Product: iCON office

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iCON office release of version 2021.3.3

We are pleased to announce the engineering release of iCON office 2021.3.3 with new functionality and many other important maintenance updates. The popular trench model is improved based on feedback from users. If you work with terrain models, AutoCAD files or coordinate data some new features can be found.

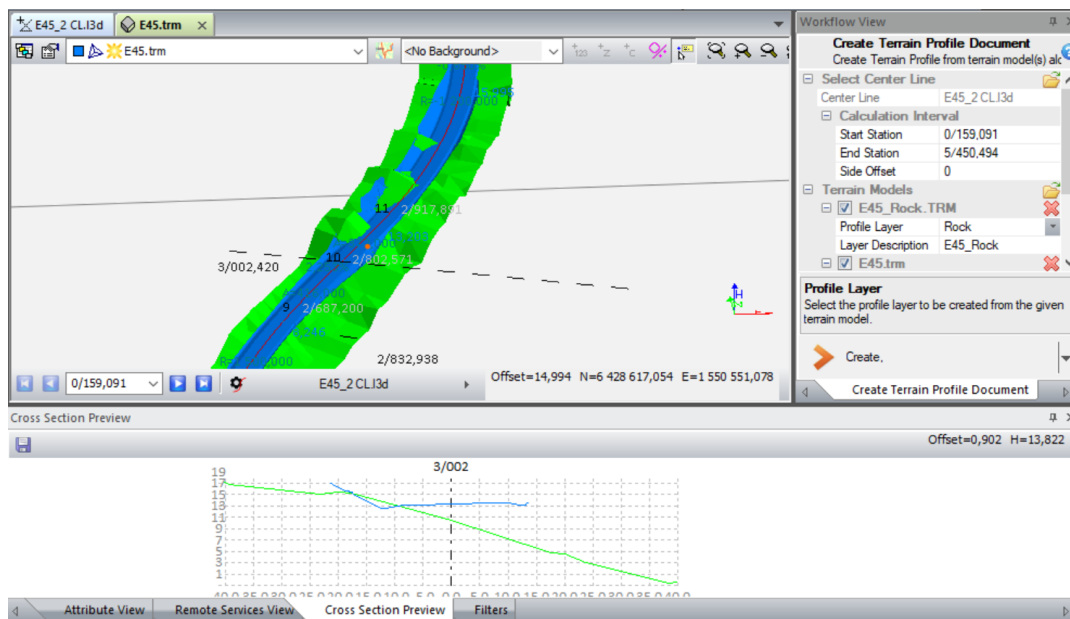All users with a valid subscription (Update Service) will be able to install and run this new version.
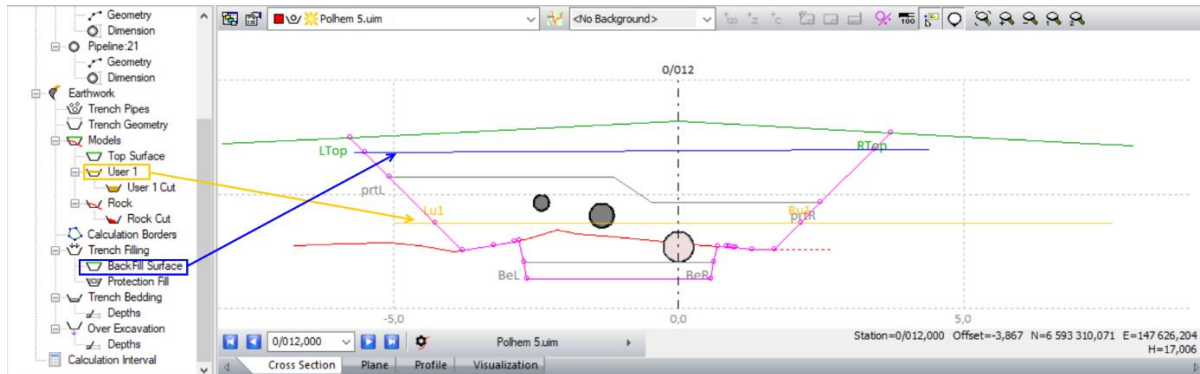
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1 New Functions and Improvements

1.1 *Trench Model*

Based on feedback from our users we have improved the trench model and its output.

