

Coupling: OptiY – Pro/Engineer

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Interface **ASCII-File**
Experiment **OptiY\CAE Integration\ProEAnsys\Optimization.opy**

Generate Script-File in Pro/E

First of all, the geometry dimensions being investigated have to be defined with parameters. Thereby, activate the menu *Tools/Relations* and define e.g. following parameters:

```
x0 = 50
d1 = x0
y0 = 25
d2 = y0
```

d1 and d2 are dimensional geometries. Then save the file and exit the Pro/E session.

The working steps with Pro/E are documented in an ASCII trail file with running number of Pro/E session. The last number is the last Pro/E session. Following steps have to be done in a new Pro/E session to generate the script file for coupling:

- Change the working directory
- Open the file
- Activate the menu *Tools/Relations*
- Change the values of the defined parameters
- Regenerate the new geometry
- Save the file to a given format (here: blech.igs)
- Exit the Pro/E session

Copy the rename the last trail file (here C:\OptiY\ProEAnsys\blech.txt)

Setting in OptiY

The generated script-file is embedded in OptiY as ASCII-Input-File. Extern Script (DOS-Batch) performing the simulation contains following codes:

```
@echo off
del blech.igs
C:\proeWF2_M120\bin\proe.exe C:\proeWF2_M120\bin\proewf2_proi34.psf
C:\OptiY\ProEAnsys\blech.txt -g:no_graphics
:Wait
IF NOT EXIST blech.igs goto Wait
```

First of all, the old IGES file is deleted. Then start a new Pro/E session with the script file in batch mode. Because the performing of the session comes back at once without waiting for exit, the loop has to be programmed waiting until the IGES file arises from the new Pro/E session. It will be sure, that the Pro/E session is exited. Please pay attention to the correct path of the files.