Drawing List Manager©

General description

DLM *(Drawing List Manager)* coordinates drawing information from multiple Revit projects and/or multiple AutoCAD drawings.

DLM may at the same time be used with both Autodesk Revit and with Autodesk AutoCAD and it will as such work as an effective Drawing list management system handling sheet data spread across multiple Revit- and/or AutoCAD files.

DLM consists of two add-ins. One for Autodesk Revit and one for Autodesk AutoCAD.

Both add-ins are working with the other and an extended license for one will also cover the other.

The DLM project administrator module allows the project administrator to configure the sheet data coordination process and maintain a central Excel drawing list for the project extracting data from all Revit projects and AutoCAD drawings used.

If you use Revit only, you may disregard the AutoCAD parts of the below description.

How is it working …

In the following we will address Revit project documents and AutoCAD drawing documents as *design documents*.

The *super user* is the user that initially downloaded / bought the add-in in Autodesk App Store.

Step One
Super administrator: Install the DLM app on all user computers.

For further instructions on how to install, please see the below paragraph *Downloading and Installing DLM.*

Step two
Super administrator: Distribute the central DLM license file to a central network location where all users have at least read access.

For further instructions on how to distribute the DLM network license please see the below paragraph *Distributing the DLM network license.*

Step three
Super administrator: Add users to the license pool. Also, it is possible to mark users as administrators that will have rights to add or remove users from the license pool.

For further instructions on how to add users to the license pool, please see the below paragraph *Adding users to the license pool.*

Step four
All users: Connect to the DLM network license.

For further instructions on how to connect to the DLM network license see the below paragraph *Connecting to the DLM network License.*

Step five
For each company project a **DLM project settings file** and **a hidden database folder** are created by the administrator.

For further instructions on how to prepare the DLM projects settings, please see the below paragraph *The DLM Project Administrator Module.*

Step six
Start working!

What happens now?

Please bear in mind that if a project contains AutoCAD drawings, AutoCAD title block names must be defined in the DLM project settings and title block attributes must be configured accordingly.

Revit default drawing data are automatically handled. Only custom sheet parameters need to be added to the parameters in the DLM project settings.

1. Revit procedures
    a. When a Revit project file is opened, Revit project parameter values are checked against the data specified in the DLM project and the Revit project data are updated accordingly
       … except however, if the Revit project is *workshared*, and the DLM-check box "Revit Central File Data Takes Precedence Over the DLM Project data" in the DLM administrator module is checked.
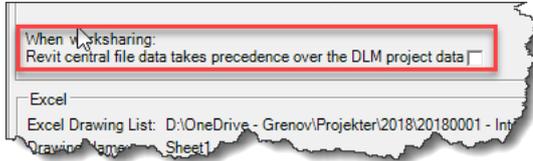
    b. When the Revit project file is saved, selected parameter data is updated in the DLM project database.

2. AutoCAD
    a. When the AutoCAD drawing is opened, a search for blocks named as specified in DLM project is performed. To the extent that the found blocks contain attribute tags that correspond to the tags marked in DLM project the blocks are perceived as title blocks that contain data (attribute references) to be handled. Attributes with tags, which in the DLM project are referenced as project data, are updated with project data from the DLM project database.
    b. When the AutoCAD drawing is saved, selected parameter data (in this case represented by attribute values) is transferred to the DLM project.

When a design document (RVT or DWG) is opened:

Main project data are transferred from the DLM database to the design document.

When a design document (RVT or DWG) is saved:

Drawing sheet data are transferred from the design document to the DLM database.
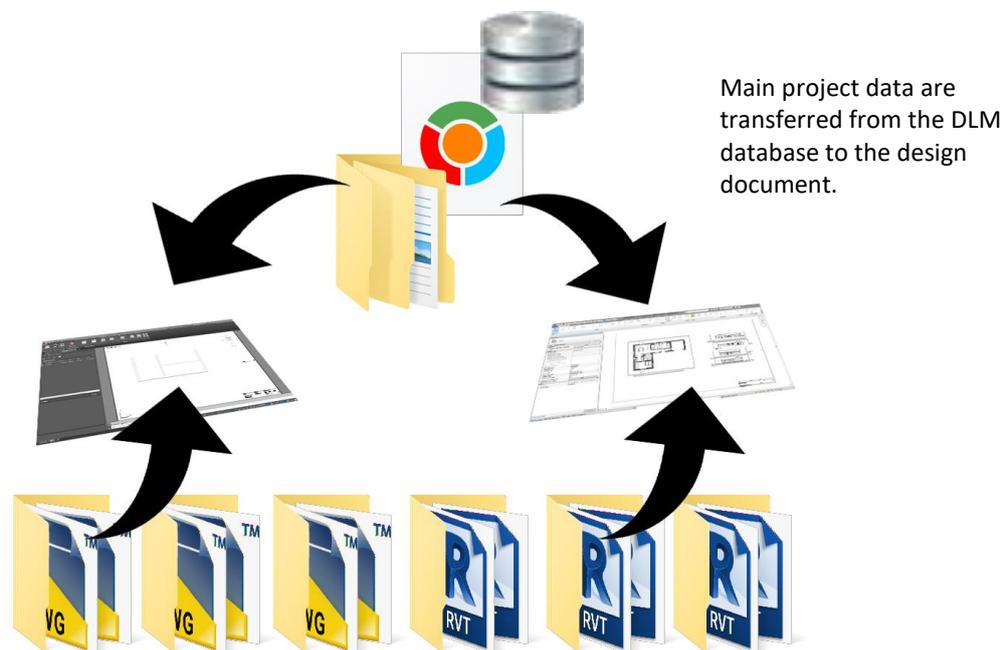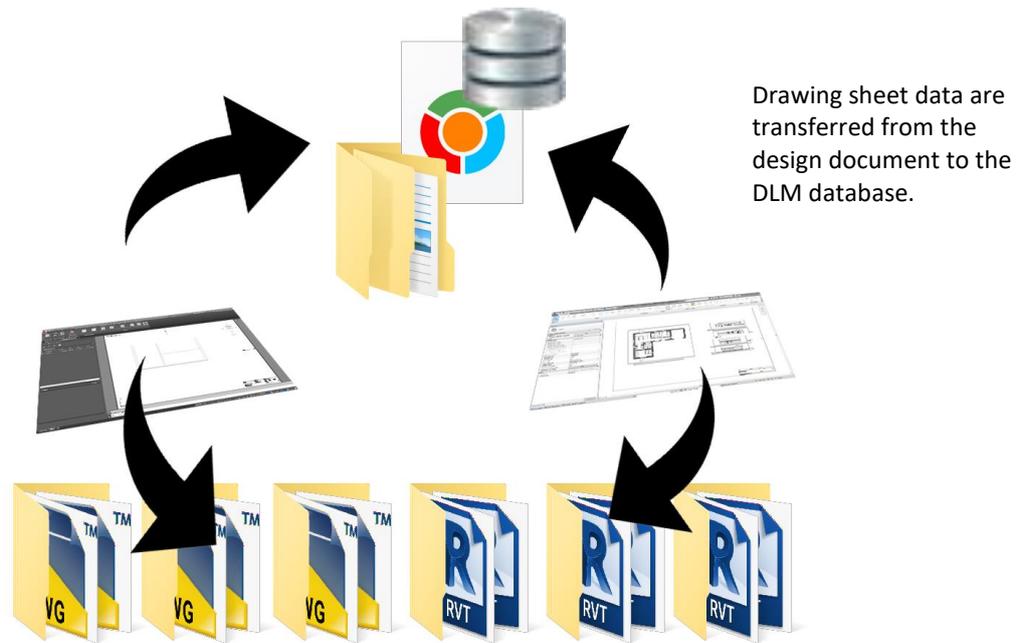
Summary:

Drawing data in other words, are always transferred **from drawing file to the DLM database**.

Project data is always transferred **from the DLM database to the drawing/sheet** (considering any exception for workshared Revit projects).

The resulting Excel drawing list

From the DLM administrator module the project administrator may access and update the Excel drawing list using the newest document data.

Downloading and Installing DLM

1. Super administrator: Download the add-in from Autodesk App Store.
   If you are working with both AutoCAD and Revit, you must download both *DLM for Revit* and *DLM for AutoCAD*.

2. When the MSI install package has been downloaded it is strongly recommended that you save it on a central network location where it can be reached by all users. You should NOT download DLM for each user!

