

CEPH OBJECT GATEWAY CONFIG REFERENCE

The following settings may be added to the Ceph configuration file (i.e., usually `ceph.conf`) under the `[client.radosgw.{instance-name}]` section. The settings may contain default values. If you do not specify each setting in the Ceph configuration file, the default value will be set automatically.

Configuration variables set under the `[client.radosgw.{instance-name}]` section will not apply to `rgw` or `radosgw-admin` commands without an instance-name specified in the command. Thus variables meant to be applied to all RGW instances or all `radosgw-admin` commands can be put into the `[global]` or the `[client]` section to avoid specifying instance-name.

rgw frontends

Description: Configures the HTTP frontend(s). The configuration for multiple frontends can be provided in a comma-delimited list. Each frontend configuration may include a list of options separated by spaces, where each option is in the form “key=value” or “key”. See [HTTP Frontends](#) for more on supported options.

Type: String

Default: `civetweb port=7480`

rgw data

Description: Sets the location of the data files for Ceph Object Gateway.

Type: String

Default: `/var/lib/ceph/radosgw/$cluster-$id`

rgw enable apis

Description: Enables the specified APIs.

Type: String

Default: `s3, swift, swift_auth, admin` All APIs.

rgw cache enabled

Description: Whether the Ceph Object Gateway cache is enabled.

Type: Boolean

Default: `true`

rgw cache lru size

Description: The number of entries in the Ceph Object Gateway cache.

Type: Integer

Default: `10000`

rgw socket path

Description: The socket path for the domain socket. `FastCgiExternalServer` uses this socket. If you do not specify a socket path, Ceph Object Gateway will not run as an external server. The path you specify here must be the same as the path specified in the `rgw.conf` file.

Type: String

Default: `N/A`

rgw fcgi socket backlog

Description: The socket backlog for fcgi.

Type: Integer

Default: `1024`

rgw host

Description: The host for the Ceph Object Gateway instance. Can be an IP address or a hostname.

Type: String

Default: `0.0.0.0`

rgw port

Description: Port the instance listens for requests. If not specified, Ceph Object Gateway runs external FastCGI.
Type: String
Default: None

rgw dns name

Description: The DNS name of the served domain. See also the hostnames setting within regions.
Type: String
Default: None

rgw script uri

Description: The alternative value for the SCRIPT_URI if not set in the request.
Type: String
Default: None

rgw request uri

Description: The alternative value for the REQUEST_URI if not set in the request.
Type: String
Default: None

rgw print continue

Description: Enable 100-continue if it is operational.
Type: Boolean
Default: true

rgw remote addr param

Description: The remote address parameter. For example, the HTTP field containing the remote address, or the X-Forwarded-For address if a reverse proxy is operational.
Type: String
Default: REMOTE_ADDR

rgw op thread timeout

Description: The timeout in seconds for open threads.
Type: Integer
Default: 600

rgw op thread suicide timeout

Description: The time timeout in seconds before a Ceph Object Gateway process dies. Disabled if set to 0.
Type: Integer
Default: 0

rgw thread pool size

Description: The size of the thread pool.
Type: Integer
Default: 100 threads.

rgw num rados handles

Description: The number of **RADOS cluster handles** for Ceph Object Gateway. Having a configurable number of RADOS handles is resulting in significant performance boost for all types of workloads. Each RGW worker thread would now get to pick a RADOS handle for its lifetime, from the available bunch.
Type: Integer
Default: 1

rgw num control oids

Description: The number of notification objects used for cache synchronization between different rgw instances.
Type: Integer

Default: 8

rgw init timeout

Description: The number of seconds before Ceph Object Gateway gives up on initialization.

Type: Integer

Default: 30

rgw mime types file

Description: The path and location of the MIME types. Used for Swift auto-detection of object types.

Type: String

Default: /etc/mime.types

rgw gc max objs

Description: The maximum number of objects that may be handled by garbage collection in one garbage collection processing cycle.

Type: Integer

Default: 32

rgw gc obj min wait

Description: The minimum wait time before the object may be removed and handled by garbage collection processing.

