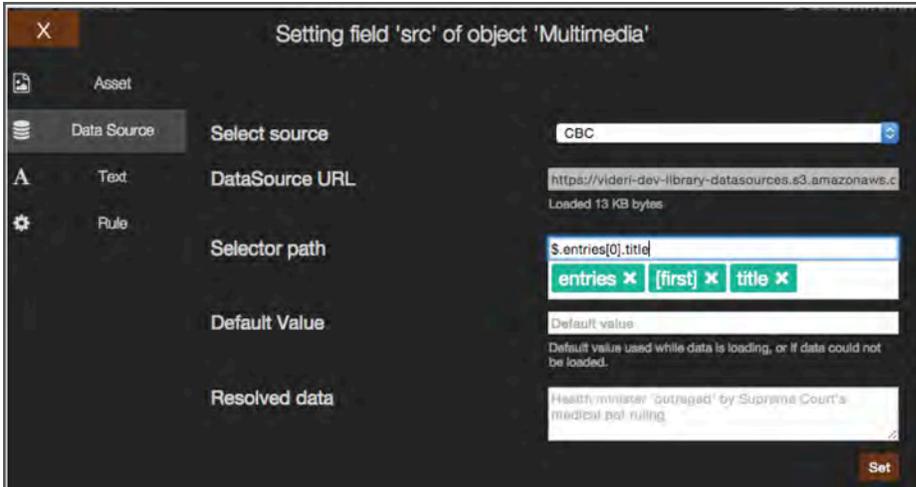


In **Selector path**, the items available in the RSS field are shown.



Click on the orange box items in the Selector Path field to add to the selector to be displayed. As you click on the orange boxes, selected item will turn green, and additional lower level orange items will be displayed. Keep clicking to drill down.

NOTE: Chances are you will start with “entries” as that selector then will open to show “title” and “summary” selectors.



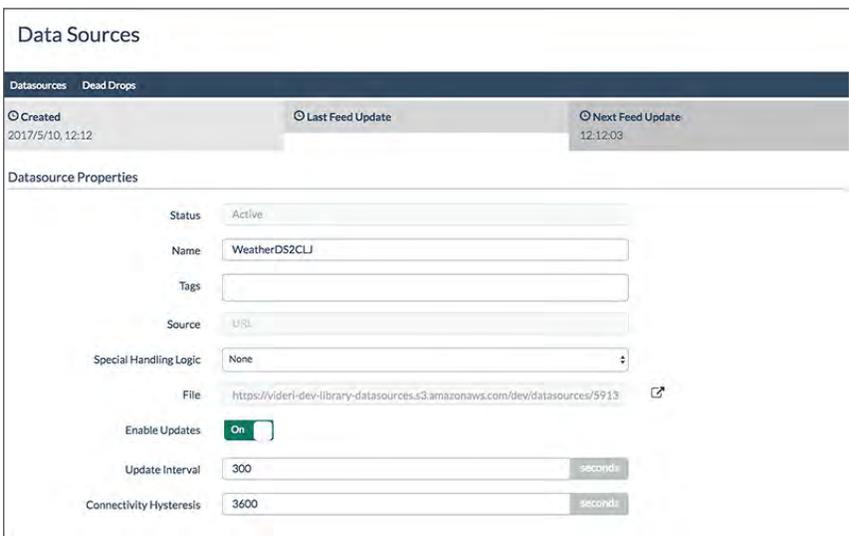
- The current contents of the selectors you've chosen will be shown in the **Resolved data** field at the bottom. When you find the data you are looking for, click **Set**, and click X to close the Data Source window. The ticker will show the first entry title, which will be updated according to the polling interval defined in the RSS Data Source.

NOTE: The **First 5** selector is not currently functional.

Setting Up Offline Mode Default Content

This section describes how to:

- Define the time period after which a liveboard is considered "offline"
 - Configure default content shown when liveboard is offline
- Create an RSS feed/data source with a CSV file that refers to content that you would like to display when a liveboard goes offline.
 - In this data source, In the **Connectivity hysteresis (in seconds)** field, enter the number of seconds for the liveboard to be offline before the default content will be shown. The default value is 3600 seconds (one hour).



NOTE: Make sure that the **Connectivity Hysteresis** value is HIGHER than the **Update Interval** value.

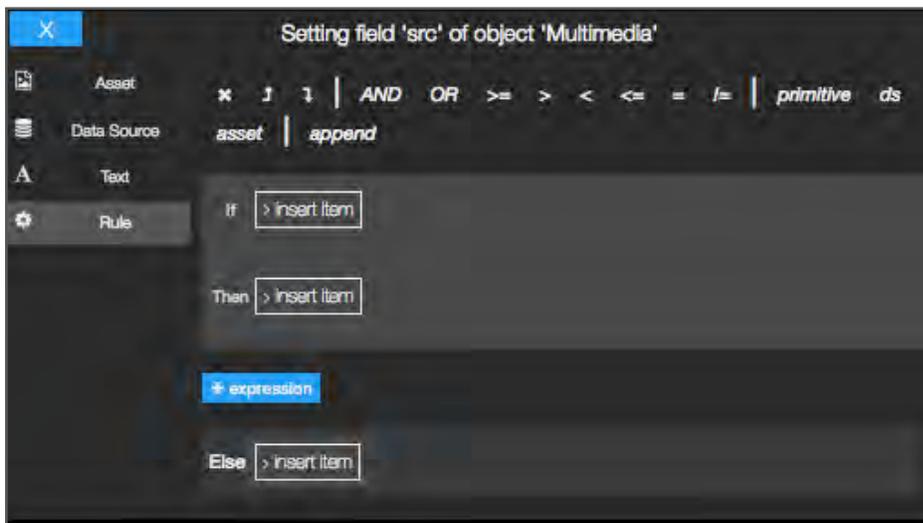
- Click **dashboard > PROJECTS > [Project] > Layouts**.



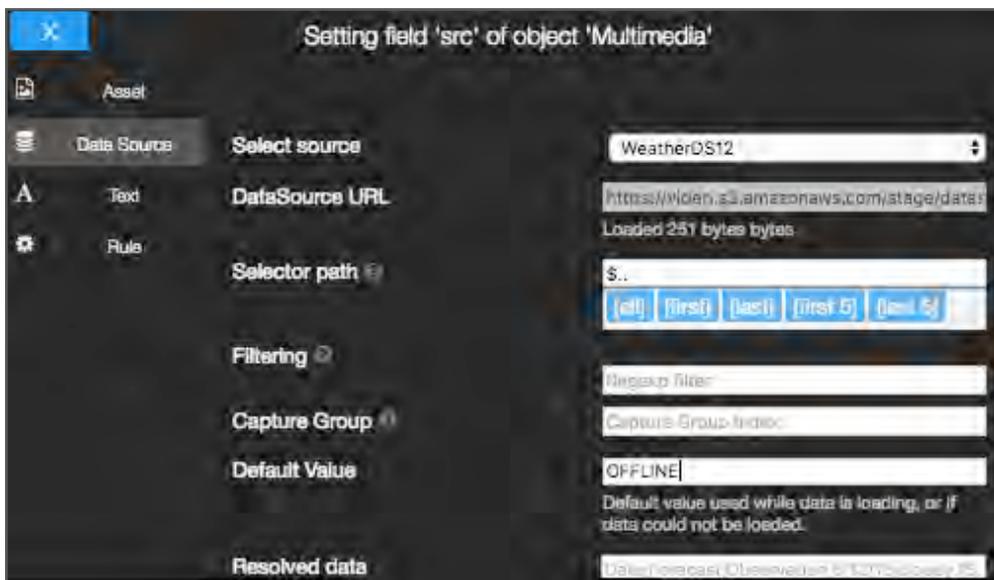
- Click **Create** to create a new layout.
- Drag a multimedia object onto the layout. In the right panel, under the **Multimedia** heading, click on the DATASOURCE icon (the cake icon).



- The data source dialog box opens.
- In the left panel, click **Rule**.



- Click **If > insert item** button and then click **ds** (data source) at the top. The Data Source dialog opens again.



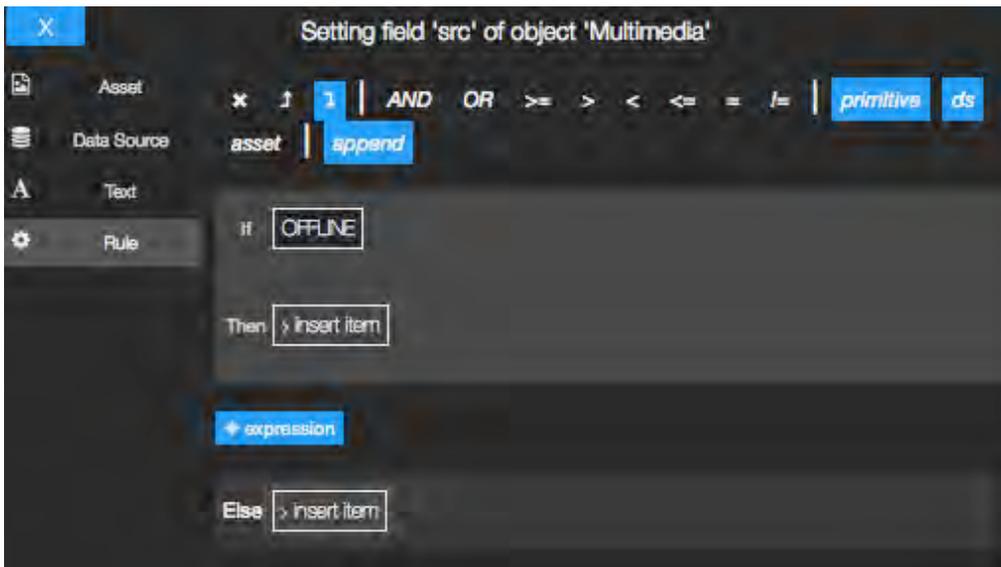
- Click **Select source** drop down menu and select the CSV to be used.
- In the **Selector path** field, click on or enter the desired selector (i.e.: $\$[0][0]$). The "Resolved data" field displays the expected value.



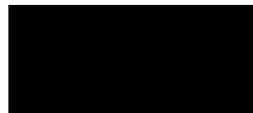
11. In the **Default Value** field, enter "**OFFLINE**" (though a default value of your choice is an option).
12. Click **SET**.
13. Click the **append** button and click the = operator button at the top. The [=] operator appears at the end of the "If" condition field.
14. Click **append**, then click **primitive**. The **Text** field appears.

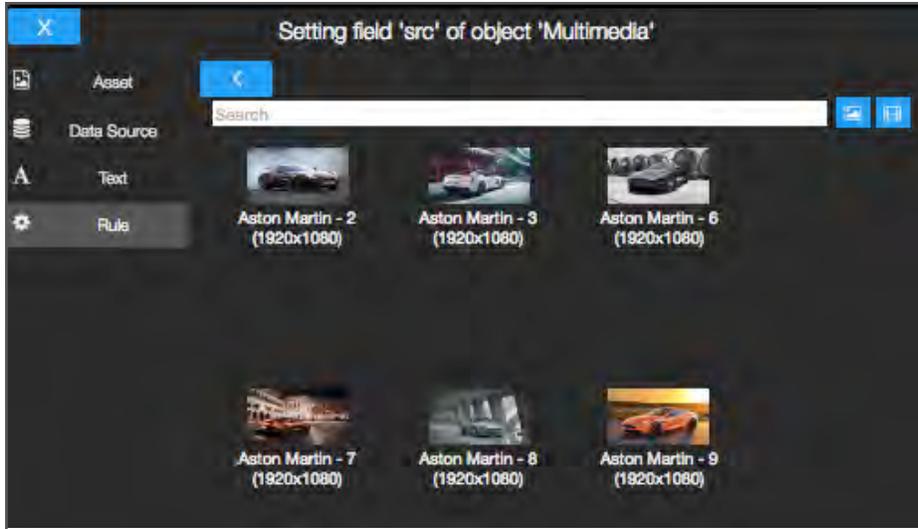


15. Enter "**OFFLINE**" in the **Text** field and click **Set**. "**OFFLINE**" now appears at the end of the "If" condition field.

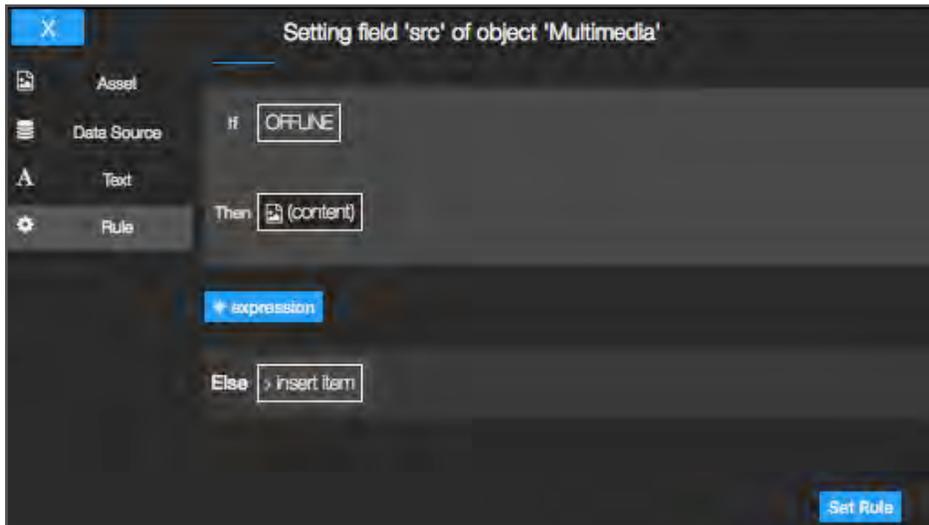


16. Click the **Then > insert** item, click **asset** at the top. The Multimedia selection page appears.



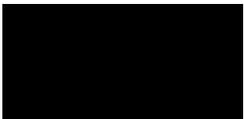


17. Click the desired image (and then the desired size). You are now back at the "Rule" section.



- 18. Click **Set Rule**.
- 19. Click Save icon (at the top left of Creative Studio).
- 20. Schedule the layout.

You can test this by setting the display to AP MODE. After about 30 seconds, you should see the asset you just configured to be shown.



CONFIGURING EMERGENCY MESSAGING



The Emergency Messaging System (EMS) is a feature commonly used for the liveboards in the public transit environments (train and subway stations) to communicate public service announcements such as Amber Alerts, a metro line going down, traffic interruptions, etc.

When EMS is running, its content will override any scheduled events on the assigned liveboards, including dominations and critical alerts.

There are two methods to provide data for EMS: Data Sources and Dead Drops. Each method has several **Special Handling Logic** options, hard-coded instructions in VLE for displaying EMS text, images and layouts specific to the liveboard location.

The Emergency Message System can support JPEG image files and text files (TXT).

Location	EMS File Types Supported		Content Source Type
	JPEG	TXT	
Urban Panel	X	X	Dead Drop
WMATA	X	X	Dead Drop
Penn Station	X		Dead Drop
Grand Central	*Hardcoded image	X	Datasource



Configuring EMS Process for WMATA/Penn Station/Urban Panels

Due to the overriding power of EMS scheduling, the exact order described in this guide must be followed, or potentially undesired behaviour may occur. The prescribed order is:

1. Assign tags to target liveboards.
2. Enable Ticker in Liveboard Display Shortcuts (turns on EMS).
3. Create/configure Dead Drop.
4. Upload files to FTP site.

Naming Files and Creating/Assigning Emergency Liveboard Tags

EMS tag categories and tags will have likely been created already, and you only need to assign them to the relevant liveboard.

The most important rule to remember is: **TAGS AND EMS CONTENT FILENAMES MUST MATCH**. It doesn't matter if you change the filename to match the tag or vice versa, but they must match. Do the renaming before you begin this process, however.

