- when it has to be right

Product: **iCON office**

Date: 06.11.2017

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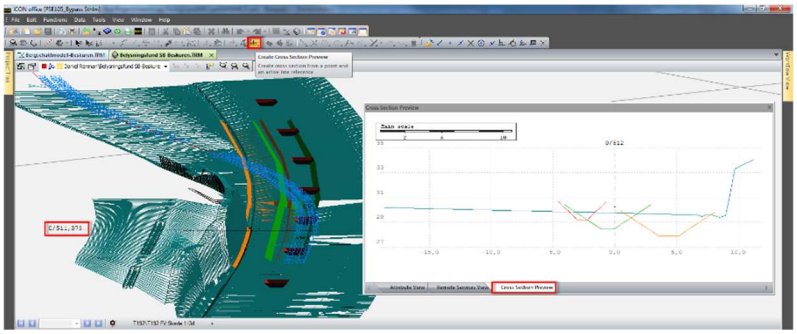
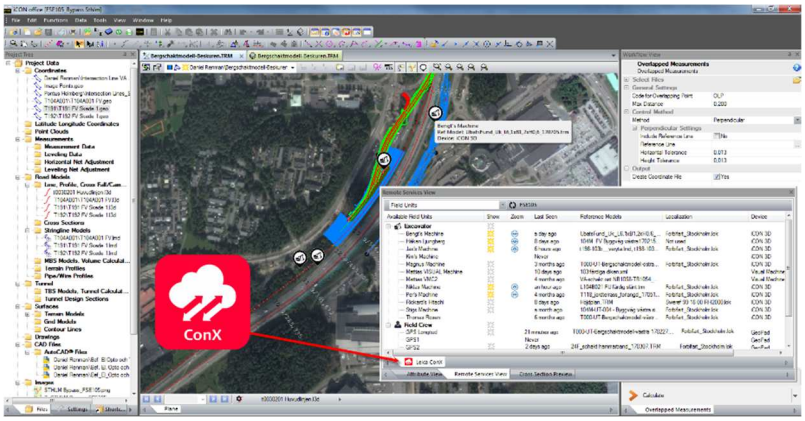
iCON office release version 2018.1.980

In this version we have made improvements regarding the Leica ConX integration. A new cross section preview tool has been developed. The tool can be used in both 2D and 3D window and makes it possible to get a quick preview of multiple surfaces in a separate cross section view.



These and other improvements are described more detailed in this document. All users with a valid subscription will be able to download, install and run this new version. Verify that that your subscription date expires after the release date of this iCON office version.

To connect iCON office to a Leica ConX project, no special iCON office module is needed. The only requirement is that the iCON office license has a **valid subscription**. Use your company level ConX credentials and connect an iCON office project to ConX.



To check the expire date of your subscription, go to the menu, Help>> About >> Subscription Date, in iCON office.

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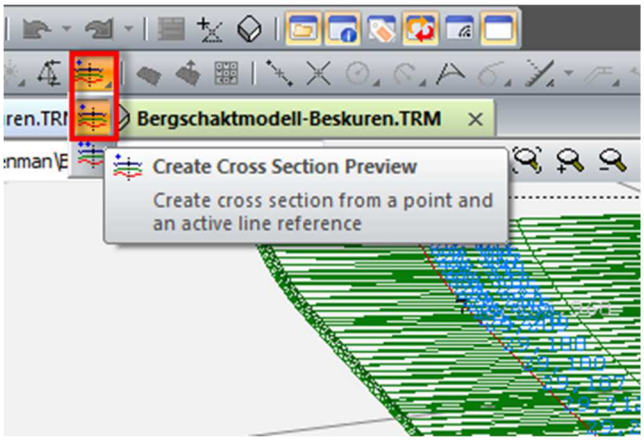
1 New Functions and Improvements

