Introducing PyWPS 4

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Introduction

- University of Luxembourg
- 3rd year student in computer science BSc
- Bachelor thesis: PyWPS 4
- Work period: 16.02.2015 - 29.05.2015

Development Environment

- Linux Mint 17 Cinnamon 64-bit

- Github

- Git

- Python 2.7

- LiClipse

- WSGI (vis-a-vis CGI in PyWPS 3)

Libraries and Frameworks

- Werkzeug is a WSGI utility library for Python

- Flask is a micro web framework for Python based on Werkzeug, Jinja 2

- Tox is a generic virtualenv management and test command line tool

- lxml is a library for processing XML and HTML in Python

What runs at this moment

- GetCapabilities

- DescribeProcess

- Execute with LiteralInput and Output

- Tests

- PyWPS demo as stand alone WSGI application

What does not run

- Execute with ComplexInput and Output

- Some tests are skipped because of missing or changed code implementation

- ProcessStatus not yet tested

Following XML Responses are not fully WPS 1.0 compliant:

- ▶ GetCapabilites

- ▶ DescribeProcess

- ▶ Execute

Short term plan

- Study Flask

- Make EXECUTE work

- How to use Tox

- Expand tests

Long term plan

- ▶ Make PyWPS WPS 1.0 and 2.0 compliant

- ▶ Extend Demo app

- ▶ Port tests from PyWPS 3

- ▶ Expand the PyWPS Wiki

- ▶ RESTful administration interface