# SimLab 3D PDF

Template Settings

3D PDF Template Settings

PDF Settings dialog enables the user to control the generated 3D PDF file(s). The dialog can be opened by clicking **PDF Export ->Settings** from under the **SimLab** menu. Upon selecting this option, the PDF Settings dialog will open. This dialog enables users to control the generated 3D PDF file(s), and it has four tabs described below.

Template Tab

Template tab is where a user can browse to the folder containing the 3D PDF template. In this tab a user can create **New** templates, **Edit**, **Delete**, or **Refresh** template(s).

Clicking the **New** button will open SimLab Designer window. SimLab Designer is a simple application that enables users to design and save their own 3D PDF templates, to be used when exporting their 3D models into 3D PDF.
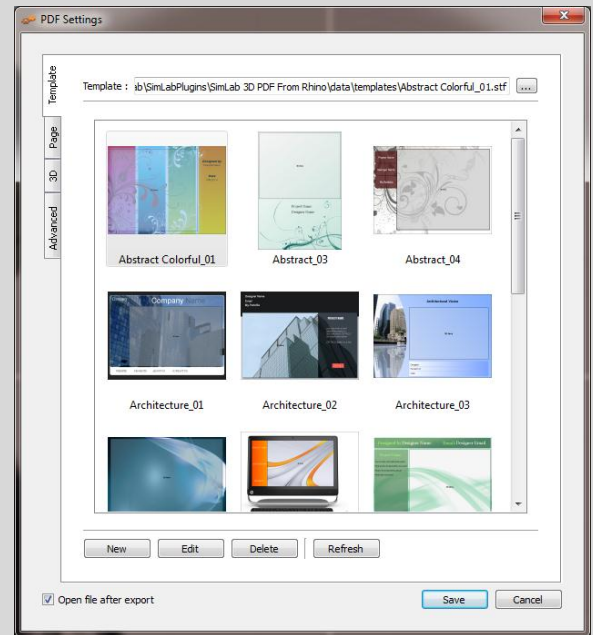
Page Tab

In this tab a user can add background music to the generated 3D PDF file, and a Password for protection.
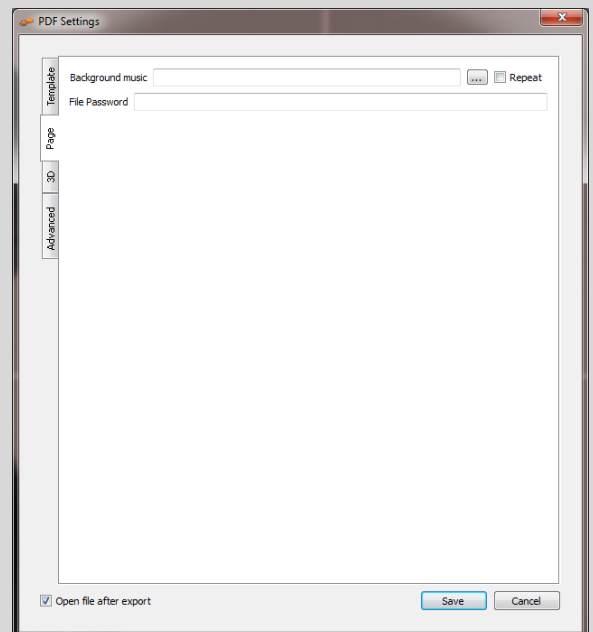
3D Tab

Show 3D Toolbar; shows or hides the 3D toolbar in Acrobat reader when opening the 3D PDF file.

Show World Axes; shows or hides the world axes, in the lower left part of the generated 3D PDF file.

Disable Selection; disables or enables selection of geometries in the generated 3D PDF file.

Navigation Mode; the user can set the default navigation mode for the generated 3D PDF file to be one of the following Rotate, Spin or Walk. The user of the 3D PDF file can choose to change this default mode from inside the generated 3D PDF file.