1.1 *Cross Section Preview*

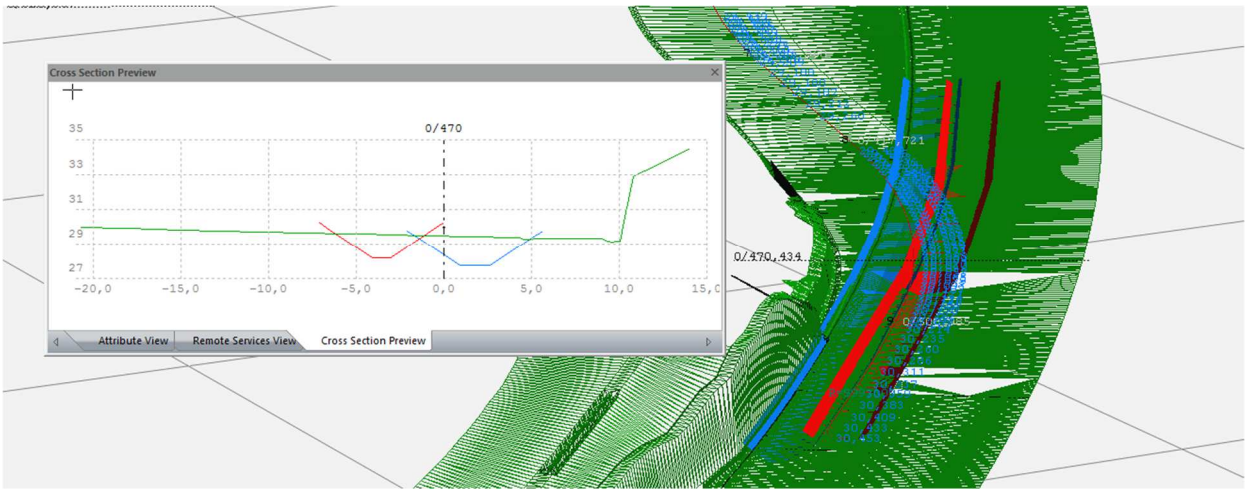
iCON office has a new preview cross section tool which supports multiple surfaces. Both terrain models (*.trm) and dwg files are supported.



The cross section is defined by two clicks in the graphics. If a center line is used, it's possible to define the cross section by one click. The tool works both in the 2D and 3D window.

If the one click tool is used, the cross section is generated at the selected stationing and perpendicular to the active line reference.

Select the tool in the toolbar and click in the graphics to define the cross section and the cross section is displayed in a view called Cross Section Preview.



1.2 *Leica ConX Improvement*

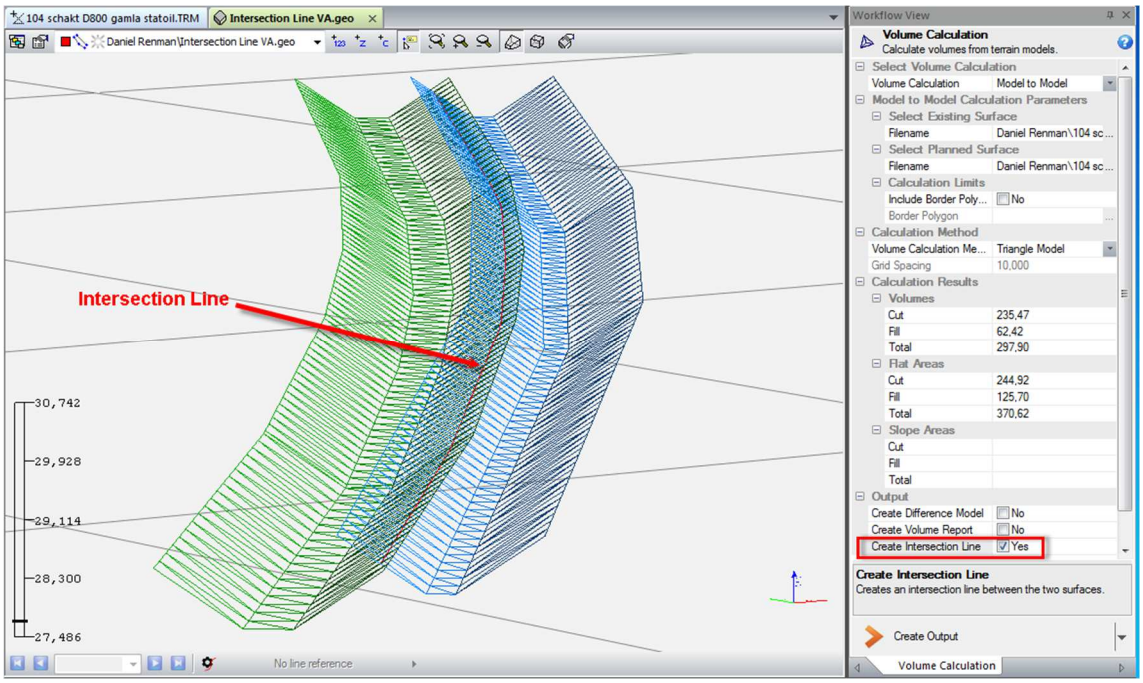
In Leica ConX companies can use account types to set up hierarchies. Earlier only projects on root level of the companies were listed in iCON office. Now iCON office supports workspaces in ConX, i.e. all projects are listed and possible to connect to.

The help text is updated with information about the iCON office and Leica ConX integration.

After a volume calculation, model to model, it's possible to create a different outputs like difference model and report. Now we have added the option Create Intersection Line. Line or lines with height, along the intersections of the two input models in the volume calculation, are generated.

