

# ELEMENTSTATS



## *Interactive Statistics on Model*

QUICKCARD – v1.0 – 10 JAN 2015

### 1. Overview

**ElementStats** is a standalone script which provides interactive statistics about the elements of the model: Groups, Components and Drawing entities, such as faces, edges, etc....

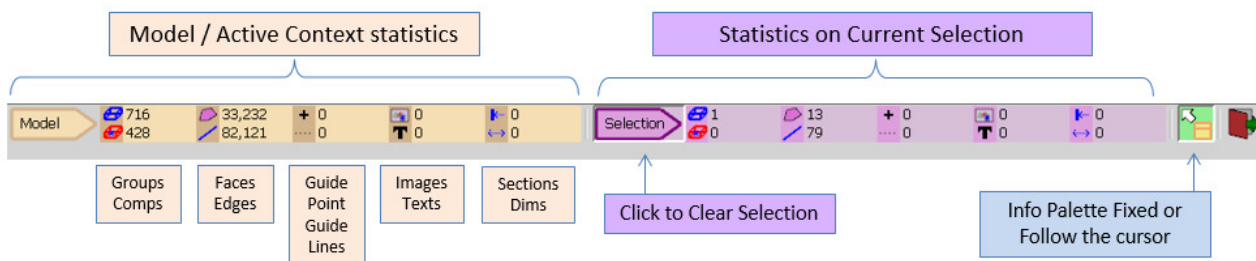
Statistics are given on:

- **The active model** (and active context, if within a group or component)
- **The selection** (initial, set by the Outliner or interactive selection)
- **The entities under the cursor**. Information is displayed in a floating palette

ElementStats is part of **FredoTools v2.5** and above. See FredoTools installation.

### 2. Statistics on Active Model and Selection

The statistics are displayed in the **Main Palette**:



Within **ElementStats**, the selection can be set / cleared by:

- The Outliner or shortcuts (like Ctrl-A, Ctrl-T)
- By clicking on a group or component → select just the group / component
- By double-Clicking on a group or component → select it and all its descendants
- By clicking on an entities at top level. Double-click will select surface, if any, if the entity under the cursor is a Face.

The information will be updated interactively in the left part of the main palette.

### 3. Interactive Statistics

When you hover the cursor over the elements of the model, a Floating palette will give statistics and information on Group / Component (if any) as well as the entity under the cursor.

- 1) **When the entity belongs to a Group or Component**, the information is displayed in a big floating palette with statistics arranged in 4 columns. Depending on the context, only the relevant columns are displayed:
  - **The Group / Component** entities
  - The Group / Component and all its descendants
  - Its **Direct Parent** and all its descendants
  - The **Top Parent** (i.e. at first level of Model or active context) and all its descendants

Note that the current Group / Component, Direct Parent and Top Parent are highlighted in the corresponding color in the model:

	Picked	Picked and Descendants	Direct Parent	Top Parent
GROUP [Face]	Terrain top boule			
Name of the Group	Terrain top boule			
Info on Entity picked Here: Face and Surface	Area: 0.11 m <sup>2</sup> Edges: 3 Area: 2.66 m <sup>2</sup> Faces: 180			
Faces	336	478	1,633	1,633
Triangles	279	279	1,252	1,252
Quad	48	187	347	347
Edges	614	1,376	3,459	3,459
Polylines		35	35	35
Sub-Groups	3	3	7	7
Sub-Comps				1
Guide Points	+	8	32	32
Guide Lines	...	8	24	24
Images				1
Dimensions of Bounding box	dx 2.17m	~ 4.69m	~ 4.69m	~ 4.69m
	dy 1.51m	~ 4.19m	~ 6.33m	~ 6.33m
	dz ~ 1.27m	~ 1.27m	~ 1.27m	~ 1.27m

2) **When the entity is at top level of the model or active context**, the information is displayed in a small floating palette with statistics on the entity picked. Note also that extra information is possibly displayed if the entity is:

- a **Face**: Surface information is shown is applicable
- an **Edge**: Curve information is shown if the edge belongs to a curve. Arcs, circles and polygons are also detected and their center displayed.

FACE [Surface]	EDGE [Circle]
Area: 0.02 m <sup>2</sup> Edges: 3 Area: 4.79 m <sup>2</sup> Faces: 1987	Length: ~ 0.37m Length: ~ 8.77m Edges: 24 Radius: 1.40m

#### 4. Other Options – Default Parameters

Element Stats	
Floating palette follows the mouse	<input type="checkbox"/>
Display technical info (SU id, Ruby Object id, ...)	<input type="checkbox"/>

##### 1) Floating Palette Position

The floating palette can either:

- be **Fixed**: you can however move it around. The position is saved across SU sessions.
- or **Follow the cursor**.



This option can be toggled in the Main palette and in the Default Parameters dialog box.

##### 2) Debug Information (for developers only)

In the Default Parameters dialog box, you can activate the option for displaying the **entityID** and **Ruby Object address** of the entities picked

EDGE [SU Curve]
Length: ~ 0.02m
Length: ~ 0.99m Edges: 20
ID = 214676 -- OBJ = 0x0000000a430580>