Lightweight Survey -User Manual

Introduction

Lightweight Survey is a plugin for Rhino 6, designed to be used on a windows 10 tablet. It's purpose is to write down every excess or missing masses in a ship, then process the data into various reports.

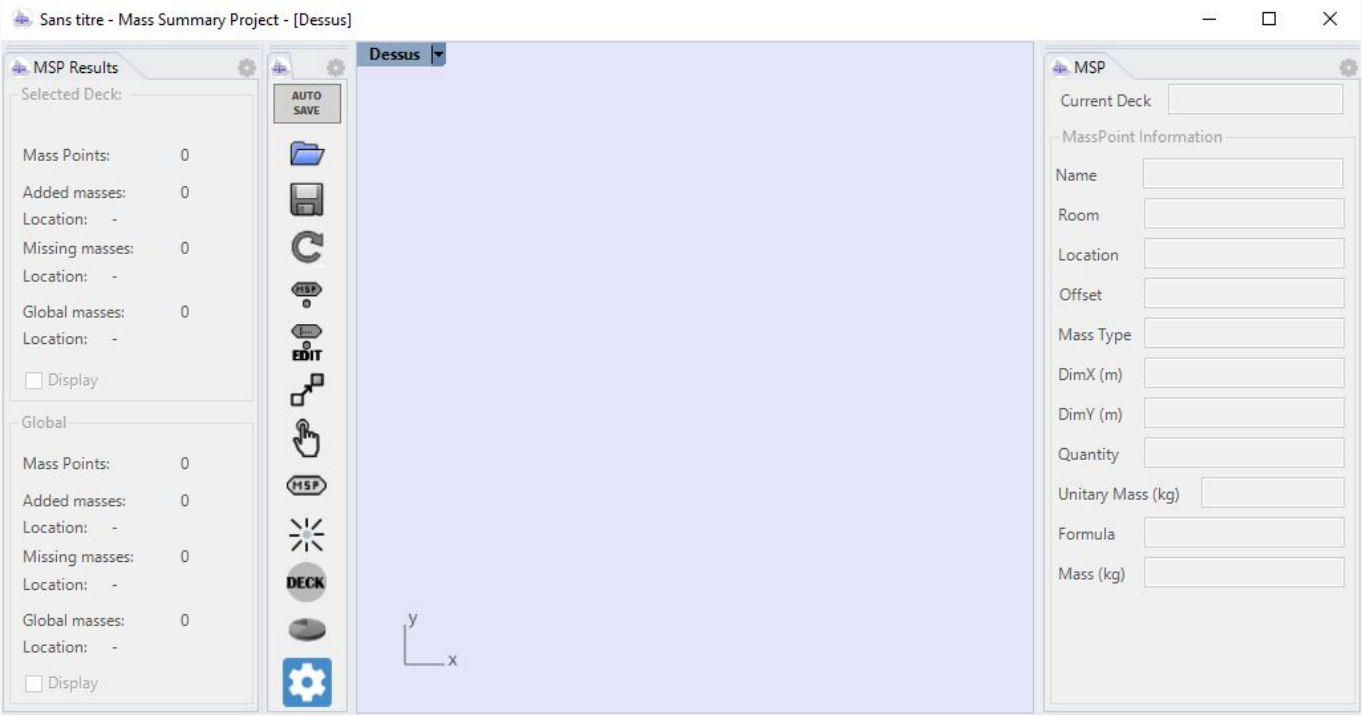
Definitions

- MassPoint: Custom rhino object with mass and location
- Lightweight Survey (LWS): A rhino doc is considered to be a Lightweight Survey if it has at least one Deck
- Deck: Special Layer with LWS related data (Height, Room names, etc…)

