# **CERN Service XML Documentation**

Release 0.1.1

CERN

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CERN Service XML is a small library to generate a CERN XSLS Service XML.

# Installation

The CERN Service XML package is on PyPI so all you need is:

\$ pip install cernservicexml

# Usage

Creation of XSLS service documents.

Usage:

```
>>> from cernservicexml import ServiceDocument
>>> doc = ServiceDocument('zenodo')
>>> doc.add_numericvalue('users', 1000, desc="Number of users")
>>> xml = doc.to_xml()
```

#### Publishing of service documents.

Usage:

```
>>> from cernservicexml import ServiceDocument, XSLSPublisher
>>> doc = ServiceDocument('myserviceid')
>>> XSLSPublisher.send(doc)
<Response [200]>
```

#### API

class cernservicexml.document.ServiceDocument (service\_id, availability=100, timestamp=None, availabilitydesc=None, contact=None, webpage=None, availabilityinfo=None)

XSLS Service Document class.

#### Parameters

- **service\_id** A unique service id.
- availability An integer 0-100 indicating availability of service. Default: 100.
- timestamp Timestamp when the availability was calculated. Must be a datetime object. Default: now.
- **availabilitydesc** Information about the availability.
- **contact** Service contacts a string.
- webpage Service website (any URI)
- availabilityinfo Information about the service. Can contain HTML.

#### add\_numericvalue (name, value, desc=None)

Add a numeric value metric.

#### **Parameters**

- **name** Numeric value id.
- value An integer, float or Decimal object.
- **desc** A description.
- to\_xml()

Serialize service document to XML.

#### class cernservicexml.publisher.XSLSPublisher Publish a service document to an XSLS service.

**classmethod send** (*document*, *api\_url=u'http://xsls.cern.ch'*) Send service document to XSLS.

# Changes

Version 0.1.1 (released 2015-06-17)

- Fixes issues with POST request for sending the service XML to XSLS.
- Adds doctests to ensure documentation examples works.
- Adds XML validation tests according to XSD Schema.

Version 0.1.0 (released 2015-06-16)

• Initial public release.

# Contributing

Bug reports, feature requests, and other contributions are welcome. If you find a demonstrable problem that is caused by the code of this library, please:

- 1. Search for already reported problems.
- 2. Check if the issue has been fixed or is still reproducible on the latest master branch.
- 3. Create an issue with **a test case**.

If you create a feature branch, you can run the tests to ensure everything is operating correctly:

\$ ./run-tests.sh

### License

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