

# Geospatial Modeling & Visualization

A Method Store for Advanced Survey and Modeling Technologies

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## Rapidform: Basic Workflow to start a digitizing project Part 1

These tutorials will show you how to digitize archaeological features from terrestrial scan data.  
*Hint: You can click on any image to see a larger version.*

### START A PROJECT

-Create a new project by clicking "File" and "New" -Import external scan points by going to "Insert" and "Import"

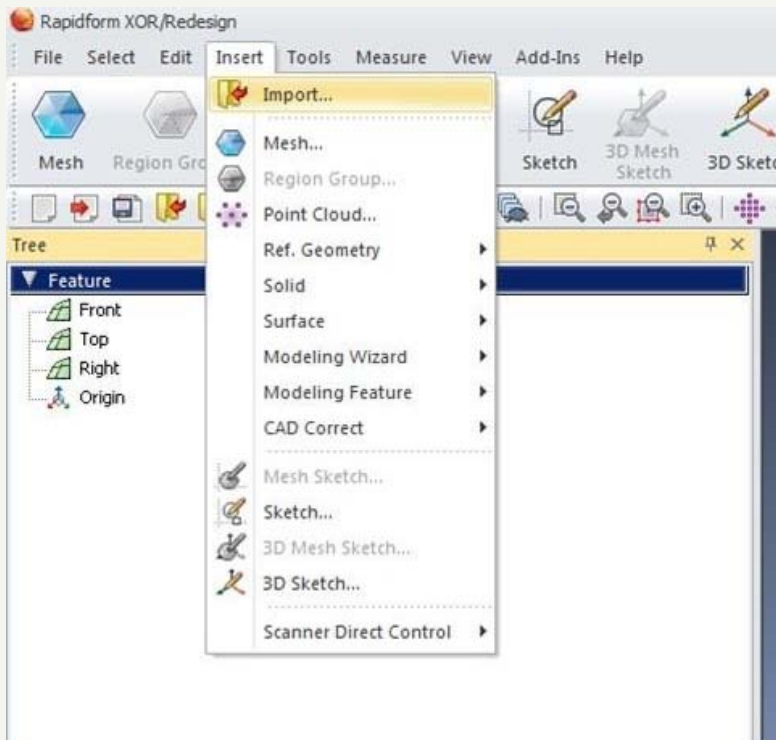


Fig. 5: Import Data into Rapidform

### SELECT A FILE TO IMPORT

-Select the file containing scan data which you wish to import. For a list of valid file types, open the "Files of Types" dropdown menu.

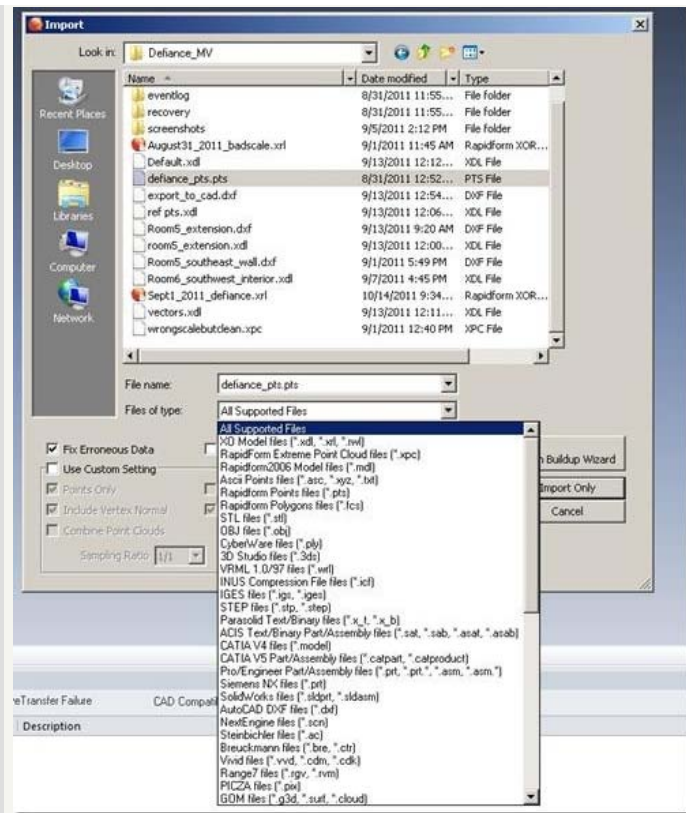


Fig. 6: Supported file types are listed in the import menu dropdown.

