Document Browser 1

In this task we introduce Product Data Management (PDM). First we will quickly create the **New Model** Pinion Flange, then create a Archive using the **Document Browser** and store a reference of the part file in that Archive. Then we'll use the **Find Documents** command to search and retrieve the part file from the Archive.

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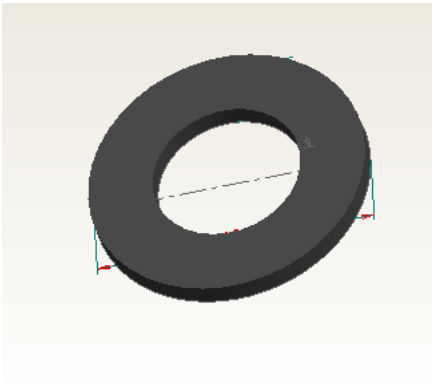
1. Step 1: Flatten that tube

We really don't want to waste a lot of time creating the pinion flange, since the point of this task is to learn about the **Document Browser**. To help speed things along, we'll use a Smart Objects.

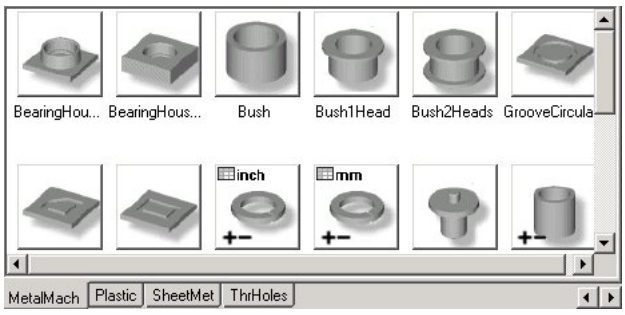


Let's get ready.

- Start a **New Model** and set the units to millimeters.
- From the Attribute toolbar change the **Color** to Black.

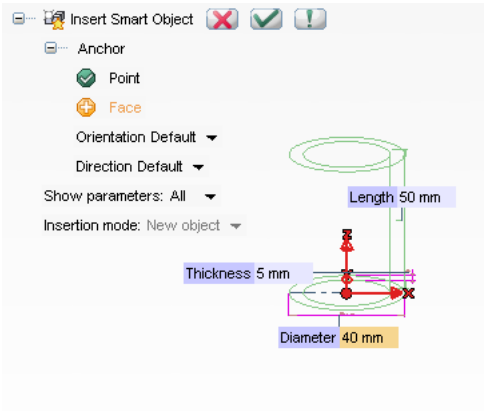
We're going to want to pick out a Smart Object.

- Bring up the **Smart Object Library**
- Click on the MetalMach tab.



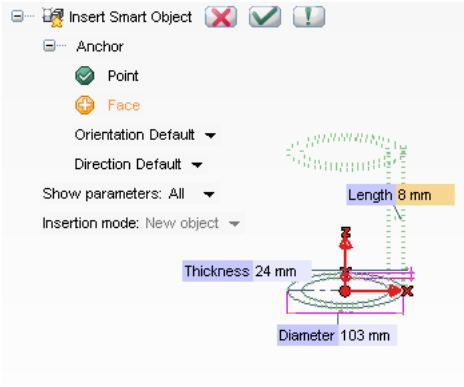
Since the flange is shaped very much like a washer, a flattened tube is the most suitable shape to create the solid.

- Scroll down and locate the ShaftHollow Smart Object.
- Drag and drop the shaft into the workspace. Pick any point.
- Select All from the Show Param: option is the Selection List.



All that's left now is to modify the exposed parameters.

