

Leica Geosystems Release Notes

Product Leica CloudWorx 2021.0.1 for AutoCAD
Date 10 March 2021
From HDS Software Product Management

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What's New

This is a major release including support for Cyclone ENTERPRISE, direct connection to Cyclone REGISTER 360, support for opening multiple point cloud sources in a single CloudWorx project, and TruSpace improvements. Windows 7 no longer supported

With this release, Windows 7 is no longer supported.

Cyclone ENTERPRISE Support

Note: Cyclone ENTERPRISE is not released. All information to follow applies to the future release of Cyclone ENTERPRISE.

Leica Cyclone ENTERPRISE is a new, user managed software platform for reality capture project delivery and management. Powered by JetStream technology, Cyclone ENTERPRISE allows reality capture professionals serving all industries to scale from a file-based workflow to a collaborative server and deploy a secure, flexible and self-managed operation.

Leica Cyclone ENTERPRISE offers a range of benefits for new and existing reality capture users:

- Centralised Management: Control user and data management from a simple online, browser-based admin portal
- Seamless Integration: Interoperability with all major CAD products from Hexagon, Autodesk, Bentley, AVEVA, Dassault Systems and others via CloudWorx and JetStream powered technology, delivering rich reality capture-based feature extraction and analysis workflows
- Secure Project Access: Provide secure access to internal and external users on a per project basis. No data leaves the premise. Sessions are managed centrally and remotely.
- Single Source of Truth: Eliminate redundant and duplicated data sources and enable a common project view thereby improving quality and productivity
- Web and Desktop Access: Access via desktop viewer and CAD as well as the no-install online viewer for quick viewing and collaboration from anywhere on any device
- Powered by JetStream: Cyclone ENTERPRISE harnesses the power of Leica JetStream technology for rapid visualisation and powerful collaboration

With this release, CloudWorx now supports consuming Cyclone ENTERPRISE projects with the full contents of a project, including:

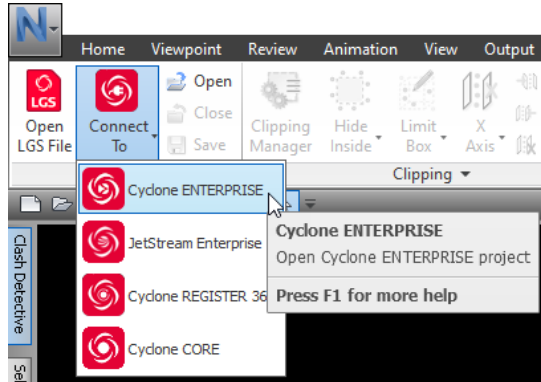
- Point Cloud (RGB, Greyscale, Hue Intensity)
- Imagery (LDR, HDR, IR)
- SiteMap(s)
- UCS(s)
- Clip(s)
- GeoTags
- Assets
- Snapshots/Markups

Publishing to Cyclone ENTERPRISE requires a Cyclone PUBLISHER or Cyclone PUBLISHER Pro license.

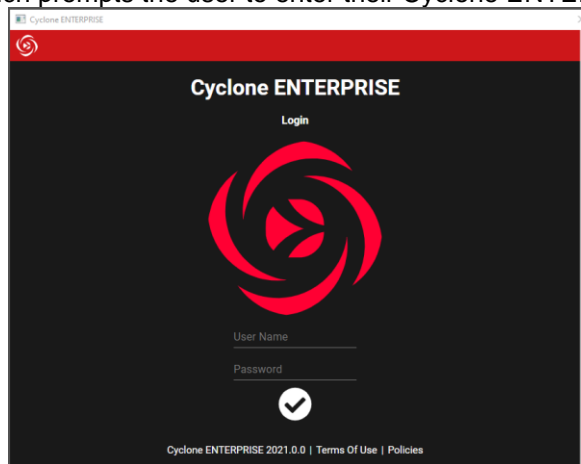
Connecting to Cyclone ENTERPRISE from CloudWorx requires an ENTERPRISE Connector license.

