- when it has to be **right**

Leica Geosystems
Release Notes

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Product	Leica JetStream Viewer 2020
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From	HDS Software Product Management

Contents

What's New

This is a major release including support for the BLK2GO scanner.

BLK2GO support

This release includes support for the new BLK2GO scanner.

The BLK2GO is a new handheld imaging laser scanner from Leica Geosystems which captures images and dimensionally accurate point clouds in real-time and uses SLAM technology to record the user's trajectory though space.
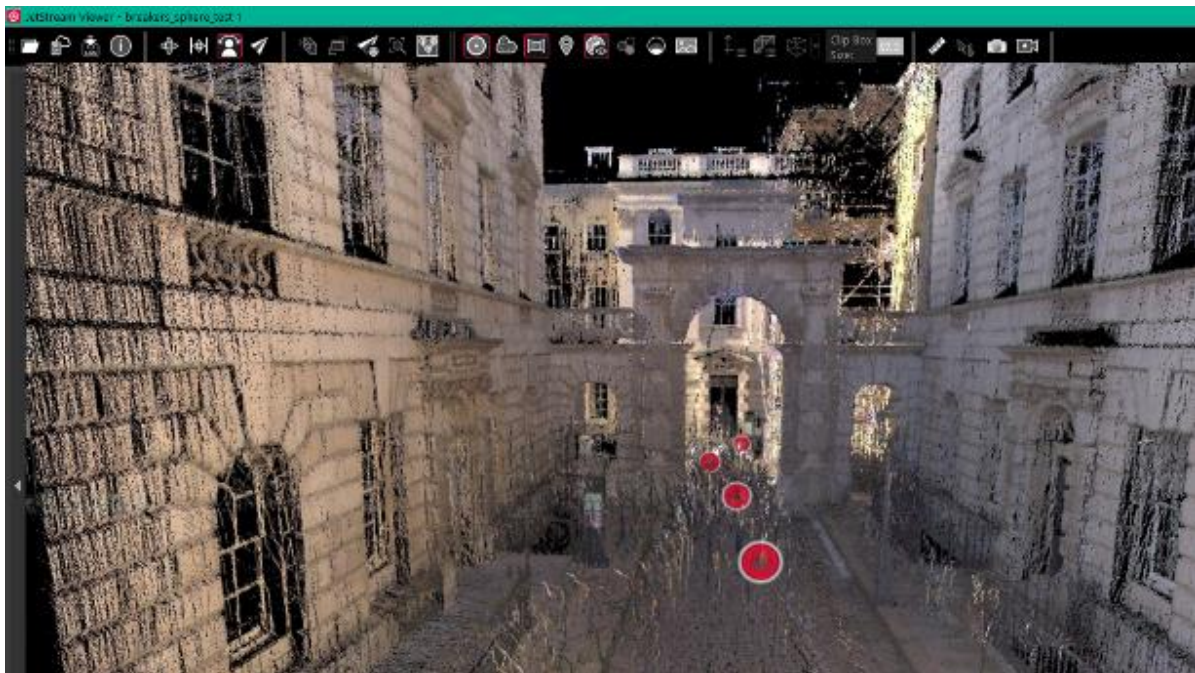

JetStream Viewer 2020 supports visualizing the point and panormaic imagery data and GeoTags collected by the BLK2GO scanner as well as the WayPoints created in Cyclone or the Cyclone REGISTER 360 family. WayPoints will be experienced as Setup positions within the context of JetStream Viewer, allowing users to jump from WayPoint to WayPoint for a panoramic image expericne. Users can also navigate through the point cloud using the fly tool.

All JetStream Viewer capabilites are available with BLK2GO data including Snapshots and Markups, GeoTag viewing, video recording and clipping