- If the JPEG image to be used is named **alert1**, make sure the tag you assign is also **alert1**.
- If the (.txt) file to be used is named **line-a**, make sure the tag you assign is also **line-a**.

Defining Transit Line Icons for Alert/Advisories (WMATA and Urban Panel Only)



To change the icons for the various subway lines that appear on the outside edges of the ticker area, append the name/number of the line to the filename and tags.



Examples:

- For an alert for the N line, the filename and tag should be: Alert-N
- For an advisory message for the 7 line, the filename should be: line-7

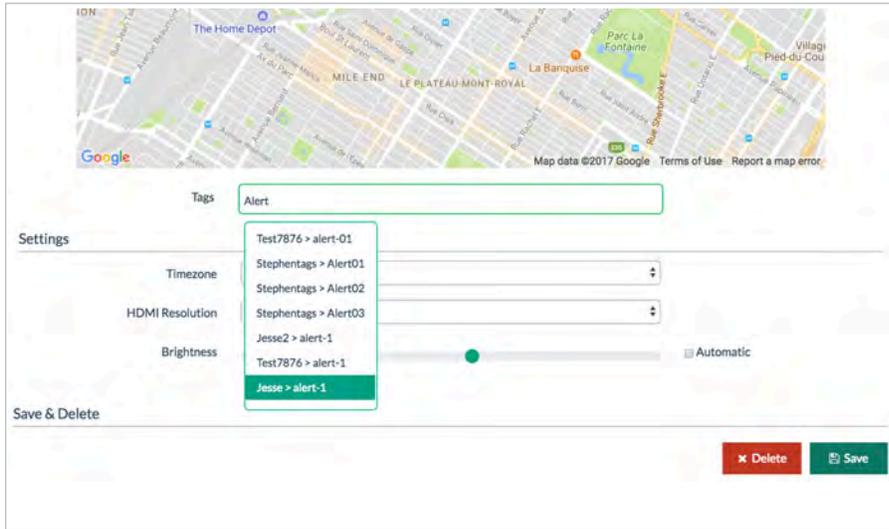
NOTE: If the filename is not appended with the appropriate line letter/number, the default icon will be used.



Assigning Tags to Liveboards

To assign tags to liveboards:

1. Click **dashboard > LIVEBOARDS > [liveboard]**.
2. Click **Profile & Settings** tab.
3. In the **Tags** field, start typing the intended tag. The field will auto-complete and show related tags. Click the proper one, and click **Save**.

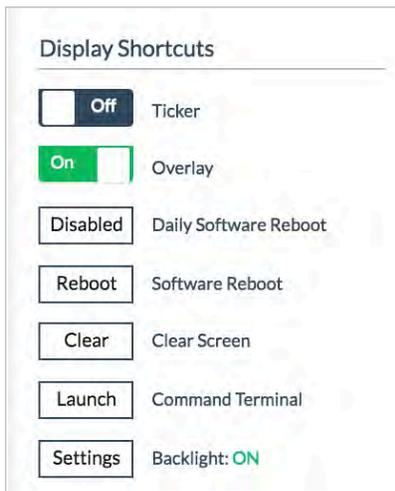


Enabling EMS

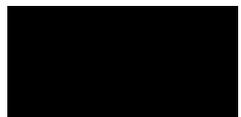
Enabling the ticker for a liveboard means that you are enabling EMS.

NOTE: If there are proper tags in place and EMS content has been uploaded to FTP, turning on EMS will immediately display EMS content on the liveboard.

1. Click **dashboard > LIVEBOARDS > [LIVEBOARD]**.
2. Click **[+]** to open the Liveboard Basic Monitoring Drawer.
3. Under the **Display Shortcuts** section, slide **Ticker** to **ON**.



4. Click **OK** on dialog.



Creating EMS Dead Drop

1. Click **dashboard > DATA SOURCES**.
2. Click **Dead Drops** tab, then **Add Dead Drop**.

The screenshot shows the 'Data Sources' page with the 'Dead Drops' tab selected. The 'ADD A DEAD DROP' form is visible, containing the following fields:

- NAME:** Name
- HOST:** Host
- USER:** User
- DIRECTORY:** Directory
- SPECIAL HANDLING LOGIC:** None
- UPDATE INTERVAL:** Update Interval (set to 15) SECONDS
- PATTERN:** *
- PASSWORD:** Password

Below the form, there is a 'SAVE & DELETE' section with 'Cancel' and 'Save' buttons. A table below shows the existing dead drops:

Name	Tags	Last Update	Last Message	# Artefacts	EDIT
Dead Drop Gorgeous		2017/4/18, 12:49	getaddrinfo: Name or service not known on host qa-ftp.videri.com		

3. Enter a **Name** for the Dead Drop.
4. Enter **host**, **user** and **password** for the FTP site.
5. **Directory** e.g: /JPL-Test/ or /whateverfolderyoumade/
6. For **Special Handling Logic**, choose the liveboard location (Urban Panel, WMATA, Penn Station).
7. Enter **Update interval**: 15-30 seconds (recommended).
8. Ignore **Pattern** field.
9. Click **Save**.

Uploading Emergency Messaging Content Files

1. With an FTP client, upload the JPEG and TXT files into the directory specified in the Dead Drop you just created.
2. To confirm that VLE recognizes the upload, navigate back to the Dead Drop for the EMS you just created, and view the **Artefact Count** field (you might need to refresh the page).
3. Observe the liveboard to ensure EMS content is being displayed.

NOTE: For WMATA and Urban Panel, if there are both *Alert-X* and *Line-X* files present in the FTP directory, only the *Alert-X* file will be displayed.

Configuring EMS Messaging (Grand Central Only)

Grand Central Emergency Messaging uses a hard-coded image and an alert text overlay whose content will come from the MTA.INFO service alerts feed, so no files need to be uploaded.

To enable EMS, you must tag liveboards, reserve slots for EMS content and create a datasource that points to the *MTA.INFO* service alerts feed.

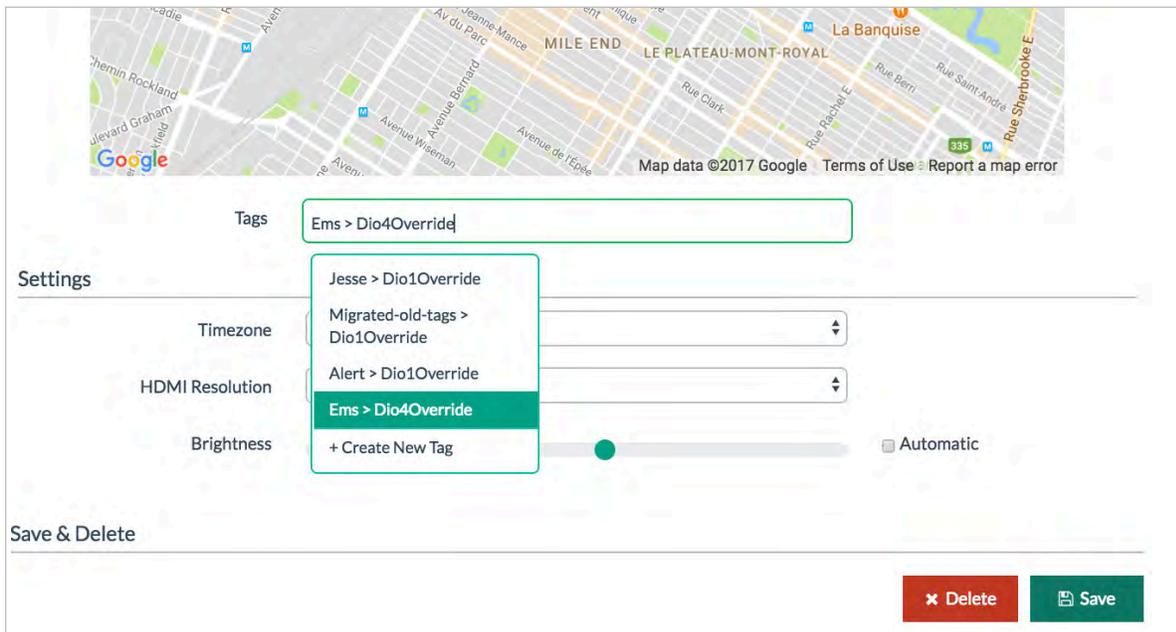
Configure Liveboard for EMS Messaging

1. View the MTA.INFO file.
2. Scroll down to the <ITEM> section with <title>DIAOVERRIDE items. Find out from your team lead which OVERRIDE item will be used. You will assign that value as a tag to the liveboard.

```

<item>
  <title>Dio1Override</title>
  <guid isPermaLink="false">MTA Grand Central Terminal Diorama 1 Override</guid>
  <link>http://as0.mta.info/mnr/rss/gct.cfm</link>
  <description>0</description>
  <!-- 1 = Override, 0 Don't override -->
</item>
<item>
  <title>Dio2Override</title>
  <guid isPermaLink="false">MTA Grand Central Terminal Diorama 2 Override</guid>
  <link>http://as0.mta.info/mnr/rss/gct.cfm</link>
  <description>0</description>
  <!-- 1 = Override, 0 Don't override -->
</item>
<item>
  <title>Dio3Override</title>
  <guid isPermaLink="false">MTA Grand Central Terminal Diorama 3 Override</guid>
  <link>http://as0.mta.info/mnr/rss/gct.cfm</link>
  <description>0</description>
  <!-- 1 = Override, 0 Don't override -->
</item>
<item>
  <title>Dio4Override</title>
  <guid isPermaLink="false">MTA Grand Central Terminal Diorama 4 Override</guid>
  <link>http://as0.mta.info/mnr/rss/gct.cfm</link>
  <description>0</description>
  <!-- 1 = Override, 0 Don't override -->
</item>
</channel>
</rss>
    
```

3. Click **dashboard > LIVEBOARDS > [liveboard]**.
4. Click **Profile & Settings** tab.
5. In the **Tags** field, start typing the intended tag (with the value from Step 1). The field will auto-complete and show related tags. Click the proper one (or create the New Tag, and then select it).



- In the **Reserved Slots** field, enter the number(s) of the slots to be reserved for Emergency Messaging, separated by commas.

NOTE: if Reserved Slots are not defined, EMS messaging will take over all slots.

The screenshot shows the 'Profile & Settings' page with the following configuration:

- Liveboard Name: Amazing Rob Board
- Display Type: Liveboard
- Schedule Delivery Mode: ccdse
- Schedule URL (optional): https://videri.s3.amazonaws.com/dev/schedule/1/latest.json
- Dwell Time (in secs.): 8
- Number of Slots: 44
- Reserved Slots: 9 (highlighted with a green border)

- Click **Save**.

Configure Datasource for Grand Central EMS Messaging

- Click **dashboard > DATA SOURCES**.
- Click **Datasources** tab, then **Generate Datasource**.

The screenshot shows the 'Data Sources' page with the 'DATA SOURCE GENERATION' form filled out as follows:

- NAME: EMS-GC
- URL: http://as0.mta.info/mnr/rss/gct.cfm
- MIME TYPE: RSS/XML (selected)
- SPECIAL HANDLING LOGIC: Grand Central
- UPDATE INTERVAL (SECONDS): 300
- CONNECTIVITY HYSTERESIS (SECONDS): 3600

Buttons for 'Cancel' and 'Save' are visible at the bottom right.

- Enter a **Name** for the datasource.
- For **URL**, enter the URL for the **MTA.INFO** service alerts feed.
- For **Special Handling Logic**, choose **Grand Central**.
- Enter **Update Interval**: 15-30 seconds (recommended).
- Click **Save**.



How Grand Central EMS is Triggered

EMS messaging will be triggered from a change in the MTA.INFO service alerts feed.

When the item `<description>` under `<item><title>SERVICE STATUS` changes to **NOT GOOD**, Emergency Messaging will show up on boards with the appropriate Override tags.

```

▼<item>
  ▼<!--
    This section is for the service status for MetroNorth Lines originating or terminating in GCT
    -->
    <title>SERVICE STATUS</title>
    <guid isPermaLink="false">MTA Grand Central Terminal Diorama SAM</guid>
    <link>http://as0.mta.info/mnr/rss/gct.cfm</link>
    <description>GOOD SERVICE</description>
  </item>
  ▼<item>
    <title>MESSAGE</title>
    <guid isPermaLink="false">MTA Grand Central Terminal Diorama</guid>
    <link>http://as0.mta.info/mnr/rss/gct.cfm</link>
    <description>NORMAL SERVICE</description>
    <!-- Valid CONTENT for the discription field are -->
    ▼<!--
      CONTENT OF THE SERVICE ALERT MESSAGE. MESSAGE WILL BE DISPLAYED ON LOWER 2/3RDS OF EACH DIORAMA
      -->
    ▼<!--
      UPPER 1/3 OF THE DISPLAYS WILL READ "SERVICE ADVISORY" FOR BOTH SERVICE ALERT AND EMERGENCY ALERT STATES
      -->
  </item>
    
```

Whether the EMS content will be shown on all slots, or only on reserved slots is determined by the value of the `<description>` field of the `<item><title>Dio[X]Override` item.

```

▼<item>
  <title>Dio1Override</title>
  <guid isPermaLink="false">MTA Grand Central Terminal Diorama 1 Override</guid>
  <link>http://as0.mta.info/mnr/rss/gct.cfm</link>
  <description>0</description>
  <!-- 1 = Override, 0 Don't override -->
</item>
    
```

- 1 = will be shown on all slots
- 0 = will only be shown on reserved slots

Scheduling Terminology

- **Event:** a configuration of options that describes when/where/how long/if content will play. You can directly schedule an asset (image, video or application), layout and playlist. An event can be assigned to either a liveboard OR a schedule/event group.
- **Event States:** approval status for a created event. In order to appear on a schedule (and be played on a liveboard), an event must have a “complete” status.
- **Event Ranking:** an option that determines the weight of event; specifically, the order in which it will play in a loaded slot with multiple events.
- **Event Groups:** a collection of events that can be assigned to one or more liveboard(s). Using an event group for multiple events makes it easy to quickly assign multiple events to multiple liveboards
- **Domination/Critical Alert Event:** an event that overrides current content on a display
- **Schedule:** a collection of events that can be embedded as an object on a layout.
- **Schedule Span:** the longest a liveboard can go without a new schedule.
- **Rule Builder/Event-based Rules Engine:** a combination of variables (input about liveboards, datasources and/or the current item being scheduled) and logical expressions to create display conditions for events.

How Event Schedules are Delivered and Assets are Downloaded

- By default, a schedule is downloaded to the liveboard every 24 hours, at midnight local time.
- When an event is created, scheduled, assigned to a liveboard and the status is marked “complete,” and the event is saved, the schedule is sent to that liveboard.
- When a schedule is received by the liveboard, it immediately starts downloading the scheduled assets.
- Whenever a schedule is edited, when changes are saved, that updated schedule is sent to the relevant liveboard(s), and new/updated assets are downloaded.
- If an event is changed that will affect whatever is currently playing on a liveboard, the content in the current schedule will keep playing, until the new assets for the updated schedule have downloaded, and then the new schedule will take over.
- When an event uses Rule Builder functionality, is marked “complete” and saved, the schedule and related assets will still be downloaded by the relevant liveboards. This is so that even if a rule suddenly resolves to true after having been false for a period of time, the assets are already there and can be displayed instantly.