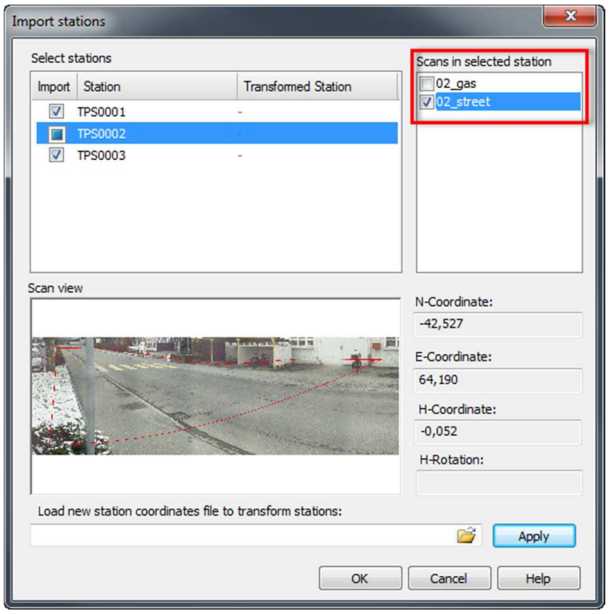
1.3 *Intersection Line between two Models*

After a volume calculation, model to model, it's possible to create a different outputs like difference model and report. Now we have added the option Create Intersection Line. Line or lines with height, along the intersections of the two input models in the volume calculation, are generated.



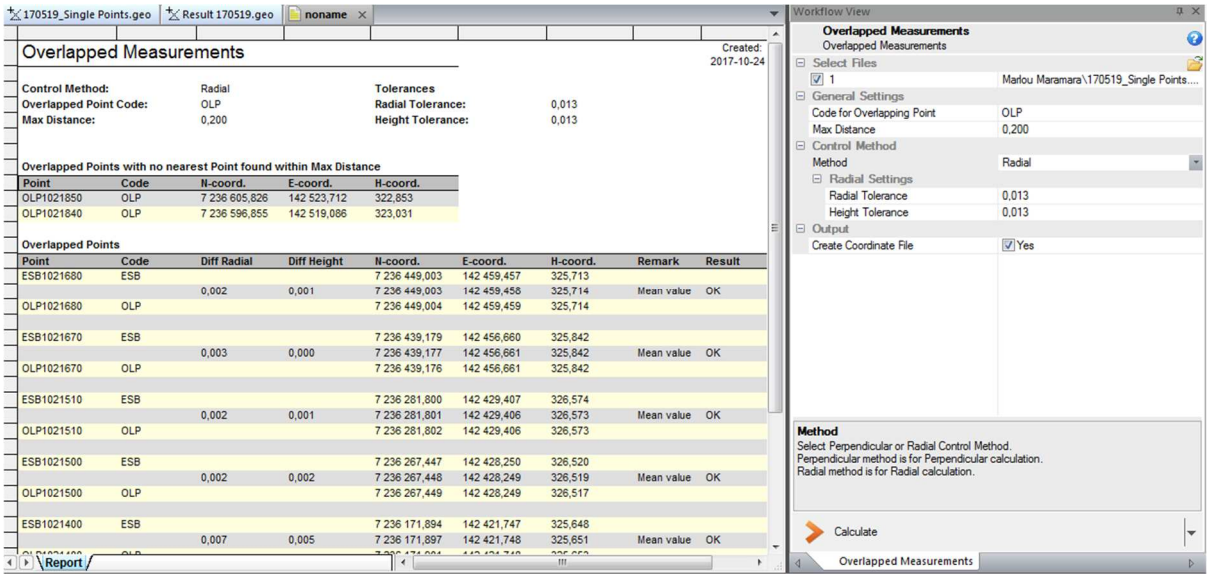
1.4 *Point Cloud*

Possible to select which scans to import from Leica MS50/MS60. Previously, you could only get all or no scans from each station set up. Now it's possible to select both stations and individual scans from each station.



1.5 *Overlapped Measurements*

A new function, Overlapped Measurements, to check that angular deviation does not occur between station set ups is implemented. A point is measured from two different stations and the difference between the two set ups are checked, if the they are within the user defined tolerances. The function can be used both with or without road-/railway line.



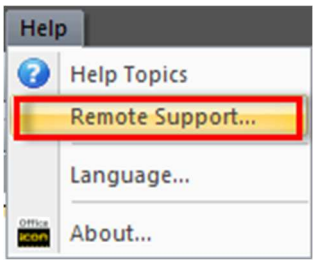
A report is generated and it's possible to get a new coordinate file with the adjusted points.

1.6 *DWG Files in Volume Calculation by Section (MBS)*

In MBS models, used for volume calculation by sections, it's now possible to use a dwg, containing a surface, as a model for an existing layer. Previously, you always had to convert the surfaces in dwg files to terrain models (*.trm)

1.7 *Remote Support*

To make it easier to give remote support a direct link to Screen Connect is now available in the Help menu.

