

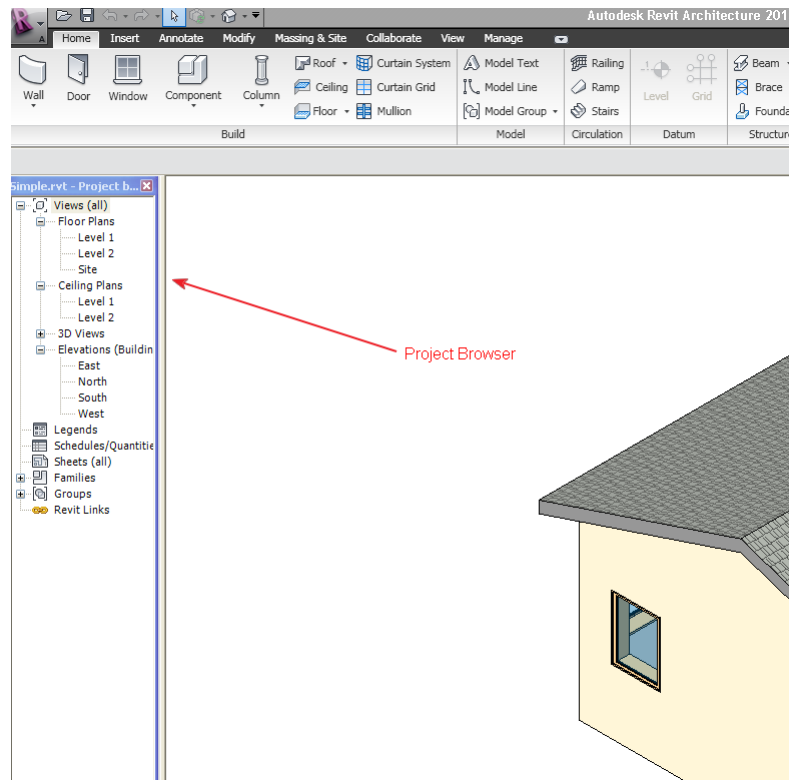
Autodesk Revit

With its parametric capabilities and BIM user interface (UI) concept, Revit quickly revolutionized the world of architecture after being introduced in 2000.

In Revit smart (interactive) objects have parameters assigned to them when grouped into pre-defined types. This allows for objects to relate in an intelligent way. Entire groups can be changed on the fly without the need for multiple object definitions. A component (a grouped pre-defined object) can have multiple types associated with it and will affect surrounding objects.

Revit's project browser is an easy to navigate tool that allows any changes to the model (i.e. plan, elevation etc.) be instantly reflected to all other areas of the design. Revit makes this possible by using live section planes of the single model to represent working drawings of that model.

The benefits of using Revit are immediately apparent to any designer working with it: The ease and speed with which a concept design can be developed and the parametric nature of the software allow architects to make instantaneous changes to their designs easily and intuitively. Revit allows you to start your design process much more loosely and then refine your design using parametric smart objects.



Exporting to Vizard

There are two ways to get models from Revit into Vizard:

- 1- Using the FBX format (with or without 3DS Max)
- 2- Using the DWG format (only possible through 3DS Max)