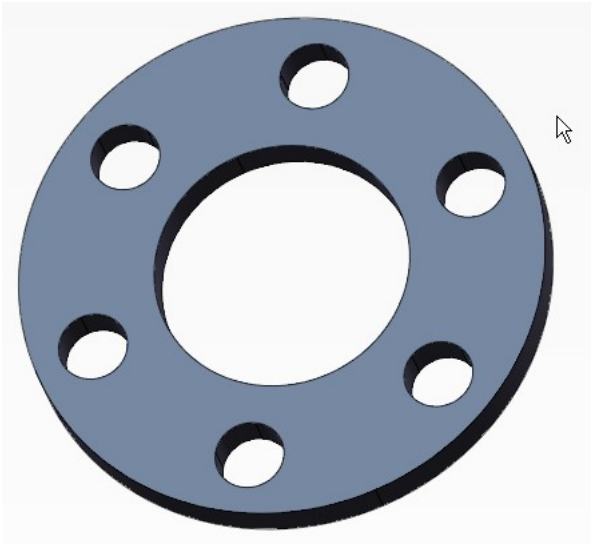
- Set the Diameter to 103 mm Diameter103
- Set the Thickness to 24 mm. Thickness24
- Set the Length to 8 mm. Length8
- Click OK and close the **Smart Object Library**



All right, we're halfway done creating the flange. Let's move on to adding features.

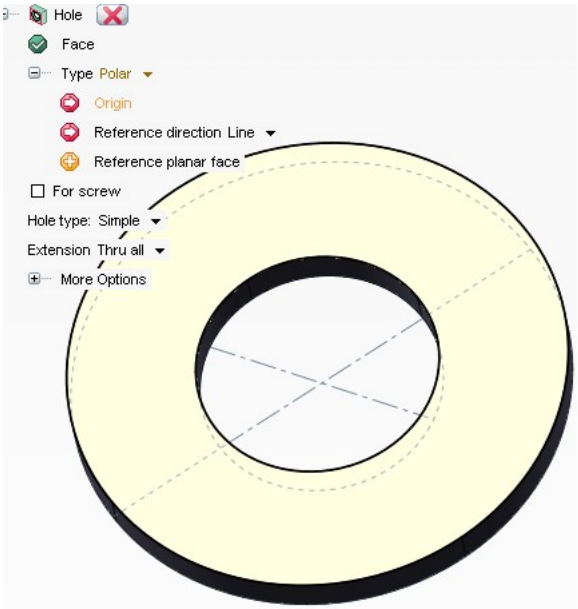
2. Step 2: Turn it into Swiss Cheese

In this step we'll finish the flange by adding a hole feature and then patterning the feature. Child's play right?



Start off by adding a hole to the top of the flange.

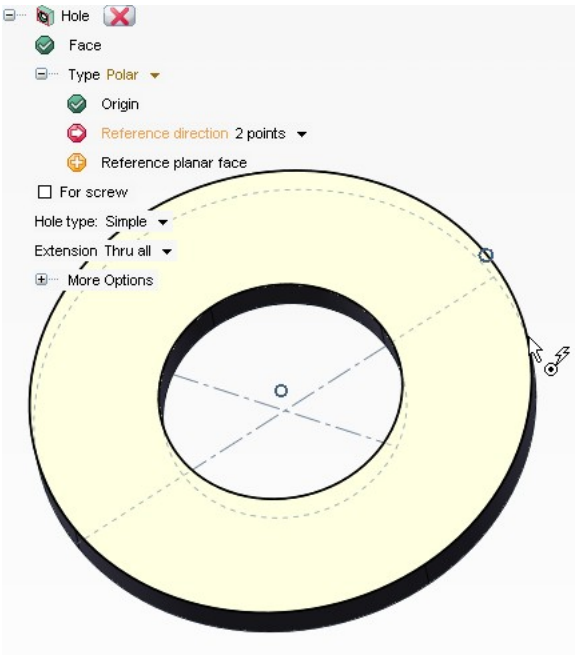
- Start **Hole** command.
- Click the top surface for the Face.
- Change the point Type: to Polar.



Now position the hole using the polar coordinate parameters.

