

# HOW TO INSTALL THE LOKI TOOL (For REVIT 2018)

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## Description

The “LOKI TOOL” is provided as ZIP file comprising the following elements:

### FILES:

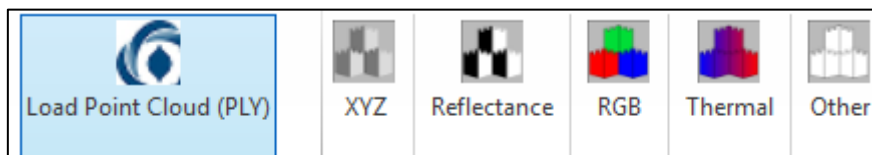
1. This Document (“How to Install LOKI TOOL.doc”)

### FOLDERS:

1. ADDIN FILE
2. LOKI TOOL DLLs (MANDATORY)
3. LOGOS (MANDATORY)
4. POINT CLOUD DLLs (MANDATORY)
5. ONLY IF NEEDED

### Folders description:

1. ADDIN FILE: Inside there is a unique file (“LOKI\_TOOL.addin”). REVIT uses this file to know where the plugin’s files are installed (see below).
2. LOKI TOOLS DLLs (MANDATORY): Inside this folder is the tool itself. It is made up of two dynamic libraries (dll files):
  - Loki\_Tool.dll
  - Loki\_Tool\_Pcl.dll
3. LOGOS (MANDATORY): Inside there is a folder named “LOGOS”. It contains the image files needed for the tool to show the buttons’ icons in REVIT.



4. POINT CLOUD DLLs (MANDATORY): Inside this folder there are several dll files which are complementary needed since the tool internally uses the *Point Cloud Library* (<http://pointclouds.org/>):
  - OpenNI2.dll
  - pcl\_common\_release.dll
  - pcl\_io\_ply\_release.dll
  - pcl\_io\_release.dll
  - pcl\_kdtree\_release.dll
  - pcl\_visualization\_release.dll
5. ONLY IF NEEDED: Depending on what applications and updates of your installed OS, additional dll files might be required. It is difficult to know beforehand what extra dll files could be needed since it strongly depends on many factors. For this reason, this folder includes several dll files that might be necessary.

Besides, inside the folder there is a file named "LINK FOR DOWNLOADING Microsoft Visual C++ Redistributable Packages.txt", with a Link to install the redistributables: <https://gist.github.com/mmozeiko/de5d9b756bd11b77db8bf4253bed8b3e>  
Sometimes installing the "redistributables" of Microsoft Visual C++ (IDE used for the LOKI TOOL), may solve the problem of dll missing.

There is a way to know what dll files are missing: Using "*Dependency Walker*" tool. It is a free utility that scans any 32-bit or 64-bit Windows module (exe, dll, ocx, sys, etc.) and builds a hierarchical tree diagram of all dependent modules. For every module found, all the associated exported functions are listed, in addition to which of those functions are actually being called by other modules. Another view displays the minimum set of required files, along with detailed information about each file (including the full path to the file, base address, version numbers, machine type, debug information, and more).

"*Dependency Walker*" official webpage: <http://www.dependencywalker.com/>

### Steps to follow

- Step 1: Copy the ADDIN file.

Copy "LOKI\_TOOL.addin" from the "1.ADDIN FILE" folder to:

**"C:\ProgramData\Autodesk\Revit\Addins\XXX"**

where **XXX** could be either "2016", "2017" or "2018" depending on your installed REVIT version (the plugin is tested in these three versions).

- Step 2: Choose installation folder.

Choose the location where the plugin is going to be installed. It is recommended to make a new folder (for example: "LOKI\_TOOL\_FOLDER") where the aforesaid ADDIN file is. For instance:

**"C:\ProgramData\Autodesk\Revit\Addins\XXX\LOKI\_TOOL\_FOLDER"**

- Step 3: Edit the ADDIN file.

