Overview

Main Data Types

APIs

How to use DPF's package

Available Operators

Search..

averaging

filter

geo

invariant

logic

mapping

math

mesh

metadata

min_max

result

scoping

serialization

utility

How to use the IPython package

ACT Console

Open the ACT console scripting in Mechanical

The ACT console can be opened by clicking on "Automation"/"Scripting" menus in Mechanical.

Import DPF and connect it to the current console

To import DPF capabilities into the ACT console, the user should import mech_dpf to access helpers and import the framework contained in the Ans.DataProcessing module. To access data from the current Mechanical windows, DPF shelpers should be linked to it through the extAPI.

```
import mech_dpf
import Ans.DataProcessing as dpf
mech_dpf.setExtAPI(ExtAPI)
```

DPF's helpers to access mechanical's data

Diverse Mechanical s and DPF's data can be accessed:

this documentation can be generated via:

```
mech_dpf.help()
```

• the result files of Mechanical s analysis: to collect the DataSources (DPF s entity containing result file paths) the user can write:

```
my_data_sources = mech_dpf.GetDataSources()
```

• a mesh selection in the interface: to collect a mesh Scoping (DPF s entity representing a list of ids of nodes or elements), once a geometry selection is picked out in the interface, it can be accessed via:

```
my_nodes_scoping = mech_dpf.GetNodesScoping()
my_elements_scoping = mech_dpf.GetElementScoping()
```