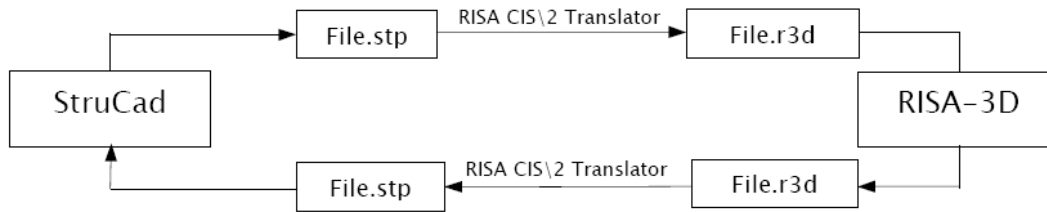


Linking to RISA-3D

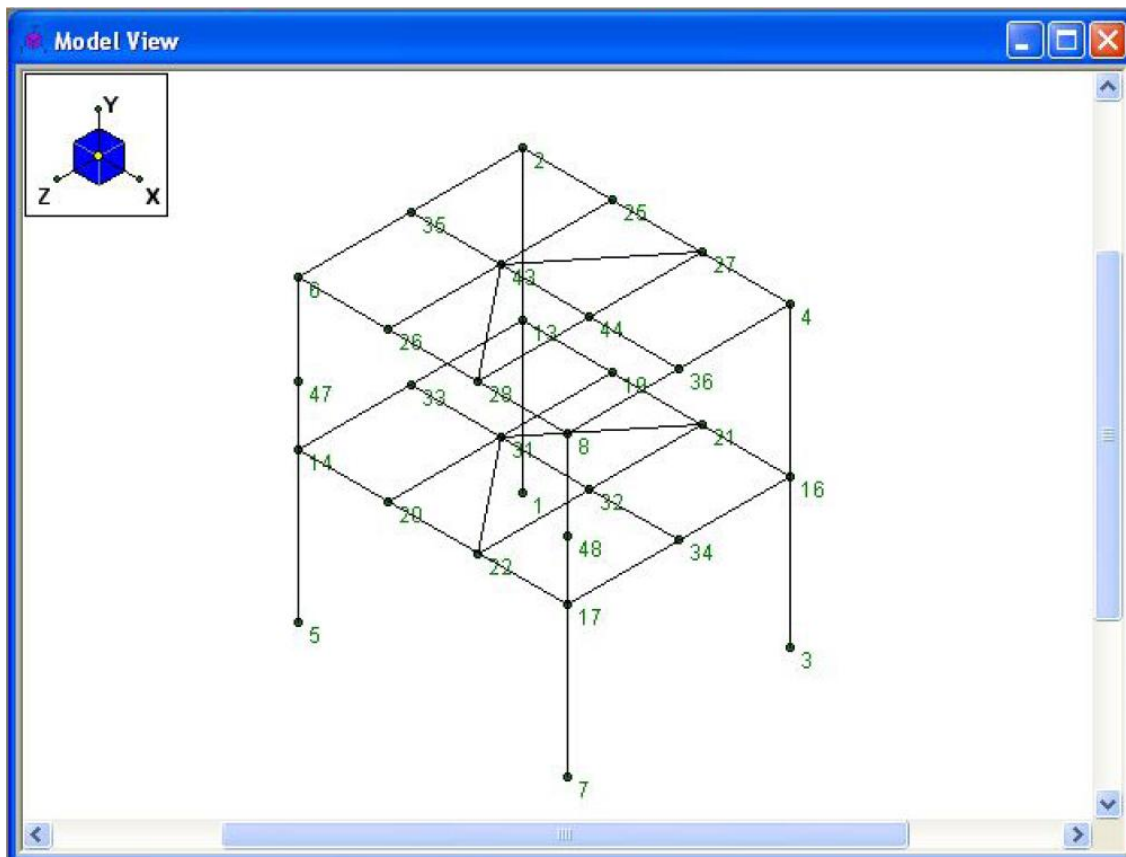
The CIS/2 Translator can be used as a bi-directional link between StruCad and RISA-3D or RISAFloor. The procedure is as follows:



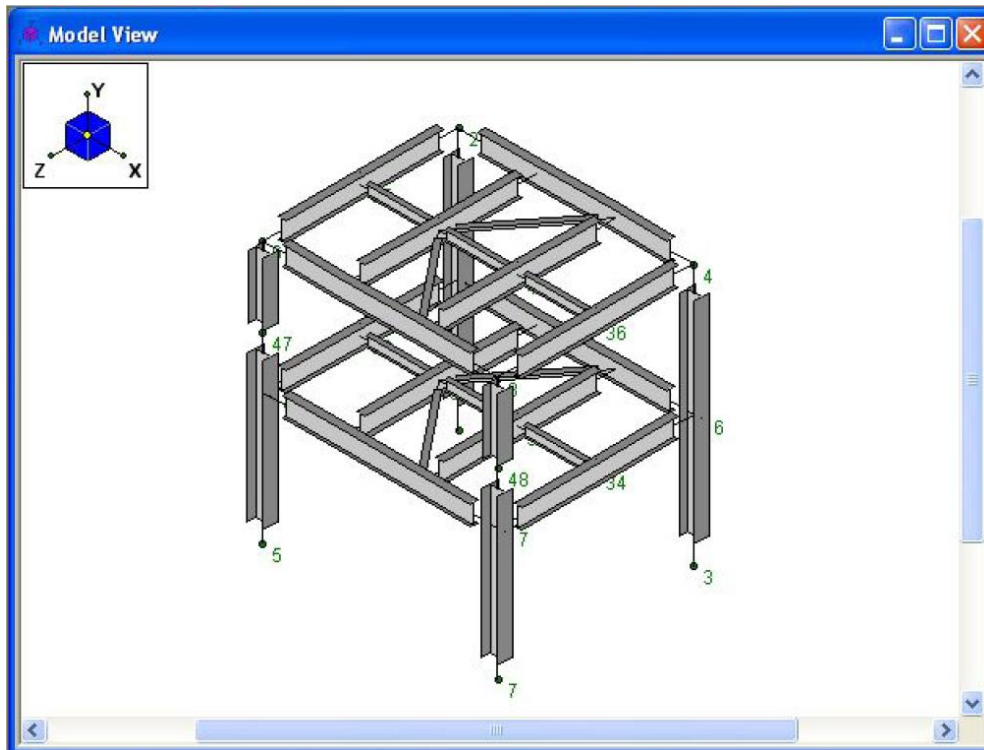
The wire-frame model can be built and analyzed in RISA-3D and then exported to StruCad for detailing. With most projects revisions are common, so when you re-export the .stp file with changes, StruCad will highlight these changes and allow the detailer to keep a history report in Excel. If needed, the model from StruCad can be re-exported back to RISA-3D for any final design checks.