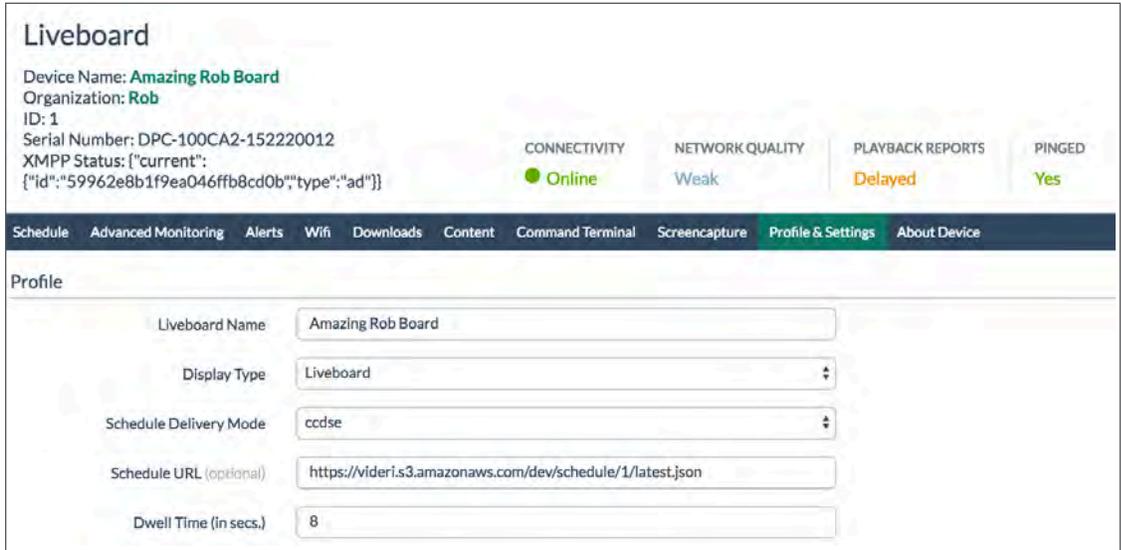
Before Scheduling Events

- Liveboards must be provisioned (do not need to be online) (see **Provisioning Guide**)
- Number of slots, dwell time (slot length) and scheduling span for liveboard must be defined
- Assets must have been ingested (see Chapter, **Creating Signage**), and/or
- Layouts must have been created (see Chapter, **Creating Signage**)
- If using **Rule Builder** functionality with datasource input, datasources must have been created (see Chapter, **Data Sources**)
- If using **Rule Builder** functionality with tags, Tag categories and tags must have been created and assigned to liveboards and assets

Preparing Liveboards for Events and Scheduling

You can customize dwell time and number of slots for each liveboard. To customize these settings:

1. On the dashboard panel, click **LIVEBOARDS > [LIVEBOARD] > Profile & Settings**.



2. Find the **Dwell Time (in secs)** field and enter the desired dwell time for the liveboard (default is 8, minimum is 2).
3. Find the **Number of Slots** field, and enter the desired number of slots (default is 8).
4. Click **Save**.

Creating an Event

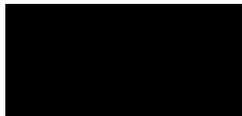
You can create an event directly for an asset, application, playlist or layout.

There are several steps in creating and configuring an event:

1. Create the event.
2. Configure event details (name, start/end date and time, priority, etc.).
3. Assign the event to one or more liveboards. With VLE version 1.7, you can now dynamically assign events to liveboards using Rule Builder functionality (in addition to assigning manually as before).
4. Update the event status (usually to COMPLETE).

Creating an Event Directly for an Asset

Scheduling Assets	Information
Scheduling a Single Asset	<ol style="list-style-type: none"> 1. Click PROJECTS > [PROJECT] > ASSETS. 2. Find the row of the asset to schedule, and click the schedule icon . 3. The Event details page appears.



<p>Scheduling Multiple Assets</p>	<ol style="list-style-type: none"> 1. Click PROJECTS > [PROJECT] > ASSETS. 2. Select the checkbox of each asset to schedule. NOTE: You can schedule up to 30 assets at a time. If you need to schedule more than 30, you would need to schedule assets in blocks of 30 assets if a complex schedule is intended. 3. Click Schedule. 4. The Event details page appears.
<p>Scheduling a Layout</p>	<ol style="list-style-type: none"> 1. Click PROJECTS > [PROJECT] > LAYOUTS. 2. Roll over the layout to schedule. <div data-bbox="565 510 792 793" data-label="Image"> </div>

Configuring Event Options

Projects

Aaron's Projects / Demo / Butterfly

Assets | Layouts | Events | Schedules | Playlists | Event Groups | Settings

Event Details

State: Complete

Name: Butterfly

Asset: Butterfly

Duration: Default (dwell time)

Slot: 1 To 1

Tags:

Event Rank: 0

Priority: Normal

1. Name the event.

<p>2. In the Duration field, select whether the event will Play to End or Play to Duration.</p>	<p>Setting Play Duration</p> <ul style="list-style-type: none"> By default, a two minute video scheduled on a display that has an 8-second dwell time would only play for the first 8 seconds. If setup as "Play-to-duration", that same video will play for as long as the number of seconds entered in the "Duration (seconds)" field. If setup as "Play-to-end", that video it will play in its totality before switching to the next asset.
<p>3. In the Slot field, enter the desired slot for the event. If play in sequential slots is desired, enter a value in the Slot End field.</p>	
<p>4. In Event Rank, enter the rank (weight) of the event (lower numbers have most weight).</p>	
<p>5. In Priority, select the event priority (normal, domination or critical alert).</p>	<p>Domination and Critical Alert Events</p> <p>Setting an event's priority to Domination or Critical Alert will make that event's content override whatever is concurrently scheduled on a liveboard.</p> <ul style="list-style-type: none"> There can only be one domination/critical alert event scheduled per liveboard. A domination/critical alert event cannot be assigned to an event group. A critical alert will override a domination event. After a domination/critical alert event ends, the regularly scheduled event at that time will start (although it may not play completely). Rule Builder functionality is not available with a domination or critical event priority.

Configuring Event Scheduling Options

Event Scheduling

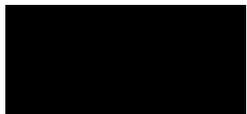
Use UTC **Off**

Schedule To

Hour Parting [+ Add a time slot](#)

Frequency None Daily Monthly

6. In **Schedule** fields, enter the duration for the event: date and time to start and end.



Set Hour Parting Options

Play content at different times in a day

Hour parting allows you to set an event to play multiple times in a day without having to create multiple events.

1. Near **Hour Parting**, click **Add a time slot**.
2. Enter the start and end times for the time slot.

Hour Parting: 12:00 AM To 12:00 AM [Add] [Cancel]

3. Click **Add** to add additional time slots.

Hour Parting: 12:00 PM To 12:44 PM [edit] [X]
 1:00 PM To 1:44 PM [edit] [X]
 2:00 PM To 2:44 PM [edit] [X]
 3:00 PM To 3:44 PM [edit] [X]
 4:00 PM To 4:44 PM [edit] [X]
 4:00 PM To 4:44 PM [Add]

Set Recurrence Options

Play content during certain days of the week

1. Near the **Frequency** fields, click the radio button for **Daily**.

Frequency: None Daily Monthly
 MON TUE WED THU FRI SAT SUN

2. Check the boxes for the days of the week during which the content should play.

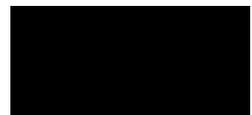
Play content on certain days of the month (or all days)

1. Near the **Frequency** fields, click the radio button for **Monthly**.

Frequency: None Daily Monthly

Calendar grid showing days 1-31, all highlighted in green.
 [Clear all] [Select all]

2. The monthly calendarly appears, with all days selected (green).
 - a. click a green day to deselect it
 - b. click **Select All** to select all days
 - c. click **Clear All** to clear all selections



Creating Event Display Conditions with Rule Builder

Rule Builder functionality is available for any item that can be scheduled: assets (images, videos, APKs), layouts and playlists. Schedules can't use the Rule Builder, but can make use of Rules Engine in Creative Studio.

A "rule" is composed of defined variables (input), PLUS logical expressions to create rules to define conditions under which content will be displayed.

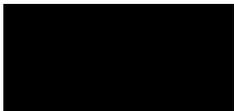
There are three variable types:

- **Liveboard:** specifies attributes of liveboard to receive the event in their schedule. All liveboards within your organization which match the attribute values of created liveboard variables will receive the event in their schedule.
- **Datasource:** specifies which datasource and which path will be used as input.
- **Current Item:** defines attributes specific to the current item being scheduled.

Variable Entries

- The variable entry field types correspond to fields in other areas. For example, the timezone attribute value field will be a drop-down field, because the timezone field in the **Liveboard > Profile & Settings** tab is also a drop-down field.
- Some fields (such as Tags) are auto-complete fields; if you start typing, you will see a list of available options.
NOTE: Most fields are text entry fields, so it is up to the user to ensure that the value typed in the variable attribute field EXACTLY MATCHES that of the corresponding liveboard, datasource or asset item field, or the the Rule will not result in content being displayed under the desired conditions.

<p>Defining Liveboard Variables</p>	<p>Each available attribute represents information about the liveboard. Many of the Liveboard attributes correspond to fields found in Liveboard > Profile & Settings tab.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <p>Rule Builder</p> <p>Define the variables</p> <p><input type="button" value="Add"/></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Type</th> <th style="width: 30%;">Name</th> <th style="width: 30%;">Attribute/Datasource</th> <th style="width: 25%;">Value/Path</th> </tr> </thead> <tbody> <tr> <td>Liveboard</td> <td><input type="text"/></td> <td>tags</td> <td><input type="text"/></td> </tr> </tbody> </table> <p style="text-align: right;"><input type="button" value="Save"/> <input type="button" value="Cancel"/></p> </div> <ol style="list-style-type: none"> 1. Click Add. 2. Under Type, select variable type: 3. Under Name, enter a unique name for variable. Variable names must start with a letter, have no spaces, and use only alphanumeric characters. 4. Under Attribute/Datasource, select the appropriate liveboard attribute (attributes defined in tables following these instructions). 5. Under Value/Path, define the value for the attribute. 6. Click Save. 7. Repeat steps 1-6 to create more liveboard variables. 	Type	Name	Attribute/Datasource	Value/Path	Liveboard	<input type="text"/>	tags	<input type="text"/>
Type	Name	Attribute/Datasource	Value/Path						
Liveboard	<input type="text"/>	tags	<input type="text"/>						



Defining Current Item Variables

Rule Builder

Define the variables

Type	Name	Attribute/Datasource	Value/Path
Current Item	Shark1	tags	Jesse > alert-1

8. Click **Add**.
9. Under **Type**, select **Current Item**.
10. Under **Name**, enter name for variable.
11. Under **Attribute/Datasource**, select the appropriate attribute for the variable (attributes defined in table following these instructions).
12. Under **Value/Path**, define the value for the attribute.
13. Click **Save**.
14. Repeat steps 1-6 to create more current item variables.

Create Rule Logic

15. Under *Set the Rule*, the variables you just created are available in the **Add Variable** drop-down menu. Use the variables and the operators to construct rules logic.

Rule Builder

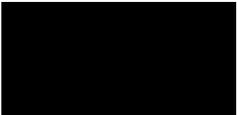
Define the variables

Type	Name	Attribute/Datasource	Value/Path
Liveboard	AssignMTL	tags	Demo > Montreal
Liveboard	AssignBT	tags	Demo > Boston
Liveboard	AssignWT	tags	Demo > Washington
Data Source	RainChance	Weather	/csv/data/datum[2]/*

Set the Rule

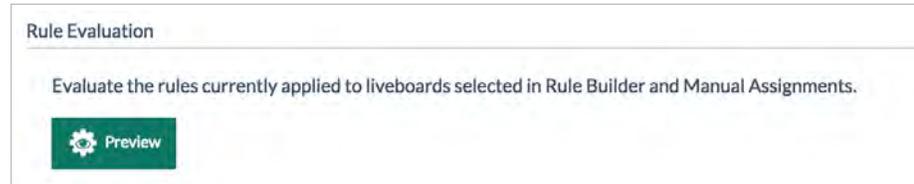
Add Variable

(AssignMTL || AssignBT || AssignWT) && RainChance >= 80 && RainChance <= 89

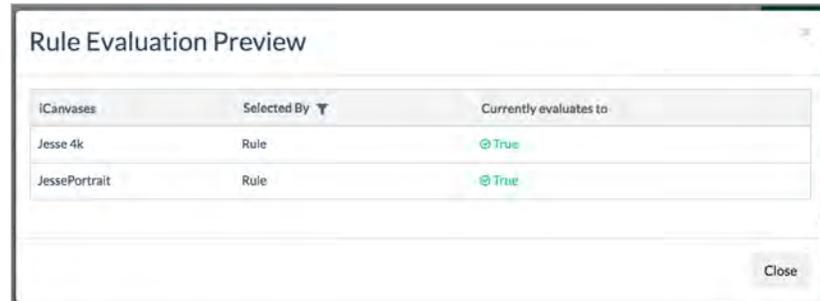


Preview Rule

16. Under *Rule Evaluation*, click **Preview**.



17. A dialog shows which liveboards the event would play on **under current conditions**.



Possible Other Rule Preview Results

Message	Meaning
No Results Found	No rules to evaluate. It might mean: <ul style="list-style-type: none"> – there are no variables defined – there are no characters in the <i>Set the Rule</i> field – event not assigned to anything manually – liveboard variable attribute value doesn't match any liveboards in your organization
An Error Has Occurred	A backend problem with the schedule logic service



Assigning Events to Liveboards

There are now two ways to assign events to liveboards:

- **Dynamic assignment:** Use Rule Builder functionality on the event detail page to create liveboard variables, select an attribute and give that attribute a value. Any liveboards whose value for the selected attribute matches the created variable will receive the event in their schedule. These variables are then used in Rule Builder functionality on event detail pages to create display conditions which determine whether the event will display.
 - **Manual assignment:** check the box(es) for individual liveboards as before on the event detail page.
- NOTE:** You can use Rule Builder to define display conditions but assign liveboards manually.

Dynamically Assign Event to Liveboard

(as explained in the section, **Creating Event Display Conditions with Rule Builder**)

18. Create liveboard variables and define attribute values.
19. If desired, add rule logic conditions to display.

The screenshot shows the 'Rule Builder' interface. Under 'Define the variables', there is an 'Add' button and a table with the following data:

Type	Name	Attribute/Datasource	Value/Path
Liveboard	AssignMTL	tags	Demo > Montreal
Liveboard	AssignBT	tags	Demo > Boston
Liveboard	AssignWT	tags	Demo > Washington
Data Source	RainChance	Weather	/csv/data/datum(2)/7

Under 'Set the Rule', there is a logic builder with the following expression:

```
(AssignMTL || AssignBT || AssignWT ) && RainChance >= 80 && RainChance <= 89
```

20. Click **Save** (lower right corner).

Manually Assign Event to Liveboard

The screenshot shows the 'Manual Assignments' section with a 'Liveboards' tab selected. It displays a table of liveboards with the following columns: Name, XMPP Connectivity, Performance Quality, Network Quality, Playback Reports, Pinged, Location, Tags, Display Type, and Orientation. The table contains four rows of data:

Name	XMPP Connectivity	Performance Quality	Network Quality	Playback Reports	Pinged	Location	Tags	Display Type	Orientation
Alice	Offline	Poor	Weak	Unrespons...	No	3655 rue des lacquiers	Alice em	liveboard	Landscape
AP LEFT	Offline	Poor	Weak	Unrespons...	No	westeros		liveboard	Reverse Portrait
Ben-fake	Offline	Poor	Weak	Unrespons...	No		ragdoll C	liveboard	
Ben - Window	Offline	Poor	Weak	Unrespons...	No	1591 Richardson, Quebec			Portrait

21. To assign events manually, In the Manual Assignments section. Click the **Liveboards** button on the left. All liveboards will be shown.
22. Check the checkbox(es) for the liveboard(s) you would like to assign the event to.
23. Click **Save** (lower right corner).

Update Event State

Before an event will be shown on a display, it must:

- have a “**Complete**” status
- be assigned to one or more liveboards (either manually or dynamically through rule builder).