To connect to Cyclone ENTERPRISE from CloudWorx:

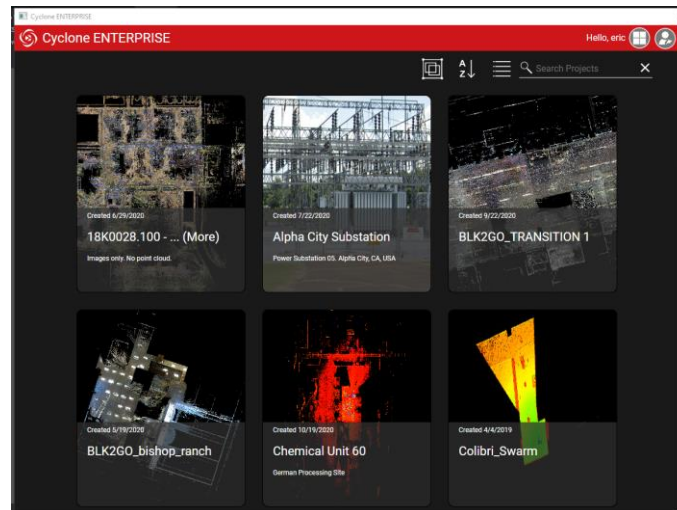
1. Click the *Connect To* dropdown in the CloudWorx Ribbon.



2. Select Cyclone ENTERPRISE.
3. A dialog will appear which prompts the user to enter their Cyclone ENTERPRISE credentials.



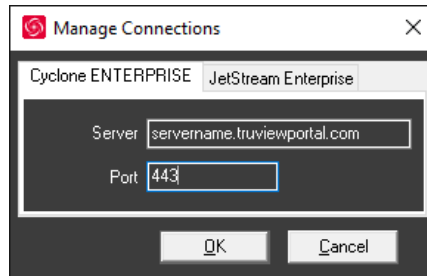
4. Upon entering valid credentials, users will be presented with a list of projects which are accessible to them based on the rights assigned to them within Cyclone ENTERPRISE.
5. Select a project.



6. The project will load within the CAD application.

To configure a connection to Cyclone ENTERPRISE:

1. Select *Manage Connections* from the Project dropdown in the CloudWorx ribbon
2. Enter your server name and port number in the Cyclone ENTERPRISE tab (**Note: You do NOT need to include 'http' or 'https' in the server name.**)
3. Click OK



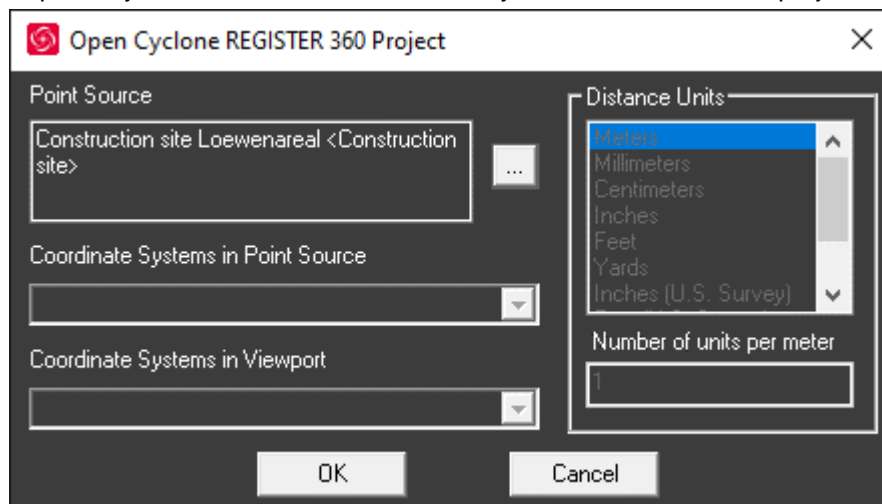
Direct Connect to Cyclone REGISTER 360

With this release, CloudWorx 2021 users can now connect directly to Finalized Registrations in Cyclone REGISTER 360 to access project data without publishing to a server or exporting to an LGS file. To access this feature, the project must be a Finalized Registration and Cyclone REGISTER 360 and CloudWorx must be installed on the same computer.