Start with Designing the RISA-3D Model

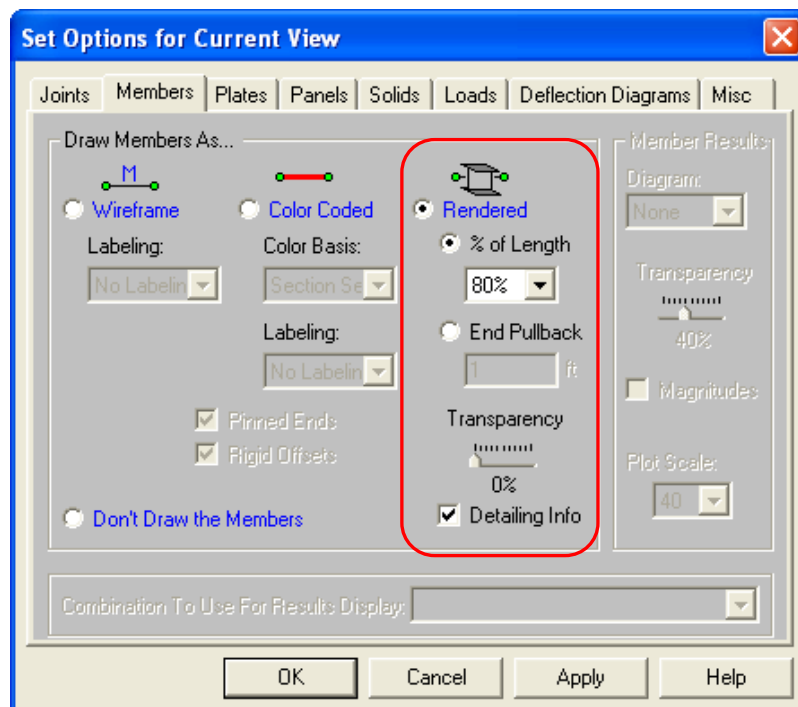
1. Start by creating the model in RISA-3D as shown below.



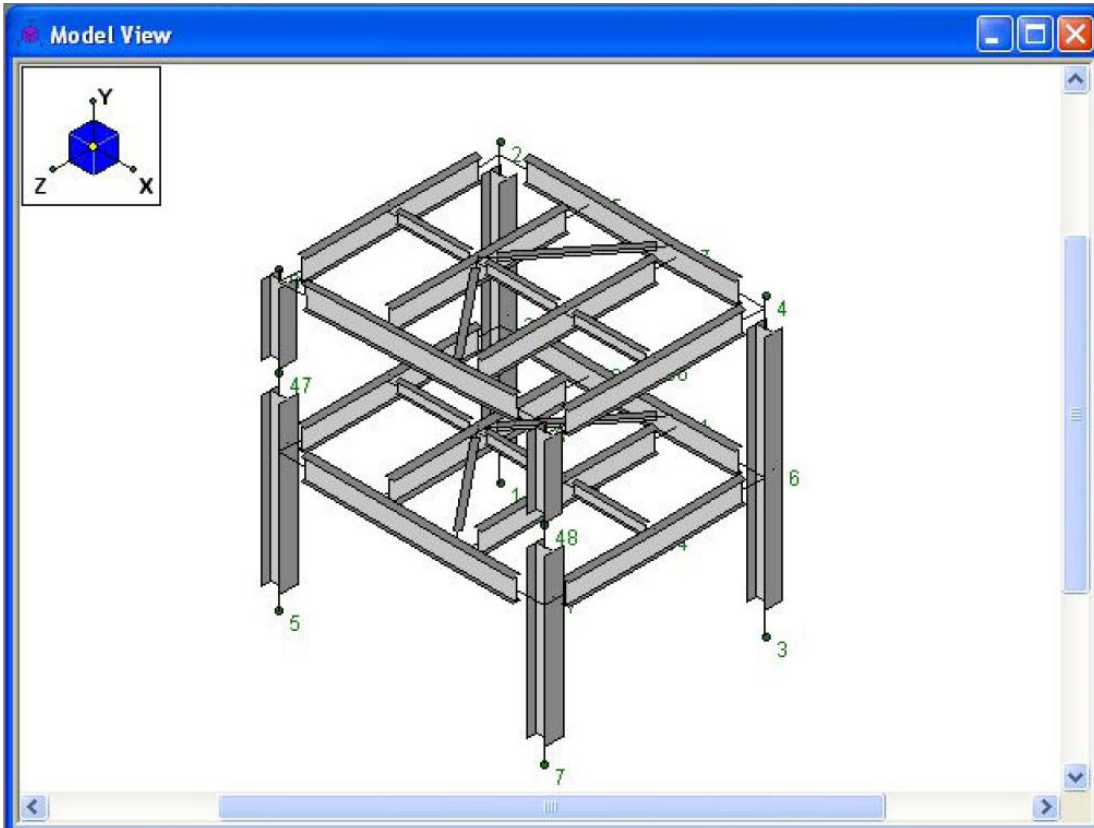
- When you turn on the rendered view in RISA-3D, you will see that the members are all drawn at their center-line locations.



- Turn on the rendered view by going to the **Set Options for Current View** dialog box. Open this dialog by selecting **Plot Options** from the **View** menu. Select the **Members** tab and click on **Rendered** under the **Draw Member As . . .** option. Finally, select the **Detailing Info** checkbox and click **OK**.

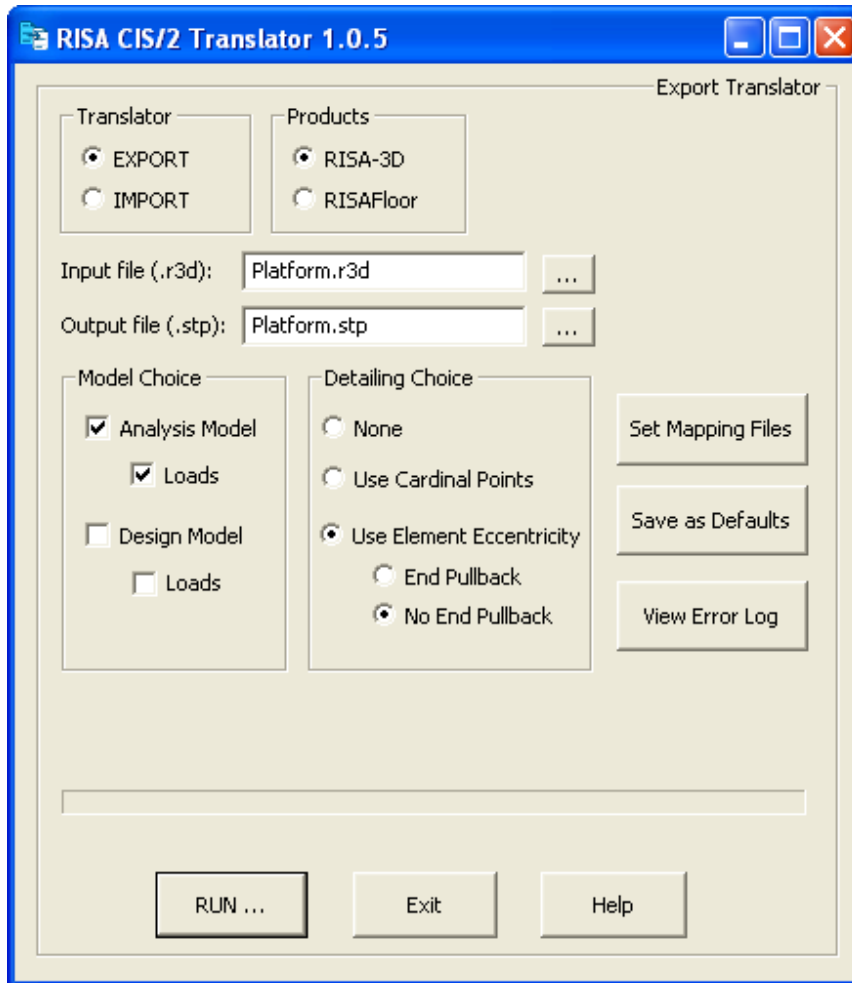


- The rendered model will now adjust to show the top of steel designation. Since RISA-3D always displays the model in reference to the member's centerline designations, turning on the **Detailing Info** now makes the members look like they are disconnected from the end nodes. However, we can confirm that the end nodes are located at the same location, so we know that this is just a limitation of the rendered graphic view.