Interface

Skin

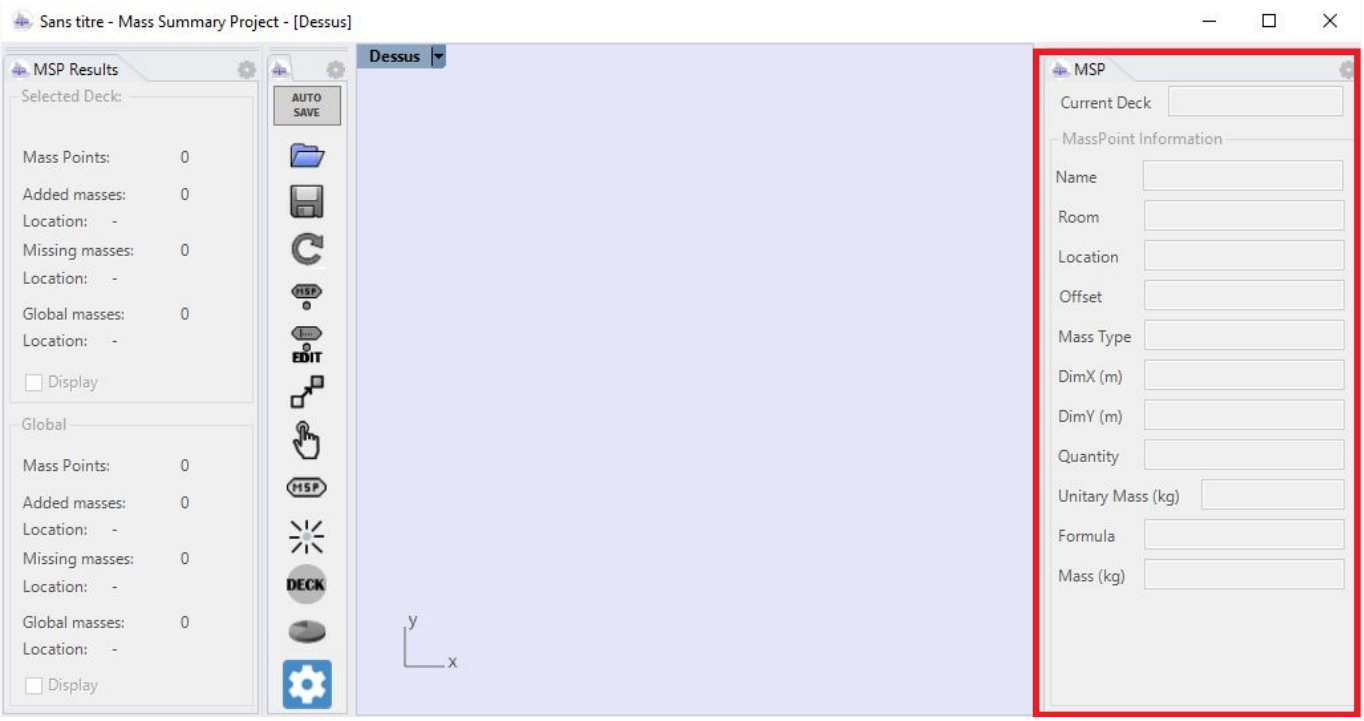
The skin is a custom interface for your plugin. When you launch the skin, you'll have a rhino interface customized just for the Lightweight Survey Plugin. Any change to this interface will not be applied to rhino main interface.



