RADOSGW – RADOS REST GATEWAY

SYNOPSIS

radosgw

DESCRIPTION

radosgw is an HTTP REST gateway for the RADOS object store, a part of the Ceph distributed storage system. It is implemented as a FastCGI module using libfcgi, and can be used in conjunction with any FastCGI capable web server.

OPTIONS

-c ceph.conf, **--conf**=ceph.conf

Use *ceph.conf* configuration file instead of the default `/etc/ceph/ceph.conf` to determine monitor addresses during startup.

-m monaddress[:port]

Connect to specified monitor (instead of looking through `ceph.conf`).

--rgw-socket-path=path

Specify a unix domain socket path.

CONFIGURATION

Currently it's the easiest to use the RADOS Gateway with Apache and mod_fastcgi:

```
FastCgiExternalServer /var/www/s3gw.fcgi -socket /tmp/radosgw.sock

<VirtualHost *:80>
  ServerName rgw.example1.com
  ServerAlias rgw
  ServerAdmin webmaster@example1.com
  DocumentRoot /var/www

  RewriteEngine On
  RewriteRule ^/([a-zA-Z0-9-_.]*)([/]?.*) /s3gw.fcgi?page=$1&params=$2&%{QUERY_STRING} [E=HTT

  <IfModule mod_fastcgi.c>
    <Directory /var/www>
      Options +ExecCGI
      AllowOverride All
      SetHandler fastcgi-script
      Order allow,deny
      Allow from all
      AuthBasicAuthoritative Off
    </Directory>
  </IfModule>

  AllowEncodedSlashes On
  ServerSignature Off
</VirtualHost>
```

And the corresponding radosgw script (/var/www/s3gw.fcgi):

```
#!/bin/sh
exec /usr/bin/radosgw -c /etc/ceph/ceph.conf -n client.radosgw.gateway
```

The radosgw daemon is a standalone process which needs a configuration section in the ceph.conf The section name should start with 'client.radosgw.' as specified in /etc/init.d/radosgw:

```
[client.radosgw.gateway]
    host = gateway
    keyring = /etc/ceph/keyring.radosgw.gateway
    rgw socket path = /tmp/radosgw.sock
```

You will also have to generate a key for the radosgw to use for authentication with the cluster:

```
ceph-authtool -C -n client.radosgw.gateway --gen-key /etc/ceph/keyring.radosgw.gateway
ceph-authtool -n client.radosgw.gateway --cap mon 'allow r' --cap osd 'allow rwx' /etc/ceph/k
```

And add the key to the auth entries:

```
ceph auth add client.radosgw.gateway --in-file=keyring.radosgw.gateway
```

Now you can start Apache and the radosgw daemon:

```
/etc/init.d/apache2 start
/etc/init.d/radosgw start
```

USAGE LOGGING

The **radosgw** maintains an asynchronous usage log. It accumulates statistics about user operations and flushes it periodically. The logs can be accessed and managed through **radosgw-admin**.

The information that is being logged contains total data transfer, total operations, and total successful operations. The data is being accounted in an hourly resolution under the bucket owner, unless the operation was done on the service (e.g., when listing a bucket) in which case it is accounted under the operating user.

Following is an example configuration:

```
[client.radosgw.gateway]
    rgw enable usage log = true
    rgw usage log tick interval = 30
    rgw usage log flush threshold = 1024
    rgw usage max shards = 32
    rgw usage max user shards = 1
```

The total number of shards determines how many total objects hold the usage log information. The per-user number of shards specify how many objects hold usage information for a single user. The tick interval configures the number of seconds between log flushes, and the flush threshold specify how many entries can be kept before resorting to synchronous flush.

AVAILABILITY

radosgw is part of the Ceph distributed file system. Please refer to the Ceph documentation at http://ceph.com/docs for more information.

SEE ALSO

ceph(8) radosgw-admin(8)