

Count Objects - Creo Element/Direct Modeling

How many 3D Modeling Objects are loaded in Creo Element/Direct Modeling: Let's count them!

This tool was re-created by der_wolfgang@forum@cad.de in August 2025, based on the existing approaches to count different types of 3D objects loaded/contained in a selected assembly.

The idea goes back to <https://ww3.cad.de/foren/ubb/Forum29/HTML/004867.shtml>, where it was already discussed. This version is an extension that improves performance, displays more object types (views, docuplanes, etc.) and some other goodies.

Usage

After loading the tool is located in the Toolbox of Creo Element/Direct Modeling.

There is also an available command to add it to your ribbon bar, context menu, or wherever else you like (standard customization).

- Select a part or assembly to start the counting. The result is displayed immediately in the dialog's user interface.
 - The selected object is not included in the counting.
 - You can directly select the next part or assembly (see the text in prompt line) .. and the next and the next ..
- 'Only Parts + Assemblies': use this check box if you only want to count parts and assemblies. Containers are also displayed because they are a type of assembly.
- The 'other objects' should normally be empty and displayed as "- / -"). In case there is something found that is *not covered* by the other types these objects will appear there.
 - Information on these objects can be displayed in the console window on request (when the console is visible).

Customization

Three additional counters are available, which can be enabled and customised via the file `sd_count_objects_customize.lsp`. This file will be loaded from the following locations in the mentioned sequence:

- from the directory the counting tool is loaded from
- in addition from the SITE customize directory (if available)
- in addition from the CORP customize directory (if available)
- in addition from the USER customize directory

This ensures that we follow the standard load mechanism of [sd-load-customization-file](https://support.ptc.com/help/creo_elements_direct/r20.7.0.0/advanced_documentation/integration_kit/reference/customize.html#sd-load-customization-file) (https://support.ptc.com/help/creo_elements_direct/r20.7.0.0/advanced_documentation/integration_kit/reference/customize.html#sd-load-customization-file)

from the integration kit. The customized counters will not be enabled without any file with the given name.

Three customized counters are available (where `x` is 1, 2, or 3).

- The title should be set to a meaningful string in order to enable the counter: `sd-count-object-customized-count-x-title` Only if the title is set to a string the customized counter will be used.

- The corresponding function `sd-count-object-customized-count-x` should be extended to meet your requirements. It should receive an object (`sel-item`) and return nil or anything T. If the return value is not NIL, the counter will be increased accordingly.

Here is an example to count read-only Objects:

```
;; title of the counter
(setq sd-count-object-customized-count-1-title
  (sd-multi-lang-string "readonly" :german "Schreibgeschützt"))
;; function for the counter
(defun sd-count-object-customized-count-1 (object)
  (sd-inq-obj-contents-read-only-p object)
  )
```

A template customization file is delivered together with this tool and this documentation.

Compatibility

- The tool was primarily developed using Creo Element/Direct Modeling Express 9.0, but was also used in PE80, PE30, and in Modeling 20.7.1.0 / 20.4.x / 20.1.x and some more.
- The tool is available with English and German user interface. More languages are already prepared.

Compare

Comparison with older versions of count tools using a real customer model within Modeling 20.7.1.0

September 2025	April 2022	November 2021

Using an artificial example within Modeling Express 9.0

September 2025	April 2022	November 2021
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As with other tools on cad.de

([https://ww3.cad.de/cgi-bin/ubb/forumdisplay.cgi?](https://ww3.cad.de/cgi-bin/ubb/forumdisplay.cgi?action=topics&forum=Creo+Elements%2FDirect&number=29&mystyle=&DaysPrune=100&SUBMIT=Los%21)

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