Panels

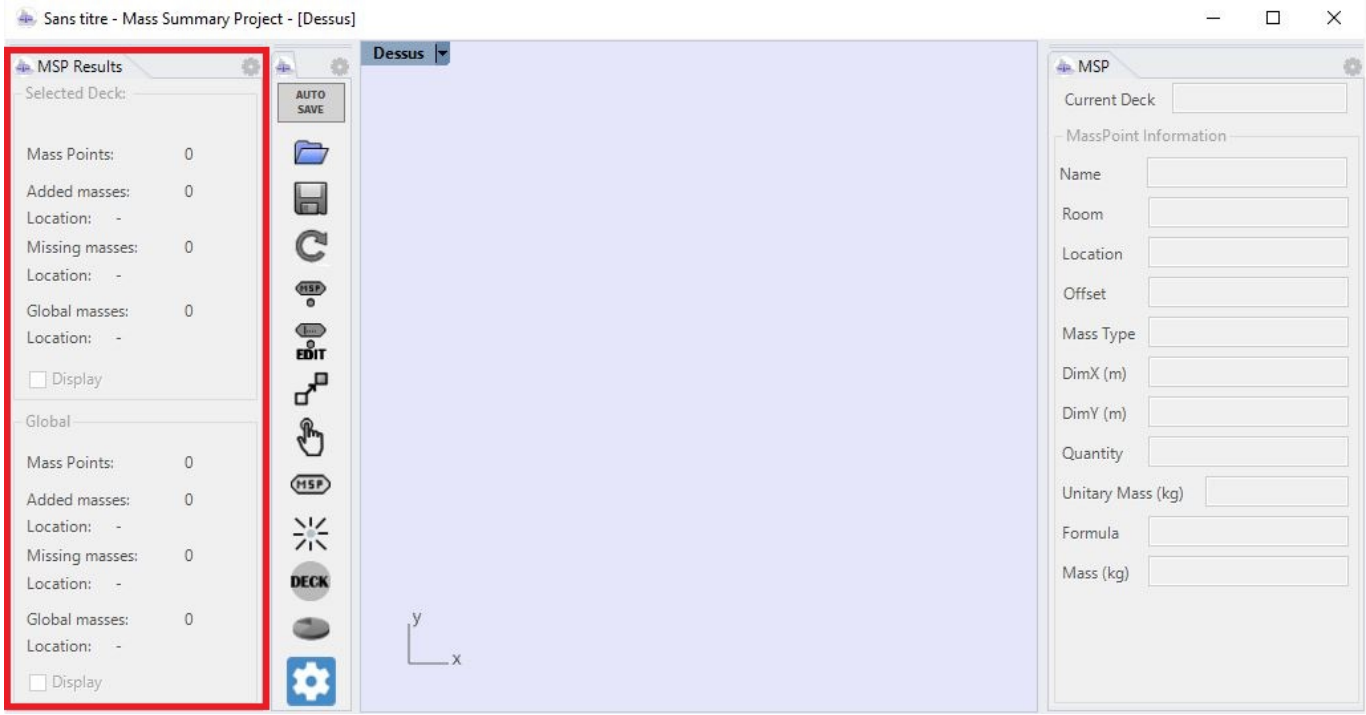
Main Panel

The main panel is where you will find every available information on the selected MassPoint(s).



