In the past, users often struggled with point cloud manipulation when using MicroStation point cloud plug-ins. CloudWorx 4.0 overcomes this with its powerful TruSpace viewing window. This intuitive, panoramic viewing window lets users “see” better what the point cloud represents, and acts like a super-control to drive point clouds visualization in MicroStation with unprecedented speed.

Features and Benefits

- Fast manipulation of scans in MicroStation
- Slices – quickly trace or auto-fit 2D lines, polylines, arcs
- Auto pipe fit – intelligent, as-builts in AutoPLANT, CADWorx, more
- Accurate tie-ins & clash checks
- Fully-featured for 3D or 2D deliverables
- English, German and Japanese versions

Efficient management, viewing and processing of laser scan data for architectural, plant, civil and other 2D & 3D projects

Leica CloudWorx 4.0 for MicroStation is the most efficient and popular plug-in software for using as-built point cloud data – captured by laser scanners – directly within MicroStation.

Users take advantage of the familiar MicroStation interface and tools to shorten the learning curve for working with laser scan data. Leica CloudWorx and the powerful Leica Cyclone point cloud engine let users efficiently visualize and process large point cloud data sets. Users can create accurate 2D and 3D as-builts, check proposed designs against existing conditions, perform critical construction & fabrication QA, and more... all directly within MicroStation.

- when it has to be right
Leica CloudWorx 4.0 for MicroStation

Point Cloud Display Control
To focus on particular areas of interest, easy-to-use tools define specific areas of 3D point clouds to display. For improved visualization, segments of point clouds can be selectively hidden using fences and user-defined cutplanes, slices or 3D limit boxes.

Accurate Building Documentation
Slices through point cloud data facilitate the creation of planimetric and elevation drawings. 2D lines, polylines, and arcs can be best-fit to provide accurate results. Cross sections of point clouds can also be plotted directly, introducing an entirely new, accurate deliverable and reducing project cycle time.

As-built Piping Models
Pipe fitting tools enable users to quickly create accurate, intelligent as-built piping models, best-fit to the point clouds, in conjunction with tools in Bentley PlantSpace, PDS, etc. Tie-in locations for proposed retrofit designs are also easily identified. Planar surfaces can also be modeled from point clouds using CloudWorx fitting and region growing tools.

Detailed Information for Retrofit Projects
Engineers can use CloudWorx in retrofit design projects to check for potential interferences with point clouds that represent actual as-built or as-is conditions. The unparalleled detail provided by point clouds allows engineers to create 2D or 3D designs based on accurate, comprehensive information, providing time- and cost-savings throughout a project’s various construction phases.

Civil Engineering Applications
Leica CloudWorx integrates with applications like Bentley’s InRoads and GEOPAK to deliver solutions for civil engineering projects – such as transportation infrastructure, land development, bridge models and more. Users can extract 3D coordinates to represent site features that are easily identifiable in detailed point clouds. Original ground points can be extracted for topographic modeling.

Available in Multiple Languages
Leica CloudWorx for MicroStation is available in English, German and Japanese. See the Leica CloudWorx 4.0 Technical Specifications document for a complete listing of product specifications.