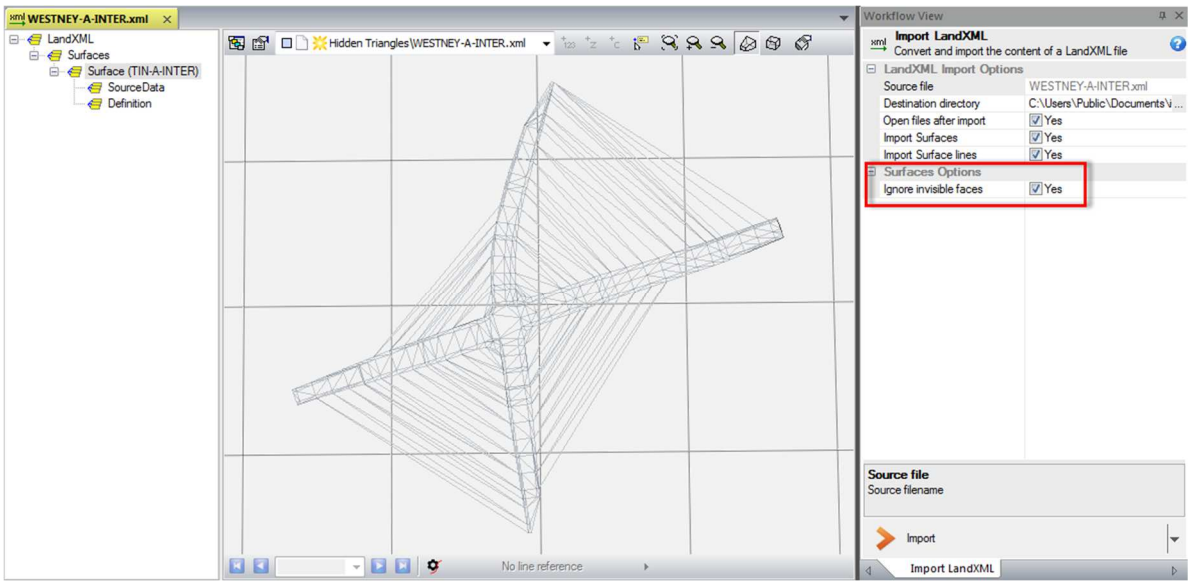


The customer is directed to the Leica remote support portal (https://rs.leica-geosystems.com/) and just has to type in the code, provided by the support, to start a session.

1.8 *LandXML Import*

Support for latitude and longitude coordinates is now implemented in the LandXML import. If the LandXML file contains latitude and longitude data, it's possible to import it. The coordinates are saved in a llc-file (Latitude Longitude Coordinates) and can be used in iCON office. The points could e.g. be used to create a GNSS localization or transformed to local grid coordinates.

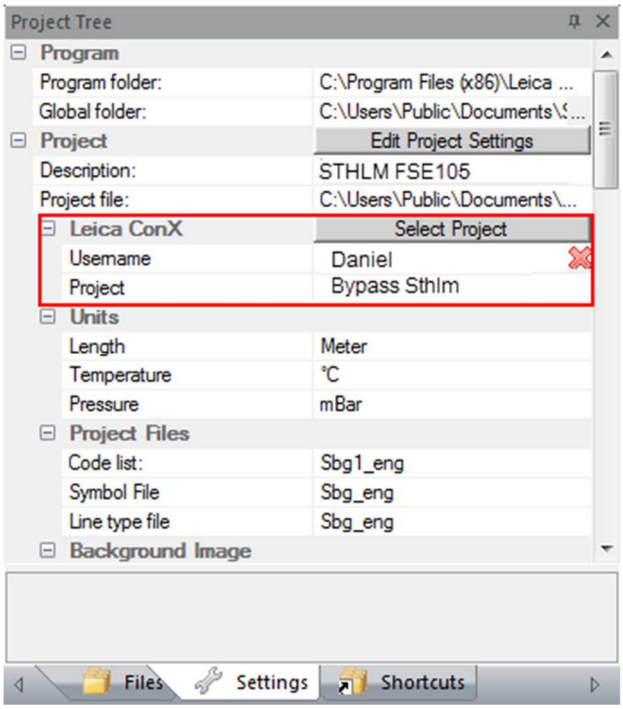
A new setting, **Ignore invisible faces**, is added to the LandXML import. Triangles in LandXML files can have an optional attribute that they are invisible, even if they are a part of the triangulation. When this option is selected, these triangles are ignored, and will not be imported to the resulting terrain model.