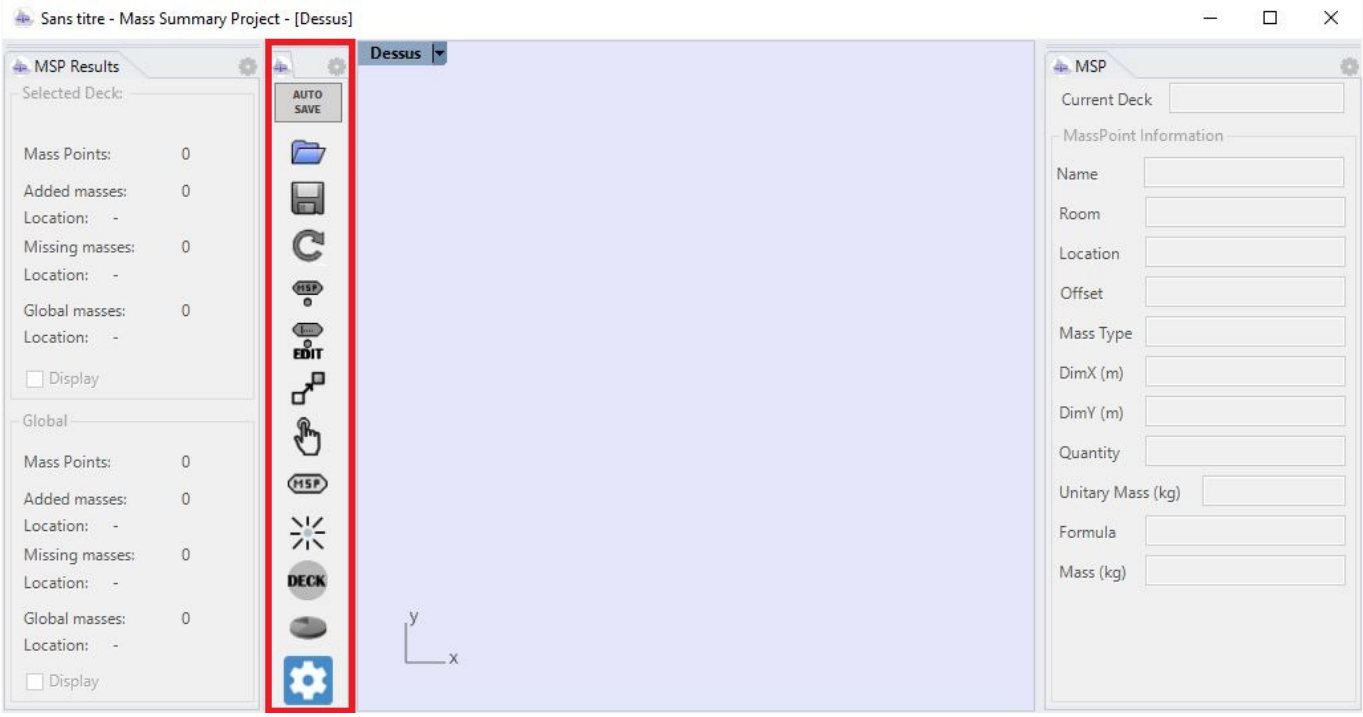
Result Panel

The result panel displays real time computed information concerning the model and the current deck, such as the Mass Points global centroid.



Magic Toolbar

The “magic toolbar” is a panel that mimics classic Rhino ToolBar but with dynamic and contextual display. This toolbar will be your best friend while working on a touchscreen.

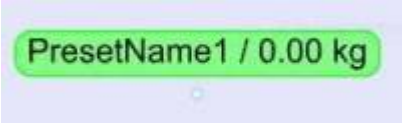


Rhino ToolBar

The toolbar is only meant to be used when preparing the model on a desktop computer.

Annotations

The annotations system displays MassPoints related data in text dots. In the Options panel, you can define the colors (For excess and missing masses), size and content of the annotations.



They can be shown/hidden anytime through the magic toolbar or the command `LWS_HideAnnotations` and `LWS_ShowAnnotations`

Installation

Plugin

TODO

License activation

Prerequisites

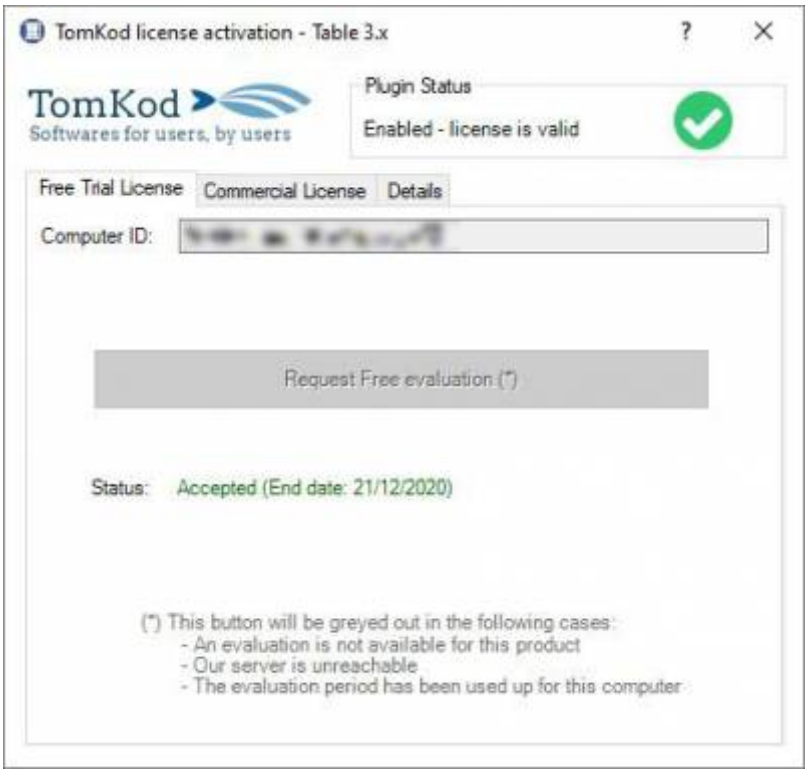
The free evaluation can be used once per computer, and requires network access to www.license.tomkod.com
The license activation requires network access to www.tomkod.com
Please check your firewall in case of failure.

