Naval Structure Toolkit - User Manual

Introduction



Plugin installation

Overview

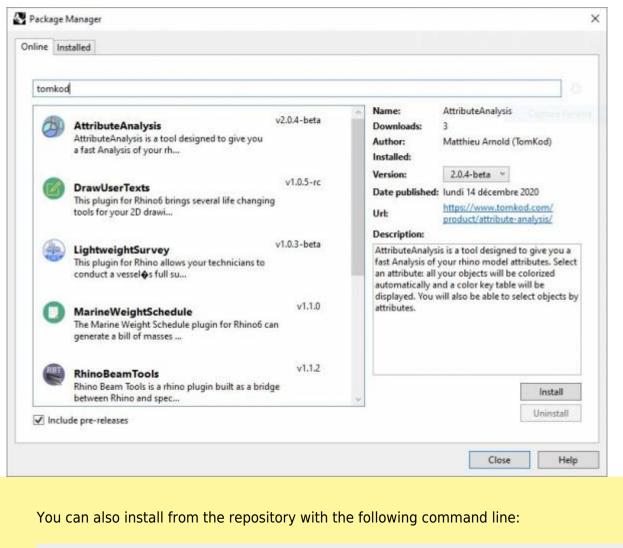
The plugin installer can be downloaded at \bigcirc Fix Me! A free trial is included, and yearly licenses can be purchased on the aforementioned page. *Naval Structure Toolkit* works for Rhino 6¹⁾, and Rhino7²⁾.

Yak

Our plugins are also compatible with <u>Yak</u>, Rhino's new package manager ³⁾, which is basically an application store for Rhino. You just need to call Rhino's command **PackageManager**:

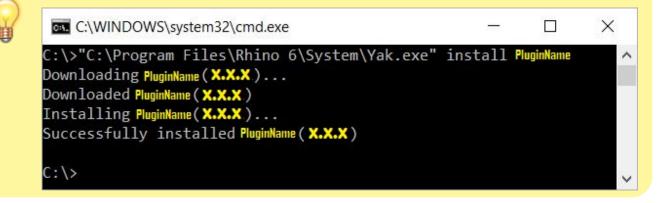
Last update:

update: 2021/03/15 start:plugins:navalstructuretoolkit:nst-usermanual https://wiki.tomkod.com/doku.php?id=start:plugins:navalstructuretoolkit:nst-usermanual&rev=1615805864 11:57



"D:\Program Files\Rhino 6\System\Yak.exe" install 'PluginName'

If you add this in a batch file (*.bat) at windows startup, it is probably the best way to keep all your plugins up-to-date 😉



License activation

Prerequisites

The free evaluation can be used once per computer, and requires network access to www.license.tomkod.com The license activation requires network access to www.tomkod.com

Please check your firewall in case of failure.

Activation form

The activation window automatically shows up when the plugin is loading and a valid license or trial is not registered. If you want to see, change or remove your license while the plugin is already loaded, you can use the Rhino commands **PluginName_License**.

Activation status is always visible on the upper right corner of the form, if the icon is green your plugin will be enabled:

| \checkmark |
|--------------|
| |

Trial Tab

This first tab is dedicated to the trial requests. Your trial status is displayed, and the button is disabled if a trial is not available for your computer (Your trial has already been activated, or the server is unreachable)

| ble 3.x | ? | × |
|--|--|---|
| Plugin Status Enabled - license is valid | 0 |) |
| nse Details | | |
| | | 21 |
| the states and | | |
| ist Free evaluation (1) | | |
| a: 21/12/2020) | | |
| | | |
| reyed out in the following cases: not available for this product reachable | ıter | |
| | Plugin Status Enabled - license is valid nee Details st Free evaluation (*) a: 21/12/2020) | Plugin Status Enabled - license is valid nee Details st Free evaluation (*) a: 21/12/2020) reyed out in the following cases: not available for this product |

Commercial Tab

This tab's two main buttons let you Check-out (Activate) or Check-in (Desactivate) your license from

Last update: 2021/03/15 start:plugins:navalstructuretoolkit:nst-usermanual https://wiki.tomkod.com/doku.php?id=start:plugins:navalstructuretoolkit:nst-usermanual&rev=1615805864 11:57

our license server.

| TomKod license | e activation - Table | : 3.x | | ? | × |
|--------------------|--|-----------------------------------|----------------|----------|---|
| | | Plugin Status Enabled - licens | se is valid | | |
| Free Trial License | Commercial Licens | e Details | | | |
| Email | | .com | | | |
| Product key | ; | | | | |
| Activ | ate (Check-Out) | | Desactivate (C | heck-in) | |
| Status: Dis | abled | | | | |
| Enable floa | ting licenses (Affe | cts every TomKo | d plugins) | | |
| Use a license ce | rtificate | | | | |
| | native method for of void network activat | | | | |
| | | | | | |

When the checkbox "Enable floating licenses" is checked, every TomKod's plugin will try to deactivate the license automatically when closing (Making it available for another of your computers)

Finally, a license certificate (*.TkLic) can be selected at the bottom of this tab. It allows to activate a license offline, but the license won't be floating anymore. If you need one, contact us at https://www.tomkod.com/contact/

Toolbar

The toolbars for Rhino are always included in your plugins installation directory, or can be downloaded here.

