

create new buckets and users. If the master zone does not recover immediately, promote one of the secondary zones as a replacement for the master zone.

To promote a secondary zone, modify the zone and zone group and commit the period update.

1. Point the master zone to the secondary zone (`datacenter02`).

```
[ceph: root@node02 /]# radosgw-admin zone modify --master --rgw-zone=datacenter02
```

2. Update the master zone group after changing the role of the zone.

```
[ceph: root@node02 /]# radosgw-admin zonegroup modify --rgw-zonegroup=us \
--endpoints=http://node02:80
```

3. Commit the changes.

```
[ceph: root@node02 /]# radosgw-admin period update --commit
```

Metadata Search Capabilities

Very large object stores are becoming common. Users still require smart access to objects so that they can extract additional information from the object metadata. The metadata associated with the objects provides insightful information about the objects. RADOS Gateway supports Elasticsearch to query metadata in an object store, and to index objects based on user-defined custom metadata for objects.

RADOS Gateway supports Elasticsearch as a component of the `multimode` architecture. Elasticsearch can manage the metadata for all objects in a zone group. A zone group can contain zones that store objects, while other zones store the metadata for those objects.

The following command defines the `metadata-zone` zone as a metadata zone managed by Elasticsearch:

```
[ceph: root@node /]# radosgw-admin zone modify --rgw-zone=metadata-zone \
--tier-type=elasticsearch \
--tier-config=endpoint=http://node03:9200,num_shards=10,num_replicas=1
```

- The `--tier-type` option sets the zone type to `elasticsearch`.
- The `--tier-config` option defines the configuration for the Elasticsearch zone.
- The `endpoint` parameter defines the endpoint to access the Elasticsearch server.
- The `num_shards` parameter defines the number of shards used by Elasticsearch.
- The `num_replicas` parameter specifies the number of replicas used by Elasticsearch.

RADOS Gateway Multisite Monitoring

You can monitor RADOS Gateway performance and usage statistics in the Ceph Storage Dashboard. To integrate the RADOS Gateway with the Ceph Storage Dashboard, you must add the login credentials of an RGW user with the `system` flag in a JSON format file.

Use the `ceph dashboard set-rgw-api-access-key` and `ceph dashboard set-rgw-api-secret-key` commands to provide the access key and secret key, when adding an RGW system user to the dashboard.