New Setup icons

The look of Setup position icons has been modernized across the Laser Scanning Software portfolio in keeping with the streamlined UI of the next-generation products. Yellow 3D tetrahedron and 2D triangle Setup markers have been replaced with red spheres and circles respectively. All scanner data imported into Cyclone 2020 adn Cyclone REGISTER 360 2020 will display spheres when the IMP is accessed by CloudWorx.
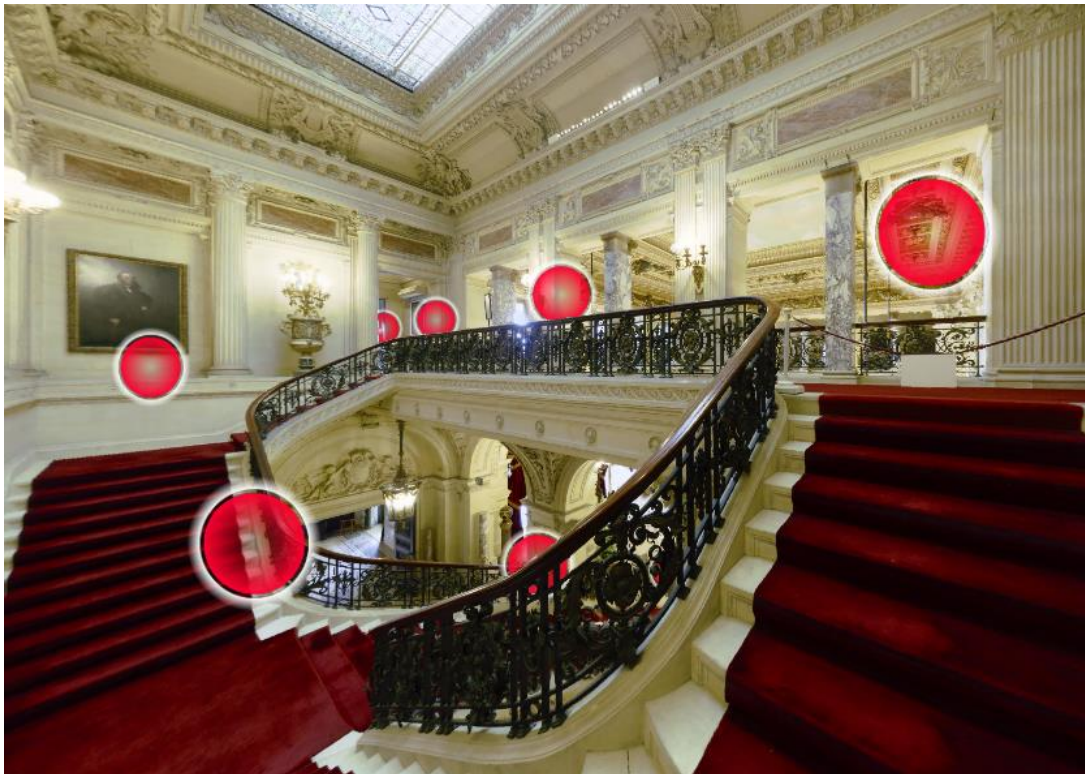
The new sphere setup marker will also appear in Cyclone, the Cyclone REGISTER 360 family, JetStream Viewer, TruView Enterprise and Cloud, and in the CloudWorx TruSpace window..

Old JSV files, LGS files, and JetStream Enterprise projects will continue to display yellow 3D tetrahedrons and 2D triangles. To access the new UI, please re-publish projects from Cyclone 2020 or the Cyclone REGISTER 360 2020 family to LGS files or to JetStream Enterprise 2020. JSV files are depricated and will not support this new UI enhancement.

Old projects accessed via JetStream Enterprise will display tetrahedrons if the JetStream Enterprise service is running 1.6.1 or earlier and spheres if it is running 2020 or later.

Spheres can be resized in JetStream Viewer in the Settings dialog. To adjust the size of a sphere:
1. Access the Settings dialog by clicking on the gear at the top right of the Viewer window.
2. Select the desired radius of the Setup sphere.
   - Minimum setup size is 0.1m maximum size is 1m.
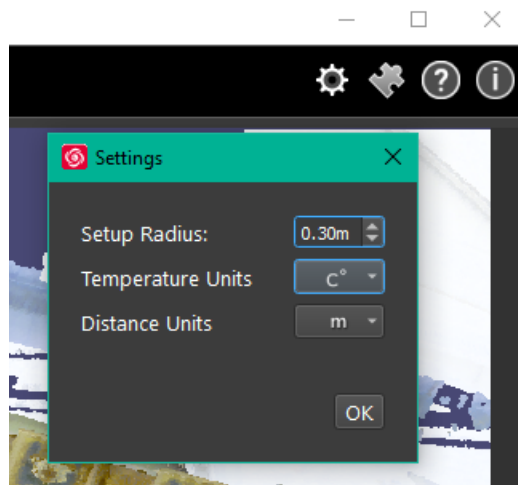3. Click **OK**.
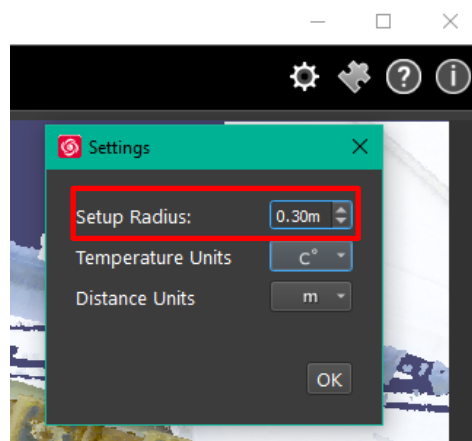
New Settings Dialog

