Working with a private Swift container
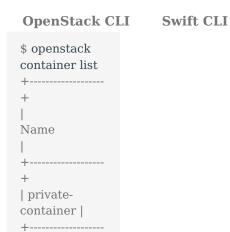
Prerequisites

In order to create a Swift container, be sure that you have installed and configured the required command-line interface (CLI) tools.

Creating a private container

To create a private container (that is, one that can only be accessed with proper Swift API credentials), use the following command:

OpenStack CLI   Swift CLI

```
$ openstack container create private-container
+-----------------------------------+-------------------
+---------------------------------------------------+
| account                           | container       | x-
trans-id                          |
+-----------------------------------+-------------------
+---------------------------------------------------+
| AUTH_30a7768a0ffc40359d6110f21a6e7d88 |
private-container |
tx00000ddb0f9e2a50ad881-00638dbf9c-300de11-
default |
+-----------------------------------+-------------------
+---------------------------------------------------+
```

```
swift post private-container
```
on

This command produces no output.

To create a list of all containers accessible with your current set of credentials, use this command:

OpenStack CLI   Swift CLI

```
$ openstack
container list
+-------------------
+
|
Name
|
+-------------------
+
| private-
container |
+-------------------
+
```

```
$ swift list
private-
container
```

To retrieve more detailed information about an individual container, you can also use this command:

OpenStack CLI   **Swift CLI**

```
$ openstack container show private-container
+---------------+------------------------------------+
| Field         | Value                              |
+---------------+------------------------------------+
| account       |
AUTH_30a7768a0ffc40359d6110f21a6e7d88 |
| bytes_used    | 0                                  |
| container     | private-container                  |
| object_count  | 0                                  |
| storage_policy | default-placement                 |
+---------------+------------------------------------+
```

```
$ swift stat private-container
              Account:
AUTH_30a7768a0ffc40359d6110f21a6e7d88
            Container: private-container
              Objects: 0
                Bytes: 0
             Read ACL:
            Write ACL:
              Sync To:
             Sync Key:
          X-Timestamp: 1670234012.31534
X-Container-Bytes-Used-Actual: 0
       X-Storage-Policy: default-placement
        X-Storage-Class: STANDARD
         Last-Modified: Mon, 05 Dec 2022
09:53:32 GMT
            X-Trans-Id:
tx0000073eebb42acd6e7e1-00638dbfe8-301ddeb-
default
     X-Openstack-Request-Id:
tx0000073eebb42acd6e7e1-00638dbfe8-301ddeb-
default
         Accept-Ranges: bytes
          Content-Type: text/plain; charset=utf-8
```
a local test file:

```
echo "hello world" > testobj.txt
```

Then, upload the file (as a Swift object) into your container, and read back its metadata:

OpenStack CLI	Swift CLI

```
$ openstack object create private-container
testobj.txt
+-------------+------------------+-------------------------------
+
| object      | container        |
etag                    |
+-------------+------------------+-------------------------------
+
| testobj.txt | private-container |
6f5902ac237024bdd0c176cb93063dc4 |
+-------------+------------------+-------------------------------
+

$ openstack object show private-container
testobj.txt
+----------------+--------------------------------------+
| Field          | Value                                |
+----------------+--------------------------------------+
| account        |
AUTH_30a7768a0ffc40359d6110f21a6e7d88 |
| container      | private-container                    |
| content-length | 12                                   |
| content-type   | text/plain                           |
| etag           |
6f5902ac237024bdd0c176cb93063dc4      |
| last-modified  | Mon, 05 Dec 2022 10:00:34
GMT        |
| object         | testobj.txt                          |
| properties     |
mtime='1670234292.370177'             |
+----------------+--------------------------------------+

$ swift upload private-container testobj.txt
testobj.txt

$ swift stat private-container testobj.txt
            Account:
AUTH_30a7768a0ffc40359d6110f21a6e7d88
          Container: private-container
             Object: testobj.txt
       Content Type: text/plain
     Content Length: 12
      Last Modified: Mon, 05 Dec 2022 10:00:34
GMT
               ETag:
6f5902ac237024bdd0c176cb93063dc4
        Meta Mtime: 1670234292.370177
      Accept-Ranges: bytes
        X-Timestamp: 1670234434.67877
         X-Trans-Id:
tx000000f26ccf73c19f596-00638dc160-300de11-
default
X-Openstack-Request-Id:
tx000000f26ccf73c19f596-00638dc160-300de11-
default
```

ner, use the following command:

OpenStack CLI	Swift CLI

```
$ openstack object
save --file - private-
container
testobj.txt
hello world
```

The `--file -` option
prints the file
contents to stdout.
If instead you want
to save the object's
content to a local
file, use `--file`
`<filename>`.

If you omit the `--file`
argument
altogether,
`openstack object`
`save` will create a
local file named like
the object you are
downloading (in this
case, `testobj.txt`).

```
$ swift download -
o - private-
container
testobj.txt
hello world
```

The `-o -` option
prints the file
contents to stdout.
If instead you want
to save the object's
content to a local
file, use `-o`
`<filename>`.

If you omit the `-o`
argument
altogether, `swift`
`download` will create

a local file named like the object you are downloading (in this case, testobj.txt).

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