- Possible to divide and report cut volumes by adding one more terrain model, User 1, in addition to soil and rock.
- Option to add an alternative top surface when calculating backfill volumes, for example a roadbed.

- A new option to add more pipes to the trench by using height and side offsets from main pipe.
- Calculation borders can be used if the volumes of the trench should be divided, for example between different owners.
- Pipe profiles can be generated from the trench model (Data → Create Pipe Profiles)

1.2 *Terrain Model*

New UI to create terrain profiles in the workflow pane. Multiple surfaces can be used at the same time and user defined descriptions can be given (Data → Create Terrain Profiles).
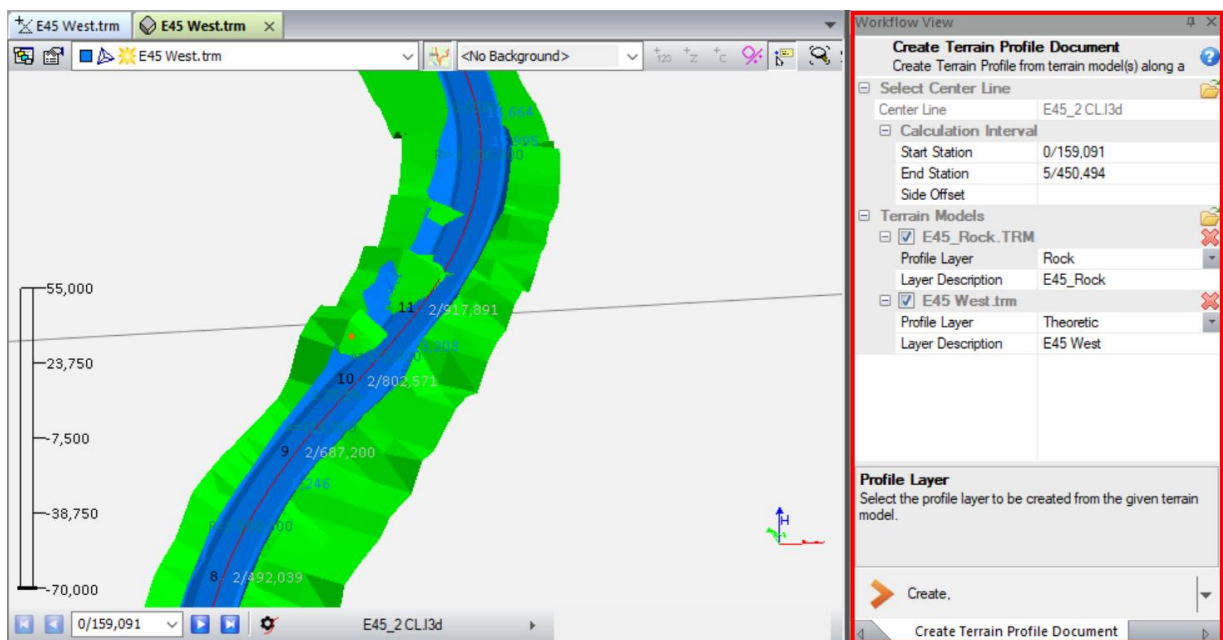
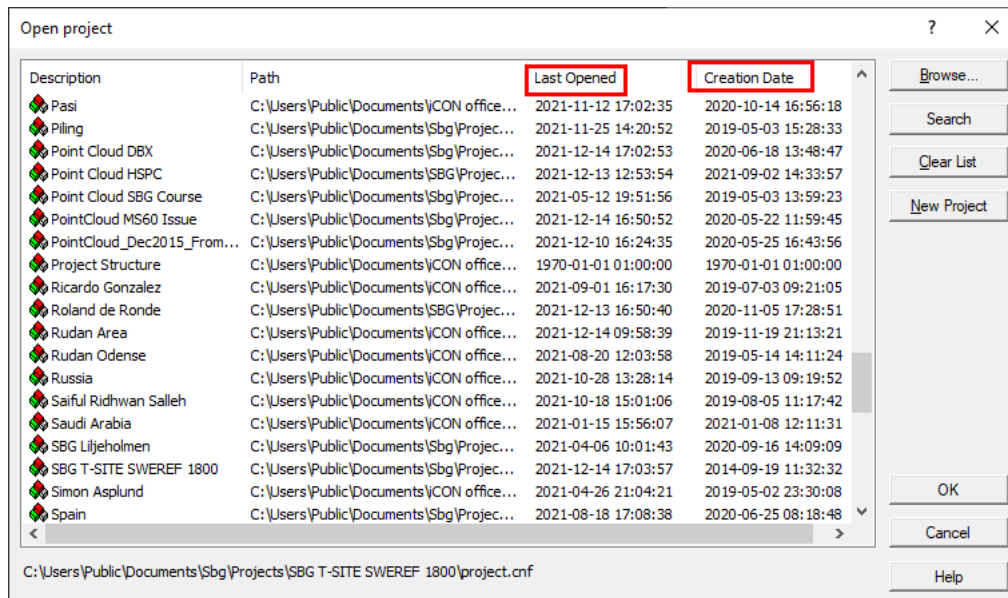When a terrain model is cut based on offsets from a road line, the used bounding box is visualized as a preview of the result (Data → Cut Terrain Model).
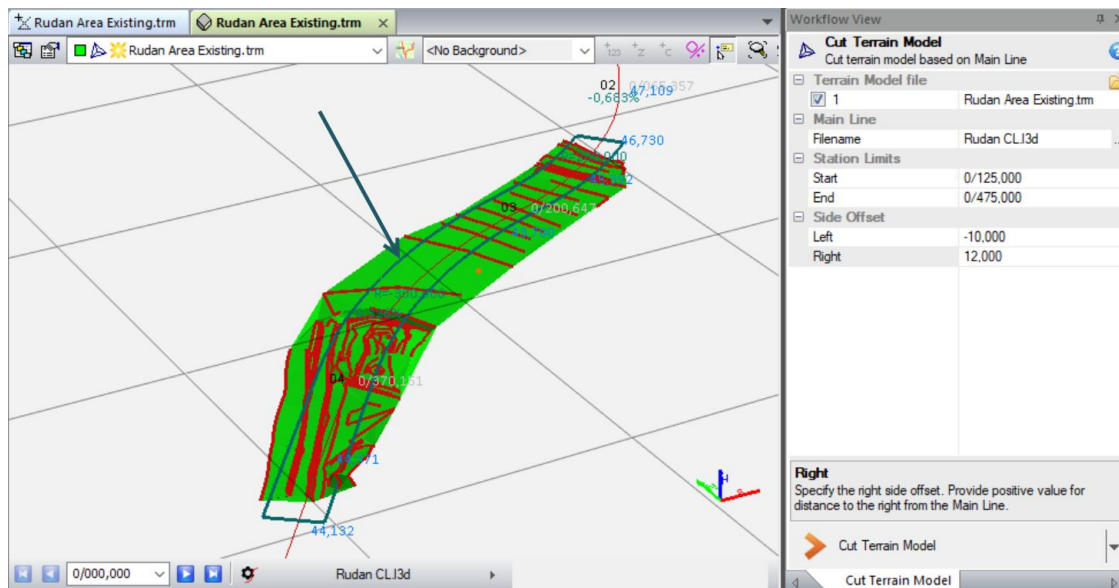
1.3 *Project Dialog*

