
Release Notes

Product: Leica Infinity

Date: 14 April 2026

From: Kevin Hanson

Leica Infinity v5.1.0



Contents

Contents	2
1 Welcome to Infinity v5.1	3
2 Installation details.....	4
3 New: Quality Control tool	5
4 Drafting module updates	6
5 Tunnel Infrastructure – Wriggle Survey & Checked Tunnel Axis.....	7
6 General application improvements and fixes	8
7 What is new in Infinity v5.0.....	9
8 New: Drafting module to create Drawings	9
9 New: TS20 & Captivate v10	11
10 Surface module	12
11 Level processing – Level Lines wizard	12
12 General application improvements and fixes	13

1 Welcome to Infinity v5.1

Leica Infinity v5.1.0

Please read the following chapters carefully to learn more about what is new.

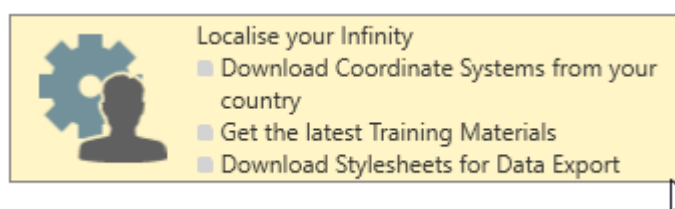
Overview: what's new

- New Quality Control tool: A new window that groups different types of data issues making it easier to consider actions to address
- Drafting module: Background image support and automatic snapping options
- Infrastructure module: recompute CTA profiles
- Coordinate Systems: Create geoid files from NGS BIN and Trimble GGF formats
- Import IFC v4.3
- Host of customer requested improvements and bug fixes

Getting started – Help & support

Getting started, users have access to information and useful data, including coordinate systems, stylesheets, tutorials and sample data, all available from the *Localisation Tool*.

From the **Help** menu, click on the **Localise your Infinity** button to access this data and the tutorials to help you get started with Infinity.



Ordering Infinity

Infinity has flexible ordering options. Users can purchase a one-time permanent perpetual license or can also buy into a subscription plan.

In addition to our existing Leica Infinity – Basic package, users can purchase additional packages based on their needs. All packages and their features can be found on the [Leica Infinity data sheet](#).

[Contact](#) your local Leica representative to discuss the best options for meeting your project and workflow needs.

YouTube videos

Check the Leica Infinity [YouTube page](#) to see the new **How to create drawings to document your field work** video, which helps you get started using the Drafting Module.

While you are there, see our playlist of how-to videos that help you get familiar with all the features of the application, including tips & tricks and best practices.

2 Installation details

Installation information	Leica Infinity v5.1.0Build5.1.0.50038Maintenance end date1st November 2025		
	Leica Infinity a Windows 64bit application		
	CUSTOMER CARE PACKAGE CCP	With an active CCP or Leica Infinity subscription license, users will be able to update to this new version. Confirm that your Maintenance End Date is on or after the date listed above before installation.	
	New users can download the latest version from the Leica Geosystems myWorld support website.		
Check for updates	From <i>Help & About</i> choose Check for updates . When a new version is available, you will be notified that the update can be downloaded from myWorld .		
	Check for updates Get the latest updates available for Infinity		
Operating system requirements	The following Microsoft® Windows™ operating system editions are supported: - Desktop: Windows 11 - Server: Windows Server 2019, Windows Server 2022, Windows Server 2025 Note: You must have administrative privileges on your computer to successfully install Leica Infinity.		
Minimum hardware	- Display: 1024 * 768 px - Input: keyboard and mouse with wheel - Processor: multi-core 2.4 GHz - RAM: 8 GB - Disk storage: 100 GB - Graphics: DirectX9 compatible		
Recommended hardware	- Dual Display: 1920 * 1280 px - Input: keyboard and mouse with wheel - Processor: multi-core 3.5 GHz or more - RAM: 32 GB or more - Disk storage: SSD of 1 TB or more - Graphics: DirectX11 compatible, 8 GB memory or more, CUDA capable		
Recommended hardware for Image Processing, Point Cloud Registration	- Dual Display: 1920 * 1280 px - Input: keyboard and mouse with wheel - Processor: 8 Core 3.5 GHz or more - RAM: 64 GB or more - Disk storage: SSD of 2TB or more - Graphics: DirectX11 compatible, 16 GB memory or more, CUDA capable		