Because of this, the RISA-3D user will typically work with the **Detailing Info** turned off.

- After the RISA-3D user completes the design of the superstructure model, they will save their work to a .r3d (RISA-3D) file. This is the file that can now be converted into a .stp file using the *CIS/2 Translator*.
- In order to do this, open the *CIS/2 Translator*, version 1.0.5 and select **Export** under the **Translator** option. Select **RISA-3D** under **Products** and click on the **Input file (.r3d) "..."** button to browse and select the .r3d file from step #5 above. You can leave the **Output file** blank, or specify the name of the output file that you would like created. Make sure that under **Model Choice**, you have **Analysis Model** and **Loads** selected. Under **Detailing Choice**, select **Use Element Eccentricity with No End Pullback**.



7. Click **OK** to run the *Translator*. After it completes the file translation, you can email the .stp file to the StruCad detailer.

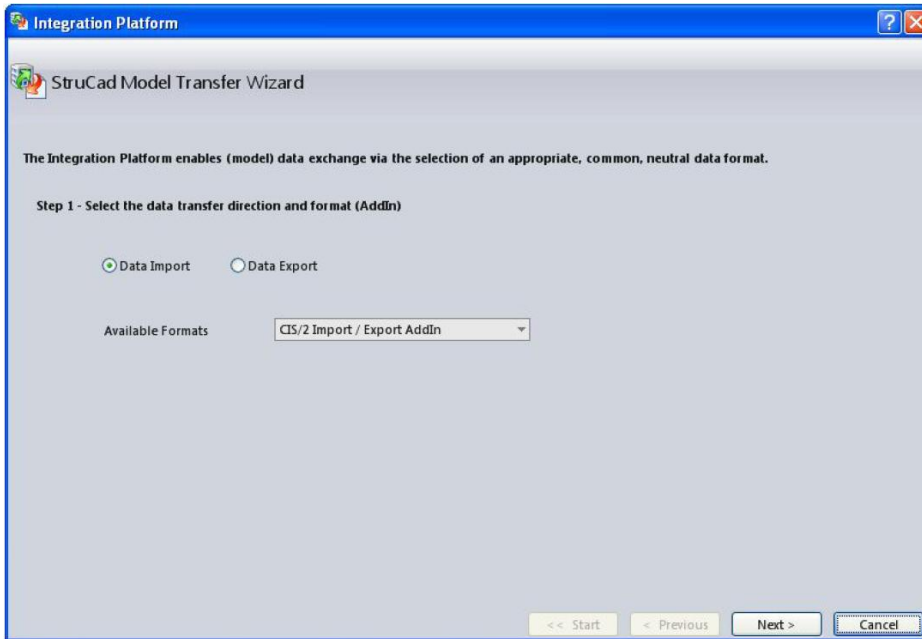
Importing the .stp File into StruCad

Once the StruCad detailer has the .stp file, they can follow the steps below to import the file into StruCad.

1. Open a new model and start the **Integration Platform** Wizard. Select **Model Import – Skip member selection**.



2. The Wizard will then ask what format we want to import. Select **Data Import** and **CIS/2 Import/Export AddIn** from the **Available Formats** menu.

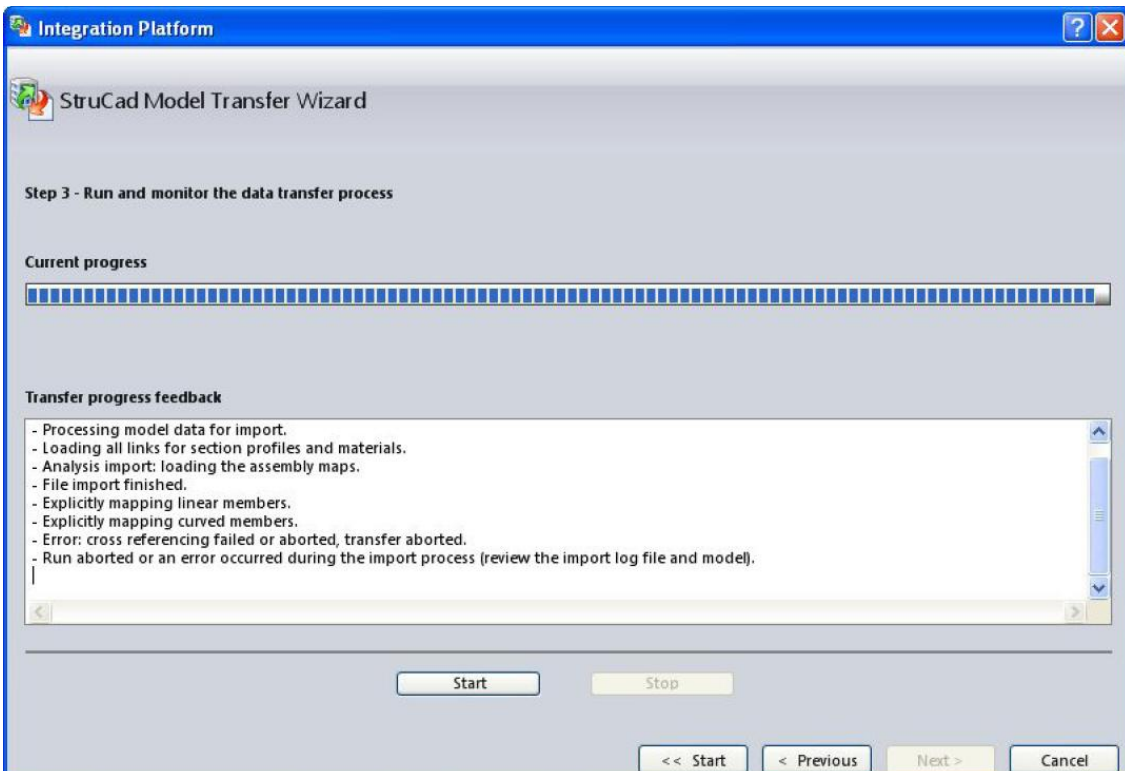


Click **Next**.