By connecting directly to a Finalized Registration, users can eliminate the time spent publishing to LGS or a server product and reduce the possibility of redundant LGS files causing confusion.

To connect to Cyclone REGISTER 360 or Cyclone REGISTER 360 (BLK Edition):

1. Select *Connect To* in the CloudWorx Ribbon.
2. Select Cyclone REGISTER 360.
3. A dialog will open prompting the user to select a project in Cyclone REGISTER 360. Projects which do not have Finalized Registrations and Finalized Registrations which do not include point clouds will not be accessible from this menu as they are not supported by CloudWorx.
 - a. Select the "..." button under Point Source and pick the desired Finalized Registration.
 - b. Optionally, select one of the coordinate systems available in the project.



4. Select *OK* to import and view the project.

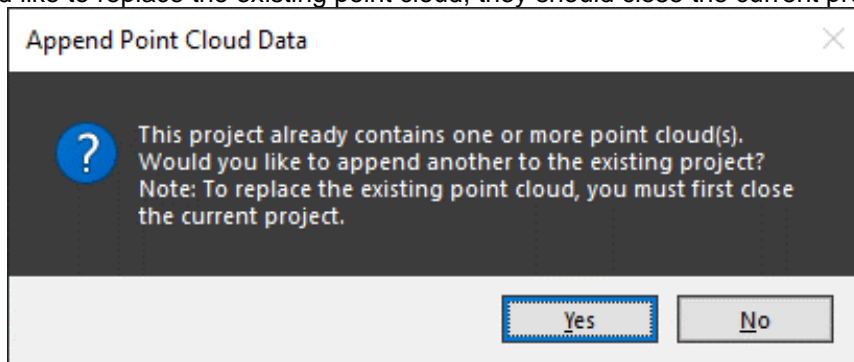
Cyclone REGISTER 360 projects opened in CloudWorx are read-only. CloudWorx can access any existing content such as GeoTags and Assets, but will not be able write any information back, such as editing GeoTags, creating Snapshots, etc. These features are disabled.

Connecting to Cyclone REGISTER 360 requires a Cyclone PUBLISHER Standard, or Cyclone PUBLISHER Pro license.

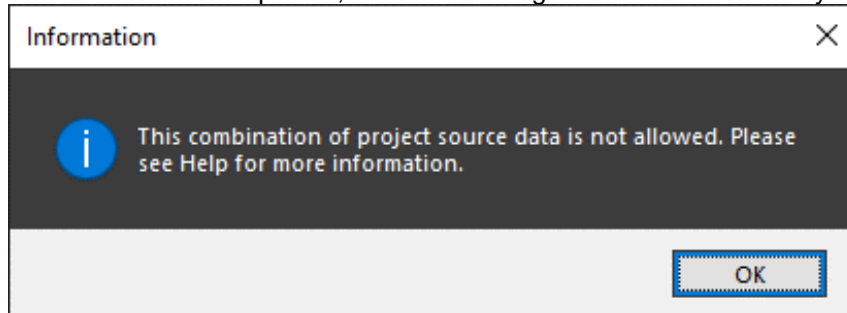
Multiple Point Sources

With the 2021 release, it is possible to open multiple point clouds within the same project. The first point cloud is opened as normal and becomes the reference frame. Other point clouds, if the source is compatible with the existing point cloud, can be appended to the same project. See further below for a table of cross-compatible point sources.

If the user would like to replace the existing point cloud, they should close the current project first.