2 Leica ConX Integration in iCON office

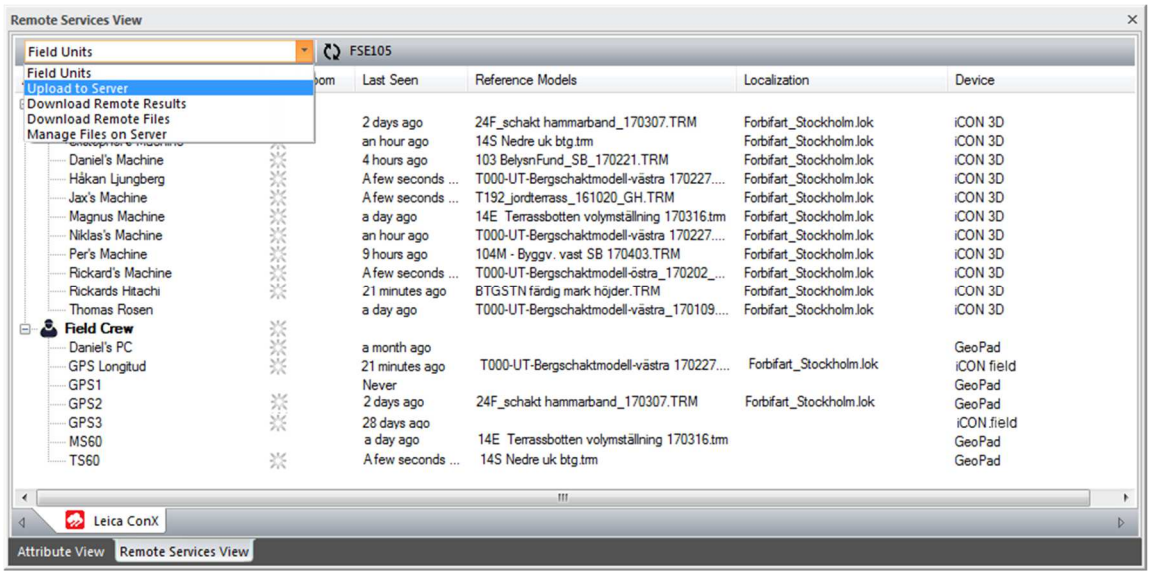
In project settings in iCON office, it's possible to use the Leica ConX company level credentials to login and link to a Leica ConX project.

A new *Remote Service View* tab is added and from here it's possible to manage project data for machine control and field crew units.