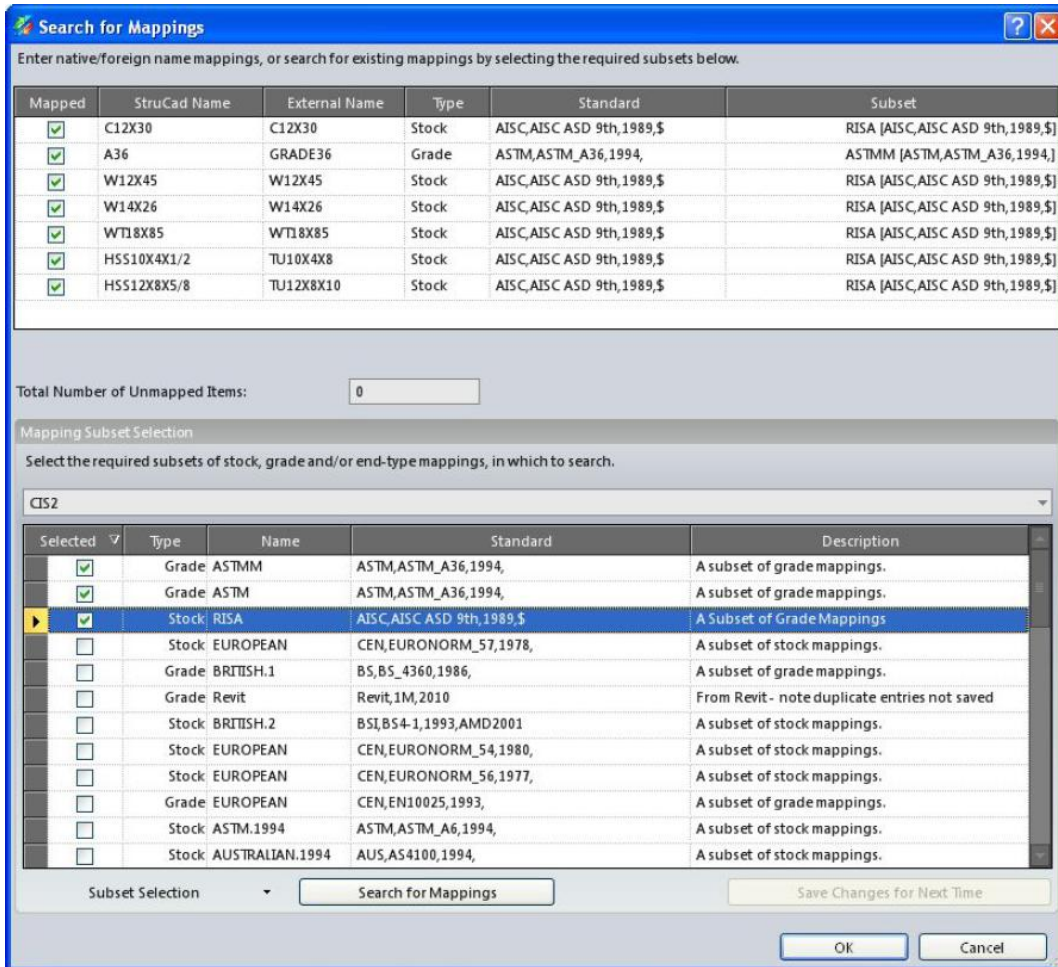
3. Browse to select the .stp file and then click **Next**.



4. Click **Start** to run the data transfer process.

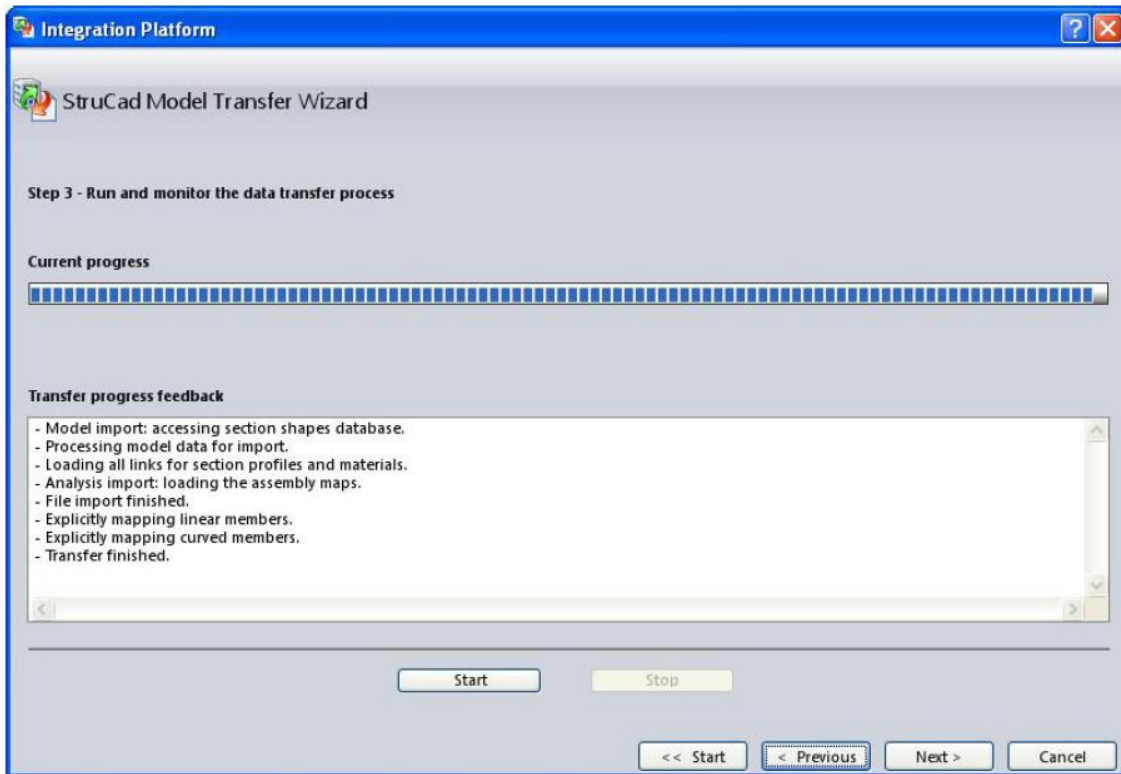


- When the transfer is complete, a menu will appear asking to map the stock sizes that are in the .stp file. The stock size mapping will already have a subset called off in the **Standard** column at the top. It looks through the list of available subsets in the bottom list to find a matching name. If one is found, the *Wizard* will automatically place a check mark in the mapped box.

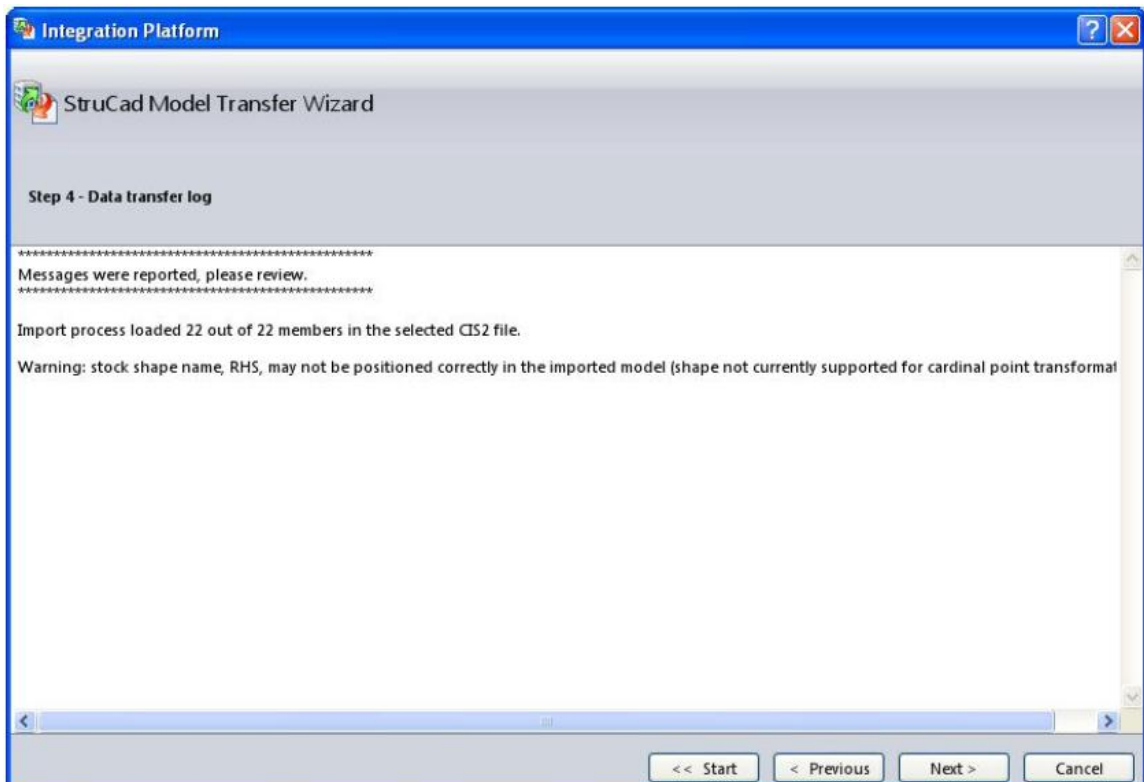


Click on **Search for Mappings** and it will look for any stock names and match it with the correct StruCad catalog name. Any stock sizes that could not be matched to a StruCad stock name will need to be picked from the existing StruCad catalog. After all the stock names and grades have been correctly matched click **OK** to return to Step 3 of the *Wizard*.