Using the FBX format

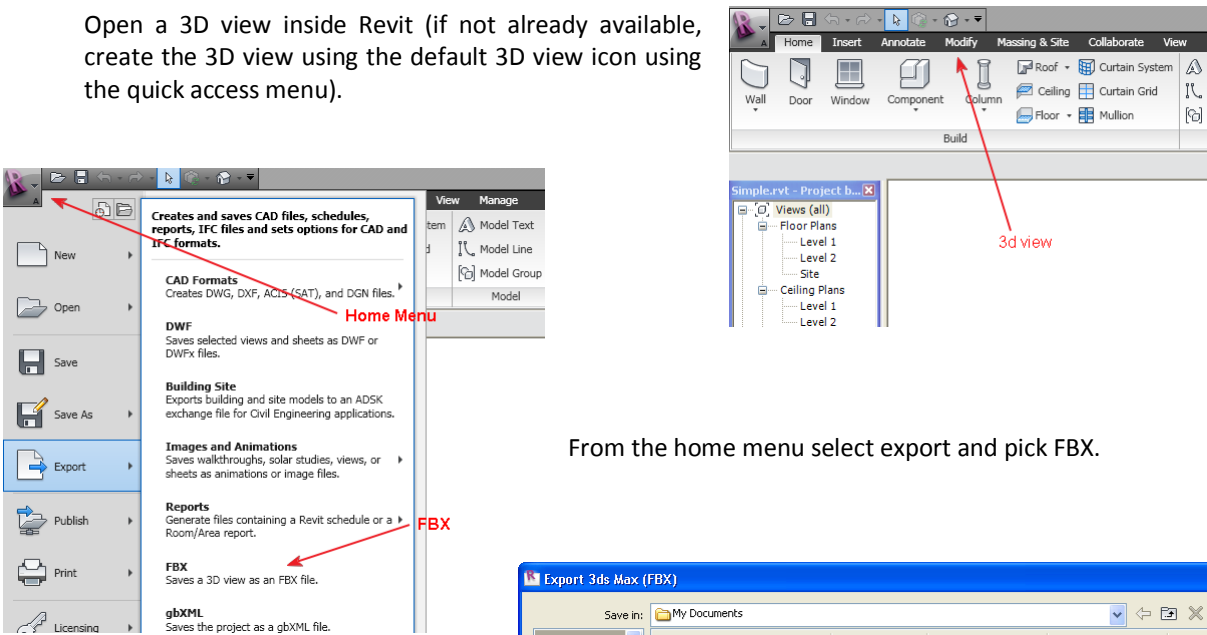
FBX is the interchangeable format introduced by Autodesk. Although a work-in-progress, it provides great potential for moving models between 3D software tools. It provides the ability to preserve all materials, textures,

lighting and cameras that are setup inside Revit. The FBX format will eventually provide the best way to export models out of Revit.

Future versions of Vizard will be capable of opening an FBX file directly.

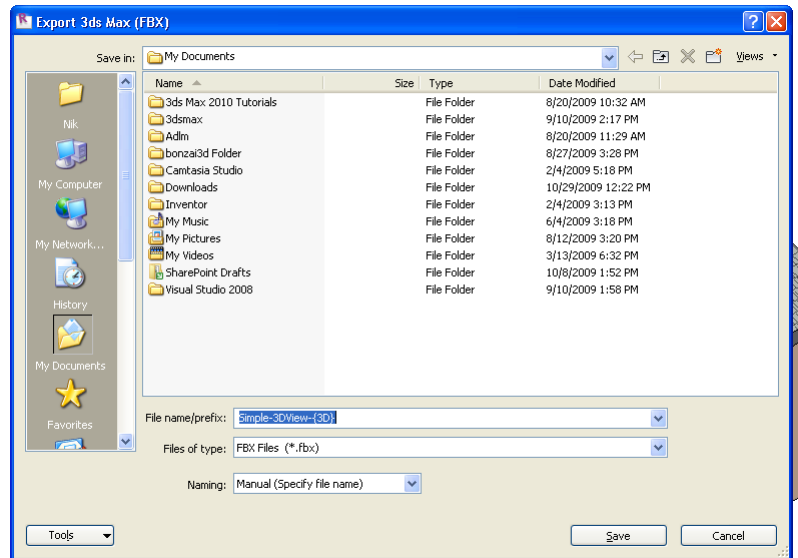
Currently the best use of FBX is through the 3DS Max interface:

Open a 3D view inside Revit (if not already available, create the 3D view using the default 3D view icon using the quick access menu).



From the home menu select export and pick FBX.

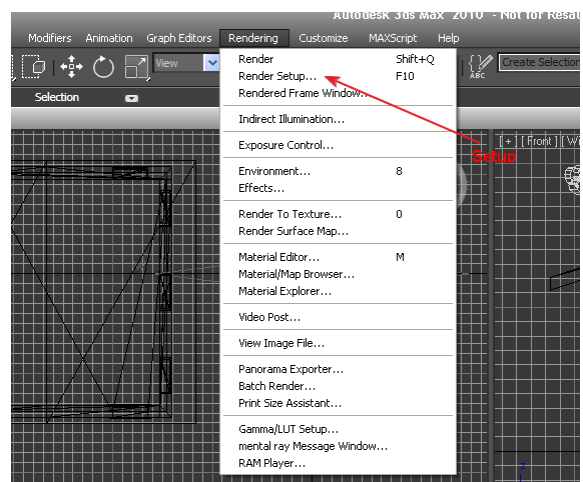
Revit does not provide any special options for creating FBX other than how the file is named.