## IMPORT ONLY OR MESH ON IMPORT?

Decide whether or not you want to mesh your data now. If you want to inspect your data before meshing, select **“Import only”**. If this is the first time you’re working with the dataset, **“Import only”** is probably a good idea.

## SET THE SCAN RANGE

Set the Valid Scan Range to zero to import all the data.

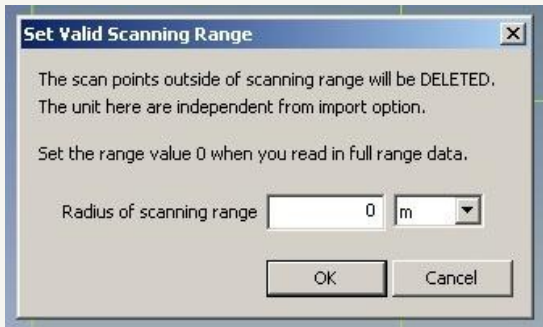


Fig. 7:Setting the Valid Scan Range.

## CONFIRM THE SCALE AND THE UNITS

Confirm that your data is imported at the correct scale and make any necessary adjustments by setting the "Unit" value.

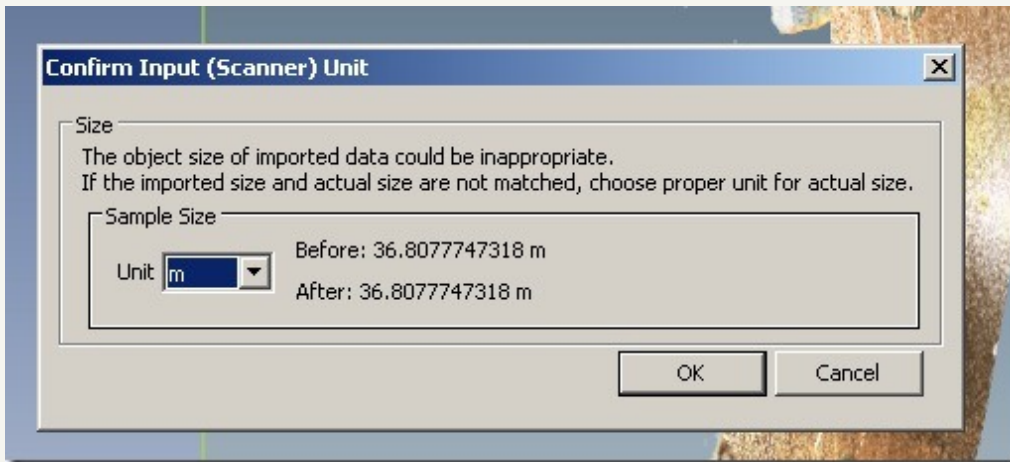


Fig. 8: Input values should always be checked at the start of a project.

## CHECK THE ALIGNMENT

Check the alignment of the scan data and adjust if necessary. A common adjustment is forcing Z to be up. Adjusting the alignment will allow you to use the "Viewport" buttons intuitively because the "Top" viewport will show your data from the top.

