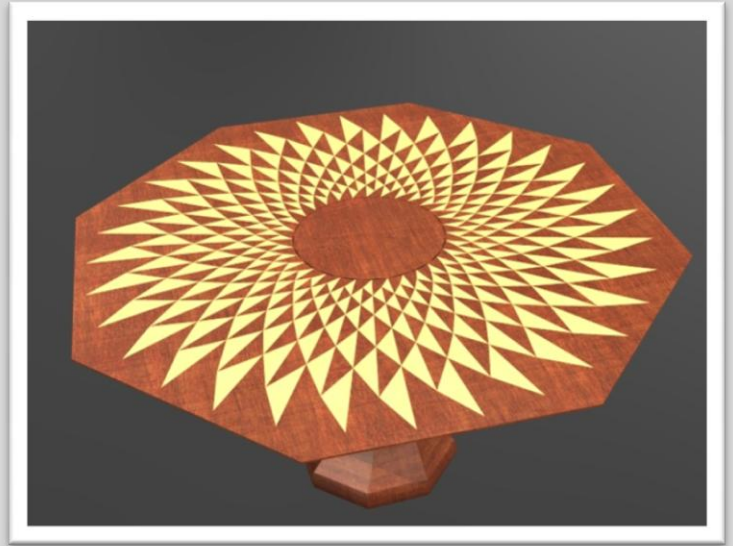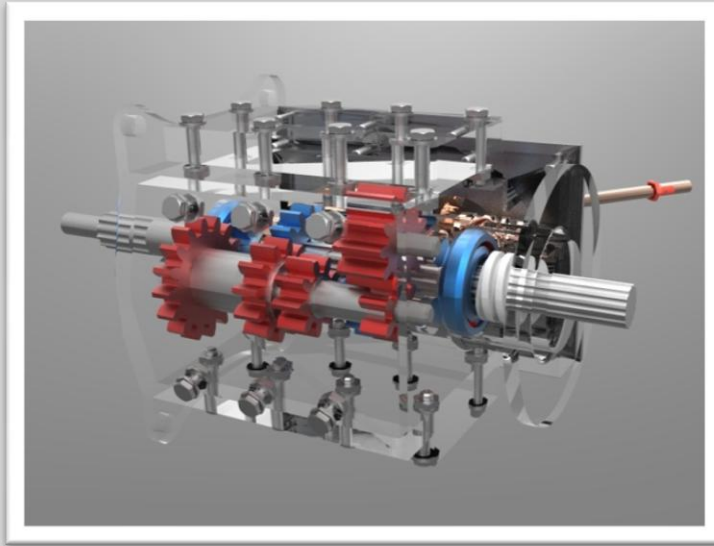# SimLab Composer 2.1

for Alibre users

SimLab Composer Capabilities

What does SimLab Composer add to the Alibre user?

1- Rendering

SimLab Composer provides Alibre user with a high quality renderer (based on Luxion technology), capable of creating top quality photorealistic images in no time.

SimLab Composer renderer has the following features:

- **Creates top quality images:** It's hard to make a bad rendered image with SimLab Composer
- **Fast rendering time**
- **Material library:** SimLab Composer ships with a large number of photorealistic materials (wood, metal…etc). Using a material from the material library is as easy as dragging it and dropping it on the object the user wants to change its material
- **Multithreading**: Though it runs great on a single core machine, its speed increases linearly with the number of processors available. SimLab Composer renderer is capable of taking advantage of all the CPUs available in the user's machine

2- Building 3D Scenes

SimLab Composer enables the user to place the Alibre model in the right spot by allowing her/him to:

- Add 3D elements using many file formats including (SketchUp, Rhino, 3DS, OBJ, and others) to complete the 3D scene
- Place the model in a realistic environment
- Create multiple copies showing its different material or color configurations

3- Exporting advanced 3D PDF files

3D PDF is the best way to share 3D models with none technical users. All what the file recipient will need, is a free copy of Acrobat reader from Adobe.
SimLab Composer allows the user to add background music and to select predefined cameras, to create 3D presentations.