Default Render Mode; using this option, the user can select the default render mode to be one of the following (Solid, Solid Wireframe, Transparent, Transparent Wireframe, Illustration, Shaded Illustration, Transparent Bounding Box, Solid Outline, or Bounding Box, Transparent Bounding Box Outline, Wireframe, Shaded Wireframe, Hidden Wireframe, Vertices, Shaded Vertices).
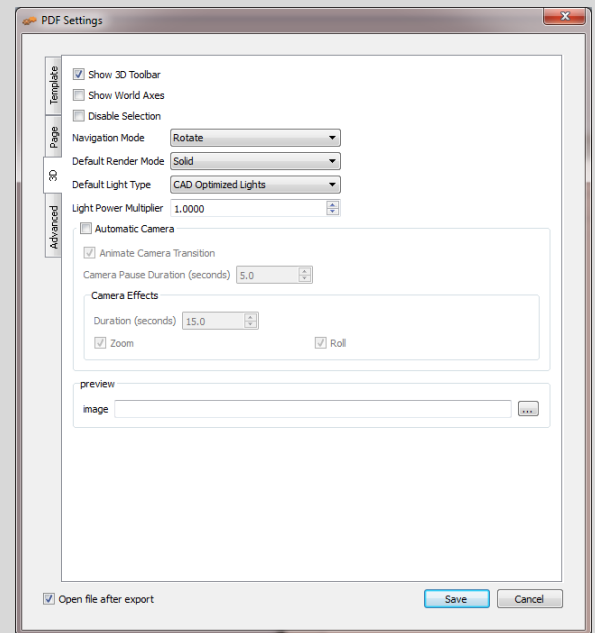
The images bellow show the same model using different render modes.
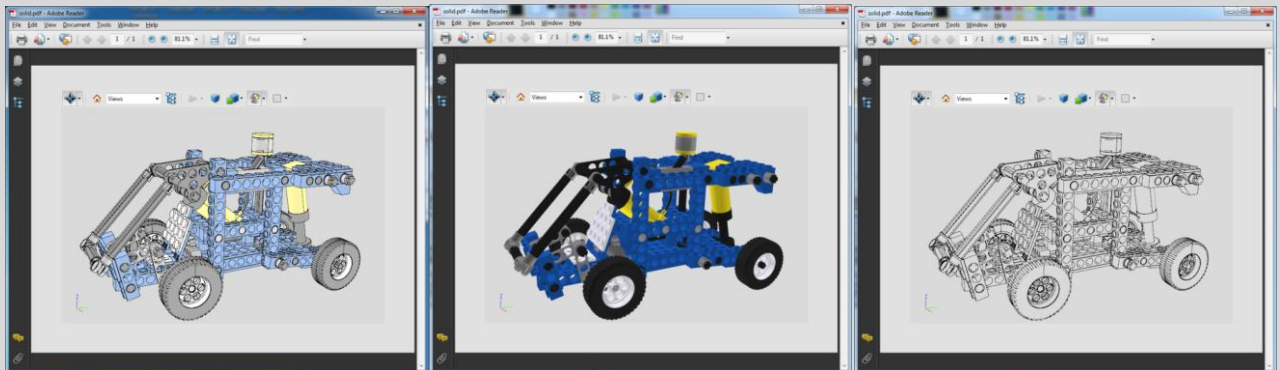
Default Light Type; light type can be one of the following: white, day, night, bright, CAD optimized, cube, or head lamp.

Light Power Multiplier; increasing this value increases the brightness in the generated 3D PDF file.

Automatic Camera; this option enables automatic switching between, the different cameras in the scene. When automatic camera is enabled, the user can select the **Pause Duration**, which is the time in seconds for which the camera will stand still before camera effect starts. **Animate**

Camera Transition is an option for animating the transition between different cameras in the scene. The **Duration (seconds)** is the time of the animated transition. In case of no animated transition:

Time before switching cameras = Pause Duration + Duration (seconds)

A user can select the camera effect to be Zoom, Roll or the two combined. The camera effect will take place for the camera effect duration.

In case the Automatic Camera option is not checked, the 3D PDF file will be exported with the scene cameras, but without switching between them.

