

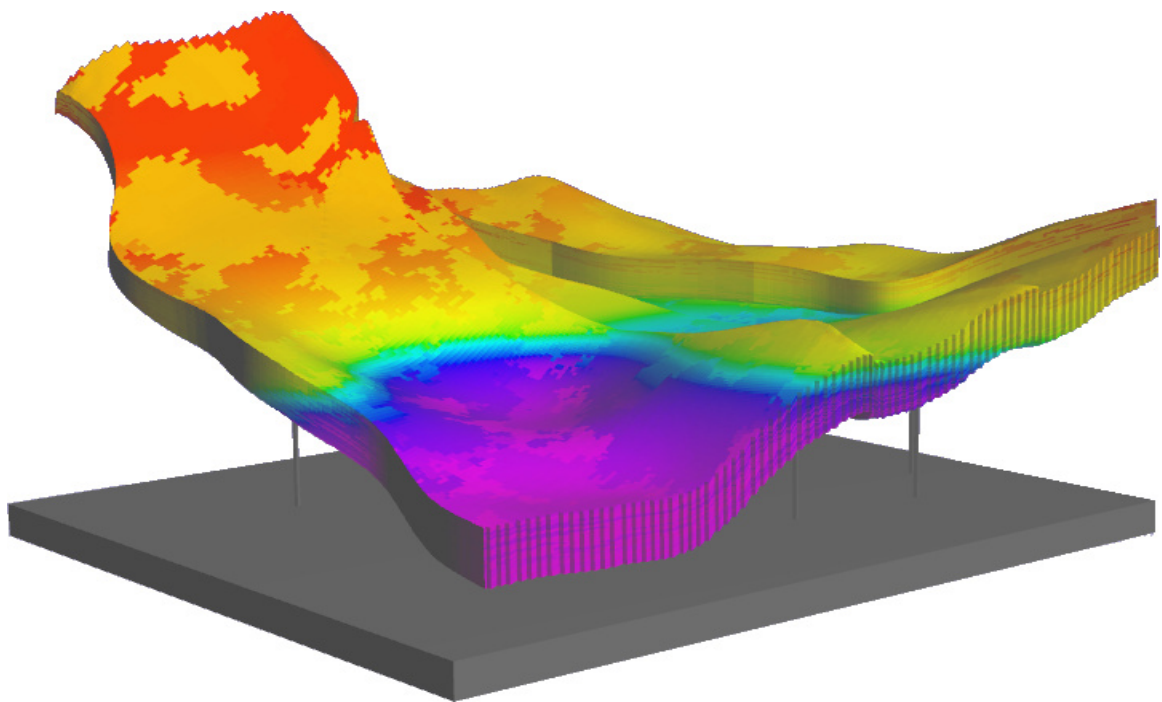


Terra3E

PrinTerra™

User's Guide

Version 2013.1.1





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1 INTRODUCTION

1.1 BRIEF DESCRIPTION

PrinTerra is an easy and innovative tool for printing in 3D your geological and reservoir models.

3D printers use a variety of very different types of manufacturing technologies, but they all share one core thing in common: they create a three dimensional object by building it layer by successive layer, until the entire object is complete. For that, this technology requires to read data in a specific format.