If the point cloud sources are not compatible, an error message will be shown to notify the user.



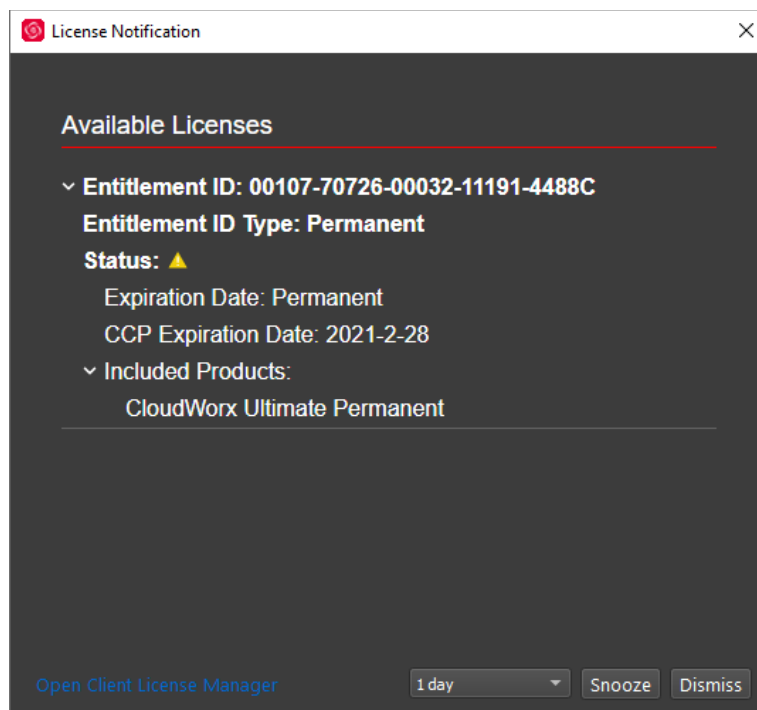
The following table describes the data sources that are compatible for simultaneous opening:

Point Source	LGS	Cyclone ENTERPRISE	JetStream Enterprise	Cyclone REGISTER 360	Cyclone CORE
LGS	✓	✓	✓	✓	
Cyclone ENTERPRISE	✓	✓		✓	

JetStream Enterprise	✓		✓	✓	
Cyclone REGISTER 360	✓	✓	✓	✓	
Cyclone CORE					✓

License Notifications

With the 2021 release, users will now be presented with license status notifications as they near expiration and renewal dates. The notification will only appear for EIDs that contain a licensed seat for the current application. License notifications will empower users to easily manage their collection of licenses and check in on the health of their licenses.



Users will first be presented with notifications 30 days prior to the expiration or renewal date of the product which they are actively running. Users may snooze the notifications until later or dismiss them altogether.

Users can view the following license information from within the dashboard:

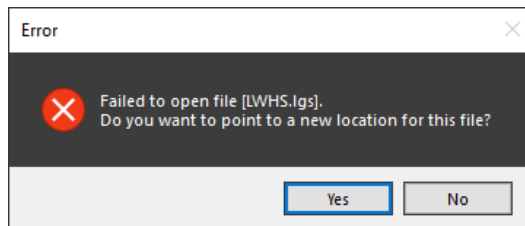
- Entitlement (EID) in use
- EID type
 - Permanent
 - Subscription
 - TimeLimited
 - Evaluation

- Education
- Enterprise Elite
- Demo
- Training
- Beta
- EID Status
- Date of EID expiration
 - Note: Permanent EIDs will not show any expiration date, they will only show a CCP expiration date
- CCP Expiration:
 - Note: only permanent licenses will have a CCP expiration date.
- What products are available on the EID in use

Reconnect LGS file

Users will be prompted immediately upon opening a CloudWorx project if the LGS file cannot be found. To reconnect the file:

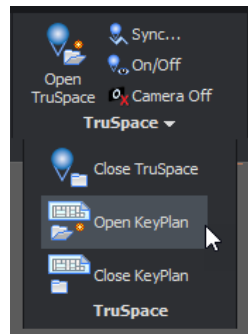
1. A dialog will open stating that the file could not be found.



