# **BUCKET OPERATIONS**

# **PUT BUCKET**

Creates a new bucket. To create a bucket, you must have a user ID and a valid AWS Access Key ID to authenticate requests. You may not create buckets as an anonymous user.

**Note:** We do not support request entities for PUT /{bucket} in this release.

#### **CONSTRAINTS**

In general, bucket names should follow domain name constraints.

- Bucket names must be unique.
- Bucket names must begin and end with a lowercase letter.
- Bucket names may contain a dash (-).

#### **SYNTAX**

```
PUT /{bucket} HTTP/1.1
Host: cname.domain.com
x-amz-acl: public-read-write
```

Authorization: AWS {access-key}:{hash-of-header-**and**-secret}

#### **PARAMETERS**

Name	Description	Valid Values	Required
x-amz-acl	Canned ACLs.	<pre>private, public-read, public-read-write, authenticated-read</pre>	No

#### **HTTP RESPONSE**

If the bucket name is unique, within constraints and unused, the operation will succeed. If a bucket with the same name already exists and the user is the bucket owner, the operation will succeed. If the bucket name is already in use, the operation will fail.

HTTP Status	Status Code	Description
409	BucketAlreadyExists	Bucket already exists under different user's ownership.

## **DELETE BUCKET**

Deletes a bucket. You can reuse bucket names following a successful bucket removal.

#### **SYNTAX**

```
DELETE /{bucket} HTTP/1.1
Host: cname.domain.com
Authorization: AWS {access-key}:{hash-of-header-and-secret}
```

#### HTTP RESPONSE

204	No Content	Bucket removed.

# **GET BUCKET**

Returns a list of bucket objects.

#### **SYNTAX**

GET /{bucket}?max-keys=25 HTTP/1.1

Host: cname.domain.com

## **PARAMETERS**

Name	Type	Description	
prefix	String	Only returns objects that contain the specified prefix.	
delimiter	String	The delimiter between the prefix and the rest of the object name.	
marker	String	A beginning index for the list of objects returned.	
max-keys	Integer	The maximum number of keys to return. Default is 1000.	

## **HTTP RESPONSE**

HTTP Status	Status Code	Description
200	OK	Buckets retrieved

## **BUCKET RESPONSE ENTITIES**

GET /{bucket} returns a container for buckets with the following fields.

Name Type D		Description	
ListBucketResult	Entity	The container for the list of objects.	
Name	String	The name of the bucket whose contents will be returned.	
Prefix	String	A prefix for the object keys.	
Marker	String	A beginning index for the list of objects returned.	
MaxKeys	Integer	The maximum number of keys returned.	
Delimiter	miter String If set, objects with the same prefix will appear in the CommonPrefixes list.		
IsTruncated Boolean If true, only a subset of the bucket's contents were returned.		If true, only a subset of the bucket's contents were returned.	
CommonPrefixes Container If multiple objects contain the same prefix, they will appear in this list.		If multiple objects contain the same prefix, they will appear in this list.	

## **OBJECT RESPONSE ENTITIES**

 $\label{thm:contains} The \ {\tt ListBucketResult}\ contains\ objects,\ where\ {\tt each}\ object\ is\ within\ a\ {\tt Contents}\ container.$ 

Name	Type	Description
Contents	Object	A container for the object.
Key	String	The object's key.
LastModified	Date	The object's last-modified date/time.
ETag	String	An MD-5 hash of the object. (entity tag)
Size	Integer	The object's size.
StorageClass	String	Should always return STANDARD.

# GET BUCKET ACL

Retrieves the bucket access control list. The user needs to be the bucket owner or to have been granted READ\_ACP permission on the bucket.

## **SYNTAX**

Add the acl subresource to the bucket request as shown below.

GET /{bucket}?acl HTTP/1.1
Host: cname.domain.com

Authorization: AWS {access-key}:{hash-of-header-and-secret}

## **RESPONSE ENTITIES**

Name	Type	Description	
AccessControlPolicy	Container	A container for the response.	
AccessControlList	Container	A container for the ACL information.	
0wner	Container	A container for the bucket owner's ID and DisplayName.	
ID	String	The bucket owner's ID.	
DisplayName	String	The bucket 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 bucket.	

# **PUT BUCKET ACL**

Sets an access control to an existing bucket. The user needs to be the bucket owner or to have been granted WRITE\_ACP permission on the bucket.

#### **SYNTAX**

Add the acl subresource to the bucket request as shown below.

PUT /{bucket}?acl HTTP/1.1

## **REQUEST ENTITIES**

Name	Type Description		
AccessControlPolicy	Container	A container for the request.	
AccessControlList	Container	A container for the ACL information.	
0wner	Container	A container for the bucket owner's ID and DisplayName.	
ID	String	The bucket owner's ID.	
DisplayName	String	The bucket 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 bucket.	

# LIST BUCKET MULTIPART UPLOADS

GET /?uploads returns a list of the current in-progress multipart uploads-i.e., the application initiates a multipart upload, but the service hasn't completed all the uploads yet.

#### **SYNTAX**

GET /{bucket}?uploads HTTP/1.1

# **PARAMETERS**

You may specify parameters for GET  $\fill {\c GET }$  /{bucket}?uploads, but none of them are required.

Name Type		Description	
prefix	String	Returns in-progress uploads whose keys contains the specified prefix.	
delimiter	String	The delimiter between the prefix and the rest of the object name.	
key-marker	String	The beginning marker for the list of uploads.	
max-keys	Integer	The maximum number of in-progress uploads. The default is 1000.	
max-uploads	Integer The maximum number of multipart uploads. The range from 1-1000. The 1000.		
upload-id-marker String Ignored if key-marker isn't specified. Specifies the ID of first use lexicographical order at or following the ID.		Ignored if key-marker isn't specified. Specifies the ID of first upload to list in lexicographical order at or following the ID.	

# **RESPONSE ENTITIES**

Type	Description
Container	A container for the results.
String	The prefix specified by the prefix request parameter (if any).
String	The bucket that will receive the bucket contents.
String	The key marker specified by the key-marker request parameter (if any).
String	The marker specified by the upload-id-marker request parameter (if any).
String	The key marker to use in a subsequent request if IsTruncated is true.
String	The upload ID marker to use in a subsequent request if IsTruncated is true.
Integer	The max uploads specified by the max-uploads request parameter.
String	If set, objects with the same prefix will appear in the CommonPrefixes list.
Boolean	If true, only a subset of the bucket's upload contents were returned.
Container	A container for Key, UploadId, InitiatorOwner, StorageClass, and Initiated elements.
String	The key of the object once the multipart upload is complete.
String	The ID that identifies the multipart upload.
Container	Contains the ID and DisplayName of the user who initiated the upload.
String	The initiator's display name.
String	The initiator's ID.
Container	A container for the ID and DisplayName of the user who owns the uploaded object.
String	The method used to store the resulting object. STANDARD or REDUCED_REDUNDANCY
Date	The date and time the user initiated the upload.
Container	If multiple objects contain the same prefix, they will appear in this list.
String	The substring of the key after the prefix as defined by the prefix request parameter.
	Container String String String String String String String String Integer String Boolean Container String String Container String String Container String Container