Step by Step Guide for Excel file exporter

Short Description

Exports element properties into an Excel file. The elements are exported by type into separate sheets in the output Excel file.

Files to Download

Python Script

https://graphisoftse-my.sharepoint.com/:u:/g/personal/tlorantfy_graphisoft_com/ES1OlHBCQBBOoXsVGc0duX0BZA1LOmGRwIsmFUDavpSFrA?e=HxYVts

Example ARCHICAD Project

https://graphisoftse-my.sharepoint.com/:u:/g/personal/tlorantfy_graphisoft_com/Ef5HjcELgz9Ou3yChz3E7HYBjei0bRbCZ4nkxaSYK4mHNQ?e=gScqFN

Step by Step Tryout Guide

1. Download the Python script.
2. Download the example project file and open it in ARCHICAD.
3. Run the Python script (from Python Palette or in any external application).
4. The output Excel file will be automatically opened by the script.

Demo Video

https://ttprivatenew.s3.amazonaws.com/pulse/tlorantfy-graphisoft/attachments/13773651/excel_export_demo.mp4

Example Output

https://graphisoftse-my.sharepoint.com/:x:/g/personal/tlorantfy_graphisoft_com/ETXsUt8CHx1MkqgF7UUBAssBfxOEVys7utI983Rd4o2XqA?e=ASDrpO

Details

Requirements

To execute the script successfully without any customization, the following requirements must be met. See the Customization section to change or eliminate these requirements.

- An application must be associated to the .xlsx (Excel) file, to be able to open the output Excel file.
- ARCHICAD 24.3003 or above
- ARCHICAD-Python Connection (Archicad package) version 24.3003 or above

Customization

Feel free to open the script in any text editor and customize it. Each example script has a well-separated section, named “CONFIGURATION”. Change the values in that section for customization.

```
################################ CONFIGURATION ###################################
worksheetTitlesAndElements = {
    "Beams": acc.GetElementsByType("Beam"),
    "Walls": acc.GetElementsByType("Wall")
```

```
}
propertyUserIds = [
    act.BuiltInPropertyUserId("General_ElementID"),
    act.BuiltInPropertyUserId("General_Height"),
    act.BuiltInPropertyUserId("General_Width"),
    act.BuiltInPropertyUserId("General_Thickness")
]
outputFolder = scriptFolder
outputFileName = "BeamAndWallGeometry.xlsx"
##############################################################################
```

This table explains the meaning of each variable and values in the configuration section to help customization.

Name of the variable	Description	Default value
worksheetTitlesAndElements	A dictionary in which the keys are the titles of the Excel worksheets, and the values are the elements to export.	Beams and walls are exported by default. The first worksheet's title is Beams and lists the beams; the second sheet is entitled Walls and the walls go there.
propertyUserIds	This identifies the properties to export into Excel.	The following built-in properties are set to export: Element ID, height, width and thickness.
outputFolder	The folder which will contain the output Excel file.	The folder of the script file.
outputFileName	The name of the output Excel file.	BeamAndWallGeometry.xlsx

Possible Errors

If the script fails to execute and returns an error, please make sure the script's requirements have been met.

The following are possible errors and how to resolve them.

AttributeError: 'Utilities' object has no attribute …

The version of the currently running ARCHICAD does not meet the requirements, or the version of the installed ARCHICAD-Python Connection is below the required version.

To update the ARCHICAD-Python Connection, open the Python Options from Python Palette and click the Update Connection button.

TypeError: propertyId cannot be initialized …

One of the listed properties is not defined in the user's project file. The built-in properties always exist because those are built-in in ARCHICAD, but the user defined properties belong to the project file may have been modified by the user. Double check to see whether the names of the user defined properties and their groups match the values in the script configuration.

PermissionError: [Errno 13] Permission denied …

This error message indicates that the script does not have permission to save the output file. The most common reason is that the output file is currently opened in Excel, for example because you have run the script twice in a row. Close Excel before running the script to eliminate this issue.