The **Preview Image** selection box is available for the user to select an image that will be displayed upon browsing for 3D PDF files, to help the user in selecting the required file. This image will also be displayed when the user first opens the 3D PDF file, then the original 3D model will appear. The image can be a rendered view image of the model/scene.
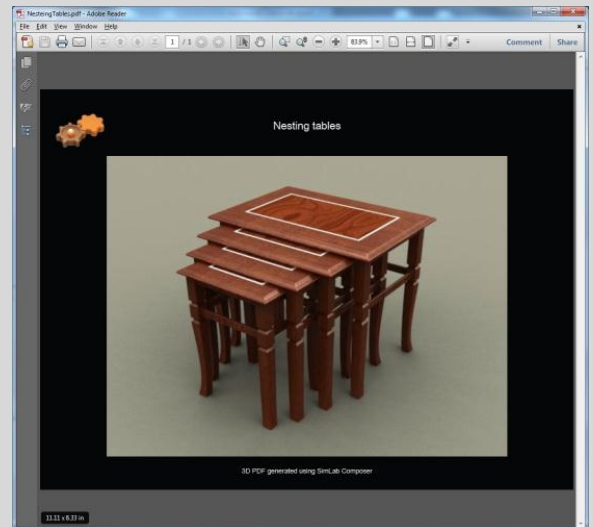
Advanced Tab

Open file after export check box; will open the generated 3D PDF file.

Full Screen check box; if checked will make the 3D PDF file start in Full screen mode.

Advanced users can use advanced settings to insert Java scripts to control both, the PDF document, and the included 3D model.

Details about Java script support in 3D PDF files can be found at;

http://www.adobe.com/devnet/acrobat/javascript.html
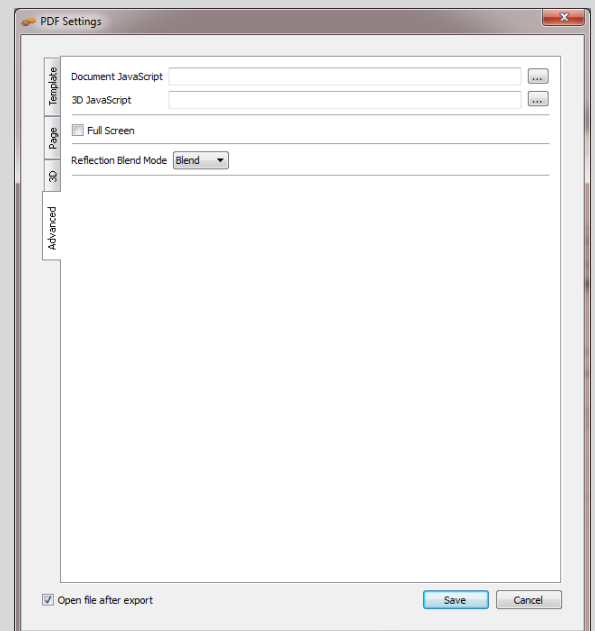
SimLab Designer

SimLab Designer is a standalone application for designing templates to be used in the exported 3D PDF files, as well as exporting them into Html5. The application toolbar includes the buttons shown and described below.