Write in the <Assembly> field:

- The INSTALLATION FOLDER selected + "**LOKI\_TOOL.DLL**" (Without """)

Example (see highlighted line in the following box):

```
<?xml version="1.0" encoding="utf-8"?>
<RevitAddIns>
  <AddIn Type="Application">
    <Name>LOKI_TOOL</Name>

    <Assembly>C:\ProgramData\Autodesk\Revit\Addins\XXX\LOKI_TOOL_FOLDER\LOKI_TOOL.DLL
  </Assembly>

    <AddInId>accd64af-f324-4f0d-9d6e-17a0f1e0e436</AddInId>
    <FullClassName>POINTCLOUD_REVIT_PLUGIN.Revit_PointCloud</FullClassName>
```

```
<VendorId>CARTIF</VendorId>  
  
<VendorDescription>CARTIF, www.cartif.com</VendorDescription>  
  
</AddIn>  
  
</RevitAddIns>
```

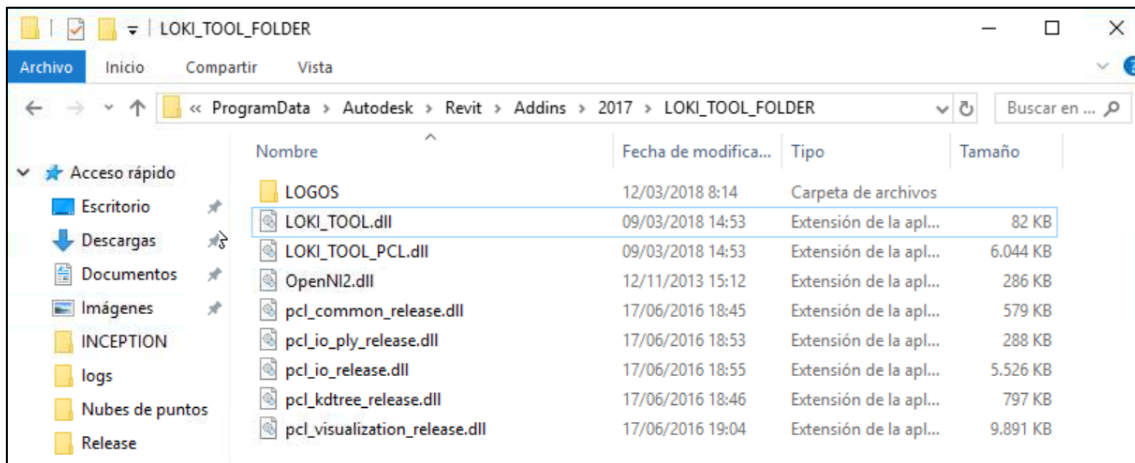
- Step 4: Copy all mandatory files.

All mandatory files must be copied in the INSTALLATION FOLDER (in the example: "C:\ProgramData\Autodesk\Revit\Addins\XXX\LOKI\_TOOL\_FOLDER")

Therefore:

1. Copy all files from "2.LOKI TOOL DLLs (MANDATORY)" folder to the INSTALLATION FOLDER
2. Copy the "LOGOS" folder from "3.LOGOS (MANDATORY)" folder to the INSTALLATION FOLDER
3. Copy all files from "4.POINT CLOUD DLLs (MANDATORY)" folder to the INSTALLATION FOLDER

Something like this should be displayed on the screen:



- Step 5: Try the LOKI TOOL in REVIT.

If it works, that's all. If not, please follow Step 6.

- Step 6: Search and install the missing DLLs.

The issue is likely a missing dll. Try running "Dependency Walker" tool in order to know what dll is missing. Then, look it up online.

The "5.ONLY IF NEEDED" folder includes common several dll files that might be solving the problem.

Also, it is known that installing the correct Visual C++ Redistributable might solve the issue. So, inside this folder is also a file with a link to download this Redistributables.

(<https://gist.github.com/mmozeiko/de5d9b756bd11b77db8bf4253bed8b3e>)

Any question and support: [davolm@cartif.es](mailto:davolm@cartif.es)