More information, last opened and creation date, is added to the Open Project dialog and listed projects can be sorted by:

- Creation date
- Last opened
- Description

1.4 *AutoCAD Files*

- In the dialog, Extract Coordinates from AutoCAD Drawing, the list can be sorted by both layer name and description.

- A new tool, Angular Dimension, is implemented. Now it's possible to create dimensions for both distances and angles in AutoCAD files.
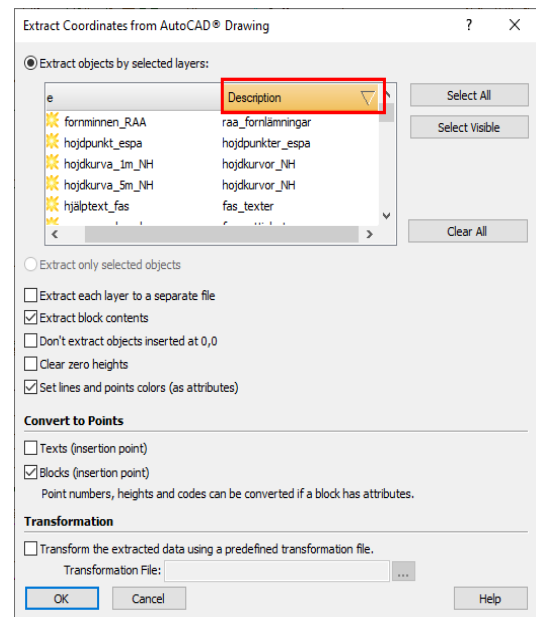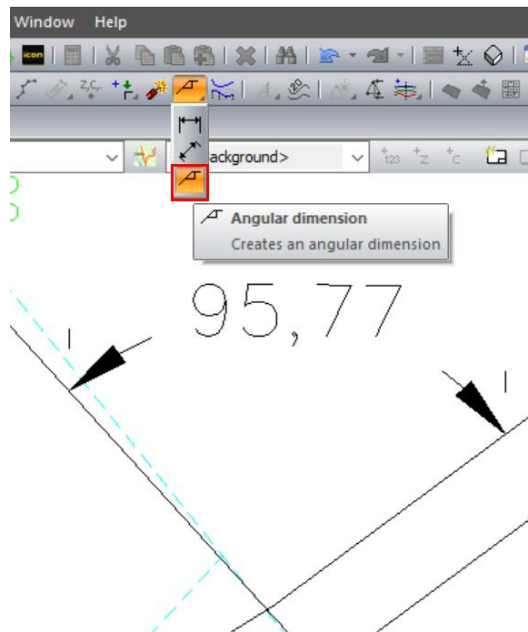
- Possible to select in which layer dimension to save dimensions. Select active layer (current layer) in the document property dialog for AutoCAD files.