3 New: Quality Control tool



Quality Control

Finding data issues is simplified with the new QC Tool, which groups different types of data issues in a single, easy-to-use window.

Open the QC window from the view strip.



From the Info & Settings page, choose which QC data checks should be displayed in the tool.

Each data issue includes a suggestion for improving your data.



Points that exceed the averaging limits

Points listed here have one or more contributors that exceed the configured averaging limits. Review an out-of-average point and set the point data that should be used for computing the average point position.



Points that are possible duplicates

Groups of points are listed here that may correspond to the same feature based on configured duplicate limits. View a group of duplicate points and consider renaming a point or delete not needed data.



Points deleted in the field

Points listed here were deleted in the field software and have been imported into the project. Use this list to recover a deleted point or to permanently delete it from the project.



Total station unknown setups

Total station setups listed here are missing information that defines the setup method. Review and assign a setup method to use these stations for processing applications.



Angular only measurements

List of observations containing angular measurements without a distance measurement. This list can help identify features that were measured incorrectly and need to be remeasured.



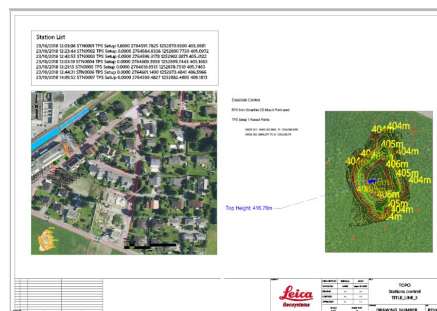
Codes not belonging to the project code table

The codes listed here were imported from a field job but are not part of the Project Code Table. Select a feature to assign the correct code, or save these field-imported codes to the project using the Code Table manager.

4 Drafting module updates

Background Images

Basemaps can provide context for drawing data within a viewport.
Set a height for a basemap to determine which has priority in the viewport.



Object Snap



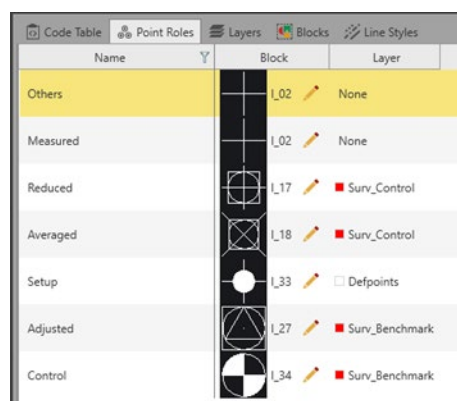
New snap option that, when enabled, will snap precisely to certain key points. These key points include Vertex, Midpoint, Centre, Quadrant, Insertion and Node. The object snap is used when drawing new objects or grip editing existing objects.

Press Tab to cycle through available snap points near the cursor.

Code table point roles

Block symbols assigned to point roles are visible in the main graphical view and viewports in a drawing and will be included in any CAD export.

The point role block will be visible for points that do not use blocks in their thematic codes. Point roles settings are added to existing code tables. Be sure to set the block and display properties as required.