Universal project settings have been moved to a settings dialog to streamline the main toolbar. To access settings click on the gear at the top right of the Viewer window.

Available settings are:
- Setup Radius (0.1 - 1.0m)
- Temperature (Farenheight, Celsius, Kelvin)
- Distance Units (feet, meters, US Surevy Feet)

Improved JetStream Enterprise connection dialog

The JetStream enterprise connection dialog will now save up to 10 recent connections. To access the connections, select the **Recent Connections** dropdown in the **Connect to Server** Dialog**.**
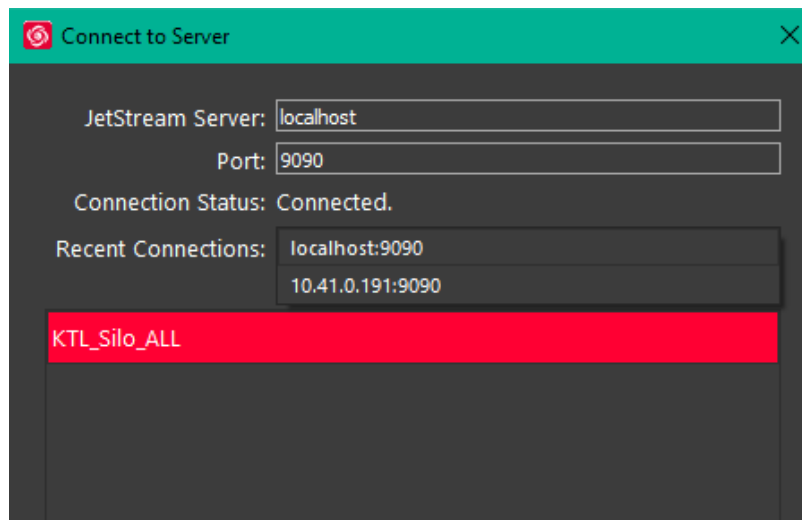
Orbit Orthographic

With this release a 360 degree user controlled view mode of the entire site is now available. Rotate or pan around a focal point using a mouse. Orthographic view represents the exact shape of an object as seen from one side at a time as the user is looking perpendicularly to it. Depth is not shown.
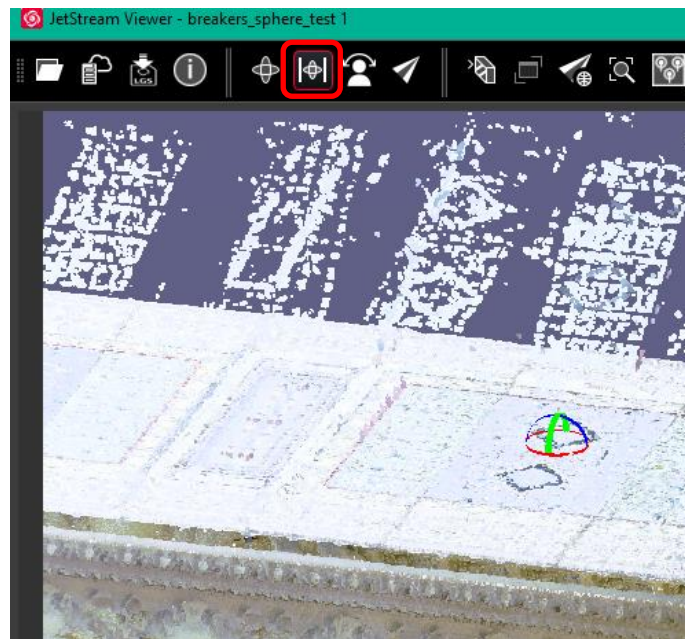
GeoTag preview on hover

If a GeoTag has an image asset attached to it, the image will diaplay when hovering over it. When the GeoTag contains an image, the image preview will be displayed.