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:

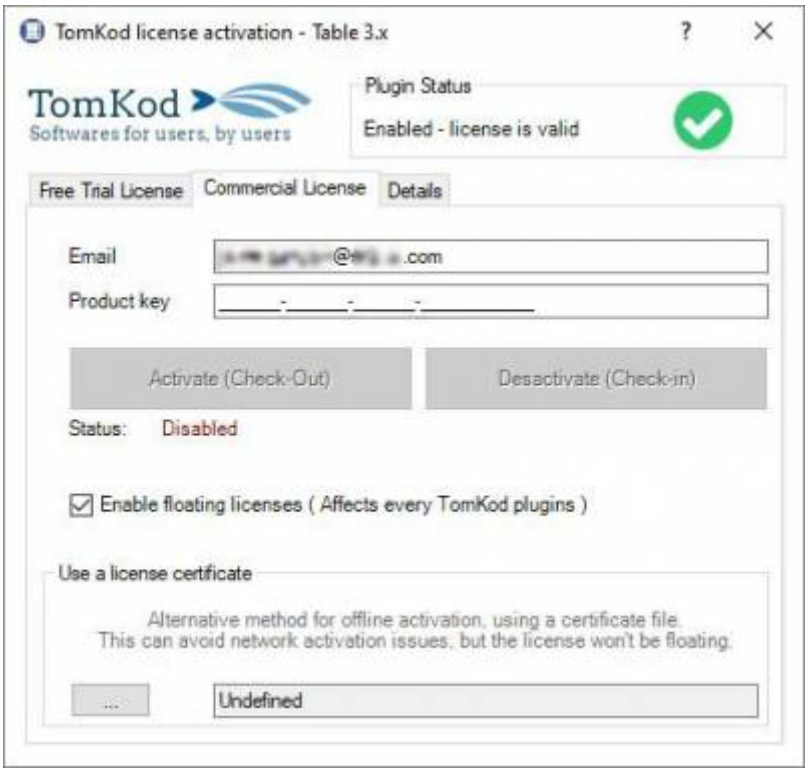
Trial Tab

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)



Commercial Tab

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



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.

Skin

TODO

Features and commands

Change deck

TODO

Unselect all

TODO

Autosave

TODO

LWS_About

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

LWS_AddMassPoint

Icon:

This command creates a new MassPoint in the current deck.

Rhino Toolbar shortcut

The command is cancelled if the document is not a valid Lightweight Survey.