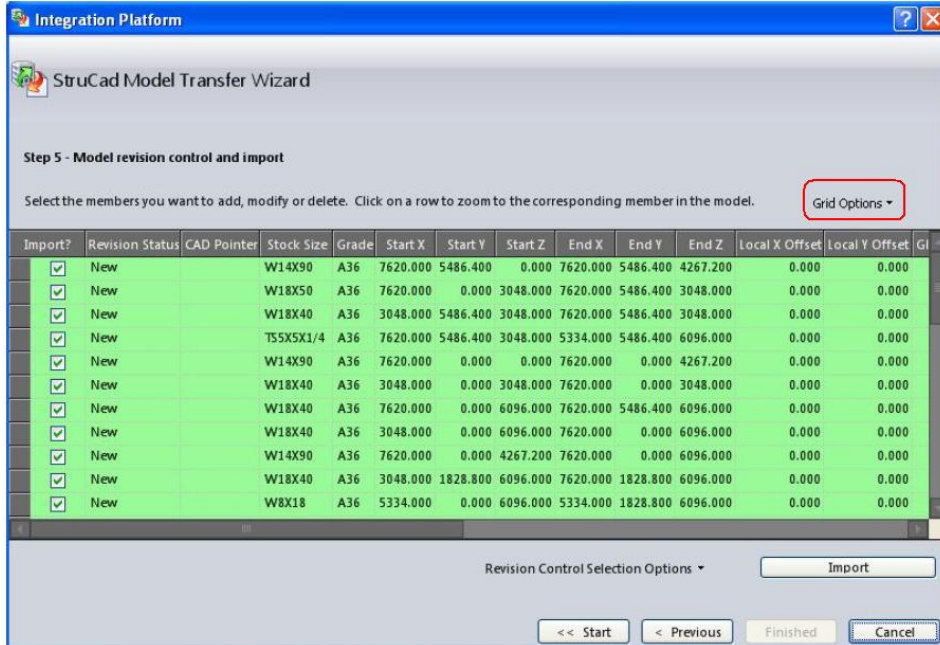
6. After you return to Step 3 of the *Import Wizard*, click on the **Next** button.



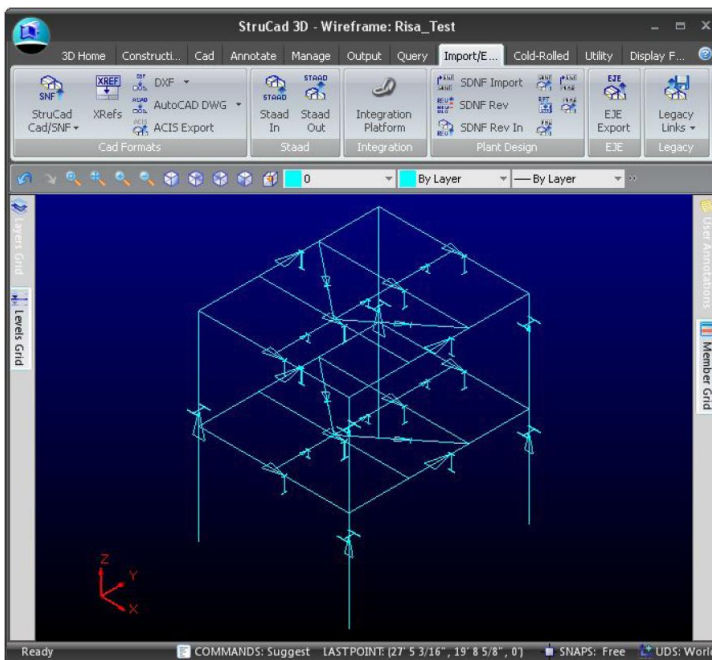
7. Next, you will be presented with the **Data transfer log**. This will show any errors that may have occurred during the transfer to StruCad. Click **Next** after you have reviewed the log.



- Next, a dialog box will open that shows the status of what is being transferred into the model. Keeping a history log of all imported items would be a good idea as the engineers will send revisions throughout the project. Simply click on **Grid Options** and export into Excel. Save this document as the original CIS/2 import and then click **Import**.



- The model finally imports into StruCad in the wireframe view. It appears exactly as the wireframe model did in RISA-3D. The members have been offset to the detailed location as indicated in the RISA-3D model.

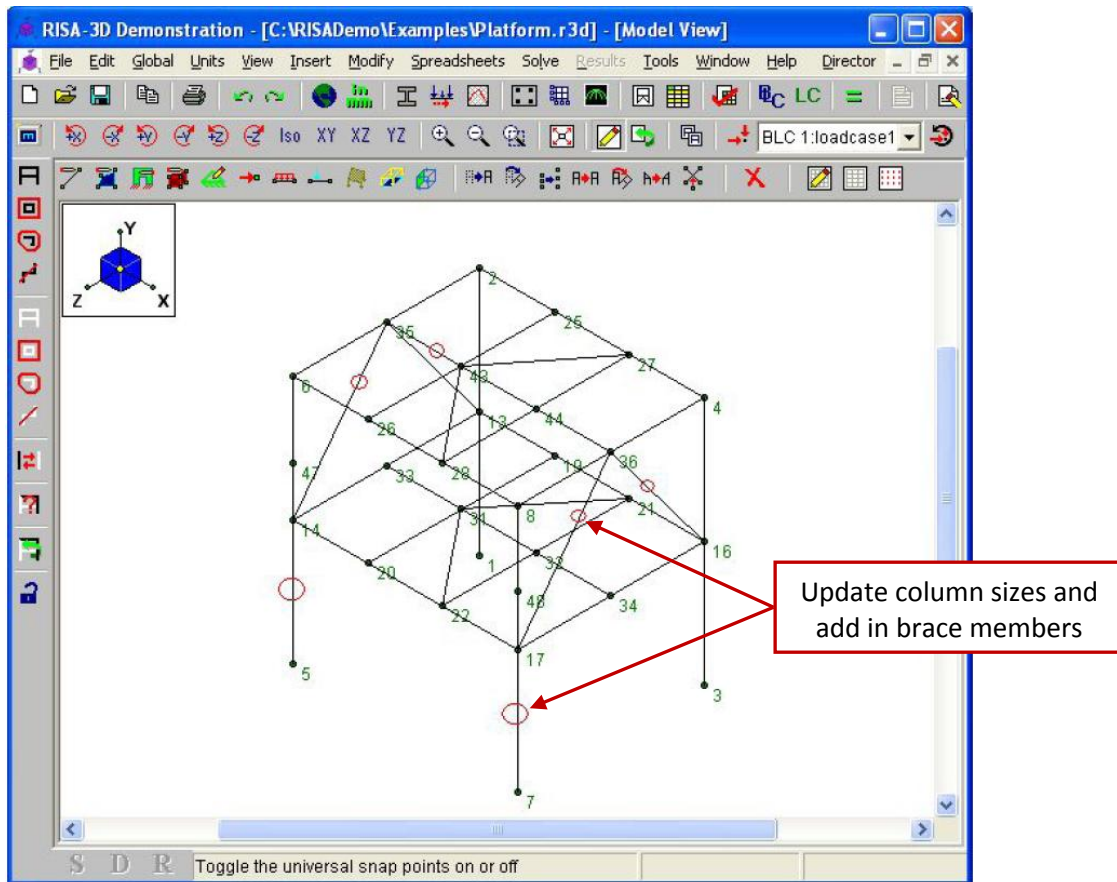


As the gridlines or layers and levels were not in the CIS/2 file, you will need to create them in StruCad.

