



e-laborate
i n n o v a t i o n s

AutoCrear Creo Gateway

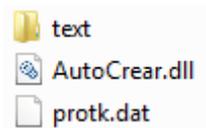
Installation and User Guide

1. Installation

The AutoCrear Gateway Package can be integrated into a Creo installation just as any other Plug-In. This section describes a common way to do this.

1.1. File Preparation

Copy the contents of the package to a folder of your choice, which we henceforth refer to as Gateway Installation Folder. This folder should contain the following files:



Now edit the file `protk.dat`. The absolute path of the Gateway installation folder must be inserted twice in the file:

```
name AutoCrear
description "AutoCrear"
exec_file <abs. path of Gateway installation folder>\AutoCrear.dll
text_dir <abs path of Gateway installation folder>
startup dll
allow_stop FALSE
delay_start FALSE
end
```

1.2. Integration into Creo

Method A: Permanent Integration (Admin Rights Required)

In order to integrate the Gateway permanently into a Creo installation, insert the line

```
protkdat <abs. path of Gateway installation folder>\protk.dat
```

in the global Creo config file, which is located in “<Creo Installation Folder>\Common Files\text\config.pro”

Method B: Local Integration

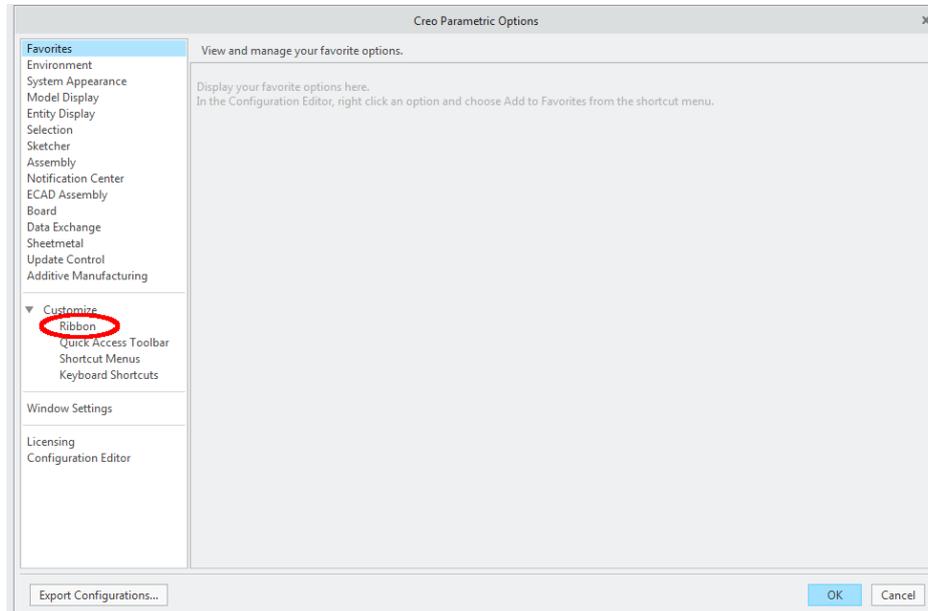
Alternatively, the program can be integrated locally in the Creo working directory. Just perform the step from Method A for the local `config.pro` file in the current Creo working directory. If there is no local `config.pro` file yet, it must be generated.

Note that this has to be performed each time the Creo working directory changes.

