

Warning: This document is a draft, it might not be accurate

NAMING CODE REFERENCE

Here comes a BNF definition on how to name a feature in the code for referencing purpose :

```
name ::= request_type "_" ( header | operation ) ( "_" header_option )?
request_type ::= "req" | "res"
header ::= string
operation ::= method resource
method ::= "GET" | "PUT" | "POST" | "DELETE" | "OPTIONS" | "HEAD"
resource ::= string
header_option ::= string
```

COMMON REQUEST HEADERS

S3 Documentation reference : <http://docs.aws.amazon.com/AmazonS3/latest/API/RESTCommonRequestHeaders.html>

Header	Supported?	Code Links	Tests links
Authorization	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1962 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L2051	
Content-Length	Yes		
Content-Type	Yes		
Content-MD5	Yes	https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1249 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1306	
Date	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_auth_s3.cc#L164	
Expect	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest.cc#L1227 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L802 https://github.com/ceph/ceph/blob/76040d90f7eb9f9921a3b8dcd0f821ac2cd9c492/src/rgw/rgw_main.cc#L372	
Host	?		
x-amz-date	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_auth_s3.cc#L169 should take precedence over DATE as mentioned here -> http://docs.aws.amazon.com/AmazonS3/latest/API/RESTCommonRequestHeaders.html	
x-amz-security-token	No		

COMMON RESPONSE HEADERS

S3 Documentation reference : <http://docs.aws.amazon.com/AmazonS3/latest/API/RESTCommonResponseHeaders.html>

Header	Supported?	Code Links	Tests links
Content-Length	Yes		
Connection	?		
Date	?		
ETag	Yes	https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1312 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1436 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L2222 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L118 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L268 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L516 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1336 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1486 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1548	
Server	No		
x-amz-delete-marker	No		
x-amz-id-2	No		
x-amz-request-id	Yes	https://github.com/ceph/ceph/commit/b711e3124f8f73c17ebd19b38807a1b77f201e44	
x-amz-version-id	No		

OPERATIONS ON THE SERVICE

S3 Documentation reference : <http://docs.aws.amazon.com/AmazonS3/latest/API/RESTServiceOps.html>

Type	Operation	Supported?	Code links	Tests links
GET	Service	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L2094 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1676 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L185	

OPERATIONS ON BUCKETS

S3 Documentation reference : <http://docs.aws.amazon.com/AmazonS3/latest/API/RESTBucketOps.html>

Type	Operation	Supported?	Code links	Tests links
DELETE	Bucket	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1728 https://github.com/ceph/ceph/blob/e91042171939b6bf82a56a1015c5cae792d228ad/src/rgw/rgw_rest_bucket.cc#L250 https://github.com/ceph/ceph/blob/e91042171939b6bf82a56a1015c5cae792d228ad/src/rgw/rgw_rest_bucket.cc#L212 https://github.com/ceph/ceph/blob/25948319c4d256c4aeb0137eb88947e54d14cc79/src/rgw/rgw_bucket.cc#L856 https://github.com/ceph/ceph/blob/25948319c4d256c4aeb0137eb88947e54d14cc79/src/rgw/rgw_bucket.cc#L513 https://github.com/ceph/ceph/blob/25948319c4d256c4aeb0137eb88947e54d14cc79/src/rgw/rgw_bucket.cc#L286 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L461	
DELETE	Bucket cors	?	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1731 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1916	
DELETE	Bucket lifecycle	No		
DELETE	Bucket policy	?		
DELETE	Bucket tagging	?		
DELETE	Bucket website	No		
GET	Bucket	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1676 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L185	
GET	Bucket acl	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1697 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1728 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1344	
GET	Bucket cors	?	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1698 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1845 https://github.com/ceph/ceph/blob/76040d90f7eb9f9921a3b8dcd0f821ac2cd9c492/src/rgw/rgw_main.cc#L345	
GET	Bucket lifecycle	No		
GET	Bucket location	No		
GET	Bucket policy	?	https://github.com/ceph/ceph/blob/e91042171939b6bf82a56a1015c5cae792d228ad/src/rgw/rgw_rest_bucket.cc#L232 https://github.com/ceph/ceph/blob/e91042171939b6bf82a56a1015c5cae792d228ad/src/rgw/rgw_rest_bucket.cc#L58	
GET	Bucket logging	?	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1695 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L287	
GET	Bucket notification	No		
GET	Bucket tagging	No		
GET	Bucket Object versions	No		
GET	Bucket requestPayment	No		
GET	Bucket versioning	No		
GET	Bucket website	No		
GET	List Multipart uploads	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1701 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest.cc#L877 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L2355 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L2363	
HEAD	Bucket	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1713 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1689 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L826 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L834	
PUT	Bucket	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1725 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L382 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L437 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L901 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L945	
PUT	Bucket acl	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1721 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1354 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1373 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1739 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1753	
PUT	Bucket cors	?	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1723 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1398 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1858 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1866	
PUT	Bucket lifecycle	No		
PUT	Bucket policy	?		
PUT	Bucket logging	?		
PUT	Bucket notification	No		
PUT	Bucket tagging	?		
PUT	Bucket requestPayment	No		
PUT	Bucket versioning	No		
PUT	Bucket website	No		

OPERATIONS ON OBJECTS

S3 Documentation reference : <http://docs.aws.amazon.com/AmazonS3/latest/API/RESTObjectOps.html>

Type	Operation	Supported?	Code links	Tests links
DELETE	Object	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1796 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1516 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1524	

DELETE	Multiple objects	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1739 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1616 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1626 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1641 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1667 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1516 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1524
GET	Object	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1767 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L71 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L397 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L424 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L497 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L562 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L626 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L641 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L706
GET	Object acl	Yes	
GET	Object torrent	No	
HEAD	Object	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1777 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L171 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L397 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L424 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L497 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L562 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L626 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L641 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L706
OPTIONS	Object	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1814 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1418 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1951 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1968 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1993
POST	Object	Yes	https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1742 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L631 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L694 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L700 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L707 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L759 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L771 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L781 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L795 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L929 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1037 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1059 https://github.com/ceph/ceph/blob/8a2eb18494005aa968b71f18121da8ebab48e950/src/rgw/rgw_rest_s3.cc#L1134 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1344 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1360 https://github.com/ceph/ceph/blob/b139a7cd34b4e203ab164ada7a8fa590b50d8b13/src/rgw/rgw_op.cc#L1365
POST	Object restore	?	
PUT	Object	Yes	
PUT	Object acl	Yes	
PUT	Object copy	Yes	
PUT	Initate multipart upload	Yes	
PUT	Upload Part	Yes	
PUT	Upload Part copy	?	
PUT	Complete multipart upload	Yes	
PUT	Abort multipart upload	Yes	
PUT	List parts	Yes	