1.5 COGO

- The help layer tool, Parallel Line, has three options how to handle sharp corners and they are available in a right click menu:
    - Sharp corners, with inserted points
    - Round corners, with inserted points
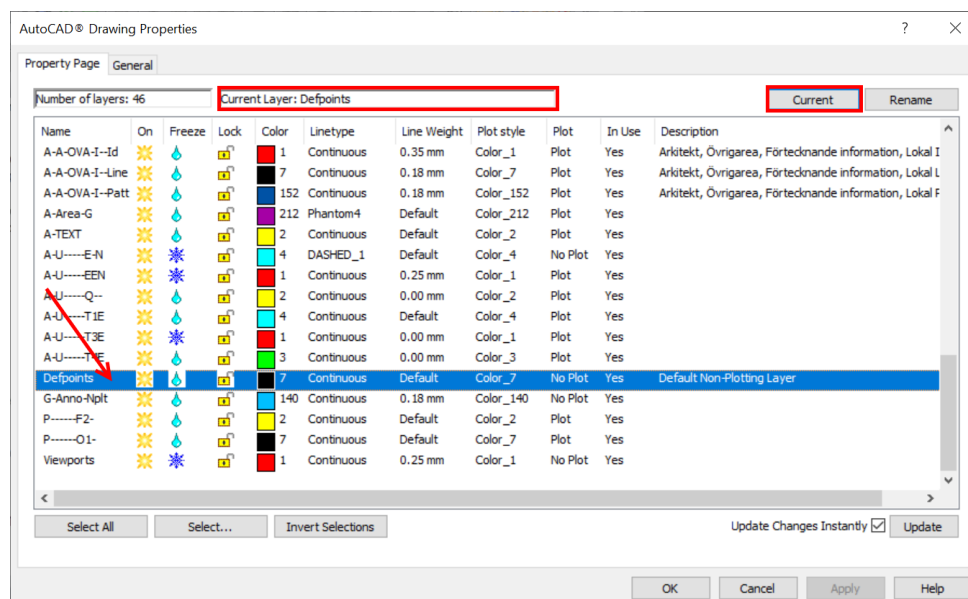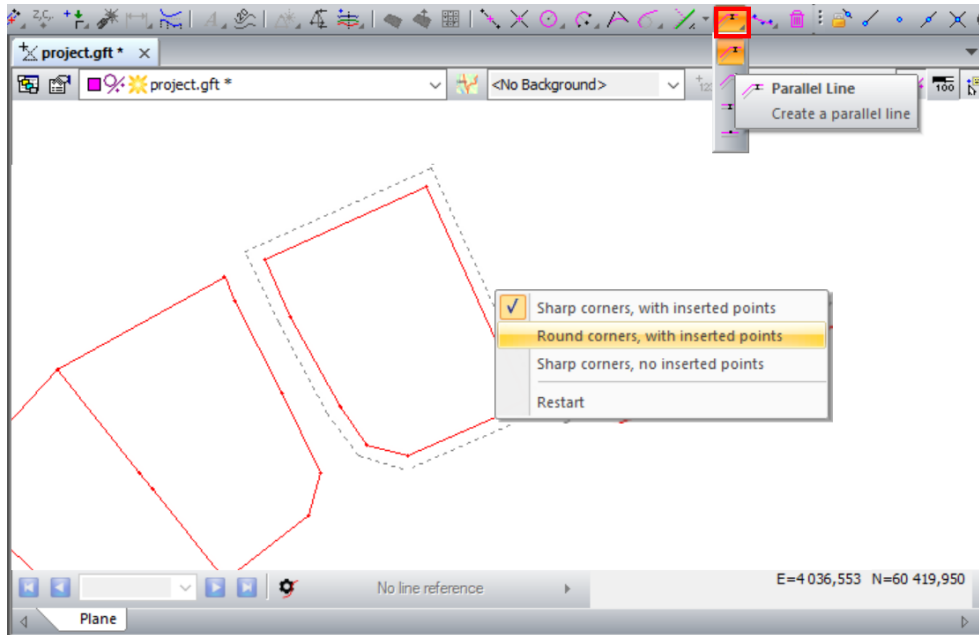   - Sharp corners, no inserted points

1.6 Pile Intersection

Pile intersection is improved with a new option to use a terrain model as theoretical intersecting surface.

1.7 LandXML

Data i.e., points and lines, alignments and surfaces from XML files with Inframodel schema version 404, can now be imported.

1.8 IFC

When extracting data from IFC files the GUID is saved as an attribute in the coordinate file (*.geo).

1.9 Coordinate Data

- Possible to save filters in the function, Extract Coordinates (Functions → Extract Coordinates).
- Points with codes that don't match the active code list can be visualized and the information, Not in code list, is added to the tooltip. The option is available in document properties for coordinate files (geo) and can be switch on/off.
- For the tool, "Snap to Intersection", the drop list is now only shown, when the intersection heights are different so the user can select the correct height to use.

- Direction symbol is implemented for coordinate lines and can be activated in the Document Property dialog.
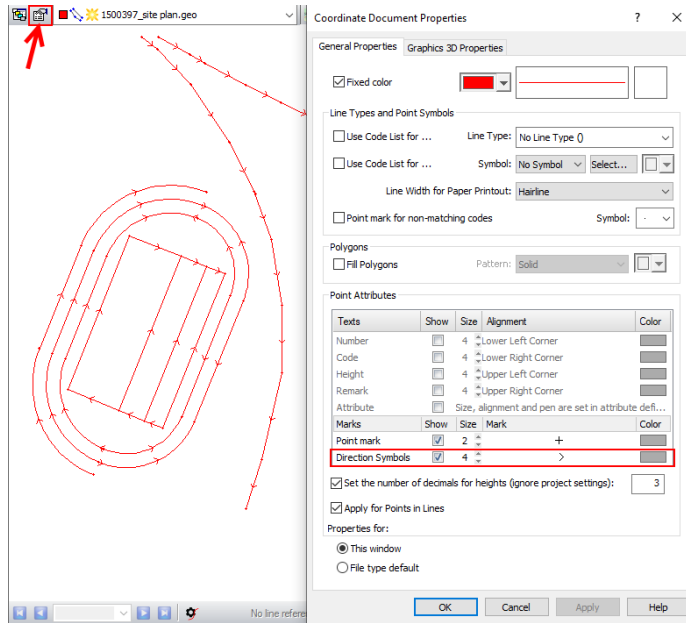
1.10 *Surveying*

- Backsight check - Angular and length differences, in addition to dN, dE, dH, are added to the report.
- Leveling - New report when leveling data (*.lvt) is reduced.