2. Select *Yes* to browse to the LGS file.
3. Select the appropriate file and select *Open*.
4. To update the file location, save the project. If the project has not been saved before closing, the user will be prompted to save it with the new LGS location.

TruSpace Improvements

Open KeyPlan now supports JS/LGS projects



The Open KeyPlan function in TruSpace has been updated to support SiteMaps in Leica JetStream technology-based point cloud projects (LGS files, JetStream Enterprise projects, Cyclone ENTERPRISE projects). When a user selects this option, the project's SiteMap (if available) will be loaded within TruSpace to allow a user to jump to a specific Setup. If connected to a Cyclone ModelSpace View, this button will still launch an associated Cyclone KeyPlan (if available).

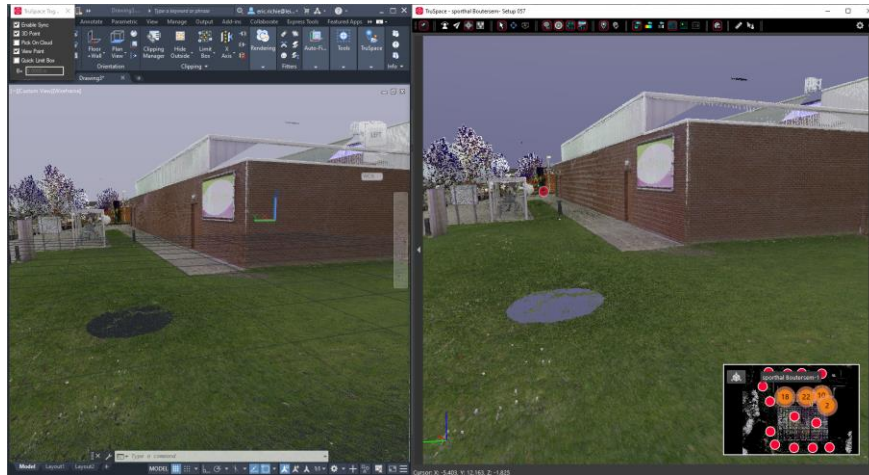
If a project contains multiple SiteMaps, the Master SiteMap will be launched, and the user can navigate to other SiteMaps as needed.

Jump to nearest Setup at launch

When launching TruSpace, users can now be placed immediately at the nearest Setup location to their selected point in the main viewing window rather than having to select the Setup from a list. This provides a streamlined entrance into TruSpace and quickly orients the user to their location in the cloud.

Support for 3D navigation in TruSpace

Users can now move in 3D within TruSpace to control their view and movement with precision rather than being confined to Setup positions. Users will be familiar with these navigation modes from Cyclone REGISTER 360 and TruView (formerly JetStream Viewer).

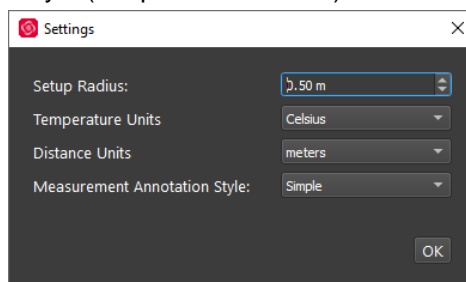


TruSpace view is offset from the Setup location.

Settings panel

Users can now manage tool settings centrally from a settings panel within TruSpace. The following settings can be controlled from the settings panel:

- Size (by Radius) of the Setup spheres
- Temperature Units
- Distance Units
- Measurement Annotation Style (Simple or Advanced)



New Measurement Annotation Style

With this release, the user now has the option of selecting from either Simple or Advanced measurement modes within the settings panel. This change allows users to have greater control over the display and level of detail of information that is presented for each measurement.