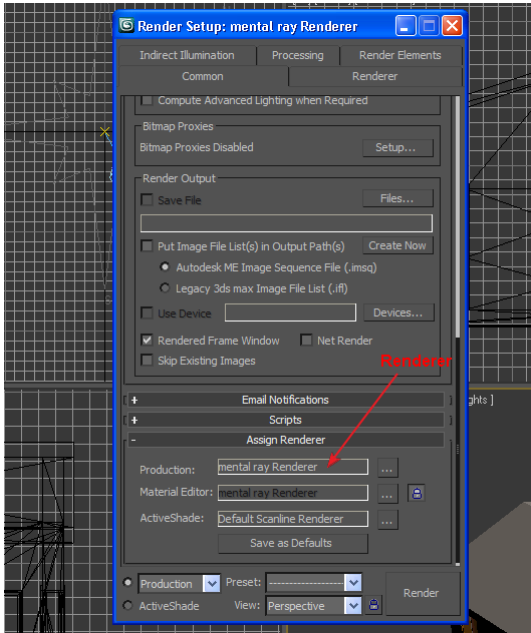
The saved FBX file is immediately available to use inside Vizard - just start Vizard and select the FBX file to Run.

On to 3DS Max

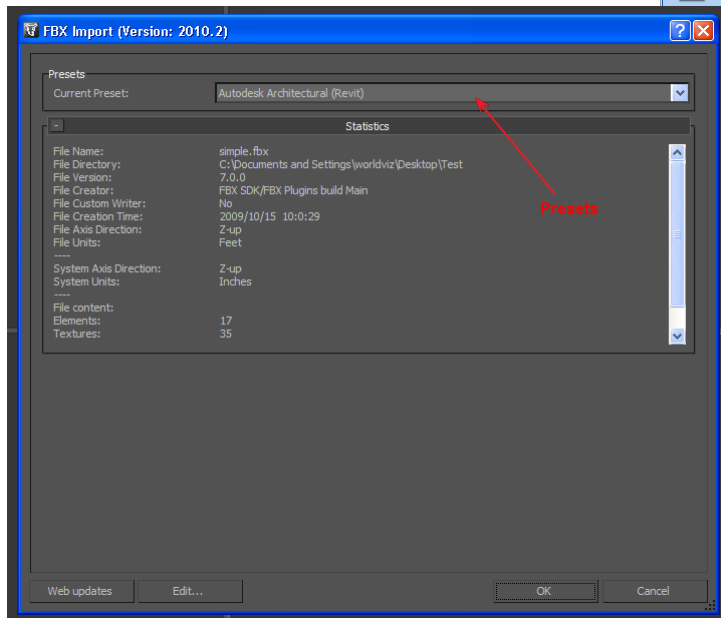
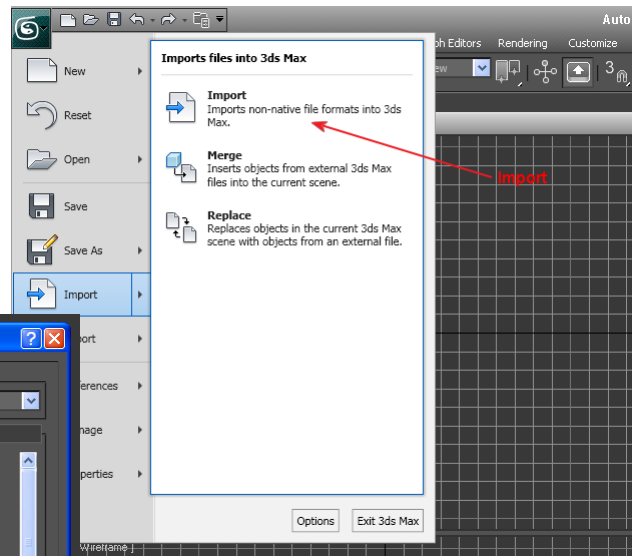
Once 3DS Max is up and running, use the main menu to import the FBX file you created into 3DS Max.



Note that since Revit uses Mental Ray as the default rendering engine, 3DS Max needs to be setup to default to Mental Ray as well, otherwise you will have issues with rendering. To accomplish this you need to change the default renderer in 3DS Max to Mental Ray, access the Render Setup and select Mental Ray as the production renderer and save this setting as the default.



Now you are ready to import the created file.



3DS Max is already setup with presets to import Revit FBX files with optimum settings.

For Vizard to recognize the materials from 3DS Max, all multi materials need to be converted to standard materials. Once this is accomplished, the file can be exported to IVE format which is the preferred format for Vizard.

Using the DWG format

Using DWG is similar to the FBX format, the difference being that no lights or materials are transferred into 3DS Max. However, there are some advantages to using DWG, most importantly the geometry is managed better through this method. The downside is that all materials and lights have to be reassigned inside 3DS Max.