COMPRESSION

New in version Kraken.

The Ceph Object Gateway supports server-side compression of uploaded objects, using any of Ceph's existing compression plugins.

CONFIGURATION

Compression can be enabled on a Zone's placement target by providing the `--compression=<type>` option to the `radosgw-admin zone placement modify` command.

The compression `type` refers to the name of the compression plugin to use when writing new object data. Each compressed object remembers which plugin was used, so changing this setting does not hinder the ability to decompress existing objects, not does it force existing objects to be recompressed.

This compression setting applies to all new objects uploaded to buckets using this placement target. Compression can be disabled by setting the `type` to an empty string or none.

For example:

```
$ radosgw-admin zone placement modify --rgw-zone=default --placement-id=default-placement --c
{
...
    "placement_pools": [
        {
            "key": "default-placement",
            "val": {
                "index_pool": "default.rgw.buckets.index",
                "data_pool": "default.rgw.buckets.data",
                "data_extra_pool": "default.rgw.buckets.non-ec",
                "index_type": 0,
                "compression": "zlib"
            }
        }
    ],
...
}
```

Note: A `default` zone is created for you if you have not done any previous Multisite Configuration.

STATISTICS

While all existing commands and APIs continue to report object and bucket sizes based their uncompressed data, compression statistics for a given bucket are included in its `bucket stats`:

```
$ radosgw-admin bucket stats --bucket=<name>
{
...
    "usage": {
        "rgw.main": {
            "size": 1075028,
            "size_actual": 1331200,
            "size_utilized": 592035,
            "size_kb": 1050,
            "size_kb_actual": 1300,
            "size_kb_utilized": 579,
            "num_objects": 104
        }
    },
...
}
```

The `size_utilized` and `size_kb_utilized` fields represent the total size of compressed data, in bytes and kilobytes respectively.