State Transition	<p>24. If this event doesn't need to go through an approval process, click the Complete button (it will turn dark blue).</p> <p>25. Click Save.</p> <p>NOTE: The previous state will stay highlighted until the event is saved.</p>
-------------------------	--

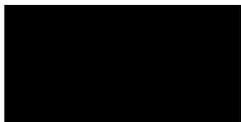
Rule Builder Notes and Variables

Rule Builder Notes

- Rule Builder is not available for events with a Domination or Critical Event priority (options disappear).
- Variables defined in Rule Builder are unique to that event.
- Variables cannot be copied and pasted between events.
- Rule logic CAN be copied and pasted between events. However, the rules won't work unless identically-named variables are created.
- Events can be cloned to reuse the Rule Builder variables and logic.
- When a rule has been prepared and event assignments have been made, you can use Rule Preview (in either Event Details, Events Overview page or Playlist Schedule Info blocks) to check whether it resolves to true or false with the inputs' current values. However, since input values can be dynamic, the rule resolution can evolve with time.
- Layout-based Rules Engine rules will be respected by events-based rules engine, but not the reverse. .
- If an event uses Rule Builder rules, when the liveboard first receives the schedule it will check the rules to see if the event meets display conditions for that liveboard. It will check the rules again on each update interval of any related datasources (or when connectivity hysteresis is reached).

Liveboard Variable Attributes/Datasources

Attribute/Datasource	Corresponds to Liveboard Profile/Settings field	Value/Field Type
name	Liveboard Name	Text entry
ims_market	OFM field	Text entry
unit_number	OFM field	Text entry
orientation_setting	Orientation	Drop-down
timezone	Timezone	Drop-down
location	Address	Text entry
schedule_delivery_mode	Schedule Delivery	Drop-down
schedule_url	Schedule URL	Text entry
schedule_dwell_seconds	Dwell time	Number spinner
schedule_slot_count	Liveboard slots	Number spinner
owner_name	Owner	Text entry
schedule_delivery_window_days	Schedule Span	Number spinner
tags	Tags	Auto-complete
Attribute/Datasource	Field found at top of Liveboard Details Page	
device_id	The device's DPC ID	Text entry



Current Item Attributes/Datasources

The fields for "current item" refer to properties of assets (images, videos, or applications), layouts or playlists. The attributes available change depending on the current item.

Attribute/Datasource	Description	Field Type
tags	Tags assigned to item	Auto-complete
project_id/external_id (assets only/playlist+layouts only)	Project ID (project) of project containing the item	Text entry
orientation (assets only)	Item orientation	Text entry

Rule Builder Operators

These are operators we have buttons for in the rule builder:



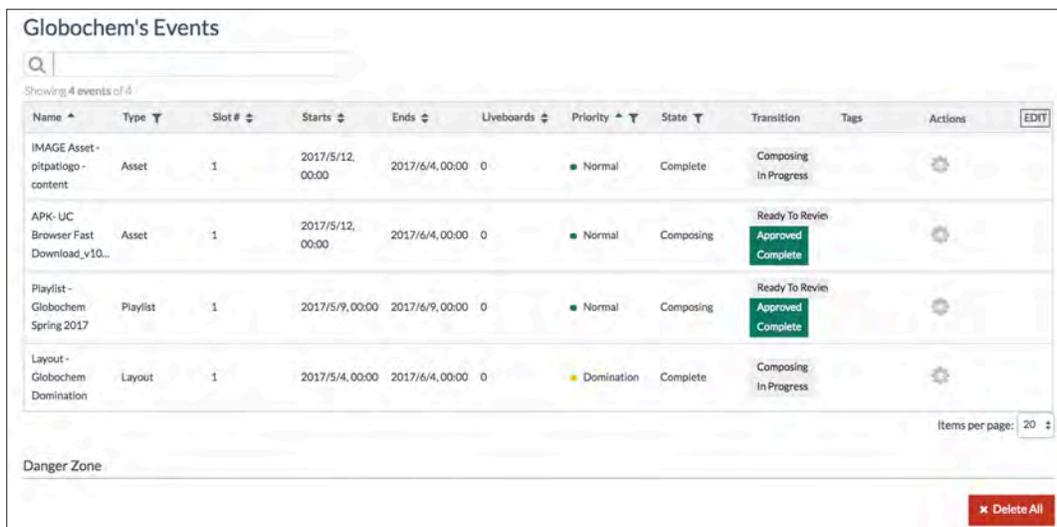
We also use standard rules engine operators:



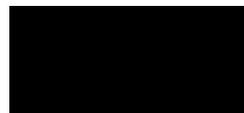
Ending a Critical Alert Event

It's easiest to simply delete a Critical Alert event when its purpose has been served.

1. Click **PROJECTS > [PROJECT] > Events**.
2. Click the row of the critical event to delete.



3. Click **Delete** and **OK** in the confirmation dialog box.



Playlists

Playlists are a collection of assets designed to play sequentially.

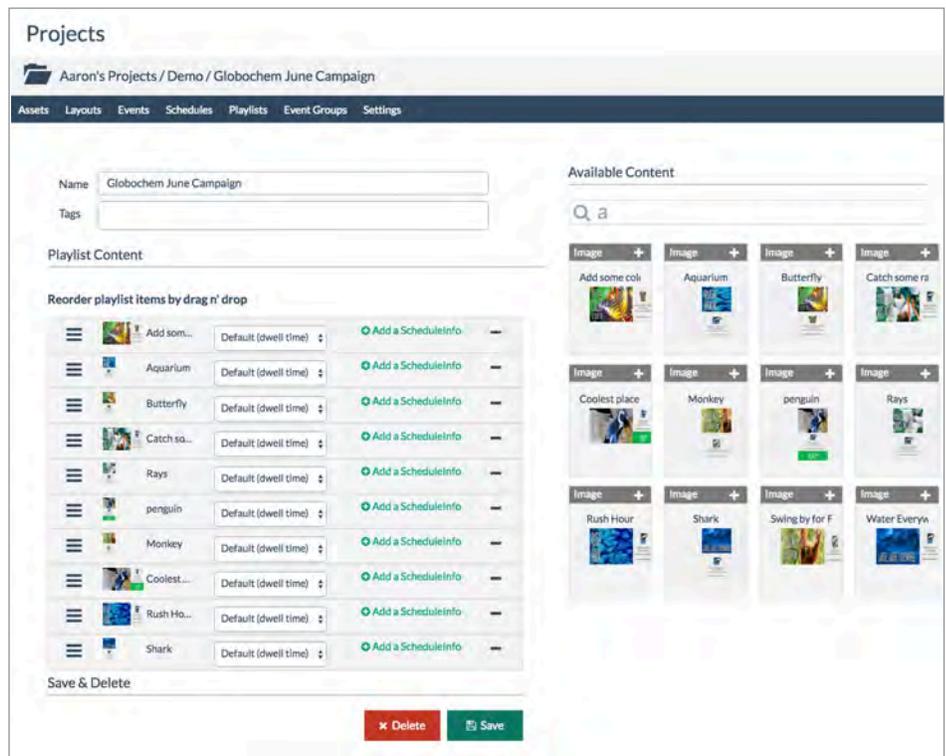
- Playlists can contain assets (videos, images, applications), layouts AND other playlists (to create complex slot segmentation).
- Playlists can be scheduled just like any other asset.
- Playlists can't be scheduled to span multiple slots.
- Playlist items can be configured to override the liveboard's dwell time.
- Playlist content items have their own custom frequency, and/or rules applied for display conditions (through schedule info blocks).
- Playlists on a layout: If you define custom duration or play to end for a playlist content item, and the playlist is inserted onto a Creative Studio layout (as an element), custom values will be ignored and the liveboard's dwell time will be used.
- A playlist may be inserted into an existing playlist (e.g. inserting Playlist X into Playlist Y). However, Playlist Y cannot be added back to Playlist X because X is already embedded inside Playlist Y.

Creating Playlists

1. Click **PROJECTS > [PROJECT] > Playlists** tab.
2. Click **Create**.
3. Name the playlist and click **OK**.

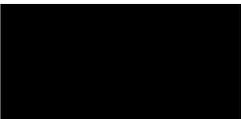
Add Content Items to Playlist

4. Click + on the right corner of each asset to add to the playlist. The asset will appear in the **Playlist Content** list on the left side.



Change Playlist Item Order (optional)

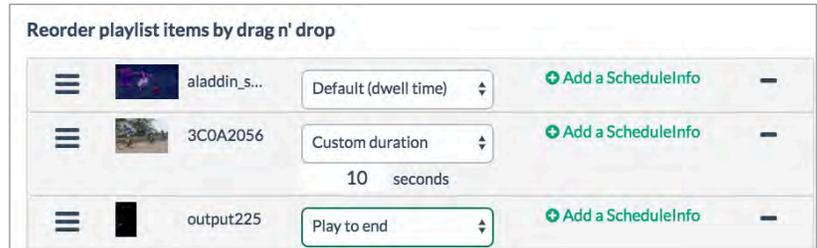
5. If desired, change the order of the assets in the playlist by clicking and dragging the move icon  on rows in the *Playlist Content* box.



Define Content Play Time

By default, content in a playlist (and content in general) will play according to the liveboard's defined Dwell Time (8 seconds by default, configured in **Liveboard > Profile & Settings**). However, you can override this value with a custom duration, or set a video to Play to End.

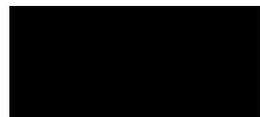
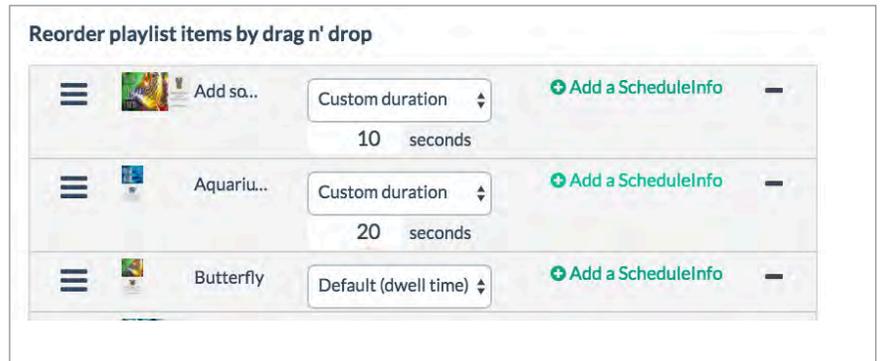
6. **Custom Duration:** pull down the menu, select Custom Duration, and enter a value in the seconds field.



Schedule Info Blocks

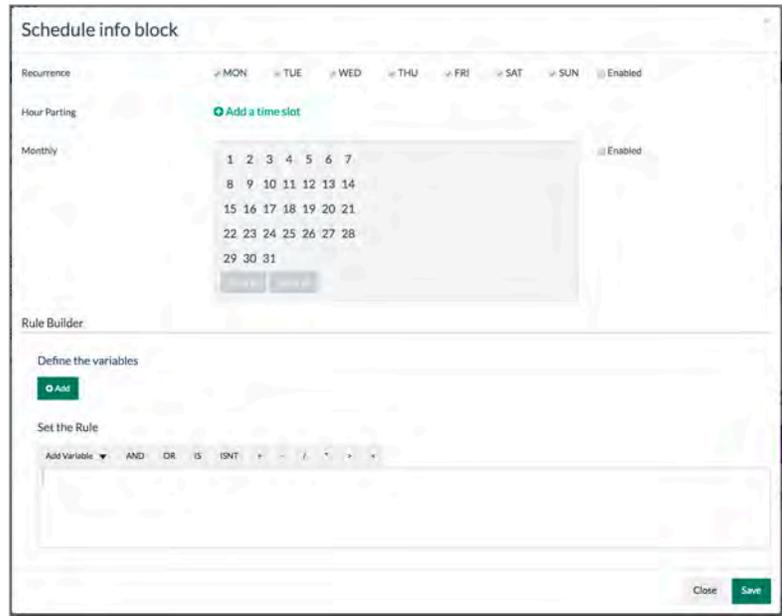
Schedule info blocks allow you to define custom frequency and rule builder display conditions for individual content items inside a playlist (with the caveat that event scheduling options for the playlist container will always take precedence).

7. On the "child" content item, click **Add a Schedule Info**.



Schedule Info Blocks (cont)

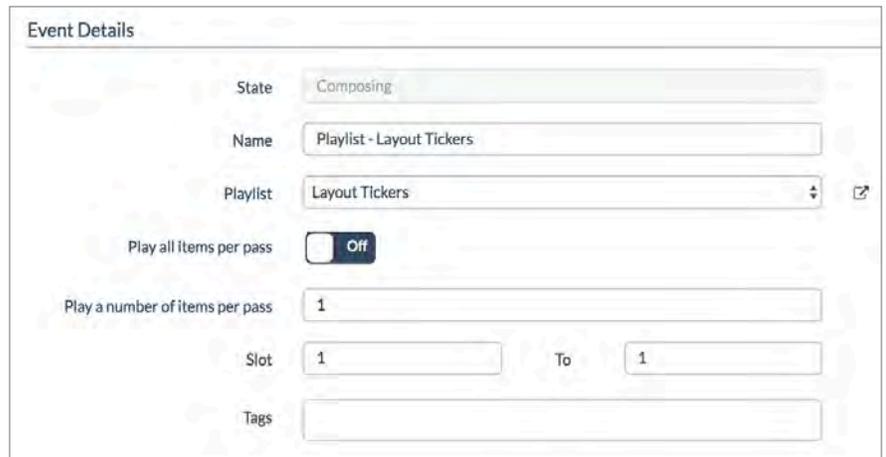
- Configure event options for the child content item (they are a subset of the "regular" event options).



- Click **Save**.

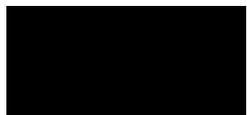
Schedule the Playlist

- Click the **Playlists** tab to get to the overview page.
- Click the clock icon next to the playlist to schedule it. The **Event details** page appears. The event details for a Playlist are similar to a regular event except with a few additional fields.



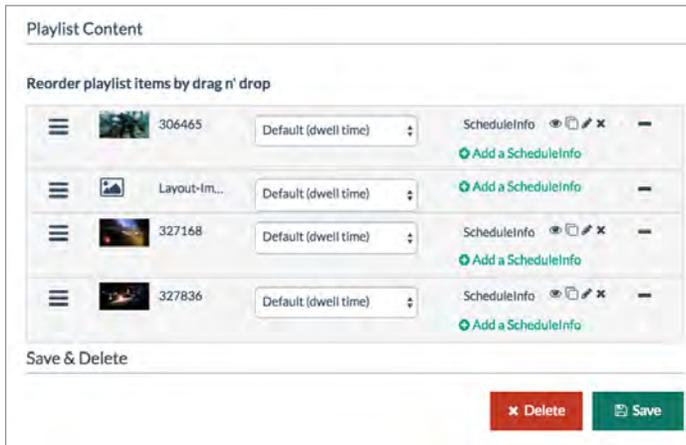
- To create a slot segmentation, turn on the slider for **Play all items per pass**.
- NOTE: NEW in 1.7.1,

- Schedule/assign the playlist to a liveboard just like any other event.
- Click **Save**.



Copy Schedule Info Blocks (optional)

1. Click the copy info icon of the playlist content item to copy from.



2. Check the box(es) of the playlist items to copy to.
3. Click **Paste**.
4. Click **Save**.

Experimental Schedule Info Block Span Function

WARNING: This behavior is experimental and is not guaranteed to function as intended in all circumstances.

This experimental behavior uses the underlying javascript engine to allow the definition of a time interval in a schedule info block in a playlist.

This requirement is to allow defining time interval at the scheduleInfo level to be used within playlists.

The expression is: `new Date()`

Example:

```
new Date() > new Date('2017-04-12') && new Date() < new Date('2017-04-15')
```

The event will show from the 12th through 14th of April.

NOTE: The span in the schedule info block cannot expand beyond the span of the event the playlist is associated with. This is because schedule info blocks are "children" of the parent playlist event.



