- when it has to be **right**

Leica Geosystems
Release Notes

Product	Leica CloudWorx 5.1.2 for MicroStation
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From	HDS Software Product Management

Contents

What's New

Quickslice

The all new QuickSlice feature includes a set of tools designed to set up a slice and place the workplane (also the ACS) on the slice's mid-plane, then align the view to the slice. These tools are intended to prepare data for use with the new Auto-Fit Polyline tool.

The QuickSlice tool command is which will be followed by the dialog below:
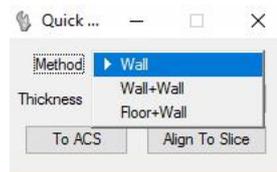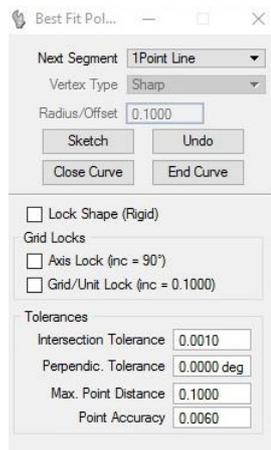

Wall:	to define a horizontal slice as a workplane by picking a wall point
Wall + Wall:	to define a horizontal slice as a workplane by piking two wall points
Floor + Wall:	to define a vertical slice as a workplane by picking both floor and wall points
To ACS:	to define a slice as a workplane on the ACS' XY plane
Align To Slice:	to define a slice and rotation from a slice

- When **Floor+Wall** is chosen, a vertical slice will be created at the first pick with the UCS X axis on floor, origin on hinge line and Z along hinge.
- When **Wall** is chosen, a horizontal slice will be created at the pick, with UCS X along the wall to the right.
- When **Wall+Wall** is chosen, a horizontal slice will be created with UCS X along first wall, Y along second wall, and origin on hinge projected from first pick.
- For other general cases, you can adjust the UCS first (using MicroStation tools or CloudWorx Orientation tools), then use this command and choose **To ACS**.

Auto-Fit Polyline

The new Auto-Fit Polyline feature works from a single pick point or two pick points on the point cloud. After the pick point(s), the tool will grow a best-fit polyline the length of the point cloud in both directions from the pick(s). The user then clicks on the next adjacent point cloud segment to fit the continuation of the polyline. The tool will fit and grow the next line while also extending to connect to the previous line, including spanning corners. This tool should be used in conjunction with the QuickSlice tool to set up the desired slice for 2D linework extraction.

The Auto-Fit Polyline command is which will be followed by the dialog below:

Best Fit Pol... — □ ×

Next Segment 1Point Line ▼
Vertex Type Sharp ▼
Radius/Offset 0.1000
Sketch   Undo
Close Curve   End Curve

☐ Lock Shape (Rigid)
Grid Locks
☐ Axis Lock (inc = 90°)
☐ Grid/Unit Lock (inc = 0.1000)
Tolerances
Intersection Tolerance 0.0010
Perpendic. Tolerance   0.0000 deg
Max. Point Distance   0.1000
Point Accuracy   0.0060

Due to the quality and availability of point cloud points along the actual lines, sometimes a 1-pick point grow may fail. Sometimes a 2-pick point grow may also fail. If the resulting line does not meet your expectation, you can use the **"Undo"** command. If a 1-point grow fails or simply cannot work due to short segments, switch to 2-point mode. If the 2-point mode still does not work, use the keyword **"Sketch"** on the second point so that this segment will not fit to the points under the line. Following are all possible within the dialog:

- **Undo** to undo last line segment or last pick input
- **1Point Line** to switch from 2-point fit mode to 1-point region grow mode
- **2Point Line** to switch from 1-point region grow mode to 2-point best-fit mode
- **1Point Arc** to switch to 1-point Auto-fit Arc mode
- **3Point Arc** to switch to 3-point Auto-fit Arc mode
- **Sketch** to skip best-fit for the next 2-pick line segment (one-time only)
- **Undo** to undo the last fit
- **Close Curve** to complete the arc to a circle and end the tool
- **End Curve** to close the line string and end the tool

Leica CloudWorx 5.1.2 for MicroStation Compatibility and Upgrades

Upgrading to Leica CloudWorx 5.1.2 from Leica CloudWorx 5.1

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 5.1.2 InstallShield and follow the directions in the InstallShield Wizard to proceed with the installation. Please heed the warning message about compatibility of earlier version databases. We strongly recommend that when upgrading, please select the "Remove" option when it appears, rather than the "Repair" option.

All users with a valid license(s) for CloudWorx 5.1.x or later can run this new version with no new license required. All users with a currently valid CCP or with CCP which was valid as late as April 18, 2016 can receive a new license to run this version.

Compatibility with Leica CloudWorx 5.1.2 AND Earlier Versions

Cyclone 7.2 databases are *NOT* backward compatible. Therefore older databases must be updated before using Cyclone 7.2 and can no longer be used with earlier versions. If you need to work with your

data in older versions of Cyclone or CloudWorx, you should make an archive copy of your database(s) prior to upgrading. Since it can take some time to update and optimize Cyclone databases, we recommend that you optimize your databases overnight, particularly when multiple databases are involved.

Compatibility with Leica CloudWorx 5.1.2 AND MicroStation Versions

CloudWorx 5.1.2 officially supports MicroStation versions J-V8i.

Known Issues

Optimizing Older Databases with Windows 7 and Higher

If users wish to use CloudWorx 5.1.2 for MicroStation to optimize IMP databases from Cyclone version 7.0 or higher, they must first disable User Access Control prior to optimizing, or the optimization will not succeed yet no meaningful error message will be produced.