

Liquid Galaxy Update 2020 Q2:

The following is a list of many of our most recent feature updates and bug fixes in Q2. Along with the individual bug fixes, restarts, and site-specific updates that we have done for each system, End Point has performed a number of fleet-wide feature updates, upgrades, and improvements.

Core Experience

These updates are for bringing important new functionality to the Liquid Galaxy platform.

Feature Updates

(Iso updates from 3.0 to 3.1.5)

- Earth Version: from 7.3.2 to 7.3.3
- Cesium Changes:
 - Upgraded to Python3
 - Introduction of new custom deployment mechanism for Cesium base to allow for more frequent base app release upgrades tested for LG compatibility
 - Cesium version upgraded from 1.62 to 1.70.1
- An online user-interface tool that allows for conversion from Google Earth generated KML to Cesium- based CZML and for subsequent editing
- Lg ros nodes:
 - Upgraded to Python3
 - Media player ros node for better synced video
 - Image viewer fixes, support transparent images
 - Created unique slug ids for sv windows to prevent race conditions
- Unity
 - Upgraded to Python3
- Street View viewer
 - Upgraded to Python3
- Zoom integration
- Clickshare integration
- Hardware research into new podium stands for ipads, development of potential new product lines

Bug Fixes

- Rosbridge:
 - Fixes for reliability
- General Fixes:
 - Map touchscreen when it is powered on preventing the previously necessary relaunch

- o Better handle temporary spacenavigator device disconnections
- Improvements to our logging and continuous integration testing
- Cesium bug fixes
- New Street View implementation that automatically generates a more modern pano ID (based on Google's API) and serves more reliable imagery for Street View and user uploaded Panospheres.

Infrastructure

These updates are somewhat invisible to the experience, but make the overall platform much more robust and efficient.

Feature Updates

- Montage 2.0: a new interface for the support team to monitor the state of systems, review recent changes, and react to visual problems.
- Borg backup updates: Updates to the scripts we use to back up content and files on the
 systems in the event we need to restore data. The updates ensure that we no longer fill up
 our back up servers with unnecessary data, meaning that both back ups and data
 restoration can be done quicker and more reliably.
- CI infrastructure updates: invisible updates to optimize how we deploy updates to the systems, making it more efficient and effective.

Interface Improvements

We continue to improve the touchscreen/ipad interface:

Feature Updates

• Introduction of an updated framework (Vue.js) for our touchscreen interface. Currently redesigning an upgraded interface.

Content Management System

The following feature updates, application updates, and bug fixes were rolled out during Q2:

Application Updates

- Supported for transparency in PNG Graphic assets
- Allow administration of user accounts and passwords through the CMS
- Allow one-push publishing content from one system to another
- Allow imports to attach themselves automatically to new objects created for that purpose
- Added Data Immersion Room display configuration
- Added Pannellum asset type
- Backend updates in preparation for a new CMS interface featuring a new approach to building presentations, in addition to upgrading to a newer more modern framework (Vue.js)

Developer Updates

- Added search interface to director api
- Fixes to new get_object_tree
- Fixed login for publisher, to get through facade server

- Make sure export zips are deflated, and use zip64 to support exports > 4GB
- Quit importing several object types, for more stable imports

Bug Fixes

- Faster get_object_tree method, for scene duplication to quit failing
- Deduplicate both UI and CLI export files, and ensure UTF-8 data won't cause complaints
- Quit complaining about duplicate asset types and activities on CLI import
- Fixed directory permissions for assets directory in docker image
- Fixed logging so dockerized CMS's logs are more useful
- Fix to delete existing scene thumbnail before uploading a new one

As always, please do not hesitate to reach out to us with any questions about these fixes and features. We also encourage you to reach out with any requests for new features and capabilities!