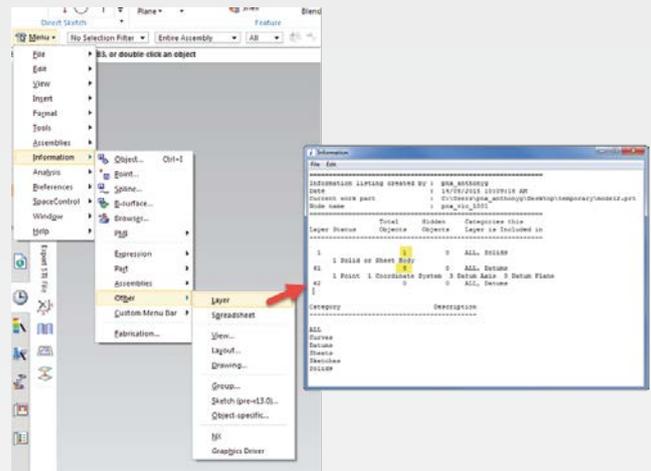


Where are my objects?

We sometimes hear from customers that open a NX part and are unable to see anything. This usually happens when opening up parts from someone else or after an import.

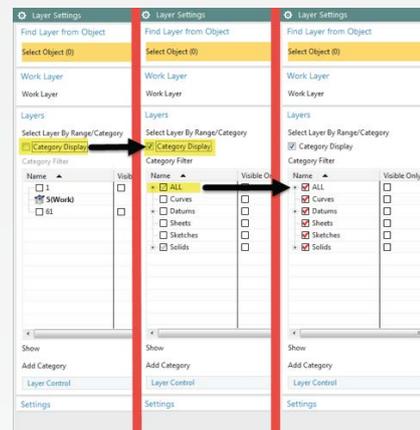
1. Check

First thing is to make sure that there is something in the part. Information -> Other -> Layer, will list the layers and any objects that may exist.



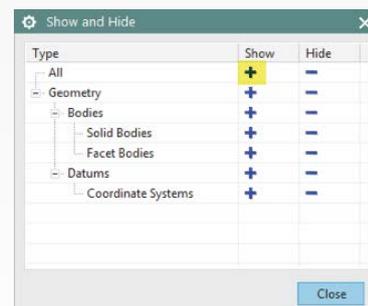
2. Layers

Turn on the layers that have the objects. Control L or Format -> Layer Settings will give you the Layers Settings dialog, where you can turn layers on or off. Tick on 'Category Display' and you can then enable 'All' to turn on all layers.



3. Show/Hide (Blank/Un-blank)

Make sure the objects aren't hidden. Control W will bring up the 'Show and Hide' dialog. Click the + next to 'All' to show all objects possible.

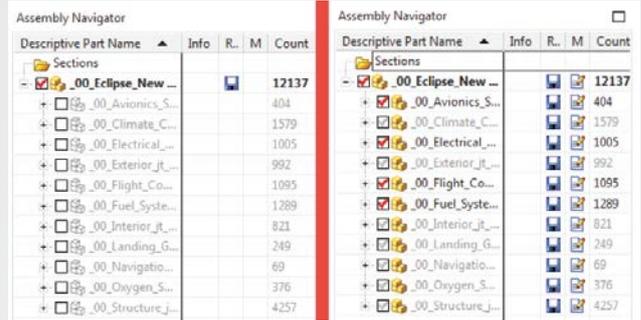


4. Assemblies – Loaded/Unloaded

Check the Assembly Navigator. It may be that the components are not loaded.

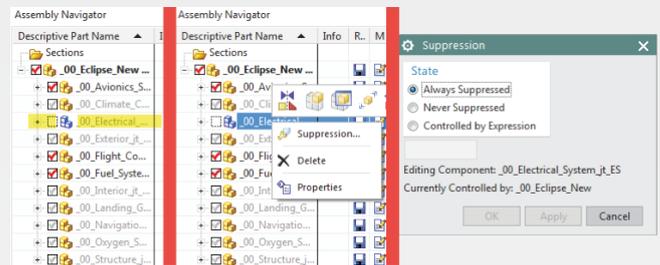
If the components are not ticked, then they aren't loaded. Tick them to load. You may get an error message saying it can't load parts (you should've gotten it when opening originally). If this is the case, you need to look at your load options (time for another tip).

If they are Ticked Grey they are hidden from view. Tick them to display them.



5. Assemblies – Suppression

It's also possible that components/assemblies are suppressed. The icon will be blue. RMB the component and you can edit the suppression status.



6. Assemblies – Reference Sets

Reference sets are essentially filters for objects at the assembly level. Primary reasons they are used:

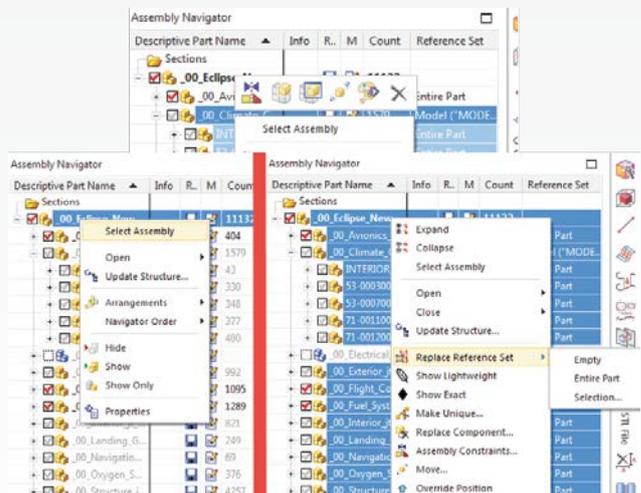
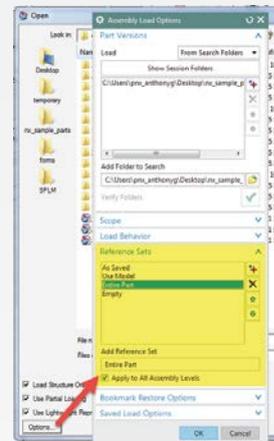
- Filter unwanted objects in a component part so that they do not appear in the assembly.
- Represent a component part in the assembly with alternative or simpler geometry than the complete solid body

Because of this they can also be the main reason why things aren't visible when working with assemblies.