New Cyclone PUBLISHER Family support

With the 2020 release of the Laser Scaning Software portfolio, Leica Geosystems will has simplified its Cyclone PUBLISHER Family and now offers two PUBLISHER licenses:

- Cyclone PUBLISHER
- Cyclone PUBLISHER Pro

Cyclone TruView PUBLISHER and Cyclone JetStream PUBLISHER will be replaced by Cyclone PUBLISHER and Cyclone PUBLISHER Pro which provide greater flexibility and several desirable features. This simplified PUBLISHER landscape will ensure that all users are working with the most modern and complete files possible and retain access to the full suite of Leica Geosystems software currently available to them.

Both PUBLISHER licenses will write LGS files which can be consumed downstream in Cyclone, Cyclone 3DR, JetStream Enterprise, JetStream Viewer, the CloudWorx suite, TruView Enterprise and Cloud, and Map360. Cyclone PUBLISHER will also publish ReCap files and a multiple pano layers (including IR imagery from the BLK360), all of which were previously only available with Cyclone PUBLISHER Pro.

With this move, historic formats, JSV and TVG, will no longer be published by the Cyclone REGISTER 360 Family, Cyclone or JetStream Admin, though JetStream Viewer and TruView Enterprise and Cloud will continue to accept them (respectively) indefinitely. TruView Local files will continue to be a publish option for the time being.

Projects stored in JetStream Enterprise which could formerly be written to JSV will now be written to LGS. If a project is missing any data required for the LGS format (such as a SiteMap from old projects published to JetStream Enterprise 1.4.2 or earlier, or from Cyclone 9.2.2 or earlier and from Cyclone REGISTER 360 1.4.3 or earlier), the user will receive a message stating that data is missing and the LGS cannot be produced. We recommend re-publishing such projects directly to LGS from Cyclone or the Cyclone REGISTER 360 Family to ensure a complete project file.

Additionally, for users who currently own either Cyclone TruView PUBLISHER or Cyclone JetStream PUBLISHER with current CCP (including TimeLimited, Education, EnterpriseElite, and Subscription licenses which include CCP), their current licenses will now be treated by the publishing software as Cyclone PUBLISHER Pro. Upon the expiration of a user's CCP or TimeLimited, Education, EnterpriseElite, or Subscription license(s), the user should officially migrate to Cyclone PUBLISHER Pro by contacting their sales or support representative and providing their EID(s). Each permanent seat of either Cyclone TruView PUBLISHER or Cyclone JetStream PUBLISHER can be migrated to a new, free of charge seat of Cyclone PUBLISHER Pro with the purchase of CCP for Cyclone PUBLISHER Pro.

CONTENT PUBLISHED	CYCLONE PUBLISHER	CYCLONE PUBLISHER PRO
TruView Local dataset	♦	♦
JetStream Enterprise Project	♦	♦
Direct publish to TruView Cloud	Controlled by TruView Cloud subscription	Controlled by TruView Cloud supscription
LGS file	♦	♦
LAS file		♦
RCP file*	♦	♦
Pano image as EXR & JPG		♦
Project name	♦	♦
Project creation date	♦	♦
Project creator info	♦	♦
Project stats metadata	♦	♦
SiteMap(s)	♦	♦
Control	♦	♦

Setups + Metadata	♦	♦
Multi-layer pano image	♦	♦
RGB pano image layer	♦	♦
HDR pano image layer	♦	♦
Intensity Hue pano image layer	♦	♦
Intensity Grayscale pano image layer	♦	♦
IR pano image layer + Temperatures	♦	♦
Models as part of RGB pano image layer		♦
Pano depthmap	♦	♦
3D point cloud	♦	♦
RGB attributes	♦	♦
Intensity hue attributes	♦	♦
Grayscale attributes	♦	♦
HDR attributes	♦	♦
Multiple UCS'	♦	♦
Clips	♦	♦
GeoTags + Metadata	♦	♦
Assets	♦	♦
Image	♦	♦
Video	♦	♦
Audio	♦	♦
PDF	♦	♦
Text	♦	♦
Publish Sub-selection: Limit Box content only		♦
Publish Sub-selection: Selected Setups only		♦