Advanced Mode displays all of the information that is currently presented to the user including the coordinates of each point plus the slope (linear) measurement and the horizontal (XY) measurement.



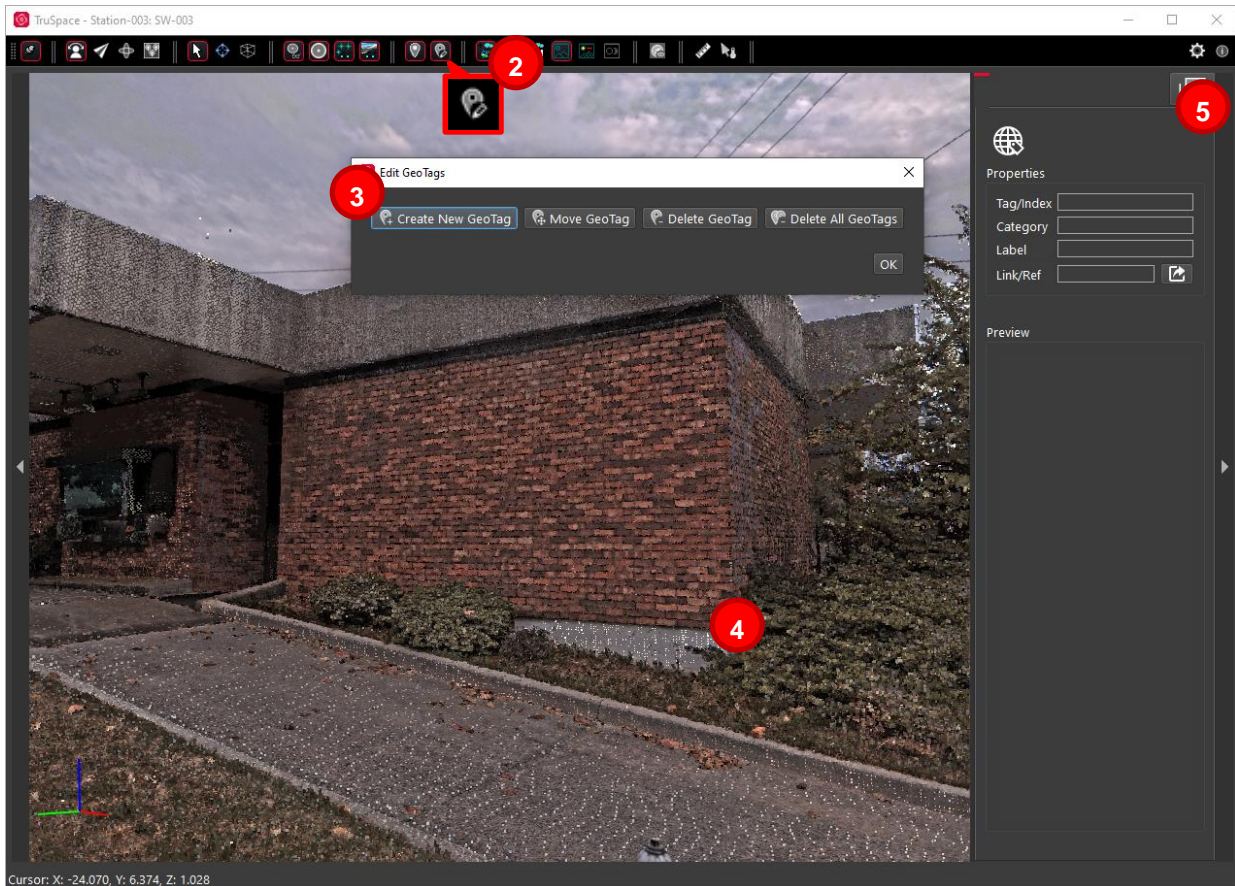
Simple Mode displays only the slope (linear) measurement and the horizontal (XY) measurement.