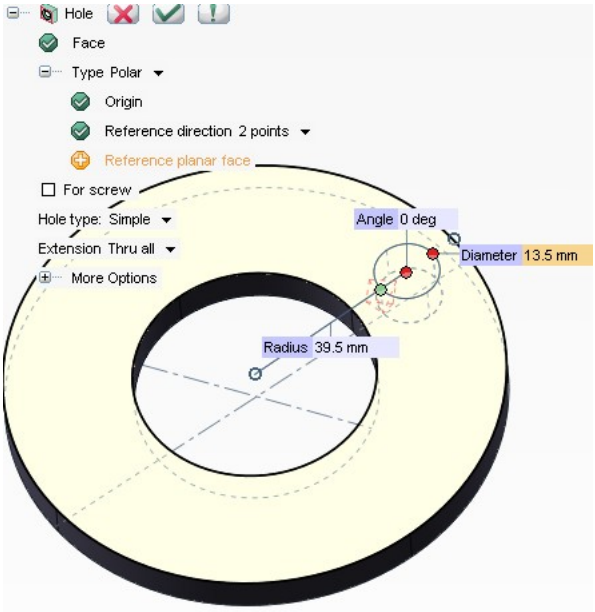
- For the Origin, pick the center point of the flange.
- Change the Reference Direction to 2 Points.
- Pick the center point again, followed by the edge start point.

Use End Point snap to help you pick the second point.



Next set the parameters to complete the command.

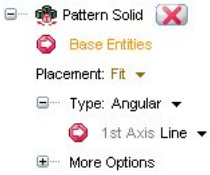
- Set the Radius to 39.5 mm. Radius39.5
- Set the Angle to 0 mm. Angle0
- Set the Diameter to 13.5 mm. Diameter13.5
- Hit OK.



Let's add some more holes around the surface by creating an angular pattern. Instead of a fixed placement we'll use a fitted one.

- Start **Pattern Solid** command.
- Change the Type to Angular.

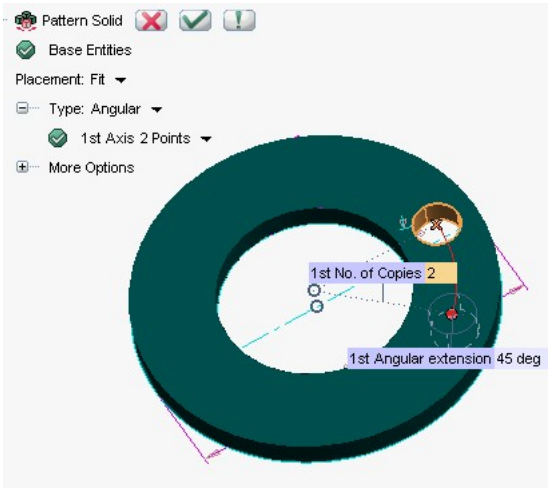
- Change the Placement to Fit.



Next pick the entity and the axis around which to pattern the entity.

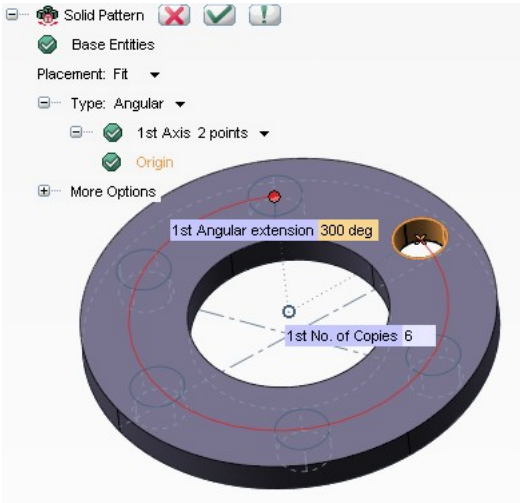
- Pick the hole for one of the Base Entities.
- Change the 1st Axis to 2 Points.
- Pick the two center points of the top and bottom surfaces.

Use **Snap to Arc Center** to help you pick the point.



Finally fill in the mini-dialogs with the correct values to create six equally-spaced holes around the flange.