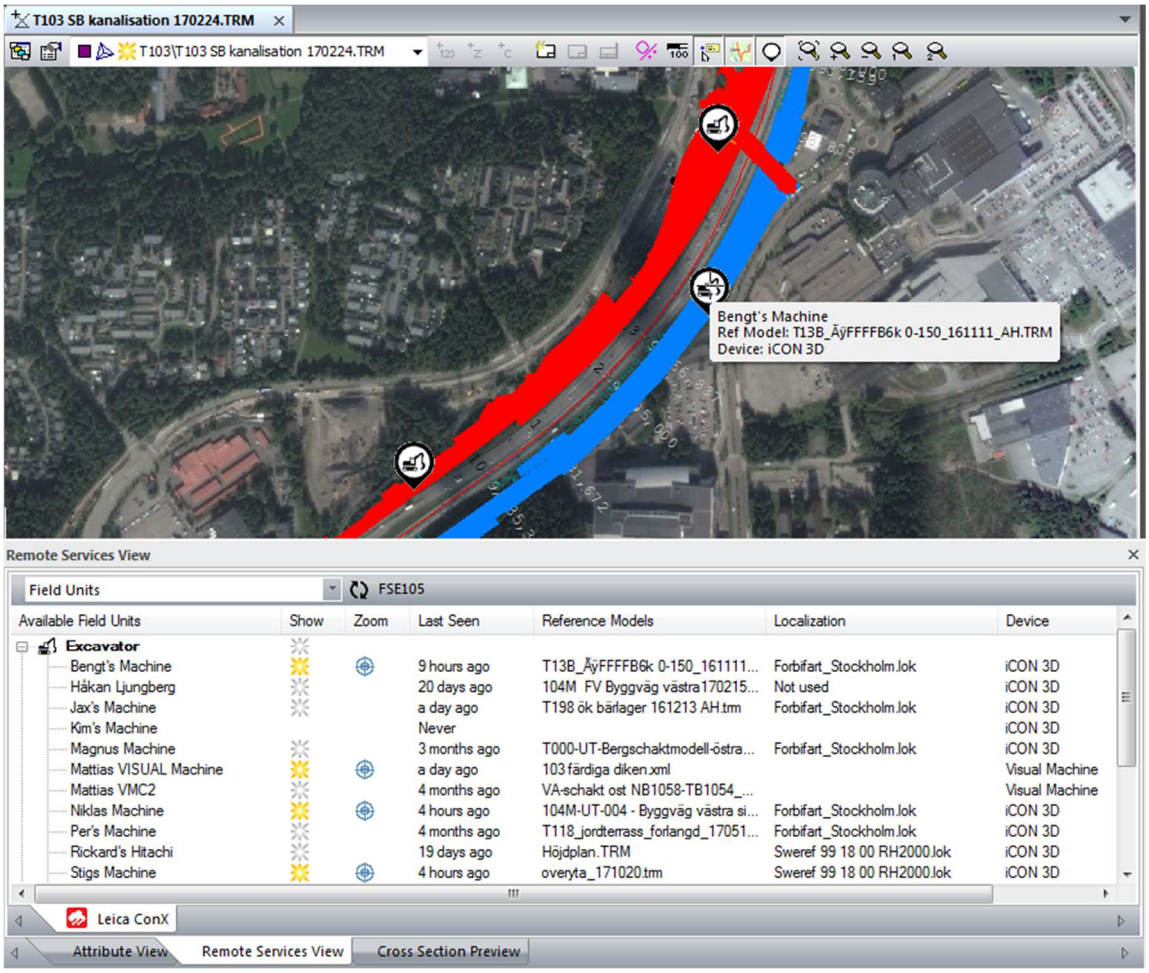


- It's possible to list available machines and field crews in the field.
- Display their positions in the graphics.
- Upload project related files like reference models, control points and coordinate system to Leica ConX and assign them to different units.
- Download surveys, asbuilt and reports uploaded from field units, to your iCON office project.
- Manage files on the server e.g. assign reference models to new machines.

2.1 *Field Units*



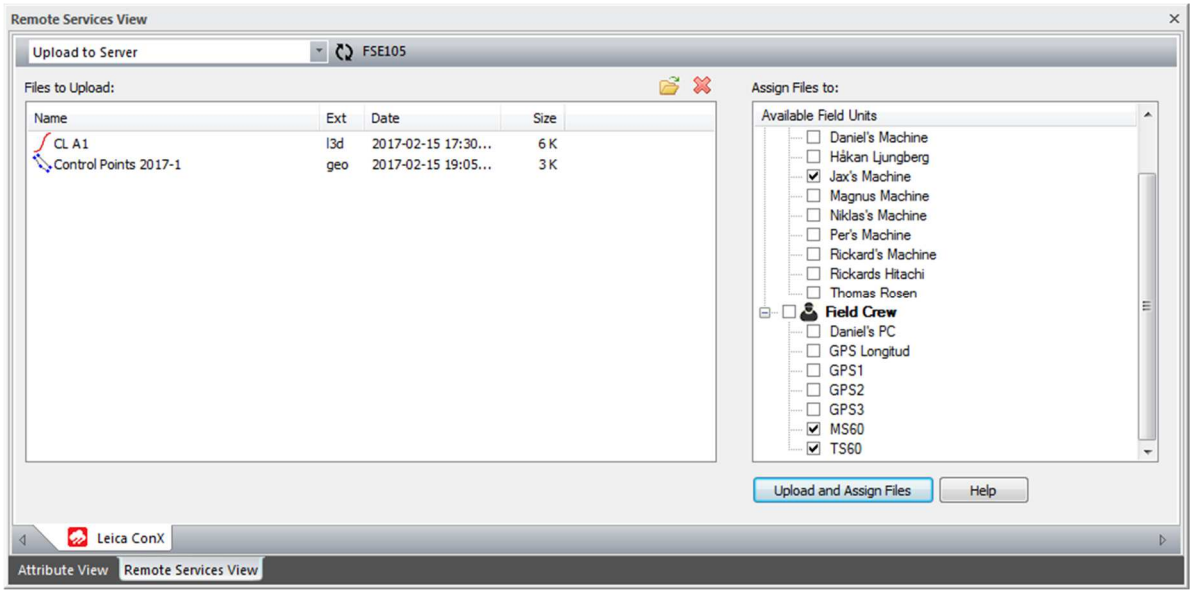
In the drop down menu above it's possible to select between different options depending on what the user will do.



When *Field Units* is selected, all machines sorted after machine type and field crews connected to the Leica ConX project are listed together with some additional information like last seen, active reference model, localization etc.