Create and edit GeoTags in JetStream Enterprise and Cyclone ENTERPRISE projects

Users can now create and edit GeoTags when working with JetStream Enterprise and Cyclone ENTERPRISE projects. This allows users to work collaboratively with other stakeholders who may be accessing projects through other CAD packages or through TruView (formerly JetStream Viewer).

To create a GeoTag:

1. Open TruSpace and navigate to a Setup location
2. Click the *Edit GeoTag* button 
3. Click the *Create New GeoTag* button on the Edit GeoTags window
4. Select a location to place the GeoTag and click
5. Enter your desired info and, if desired, attach an Asset



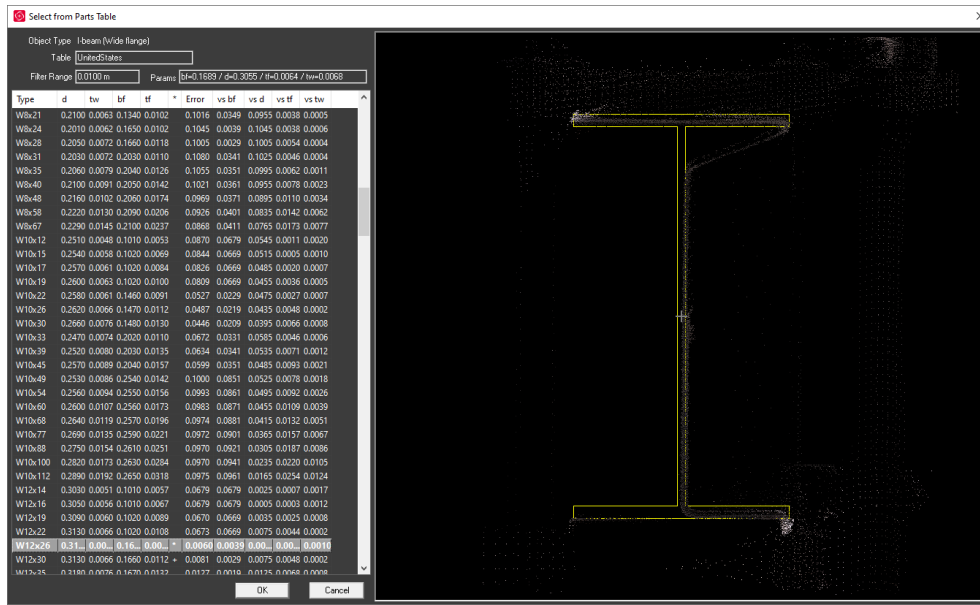
To edit an existing GeoTag:

1. Select a GeoTag in the TruSpace window
2. Edit the GeoTag via the GeoTag panel
3. When finished, click *Apply*



Preview Steel Fitter Results

With the 2021 release, users will now see a preview of the fit of their steel object prior to placement. The preview can be panned, zoomed and rotated to get a better view of the fit.



- Click and drag to pan within the preview
- Use the mouse wheel to zoom in and out
- CTRL+ Click to rotates
- SHIFT + Click to scale
- Double click to align that point to the center of the viewport

Bug Fixes

UX Bugs

- Fixed a bug that could prevent a CloudWorx Basic license from being properly recognized.
- Fixed a bug that resulted in old Setup icons being displayed in the SiteMap in TruSpace.
- Fixed a bug that caused TruSpace to open on the secondary screen regardless of display's availability.
- Fixed a bug that could result in a slice with zero thickness, especially when connected to an RCP data source.
- Fixed a bug that could cause intermittent issues with fitting rectangular tubes.
- Fixed a bug which cause a pipe centerline to be drawn when option is not selected.