3. Install the app using the MSI package on the network.

Distributing the DLM network license

After downloading and installing the DLM app, the super administrator must perform a distribution of the DLM network license to a network license file accessible by all users.

- The network license file must be distributed to a directory on the company's network, where all users as a minimum must have read access. The super administrator and other administrators must have write access.

- The path indicated when distributing the license must be equal to the path read by the users and the mapped drive must be the same for all! Therefore, you should not distribute the license by entering a server path. You must enter a drive and a path equal to the drive and path read by all users.

Distribution process

1. Open Revit or AutoCAD depending on which version is installed. If both versions are installed choose any of the two.
2. Go to the Add-ins tab and click the Deploy button.

3. Click Start
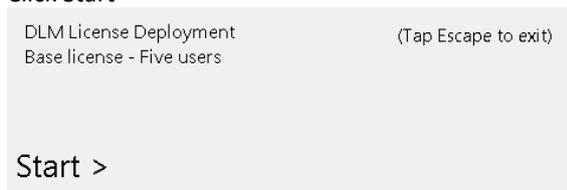
4. Brows to the desired network location and click Save

5. Click Close

Adding users to the license pool.

Process

1. Open Revit or AutoCAD depending on which version is installed. If both versions are installed choose any of the two.
2. Go to the Add-ins tab and click the Administrator button.

The DLM Administrator Module opens.

3. If prompted to create a new project, click Cancel.
4. In the Menu bar, click License Tools->Administrate

5. In the license Administrator-Module, click Edit License Pool
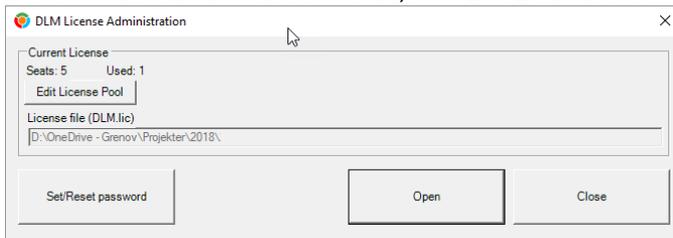
6. Add desired users to the license pool.
   The maximum number of users that can be added is stated in the license agreement

Connecting to the DLM network License

The super administrator does not need to connect to the license as this is already done when distributing the network license.

Only if the super administrator is working from another PC he or she need to connect.

Connection process

1. Open Revit or AutoCAD depending on which version is installed. If both versions are installed choose any of the two.
2. Go to the Add-ins tab and click the Connect button.

3. Browse to the DLM network license file and click Open
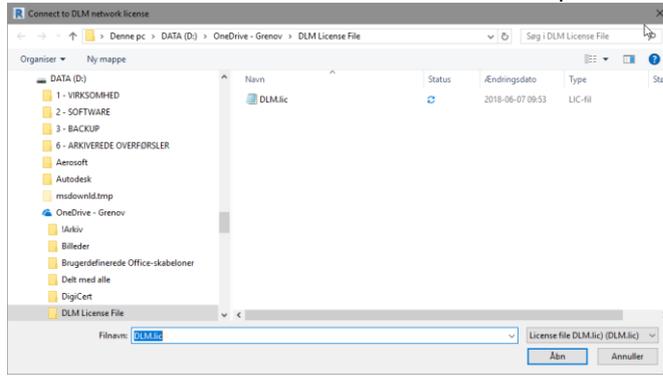
The DLM Project Administrator Module

Overall Settings
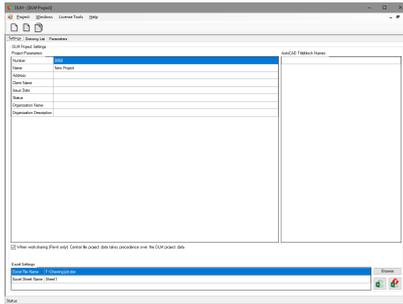
Drawing List
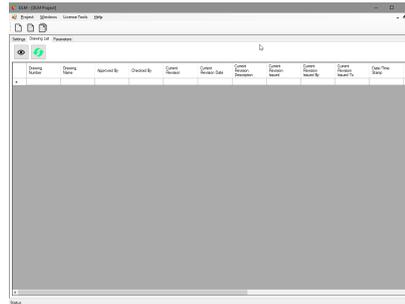
Parameters
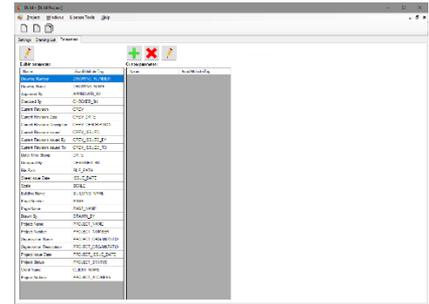
Important: For the Excel update to function, it is necessary that MS Excel 2016 or later is available.