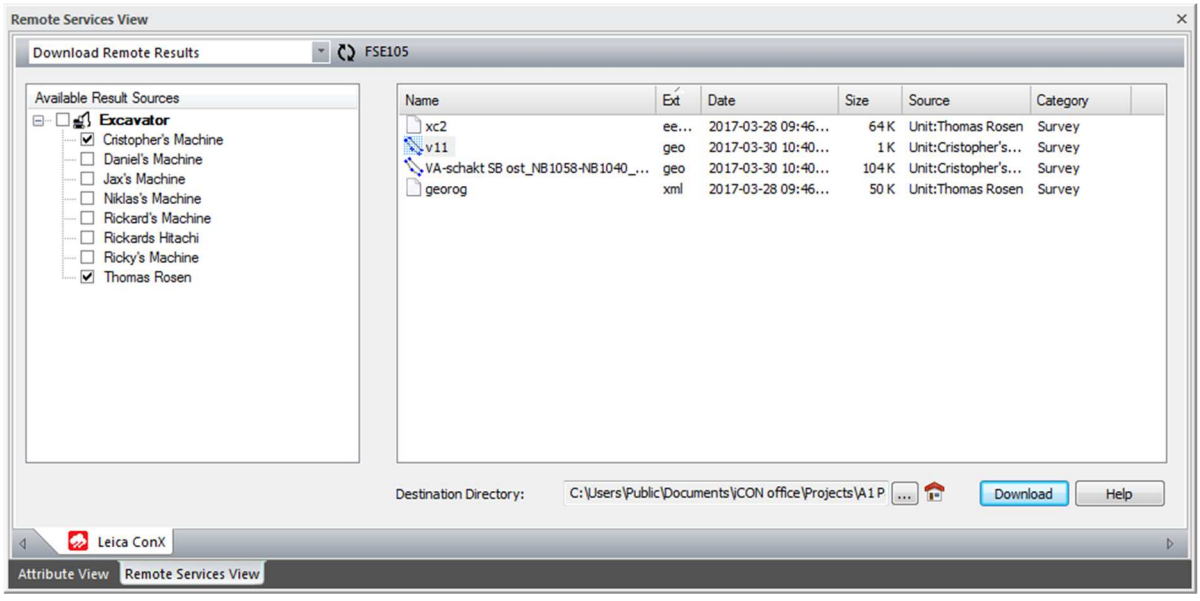
In the column Show, it's possible to turn on and display the machine or field crew in the graphics. An icon representing the machine type, for example an excavator, and the latest position sent from the unit are used.

2.2 *Upload to Server*



If the option *Upload to Server* is selected, it's possible to browse for, or drag and drop files to the upload area. Associated files are supported in the upload. In the tree view to the right, the user can assign which units that should have access to the files and hit *Upload and Assign* in order to start the upload.

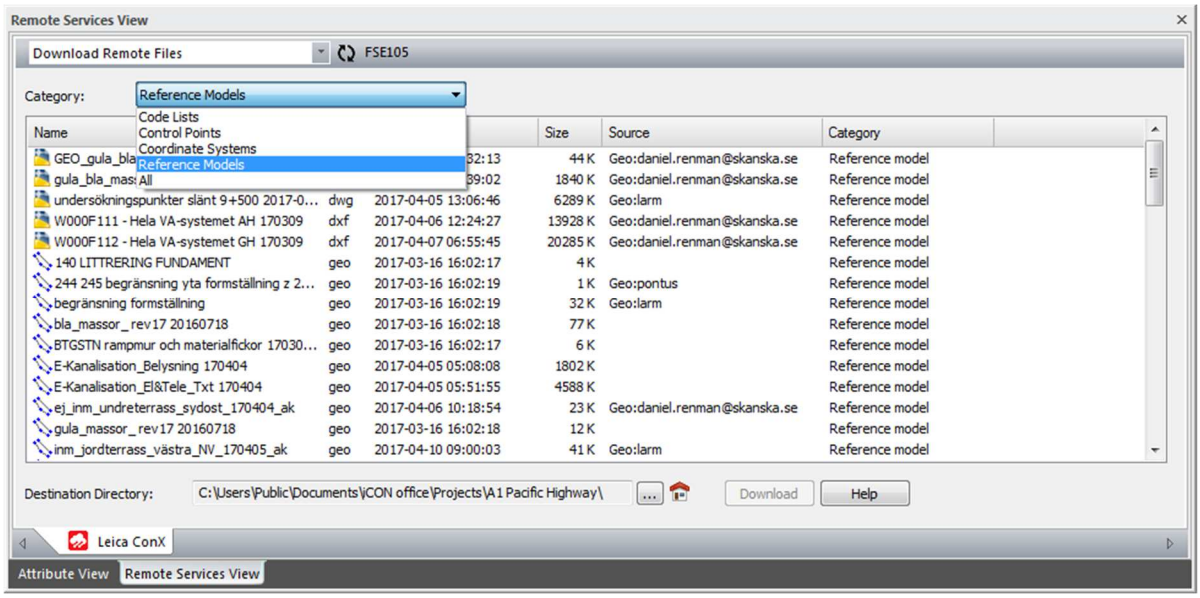
2.3 *Download Remote Results*



A typical workflow is sending measured data from the field back to office. In *Download Remote Results* all sources, e.g. machines or surveyors, which have uploaded asbuilt, survey data or reports are listed in a tree view. By selecting units, you are expecting data from, the files uploaded by these units will be listed to the right and can be selected for download to iCON office.