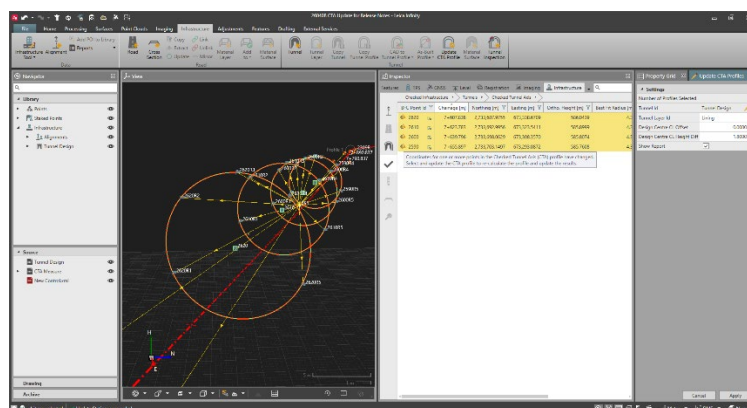
5 Tunnel Infrastructure – Wriggle Survey & Checked Tunnel Axis

Update CTA Profile



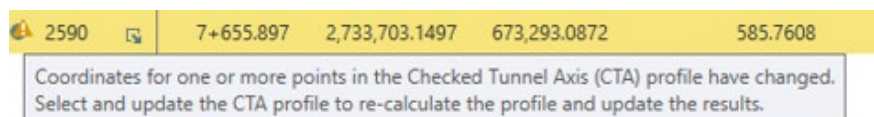
Checked Tunnel Axis (CTA) results, also known as Wriggle Surveys, in Leica Captivate now support updating report results when the total station setups are updated.

To update CTA results, use the Update Stations routine when control coordinates have been updated to bring all the TPS setups to the current control position. Once the stations have been updated, select the CTA profiles that need updates and use the Update CTA Profile routine. The results will be updated, and a new report can be saved.



CTA profile update notification

The CTA profiles monitor if any changes have been made to the source data and inform the user that they should be updated. This update can be from any edit made to a total station setup from where a profile was measured from or if any of the measure points have been updated.



6 General application improvements and fixes

Import ASCII	It is now possible to assign other point roles, Measured and Calculated, to the points to import.
Import IFC	Importing IFC v4.3 is supported
Geoid files	Create a Geoid GEM file from NGS BIN and Trimble GGF formats
Imaging	Improvements made for working with portrait images and using GCPs
Imaging	When generating large area orthophotos, the RAM memory usage is improved, and processing time has been reduced
Imaging	When working with a large number of images and GCPs, the time to open the GCP wizard has been reduced.
TPS Setup	Importing TPS setups using only 2D station height, it's now possible to update the station to 3D, and all station observations will have an updated height.
Point Coordinate Type	Users can set the coordinate type for imported or user-created points to better transform the data. This will be helpful when importing local grid coordinates into a project with a coordinate system; now it's possible to set the WGS84 coordinate as active.
Installation	Fixed an issue where it was not possible to silently install Infinity on a system user
12D CDE	Fixed a crash when a download was in progress, and the user changed to view data from a different folder
Surfaces	Fixed a display issue with comparison maps when using classified point clouds. When viewing point clouds by classification, the comparison map was not visible
WMS services	Fixed an issue where Get Feature was not working for some service providers
Reports	Fixed an issue where saving reports to the network drive was not possible

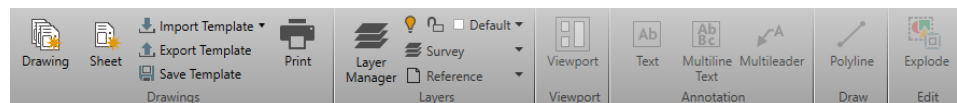
7 What is new in Infinity v5.0

- New Drafting module that lets users create and share drawings of field work
- New TS20 - Be ready with the optimal workflow using Leica Infinity
- Improved Captivate Infinity data flows with improved data management
- Improved CAD-friendly data flows, including improvements for blocks and styles
- New Level Lines wizard that simplifies edits and assignment of control points
- Host of customer requested improvements and bug fixes