4- Exporting Alibre models

SimLab Composer adds to the export file formats supported by Alibre, new file formats including (Obj, FBX, Collada and U3D)

SimLab Composer Benefits

1- **Easy to learn and use**: SimLab Composer enables the user to create stunning results in the first few minutes of using the application.
2- **Fast Results**: SimLab Composer includes an optimized renderer, which enables the user to create high quality rendered images in few seconds.
3- **High Quality**: SimLab Composer is tested with large models to guarantee great experience for its users.
4- **No new hardware is needed**: Alibre requirements are enough to run SimLab Composer, so the user will not need to buy or replace components to get great results from SimLab Composer.

5- **Great Value**: SimLab Soft focuses on making SimLab Composer accessible by all its potential users.

Transferring data from Alibre to SimLab Composer

Alibre users has multiple paths to transfer data from Alibre to SimLab Composer, in case the user had a problem in transferring data using one path, she/he will still have an additional path to insure smooth transition of data.

Data from Alibre can be transferred to SimLab Composer as:

3D PDF

The user can save Alibre model as 3D PDF file, and import it in SimLab Composer, which will import the geometry and build the tree of the imported model. The advantage of this approach is that it allows Alibre to do the tessellation, which makes this option fast and capable of achieving a great success rate.

STEP

By default Alibre uses Alibre schema inside exported STEP files, SimLab Composer supports STEP 214 and STEP 203, so to use STEP files in SimLab Composer, the user needs to export STEP 214. This option is available as one of the file format options in the export file dialog in Alibre.
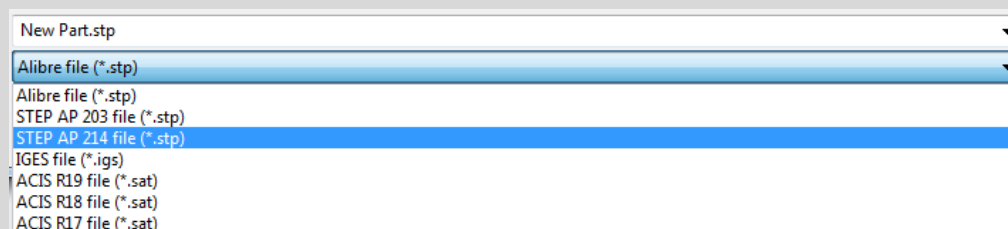
When importing STEP files in SimLab Composer, the user gets access to the face level, which means she/he will be able to assign materials on individual faces.

Tutorial

This tutorial shows the simple steps to render Alibre models using SimLab Composer:

Export the model to be rendered as STEP 214 or 3D PDF
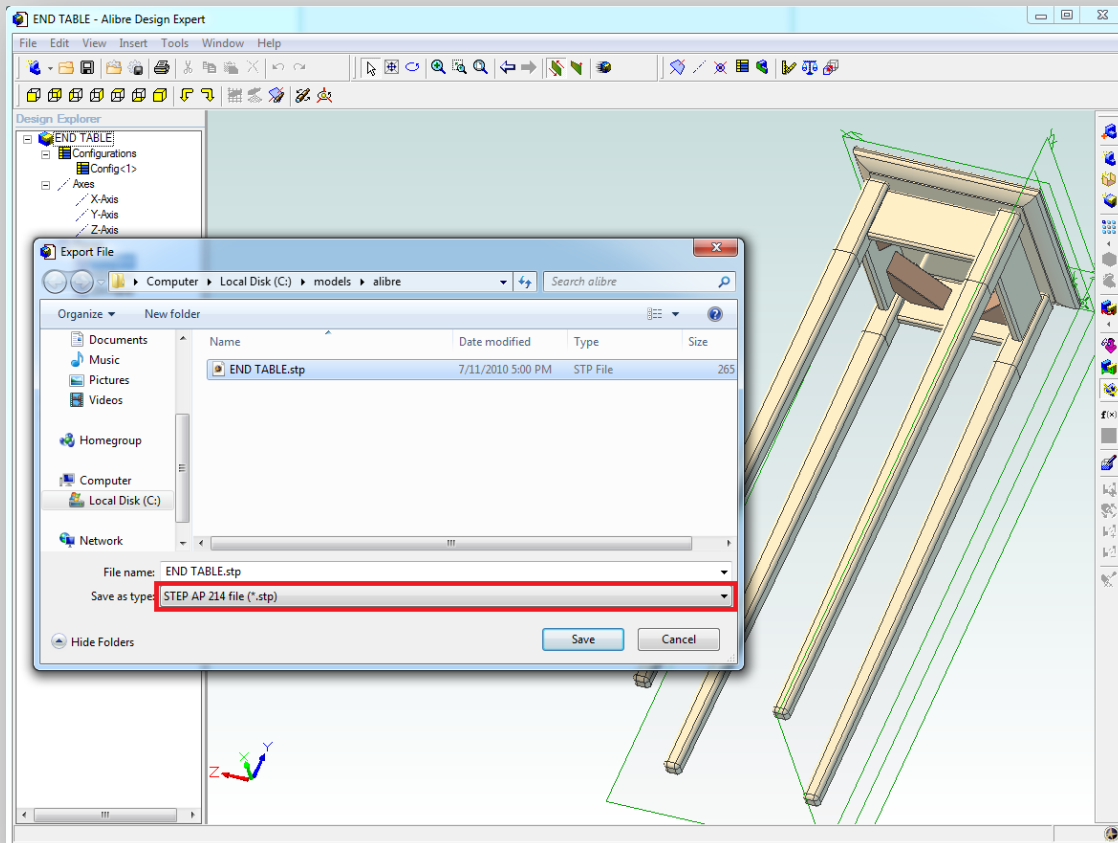
Import the model in SimLab Composer. In case the designer is not using Z as up direction of the model, she/he can align the model in SimLab Composer easily by clicking **Tools** -> **Precise Transformation** and setting rotation angle to **90** degrees
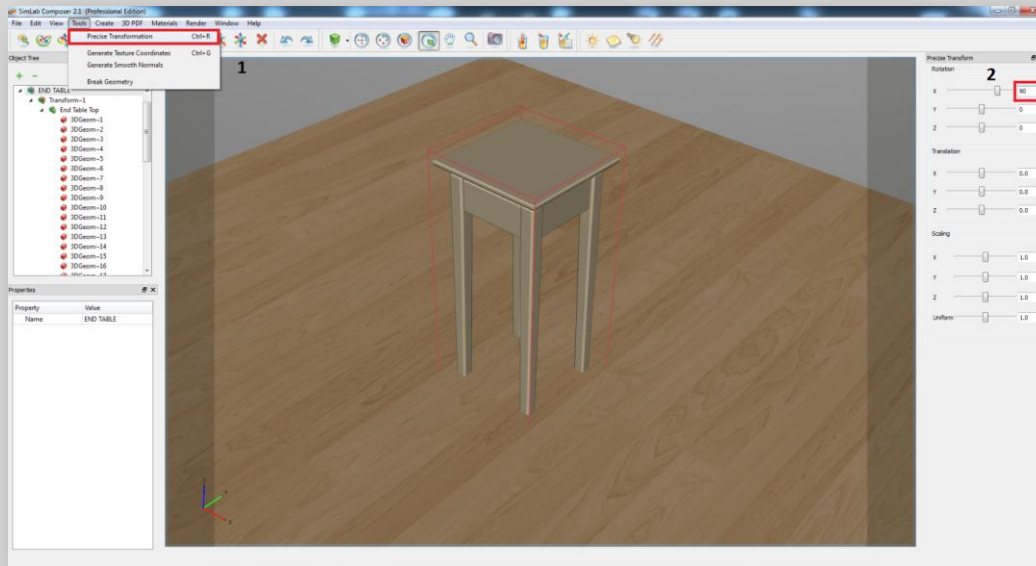
To place the imported model correctly click on **Snap to Ground**
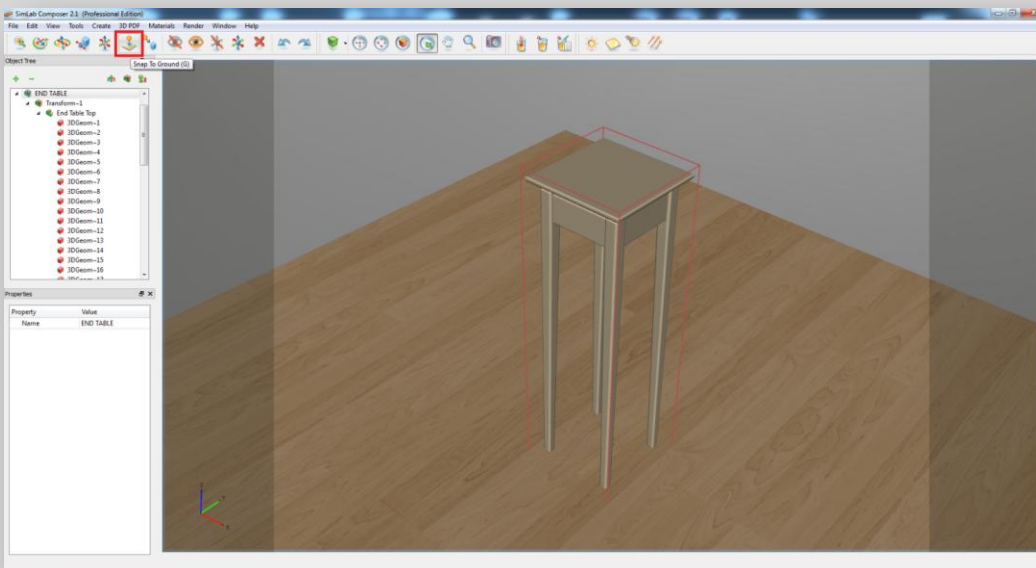
Material libraries can be shown by clicking **Materials** -> **Show Material Libraries**
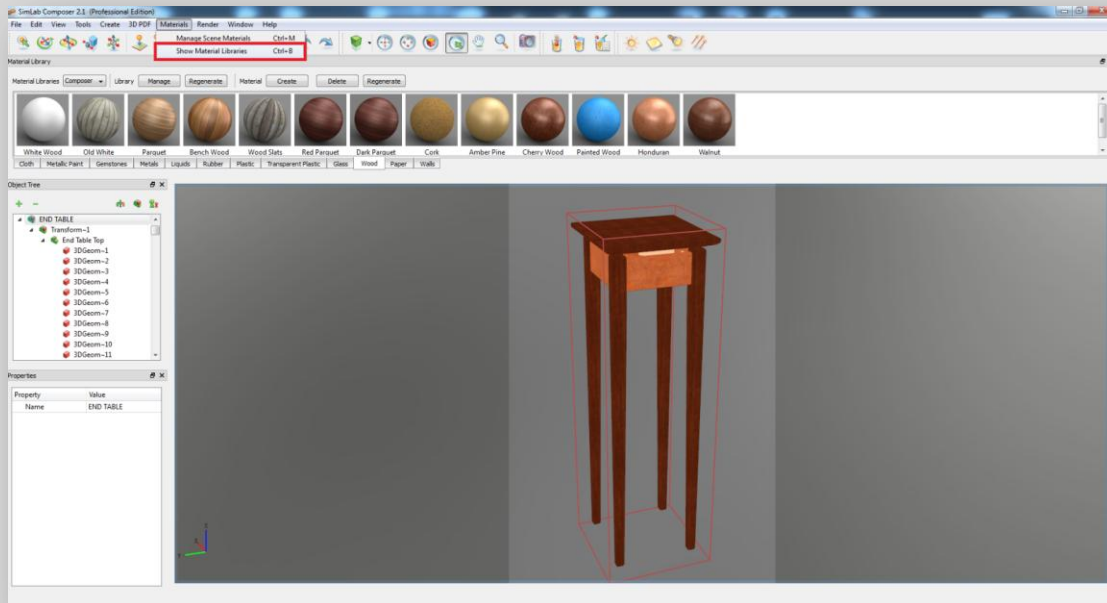
In case the models does not include texture coordinates, the user can generate texture coordinates by clicking **Tools** -> **Generate Texture coordinates**, setting the parameters, and then clicking **Apply**