New File **Button**

Clicking this button will create a new empty template file, and will display the page properties on the left. If the properties are not displayed select the page in the middle of the application window.
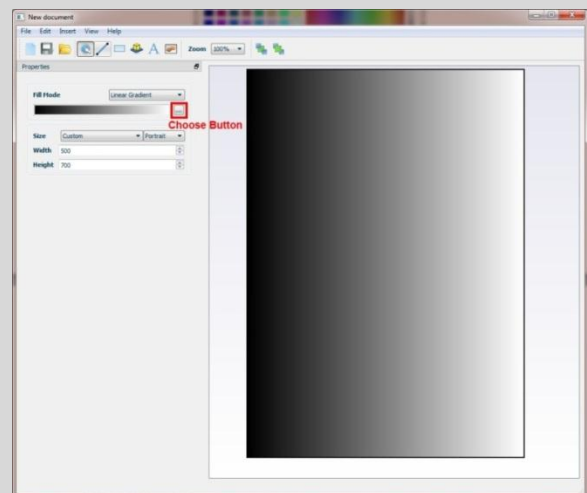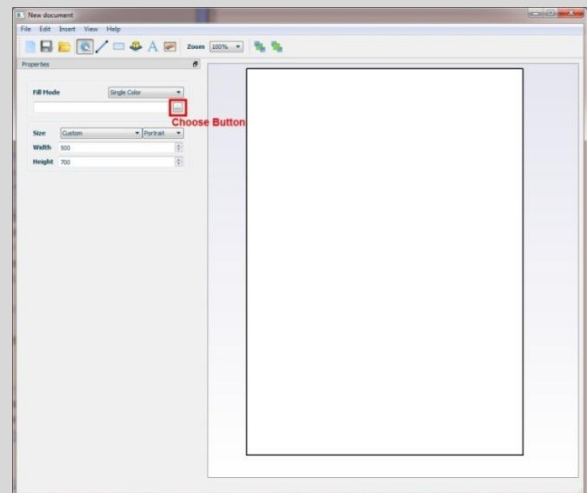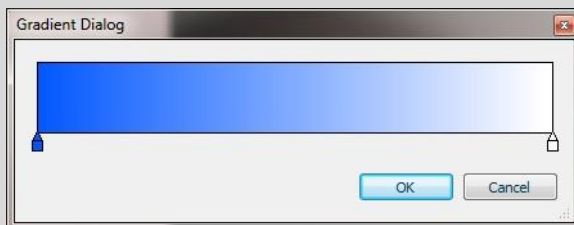
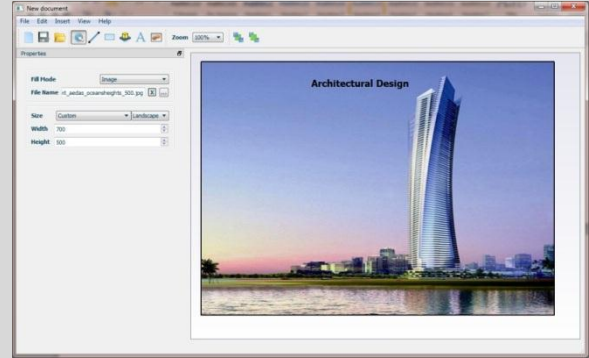## *Page Properties*

Fill Mode

Fill Mode can be a **Single Color**, a **Linear Gradient** or an **Image**. If the **Single Color** fill is selected click the choose-button to display the **Fill Color** window, where you can select the fill color you want.
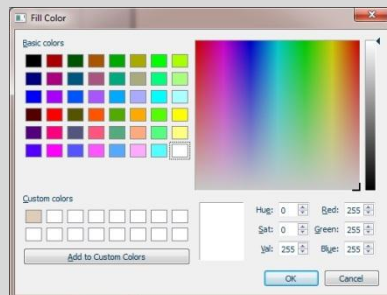
If the **Linear Gradient** fill mode is selected, a default gradient will fill the page, and again clicking the choose-button will display the Gradient Dialog where you can set the color and its gradient degree.

In case of selecting the **Image** fill mode, click the choose-button to browse to your background image.

Page Size

Under this page property a user can choose the orientation of the created 3D PDF template page, to be Portrait or Landscape. The size of the page can also be selected for the drop down selection box, and in case of selecting Custom size the Width and Height boxes will need to be filled.