Viewing Playlist in the Liveboard Schedule

The screenshot displays the 'Wonderland' device page. At the top, it shows device ID (80), DPC Serial Number (DPC-110CA2-160710638), and XMPP Status (Online). Below this is a navigation menu with options like 'Schedule', 'Advanced Monitoring', and 'Alerts'. The main area shows a 'Resume Schedule' button and a weekly view for 'Week of 2016-09-20'. A grid shows time slots from 00:00 to 18:00 for each day. Slot 1 is highlighted in purple and contains a playlist with four items: 'alice's playlist', 'madmax-furyroad-gifs-1-26569-content', 'interstellar-wallpaper-22-content', and 'Cloud-Atlas-wallpapers-16-content'. Each item has a 'Starts - Ends' range.

- When you view the schedule for a liveboard that has a playlist, the playlist will be colored purple.

Creating a Slot Segmentation

Advertisers often don't want to buy an entire slot, so time can be sold as a portion of a slot. A playlist is inserted into a slot to segment it. You can even insert a playlist that contains other playlists, further subdividing a slot.

When you insert a playlist into a time slot, by default, one item in the playlist is played each pass.

DEFAULT

Let's say we have eight slots, and one of them contains a playlist with eight items. The first time the loop plays the slot, the first playlist item is played. The second time the loop plays the slot, the second item is played, etc. Let's say we have seven slots with unique content (A, B, C, D, E, F, G) and one filled with a playlist with four items from multiple customers (H1, H2, H3, H4).

A complete rotation would look like this:

- Loop 1: A, B, C, D, E, F, G, **H1**,
- Loop 2: A, B, C, D, E, F, G, **H2**
- Loop 3: A, B, C, D, E, F, G, **H3**
- Loop 4: A, B, C, D, E, F, G, **H4**. etc.

Play All Items Per Pass Option (ON)

When the **Play All Items Per Pass** option is enabled, all items in the playlist will be shown during that slot's dwell time. Using the example above, if a liveboard has a dwell time of 8 seconds, each asset in the playlist would play for eight seconds. It would look like this:

- Loop 1: A, B, C, D, E, F, G, **H1, H2, H3, H4**,
- Loop 2: A, B, C, D, E, F, G, **H1, H2, H3, H4**,
- Loop 3: A, B, C, D, E, F, G, **H1, H2, H3, H4**
- Loop 4: A, B, C, D, E, F, G, **H1, H2, H3, H4**, etc.

Play a Number of Items Per Pass (Play all items per pass = OFF)

You can also configure only [X] number of items from a playlist to play per pass. Using the example above, lets say we want two items to play per pass. It would look like this:

- Loop 1: A, B, C, D, E, F, G, **H1, H2**
- Loop 2: A, B, C, D, E, F, G, **H3, H4**
- Loop 3: A, B, C, D, E, F, G, **H1, H2**,
- Loop 4: A, :B, C, D, E, F, G, **H3, H4**, etc.

Creating a Complex Slot Segmentation

Complex slot dilution occurs when a user schedules a playlist that contains another playlist in it.

To create slot segmentation:

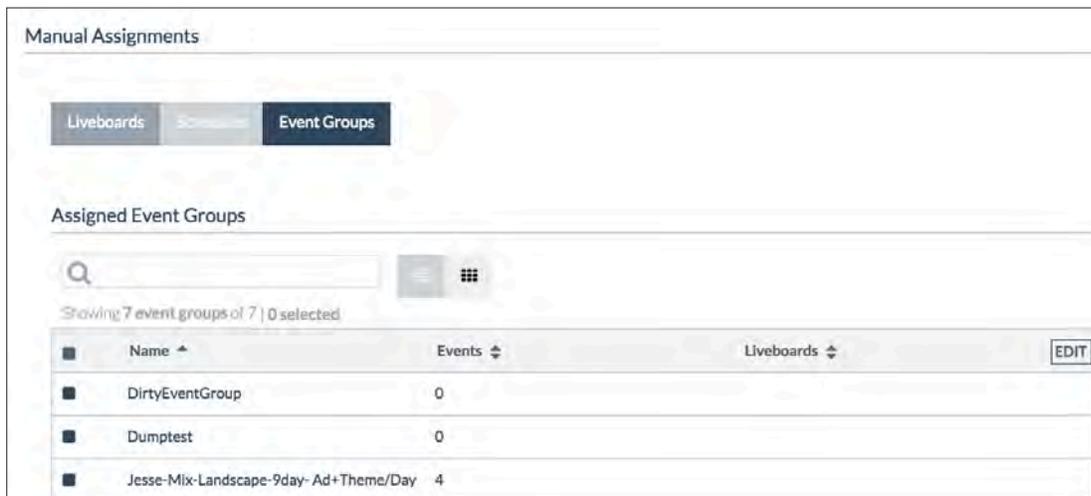
1. Create a playlist with properly ordered assets in it.
2. Click **PROJECTS > [PROJECT] > Playlists** tab.
3. Click the scheduling icon for the playlist you just created. The Event Details page appears.
4. In the **Slot Index** field, enter the slot to insert the playlist into.
5. Enter scheduling information and assign the event to one or more liveboards.
6. Click **Save**.

Creating Event Groups

Using Event Groups enables you to quickly schedule collections of events on multiple liveboards.

NOTE: Page can become unresponsive when editing an event containing an event group. Refreshing the browser page will resolve the issue.

1. Go to **dashboard > PROJECTS > [PROJECT] > EVENT GROUPS**.
2. Click **Create**.
3. Enter Event Group name, then click **OK**.
4. Go to **dashboard > [PROJECT] > EVENTS**.
5. Click the event to add to the Event Group. The Event Details page opens.
6. Scroll to the bottom to view the **Manual Assignments** section. Click **Event Groups**. Check the box for the event group you just created.



7. Click **Save**.



Viewing Event Groups

- Go to **Dashboard > Event Groups**.

Click on any event to bring up the Event Group detail page.

Projects
Jesse Corp's Projects / Jesse-RulesTesting / Jesse-RulesTesting2

Assets Layouts Events Schedules Playlists Event Groups Settings

Event Group Configuration

Name: Jesse-RulesTesting2

2017-05-16

Legend: Event, Playlist Event, Event Tag Mismatch, Domination Event, Critical Alert Event

Associated Events

Name	Type	Slot #	Starts	Ends	Liveboards	Priority	State	Transition	Tags	EDIT
Layout - Tag-A	Layout	2	2017/4/28, 00:00	2019/5/22, 00:00	0	Normal	Complete	Composing In Progress		
Layout - Portrait	Layout	5	2017/5/3, 00:00	2019/4/24, 00:00	0	Normal	Complete	Composing In Progress		
Layout -			2017/5/3,	2019/4/24,				Ready To Review		

Creating a Schedule Container

There are two different meanings for a “schedule” in Tech Ops portal, depending on where you find it.

- The Schedule tab in the liveboards area refers to events assigned to a liveboard.
- A schedule found within a project refers to an object that can be assigned to a layout. Using such objects on a layout allows you have separate areas that are running their own schedules, or have rotating assets.

Note that an Event can either be assigned to a liveboard OR a Schedule/Event Group, but not both. If an Event has been assigned to a liveboard and you try to assign it to a Schedule or Event Group, it will be removed from the liveboard.

Creating and using a schedule/event group involves several steps:

- creating a schedule
- assigning events to the schedule
- adding a schedule object to a layout/connecting the schedule to it
- creating an event from that layout containing the schedule object

Creating a Schedule Container

1. Go to dashboard > PROJECTS > [PROJECT] > Schedules.
2. Click **Create**.

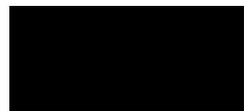
3. Enter schedule name, then click **OK**. The Schedule details page appears.

4. Edit the **Dwell Seconds** and **Slot Number** fields, if desired.
NOTE: Changes to these fields will override the default liveboard settings.
5. Click **Save**.

Assigning an Event to a Schedule Container

After you've configured an event:

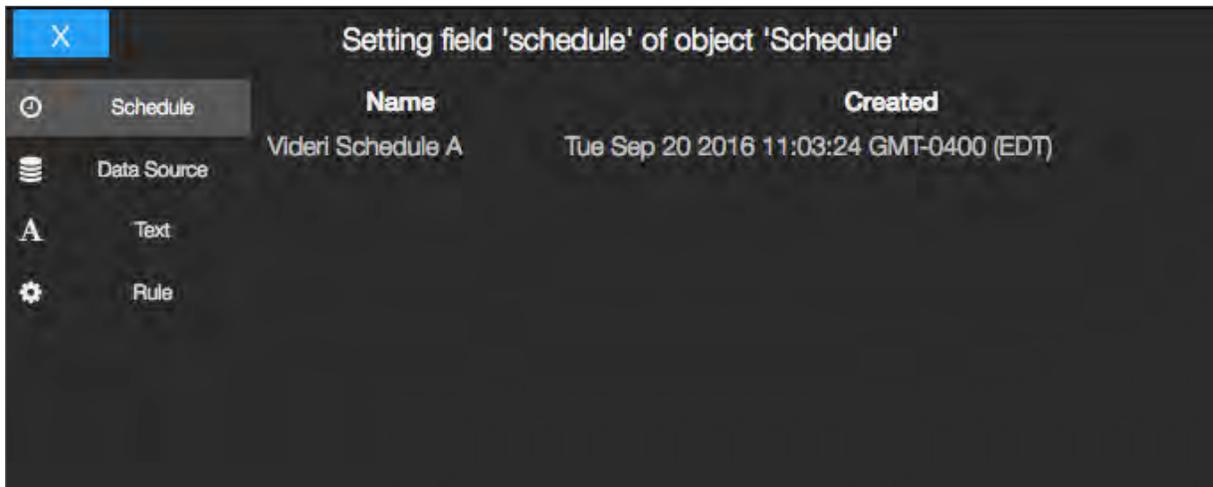
1. Access the event, then scroll to the bottom of the Event details page.
2. Click the **Schedules** button on the left, then the **All** button on the right. All schedules will appear.



3. Check the boxes for the schedule(s) you'd like the event to be a part of.
4. Click **Save**.

Adding the Schedule Container to a Layout

1. Click **Layouts** tab.
2. Click **Create**, name the Layout, and click **OK**.
3. Click on the layout to launch Creative Studio.
4. Drag a **Schedule** element onto the layout.
5. In the **Schedule** field, click the data source icon. The Data Source dialog appears.



6. Click the schedule you previously created, then X to close the window.
7. Click **Save** icon, and close the Creative Studio tab.
8. Back on the **Layout** tab, for the layout you just created, roll over the **Layout** icon until the Schedule icon appears, and click it to open Event details.
9. Schedule this layout like usual, but for Slot Number field, assign this layout to slot 1.

NOTE: It can be any slot, but it should be the only event scheduled on the liveboard for the desired effect. Changes are saved automatically.

10. Scroll down and click **LIVEBOARDS** on the left, then **All** on the right.
11. Check the box(es) for all the liveboards you'd like to apply the layout to. Changes are saved automatically.

Once this is done, select an asset or a layout and schedule it normally. At the bottom of the event panel, click on the **Schedule** toggle to view available schedules (click **All** to see all schedules). Observe the player has a single event, within the event the layouts will rotate according to the schedule created previously.



Viewing Events

There are three places you can look to find/edit events:

- View all events: **dashboard > EVENTS**
- View all events per project: **dashboard > PROJECTS > [PROJECT] > EVENTS**
- View all events per liveboard: **dashboard > LIVEBOARDS > [LIVEBOARD] > Schedule > click Event on calendar**

Viewing All Events

- Go to **Dashboard > EVENTS**
- Click an event to see its details
- The new **Actions** column shows an icon that represents whether an event uses Rule Builder. If the icon is solid, it means the event has variables and/or rules associated with it, and when clicked it will display the Rule Evaluation Preview which will show the rule resolution per assigned liveboard.

Aaron's Events

Showing 12 events of 12

Name ^	Type ▾	Slot # ⇅	Starts ⇅	Ends ⇅	Liveboards ⇅	Priority ⇅ ▾	State ▾	Transition	Tags	Actions	EDIT
Asset - 959 - content	Asset	1	2017/5/3, 00:00	2017/6/3, 00:00	0	● Normal	Composing	Ready To Review Approved Complete			
Asset - Overwatch_Min... - content	Asset	1	2017/5/4, 00:00	2017/6/4, 00:00	0	● Normal	Complete	Composing In Progress			
Butterfly	Asset	1	2017/4/12, 00:00	2017/5/12, 00:00	0	● Normal	Complete	Composing In Progress			
Layout - Kasey Landscape	Layout	1	2017/5/8, 00:00	2017/6/8, 00:00	1	● Normal	Complete	Composing In Progress			
Monkey	Asset	1	2017/4/12, 00:00	2017/5/12, 00:00	0	● Normal	Complete	Composing In Progress			
Penguin	Asset	1	2017/4/12, 00:00	2017/5/12, 00:00	0	● Normal	Complete	Composing In Progress			
Rays	Asset	1	2017/4/12, 00:00	2017/5/12, 00:00	0	● Normal	Complete	Composing In Progress			
Shark	Asset	1	2017/4/12, 00:00	2017/5/12, 00:00	0	● Normal	Complete	Composing In Progress			

Items per page: 20

Danger Zone

Viewing All Events Per Project

- Go to **dashboard > PROJECTS > [PROJECT] > Events**
- Click an event to see its details
- Click Action icon to view Rule Evaluation Preview



Projects

Aaron's Projects / Demo

Assets | **Layouts** | Events | Schedules | Playlists | Event Groups | Settings

Showing 5 events of 5 | 0 selected

Name	Type	Slot #	Starts	Ends	Liveboards	Priority	State	Transition	Tags	Actions
Butterfly	Asset	1	2017/4/12, 00:00	2017/5/12, 00:00	0	Normal	Complete	Composing In Progress		⚙️
Monkey	Asset	1	2017/4/12, 00:00	2017/5/12, 00:00	0	Normal	Complete	Composing In Progress		⚙️
Penguin	Asset	1	2017/4/12, 00:00	2017/5/12, 00:00	0	Normal	Complete	Composing In Progress		⚙️
Rays	Asset	1	2017/4/12, 00:00	2017/5/12, 00:00	0	Normal	Complete	Composing In Progress		⚙️
Shark	Asset	1	2017/4/12, 00:00	2017/5/12, 00:00	0	Normal	Complete	Composing In Progress		⚙️

Items per page: 20

Danger Zone

[Delete All](#)

Viewing All Events Per Liveboard

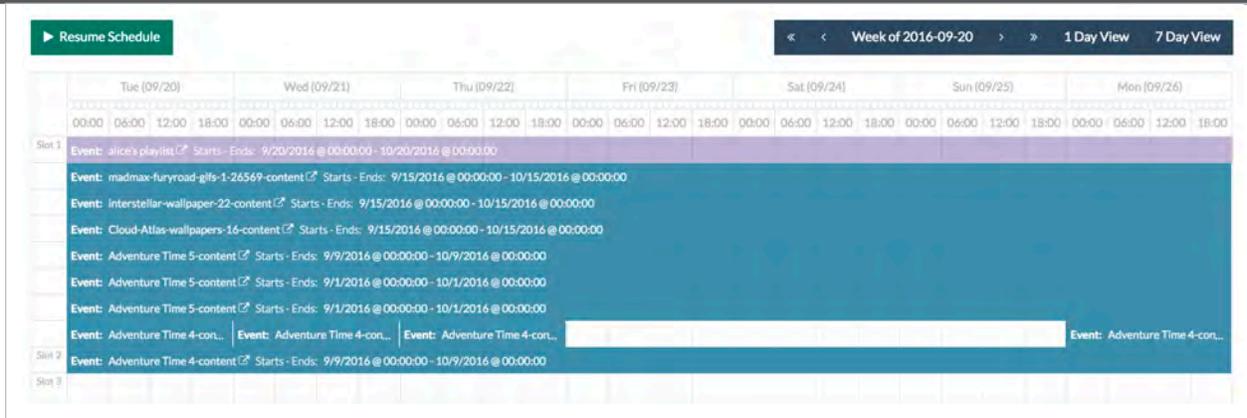
To view all the events assigned to a liveboard:

- Go to **dashboard > LIVEBOARDS > [LIVEBOARD] > Schedule**
- Events for a liveboard can now be viewed two ways: 1 Day View and 7 Day View.