Assigning realistic materials can be achieved by dragging a material from the material library and dropping it on the 3D area
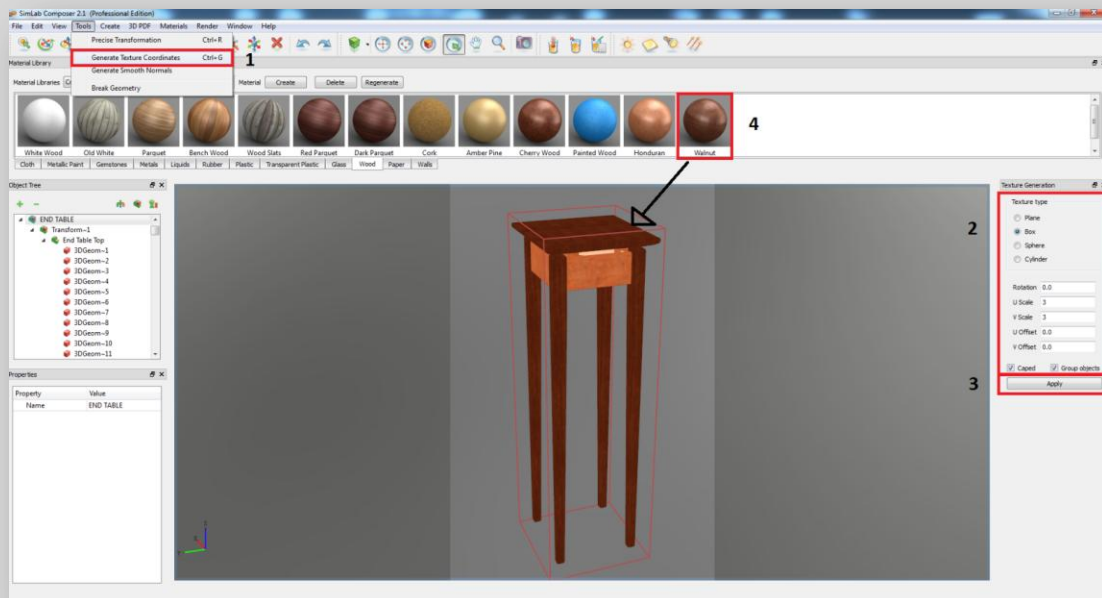
To generate the photorealistic image, the user needs to click on the **render** button in the toolbar