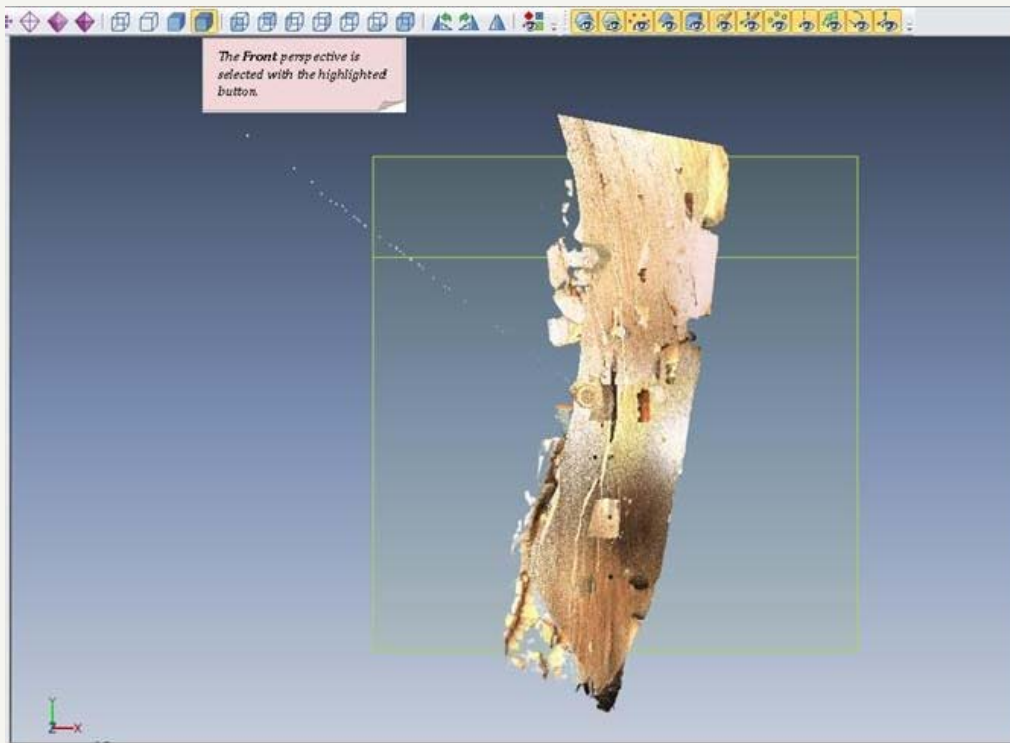


Fig. 9: The scan is misaligned when first imported. The front perspective shows a view from the top in this figure.

## INTERACTIVE ALIGNMENT WIZARD STEP 1

Looking at the scan data from the **Front** perspective the model is incorrectly aligned.

Use the interactive alignment wizard to change this by going to “Tools” and choosing “Align” and “Interactive alignment”.

