

SimLab

3D PDF exporter 3.2

For



SimLab 3D PDF exporter 3.2 for Rhino

Table of Contents

Benefits	
Installation	
Trial License	5
Professional License	6
Exporting 2D DDE files from Phine	o
Exporting layer structure 8 environment mans	0
Exporting layer structure & environment maps	
Mesh Quality	10
Command Line Export	10



Benefits

With SimLab 3D PDF exporter for Rhino, 3D models created inside Rhino can be exported into customized 3D PDF files. 3D PDF files can be opened using the free Acrobat reader; versions 9.0 or newer, to take advantage of all the great features in the generated 3D PDF files.

3D PDF is the best way to share 3D models with others without the risk of losing their details. The file recipient will only need a free copy of Adobe Acrobat reader (which is already installed on most Windows and Mac machines). Navigating 3D models inside 3D PDF is very easy, and can be quickly mastered by none technical users. The file creator has the option to include multiple cameras in the 3D PDF file, and to make the file recipient switch between those predefined cameras.

With SimLab Template Designer, users of SimLab 3D PDF for Rhino can export their 3D models using customized templates that reflect company/product themes. To learn more about SimLab Template Designer, go to SimLab -> PDF Export -> Designer Help.

Installation

After downloading the plugin, it automatically registers itself inside Rhino 4.0/5.0. The functionalities of the plugin can be accessed from the menu SimLab -> PDF Export. To start experimenting with the plugin, a user needs only to request a FREE Trial License or use the professional license bought.





Manual registration may be needed in some cases. In case the top level menu SimLab did not appear. The user can manually register the plugin by clicking Tools -> Options, and then select Plug-ins from the Options dialog.

Document Properties		_			
Rhino Render	Plug-ins	Sł	iow All Plug	g-ins	
Mesh	Name /	Type	Loaded	Load	Load
- Units	The second secon	1 Julian	Vee		Autom
Page Units	2DC Systems Invision	Clarge	Ne.		Autom
Grd	3DS Export Plug-In	File ex	INO NI-		Autom
Gind	3US Import Plug-in	File im	No		Autom
Summer	Adobe PDF Import Plug-in	File im	No		Autom
Linebrae	Al Export Plug-In	File ex	No		Autom
Web Browser	Alerter	Utility	Yes		Autom
- Rhino Ontions	Animation I ools	Utility	No		Autom
in View	Calculator Plug-in	Utility	No		Autom
Aliases	CD Export Plug-in	File ex	No		Autom
+ Appearance	CSV Export Plug-in	File ex	No		Autom
Files	Delft Spline Systems DeskProto	Utility	Yes		Autom
General	Dimension Catalyst	Utility	Yes		Autom
Mouse	DWG and DXF Export Plug-in	File ex	No		Autom
Keyboard	BWG and DXF Import Plug-in	File im	No		Autom
Plugins	😼 Faro Digitizer Plug-in	Digitizer	No		Autom
Fin wogeing Aids	🛛 📜 Faro Titanium Digitizer Plug-in	Digitizer	No		Autom
- Context Menu	FBX Export Plug-in	File ex	No		Autom
- Selection Menu	FBX Import Plug in	File im	No		Autom
RhinoScript	GHS Export Plug-in	File ex	No		Autom
Render Options	GHS Import Plug-in	File im	No		Autom
Rhino Mail					
Alerter					,
	Properties Install				

From the Plug-ins options the user should select the RHP file for the plugin ("SimLabPDF.rhp" for

32bit plugin, and "SimLabPDFx64.rhp" for 64bit), and then click Install.

For 64 bit version default location is

C:\Program Files\SimLab\Plugins\SimLab 3D PDF From Rhino\

For 32 bit version default location on windows 64 bit is

C:\Program Files (x86)\SimLab\Plugins\SimLab 3D PDF From Rhino

The default location of the RHP file in windows 32 bit is

C:\Program Files\SimLab\Plugins\SimLab 3D PDF From Rhino\



SimLab 3D PDF exporter 3.2 for Rhino

Register A License

Trial License

With the plugin registered in Rhino a license is required, trial or professional.

To request a trial license for the plugin go to SimLab -> PDF Export -> Register. This will open the License Dialog. Click Get Free Trial, and the License Dialog will change as shown.

🧼 License Dialog 📃	
Simlab Soft	
→ Buy	
➔ Get Free Trial	
Activate	
Help (Step By Step instructions)	
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Hardware Key	s 0A:A3:C4:D2:93:61 🔻 Copy to clipb	oard
If Request press Copy data to <u>licen</u>	License did not work for you pleas to clipboard and then send the co se@simlab-soft.com	e pied
[Request License Home	

If you haven't already received an (*.sl) file, click the Request a trial license option.

The License Dialog will change again. Fill in the needed information, and then click the Request License button. A message window will appear indicating that the trial license file has been sent to the provided e-mail address.

From your e-mail save the license file (license.sl). Back to Rhino/License Dialog click the Home button to go back to the original License Dialog, and then click Activate. The License Dialog will be updated again, as shown below. Select the 'I already received a license file (*.sl)' option from the



list. A message will appear requesting the selection of the file received by e-mail. Select the file, and if valid a message will appear indicating that, and you can start using the plugin.