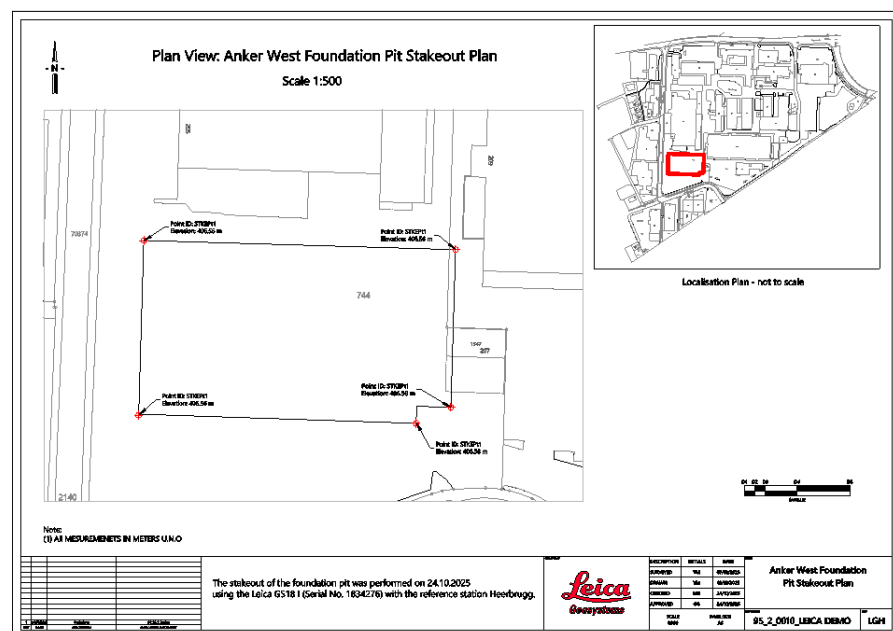
8 New: Drafting module to create Drawings

Drafting Module

Infinity v5.0 brings a new level of documentation with the release of the Drafting module. Included in Infinity CORE, the Drafting module is designed to create shareable drawings from measure data that describe your work.

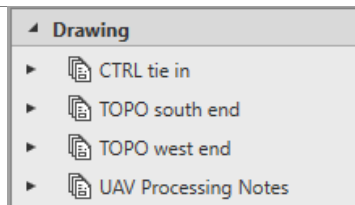


Create drawings to document field work, to document office processing and to complement any of your required surveying deliverables, all of which can be shared as PDF or in DXF, DWG format.



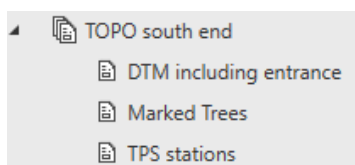
8 New: Drafting module to create Drawings

Drawing



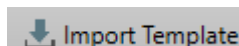
A Drawing is a set of sheets in the project that can be given a unique name and help keep the order of project work. Create a Drawing to group the different work you want to document, and even label each sheet with a unique name that specifically gives the contents a title.

Use a Drawing to summarise an aspect of the project work, including a place to write notes that help recall specific project tasks.



Each Drawing, or even each Sheet, can be saved as a PDF or DWG/DXF file by selecting it, or, when nothing is selected, by saving the group.

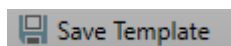
Import templates from CAD



Infinity makes it easy to get started with drafting by supporting import of CAD templates, layers and styles. Most users already have defined CAD templates that include their company information and formatting. Importing these to Infinity is a quick and easy way to generate professional documentation.

CAD templates can be imported from DWT, DXF, and DWG files.

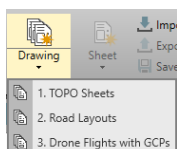
Save template



To be most time-efficient, setting up templates helps you to quickly start your work at the right level. Create the base for your Sheet, save it as a template, and save a set of Sheets as a Drawing template. Use the Infinity templates as themes for the different survey work you need to produce documentation for.

