



- when it has to be **right**



Product: iCON office
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iCON office release version 2015.2.943.64

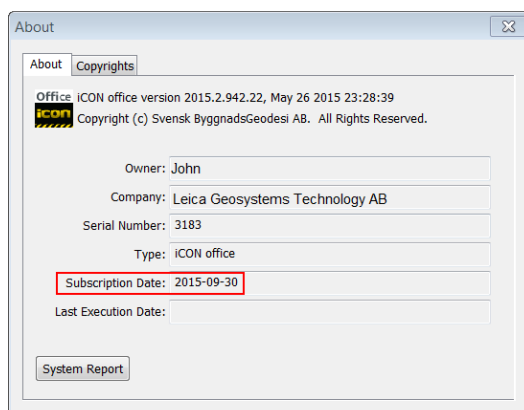
This document describes the latest engineering release of iCON office.

What's new?

- Support for reading HeXML version 7 (coordinate system from Viva SmartWorx and Captivate).
- Stability improvements, found thanks to the users who used the crash reporter and did send automatically created error reports to the development team.

Further down in this document, information about new functions and improvements, e.g. the new road line format, in the iCON office 2015 release in the beginning of June can be found. If you haven't read it, please take your time to read the release notes for this release.

iCON office is a subscription based software and it is only possible to run versions that are released before the expire date of your subscription. To check the subscription date of your license go to the menu, Help → About → Subscription Date in iCON office and check the expire date.



The help text in iCON office contains even more detailed information about the new functions and can be found in the menu Help → Help Topics.

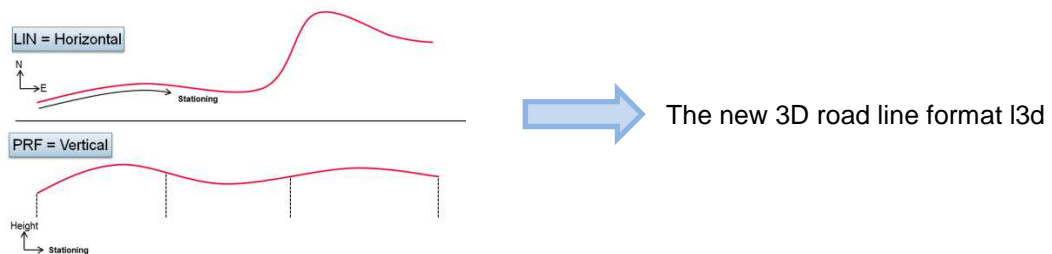
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1 New Functions and Improvements in iCON office 2015

1.1 New 3D Road Line Format

With the release of the new iCON office version we have introduced a new 3D road line format and a new cross fall model. The new road line format, l3d, replaces the old lin and prf files. The lin format was for the horizontal part and prf for the vertical. The new cross fall model, cfm, replaces the old format, skv, with camber/cross fall information.

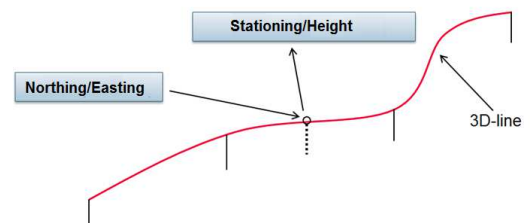


iCON office 2015 is backward compatible and still supports the old road line formats lin/prf and skv, but when a road alignment is imported from e.g. a LandXML file, a l3d line is created. It's possible to use, *File* → *Save as*, to save a l3d road line as lin/prf or a cfm as the old format skv. In the same way it's possible to convert the old format lin/prf to the new l3d format and skv to the new cross fall model cfm.

iCON 3D supports the new formats l3d and cfm from version 2.10.19 and GeoPad from version 2015.01.1002. iCON site and build don't support the new road line format yet, so iCON site/build users must still use the old road line format lin/prf and the skv file for cross fall information.

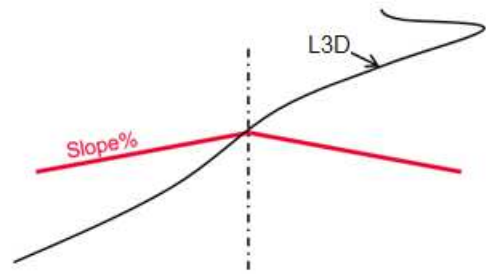
1.1.1 Road Line (*.l3d)

- 3D line
- Enables more robust alignment handling since the horizontal and vertical parts are integrated. Removes the "magic" of linking files with the same name automatically.
- Support for station equations
- Currently supports circular and spiral curves for horizontal lines.
- Currently supports circular and parabolic curves for vertical lines.



