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CERN Service XML is a small library to generate a CERN XSLS Service XML.
The CERN Service XML package is on PyPI so all you need is:

$ pip install cernservicexml
Creation of XSLS service documents.

Usage:

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

Publishing of service documents.

Usage:

```python
>>> from cernservicexml import ServiceDocument, XSLSPublisher
>>> doc = ServiceDocument('myserviceid')
>>> XSLSPublisher.send(doc)
<Response [200]>
```
class cernservicexml.document.ServiceDocument (service_id, status=None, timestamp=None, availabilitydesc=None, contact=None, webpage=None, availabilityinfo=None, availability=None)

XSLS Service Document class.

Parameters

- **service_id** – A unique service id.
- **availability** – An integer 0-100 indicating availability of service (deprecated, use **status** instead). Default: 100.
- **status** – Status of the service. Allowed values: available, degraded or unavailable. Default: available.
- **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.

Changed in version 0.2: Added **status** parameter. Deprecated **availability** parameter.

**STATUSES** = [u'available', u'degraded', u'unavailable']

Allowed status values.

**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.

**availability**

Get status as legacy availability percentage.

Deprecated since version 0.2: Use of availability as percentage is deprecated. Please use **status** instead. Attribute will be removed in v0.3.
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://xslls.cern.ch')  
   Send service document to XSLS.
CHAPTER 4

Changes

Version 0.2 (released 2015-07-16)

• Adds support for service status parameter in ServiceDocument.
• Deprecates use of service availability percentage in ServiceDocument. Please use service status parameter instead.
• Changes documentation theme to the standard non-Flask RTD one.
• Initial release of Docker configuration suitable for local developments. docker-compose build rebuilds the image, docker-compose run –rm web python setup.py test runs the test suite.

Version 0.1.2 (released 2015-06-17)

• Adds support for long (Python 2) integers.

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.
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
```

You can also test your feature branch using Docker:

```
$ docker-compose build
$ docker-compose run --rm web /code/run-tests.sh
```
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