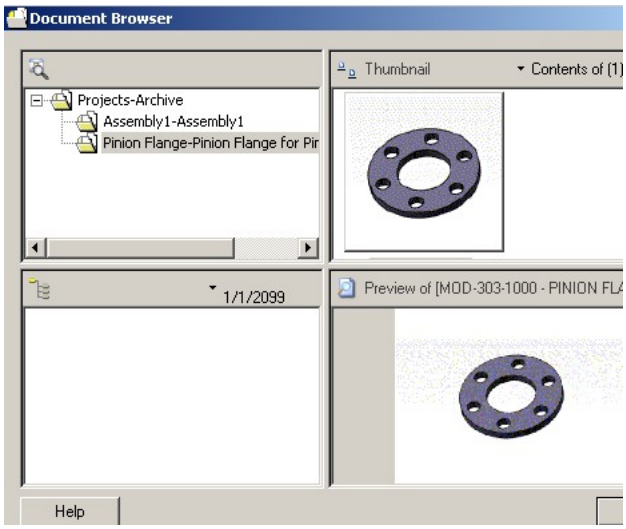
- Set 1st Number of Copies to 6. 1st Number of Copies6
- Set 1st Angular Extension to 300 deg. 1st Angular Extension300
- Hit OK.



There we go. We're all done with the part. Now wasn't that fast?

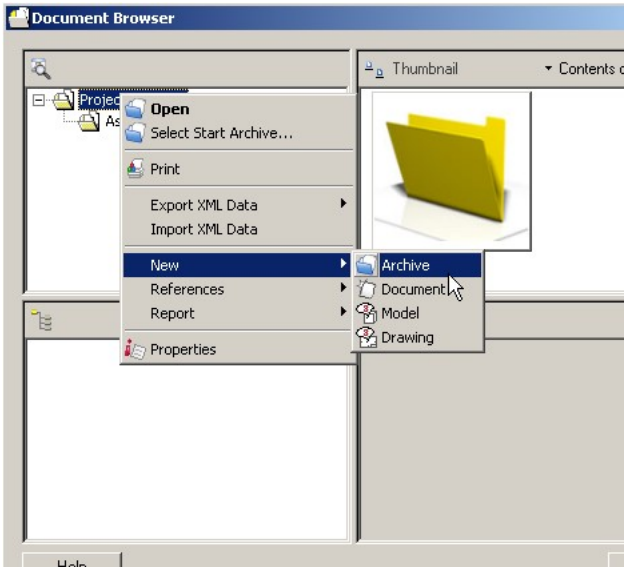
3. Step 3: The Document Browser

Often what you model will be made up of more than one part. In addition to the many part files you create, you may also have accompanying ../../../Documents like drawings and specifications. How do you manage all this data? That's where the **Document Browser** comes in. It allows you to create Archives and store files — technically references to files — within each Archive. In this step we'll create a new Archive and save the pinion flange into it.



Open the **Document Browser** from thinkteam toolbar.

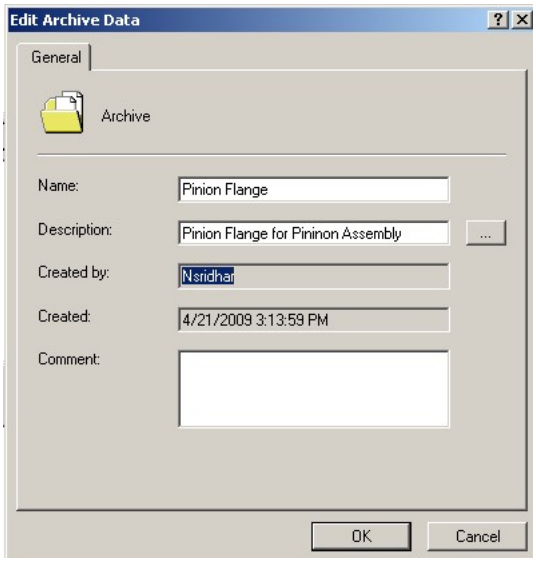
- Right click on Projects-Archive.
- Select New > Archinve



In the Archive Properties dialog:

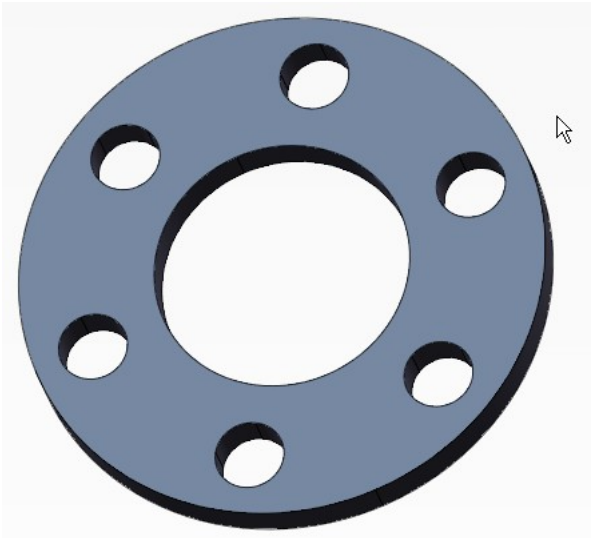
- Set Name: Pinion Flange.
- Set Description: Pinion Flange for Pinion Assembly.
- Hit OK.

The Created by and Created fields are automatically defined. The username should look very familiar.



Prep the model for saving. We do this because the preview image is based on the current display settings, including what's visible, which rendering mode is used, and the orientation.

- Switch back to the model by Minimizing the **Document Browser** window.
- Use **Select All**.
- Hit **View**→**Hide Entities**.
- Hit **View**→**Unhide Entities**and select only the Pinion flange and nothing else as shown in the image below.



Now save the file into the Archive.

- Pull down **Save into Archive** command from thinkteam menu.

The **Save into Archive** dialog appears.

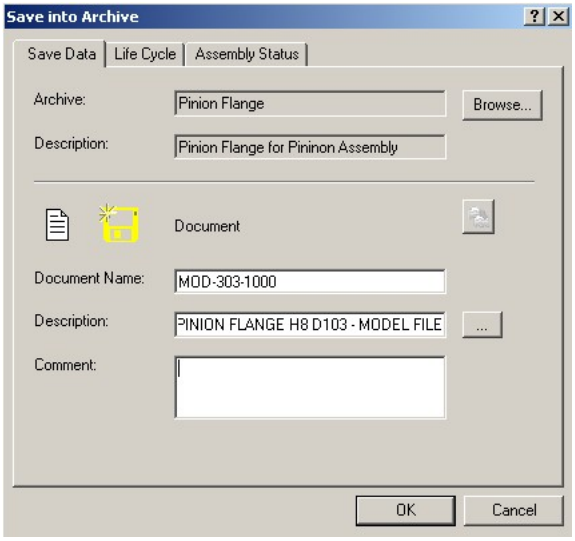
- In the Save into Archive dialog, click Browse...

The Archive Pinion Flange should be listed here.

- Click the Pinion Flange Archive.
- Hit OK

Specify the part settings to complete the process.

- Set Name: to MOD-303-1000.
- Set Description: to PINION FLANGE H8 D103 - MODEL FILE.
- Hit OK to Save the file in the Archive.



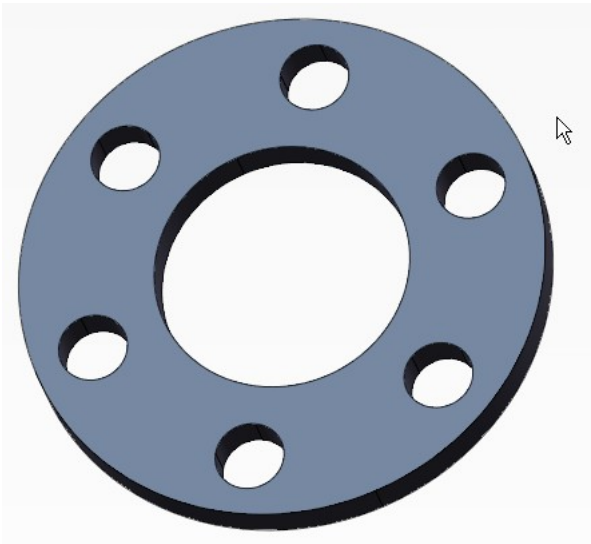
We're done modeling.