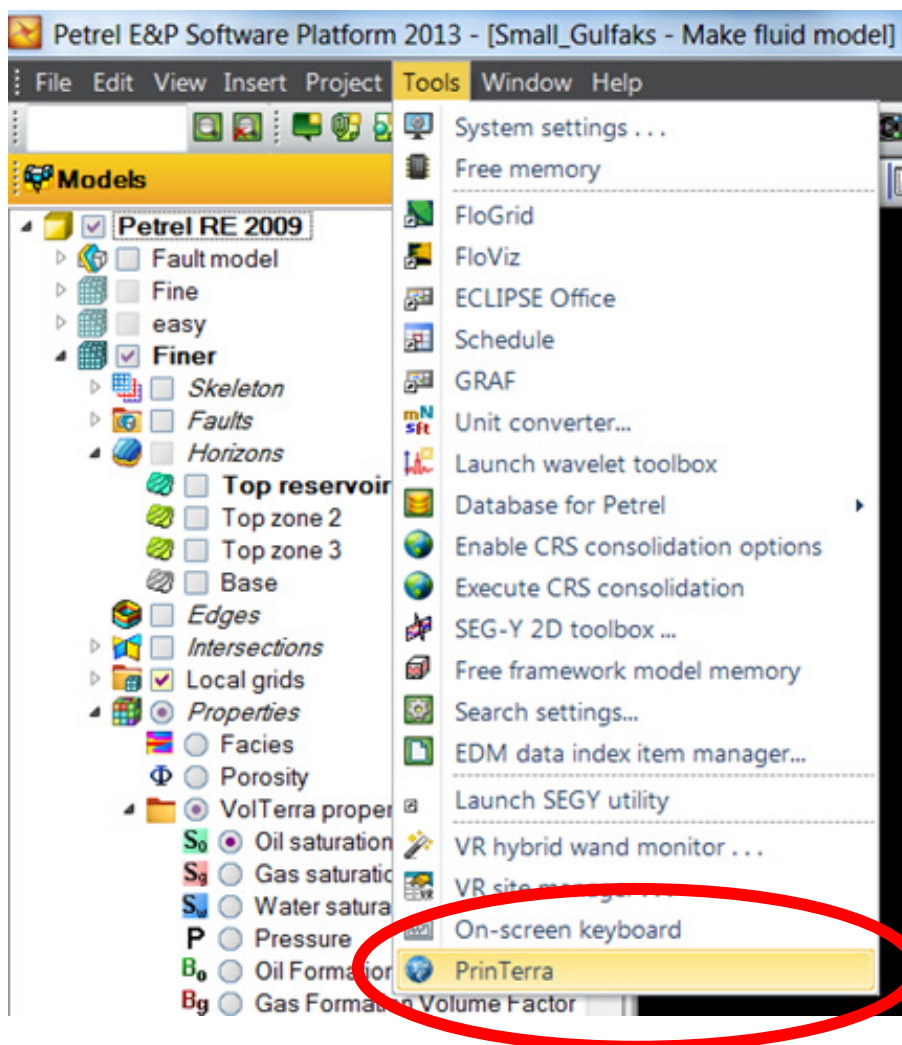
PrinTerra is a driver interface within Petrel to export your geological and reservoir models to file formats recognized by 3D printers.

With the ability to print in full colours, geological and reservoir data can be “touched” to better understand a complex field area.

3D printing makes data touchable and greatly improves the ability to demonstrate complex geological and reservoir models.

2 GETTING STARTED WITH PRINTERRA

In Petrel, open a project. Then click on the “Tools” button of the toolbar. Click on “PrinTerra” to start the process and display the PrinTerra process dialog.

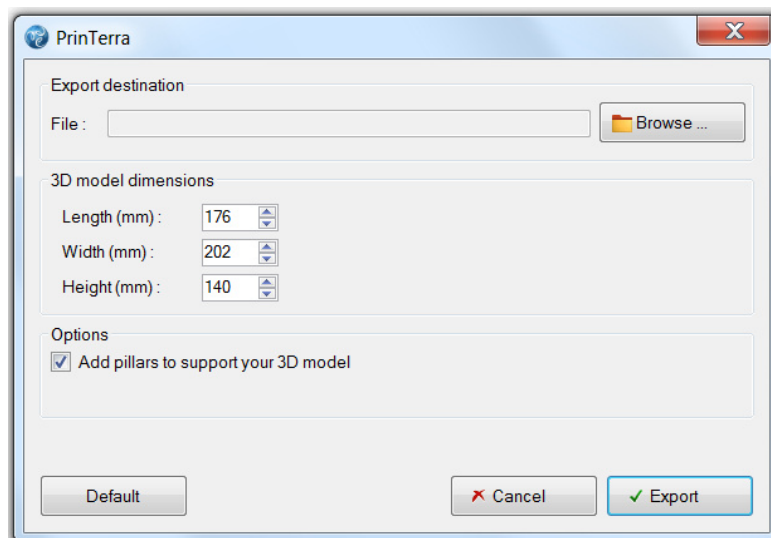


2.1 DATA MANAGED

Data managed are the properties available in the “Properties” folder of your model available in the “Models” pane:

- Facies
- Porosity
- Permeability
- Saturation
- Pressure
- Etc.

2.2 PRINTERRA INTERFACE



Select your destination file using the “Browse ...” button.

Define the dimension (in mm) of your output object: length, width and height

Button “Default” assigns default value respecting the ratio defined in Petrel.

Option: Export the mesh of a pedestal composed of pillars and a base. This pedestal will be printed in a hard plastic. The pedestal and the geological and reservoir model will fit together perfectly.

Button “Cancel” closes the window.