* RCP files can be produced from Cyclone REGISTER 360 (BLK Edition) without an additional PUBLISHER license.
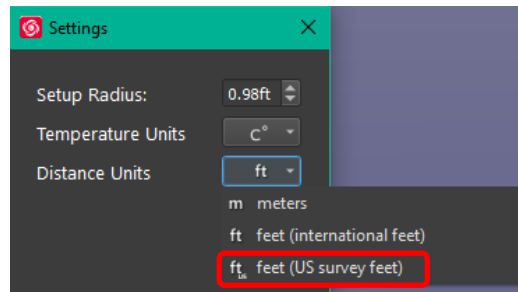
Support for Arabic

With the relase of JetStream Viewer 2020, users can now use the Viewer in Arabic. For this release, text has been translated but the UI has

not been mirored.

Support for US Survey Feet

JetStream Viewer now supports US Survey Feet for temporary measurements and permanent measurements within Markups. Users can change their unit of measurement from within in the Viewer's Settings.


Support for Clip Box creation

With the release of JetStream Viewer 2020, users now have the ability to create Clip Boxes which persist through the duration of a session rather that temporary clipping boxes only.
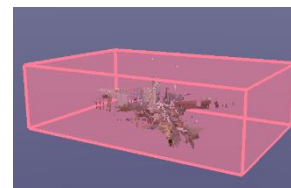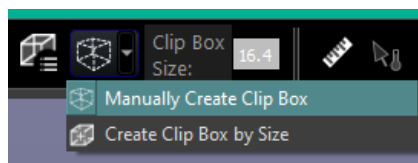
To create a Clip Box:
1. Click on the Clip Box dropdown and select **Manually Create Clip Box** or **Create Clip Box by Size**
   - **Create Clip Box by Size –** Define a clip box size, then identify a point in the viewer. The clip box will be create at the deifned size and using the selected point as the centroid.
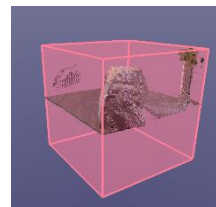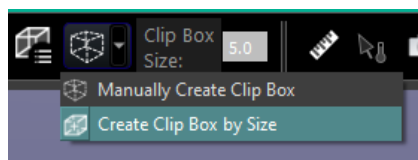
   - **Manually Create Clip Box** – A clip box will be created at the entire extent of the project. The Clip Box can then be manually adjusted to an appropriate size.


2. Create a Clip box in the viewing window
   - To adjust the size, click on a face and drag it to teh desired location.
   - Use SHIFT+Click to access faces on the reverse of the box
   - Use ALT+ Click to rotate a clip box
3. Click the Clip Box button again and select **Accept** to save the Box or **Clear** to delete it.
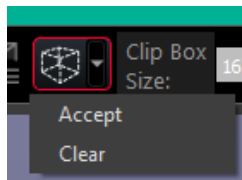
4. The newly created clip is now accessible from the **Saved Clips** list
5. When a Clip Box is active, it can be edited and Accepted again.

