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How to use the CPython package

Install the environment

DPF's CPython interface is a grpc service. Its server is available in Workbench installation under aisol/bin/{platform}/Ans.Dpf.Grpc.exe. The client is based on a python SDK and protobuf generated python scripts. To use this API, the environment must have:

- grpc io-tools
- jupyter-lab

To install those module with anaconda:

```
conda install -c anaconda grpcio-tools
conda install -c conda-forge jupyterlab
```

Before launching the jupyter notebook application, several environment variables need to be set:

- %ANSYS_PATH% to the install folder: ANSYSInc/v{version}.
- %DPF_PATH% to %ANSYS_PATH%/aisol/bin/{platform}/Ans.Dpf.Grpc.exe.
- %PYTHONPATH%: add the paths to DPF's SDK and protobuf generated python scripts.

Connect to the server

Once Jupyter Notebook or Lab is launched with the requierements above, connecting the Python client to the service is done with:

```
from ansys import dpf

#start server on local machine with default port
dpf.start_local_server()

#start a specified server
dpf.start_local_server(ip=my_ip, port=my_port)
```