

With the `X-History-Location` flag set, you receive a `404 Not Found` error after deleting the object inside the container. Swift copies the object to the archive container and removes the original copy in the versioned container. You can recover the object from the archive container.

With the `X-Versions-Location` flag set, Swift removes the current object version in the versioned container. Then, Swift copies the most recent object version in the archive container to the versioned container, and deletes that most recent object version from the archive container. To completely remove an object from a versioned container with the `X-Versions-Location` flag set, you must remove the object as many times as there are object versions available in the archive container.

Set only one of these flags at the same time on an OpenStack Swift container. If the container's metadata contains both flags, then a `400 Bad Request` error is issued.

RADOS Gateway supports the Swift API object versioning feature. To activate this feature in the RADOS Gateway, set `rgw_swift_versioning_enabled` to `true` in the `[client.radosgw.radosgw-name]` section in the `/etc/ceph/ceph.conf` configuration file.

RADOS Gateway also supports using the `X-Delete-At` and `X-Delete-After` headers when adding objects using the Swift API. At the time specified by the header, RADOS Gateway stops serving that object, and removes it shortly after.

## Multitenancy Support in Swift

The OpenStack Swift API supports the use of tenants to isolate buckets and users. The Swift API associates every new bucket created by a user with a tenant. This feature allows you to use the same bucket name on different tenants, because tenants isolate resources. For backward compatibility, the Swift API uses a generic, no-name tenant for containers which don't have an associated tenant.

Configure Swift API tenants in RADOS Gateway with the `radosgw-admin` command. This command requires a tenant to create the user provided using the `--tenant` option.

```
[root@node ~]$ radosgw-admin user create --tenant testtenant \
  --uid testuser --display-name "Swift User" --subuser testswift:testuser \
  --key-type swift --access full
```

Any further reference to the subuser must include the tenant.

```
[root@node ~]$ radosgw-admin --subuser 'testtenant:testswift:testuser' \
  --key-type swift --secret redhat
```



### References

For more information, refer to the *Configuration Reference* chapter in the *Object Gateway Configuration and Administration Guide* at [https://access.redhat.com/documentation/en-us/red\\_hat\\_ceph\\_storage/5/html-single/object\\_gateway\\_guide/index#rgw-configuration-reference-rgw](https://access.redhat.com/documentation/en-us/red_hat_ceph_storage/5/html-single/object_gateway_guide/index#rgw-configuration-reference-rgw)