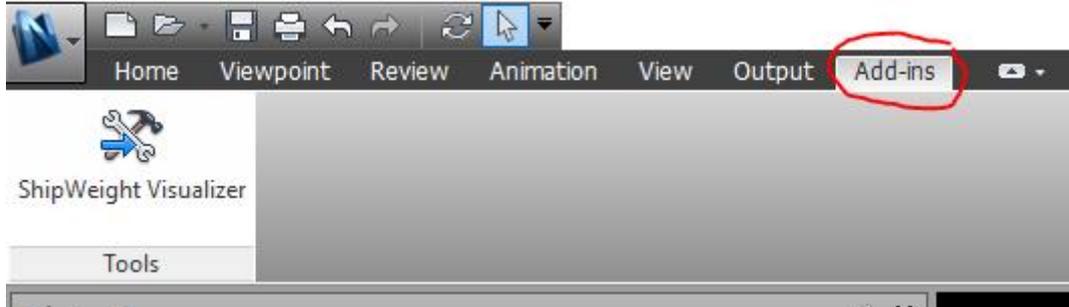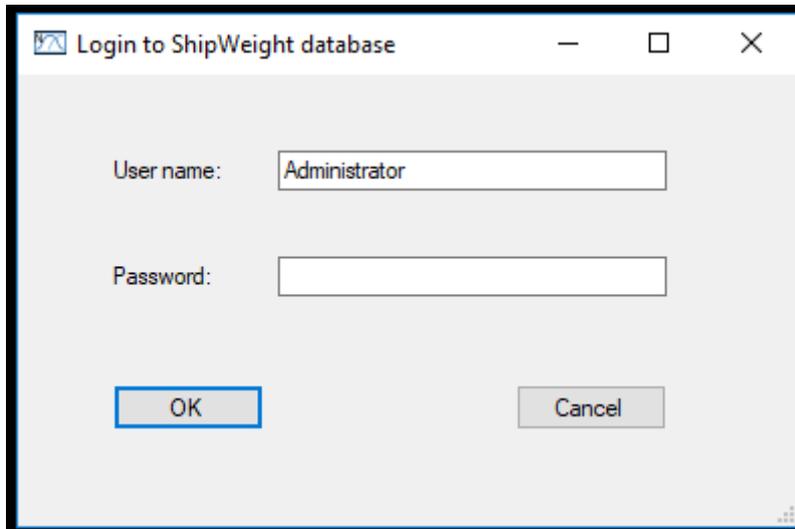# ShipWeight plugin for Navisworks (Version 1.50)

With the ShipWeight Navisworks plugin you can do visual sanity checks during estimation and monitoring.

After installation the plugin can be found by clicking the 'Add-ins' tab.

Click 'ShipWeight Visualizer' button and login with valid ShipWeight user and password.

The plugin displays center of gravity and extension in 3D for all parts of a project contained in a ShipWeight database:

You can set the size of the center of gravity spheres and the transparency of their color.

Items without extensions are drawn as spheres. Items with extensions in 1 direction are visualized by cylinders. Items with extensions in 2 directions are drawn as rectangles, and items with extensions in 3 directions are drawn as cuboids.
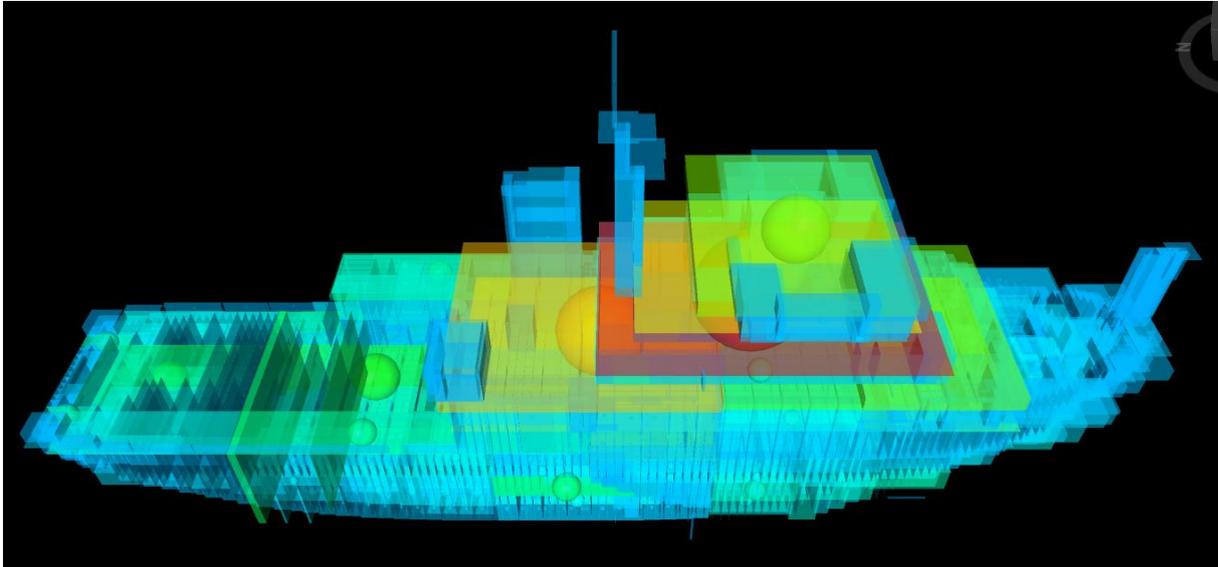
The values of 'Set CG size by weight of item', 'CG Size Factor' and 'CG min radius' determine the size of the spheres representing the center of gravity of items.