Type: Integer

Default: 2 * 3600

rgw gc processor max time

Description: The maximum time between the beginning of two consecutive garbage collection processing cycles.

Type: Integer

Default: 3600

rgw gc processor period

Description: The cycle time for garbage collection processing.

Type: Integer

Default: 3600

rgw s3 success create obj status

Description: The alternate success status response for create-obj.

Type: Integer

Default: 0

rgw resolve cname

Description: Whether rgw should use DNS CNAME record of the request hostname field (if hostname is not equal to rgw dns name).

Type: Boolean

Default: false

rgw obj stripe size

Description: The size of an object stripe for Ceph Object Gateway objects. See [Architecture](#) for details on striping.

Type: Integer

Default: 4 << 20

rgw extended http attrs

Description: Add new set of attributes that could be set on an entity (user, bucket or object). These extra attributes can be set through HTTP header fields when putting the entity or modifying it using POST method. If set, these attributes will return as HTTP fields when doing GET/HEAD on the entity.

Type: String

Default: None
Example: "content_foo, content_bar, x-foo-bar"

rgw exit timeout secs

Description: Number of seconds to wait for a process before exiting unconditionally.
Type: Integer
Default: 120

rgw get obj window size

Description: The window size in bytes for a single object request.
Type: Integer
Default: 16 << 20

rgw get obj max req size

Description: The maximum request size of a single get operation sent to the Ceph Storage Cluster.
Type: Integer
Default: 4 << 20

rgw relaxed s3 bucket names

Description: Enables relaxed S3 bucket names rules for US region buckets.
Type: Boolean
Default: false

rgw list buckets max chunk

Description: The maximum number of buckets to retrieve in a single operation when listing user buckets.
Type: Integer
Default: 1000

rgw override bucket index max shards

Description: Represents the number of shards for the bucket index object, a value of zero indicates there is no sharding. It is not recommended to set a value too large (e.g. thousand) as it increases the cost for bucket listing. This variable should be set in the client or global sections so that it is automatically applied to radosgw-admin commands.
Type: Integer
Default: 0

rgw curl wait timeout ms

Description: The timeout in milliseconds for certain curl calls.
Type: Integer
Default: 1000

rgw copy obj progress

Description: Enables output of object progress during long copy operations.
Type: Boolean
Default: true

rgw copy obj progress every bytes

Description: The minimum bytes between copy progress output.
Type: Integer
Default: 1024 * 1024

rgw admin entry

Description: The entry point for an admin request URL.
Type: String
Default: admin

rgw content length compat

Description: Enable compatability handling of FCGI requests with both CONTENT_LENGTH AND HTTP_CONTENT_LENGTH set.

Type: Boolean

Default: false

rgw bucket quota ttl

Description: The amount of time in seconds cached quota information is trusted. After this timeout, the quota information will be re-fetched from the cluster.

Type: Integer

Default: 600

rgw user quota bucket sync interval

Description: The amount of time in seconds bucket quota information is accumulated before syncing to the cluster. During this time, other RGW instances will not see the changes in bucket quota stats from operations on this instance.

Type: Integer

Default: 180

rgw user quota sync interval

Description: The amount of time in seconds user quota information is accumulated before syncing to the cluster. During this time, other RGW instances will not see the changes in user quota stats from operations on this instance.

Type: Integer

Default: 180

rgw bucket default quota max objects

Description: Default max number of objects per bucket. Set on new users, if no other quota is specified. Has no effect on existing users. This variable should be set in the client or global sections so that it is automatically applied to radosgw-admin commands.

Type: Integer

Default: -1

rgw bucket default quota max size

Description: Default max capacity per bucket, in bytes. Set on new users, if no other quota is specified. Has no effect on existing users.

Type: Integer

Default: -1

rgw user default quota max objects

Description: Default max number of objects for a user. This includes all objects in all buckets owned by the user. Set on new users, if no other quota is specified. Has no effect on existing users.