Line Button

To add a line to a template click this button, then click where you want to add the text on your template page. The line properties will appear on the left. The **Start** and **End locations** indicate the X, and Y coordinates of the line's end points.
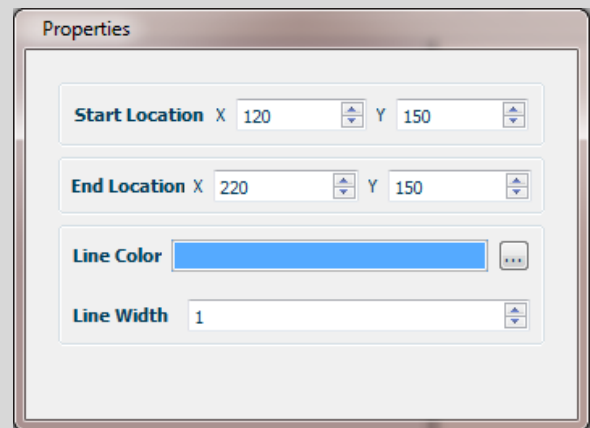
Line Color enables users to change the color of a line, and **Line Width** to change its width. A user can pull any of a line's end points to change its length and orientation.
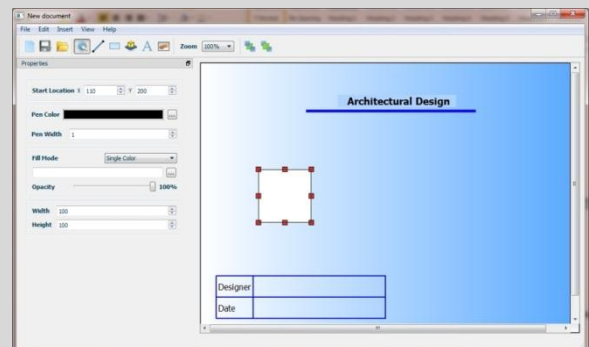
Rectangle Button

Clicking this button then anywhere on a template page will create a rectangle, filled with single white color.

Rectangle Properties

Start Location; can be set by specifying the X and Y values of its location. The coordinates are those for the upper left point of the text bounding box. You can also drag the rectangle anywhere on the page, to set its location.

Line Color and Line Width; can be used to set the color and width of the lines of the rectangle.

Fill Mode and Opacity; a rectangle fill mode can be either a Single Color or a Linear Gradient, as already described under the New File Button. The Opacity it is also as described under the Text Button.

Width and Height; these two values can be used to set the dimensions of the rectangle. Another way to do that is by dragging any of the handles of the rectangle on the page, which in turn will change the values in these fields.

3D Area Button

3D Area is where the 3D model will be placed in the exported 3D PDF file.

3D Area Properties

Start Location; can be set by specifying the X and Y values of its location. The coordinates are those for the upper left point of the text bounding box. A user can also drag the 3D area anywhere on the page, to set its location.

Background Fill Mode; is where a user can set the background of the 3D model. The Background Fill Mode can be **Transparent**, **Single Color**, or an **Image**. If the **Transparent** fill is selected the 3D area's background will show the fill of the template page.

In case of **Single Color** mode click the choose-button to display the **Fill Color** window, where you can select the fill color you want.

The **Image** fill mode requires browsing for an image file to be your 3D area's background.
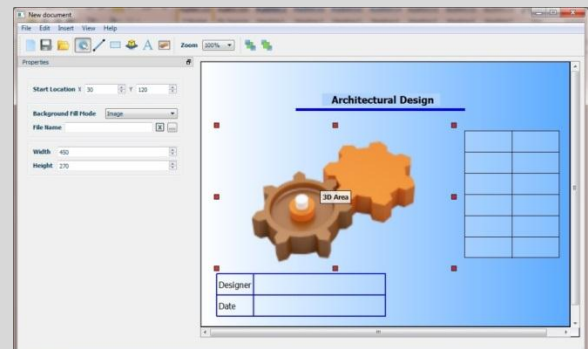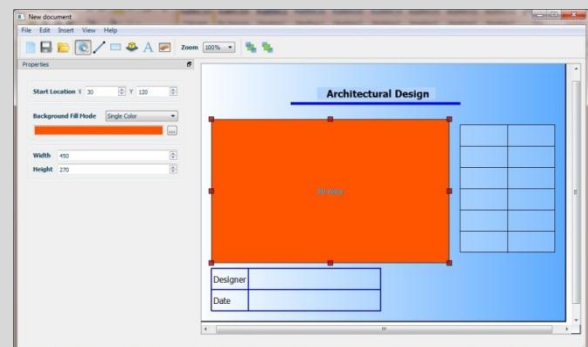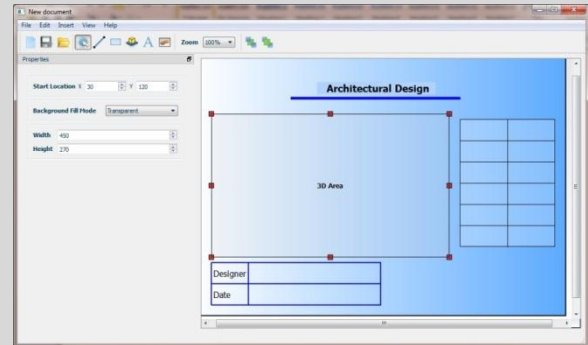
Text Button