1.11 *System*

- No support for 32-bit.
- Switch from ftp to https when downloading coordinate system from within iCON Office.

1.12 *Bug Fixes and Maintenance*

- Toggle background maps on/off in 3D window didn't work. Fixed
- DWG properties in 3D window, the possibility to Update Instantly didn't work. Fixed
- Editing of DWG properties eg., change colors. didn't work as expected. Fixed
- Create line with snap tool and height update didn't work as expected. Fixed
- Norwegian Geoid models are available for download.
- Area tool with snap didn't work properly in cross section view. Fixed
- Draw line tool with slope didn't reset properly. Fixed
- The tool, "Insert points on line graphically", could only use points in the active file. Fixed
- The Create Road Line tool searches for both points and lines, instead of only lines. Fixed
- Using other angle system than gon, gives incorrect distance lines in the tunnel model (tbs). Fixed
- Some strange behaviors regarding the manual input of parameters for the Draw Line tool has been fixed.
- The help layer tool, Intersection Point, gets broken if the user clicks at an empty space i.e., no objects found. Fixed
- Rounds of measurements could show a difference between C1 and C2 even if it was OK. Fixed
- Free station - The attribute "ROUNDS" should have priority over the setting in the dialog, but if the user clicked, Recalculate, the setting from the dialog was used. Fixed
- Create line with snap tool and height update didn't work as expected. Fixed
- Agtek export - Improved error message when trying to export multiple coordinate files as benchmark. Fixed

2 iCON office modules

iCON office requires the **Core** module, which enables import/export of data, 3D visualization, COGO calculations, coordinate system handling, visualization in Google Earth and generating of drawings etc.

Add-On modules:

- 797956   **Road** – Advanced road line calculations
- 797957   **Terrain** - Volume calculation model to model
- 906348   **Trench** – Underground utilities module (requires Terrain module)
- 797958   **Volume** - Volume calculation by sections
- 797959   **Tunnel** – Tunnel functionality
- 797580   **Net Adjustment** - Network adjustment and calculations
- 832546   **Point Cloud** – Import and filtering of scanning data

Provide serial number of the license or the hardware lock ID, when ordering add-on modules.

Available packages Single HL (Hardware Lock):

- 6007380   iCON office Core pkg, includes installation pkg with USB hardware lock
  Core
- 6007381   iCON office Terrain pkg, includes installation pkg with USB hardware lock
  Core, Road, Terrain
- 6007382   iCON office Volume pkg, includes installation pkg with USB hardware lock
  Core, Road, Terrain, Volume
- 6007383   iCON office Tunnel pkg, includes installation pkg with USB hardware lock
  Core, Road, Tunnel

Available packages NET (Single Network):

- 6017083   iCON office Core pkg NET
  Core
- 6017084   iCON office Terrain pkg NET
  Core, Road, Terrain
- 6017085   iCON office Volume pkg NET
  Core, Road, Terrain, Volume
- 6017086   iCON office Tunnel pkg NET
  Core, Road, Tunnel
- 6017087   iCON office Trench pkg NET
  Core, Terrain, Trench

3 License Update (Subscriptions)

- 849563, iCON office Update Service 1-year, Single HL

- 947556, iCON office Re-activation 1-year, Single NET

Provide serial number of the license or the hardware lock ID, when ordering Update Service or Re-activation.

Single HL users must run Dongle Tool to update the hardware lock with the latest license information.

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/

- Hasp driver

  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

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

5 Dongle Tool (only for Single HL)

Use **Dongle Tool** to update the hardware lock with extended subscription, Update Service, for Leica iCON office or to unlock new add-on 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. Start 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 license information.