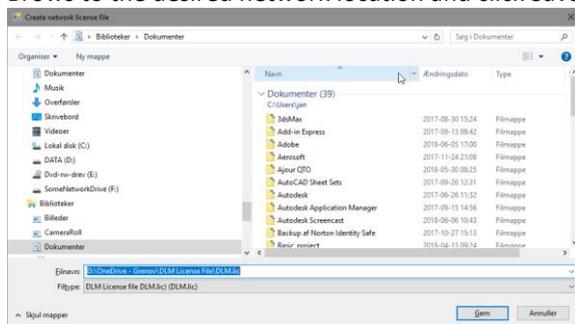## Process - Starting a new project

1. Open Revit or AutoCAD depending on which version is installed. If both versions are installed choose any of the two.
2. Go to the Add-ins tab and click the Administrator button.
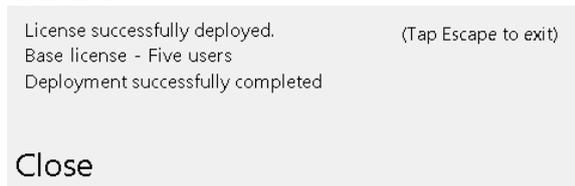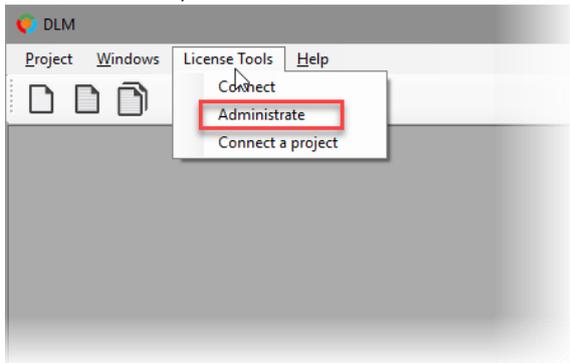

   The DLM Administrator Module opens.
3. Depending on the currently open design document, you will see this:
   a. If the document is a valid named document, the Create New DLM project dialog will open displaying a tree structure of possible save locations in relation to the currently open design document.
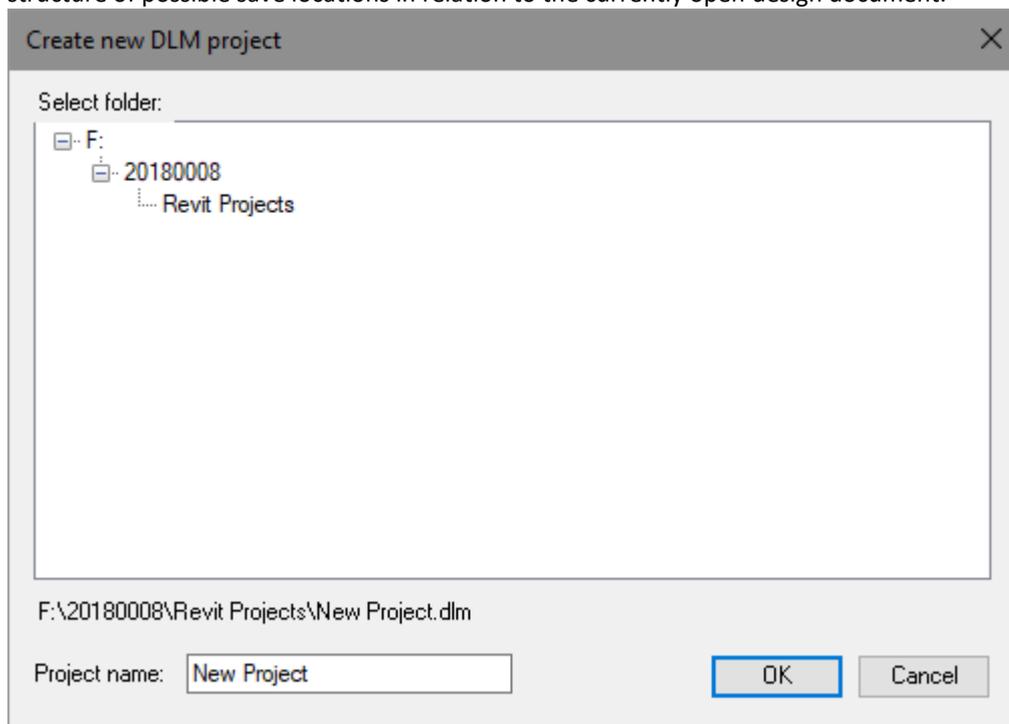
   b. If the document is a new document not yet saved:
   Either …
         i. Close the administrator module
         ii. Save the document
         iii. Open the administrator module again
      Or …
         iv. Click the "New Project" and save a new DLM Project to a company project root folder.
   c. The DLM project settings file must be saved in a folder …
         i. where users have write privileges.
         ii. that is mapped to the same drive (have the same name) on all user PC's.
         iii. that is either the same folder as the *design documents* folder or is a parent folder in relation to *design documents* folder.