To add text to your template page click this button, then click where you want to add the text on your template page. The **Font Dialog** window will open, and if it is your first time to click this button in this session, it will take some time to load the fonts.

In Font Dialog you can input the text and choose its font type, size, color, and other properties. When satisfied click Ok, and the text will appear on your page. If you need to edit anything in the text, just double click it on the page and this will open the Font Dialog again.
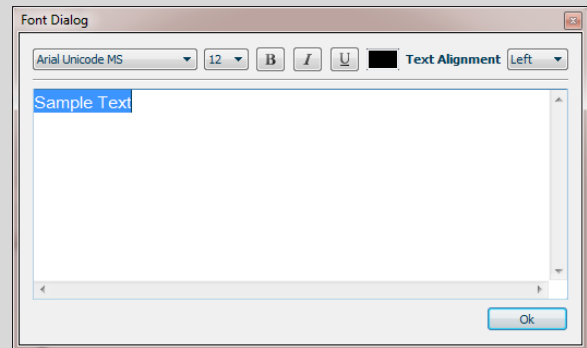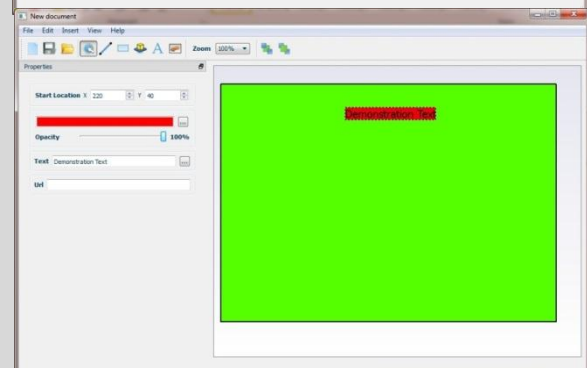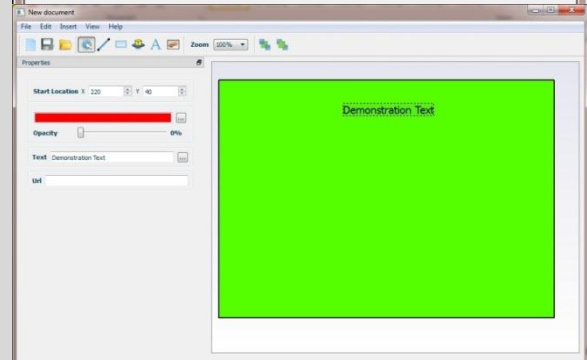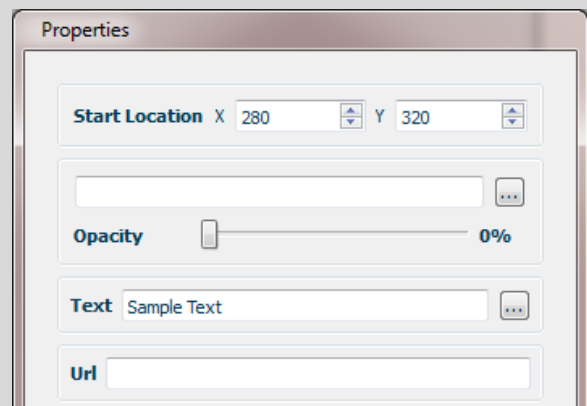
Text Properties

Start Location; can be set by specifying the X and Y values for the text location. The coordinates are those for the upper left point of the text bounding box. A user can also drag the text box anywhere on the page, to set these values.

