Realistic Visualizations Using 3ds Max and Unity

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About the speaker

Rajarshi Ray

Rajarshi Ray is a Designated Support Specialist within the Autodesk Customer Success Organization. Having an engineering background with vast experience in the field of VFX industry & Architectural Visualization. Ray's role is to support Autodesk Premium Customers using M&E & AEC products, he is based in Barcelona.

Summary

Taking architectural models into 3D Rendering/Game Engine is becoming a hot topic in the industry as companies are giving every effort to create realistic design visualization, AR & VR. This class will be focused more on creating realistic visualization in **quick(1,2,3)** process. Tips & tricks covering main points on bringing architectural model from Autodesk Revit to 3DS Max for optimization, rendering with Arnold renderer and then take it to Unity game engine. The class can be taken as guideline to be ready with model for visualization in real quick.

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Learning objectives

- Quick & effective setup Revit file before taking to 3ds Max & Unity
- Efficient model optimization in 3ds Max
- Quick render using Arnold in 3ds Max
- Tips & tricks taking model be ready for Game engine/Unity

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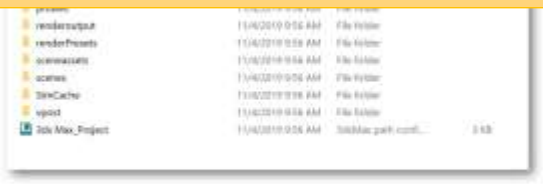
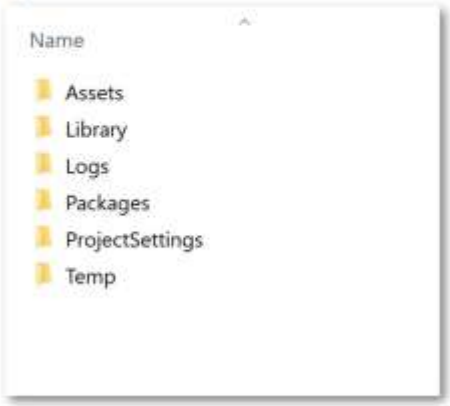


Basic House Keeping- Folder Structure

Revit Folder

Unity



Revit Architecture – File Setup

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of model geometry (and its underlying data) that is exported, you can achieve the following:

- Improve performance of the export process.
- Reduce the size of the exported file.
- Improve performance of the importing application.

Use the following techniques to reduce the amount of geometry to be exported.

Turn off visibility of graphics

This strategy reduces the number of objects and the amount of data that are exported from Revit and imported into another application, thus improving performance.

To turn off visibility of graphics in a view, click View tabGraphics panel (Visibility/Graphics).

Use a section box or a crop region

To define the specific part of the model to export,

This technique is particularly useful on large models. For example, for an interior rendering of a conference room in an office building, use a section box to export a 3D view of the conference room and omit the rest of the building.

Specify the detail level

This strategy results in better performance in the importing application.

To specify the detail level for a view, on the View Control Bar at the bottom of the drawing area, click the Detail Level button, and select the desired detail level: Coarse, Medium, or Fine.

Specify Coarse or Medium to reduce the amount of detail in the Revit view. As a result, you reduce the number of objects exported, and the size of the exported file.

Exporting Revit Model

- Export as fbx
- Storing FBX in import folder of 3ds Max project

Before You Import In 3ds Max

- Switch to Design Standard workspace in 3ds Max
- Change the unit setup in 3ds Max
- File Axis Direction:Z-up
- File Units: Feet
- System Axis Direction:Z-up
- System Units: Inches
- Smoothing group for round