You just have to drag/drop the file "Tomkod.rui" to a rhino window to install them.

Commands

NST_About

This command can be used only from the command line prompt. It displays the plugin's current revision and license status.





NST_License

This command can be used only from the command line prompt. It displays the plugin's activation form.

See license_activation.

CheckPlatCut



Walkthrough

- 1. Launch the command
- 2. First Step 🕐
- 3. Second Step ?

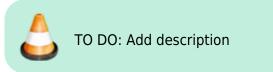


TODO: Add animated gif

Scripted mode

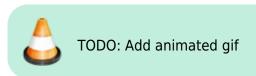
No scripted mode is available for this command.

IDsToUserText



Walkthrough

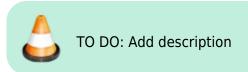
- 1. Launch the command
- 2. First Step 🥐
- 3. Second Step 🥐



Scripted mode

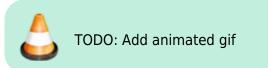
No scripted mode is available for this command.

SolidMass



Walkthrough

- 1. Launch the command
- 2. Select an extrusion or a closed polysurface
- 3. The object's mass and centroid coordinates will be displayed in command line feedback



Options

| | | Either a material from the editable material list or "Other", which will ask to manually enter a volumic mass Materials | | | | |
|--|------------------------|--|---------------------|---------------------------|--|--|
| SteelSteel78MaterialAluminiumAluminium27 | Steel Aluminium | Steel Aluminium | 7850 nium 2700 | | | |
| | | Edit | | | | |
| | Delete | | | Add Defaults | | |
| WeldingPercenta | age The margin to a | dd to the resu | It to consider weld | ding masses (%) | | |
| DrawCentroidPoi | ints If enabled, a poi | nt will be adde | ed to the model at | t the centroid's location | | |

Scripted mode

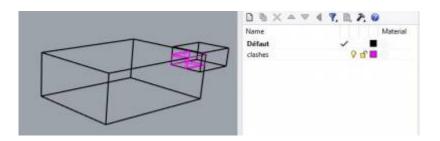
No scripted mode is available for this command.

IntersectSolids

Check object intersections between two or several closed polysurfaces. The clashes volumes are added to the doc, in a layer named "clashes"

Walkthrough

- 1. Launch the command
- 2. First Step 🕐
- 3. Second Step 🥐



Scripted mode

No scripted mode is available for this command.

ExportPartsToDxf

Exports selected curves and annotations to a DXF file.

Walkthrough

- 1. Launch the command
- 2. First Step 🕐
- 3. The dxf file with the selected items is saved as: %*ModelDIrectory*%\Platcuts-%*DocAttributeForBlockNumber*%\%*LayernameExtract*%\%*ObjectReference*%.dxf

TODO: Add animated gif

Options

| DocAttributeForBlockNumber | value from a document usertext. The targeted usertext can be changed in the MSW option panel. |
|----------------------------|---|
| | Filter objects by the beginning of their layer name. The targeted user text can be changed in the MSW option panel. |
| | value from an object's usertext. The targeted usertext can be changed in the MSW option panel and is common with several other commands. |

Scripted mode

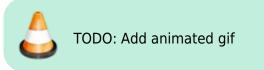
No scripted mode is available for this command.

Bracket



Walkthrough

- 1. Launch the command
- 2. First Step 🥐
- 3. Second Step 🕐



Scripted mode

No scripted mode is available for this command.



Walkthrough

- 1. Launch the command
- 2. First Step 🕐
- 3. Second Step ?

🐧 TODO: Add animated gif

Scripted mode

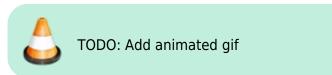
No scripted mode is available for this command.

Rails

TO DO: Add description

Walkthrough

- 1. Launch the command
- 2. First Step 🕐
- 3. Second Step ?



Scripted mode

No scripted mode is available for this command.

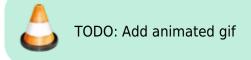
GeneratePlateMarking

TO DO: Add description

Last update: 2021/03/15 start:plugins:navalstructuretoolkit:nst-usermanual https://wiki.tomkod.com/doku.php?id=start:plugins:navalstructuretoolkit:nst-usermanual&rev=1615805864 11:57

Walkthrough

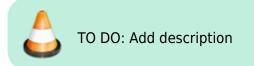
- 1. Launch the command
- 2. First Step 🕐
- 3. Second Step 🕐



Scripted mode

No scripted mode is available for this command.

DevelopPlanarPlate



Walkthrough

- 1. Launch the command
- 2. First Step 🕐
- 3. Second Step 🥐



Scripted mode

No scripted mode is available for this command.

```
1)

Rhino 6.15 or later

2)

Tested up to Rhino 7.1

3)

Rhino 6 or later only, with graphic user interface for Rhino7 only
```

From: https://wiki.tomkod.com/ - TomKod knowledge base

Permanent link: https://wiki.tomkod.com/doku.php?id=start:plugins:navalstructuretoolkit:nst-usermanual&rev=1615805864

Last update: 2021/03/15 11:57