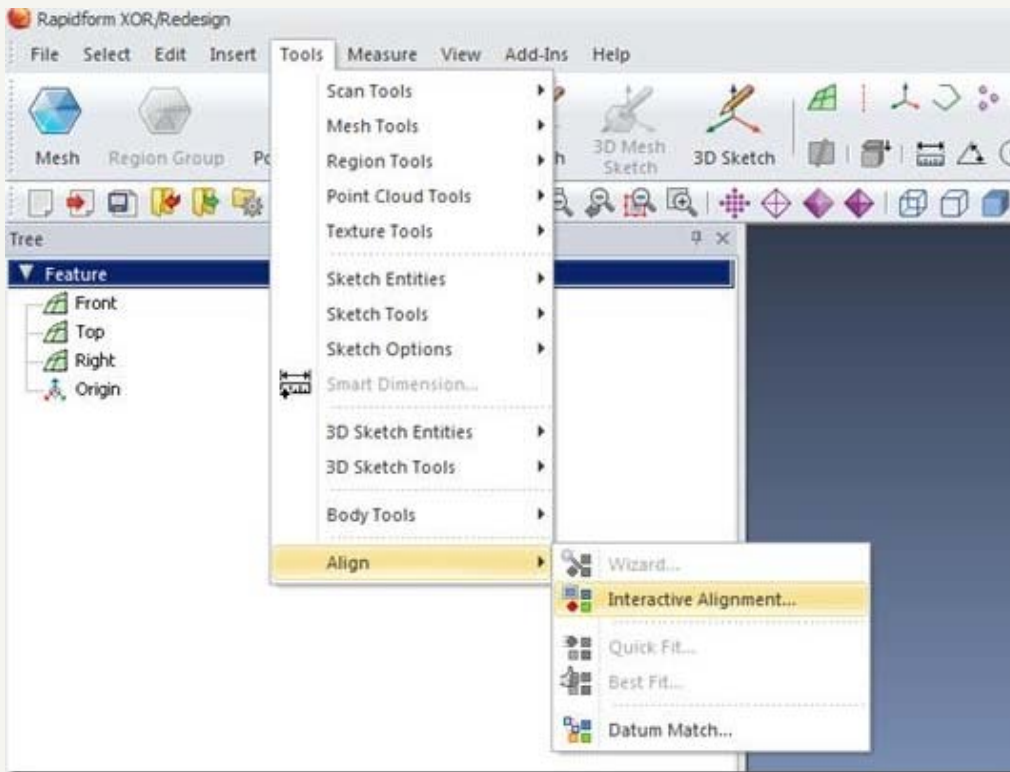


Fig. 10: The Interactive Alignment tool.

## INTERACTIVE ALIGNMENT WIZARD STEP 2

Select and move the **x, y, and z axes** in the **left-hand window** to adjust the alignment of the scan data. Your adjustments will be reflected in the **right-hand window**. When you are satisfied with your changes, click the “**check**” button.

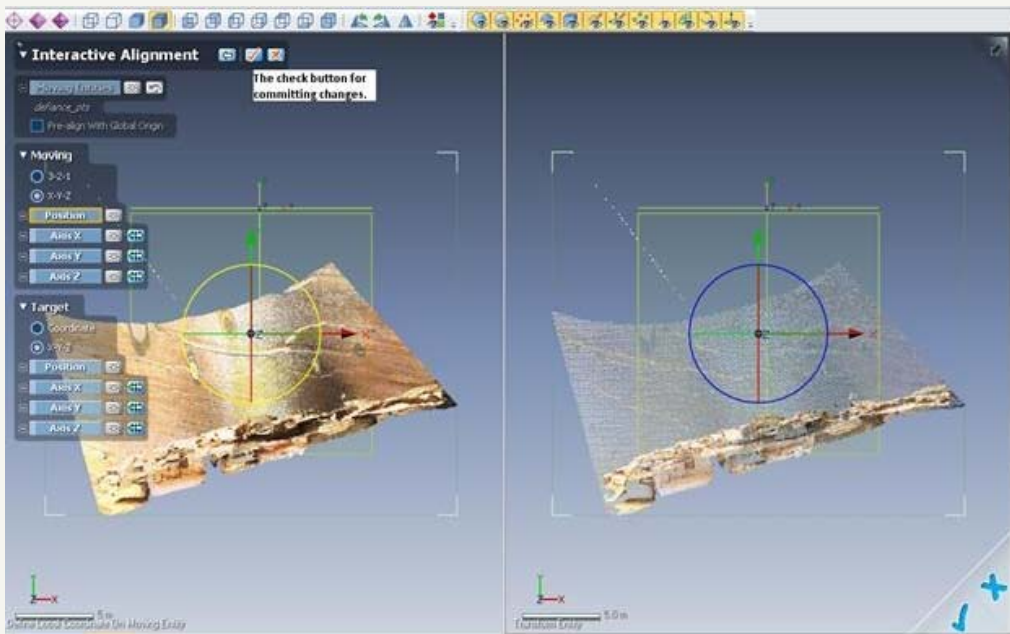


Fig. 11: Navigation in the Interactive Alignment tool.

## CONTINUE TO GENERATING A MESH

Now that your scan data is properly imported, scaled and aligned you are ready to generate a mesh. Continue to [Generating a Mesh in Rapidform](#).



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