In the above simple example the DLM project file should be placed either in the project root folder 20180008.

In the same folder as the folder containing the DLM project file a hidden folder named "Dlmdata" is created. Throughout the projects life users must have write access to this folder. However, data in this folder should NOT be edited manually.

Select a logical filename for the DLM project – preferably equal to the project name.

Opening an existing DLM project

Click the "Open Project" and select a DLM project file.
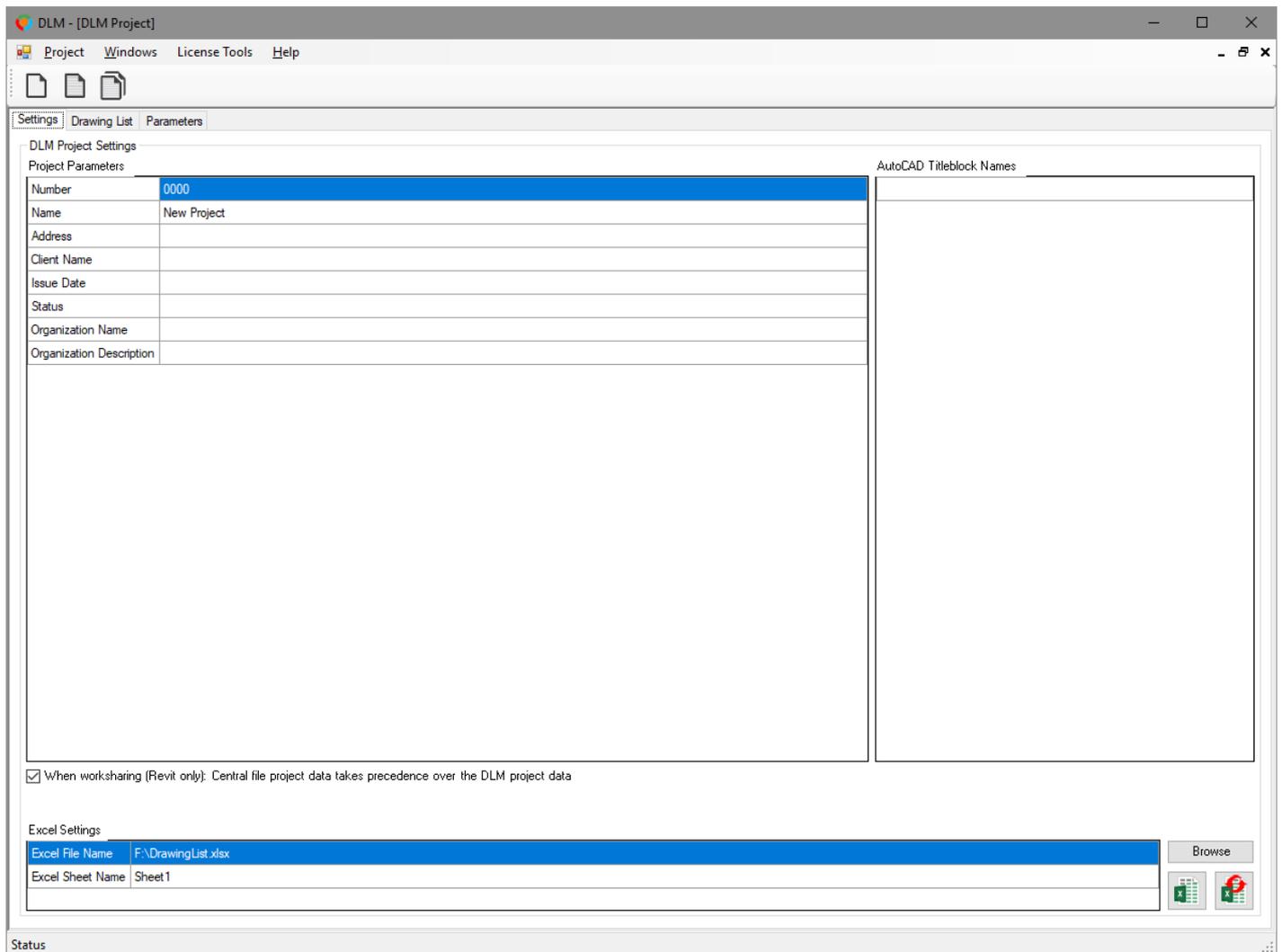
How to duplicate an existing DLM project