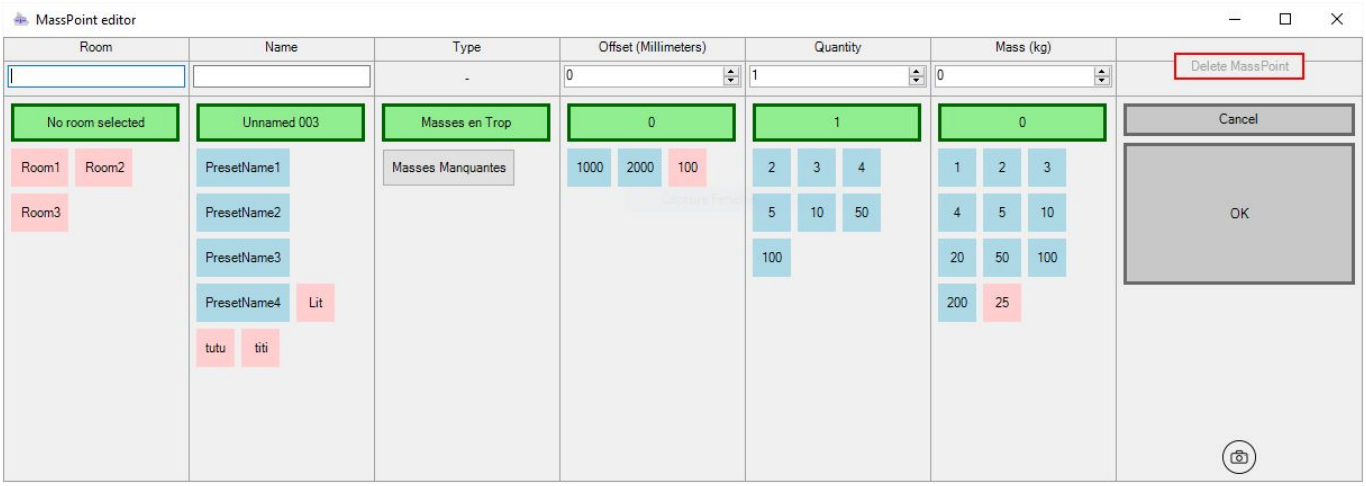
Magic Toolbar button

This button is grayed out if the document is not a valid Lightweight Survey.

Usage

1. Start the command
2. (Optionnal)
3. Pick the selection method with the 3 buttons on the right corner:

   The location can be picked with a point (default), a line's middle or a rectangle's center.
4. Pick the MassPoint's location. If the command was started from the MagicToolBar, the selection helper will be displayed.
5. Select the appropriate data for your MassPoint on the edition window:



The light-red buttons are shortcuts to reuse the values existing in the model. The light-blue buttons

are presets values defined in the LWS_Options.

The camera button on the bottom-right corner is a shortcut to windows camera app. While this “MassPoint Editor” window is open, any picture added or created in windows picture directory will be linked the the MassPoint.

LWS_Copy

Icon:

This command relocates a MassPoint to a new location.

Magic Toolbar button only

This button is grayed out if the document is not a valid Lightweight Survey. The command asks for a MassPoint then a new location, and the touchscreen helpers are displayed.

LWS_CsvReport

Icon:

This command generates a CSV (Semicolon Separated Value) report.

Rhino Toolbar shortcut

The command is exited if the document is not a valid Lightweight Survey. In scripted mode, the command saves the report as “MyRhinoDocName.csv”

Magic Toolbar button

No button on the MagicToolBar. To create a csv report, you have to use the visual report report's window menu instead.

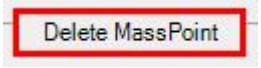
LWS_EditMassPoint

Icon:

This command is similar to LWS_AddMassPoint, except that the values are applied to a previously

selected MassPoint.

Other than that, the main difference is that the “Remove” button is enabled, allowing a MassPoint's removal:



Rhino Toolbar shortcut

The command is exited if the document is not a valid Lightweight Survey.

Magic Toolbar button

This button is grayed out if the document is not a valid Lightweight Survey. The helpers are displayed to select the MassPoint on touchscreen.

LWS_HideAnnotations

Icon:

This commands hides every MassPoints annotations.

Rhino Toolbar shortcut

The command is exited if the document is not a valid Lightweight Survey.

Magic Toolbar button

This button is grayed out if the document is not a valid Lightweight Survey. Else it works as a switch (Grayed when disabled, Green colored when enabled)

LWS_ImportPictureDoc

Icon:

This commands imports a .jpg file to the doc, and helps you to scale it and split it into several layers. This will make it easier to create your decks from a scanned drawing.

LWS_Move

Icon:

Magic Toolbar button only

This command does basically the same thing as the Rhino Move command, but it only considers MassPoints. The helpers are displayed to select the MassPoint and the new location on touchscreen.

LWS_Options

LWS_Refresh

Icon:

This command refresh most LWS related display and data. You normally don't need it.

Rhino Toolbar shortcut

The command is exited if the document is not a valid Lightweight Survey.

Magic Toolbar button

This button is grayed out if the document is not a valid Lightweight Survey.

LWS_RelocateDecksToOrigin

LWS_Select

Magic Toolbar button

This button is grayed out if the document is not a valid Lightweight Survey.

LWS_ShowAnnotations

Icon:

This commands shows every MassPoints annotations.

Rhino Toolbar shortcut

The command is exited if the document is not a valid Lightweight Survey.