- **Close** the model.
- Close the **Document Browser**.

We're not quite done yet; in the last step we're going to learn how to locate files within a Archive.

4. Step 4: Where, o' where has my li'l part gone?

Did we end up losing the file? Hardly. The reference to the file stored in the **Document Browser** is fully searchable. We'll use the **Find ../Documents** command to locate the file in a couple of different ways.

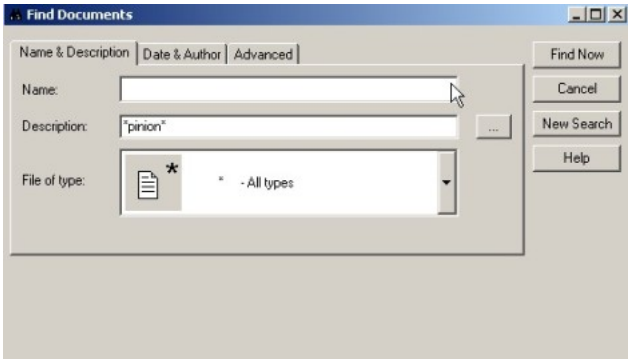


Now, let's retrieve our new model file.

- Activate **Find ../Documents** from thinkteam toolbar as shown in the image below.

You can now search by any of the fields shown in the **Find ../Documents** dialog. Wildcard characters (*) are permitted. Let's search by description.

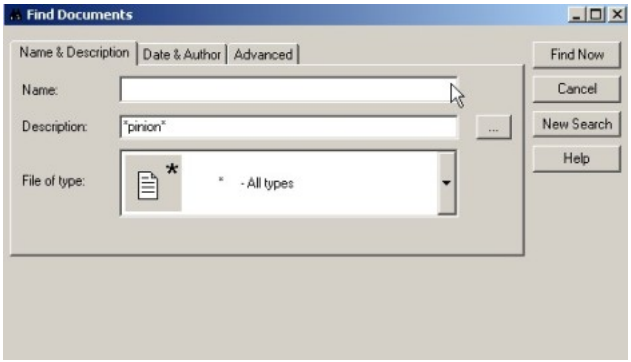
- Type *PINION* in the Description field.
- Click Find Now.



The search results will list all the model files that contain PINION somewhere in the Description field. The wildcard character (*) matches any text before and after the word PINION. That's why there may be more than one file found. Now examine the search results.

- Move your cursor over each thumbnail image.

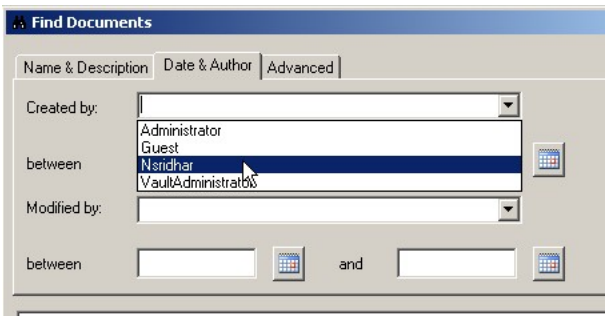
The tool tip is each item's Description field.



You can also search for models by date or author.

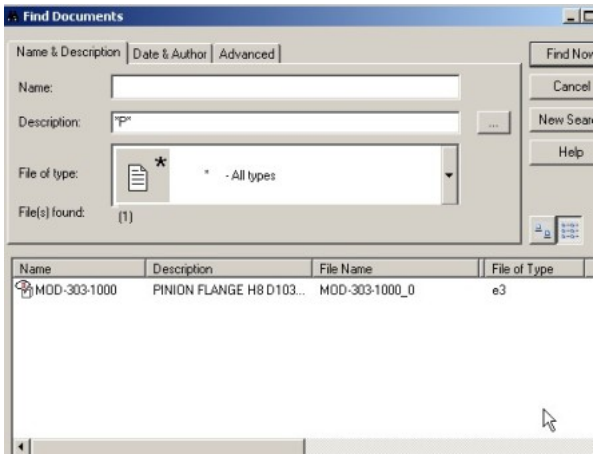
- Click the Date & Author tab.
- In the Created by field click the down arrow.
- Select your user name.
- Hit Find Now.

