Article

Eduard Lebedyuk · Jan 16, 2020 2m read

Open Exchange

# Python Gateway VI: Jupyter Notebook

This series of articles would cover <u>Python Gateway</u> for InterSystems Data Platforms. Execute Python code and more from InterSystems IRIS. This project brings you the power of Python right into your InterSystems IRIS environment:

- Execute arbitrary Python code
- · Seamlessly transfer data from InterSystems IRIS into Python
- Build intelligent Interoperability business processes with Python Interoperability Adapter
- Save, examine, modify and restore Python context from InterSystems IRIS

### Other articles

The plan for the series so far (subject to change).

- Part I: Overview, Landscape, and Introduction
- Part II: Installation and Troubleshooting
- Part III: Basic functionality
- Part IV: Interoperability Adapter
- Part V: Execute function
- Part VI: Jupyter Notebook <-- you're here
- Part VII: Dynamic Gateway
- Part VIII: Proxy Gateway
- Part IX: Use cases and ML Toolkit

#### Intro

The <u>Jupyter Notebook</u> is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations and narrative text.

This extension allows you to browse and edit InterSystems IRIS BPL processes as jupyter notebooks.

Note that currently default Python 3 executor is used.

This extension assumes that annotations contain Python code and uses activities names as preceding read-only headings.

Recently I added extended Jupyter Support. Now we all can develop PythonGateway Business Processes from Jupyter. Everything is possible:

- Create new Business Processes
- Delete Business Processes
- · Create new activities
- · Modify activities
- · Delete activities

Python Gateway VI: Jupyter Notebook Published on InterSystems Developer Community (https://community.intersystems.com)

Here's a demo video. And how it looks like:

## **Process Explorer**

#### **Process Editor**

#### Installation

- 1. You'll need InterSystems IRIS 2019.2+.
- 2. Install PythonGateway v0.8+ (only isc.py.util.Jupyter and isc.py.ens.ProcessUtils are required).
- 3. Update ObjectScript codebase from Repository.
- 4. Run do ##class(isc.py.util.Jupyter).Install() and follow the prompt.

Readme and complete installation instructions.

# Summary

Python Gateway allows seamless integration between InterSystems IRIS and Python. Use it to add Python functionality to your InterSystems IRIS Application. Use Jupyter Notebook to edit Business Processes. As usual testing and bug reports are welcome.

### Links

- Video
- Python Gateway
- Python Gateway Samples
- Install Python 3.6.7 64 bit
- Python documentation/tutorial

#Convergent Analytics #Machine Learning #Python #InterSystems IRIS Check the related application on InterSystems Open Exchange

Source URL: https://community.intersystems.com/post/python-gateway-vi-jupyter-notebook