invenio-xrootd Documentation

Release 1.0.0a3

CERN

September 27, 2016

XRootD file storage support for Invenio.

This is an experimental developer preview release.

- Free software: GPLv2 license

- Documentation: https://pythonhosted.org/invenio-xrootd/

User's Guide

This part of the documentation will show you how to get started in using Invenio-XRootD.

1.1 Installation

Install from PyPI:

```
pip install invenio-xrootd
```

Note: Invenio-XRootD is dependent on XRootDPyFS and the XRootD Python bindings which are compatible with Python 2.7 only, and which can be somewhat difficult to install. Please consult the XRootDPyFS installation guide for further details.

1.1.1 Running tests

The easiest way of running the tests is via Docker due to the difficulties in installing the Python XRootD bindings locally:

```
$ docker build -t xrootd . && docker run -h xrootdhost -it xrootd
```

1.2 Usage

API Reference

If you are looking for information on a specific function, class or method, this part of the documentation is for you.

2.1 API Docs

Additional Notes

Notes on how to contribute, legal information and changes are here for the interested.

3.1 Contributing

Contributions are welcome, and they are greatly appreciated! Every little bit helps, and credit will always be given.

3.1.1 Types of Contributions

Report Bugs

Report bugs at https://github.com/inveniosoftware/invenio-xrootd/issues.

If you are reporting a bug, please include:

- Your operating system name and version.
- Any details about your local setup that might be helpful in troubleshooting.
- Detailed steps to reproduce the bug.

Fix Bugs

Look through the GitHub issues for bugs. Anything tagged with "bug" is open to whoever wants to implement it.

Implement Features

Look through the GitHub issues for features. Anything tagged with "feature" is open to whoever wants to implement it.

Write Documentation

Invenio-XRootD could always use more documentation, whether as part of the official Invenio-XRootD docs, in docstrings, or even on the web in blog posts, articles, and such.

Submit Feedback

The best way to send feedback is to file an issue at https://github.com/inveniosoftware/invenio-xrootd/issues.

If you are proposing a feature:

- Explain in detail how it would work.
- Keep the scope as narrow as possible, to make it easier to implement.
- Remember that this is a volunteer-driven project, and that contributions are welcome :)

3.1.2 Get Started!

Ready to contribute? Here's how to set up *invenio-xrootd* for local development.

1. Fork the *invenio* repo on GitHub.

2. Clone your fork locally:

```
$ git clone git@github.com:your_name_here/invenio-xrootd.git
```

3. Install your local copy into a virtualenv. Assuming you have virtualenvwrapper installed, this is how you set up your fork for local development:

```
$ mkvirtualenv invenio-xrootd
$ cd invenio-xrootd/
$ pip install -e .[all]
```

4. Create a branch for local development:

```
$ git checkout -b name-of-your-bugfix-or-feature
```

Now you can make your changes locally.

5. When you're done making changes, check that your changes pass tests:

```
$ ./run-tests.sh
```

The tests will provide you with test coverage and also check PEP8 (code style), PEP257 (documentation), flake8 as well as build the Sphinx documentation and run doctests.

6. Commit your changes and push your branch to GitHub:

```
$ git add .
$ git commit -s
    -m "component: title without verbs"
    -m "* NEW Adds your new feature."
    -m "* FIX Fixes an existing issue."
    -m "* BETTER Improves and existing feature."
    -m "* Changes something that should not be visible in release notes"
$ git push origin name-of-your-bugfix-or-feature
```

7. Submit a pull request through the GitHub website.

3.1.3 Pull Request Guidelines

Before you submit a pull request, check that it meets these guidelines:

1. The pull request should include tests and must not decrease test coverage.

2. If the pull request adds functionality, the docs should be updated. Put your new functionality into a function with a docstring.

3. The pull request should work for Python 2.7, 3.3, 3.4 and 3.5. Check https://travis-ci.org/inveniosoftware/invenio-xrootd/pull_requests and make sure that the tests pass for all supported Python versions.

3.2 Changes

Version 1.0.0a3 (released 2016-09-06)

- Initial public release.

3.3 License

Invenio is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

Invenio is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with Invenio; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307, USA.

In applying this license, CERN does not waive the privileges and immunities granted to it by virtue of its status as an Intergovernmental Organization or submit itself to any jurisdiction.

3.4 Authors

XRootD file storage support for Invenio.

- Lars Holm Nielsen <lars.holm.nielsen@cern.ch>