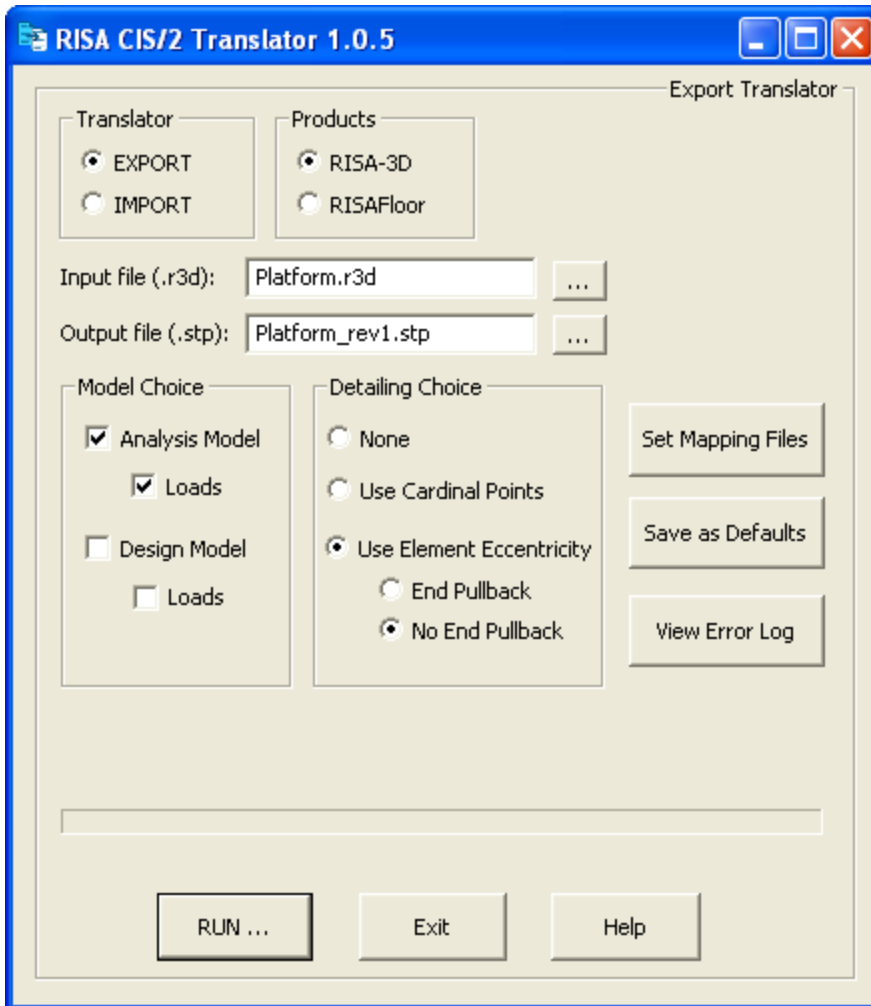
Importing Revisions from RISA-3D

If the RISA-3D user needs to make design changes to the original model which was already exported, simply make the changes then re-export the model using the CIS/2 .stp file similar to before.

1. The RISA-3D user will make the changes to the RISA-3D model and then save the .r3d file, same as done with the original file.



2. Next, re-open the **CIS/2 Translator** and create a second .stp export file. Note: it might be a good idea to save this file with a different name from the original. This will help keep the model revisions clearly separate as the engineer makes changes to the project.

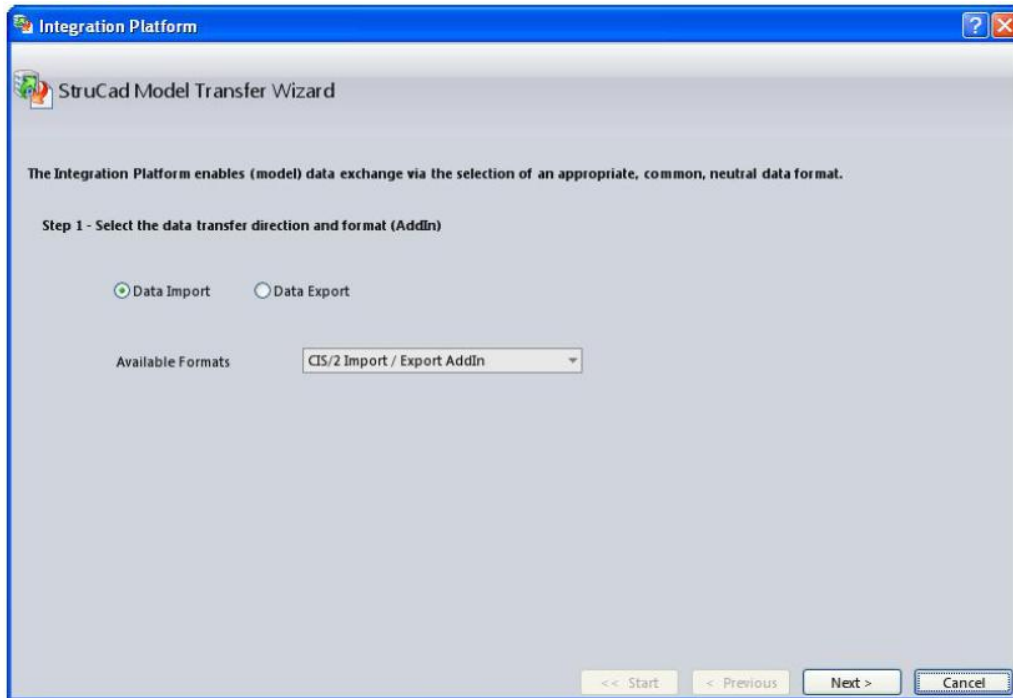


After the Translator finishes the second .stp file, this can be emailed to the StruCad detailer.