Type: Integer

Default: -1

rgw user default quota max size

Description: The value for user max size quota in bytes set on new users, if no other quota is specified. Has no effect on existing users.

Type: Integer

Default: -1

rgw verify ssl

Description: Verify SSL certificates while making requests.

Type: Boolean

Default: true

New in version Jewel.

You may include the following settings in your Ceph configuration file under each `[client.radosgw.{instance-name}]` instance.

rgw zone

Description: The name of the zone for the gateway instance. If no zone is set, a cluster-wide default can be configured with the command `radosgw-admin zone default`.

Type: String

Default: None

rgw zonegroup

Description: The name of the zonegroup for the gateway instance. If no zonegroup is set, a cluster-wide default can be configured with the command `radosgw-admin zonegroup default`.

Type: String

Default: None

rgw realm

Description: The name of the realm for the gateway instance. If no realm is set, a cluster-wide default can be configured with the command `radosgw-admin realm default`.

Type: String

Default: None

rgw run sync thread

Description: If there are other zones in the realm to sync from, spawn threads to handle the sync of data and metadata.

Type: Boolean

Default: true

rgw data log window

Description: The data log entries window in seconds.

Type: Integer

Default: 30

rgw data log changes size

Description: The number of in-memory entries to hold for the data changes log.

Type: Integer

Default: 1000

rgw data log obj prefix

Description: The object name prefix for the data log.

Type: String

Default: data_log

rgw data log num shards

Description: The number of shards (objects) on which to keep the data changes log.

Type: Integer

Default: 128

rgw md log max shards

Description: The maximum number of shards for the metadata log.

Type: Integer

Default: 64

Important: The values of `rgw data log num shards` and `rgw md log max shards` should not be changed after sync has started.

SWIFT SETTINGS

`rgw enforce swift acls`

Description: Enforces the Swift Access Control List (ACL) settings.
Type: Boolean
Default: true

`rgw swift token expiration`

Description: The time in seconds for expiring a Swift token.
Type: Integer
Default: 24 * 3600

`rgw swift url`

Description: The URL for the Ceph Object Gateway Swift API.
Type: String
Default: None

`rgw swift url prefix`

Description: The URL prefix for the Swift StorageURL that goes in front of the `"/v1"` part. This allows to run several Gateway instances on the same host. For compatibility, setting this configuration variable to empty causes the default `"/swift"` to be used. Use explicit prefix `"/"` to start StorageURL at the root. WARNING: setting this option to `"/"` will NOT work if S3 API is enabled. From the other side disabling S3 will make impossible to deploy RadosGW in the multi-site configuration!
Default: swift
Example: `"/swift-testing"`

`rgw swift auth url`

Description: Default URL for verifying v1 auth tokens (if not using internal Swift auth).
Type: String
Default: None

`rgw swift auth entry`

Description: The entry point for a Swift auth URL.
Type: String
Default: auth

`rgw swift versioning enabled`

Description: Enables the Object Versioning of OpenStack Object Storage API. This allows clients to put the `X-Versions-Location` attribute on containers that should be versioned. The attribute specifies the name of container storing archived versions. It must be owned by the same user that the versioned container due to access control verification - ACLs are NOT taken into consideration. Those containers cannot be versioned by the S3 object versioning mechanism.
Type: Boolean
Default: false

LOGGING SETTINGS

`rgw log nonexistent bucket`

Description: Enables Ceph Object Gateway to log a request for a non-existent bucket.
Type: Boolean
Default: false

rgw log object name

Description: The logging format for an object name. See manpage *date* for details about format specifiers.
Type: Date
Default: %Y-%m-%d-%H-%i-%n

rgw log object name utc

Description: Whether a logged object name includes a UTC time. If false, it uses the local time.
Type: Boolean
Default: false

rgw usage max shards

Description: The maximum number of shards for usage logging.
Type: Integer
Default: 32

rgw usage max user shards

Description: The maximum number of shards used for a single user's usage logging.
Type: Integer
Default: 1

rgw enable ops log

Description: Enable logging for each successful Ceph Object Gateway operation.
Type: Boolean
Default: false