Improved Clip Box support

JetStream Viewer now supports viewing multiple Clip Boxes from the Cyclone REGISTER 360 family and Cyclone simultaneously and editing Clip boxes to a custom size. If more than one Clip Box was saved with a project, the viewer supports turning them on independently or simultaneously in the **Saved Clips** list.
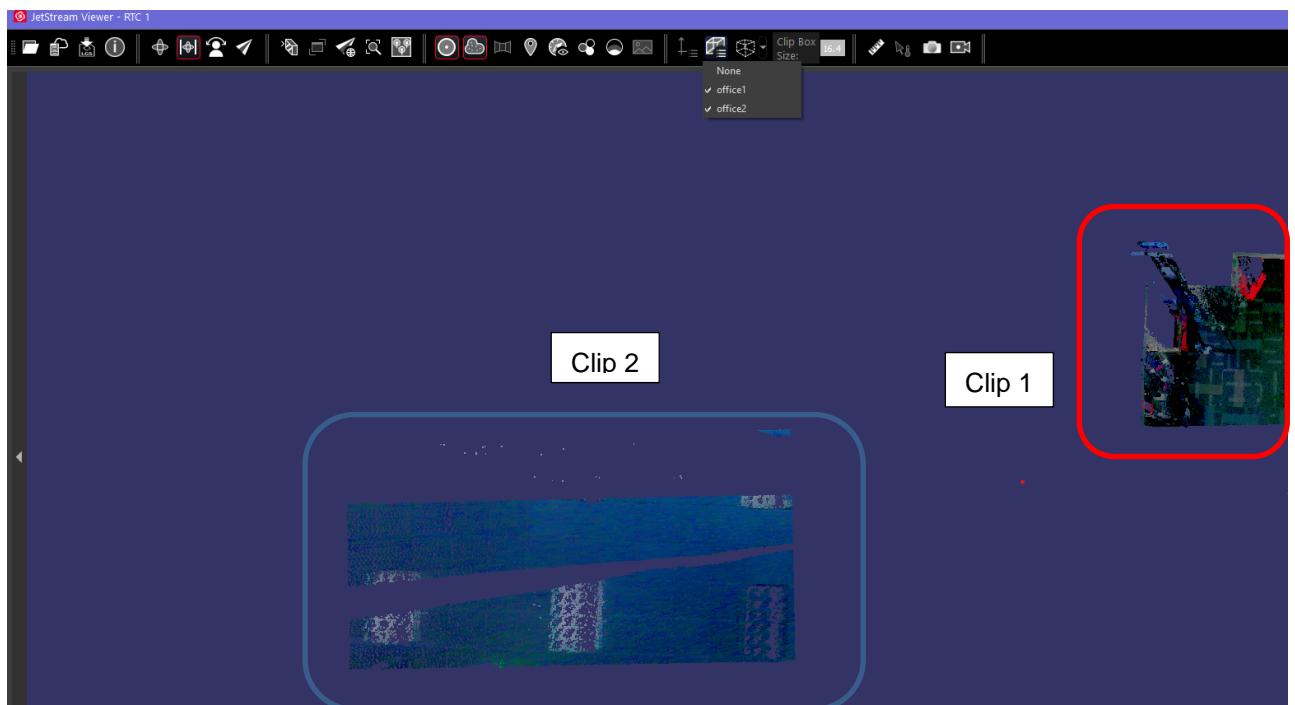

Update Snapshots

With the release of JetStream Viewer 2020, Snapshot settings can now be updated. To do so:
1. Click on the snapshot to make it active
2. Modify the settings in the toolbar to the new state you wish to save as the default for that Snapshot
3. Click the **Update Snapshot** button next to the Snapshot name
4. The Snapshot will be saved with the layers that were turned on at the time that it was taken. The following layers are supported:
   - Pano On/Off
   - Cloud On/Off
   - Geotags On/Off
   - Labels On/Off
   - Cloud Color
   - Background Gradient