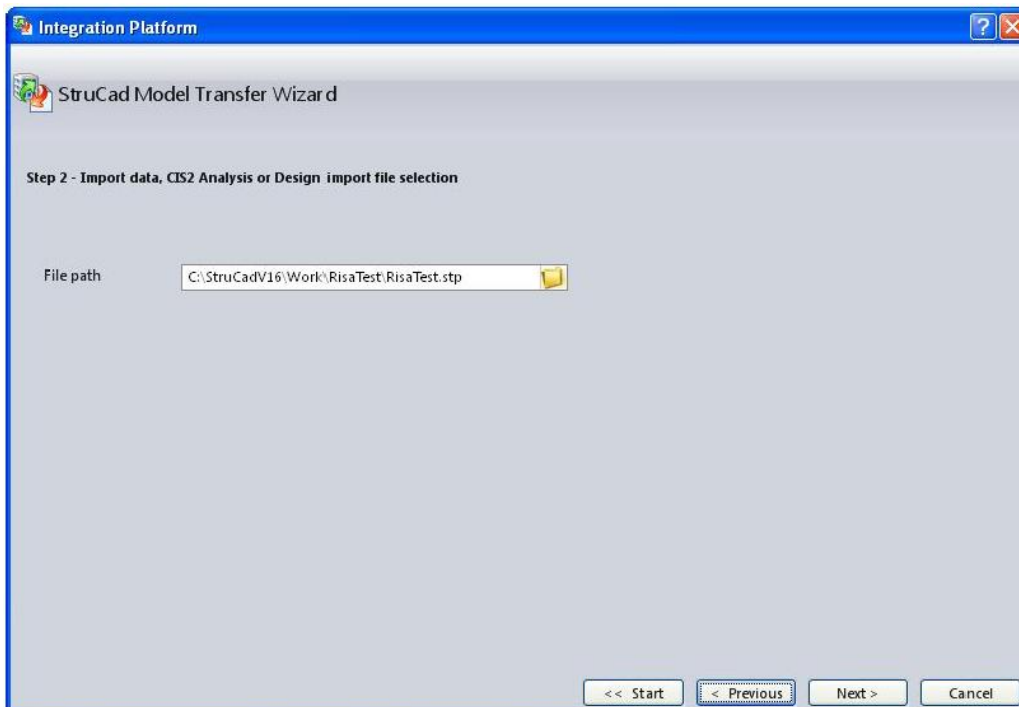
3. The StruCad detailer will then open the current working model and start the **Integration Platform Wizard**. The **Wizard** will start by making sure that the model is up-to-date. As before, select **Model Import – Skip member selection**.



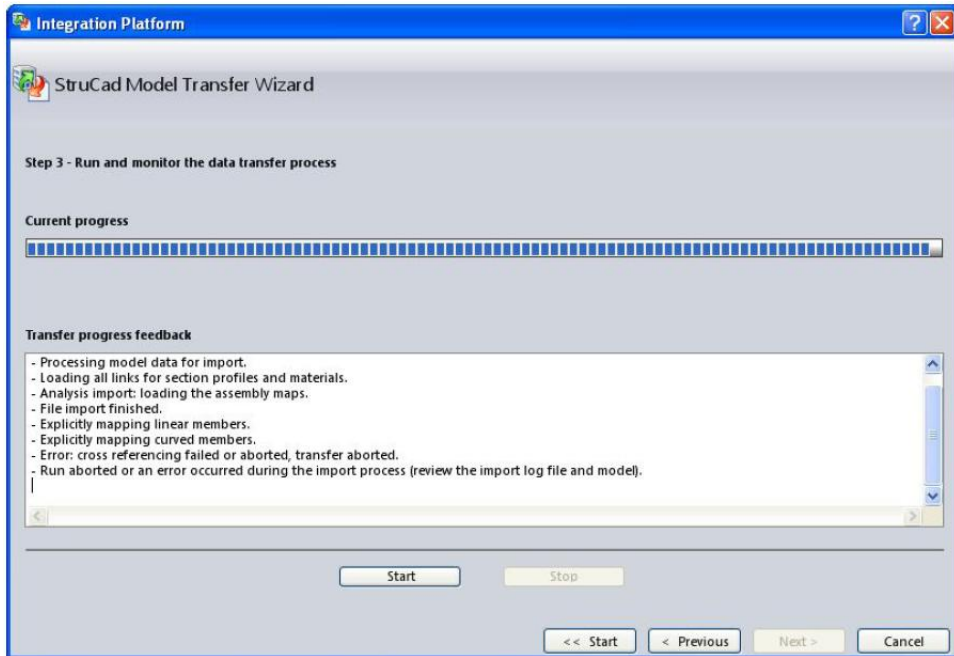
- Go through the same steps as before. First, select **Data Import** and choose **CIS/2 Import/Export AddIn** from **Available Formats**.



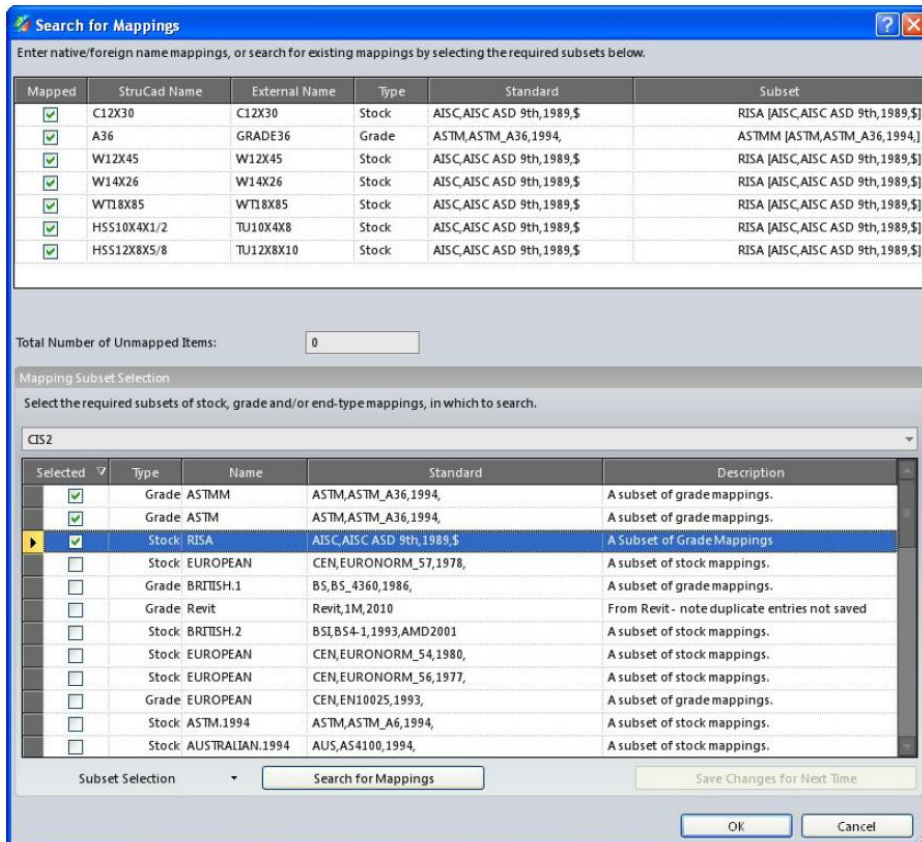
- Browse to select the new .stp file and click **Next**.