Fill Color; is by default White. Click the choose button beside the fill color box to open the fill color window and choose a new color.

Opacity; if the Opacity value is set to 0% then the text will be completely transparent, and the back ground fill will appear under the added text.

If a user changes the Opacity of the Text to 100% the Text fill color will appear on top of the page color. Values between 0-100% can also be specified for this property.

Text; clicking the choose-button next to the Text property will open the **Font Dialog.**

URL; in this property a URL address can be specified to link the added text to a certain web location.

Image Button

This button can be used to add an image to a template page. When a user selects this button and click anywhere on the page the Open Image dialog will automatically open to browse to an image file. A user can also edit the image file from the **File Name** image property.
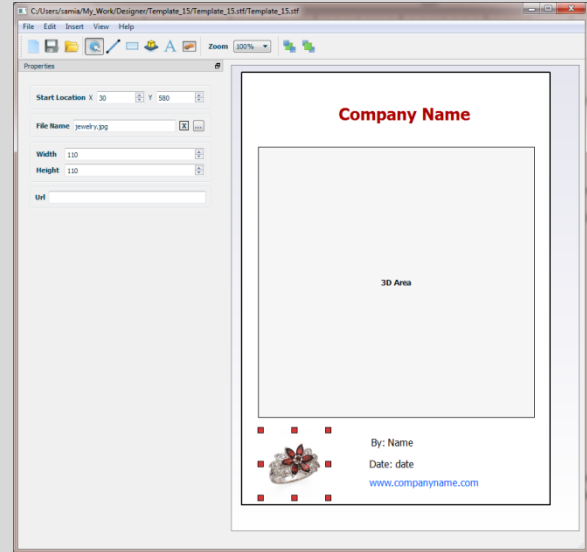
Image Properties

Start Location; Image Start Location can be set by specifying the X and Y values of its location, the coordinates are those for the upper left point of the text bounding box. A user can also drag the image anywhere on the page, to set these values.

File Name; under this property a user can change the image file.

Width and Height; these two values can be used to set the dimensions of the image. A user can enter values in these fields, or drag any of the handles of the image on the page, which in turn will change the values in these fields.

URL; in this property a URL address can be specified to link the added image to a certain web location.

Zoom

The Zoom drop down selection box can be used to set zoom percentage for viewing the PDF template page.

Send Back & Bring Front

When a user starts having more than one object on a template page, these two buttons can help arrange things. By sending some object to back and bringing others forward.

Embedding PDF inside Html

With Html support, users can embed 3D PDF files into Html documents. Html5 Settings are found under the Html5 menu; where a user can select the template for the 3D PDF file. If a new template needs to be designed, clicking the **New** button will launch SimLab Designer window.

After selecting the required 3D PDF template, clicking **Export** will open the Export Geometry dialog where a user can select the name and location of the Html5 file.
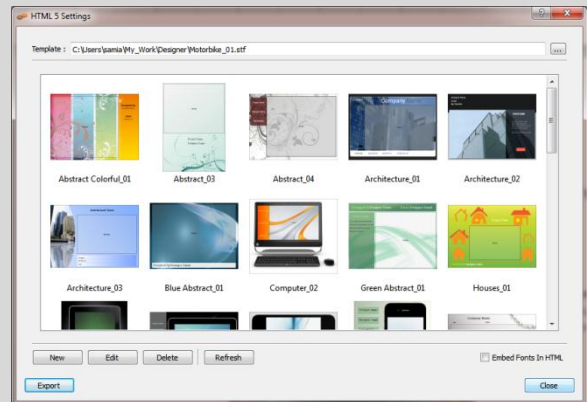
Merging PDF files

This option enables users to merge two or more PDF files together. This can be used to append a 3D model to a company's header, or a project description available in PDF format. PDF files can be generated using different programs, such as; Acrobat, WinWord, PowerPoint, or Open Office. Different 3D PDF files generated using SimLab products can also be merged together. Upon selecting this option the Merge PDFs window will open.