1.1.2 Cross Fall Model (*.cfm)

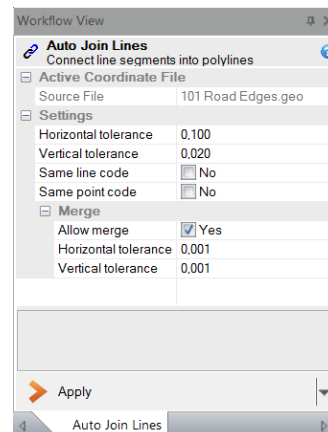
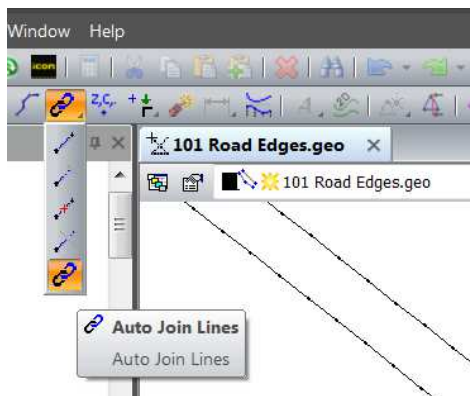
- A cross fall model is used to describe the cross fall from a road line, that is, the perpendicular slope from the center line.
- The Cross Fall Model, cfm, replaces the older file format, skv
- The new model will have a reference to a L3D line.
- Avoids the “magic” that lin+prf+skv needs to share the same name.



1.2 Auto Join Lines

When polylines are coming from DWG-files, it's quite common that the lines are built up by many short line segments and not as a continuous line. With the new tool *Auto Join Lines*, line segments can be joined into continuous lines in a coordinate file.

- The auto join lines tool is listed among the other split/connect lines tools
- The segments can be connected using different kinds of criteria like horizontal and vertical tolerances or code.
- The changes are visualized so the user can accept or undo.
- Useful for machine control and stake out.
- The tool only applies to coordinate files.



1.3 DGN Import

It's now possible to import MicroStation DGN to DWG to be used in iCON office. DGN export is not supported.

1.4 DWG Import Improvements

Extended possibility to handle DWG files with several surfaces in different layers. iCON office can now extract 3D faces to several terrain models (*.trm) directly.

1.5 Tunnel Improvements

- Point cloud can now be used directly in tunnel, you don't need to create cross sections anymore.
- The tunnel design can be used to filter unwanted data from a point cloud.

- A 3D tunnel design in the AutoCAD® file format DWG can now be used in the tunnel module.
- Now it's possible to calculate geological over profile.

1.6 2D Point Cloud Filter

An already existing closed polygon in a coordinate file, can be used to create a 2D border polygon filter in a point cloud.

1.7 LandXML Export of Road Line with Station Equation

Now it's possible to export a road line (*.l3d) with station equations to Leica SmartWorx and LandXML.

1.8 System and Stability Fixes

iCON office has its own crash reporter that catches crashes of the software and sends reports to the development team. As a result some maintenance and stability fixes have been done.

2 iCON office modules

- 797955 CSW301 **Core Module** – Import/Export and basic functionality

Add-On modules:

- 797956 CSW302 **Road** – Advanced road line calculations
- 797957 CSW303 **Terrain** - Volume calculation model to model
- 797958 CSW304 **Volume** - Volume calculation by sections
- 797959 CSW305 **Tunnel** – Tunnel functionality
- 797580 CSW306 **Net Adjustment** - Network adjustment and calculations
- 832546 CSW313 **Point Cloud** – Import and filtering of scanning data

Available packages:

- 6007380 iCON office Core package, includes installation package, Core
- 6007381 iCON office Terrain package, includes installation package, Core, Road, Terrain
- 6007382 iCON office Volume package, includes installation package, Core, Road, Terrain, Volume
- 6007383 iCON office Tunnel package, includes installation package, Core, Road, Tunnel

3 Subscriptions

- 5305269, iCON office subscription 1 year
- 5305270, iCON office subscription 2 years

Provide serial number of the license or the hardware lock ID, when an extension of subscription is ordered.

4 Leica myWorld

Please use Leica myWorld to find the latest version of the software. Access Leica myWorld by using the following link:

<https://myworld.leica-geosystems.com/>

If it is a new installation the HASP driver must be installed so the USB hardware lock will be recognized by the computer.

Point cloud utility is the point cloud engine and must only be installed if the point cloud module is purchased.

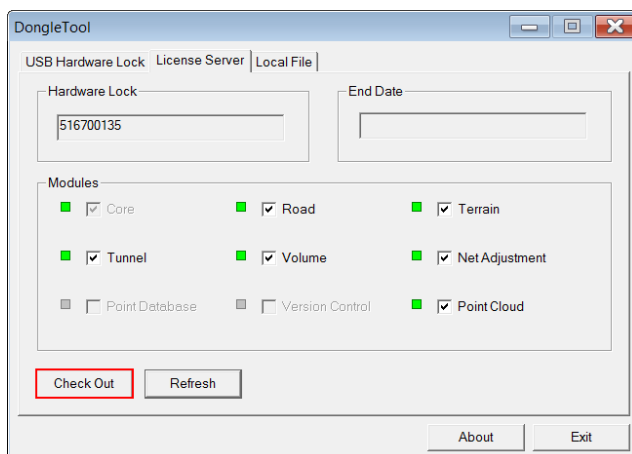


Menu of the installation package

5 Dongle Tool

Use **Dongle Tool** to update the hardware lock:

- With extended subscription for Leica iCON office
- To unlock new modules purchased for the license.



1. Insert the HASP hardware lock into the USB port.
2. Go to Start >> All Programs >> Leica Geosystems >> iCON office and select Dongle Tool.
3. To change the subscription date or to add/remove modules it is first necessary to check in the current license to the license server. This is done by pressing **Check In**.
4. Switch to the **License Server** tab. Select the modules open for use and then press **Check Out**.

This will give the hardware lock a new certificate containing the updated information.