Simlab Soft	
Machine license	
➔ I already received a software key	
Software key is a string like (xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
➔ I already received a license file (*.sl)	
Network (Floating) Licensing	
Connect to licensing server	
Home	

Professional License

When buying a professional license, the user will receive a software key to activate the plugin. By default SimLab licenses for plugins and applications, can be installed on two machines.

To activate the license start Rhino, then go to SimLab -> PDF Export -> Register. This will open the License Dialog. Click Activate, and the License Dialog will be updated, as shown below.

₽ (icense Dialog Simlab Soft D Software Done Right
	→ Buy
	➔ Get Free Trial
	→ Activate
	➔ Help (Step By Step instructions)
	Close



SimLab 3D PDF exporter 3.2 for Rhino

Select the 'I already received a software key' option from the list. The License Dialog will update again, showing fields to fill.

	Simlab Soft
	Machine license
	➔ I already received a software key
	Software key is a string like (xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
	➔ I already received a license file (*.sl)
	Network (Floating) Licensing
	 Connect to licensing server
l	Home
~	License Dialog
	Simlab Soft

Fill in the required information and paste the received license key in the Software Key text box, then click Activate. If the Software Key is valid a message will appear indicating that, and you can start using the plugin.

Simlab Soft				
Machine lic	ense			
➔ I already received a software key				
Software	key is a string like (x000000000x-0000x-000x-000x-000x-000x-			
Name				
Email				
Company				
Software key				
Hardware Keys	58:2C:80:13:92:63 Copy to dipboard			
If Activate d copied data to	d not work for you please press Copy to clipboard and then send the license@simlab-soft.com			
	Activate Home			

If you faced any problem with activation, send an email to license@simlab-soft.com make sure to click copy to clipboard and to paste the information in the email sent to licesne@simlab-soft.com



Exporting 3D PDF files from Rhino

PDF files exported using SimLab 3D PDF exporter for Rhino, use custom created PDF templates. Before attempting to export to 3D PDF, the user should select/create the template to use for file export. This can be done by clicking SimLab > PDF Export > Settings. To learn more about different 3D PDF settings, go to SimLab > PDF Export > 3D PDF Settings Help.

With a template selected clicking SimLab > PDF Export > Export, will open the PDF Export dialog. The user will need to input the output file name, and location, then click

Save.

After selecting the output file name, and location clicking Save will open the Camera Manager dialog. Each view in Rhino will be listed as a camera in this dialog. Using the camera manager dialog the user will be able to select the cameras to be included in the generated 3D PDF file, and the order of those cameras. The user will also be able to change the names of the cameras. The user can also choose to export only the active view camera.

👸 Cameras Manager 🛛 🔋	x	
 Perspective Front Right Top 	 • • 	
Name Perspective]	
Export Selected Cameras		
Export Active View		
		a

For smooth transition between the different cameras in the generated 3D PDF file, it is advised to change all the views in Rhino to perspective. This can be done by clicking on each view and changing the projection to be perspective, in the Properties window, as shown in the following image.

ewport	
Title	Perspective
Width	594
Hoight	426
Projection	Perspective
amera	
Lens Length	50.0
X Location	43.111
Y Location	-74.673
Z Location	49.782
Location	Place
arget	
X Target	0.000
Y Target	0.000
Z Target	0.000
Location	Place



Exporting layer structure & environment maps

Layer hierarchy inside Rhino are saved in the generated 3D PDF file, the user can view the model hierarchy by clicking the model tree button in Acrobat reader. Using the model tree enables the user to hide and show different parts of the model.



In addition to default material properties the plugin exports bump and environment maps from Rhino, which results in top quality output 3D PDF files.





Mesh Quality

The plugin uses the rendering mesh from inside Rhino. In case the rendering mesh was never

created, the plugin creates it behind the scene.

The user can control the number of polygons of the rendering mesh from

Tools -> Options -> Mesh

Making the mesh smoother increases the size of the output 3D PDF file.

Document Properties		
Rhino Render	Render mesh quality	
— <u>Mesh</u> — Units	 Jagged & faster Smooth & slower 	
Dimensions	Custom	
- Grid - Notes	Custom options	
- Summary	Diensity:	0.65
- Linetypes Web Browser	Maximum angle:	0.0
Rhino Options	Maximum <u>a</u> spect ratio:	0.0
	Minimum <u>e</u> dge length:	0.0001
 Appearance Files 	Maximum edge length:	0.0
General	Maximum distance, edge to surface:	0.0
- Mouse Keyboard	Minimum initial grid quads:	16
- Plug-ins	√ <u>R</u> efine mesh	
Modeling Aids	Jagged seams	
Selection Manu	✓ Simple planes	
- Bhine Script		
- Render Options		
- Rhino Mail		
Alerter		

Command Line Export

The plugin adds the new Rhino command pdfExport. Using this command the user can script the 3D PDF export operation.

To export a 3D PDF file the user can issue the command pdfExport [File Name]

For example pdfExport C:\output\model1.pdf

The generated 3D PDF file will include the active view of the model, and will use the last saved 3D PDF settings.