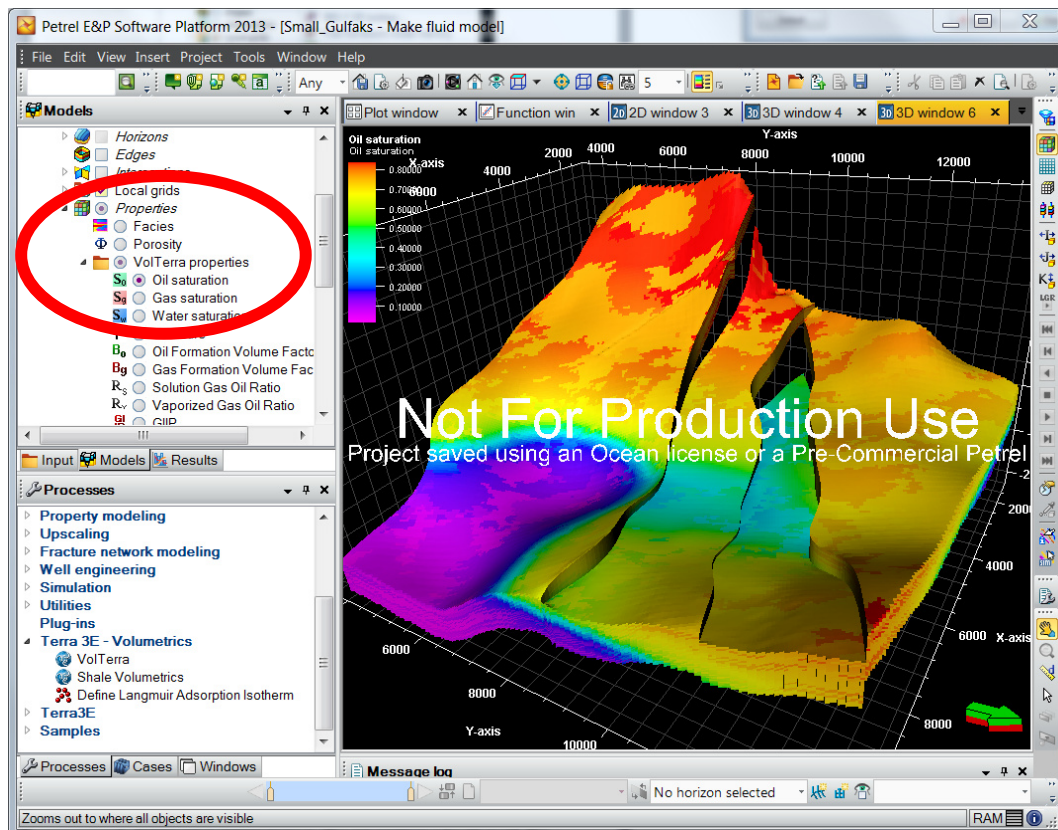
Button “Export” launches the process and create the Collada file.

2.3 WORKSTEPS FOR EXPORTING YOUR COLLADA FILE

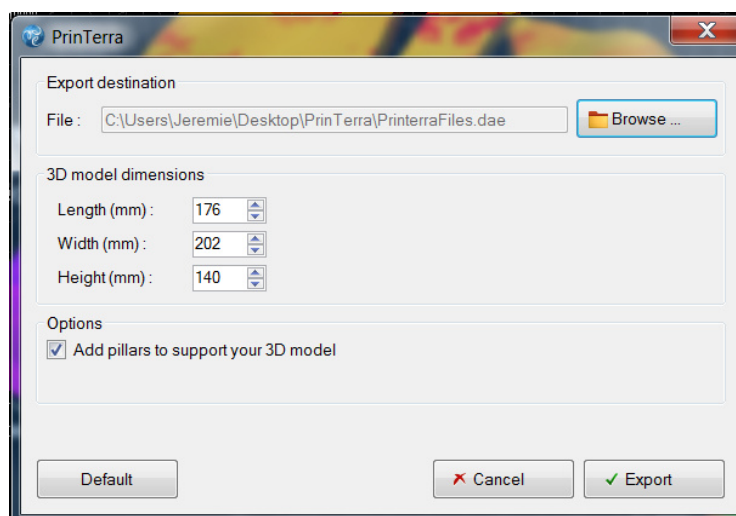
- Open a 3D window
- Select a property in the "Properties" folder of your model in the "Models" pane
- Open "PrinTerra" interface
- Select your destination file using the "Browse ..." button
- Define the dimension (in mm) of your output object: length, width and height
- Click on "Export"