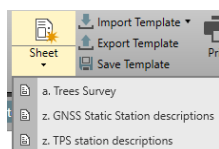
Drawing from template

When using a drawing template, easily add a specific Drawing to the project. A quick way to document information for a specific deliverable.



Sheet from template

When using a sheet template, easily insert a specific sheet to a selected Drawing.



9 New: TS20 & Captivate v10

TS20 support



Be ready with the optimal workflow – Use Leica Infinity to prepare everything you need for your TS20 field work. Import design files and feature data for general data prep, create the field jobs with the information and data for the work, assign the coordinate system and feature code table and send to Leica Captivate with GeoCloud Drive, and you are ready to go.

Captivate



With Captivate v10 Infinity users can benefit from improved data handling that can simplify quality control and data preparation.

Now, with the additional option in the import window, users can choose to import a complete Captivate field job or only import what is new, not to reimport data already existing in the project.

Import duplicated objects ☐

This import option benefits teams working on projects where data preparation starts with Infinity and field teams collect and share data back to the Infinity project for data qc, data processing and general project updates. Ensuring that duplicated data is not imported, this keeps it easy to qc and process the latest field data.

For daily tasks, working with a single job over many days but still wanting to archive each day's work separately, use this setting for importing only what is new to simplify the data management in Infinity.

Features



Import of the additional Captivate options to create

- a circle from the centre point and a user-entered radius
- and a rectangle by two points to set height and width.

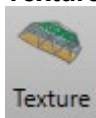
Create these features in Infinity, using the Create Feature commands.

Linework commands

Import of new Captivate linework options for Jog and Extend commands.

10 Surface module

Texture Surface



Texture Surface now allows two methods to texture a surface, using images or the colour from a point cloud.

Using texture on surfaces helps to better work with the surfaces in Infinity, such as for comparison maps. The texture can also be exported to provide a realistic representation of the surface in CAD applications or be very useful in VR or AR applications.



Project Line to Surface

2D or 3D lines projected onto a surface can now also be used to create alignments or other related infrastructure line or string objects.

Improved Surface methods

Improvements made to the surface methods Refine and Regular deliver better results when working with point cloud data, with better handling of spikes and more realistic reconstruction on edges.

11 Level processing – Level Lines wizard

Update Level Lines

Working with big level networks consisting of large number of level lines or measuring the same lines monitoring heights, it can take a lot of time to import and update the lines with 3d data. A new tool called Update Level Lines will let users update start and end points for all or the selected level lines in a project and quickly bring the level data to use the highest class point role. This is also a good tool to bring level data quickly to combine with the 3d project data.

