

## OBJECT OPERATIONS

### PUT OBJECT

Adds an object to a bucket. You must have write permissions on the bucket to perform this operation.

#### SYNTAX

```
PUT /{bucket}/{object} HTTP/1.1
```

#### REQUEST HEADERS

Name	Description	Valid Values	Required
<b>content-md5</b>	A base64 encoded MD-5 hash of the message.	A string. No defaults or constraints.	No
<b>content-type</b>	A standard MIME type.	Any MIME type. Default: binary/octet-stream	No
<b>x-amz-meta- &lt;...&gt;</b>	User metadata. Stored with the object.	A string up to 8kb. No defaults.	No
<b>x-amz-acl</b>	A canned ACL.	private, public-read, public-read-write, authenticated-read	No

### COPY OBJECT

To copy an object, use PUT and specify a destination bucket and the object name.

#### SYNTAX

```
PUT /{dest-bucket}/{dest-object} HTTP/1.1
x-amz-copy-source: {source-bucket}/{source-object}
```

#### REQUEST HEADERS

Name	Description	Valid Values	Required
<b>x-amz-copy-source</b>	The source bucket name + object name.	{bucket}/{obj}	Yes
<b>x-amz-acl</b>	A canned ACL.	private, public-read, public-read-write, authenticated-read	No
<b>x-amz-copy-if-modified-since</b>	Copies only if modified since the timestamp.	Timestamp	No
<b>x-amz-copy-if-unmodified-since</b>	Copies only if unmodified since the timestamp.	Timestamp	No
<b>x-amz-copy-if-match</b>	Copies only if object ETag matches ETag.	Entity Tag	No
<b>x-amz-copy-if-none-match</b>	Copies only if object ETag doesn't match.	Entity Tag	No

#### RESPONSE ENTITIES

Name	Type	Description
<b>CopyObjectResult</b>	Container	A container for the response elements.
<b>LastModified</b>	Date	The last modified date of the source object.
<b>Etag</b>	String	The ETag of the new object.

## REMOVE OBJECT

Removes an object. Requires WRITE permission set on the containing bucket.

### SYNTAX

```
DELETE /{bucket}/{object} HTTP/1.1
```

## GET OBJECT

Retrieves an object from a bucket within RADOS.

### SYNTAX

```
GET /{bucket}/{object} HTTP/1.1
```

### REQUEST HEADERS

Name	Description	Valid Values	Required
<b>range</b>	The range of the object to retrieve.	Range: bytes=beginbyte-endbyte	No
<b>if-modified-since</b>	Gets only if modified since the timestamp.	Timestamp	No
<b>if-unmodified-since</b>	Gets only if not modified since the timestamp.	Timestamp	No
<b>if-match</b>	Gets only if object ETag matches ETag.	Entity Tag	No
<b>if-none-match</b>	Gets only if object ETag matches ETag.	Entity Tag	No

### RESPONSE HEADERS

Name	Description
<b>Content-Range</b>	Data range, will only be returned if the range header field was specified in the request

## GET OBJECT INFO

Returns information about object. This request will return the same header information as with the Get Object request, but will include the metadata only, not the object data payload.

### SYNTAX

```
HEAD /{bucket}/{object} HTTP/1.1
```

### REQUEST HEADERS

Name	Description	Valid Values	Required
<b>range</b>	The range of the object to retrieve.	Range: bytes=beginbyte-endbyte	No
<b>if-modified-since</b>	Gets only if modified since the timestamp.	Timestamp	No
<b>if-unmodified-since</b>	Gets only if not modified since the timestamp.	Timestamp	No
<b>if-match</b>	Gets only if object ETag matches ETag.	Entity Tag	No
<b>if-none-match</b>	Gets only if object ETag matches ETag.	Entity Tag	No

## GET OBJECT ACL

## SYNTAX

```
GET /{bucket}/{object}?acl HTTP/1.1
```

## RESPONSE ENTITIES

Name	Type	Description
AccessControlPolicy	Container	A container for the response.
AccessControlList	Container	A container for the ACL information.
Owner	Container	A container for the object owner's ID and DisplayName.
ID	String	The object owner's ID.
DisplayName	String	The object owner's display name.
Grant	Container	A container for Grantee and Permission.
Grantee	Container	A container for the DisplayName and ID of the user receiving a grant of permission.
Permission	String	The permission given to the Grantee object.