3 EXAMPLE




- Select a property in "Properties" folder



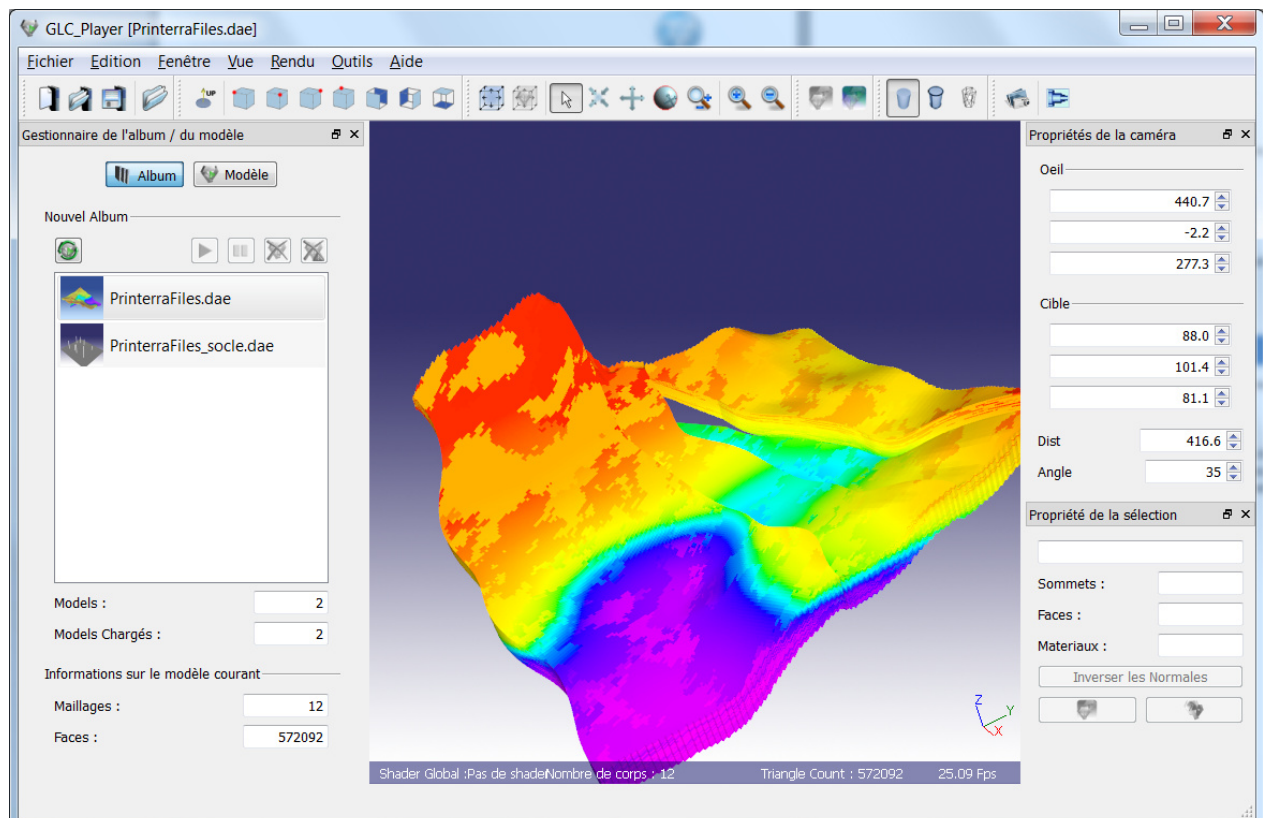
- Open "PrinTerra" interface and select the destination file



- Click on export. Output files are created:
 - Mesh related to the Petrel model
 - Color tab, required to print in full color
 - Mesh of the pedestal. The pedestal and the geological or reservoir model will fit together perfectly

 PrinterraFiles.dae	27/03/2014 12:41	Collada File	49 193 Ko
 PrinterraFiles_socle.dae	27/03/2014 12:41	Collada File	41 Ko
 PrinterraFiles-texture.png	27/03/2014 12:40	Image PNG	5 Ko

- The output files are. These files can be open with the most graphics software applications such as Blender, 3ds Max ...