Default material library

SimLab Composer ships with an extended, ready to use material library.

White Satin	Black Satin	Red Satin	Blue Satin	Golden Satin	Red Velvet	Blue Velvet	Black Velvet	Purple Velvet	Brown Leather	Dark Brown Leather	Black Leather
Red Leather	Woven Fabric	Shirt Fabric	Cloth Fabric	Blue Jeans	Light Blue Jeans	Plain Carpet	Rough Leather	Shiny Leather			
Diamond	Aquamarine	Amethyst	Citrine	Coral	Yellow Diamond	Emerald	Garnet	Crystal	Pink Quartz	Smokey Quartz	Lapis Lazuli
Fire Opal	Peridot	Chalcedony	Ruby	Purple Ruby	Sapphire	Topaz	Tourmaline				
Clear Glass	Dark Tint	Medium Tint	Light Frosted	Medium Frosted	Highly Frosted	Reflective Glass	Milky Glass	Hammered Glass			
Water	Coke	Apple Juice	Honey	Grape Juice	Ketchup	Olive Oil	Soap Bubble				
White Pearl	White Paint	Silver Paint	Silver Pearl	Golden Paint	Yellow Paint	Graphite Paint	Green Paint	Orange Paint	Brown Metallic Paint	Pink Paint	Red Paint
Red Pearl	Violet Pearl	Purple Paint	Royal Blue Pearl	Black Pearl	Black Paint	Blue Metallic Paint					
Chrome	Black Chrome	Silver	Gold	Copper	Brass	Brushed Aluminum	Aluminum	Titanium	Cast Iron	Cast Steel	Red Anodized
Blue Anodized	Diamond Cut	Corrogated Iron	Rusty Iron	Rusty Metal	Galvanized Metal	Faceted Silver	White Gold	Verdigris	Hammered pewter	Old Copper	Metal Discs
Cardboard	White Paper	Sticky Note									

White Plastic	Yellow Plastic	Red Plastic	Blue Plastic	Black Plastic	Pebble Finish	Rough Plastic	Geometric Finish	Leather Finish
New Tire	Old Tire	Yellow Rubber	Red Rubber	Blue Rubber	Purple Rubber			
Clear Plastic	Tail Light	Bright Tail Light	Signal Light	White Acrylic				
Horizontal Stripes	Vertical Stripes	Combed Wall	Plain Green	Plain Red	Wall Paper	Green Wall Paper	Old Bricks	

White Wood	Old White	Parquet	Bench Wood	Wood Slats	Red Parquet	Dark Parquet	Cork	Amber Pine	Cherry Wood	Painted Wood	Honduran Mahogany
Walnut											