If you tick the 'Automatically color items by weight' box, items will be colored according to their relative weights where red is the heaviest and light blue is the lightest. When this option is chosen the 'Item Colors' window is not shown.
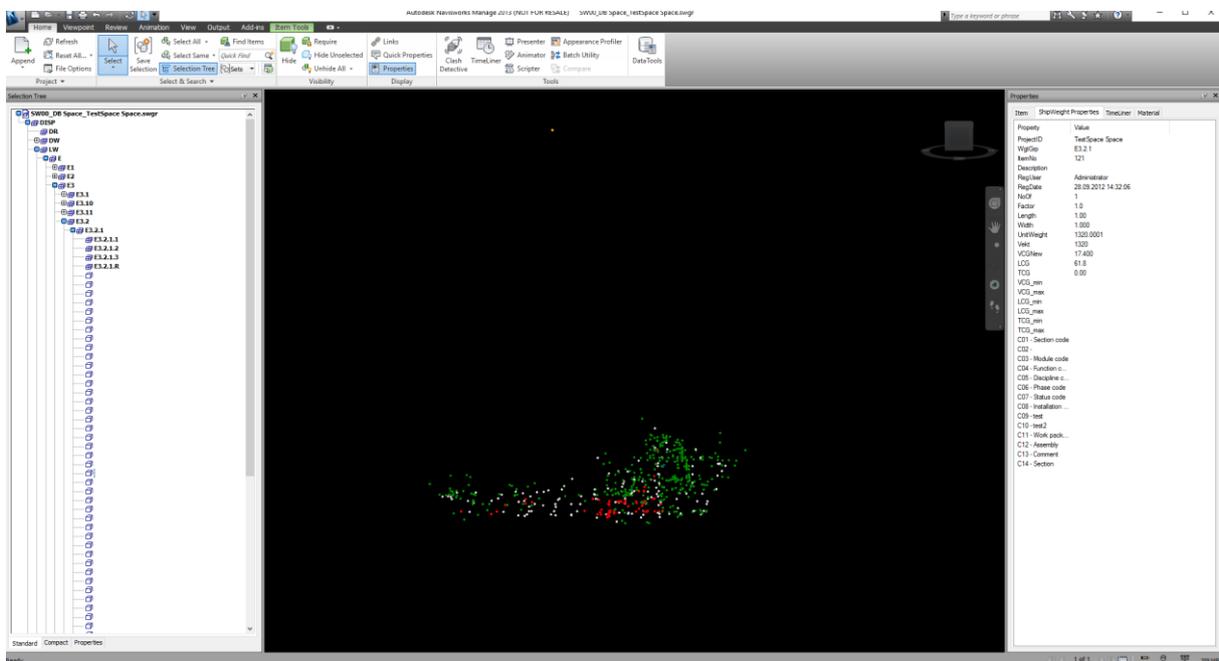
You can choose to employ 2 filters to select which items will be loaded into Navisworks, a general filter where you can filter on weight, center of gravity, or on any other ShipWeight field, and a filter

for phase codes which are typically used for 'timeline' filtering. Please refer to the ShipWeight manual for how to use these filters.
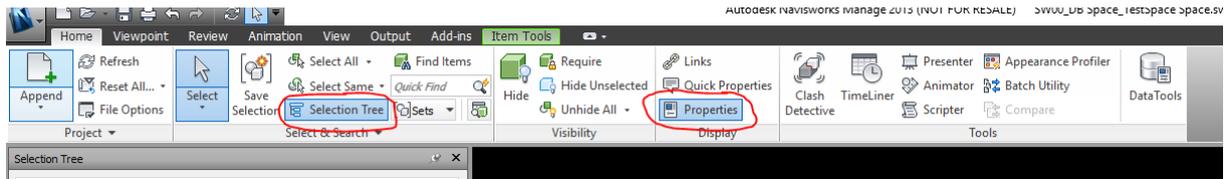
Example of displayed vessel:

You can select a particular item by clicking on it or by selecting it from the 'Selection Tree'. The item is then highlighted and information about it is displayed in Navisworks' 'Properties'-window.

Click the marked 'Selection Tree' and 'Properties' items to toggle these windows on and off.

All available data for a item from the ShipWeight database is displayed in the 'Properties' window.

When you have not chosen to employ automatic coloring the custom 'Item Colors' window is displayed. This shows the item hierarchy and is linked to the Navisworks 'Selection Tree' and the graphical display.

Colors for weight groups and items are shown in this tree and you can select which color to use for a particular weight group/item by right-clicking node. All weight groups and items belonging to a weight group inherit its parent's color unless it has been previously changed by the user.

The color scheme for each project are saved in the windows registry and are loaded and applied when a project is opened in Navisworks.