Simplest solution is use the 'Entire Part' reference set when loading the assembly. On the File -> Open dialog, click on 'Options' at the bottom. You can then move the 'Entire Part' reference set up, using the arrows. This will then load the assembly with all possible objects displayed.

If the assembly is already loaded, RMB the component, you can then 'Replace Reference Set' and select the 'Entire Part'.

To do the whole assembly at once, RMB the top level and 'Select Assembly'. Once selected, RMB again and you can 'Replace Reference Set' for all parts.

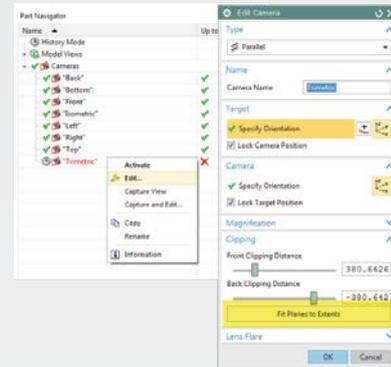


7. Fit

Sometimes view may be zoomed in or out so objects aren't visible. Control F or View -> Operation -> Fit will fit the view to all visible objects.

8. Clipping Planes

NX has clipping planes which limits a view to what is visible between the front and back clipping plane. A Fit View (see above) will fix, but you can also reset the clipping planes. RMB the camera in the Part Navigator, select 'Edit' and you can then 'Fit Planes to Extents'.



9. Size/Position/Scale

NX has a maximum 'modeling space/volume' of 1000m x 1000m x 1000m. This is a hard coded boundary in the Parasolid kernel.

All bodies must be within this 1000 meter a side cube, centered about the origin of the absolute coordinate system.

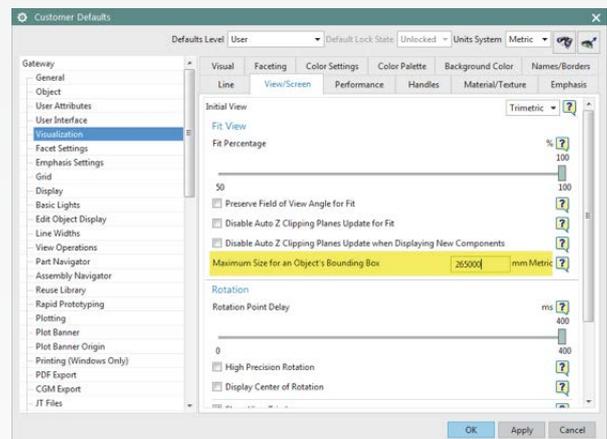
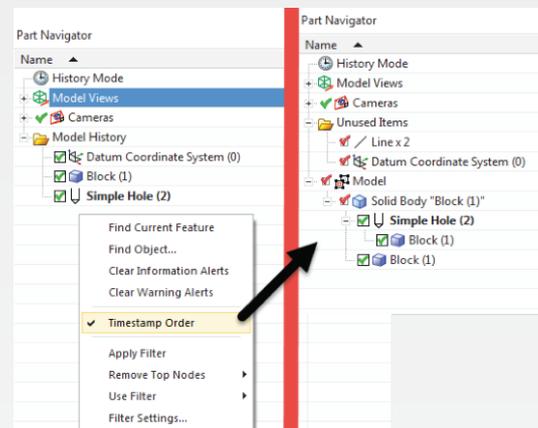
Sometimes objects can be at the extents of this space, so the objects are visible, it's just they are so far apart after doing a fit, they can't be seen. Control A will do a 'Select All' of the displayed objects. Check the status line to see if anything is selected.

You can also change the Part Navigator to non-timestamp mode (RMB in the navigator and select 'Timestamp Order').

This will list all objects an unused items in the part.

It's also possible that the object is too large for the maximum box. This can happen when reading in DXFs created in inches into a mm part.

File -> Utilities -> Customer Defaults then browse to Gateway -> Visualization -> View/Screen (tab). Increasing the value for 'Maximum Size for an Object's Bounding Box', will allow the fit & selection of those objects to possibly work (assuming the geometry isn't too large!).



10. Fit

We have seen examples where the visible objects are the same colour as the background! This usually comes about when someone's trying to play a trick on a fellow employee. Preferences -> Background and either change the background colour or turn on the Graduated backgrounds.

11. Visible in View

Views can be saved so that only certain layers are visible. Turning the layers on in the layer dialog explained earlier will not make them display, even when they are turned on.

To fix this, turn all the layers on as before. Format -> Layers Visible in View, then click the 'Reset to Global' to 'turn on' all active layers for that view. On the same dialog, you can double click the view name to see what layers are visible/invisible for that view.

Even after running through all the above suggestions, it's possible that none of them solve the issue. If that's the case, contact the PhoenixPLM helpdesk if you're in Australia or New Zealand.