Open an existing DLM pro9ject and click "Copy an Existing DLM Project" , browse to another projects root folder and enter a new name for the DLM project.

The Settings Tab

The Settings tab is displaying …

- the main project data parameters
- the AutoCAD title block names
- the Excel workbook name and Excel worksheet name

Main Project data

The main project data table contains the project information that will be transferred to the design documents when they open.

AutoCAD Title Block names

The AutoCAD Title block dialog contains the names of AutoCAD title blocks used in the project.

Excel Settings

The Excel Settings dialog contains the full file name and sheet name for the Excel drawing list workbook.
By default the Excel drawing list document will be saved in the same folder as the DLM project settings file. However, you may change this if you wish.
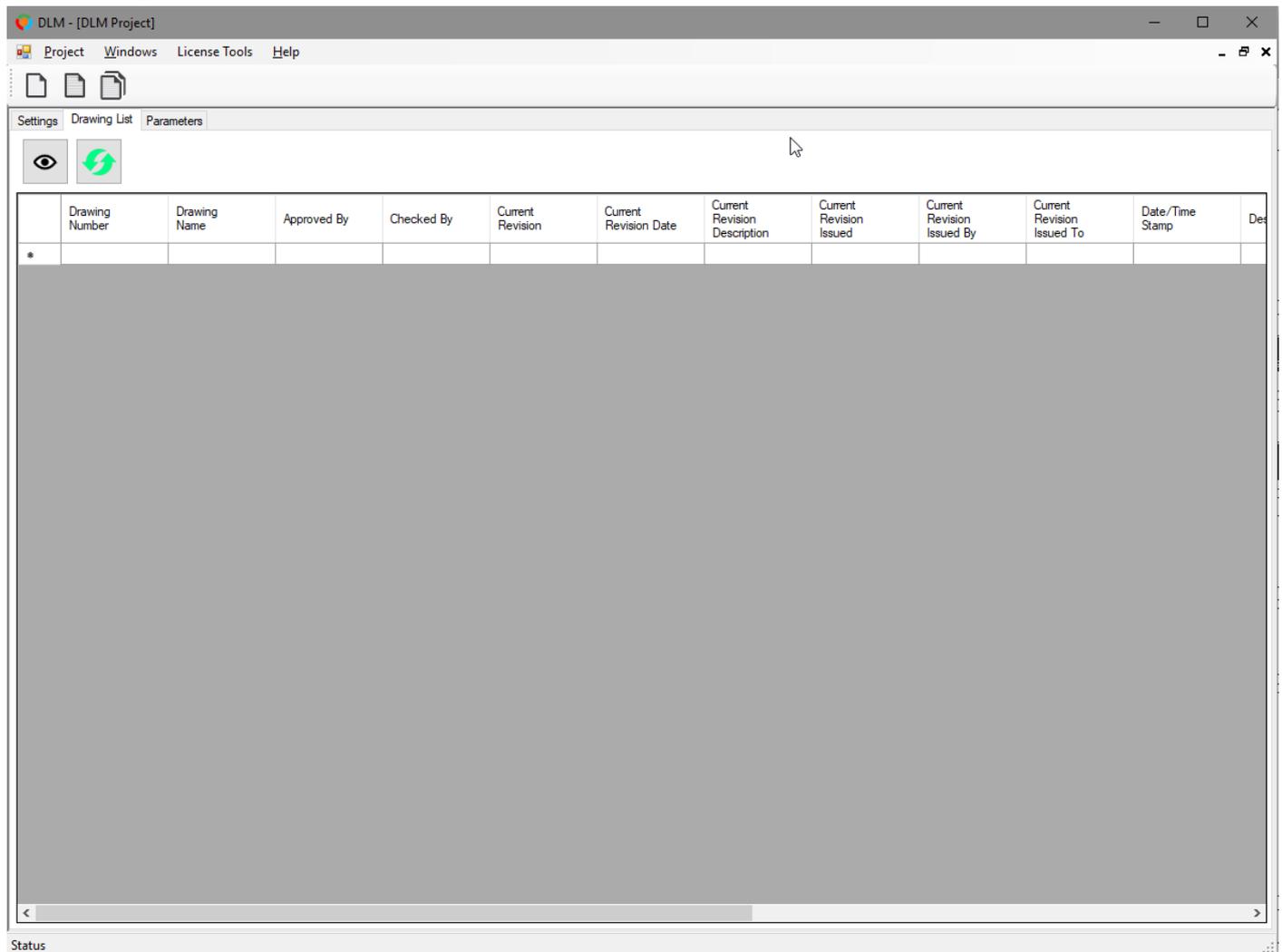