6. Click the **Start** button.

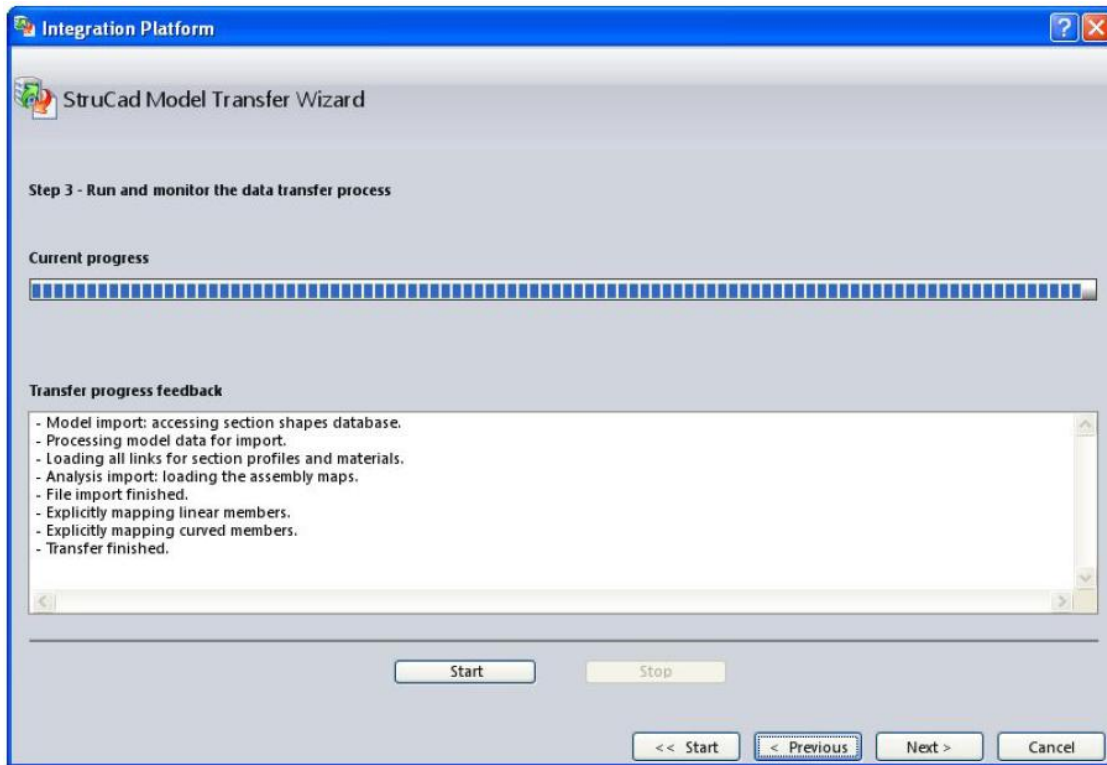


7. Click on the **Search for Mappings** button and review the stock size mapping file once more.

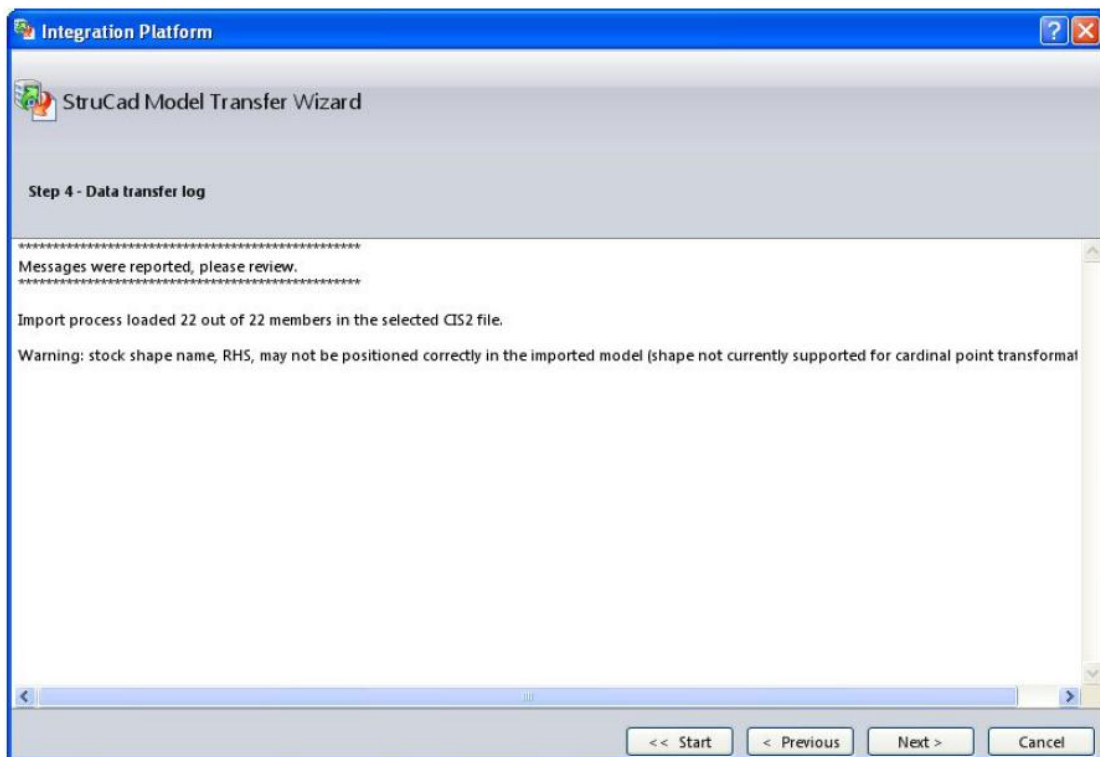


Click **OK** when you have completed matching all names and grades.

8. Click **Next** after returning to Step 3 of the *Import Wizard*.

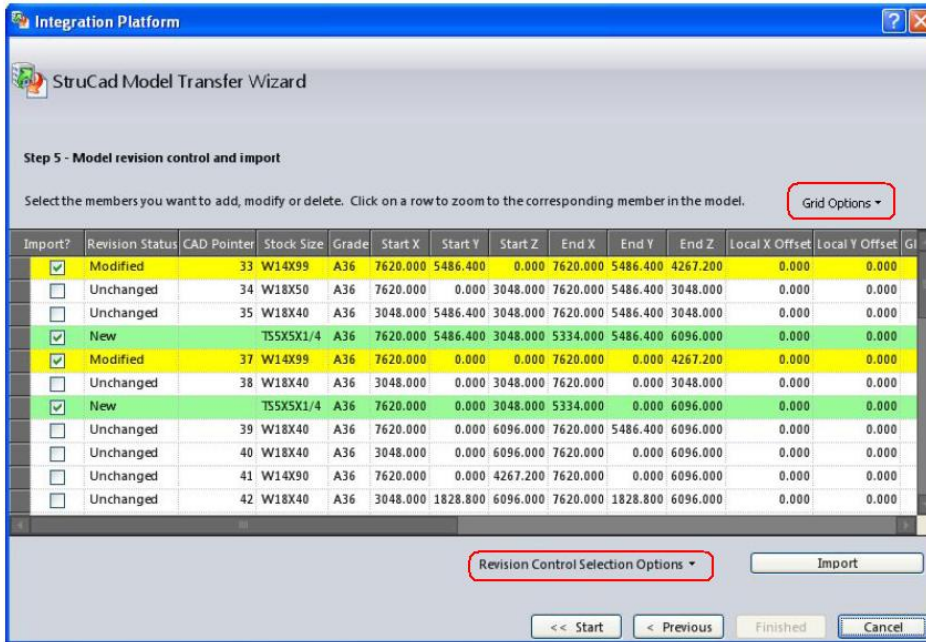


9. Again, review the **Data transfer log** for any errors. If everything looks okay, click the **Next** button.



10. Next we get a dialog box showing the status of what is being transferred into the model. The dialog box shows modified pieces in yellow, new pieces in green, and deleted pieces in red. The two updated columns are shown below in yellow and the newly-added braces are in green.

Since the grid lines were not in the original .stp file, we need to tell StruCad to keep our existing grid lines during the import process. To do this, click on the **Revision Control Selection Options** and select the **Keep Existing Model Grid** option. Then click **Import**.



If you want a history report, click on **Grid Options** and export out to Excel.

11. Pressing Import will import the modified model. The new brace members will now be in place and the modified columns will be reflected in their new section sizes. All end connections or attributed applied to this model before the last import will remain unchanged.