## SET OBJECT ACL

## SYNTAX

```
PUT /{bucket}/{object}?acl
```

## REQUEST ENTITIES

Name	Type	Description
AccessControlPolicy	Container	A container for the response.
AccessControlList	Container	A container for the ACL information.
Owner	Container	A container for the object owner's ID and DisplayName.
ID	String	The object owner's ID.
DisplayName	String	The object owner's display name.
Grant	Container	A container for Grantee and Permission.
Grantee	Container	A container for the DisplayName and ID of the user receiving a grant of permission.
Permission	String	The permission given to the Grantee object.

## INITIATE MULTI-PART UPLOAD

Initiate a multi-part upload process.

## SYNTAX

```
POST /{bucket}/{object}?uploads
```

## REQUEST HEADERS

Name	Description	Valid Values	Required
<b>content-md5</b>	A base64 encoded MD-5 hash of the message.	A string. No defaults or constraints.	No
<b>content-type</b>	A standard MIME type.	Any MIME type. Default: binary/octet-stream	No
<b>x-amz-meta-</b>	User metadata. Stored with the	A string up to 8kb. No defaults.	No

<...>	object.		
<b>x-amz-acl</b>	A canned ACL.	private, public-read, public-read-write, authenticated-read	No

## RESPONSE ENTITIES

Name	Type	Description
InitiatedMultipartUploadsResult	Container	A container for the results.
Bucket	String	The bucket that will receive the object contents.
Key	String	The key specified by the key request parameter (if any).
UploadId	String	The ID specified by the upload-id request parameter identifying the multipart upload (if any).

## MULTIPART UPLOAD PART

### SYNTAX

```
PUT /{bucket}/{object}?partNumber=&uploadId= HTTP/1.1
```

### HTTP RESPONSE

The following HTTP response may be returned:

HTTP Status	Status Code	Description
<b>404</b>	NoSuchUpload	Specified upload-id does not match any initiated upload on this object

## LIST MULTIPART UPLOAD PARTS

### SYNTAX

```
GET /{bucket}/{object}?uploadId=123 HTTP/1.1
```

## RESPONSE ENTITIES

Name	Type	Description
InitiatedMultipartUploadsResult	Container	A container for the results.
Bucket	String	The bucket that will receive the object contents.
Key	String	The key specified by the key request parameter (if any).
UploadId	String	The ID specified by the upload-id request parameter identifying the multipart upload (if any).
Initiator	Container	Contains the ID and DisplayName of the user who initiated the upload.
ID	String	The initiator's ID.
DisplayName	String	The initiator's display name.
Owner	Container	A container for the ID and DisplayName of the user who owns the uploaded object.
StorageClass	String	The method used to store the resulting object. STANDARD or REDUCED_REDUNDANCY
PartNumberMarker	String	The part marker to use in a subsequent request if IsTruncated is true. Precedes the list.
NextPartNumberMarker	String	The next part marker to use in a subsequent request if IsTruncated is true. The end of the list.
MaxParts	Integer	The max parts allowed in the response as specified by the max-parts request parameter.
IsTruncated	Boolean	If true, only a subset of the object's upload contents were returned.

<b>Part</b>	<b>Container</b>	A container for Key, Part, InitiatorOwner, StorageClass, and Initiated elements.
<b>PartNumber</b>	<b>Integer</b>	The identification number of the part.
<b>ETag</b>	<b>String</b>	The part's entity tag.
<b>Size</b>	<b>Integer</b>	The size of the uploaded part.

## COMPLETE MULTIPART UPLOAD

Assembles uploaded parts and creates a new object, thereby completing a multipart upload.

### SYNTAX

```
POST /{bucket}/{object}?uploadId= HTTP/1.1
```

### REQUEST ENTITIES

Name	Type	Description	Required
<b>CompleteMultipartUpload</b>	Container	A container consisting of one or more parts.	Yes
<b>Part</b>	Container	A container for the PartNumber and ETag.	Yes
<b>PartNumber</b>	Integer	The identifier of the part.	Yes
<b>ETag</b>	String	The part's entity tag.	Yes

### RESPONSE ENTITIES

Name	Type	Description
<b>CompleteMultipartUploadResult</b>	Container	A container for the response.
<b>Location</b>	URI	The resource identifier (path) of the new object.
<b>Bucket</b>	String	The name of the bucket that contains the new object.
<b>Key</b>	String	The object's key.
<b>ETag</b>	String	The entity tag of the new object.

## ABORT MULTIPART UPLOAD

### SYNTAX

```
DELETE /{bucket}/{object}?uploadId= HTTP/1.1
```