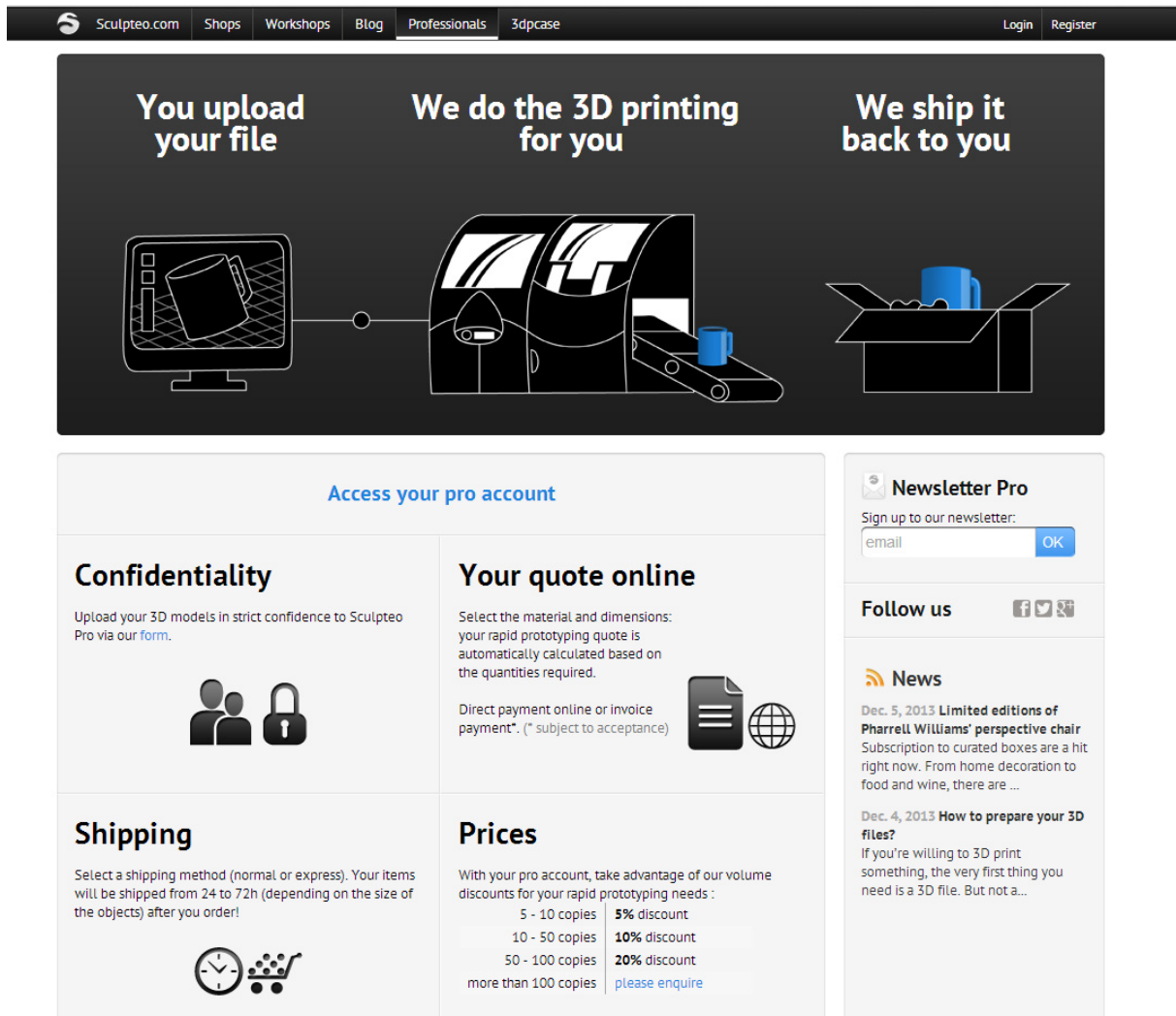


4 3D PRINTING PLATFORM

Online 3D printing platforms are available for an easy printing of your model. You send your collada file then they send your real 3D model object.

An example of online 3D printing platform:

- Sculpteo.com is company having an office and operations in the USA as well. They offer an online platform where one can upload in a confidential manner the image files and receive the corresponding 3D model. They rely on a network of workshops distributed in different locations.



Sculpteo.com Shops Workshops Blog Professionals 3dpcase Login Register

You upload your file **We do the 3D printing for you** **We ship it back to you**

Access your pro account

Confidentiality
Upload your 3D models in strict confidence to Sculpteo Pro via our [form](#).

Your quote online
Select the material and dimensions: your rapid prototyping quote is automatically calculated based on the quantities required.
Direct payment online or invoice payment*. (* subject to acceptance)

Shipping
Select a shipping method (normal or express). Your items will be shipped from 24 to 72h (depending on the size of the objects) after you order!

Prices
With your pro account, take advantage of our volume discounts for your rapid prototyping needs :

5 - 10 copies	5% discount
10 - 50 copies	10% discount
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Figure 1 - Screen capture of Sculpteo.com for professional



5 CONTACT

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