The Excel Drawing List

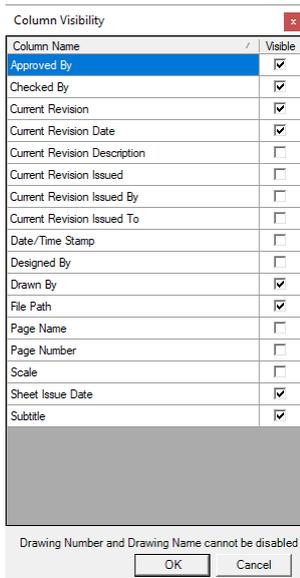Open or update the drawing list data in the Excel worksheet using the Excel buttons.

Once an Excel document has been created and it contains the required data headers, you may format it and reorder data columns as desired.

The Drawing List Tab

Drawing list parameter visibility

Click this button to open the column visibility dialog.

In this dialog all parameters will be listed. Check the ones, that you want to use in the current project.

Custom parameters may be added in the Parameters Tab > Add New Custom Parameter.
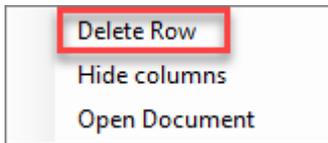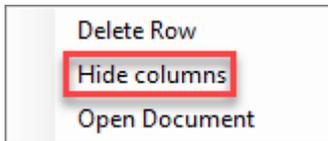

Update DLM project database

Click this button to update the DLM database after editing data in the drawings table.

Red arrows ⟳ indicate that there are changes not yet committed to the database. Green arrows ⟳ indicate that the database is up to date.

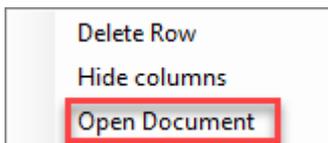## Drawing Table - Right click menu

Delete selected drawing data (data records)