Update Level Lines										
Level Lines										
Update	Level Line	Date/Time	Start Point	End Point	Adjustment Method	Misclosure [m]	Height Error / Point [m]			
☒	694-353 (2002-4368) (02/06/2025 16:07:02)	02/06/2025 16:07:02	694	353	No Adjustment	0.0006	0.0002			
☒	694-353 (894-6368) (02/06/2025 16:07:02)	02/06/2025 16:07:02	694	6368	No Adjustment	-0.0006	-0.0001			
☒	694-353 (8368-3001) (02/06/2025 16:07:02)	02/06/2025 16:07:02	6368	3001	No Adjustment	0.0005	0.0005			
☒	694-353 (8770-353) (02/06/2025 16:07:02)	02/06/2025 16:07:02	6770	353	No Adjustment	-0.0002	0.0000			
☒	694-353 (8368-2001) (02/06/2025 16:07:02)	02/06/2025 16:07:02	6368	2001	No Adjustment	-0.0005	0.0000			
☒	694-353 (2001-6770) (02/06/2025 16:07:02)	02/06/2025 16:07:02	2001	6770	No Adjustment	-0.0003	-0.0002			
☒	694-353 (8368-3002) (02/06/2025 16:07:02)	02/06/2025 16:07:02	6368	3002	No Adjustment	0.0006	0.0002			
☒	694-353 (2001-6368) (02/06/2025 16:07:02)	02/06/2025 16:07:02	2001	6368	No Adjustment	-0.0004	-0.0004			
☒	353-494 (2001-6368) (02/06/2025 16:10:13)	02/06/2025 16:10:13	2001	6368	No Adjustment	-0.0013	-0.0001			
☒	353-494 (6368-3001) (02/06/2025 16:10:13)	02/06/2025 16:10:13	6368	3001	No Adjustment	-0.0002	-0.0002			
☒	353-494 (353-6770) (02/06/2025 16:10:13)	02/06/2025 16:10:13	353	6770	No Adjustment	0.0010	0.0001			
☒	353-494 (6368-694) (02/06/2025 16:10:13)	02/06/2025 16:10:13	6368	694	No Adjustment	-0.0006	0.0000			
☒	353-494 (2001-6368) (02/06/2025 16:10:13)	02/06/2025 16:10:13	2001	6368	No Adjustment	0.0005	0.0005			
☒	353-494 (2002-6368) (02/06/2025 16:10:13)	02/06/2025 16:10:13	2002	6368	No Adjustment	-0.0002	-0.0001			
☒	353-494 (8368-3002) (02/06/2025 16:10:13)	02/06/2025 16:10:13	6368	3002	No Adjustment	0.0013	0.0004			
☒	353-494 (6770-2001) (02/06/2025 16:10:13)	02/06/2025 16:10:13	6770	2001	No Adjustment	0.0002	0.0001			
☒	325-701 (325-326) (06/06/2025 14:22:10)	06/06/2025 14:22:10	325	326	No Adjustment	0.0003	0.0000			
☒	325-701 (326-701) (06/06/2025 14:22:10)	06/06/2025 14:22:10	326	701	No Adjustment	-0.0027	-0.0001			

12 General application improvements and fixes

Import DBX	Improved the time needed to import large Captivate jobs
Import images	Improved the time needed to import large image data sets
Import GNSS	Fixed an issue when GNSS RTK points measured from a iMAX mount point and the corrections communication is interrupted, it could result in more than one GNSS Setup point being created.
Importing files from folders	When importing several data types that include many files – such as SHP, RINEX, JPG etc, the folder name from where these files are imported from will be included in the Import Source name.
Export – StarNet	Now it is possible to export observation and vectors using the StarNet format, for easy sharing of survey data.
Export - CAD	Exporting DXF, DWG now includes option to include all layers and all blocks even if not used in the data being exported.
Export – CAD	When exporting blocks that use annotative texts, the settings are respected when exporting DXF, DWG.
Export – Autodesk FBK	Export points and lines with feature codes, attributes and linework flags for easy import to AutoCAD Civil3D
Imaging module	Improvements to Dense Point Cloud: improved fine detail extraction that better represents small or thin objects such as poles, wires and general small objects
Imaging module	Improvements made in Orientation step that reduce time for processing
Imaging module	Improved creating DSM on Sparse Point Cloud
Imaging module	Added 3d texture to Digital Surface Model (DSM) that provides a more realistic 3d data object and can be exported for use in other software's
Imaging module	The average ground sample distance (GSD) is now shown in Orientation properties and shown in the Image Processing report. Note, for terrestrial acquisitions, GSD value is not output.
Imaging module	Fixed single pixel holes in the Orthophoto
Imaging module	Fixed import of orientation values from Autel UAV imaging drones
TPS processing	Fixed an issue when angular only observations were not shown correctly in the Observations page of Traverse Wizard

12 General application improvements and fixes

TPS processing	Fixed an issue where the closing angle of a traverse closed on the starting setup of a different traverse, the scale would be 1.0
TPS processing	Fixed an issue when measuring Face 1 only Sets of Angles, the sets would be imported and set to disabled.
Tunnel module	Fixed an issue for Tunnel Inspection and Profiles set to Perpendicular to alignment, the plane of the last three profiles along alignment could be wrong.