

Importing Problem from PSG Run-File Environment to PSG MATLAB Environment

The case study has only one example problem (Dataset 1) which is done in Run-File and PSG MATLAB environments. Other problems are posted only in Run-File environment. This instruction provides information how to import data from Run-File to PSG MATLAB Environment

Importing one more problem to the PSG MATLAB Toolbox:

1. Open MATLAB PSG Toolbox:

```
>>tbpsg_toolbox
```

2. In Toolbox go to menu: Data -> Import from text -> Import Problem.
3. Choose path to folder with saved txt files with PSG problem in Run-File Environment and choose file with problem statement (problem_*.txt).
4. Press button "Import" and wait until the importing is finished. Problem will be opened in PSG Toolbox after finalizing the importing.

Note. Usually, other Datasets differ from the Dataset 1 (which is already available in PSG MATLAB) only by PSG Data Objects (matrices, points, vectors). In this case you can import only data:

1. Open *.mat file with PSG problem for Dataset1 in Toolbox.
2. Import from Run-File Environment only needed PSG Data Object for a new Dataset:

menu: Data -> Import from text -> Import Matrix / Vector / Point.

Data Object will be added to the list of objects in the Toolbox.

Creating MATLAB Subroutine for one more problem:

Note. Usually other Datasets differ from Dataset 1 (for which subroutine is available) only by PSG Data Objects (matrices, points, vectors). In this case, the user subroutine from Dataset1 is applicable to other Datasets (you need to change only inputs).

If you need to generate a new subroutine, proceed as follows:

1. Import problem from Run-File Environment to PSG MATLAB Toolbox (as described in the previous section).
2. In Toolbox go to menu: Subroutines -> User Subroutine
3. Choose path to folder for saving subroutine function and type its name.
4. Press button "Save" and wait until the subroutine is generated. Files with data and m-function will be saved to the specified folder.