Hide columns.
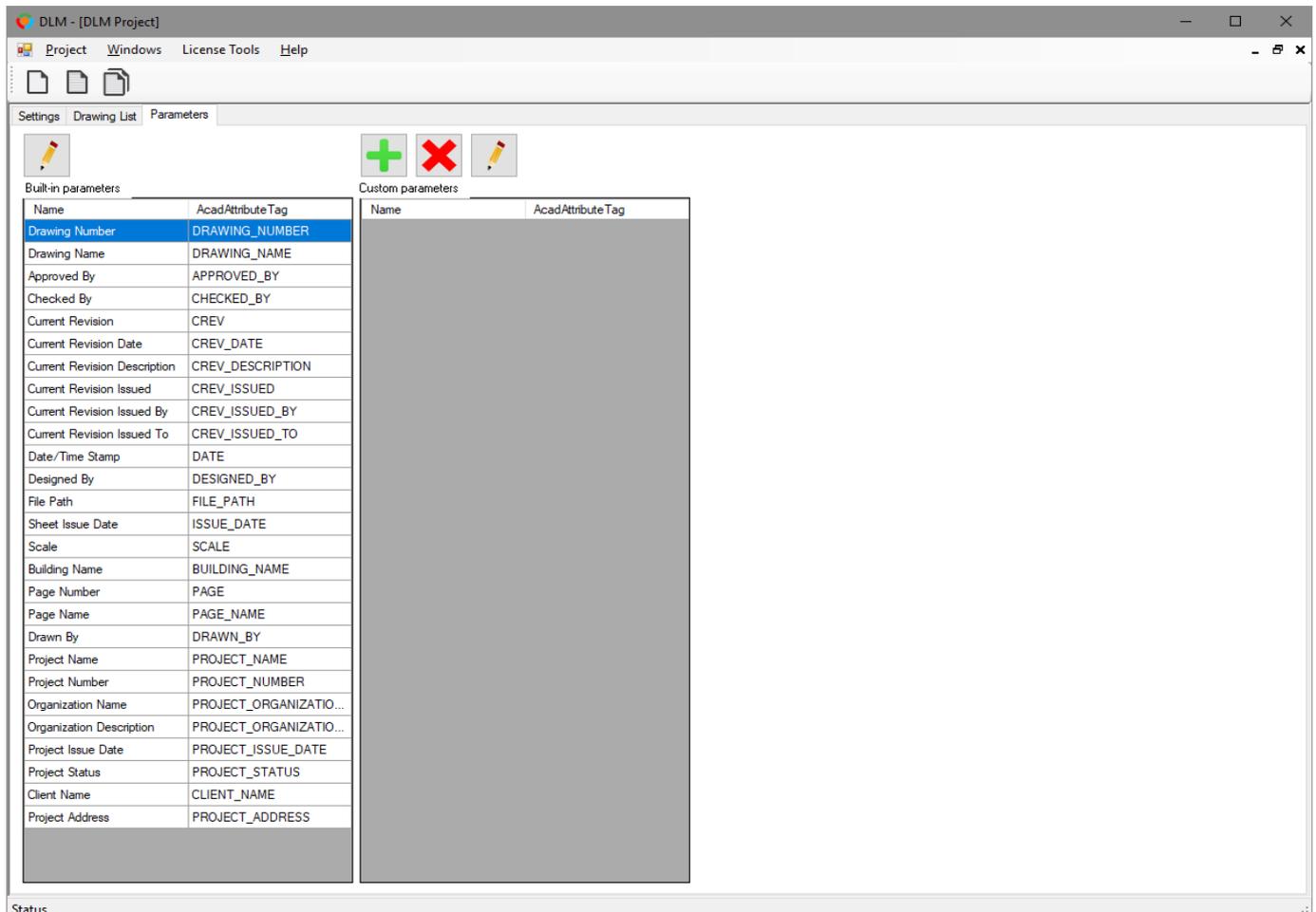
Same as ☑ Drawing list parameter visibility

If a file name is present in the column File Path DLM Administrator Module will try to open the file.

The Parameters Tab

There are a number of built-in parameters which for the most part, corresponds to Revit sheet parameters. Exceptions are the two built-in parameters Page Number and Page Name.

You may add custom parameter definitions as desired. For instance, if you have created a Revit sheet parameter named *Sheet contents*, you should also add this parameter name here.

All parameter definitions have an associated AutoCAD attribute tag. This enables the DLM app to recognize parameters in AutoCAD title blocks.

Add Custom Parameter

Click this button to add a custom parameter definition together with an AutoCAD attribute tag name.

Delete Custom Parameter

Clock this button to delete selected custom parameter definition(s). Built-in parameters can not be deleted.

Edit AutoCAD Attribute tag

Click this button to edit an AutoCAD attribute tag. All AutoCAD tags may be edited.