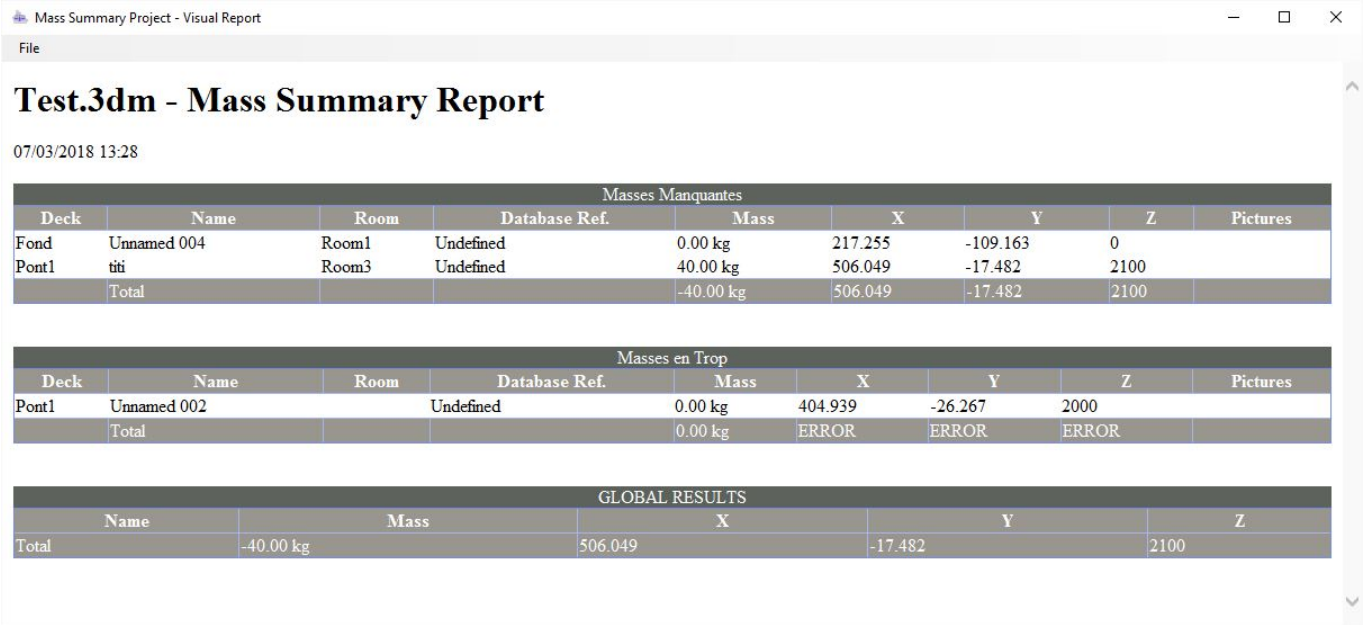
Magic Toolbar button

This button is grayed out if the document is not a valid Lightweight Survey. Else it works as a switch (Grayed when disabled, Green colored when enabled)

LWS_VisualReport

Icon:

This command displays a visual HTML report on the current Lightweight Survey.



Mass Summary Project - Visual Report

File

Test.3dm - Mass Summary Report

07/03/2018 13:28

Masses Manquantes								
Deck	Name	Room	Database Ref.	Mass	X	Y	Z	Pictures
Fond	Unnamed 004	Room1	Undefined	0.00 kg	217.255	-109.163	0	
Pont1	titi	Room3	Undefined	40.00 kg	506.049	-17.482	2100	
	Total			-40.00 kg	506.049	-17.482	2100	

Masses en Trop								
Deck	Name	Room	Database Ref.	Mass	X	Y	Z	Pictures
Pont1	Unnamed 002		Undefined	0.00 kg	404.939	-26.267	2000	
	Total			0.00 kg	ERROR	ERROR	ERROR	

GLOBAL RESULTS				
Name	Mass	X	Y	Z
Total	-40.00 kg	506.049	-17.482	2100

From the menu, the report can be printed, or exported as HTML, XLSX or CSV.

Rhino Toolbar shortcut

The command creates an empty report if the document is not a valid Lightweight Survey.

Magic Toolbar button

This button is grayed out if the document is not a valid Lightweight Survey.

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

Permanent link:
https://wiki.tomkod.com/doku.php?id=start:plugins:lightweightsurvey:lws-usermanual&rev=1597415349

Last update: **2020/08/14 16:29**