rgw enable usage log

Description: Enable the usage log.
Type: Boolean
Default: false

rgw ops log rados

Description: Whether the operations log should be written to the Ceph Storage Cluster backend.
Type: Boolean
Default: true

rgw ops log socket path

Description: The Unix domain socket for writing operations logs.
Type: String
Default: None

rgw ops log data backlog

Description: The maximum data backlog data size for operations logs written to a Unix domain socket.
Type: Integer
Default: 5 << 20

rgw usage log flush threshold

Description: The number of dirty merged entries in the usage log before flushing synchronously.
Type: Integer
Default: 1024

rgw usage log tick interval

Description: Flush pending usage log data every n seconds.
Type: Integer
Default: 30

rgw log http headers

Description: Comma-delimited list of HTTP headers to include with ops log entries. Header names are case insensitive, and use the full header name with words separated by underscores.

Type: String

Default: None

Example: "http_x_forwarded_for, http_x_special_k"

rgw intent log object name

Description: The logging format for the intent log object name. See manpage *date* for details about format specifiers.

Type: Date

Default: %Y-%m-%d-%i-%n

rgw intent log object name utc

Description: Whether the intent log object name includes a UTC time. If false, it uses the local time.

Type: Boolean

Default: false

KEYSTONE SETTINGS

rgw keystone url

Description: The URL for the Keystone server.

Type: String

Default: None

rgw keystone api version

Description: The version (2 or 3) of OpenStack Identity API that should be used for communication with the Keystone server.

Type: Integer

Default: 2

rgw keystone admin domain

Description: The name of OpenStack domain with admin privilege when using OpenStack Identity API v3.

Type: String

Default: None

rgw keystone admin project

Description: The name of OpenStack project with admin privilege when using OpenStack Identity API v3. If left unspecified, value of `rgw keystone admin tenant` will be used instead.

Type: String

Default: None

rgw keystone admin token

Description: The Keystone admin token (shared secret). In Ceph RadosGW authentication with the admin token has priority over authentication with the admin credentials (`rgw keystone admin user`, `rgw keystone admin password`, `rgw keystone admin tenant`, `rgw keystone admin project`, `rgw keystone admin domain`). Admin token feature is considered as deprecated.

Type: String

Default: None

rgw keystone admin tenant

Description: The name of OpenStack tenant with admin privilege (Service Tenant) when using OpenStack Identity API v2

Type: String

Default: None

rgw keystone admin user

Description: The name of OpenStack user with admin privilege for Keystone authentication (Service User) when OpenStack Identity API v2
Type: String
Default: None

rgw keystone admin password

Description: The password for OpenStack admin user when using OpenStack Identity API v2
Type: String
Default: None

rgw keystone accepted roles

Description: The roles requires to serve requests.
Type: String
Default: Member, admin

rgw keystone token cache size

Description: The maximum number of entries in each Keystone token cache.
Type: Integer
Default: 10000

rgw keystone revocation interval

Description: The number of seconds between token revocation checks.
Type: Integer
Default: 15 * 60

rgw keystone verify ssl

Description: Verify SSL certificates while making token requests to keystone.
Type: Boolean
Default: true

BARBICAN SETTINGS

rgw barbican url

Description: The URL for the Barbican server.
Type: String
Default: None

rgw keystone barbican user

Description: The name of the OpenStack user with access to the **Barbican** secrets used for **Encryption**.
Type: String
Default: None

rgw keystone barbican password

Description: The password associated with the **Barbican** user.
Type: String
Default: None

rgw keystone barbican tenant

Description: The name of the OpenStack tenant associated with the **Barbican** user when using OpenStack Identity API v2.
Type: String
Default: None

rgw keystone barbican project

Description: The name of the OpenStack project associated with the Barbican user when using OpenStack Identity API v3.
Type: String
Default: None

rgw keystone barbican domain

Description: The name of the OpenStack domain associated with the Barbican user when using OpenStack Identity API v3.
Type: String
Default: None