[Resume Schedule](#) | 2016-09-20 | 1 Day View | 7 Day View

Time	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
Slot 1	Event: aaron's playlist Starts - Ends: 00:00:00 - 00:00:00																							
	Event: madmax-furyroad-gifs-1-26569-content Starts - Ends: 00:00:00 - 00:00:00																							
	Event: interstellar-wallpaper-22-content Starts - Ends: 00:00:00 - 00:00:00																							
	Event: Cloud-Atlas-wallpapers-16-content Starts - Ends: 00:00:00 - 00:00:00																							
	Event: Adventure Time 5-content Starts - Ends: 00:00:00 - 00:00:00																							
	Event: Adventure Time 5-content Starts - Ends: 00:00:00 - 00:00:00																							
	Event: Adventure Time 5-content Starts - Ends: 00:00:00 - 00:00:00																							
	Event: Adventure Time 4-content Starts - Ends: 00:00:00 - 00:00:00																							
Slot 2	Event: Adventure Time 4-content Starts - Ends: 00:00:00 - 00:00:00																							
Slot 3																								
Slot 4																								

1 Day View



7 Day View

Event Legend



Events are now color coded.

- **Event:** a normally scheduled event
- **Playlist Event:** an event containing a rotation of assets/other playlists
- **Event Tag Mismatch:** an event that was scheduled but can't be played on this liveboard because of an tag mismatch (e.g., this liveboard is near a church, and the ad was for liquor, etc)
- **Domination Event:** an event that will override the regularly scheduled event
- **Critical Alert Event:** an event that will override ALL content, including dominations

Tasks you can perform on this page:

- **See an event's details:** click launch icon on the blue bar of the event 
- **View a week's schedule:** click the **7-day View** gray rectangle
- **Move forward and backward days:** click the arrows on the gray date rectangle
- **Move forward and backward weeks:** click the double arrows on the gray date rectangles
- **Resume Schedule:** Resumes the liveboard's schedule if it was overridden or cleared

Editing Existing Events

You can make changes to all aspects of an event even if it is currently running (end date/time, recurrence, even swapping out assets or layouts). You can also delete an event before it ends.

On this page, you can make changes to an event's scheduling.

NOTE: If you access an event from dashboard > **EVENTS**, you can't edit the Layout/Asset menu.

You can make changes to any information about the event here.

- To change the layout, click **Layout** field and select a different layout from the menu.



NOTE: You can't change from using a Layout to using an Asset and vice versa on an existing event.

Be sure to click **Save** to preserve your changes.

Deleting Events

The Rule Builder functionality has created two types of events: manually-assigned events and dynamically-assigned events. Each must be deleted in different ways.

Deleting a Single Event

You must use this method to delete any rule-assigned events.

- From within the Event details page, click **Delete** (lower right corner), then click **OK** on the confirmation dialog

Removing All Manually Assigned Events for a Liveboard

NOTE: Running this command removes ONLY manually assigned events from a liveboard. "Removing" an event only removes it from the liveboard's schedule, it does not delete the event from the cloud.

- Select an Organization from **Organization Content** menu.
- Go to dashboard > **LIVEBOARDS** > [LIVEBOARD] > **Schedule**.
- Click **Remove Manually Assigned Events**, then click **OK** on the confirmation dialog.

Deleting All Events Per Project

NOTE: Running this command deletes ALL events from a project, and cannot be undone.

- Select an Organization from **Organization Content** menu.
- Go to dashboard > **PROJECTS** > [PROJECT] > **Events**.
- Click **Delete All**, then click **OK** on the confirmation dialog.

Deleting Incomplete Events from All Organizations

An "incomplete" event is an event which is in any other status other than "complete." This command is a way to clean out your database from clutter. This command can only be performed by a user with admin rights.

NOTE: Running this command deletes all incomplete events, and cannot be undone.

- Go to **dashboard > EVENTS**.
- Click **Delete All**, then click **OK** on the confirmation dialog.

ADMINISTRATION

Managing Users

User Roles

Each user is assigned a role. Each role has different permissions, and can perform different tasks within the Tech Ops Portal. Currently there are two roles: user (default) and administrator.

Permissions Per User		User	Admin
LIVEBOARDS			
	View metrics	X	X
	Edit liveboard settings	X	X
	Assign to/remove from organizations		X
PROJECTS			
	Create/edit/delete	X	X
	Copy between organizations		X
LAYOUTS			
	Create/edit/delete	X	X
	Copy layouts between projects	X	X
ASSETS			
	Upload/edit/delete	X	X
	Copy assets between projects	X	X
	Copy assets between organizations		X
TAGS			
	Assign tags to liveboards, assets, events, playlists	X	X
	Create/edit/delete tags		X
	Create/edit/delete tag categories		X
REPORTS			
	Generate/view reports for events per project, or per liveboard	X	X
	Manage Alerts per liveboard (view/snooze/clear Alerts)	X	X
	DATASOURCES: Create/edit/delete	X	X
	CLOUD: View Cloud Page		X
	EVENTS: Delete Incomplete Events From All Orgs		X

Dashboard Appearance Per User	
User	Admin



Users Overview Page

- On the dashboard, under **Administration**, click **USERS**.

The **User** overview page shows you at a glance:

- the users in your system
- whether the user is an admin
- how many organizations they are associated with
- when their profile was created and last updated
- when they last logged in.

Email	Last Login	Admin Rights	Organizations	Updated	Created	Actions
aaron.hatuel@videri.c...	2 days ago	✓	0	2017/3/30, 12:26	2017/2/16, 08:28	
admin@videri.com	a month ago	✓	0	2017/3/8, 10:12	2017/2/14, 18:48	
andrew.ip@videri.com	a day ago	✓	0	2017/3/31, 05:13	2017/2/15, 11:51	
andrew.prentice@vid...	10 days ago	✓	0	2017/3/21, 07:34	2017/3/21, 07:34	
benoit.lavigne@videri...	a month ago	✓	0	2017/2/16, 07:33	2017/2/15, 08:45	
charlene.jaszewski@v...	a day ago	✓	0	2017/3/31, 10:41	2017/3/16, 11:24	
ilias.deros-admin@videri.com	21 hours ago	✓	0	2017/3/31, 07:17	2017/2/17, 07:51	
ilias.deros@videri.com	a month ago		1	2017/2/17, 12:51	2017/2/16, 07:34	
jdooling@videri.com	a month ago		1	2017/3/14, 07:50	2017/2/16, 12:35	

Creating a New User

1. On the dashboard, under **Administration**, click **USERS**.
2. In upper left corner, click **New**.

New User

Email:

First Name:

Last Name:

Password:

Confirm Password:

3. Fill in the **New User** information fields.
NOTE: Password must be between 8 and 30 characters.
4. Click **OK**.



Editing User Details

After a new user is created, the **User** details page is shown.

You can also access this page by:

- Clicking **dashboard > USERS > [USER]**

Adding Users to Organizations

Users need to belong to Organizations in order to see and work with projects, assets and layouts.

1. On the **User** detail page, under **Organizations**, click inside the field. The Organizations drop-down menu appears, with a list of available organizations.

The screenshot shows the 'User' detail page for 'bob.bloblaw@acme.com' (User ID: 18). The user's details are as follows:

- Email: bob.bloblaw@acme.com
- First Name: Bob
- Last Name: Bloblaw
- Administrator Rights: Off
- Active: On
- Password: Change password

Under the 'Organizations' section, a dropdown menu is open, showing a list of available organizations: Aaron, ACME, Devops, Jesse Org, and Videri. The 'Aaron' organization is currently selected and highlighted in green.

2. Click on the Organization to add the user to. The new Organization appears in the **Member** field.

The screenshot shows the 'Organizations' dropdown menu. The 'ACME' and 'Devops' organizations are highlighted in green, indicating they are selected. Below the dropdown, the 'Member' field is visible, showing the selected organization 'Aaron' and 'Jesse Org'.

3. Repeat this process to add membership to additional organizations.
4. Click **Save**.



Removing Users from Organizations

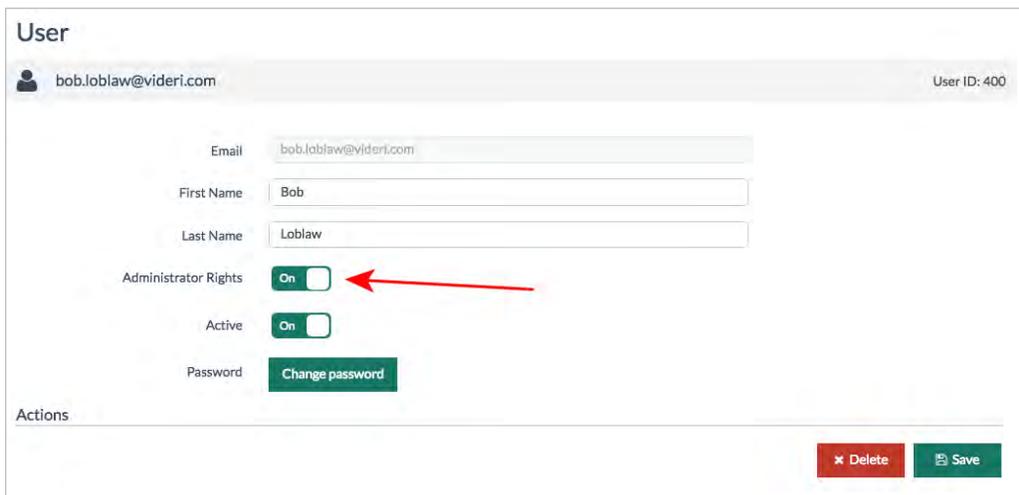
1. In the **Organizations** field, roll over the organization to remove membership from. An X appears in the corner.



2. Click the X. The organization disappears from the **Organizations** field.
3. Click **Save**.

NOTE: A user can also be added to an organization from within an Organization’s detail page.

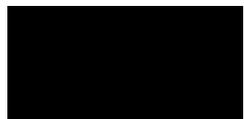
Making User an Admin



1. On the **User** detail page, move **Administrative Rights** slider to **ON**.

NOTE: When this option is enabled, the **Organizations** section disappears, as a user with Administrator rights belongs to all organizations.

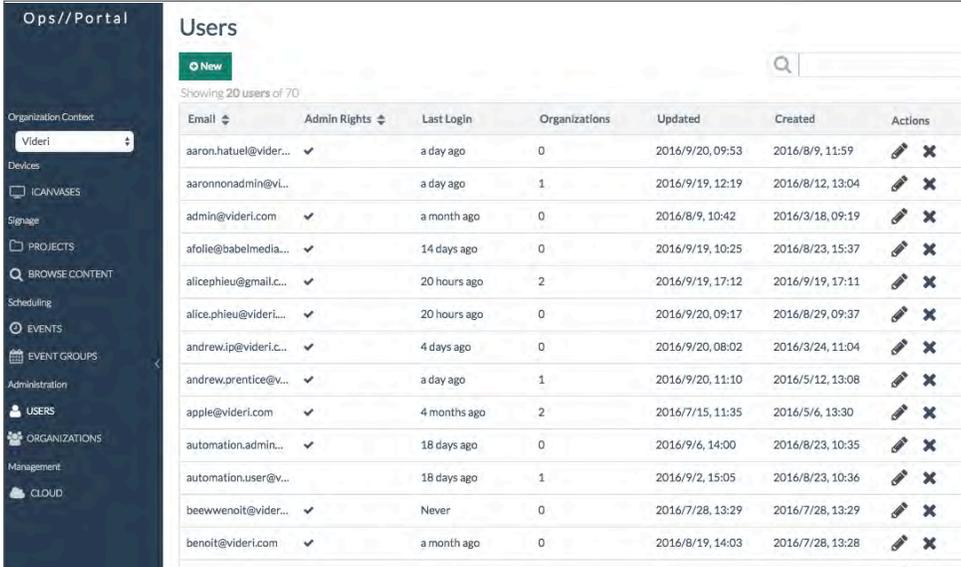
2. Click **Save**.

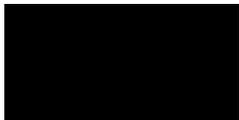


Deleting a User

You can delete a user in two ways:

- From the **User** overview page
- From within the **User** detail page

Deleting Users	Information
<p>Deleting a User from the Overview Page</p>	<ol style="list-style-type: none"> 1. On the dashboard, under Administration, click USERS. 2. Find the row of the user to delete.  <ol style="list-style-type: none"> 3. Click the X.  <ol style="list-style-type: none"> 4. On the confirmation window, click OK.
<p>Deleting a User from the Details Page</p>	<ol style="list-style-type: none"> 1. On the dashboard, under Administration, click USERS. 2. Find the row of the user to delete. Click X. 3. On the confirmation window, click OK.



Managing Organizations

Viewing Organizations Overview

- On the dashboard, under **Administration**, click **ORGANIZATIONS**. The Organizations overview page appears.

The screenshot shows the 'Organizations' page with a search bar and a 'New' button. Below the search bar, it says 'Showing 4 organizations of 4'. The table below contains the following data:

Name	Updated	Created	Owner	# Users	Actions	EDIT
Aaron	2017/2/20, 08:15	2017/2/20, 08:15	aaron.hatuel@videri...	0	[Pencil] [X]	
Devops	2017/2/15, 14:55	2017/2/15, 14:55	admin@videri.com	0	[Pencil] [X]	
Jesse Org	2017/2/15, 07:37	2017/2/15, 07:37	admin@videri.com	1	[Pencil] [X]	
Videri	2017/2/14, 19:01	2017/2/14, 19:01	admin@videri.com	1	[Pencil] [X]	

Creating a New Organization

- On the dashboard, under **Administration**, click **ORGANIZATIONS**.
- In upper left corner, click **New**.

The screenshot shows a 'New Organization' modal window. It has two input fields: 'Name' with the value 'Northern Electric' and 'Info' with the value 'Development division'. At the bottom right, there are 'Cancel' and 'Ok' buttons.

- Fill in the Organization **NAME** and **INFO** (description) fields.
- Click **Save**.



Editing Organization Details

To edit an organization's details:

1. On the dashboard, under **Administration**, click **ORGANIZATIONS**. The Organization Overview page appears.
2. Click anywhere on the row of the Organization (or the pencil) to open the Organization detail page.

The screenshot shows the 'Organization' detail page for 'Northern Electric'. At the top, there is a header with the organization name and a user count of 262. Below this, there are two input fields: 'Name' with the value 'Northern Electric' and 'Information' with the value 'Development division'. Underneath, there is a 'Users' section with a single user listed: 'bob.loblaw@videri.com'. At the bottom right, there are two buttons: a red 'Delete' button and a green 'Save' button.

Adding Users to the Organization

Users must belong to an organization in order to see and work with its projects, assets and layouts.

1. On the Organization detail page, click inside the **Users** field. The **Users** drop-down menu appears, with a list of users (emails) in alphabetical order.

The screenshot shows the 'Organization' detail page for 'Aaron'. The 'Name' field contains 'Aaron' and the 'Information' field contains 'Info'. The 'Users' section is open, showing a dropdown menu with three email addresses: 'ilias.deros@videri.com', 'jdooling@videri.com', and 'test@videri.com'. The first email address is highlighted in green.