Leica CloudWorx 2021.0.0 Compatibility and Upgrades

Upgrading to Leica CloudWorx 2021.0.0 for AutoCAD from Leica CloudWorx 2020.0.1 for AutoCAD

You must have Administrator-level privileges on your workstation to correctly install Leica CloudWorx software.

If using IMP data, first run the current Cyclone installer if you do not have a version of Cyclone installed. Otherwise/Next run the CloudWorx 2021.0.0 installer and follow the directions to proceed with the installation. Please heed the warning message about compatibility of earlier version databases. We strongly recommend that users not use the "Repair" option when upgrading. Rather, users should select "Remove" when it appears and then run the installer again to install the new version.

Compatibility with Leica CloudWorx 2021.0.0 for AutoCAD AND AutoCAD Versions

CloudWorx 2021.0.0 for AutoCAD officially supports Autodesk AutoCAD versions 2018-2021

Compatibility with JetStream Enterprise

CloudWorx 2021.0.0 for AutoCAD is compatible with JetStream Enterprise 1.3 and higher. To access the latest features, it is recommended that users update to the latest release of JetStream Enterprise 2020.

Compatibility with Cyclone ENTERPRISE

CloudWorx 2021.0.0 for AutoCAD is compatible with Cyclone ENTERPRISE 2021.0.0 and higher.

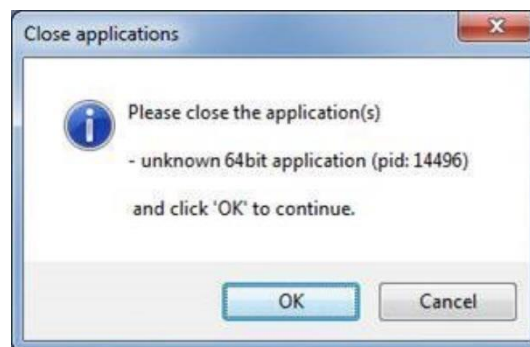
Compatibility with CloudWorx Ultimate

CloudWorx 6.3.1 (or later) for AutoCAD is compatible with the CloudWorx Ultimate License.

Known Issues

Installing CLM while the JetStream service is running

During installation of CLM, users may encounter the following error message. This is commonly due to a service like JetStream running in the background.



To enable the successful installation of CLM, please follow these steps:

- Launch the task manager
- Select the Services tab
- Look up the process with the PID (Process ID) shown in the Close applications dialog
- In this case it is JetStream
- Terminate the process so that CLM can be installed
- After CLM is installed, click on the Services button in the Task Manager and restart the service

Modified Usage for Asian Languages

Some actions and dialogs do not execute properly when operating CloudWorx in an Asian language.

Switching the JetStream Enterprise server with a JetStream Enterprise project open

CloudWorx does not support switching JetStream Enterprise servers while a JetStream Enterprise project is open. Upon attempting this action, the user will receive a message which states, "You already have a CloudWorx project open." Users should close the active project before switching servers.

Equivalent user permissions requirement

When working with IMP data, AutoCAD must be run with the same level of user privileges as Cyclone was originally configured with. Meaning if Cyclone is configured to Run As Administrator, then AutoCAD should be Run As Administrator to connect to Cyclone and open an IMP.

Temporary ModelSpace

When working with IMP data, users may see a temporary ModelSpace created within Cyclone to support rendering in CloudWorx. All ModelSpace views are temporary and will not be permanently added to a project. It is not a requirement that Cyclone be running while using CloudWorx.

LGS usage over network

The use of LGS files is only officially supported when the files are saved locally. Due to variations between network deployments LGS files may be unreliable when hosted in a network location.

RCP Compatibility

Some CloudWorx functions are not compatible with RCP data sources.

- ScanWorld Explorer
- Load Max Setting
- Pure Reference Geometry
- Silhouette Mode
- Color Mapping
- Ortho image
- Align to Model
- TruSpace
- SmartPick

Licensing

All users with valid CCP, or with CCP valid as late as 13 December 2020, can run this new version with no new license required.