

SDK FOR CEPH OBJECT CLASSES

Ceph can be extended by creating shared object classes called *Ceph Object Classes*. The existing framework to build these object classes has dependencies on the internal functionality of *Ceph*, which restricts users to build object classes within the tree. The aim of this project is to create an independent object class interface, which can be used to build object classes outside the *Ceph* tree. This allows us to have two types of object classes, 1) those that have in-tree dependencies and reside in the tree and 2) those that can make use of the *Ceph Object Class SDK framework* and can be built outside of the *Ceph* tree because they do not depend on any internal implementation of *Ceph*. This project decouples object class development from *Ceph* and encourages creation and distribution of object classes as packages.

In order to demonstrate the use of this framework, we have provided an example called `cls_sdk`, which is a very simple object class that makes use of the SDK framework. This object class resides in the `src/cls` directory.

INSTALLING OBJCLASS.H

The object class interface that enables out-of-tree development of object classes resides in `src/include/rados/` and gets installed with *Ceph* installation. After running `make install`, you should be able to see it in `<prefix>/include/rados`.

```
ls /usr/local/include/rados
```

USING THE SDK EXAMPLE

The `cls_sdk` object class resides in `src/cls/sdk/`. This gets built and loaded into *Ceph*, with the *Ceph* build process. You can run the `ceph_test_cls_sdk` unittest, which resides in `src/test/cls_sdk/`, to test this class.