2. Click on the user/email to add. The email appears in the **Users** field.
 3. Repeat this process to add more users to the organization.
- NOTE:** A user can also be added to an organization from within a User details page.
4. Click **Save**.



Removing Users from Organizations

1. In the **Users** field, click on the user to remove from the organization. An X appears in the corner.

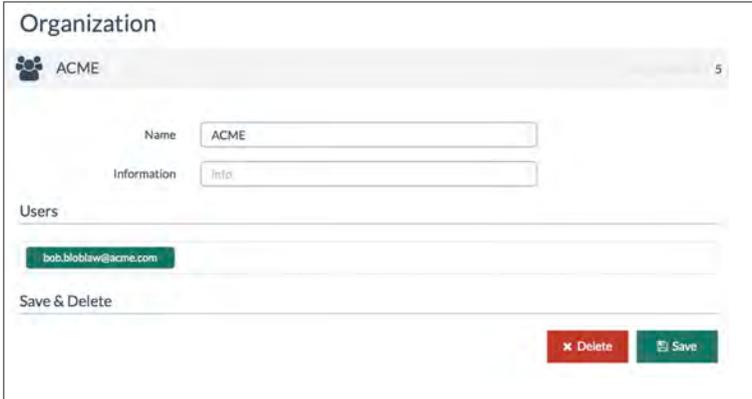


2. Click the X. The user disappears from the **Users** field.
3. Click **Save**.

Deleting an Organization

You can delete an Organization in two ways:

- From the **Organization** overview page
- From within the **Organization** detail page

Deleting Organizations	Information
<p>Deleting an Organization from the Overview Page</p>	<ol style="list-style-type: none"> 1. On the dashboard, under Administration, click ORGANIZATIONS. 2. Find the row of the organization to delete, and click the X.  <ol style="list-style-type: none"> 3. On the confirmation window, click OK.
<p>Deleting an Organization from the Details Page</p>	<ol style="list-style-type: none"> 1. On the dashboard, under Administration, click ORGANIZATIONS. 2. Click on the row of the organization to delete.  <ol style="list-style-type: none"> 3. Click Delete, then OK from the confirmation window.



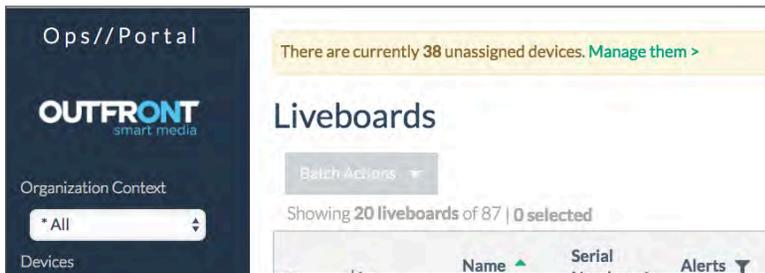
Managing Liveboards' Relationships to Organizations

Before you add a liveboard to an Organization, be sure you are adding it to the correct one. Since content (assets, layouts, applications, etc.) are associated with projects and organizations, if you later need to reassign a liveboard to another organization:

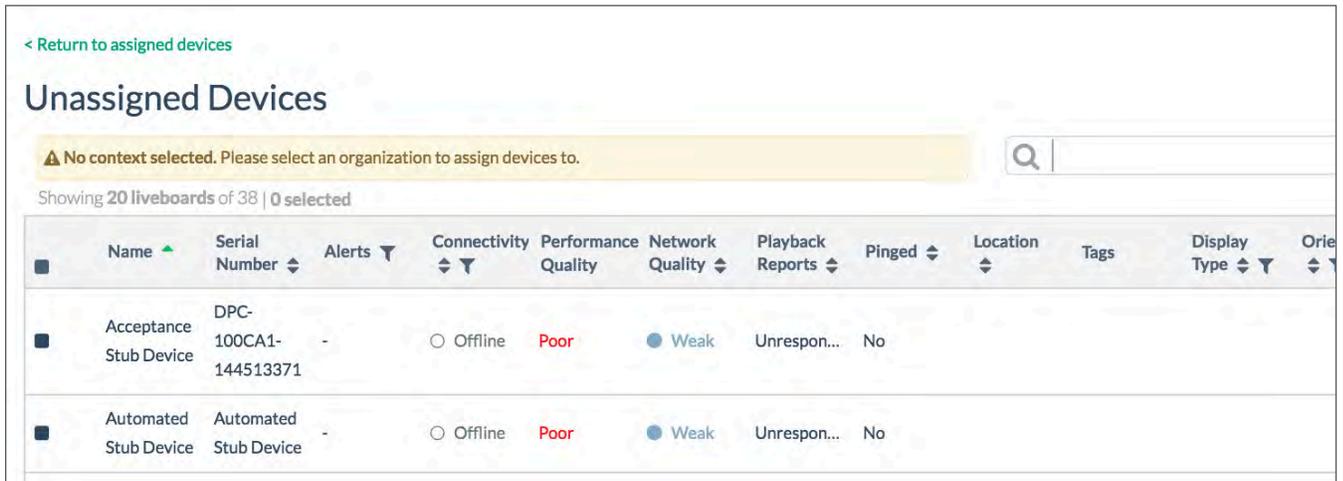
- it will cease playing the content that is assigned to it;
- your liveboard may become inoperable.

Adding Unassigned Liveboards to an Organization

1. On the dashboard, under **Organization Context**, select an Organization to assign devices to from the drop-down menu.
2. Under **Devices**, click **LIVEBOARDS**. If there are unassigned devices, you will see this message at the top of the page.



3. Click **Manage them**. The **Unassigned Devices** page appears.



4. Check the box(es) of device(s) to add to the Organization.
5. Click **Assign to [organization]** at the top of the screen.
6. The device is assigned to the Organization (no confirmation dialog).

Removing a Liveboard from an Organization

If you want to move one or more liveboards from one Organization to another, you must first remove it ("unassign" it) from its current organization.

WARNING: Once a device is unassigned from its organization, it will stop playing content, and may become inoperable.

1. On the dashboard, under **Organization Context**, select the Organization that contains the device to unassign from the drop-down menu.

- Under **Devices**, click **LIVEBOARDS**.
- Check the box(es) for the device(s) you want to unassign. Pull down the batch actions drop-down menu.
- Click **Unassign**. The warning dialog appears.



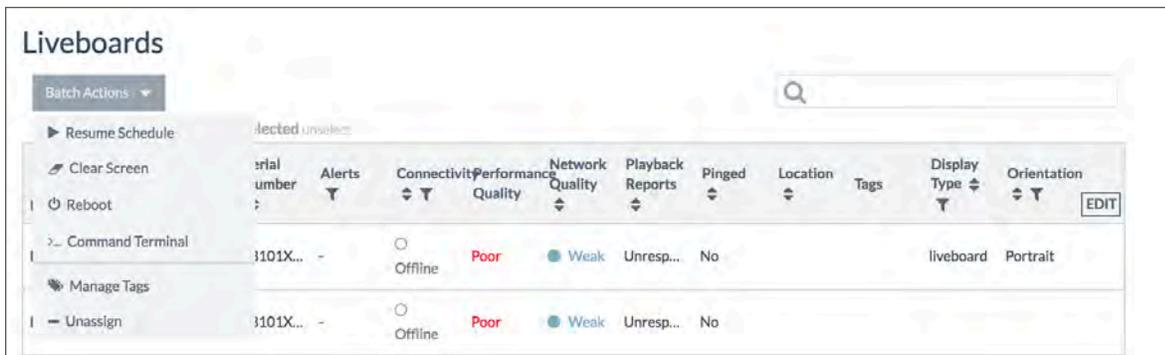
- If you are sure this is what you want to do, click **OK**. The device is removed from the Organization's Devices list, and goes back onto the Unassigned Devices list.

Removing Multiple Liveboards from Multiple Organizations

If you want to move one or more liveboards from one Organization to another, you must first remove it ("unassign" it) from its current organization.

WARNING: Once a device is removed from its organization, it will stop playing content, and may become inoperable.

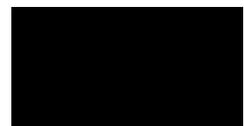
- On the dashboard, under **Organization Context**, select *All.
- Click **LIVEBOARDS**.
- Check the box(es) for the device(s) you want to remove.



- Pull down **Batch Actions** and select **Unassign**. The warning dialog appears.



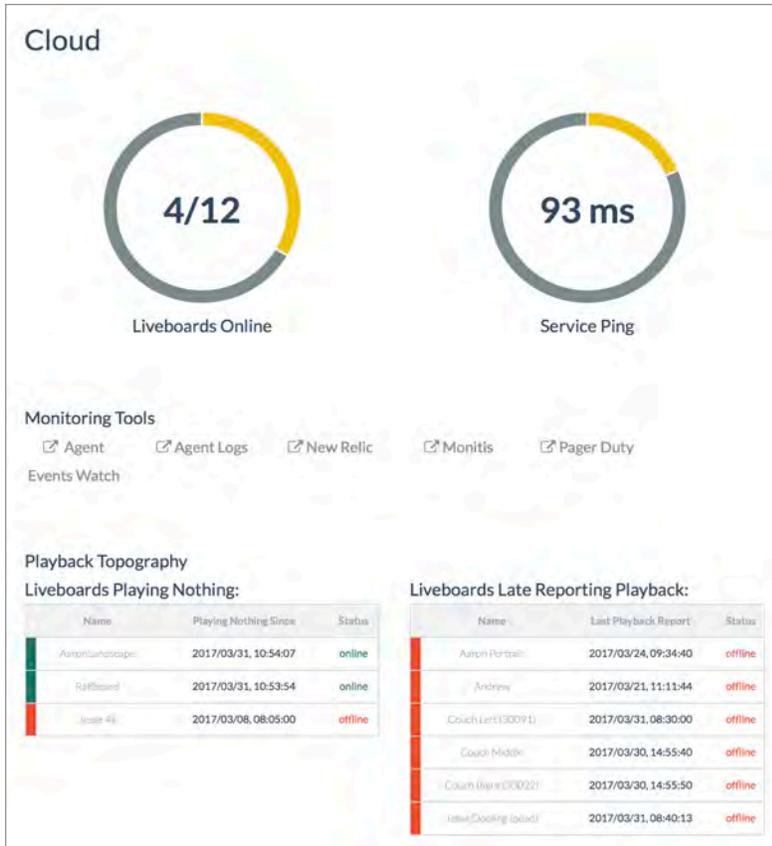
- If you are sure this is what you want to do, click **OK**. The devices are removed from the Organizations' Devices list, and they all go back onto the Unassigned Devices list.



Viewing CLOUD Overview Page

To view high level details of all liveboards managed:

- On the dashboard, under **Devices**, click **CLOUD**.



The CLOUD page shows high level information:

- Liveboards online:** numbers of liveboards currently online
- Service Ping:** the speed the Tech Ops Portal pings the provisioning server

Monitoring Tools

Links to third party monitoring tools.

Playback Topography

- Liveboards Playing Nothing:** a liveboard reports back every 10 plays or every 15 minutes (whichever comes first) if it is playing nothing, not even the logo.
- Liveboards Reporting Late Playback:** identifies liveboards from which a playback report has not been received in over 15 minutes. This may indicate connectivity issues.



Performing Advanced Operations on Liveboards

There are some basic “operations” commands that tech ops personnel may want to perform on a liveboard, either to do testing, or do a demo. These commands are available in two places: the Command Terminal tab, and from a “pop out” panel on the liveboards overview page.

Command Terminal

This page gives you command terminal access to the liveboard. The buttons at the top represent shortcuts to some common commands.

- To see the entire list of available command terminal commands, click **Help**.

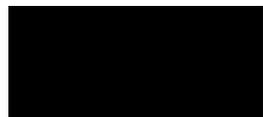
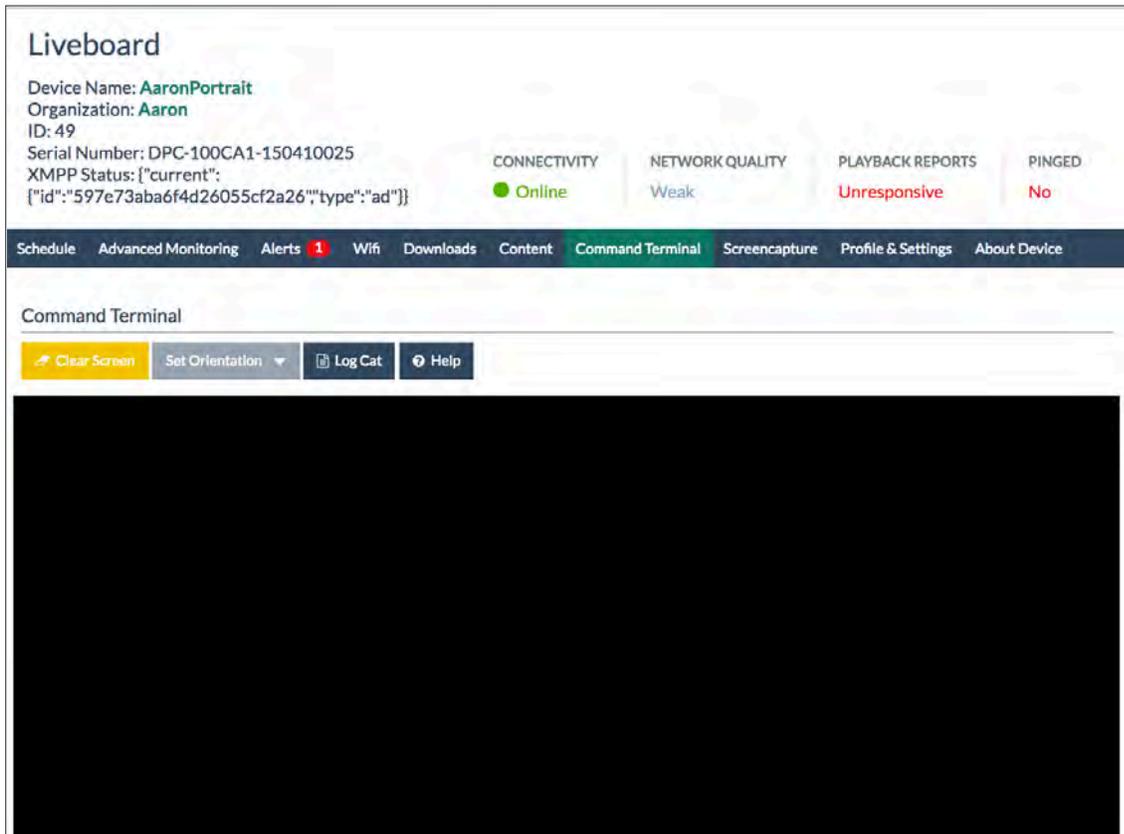


Table: Basic Command Terminal Commands

Command	Description
Clear	Click to clear current liveboard content and show logo. Liveboard will remain cleared until: <ul style="list-style-type: none"> – midnight (local time) – someone changes the current schedule (a new schedule is sent) – someone clicks RESUME SCHEDULE on the [Liveboard] > Schedules tab
Set Orientation	Sets orientation of liveboard. <ol style="list-style-type: none"> 1. Click Set Orientation button. 2. Select the desired orientation from the pop up menu.
Log Cat	Displays log file information. <ul style="list-style-type: none"> – Click Log Cat to show current log file.

Batch Actions

Batch actions can be performed on any overview pages. Available batch actions differ per overview page. Batch actions on the liveboard overview page are on a drop-down menu, while other areas have buttons.

Liveboard Batch Actions

- Select one or more online liveboards, and the Batch Actions menu appears above the liveboard list.