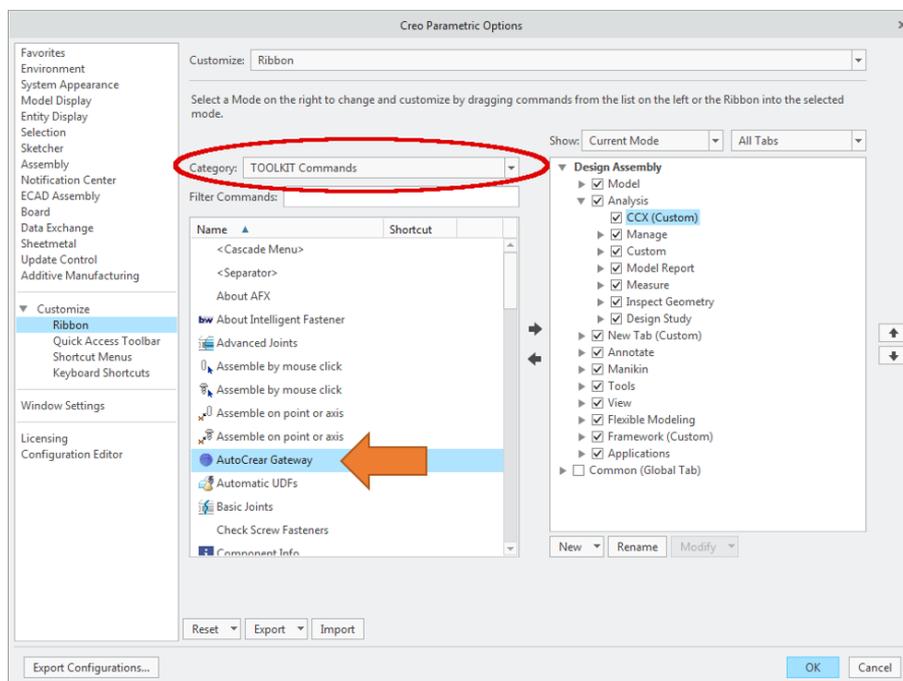
1.1. Adding a Ribbon in Creo

In order to start the program in Creo, a respective Ribbon has to be added in the Creo Options.

Open the Creo options in the menu *File* -> *Options* and choose the entry *Customize* -> *Ribbon*.

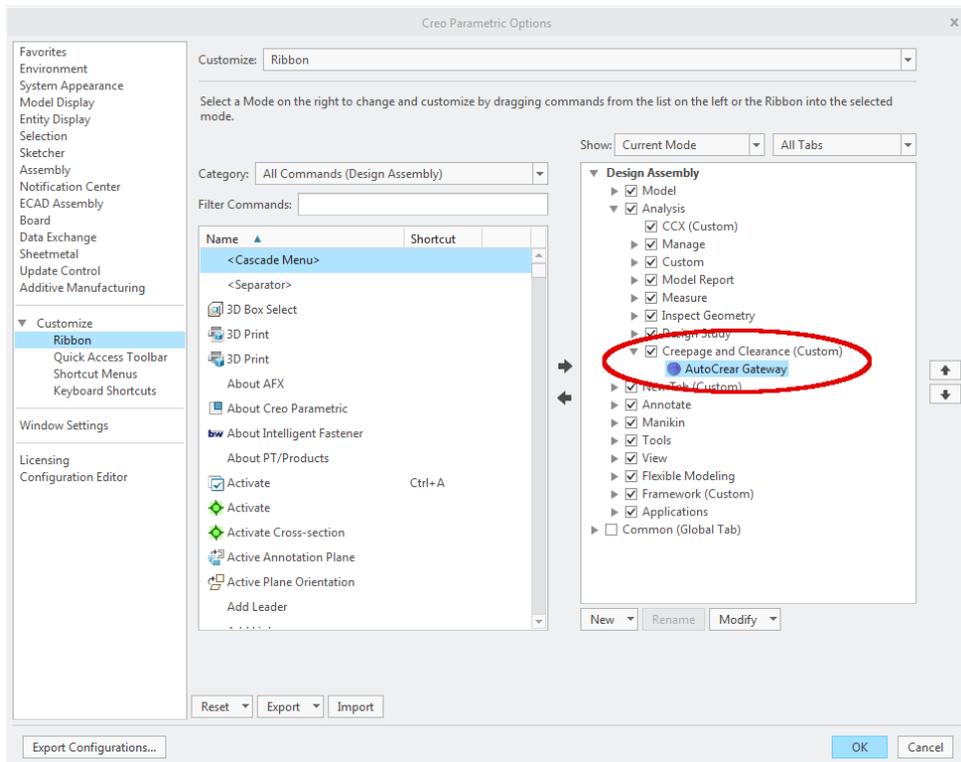


If the plug-in is correctly integrated, you will find an entry “AutoCreat Gateway” in the category “TOOLKIT Commands”:

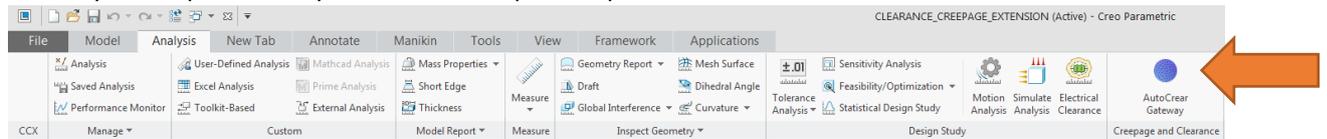


The AutoCreat Gateway can be moved to a desired position in the Creo UI, which is organized in tabs and groups.