- Pano HDR Gain (or auto)
- Active User Clip or QuickClip
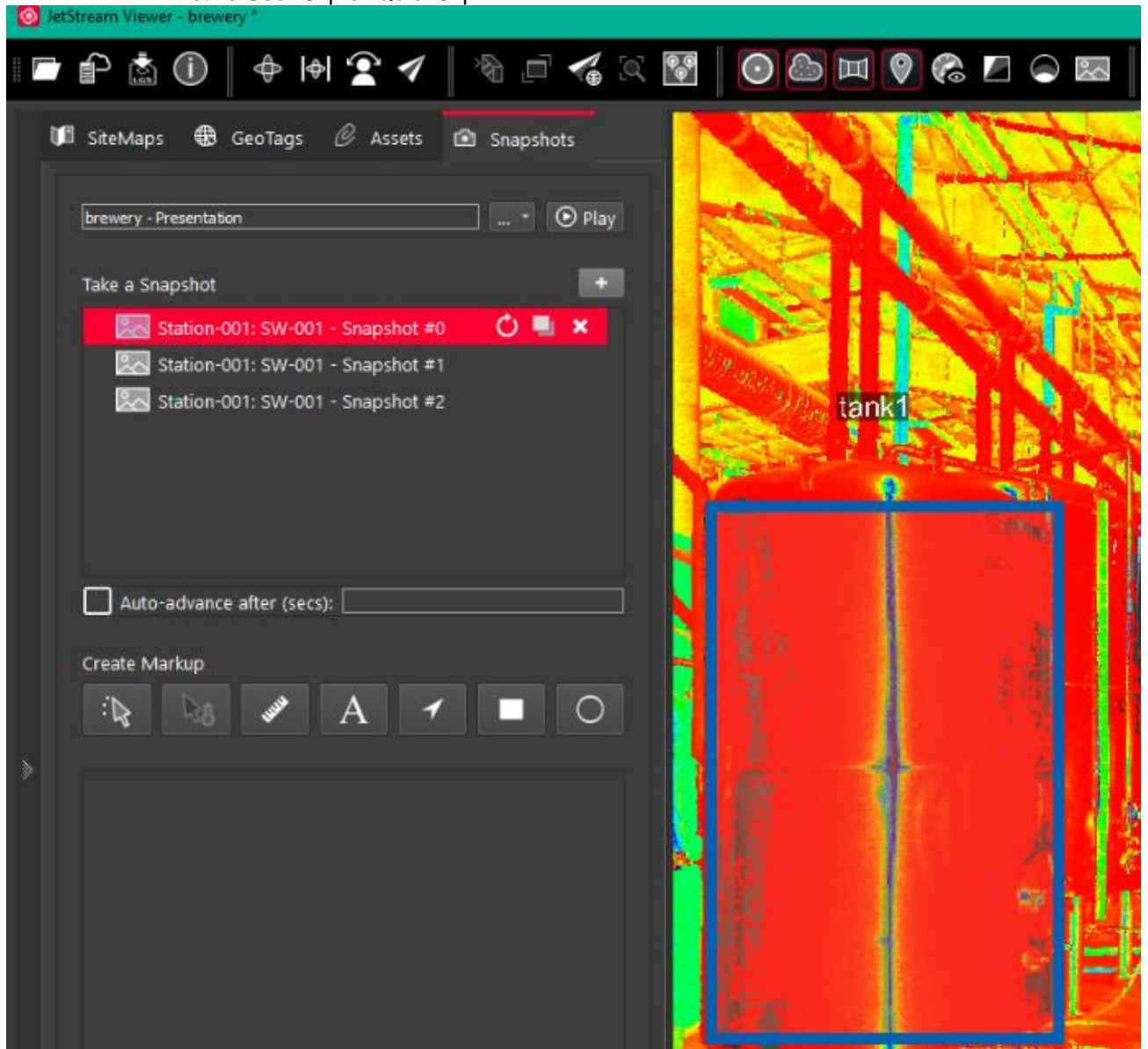
Bug Fixes

UX Bugs

- Corrected a bug which caused unexpected behavior when showing and hiding GeoTags
- Improved handling of multiple UCS'
- Improved stability of GeoTag interaction.
- Corrected a big which prevented Asset previews for images and documents from loading.
- Corrected a bug which deactivated the info button.
- Corrected a bug which limited the number of digits available when using the Zoom to Point function.
- Corrected a bug which caused the incorrect number of points to display in the project metadata.
- Corrected a bug which could cause unexpected rendering of GeoTags in Snapshot mode.

Leica JetStream Viewer Compatibility and Upgrades

Compatibility with JetStream Viewer 2020 and JetStream Enterprise server

JetStream Viewer 2020 requires JetStream Enterprise 1.6 and newer for connected mode to access all features. JetStream Viewer 2020 is compatible JetStream Enterprise 1.3 and newer, however non-synchronous versions will result in a limited toolset.

Disconnected Mode

JetStream Viewer 2020 can be installed and used without connecting to a JetStream Enterprise server, thus not requiring a JetStream Enterprise license. The free, stand-alone Viewer can open/read JetStream Viewer (JSV) files as well as LGS files. LGS files are exported from the JetStream Enterprise admin utility or from the Cyclone REGISTER 360 family, or from Cyclone.

The disconnected mode, when viewing JSV files, does not support access to saved User Coordinate Systems (UCS) nor saved limit boxes, slices, and clips. This project information is stored in and managed by JetStream Enterprise or availaible in an LGS file.