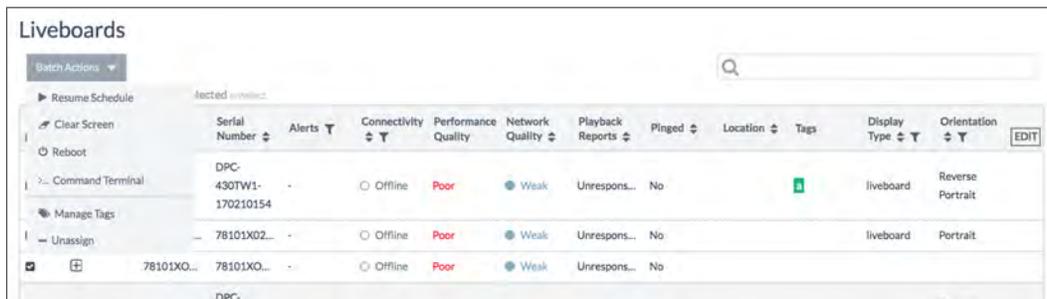
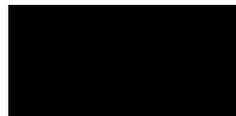


Table: Liveboard Batch Actions

Command	Description
Resume Schedule	Resumes any playbacks present on the liveboard’s schedule
Clear Screen	Removes all schedules from liveboard
Reboot (Liveboard)	Reboots selected liveboard(s). After reboot the liveboard will display the same content that was playing before reboot.
Command Terminal	Launches the Command Terminal to send commands to multiple liveboards
Manage Tags	Assigns Tags to liveboard(s)
Unassign (admin only)	Removes selected liveboard(s) from their current Organization(s)



Project Item Batch Actions

- Select one or more items, and available Batch Action buttons appear above the item list.

Command	Description	Assets	Layouts	Events	Playlists	Event Groups
Schedule	Creates Event	X			X	
Tagging	Opens tag dialog to assign or create tags (only admin can create tags)	X	X	X	X	
Delete	Deletes item	X		X	X	X
Copy	Copies asset to other organization	X				
Edit	Opens event details (changes applied to selected events)			X		
Clone	Creates duplicate of selected event			X		



TAG MANAGEMENT

VLE version 1.7 brings a more robust and organized tag management system. In previous versions, tags could be created by any user, but there was no ability to organize tags, or prevent too-similar tags. There is now a centralized TAG MANAGEMENT section available on the dashboard, and some tag functions are available on pages where tags can be assigned.

- Admin users will be able to create, edit and delete tag categories and tags.
- Both admin and users can assign available tags to and remove tags from liveboards, assets, events, playlists, and datasources

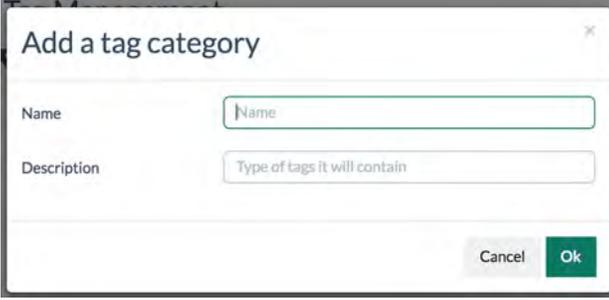
Tag Categories

- Tag Categories organize tags.
- Tag Categories (and tags within) are independent of organizations.
- Tag Categories are created/edited/deleted in the TAG MANAGEMENT area and other areas where tags can be assigned.
- Tag Categories are edited and deleted in the TAG MANAGEMENT area.
- Tag Categories must be one word, with a maximum of 140 characters. Supported characters: -, _, a-z, A-Z and 0-9 .
- Tag Categories can be edited without damaging any tag or rule relationships (as each tag category has a backend database ID which remains the same).
- Tag categories are searchable

Creating Tag Categories

Creating tag category (TAG MANAGEMENT AREA)

1. While logged in as admin, click **TAG MANAGEMENT**.
2. Click **Create**.



3. Enter tag category name and description (optional). A tag category name must be one word, with a maximum of 140 characters. Supported characters: -, _, a-z, A-Z and 0-9 .
4. Click **OK**.

NOTE: If the tag category name already exists you will get an error warning.

Creating tag category (other areas)

You can create a new category when creating a new tag.

1. While logged in as admin, click in the **Tags** field on an item details page.

The screenshot shows the 'Asset details' form for an asset with ID 12073. The form includes fields for Name (Adventure Time 1), Contract ID (fsfgfs), Tags (frog), and Orientation (+ Create New Tag). There are 'Delete' and 'Save' buttons at the bottom right.

2. Type tag name in field. If it's unique, you'll see the **Create New Tag** on dropdown menu (click it).

The screenshot shows the 'Create a new tag' dialog box. It has a text input field with 'spring' entered and a 'Select a category' dropdown menu with 'cat' entered. The dropdown menu is open, showing a list of categories: Cats, Illas, Locations, Philippe, UI-cat, and Zonet.

3. Type in the **Select Category** field, available tag categories appear. Select one, and click **Save**.

Editing Tag Categories

Editing tag category

1. While logged in as admin, click **dashboard > TAG MANAGEMENT**.
2. Click the row of the tag category to open it.
3. Click the name of the tag category to open the field in edit mode.

The screenshot shows the 'Locale' edit form. It has a text input field with 'Liveboard Location' entered. Below the field is a search bar and a list of tags: Montreal and NYC. There is also an 'Add a tag...' button.

4. Edit the tag category name as desired, and hit **Enter** to close the edit pane. Click in the description area to edit it also if desired. Changes are saved automatically.



Deleting tag category

You can delete a single tag category, or delete multiple tag categories.

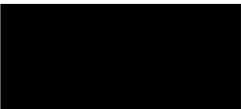
NOTE: Deleting a tag category also deletes any tags it contains and cannot be undone.

WARNING: There is no warning if tags in a category are in use, so be SURE this is what you want to do.

Deleting Tag Category	Information
<p>Deleting single tag category</p>	<ol style="list-style-type: none"> While logged in as admin, click dashboard > TAG MANAGEMENT. Click the tag category name to open the edit pane.  <ol style="list-style-type: none"> Click Delete, then OK to confirm.
<p>Deleting multiple tag categories</p>	<ol style="list-style-type: none"> While logged in as admin, click dashboard > TAG MANAGEMENT. Check the boxes on the rows of tag categories to delete. Click Delete, then OK to confirm.

Tags

- Tags can only be created by a user with admin rights.
- Tags must be created within a category.
- Tags must be uniquely named within a category, but you can have the same tags in different categories.
- Tags can't be moved between categories.
- Tags can be multiple words (combinations of alphanumeric characters). Tags have a maximum of 140 characters. Supported characters: -, _, a-z, A-Z and 0-9 .
- Tags can be created in the TAG MANAGEMENT section, as well as the Tags field in many items (Assets, Playlists, etc.).
- Tags can be edited without damaging any tag or rule relationships (as each tag has a backend database ID which remains the same).
- You will get a notification if you create a tag that is similar to an existing tag within that category.
- Tags are searchable within the tag category.



Creating Tags

Creating Tags (TAG MANAGEMENT)

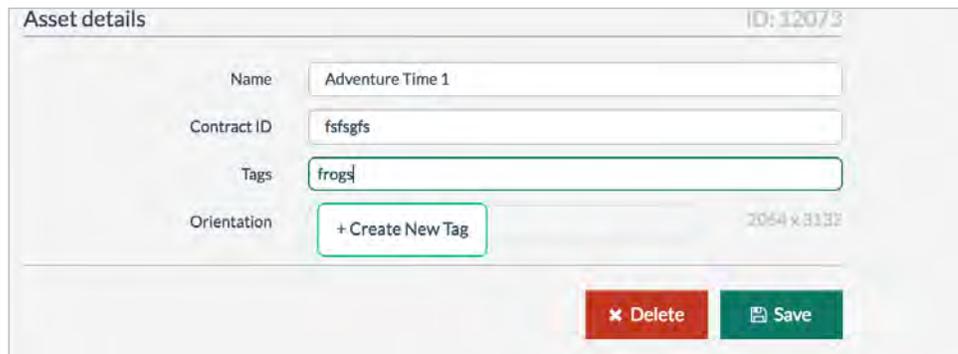
1. While logged in as admin, click **dashboard > TAG MANAGEMENT**.
2. Click the tag category to add tag to. The Tag Category pane will open.



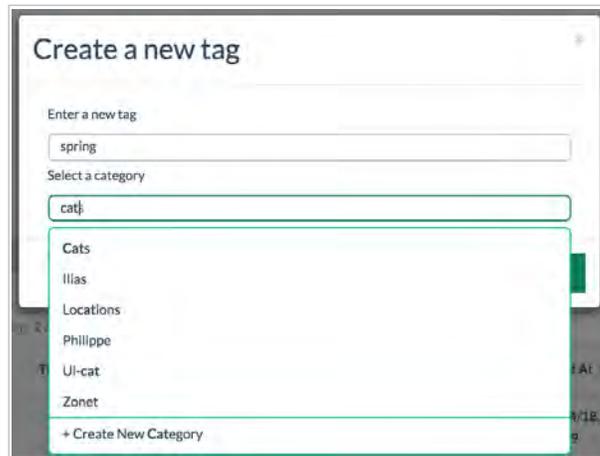
3. Type tag name in empty field, then either hit ENTER or click green checkmark. The new tag appears.

Creating Tags (detail pages)

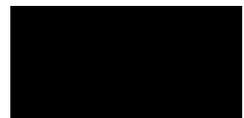
1. While logged in as admin, click in the **Tags** field for liveboards, assets or playlists.



2. Type tag name in field. If it's unique within the tag category, you'll see the **Create New Tag** on dropdown menu (click it).

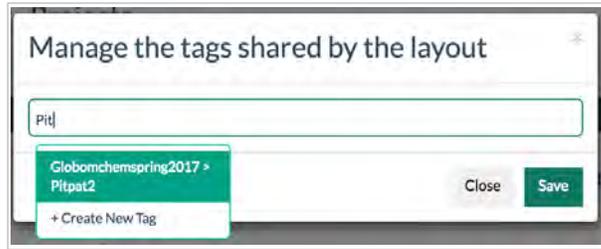


3. Type in the **Select Category** field, available tag categories appear. Select one, and click **Save**.



Creating Tags for Layouts

1. Click **PROJECTS > [PROJECT] > LAYOUTS** tab.
2. Check the box(es) for layout(s) to assign tags to.
3. Click **Tagging**.



Editing Tags

Edit tags

1. While logged in as admin, click **TAG MANAGEMENT**.
2. Click the tag category which contains the tag to edit.
3. Click on the tag to edit to put it in edit mode.



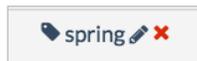
4. Make changes, and hit enter. Changes are saved automatically.

Deleting Tags

Delete tags

Tags can only be deleted by a user with admin rights from the TAG MANAGEMENT area.

1. While logged in as admin, click **TAG MANAGEMENT**.
2. Click on the red x to the right of the tag. Tag is deleted.



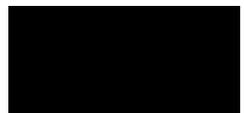
NOTE: there is no confirmation dialog when deleting a tag.

Assigning and Removing Tags

Tags can be assigned or removed by any user.

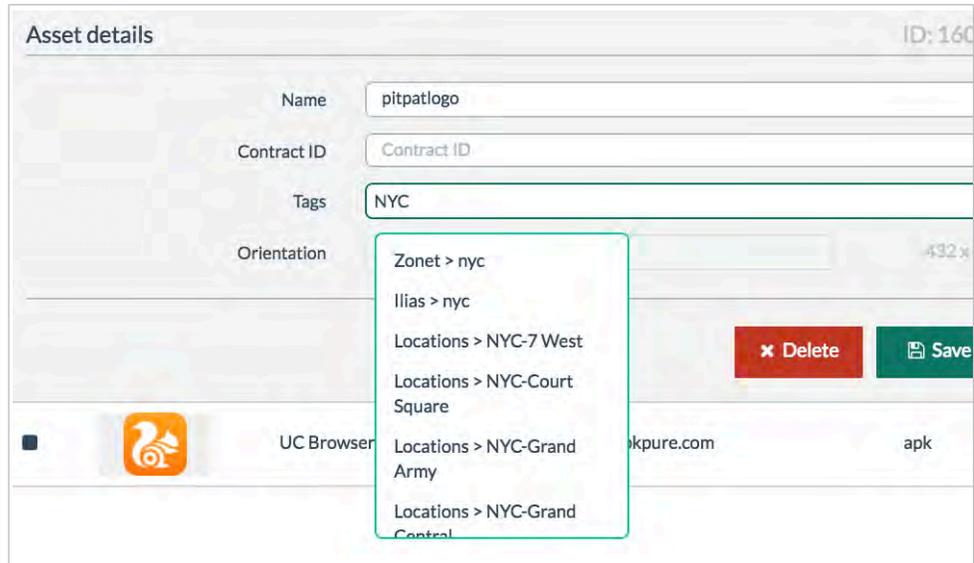
Tags can be assigned to or removed from:

- liveboards (Profile & Settings tab)
- assets (details)
- events (details)
- layouts (from overview page batch actions)
- playlists (details)
- datasources (details page after initial saving)



Assigning tags (on a details page)

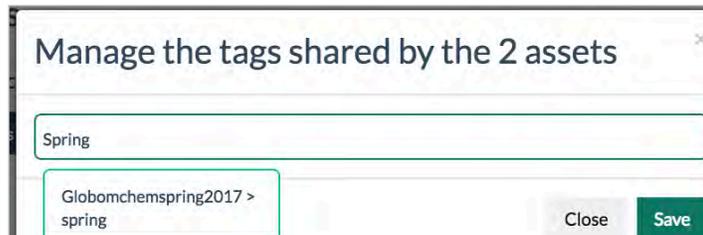
1. In one of the areas with a tag field, start typing. A list will auto-complete if any of the characters typed match any of the tags..



2. Click on the tag to assign.
3. Click **Save**.

Assigning tags (on an overview page)

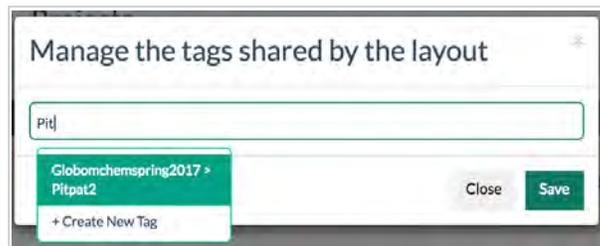
1. On an overview page, check the box(es) of items to assign tags to.
2. Click **Tagging**. A dialog appears pre-filled with any tags assigned to selections.
3. Start typing in the field. The field will show any matching tags.



4. Click **Save**.

Assigning tags to layouts

1. Click **PROJECTS > [PROJECT] > LAYOUTS** tab.
2. Check the box(es) for layout(s) to assign tags to.
3. Click **Tagging**. A dialog appears pre-filled with any tags assigned to selections.
4. Start typing in the field. The field will show any matching tags.



5. Click **Save**.



Removing tags from an item

1. Roll over the tag to remove, until an X appears to the right.

The screenshot shows the 'Asset details' form for ID: 16065. The form includes fields for Name (pitpatlogo), Contract ID, Tags (Globomchemspring2017 > spring), and Orientation (square). A red 'Delete' button with an 'X' icon is positioned to the right of the tag field, and a green 'Save' button is at the bottom right.

2. Click the X. Tag will disappear.
3. Click Save.

Removing tags from a layout

1. Click **PROJECTS > [PROJECT] > LAYOUTS** tab.
2. Check the box(es) for layout(s) to remove tags from.
3. Click **Tagging**. A dialog appears pre-filled with any tags assigned to selections.
4. Roll over the tag to remove, until an X appears to the right.

The screenshot shows a dialog box titled 'Manage the tags shared by the layout'. It contains a search field with the text 'Pit', a list of tags including 'Globomchemspring2017 > Pitpat2', and a '+ Create New Tag' button. A red 'X' delete button is visible next to the selected tag, and 'Close' and 'Save' buttons are at the bottom right.

5. Click the X, then click **Save**.