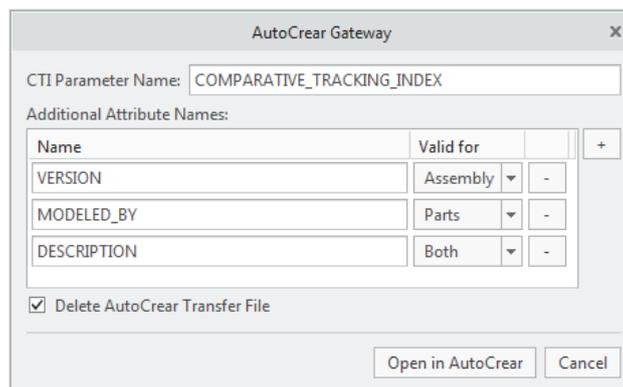
In the following example, a new Group “Creepage and Clearance” was added in the tab “Analysis” and the AutoCreat Gateway was moved into that group by clicking on the ➔ Symbol.



In addition, the option “large Button” was chosen in the “Modify” dropdown for the AutoCreat Gateway. The Gateway is now permanently available in the specified position:



2. Using the Gateway



2.1. CTI Parameter Name

You can specify the name of the user parameter used for CTI values can be specified – if there is such a parameter, the respective CTI values are then automatically taken over in AutoCreat. If no CTI values are specified as Creo parameter, the field can be ignored.

2.2. Further Parameters

If you have defined certain attributes for an assembly or its individual parts (e.g. description, version, ID, etc.) and want to see these attributes in AutoCreat, especially in the final results documentation, you can simply specify these attributes in the table “Additional Attribute Names”. Click on the “+” Button on the right of the

table in order to add a new attribute. You can choose, whether an attribute is valid for parts, for the assembly, or for both. AutoCrear automatically stores these attributes for each part (respectively for the assembly) and eventually adds the values in the documentation, which can be automatically generated from the analysis results.

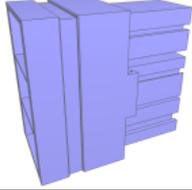
In case of assembly attributes values will appear in the section “assembly attributes” in the documentation whereas part attributes will appear in the column “Name” of each part in the section “Part List”:

1 Assembly

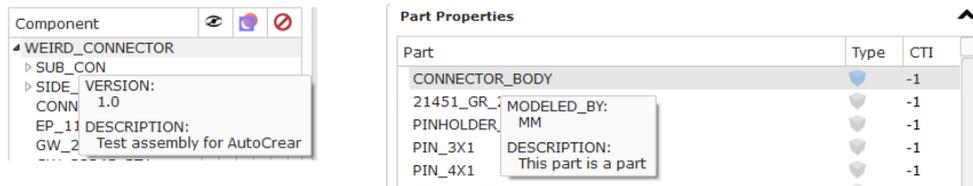
1.1 Assembly Attributes

VERSION	1.0
DESCRIPTION	Test assembly for AutoCrear

1.2 Part List

Name	Type	CTI Value	Image
CONNECTOR_BODY MODELED_BY: MM DESCRIPTION: This part is a part	 Default	199	
21451_GR_21112 MODELED_BY: Mr. Clearance DESCRIPTION: this part is nice	 Default	199	

You can also see these attributes within AutoCrear whenever you hover the mouse over a part name for more than one second:



2.3. Delete AutoCrear Transfer File

The Gateway converts the geometric representation of the CAD data to a proprietary AutoCrear format, the AutoCrear Transfer file (.act). This file format was especially designed for the creepage and clearance analysis and unifies the input data for AutoCrear coming from different CAD systems. By default, the temporary transfer file is automatically deleted as soon as it was imported in AutoCrear. For debug reasons, the deletion of the transfer file can be turned off, leaving the file <assembly_name>.act in the current working directory of Creo.

If something went wrong in the processing of the data in AutoCrear, the .act file is all the developer team of AutoCrear needs to investigate the problem. This is safer and more convenient than sending the original Creo data.

2.4. Launching AutoCrear

If there is a valid AutoCrear installation on the current machine, the button “Open in AutoCrear” automatically opens an AutoCrear session with the current working assembly. Note that the components which are hidden at the time the gateway is opened are not imported. This allows the user to exclude certain components from the analysis by simply hiding them prior to program start. However, note that such exclusions can also be made directly in AutoCrear.