There's the model you created in this task.



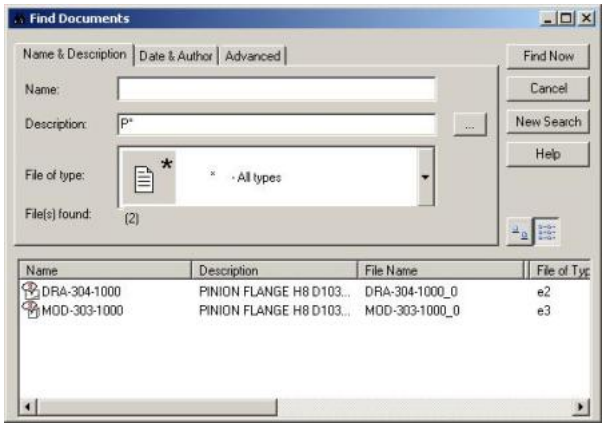
Do a new search.

- Close the **Find ../Documents** dialog box and start the command again.
- Type *P* in the Description field.
- Click Find Now.



This last search returns all the files with the description starting with P. This gives us an opportunity to use another view where you don't have to see the preview icons. The search results can be presented as a scrollable list instead.

- Click the List button.

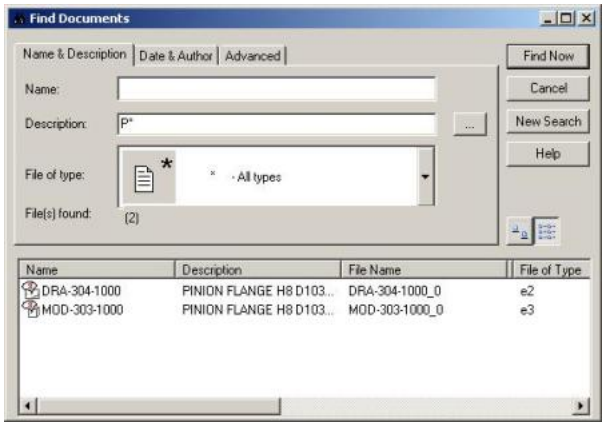


You can change the size of columns.

- Drag the column divider between Created by and Modified by.

- Double click on the column divider between File Type and Created by.

It sizes for the longest entry in the column, standard Windows behavior.

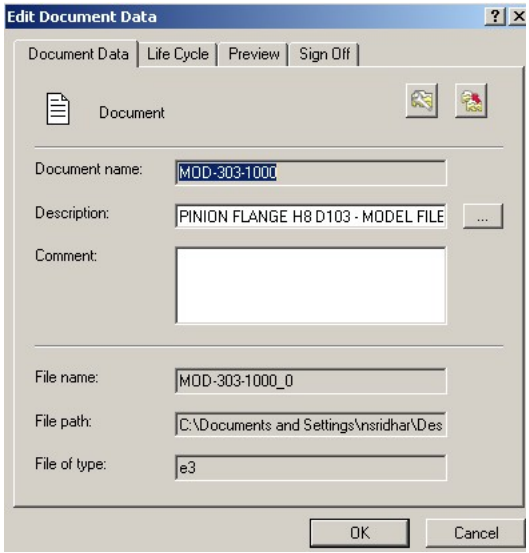


You can also access a document's properties. (This also works in Browser view when you see the icons.)

- Right click on PINION FLANGE H8 D103...
- Select **Properties**

You can use the Document Properties dialog to edit the data, except for the grayed out Document name:.

- If you want to see a preview of the model, click the Preview tab.
- Hit Cancel.



Finally, open the file.

- Right click on PINION FLANGE H8 D103...
- Choose Open - Full Detail.
- And Close the **Find ../Documents** dialog box.

There's the part. And we're done!