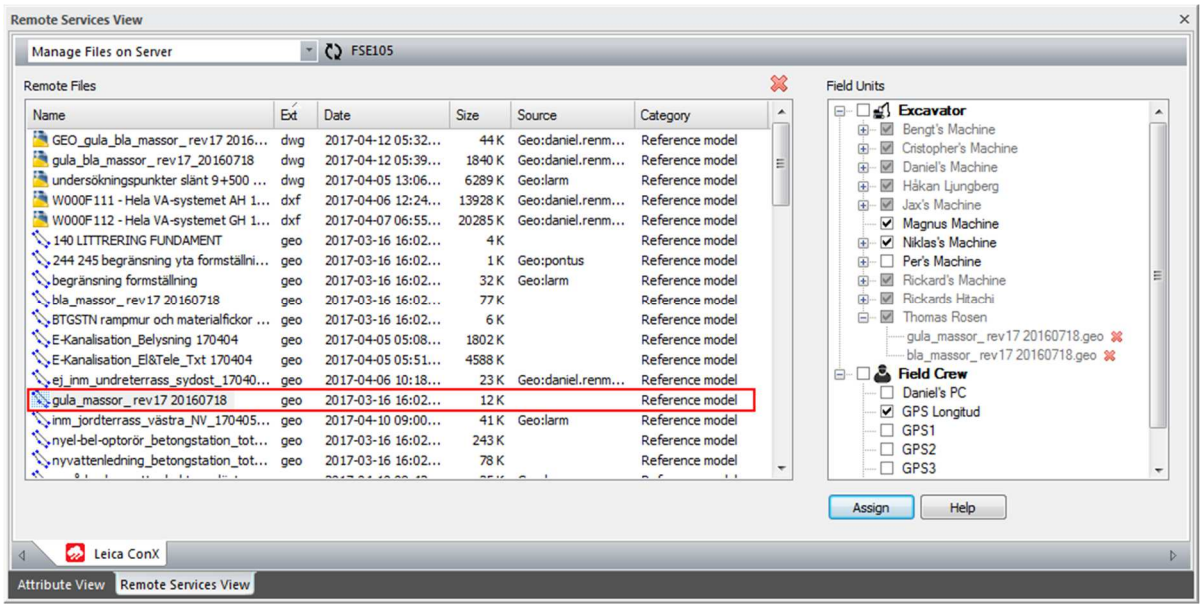
The default path is set to the active project folder in iCON office, but can be changed to any directory by using the browse button. The house icon will set the path back to the active iCON office project folder again.

2.4 *Download Remote Files*



In *Download Remote Files* all project related files, except asbuilt and reports, available on the server are listed and can be downloaded to iCON office. It's possible to filter by category, e.g. reference models, control points and coordinate systems, to get a better overview over the project data.

2.5 *Manage Files on Server*



In *Manage Files on Server* it's possible to:

- Delete files on the server, by selecting a file in the list to the left and hit the red delete icon.
- Select a file and get an overview about which units that have access to the file. These units are greyed out in the tree view to the right.
- Select a file and assign it to other units.
- Expand a node for a unit and see all the files the machine has access to on the server.
- Delete assignments for a unit in the tree view, by clicking on the red delete icon to the right of the file.

3 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

4 Subscriptions

- 849563, iCON office subscription 1 year
- 849565, iCON office subscription 2 years
- 868774, iCON office subscription 3 years
- New 868776, iCON office subscription revival
  This revival option should be used when subscription expired more than two years ago. The new subscription will be valid one year ahead from the date of purchase.

Provide serial number of the license or the hardware lock ID, when you order an extension of subscription. Use Dongle Tool to update the USB hardware lock with the extended subscription.

5 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/

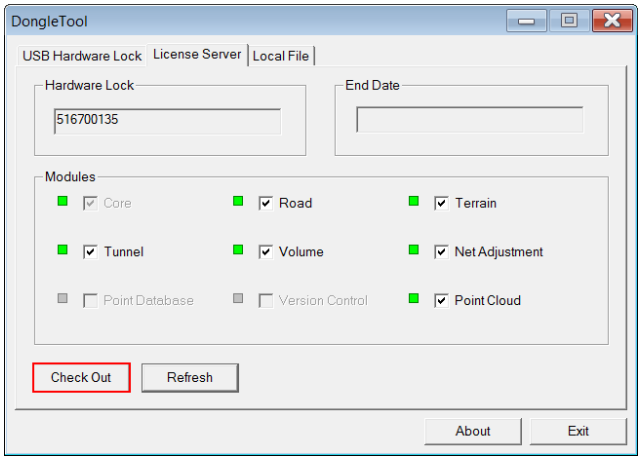
If it is a new iCON office installation the HASP driver must be installed so the computer can recognize the USB hardware lock.

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

6 Dongle Tool

Use **Dongle Tool** to update the hardware lock with extended subscription for Leica iCON office or to unlock new modules purchased for the license. Place an order using your normal order channels and when the logistics has processed your order, you can run Dongle Tool and update the USB hardware lock.



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.