Portable Mode

JetStream Viewer 2020 Portable is a free, no-install version of the Viewer that can be packaged on a thumb drive and run from any PC, no network or Wi-Fi access required. Leverage most of the Viewer's capabilities (all the same capabilities as the Disconnected Mode) in a go-anywhere package that can be navigated by even the most inexperienced point cloud user. Perfect for sharing data with organisations with IT hurdles for new software or as a marketing tool for prospective customers. The free viewer can read LGS files written from Cyclone, the Cyclone REGISTER 360 family, JetStream Enterprise projects and JetStream Admin or JSV files created before March 2020.
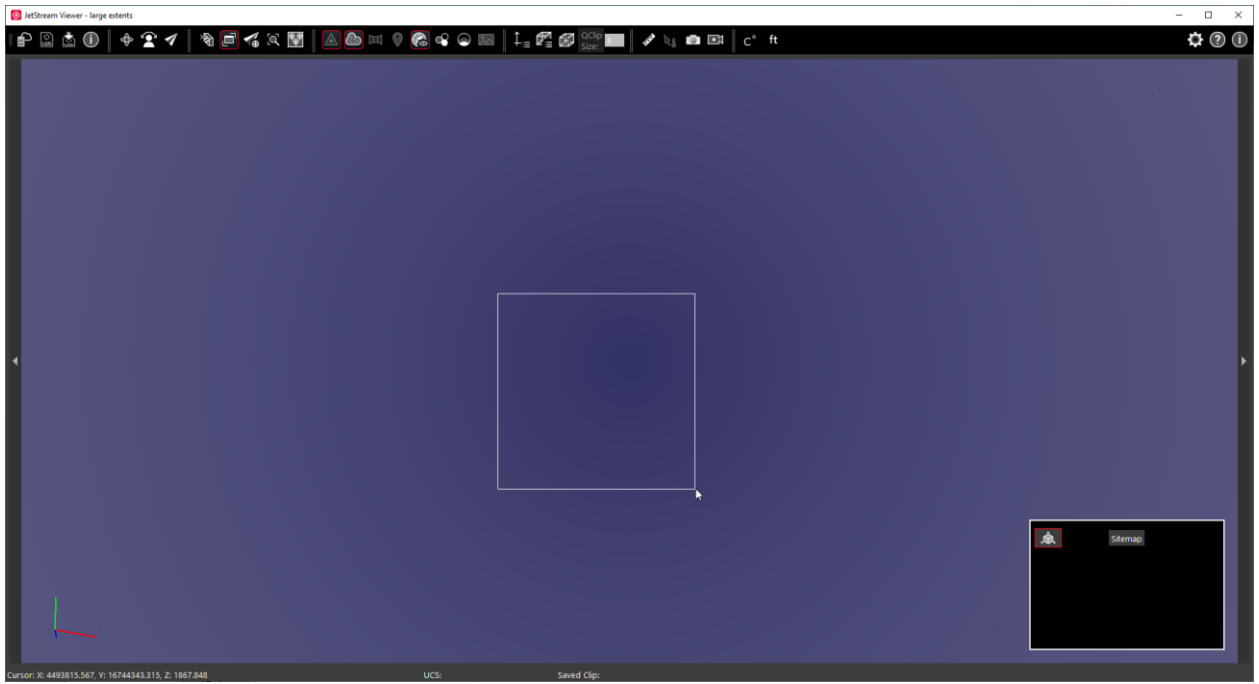
Known Issues

Large Extents Workaround

Point Cloud data with extents of more than 5km x 5km may not appear to contain points when viewed in the SiteMap mode or 3D mode at full extents in both JetStream Viewer and Cyclone REGISTER 360, though all points are present within the project. Users may either publish part of the point cloud so the extents are below 5km x 5km or continue to work with their projects of unlimited size within JetStream Viewer by minimizing the initial SiteMap view, entering 3D mode and using the 'Zoom to Window' tool to zoom to a level where only 5km x 5km or less of data is displayed on screen.
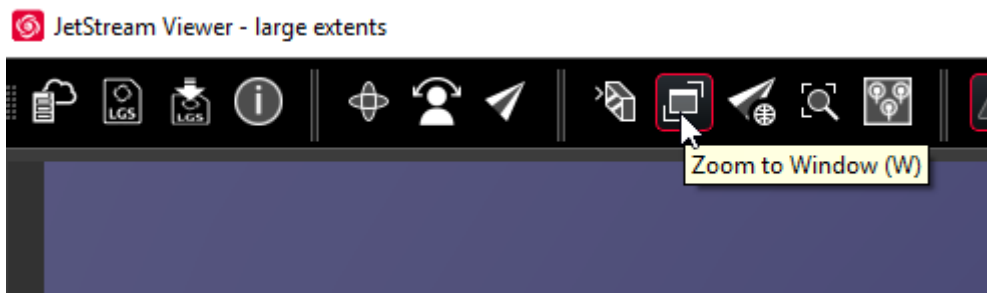
Zoom to Window

Select area of interest.