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	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	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.
CommonPrefixes	Container	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 LOCATION

Retrieves the bucket's region. The user needs to be the bucket owner to call this. A bucket can be constrained to a region by providing LocationConstraint during a PUT request.

Add the location subresource to bucket resource as shown below

GET /{bucket}?location HTTP/1.1

Host: cname.domain.com

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

RESPONSE ENTITIES

Name	Туре	Description
LocationConstraint	String	The region where bucket resides, empty string for defult region

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

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 /{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 default is 1000.
upload-id-marker	String	Ignored if key-marker is not specified. Specifies the ID of first upload to list in lexicographical order at or following the ID.

RESPONSE ENTITIES

Name	Type	Description
ListMultipartUploadsResult	Container	A container for the results.
ListMultipartUploadsResult.Prefix	String	The prefix specified by the prefix request parameter (if any).
Bucket	String	The bucket that will receive the bucket contents.
KeyMarker	String	The key marker specified by the key-marker request parameter (if
		any).
UploadIdMarker	String	The marker specified by the upload-id-marker request
		parameter (if any).
NextKeyMarker	String	The key marker to use in a subsequent request if IsTruncated is
•		true.
NextUploadIdMarker	String	The upload ID marker to use in a subsequent request if
		IsTruncated is true.
MaxUploads	Integer	The max uploads specified by the max-uploads request
		parameter.
Delimiter	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 upload contents were
		returned.
Upload	Container	A container for Key, UploadId, InitiatorOwner, StorageClass,
		and Initiated elements.
Key	String	The key of the object once the multipart upload is complete.
UploadId	String	The ID that identifies the multipart upload.
Initiator	Container	Contains the ID and DisplayName of the user who initiated the

		upload.
DisplayName	String	The initiator's display name.
ID	String	The initiator's ID.
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
Initiated	Date	The date and time the user initiated the upload.
CommonPrefixes	Container	If multiple objects contain the same prefix, they will appear in this list.
CommonPrefixes.Prefix	String	The substring of the key after the prefix as defined by the prefix request parameter.

ENABLE/SUSPEND BUCKET VERSIONING

PUT /?versioning This subresource set the versioning state of an existing bucket. To set the versioning state, you must be the bucket owner.

You can set the versioning state with one of the following values:

- Enabled : Enables versioning for the objects in the bucket, All objects added to the bucket receive a unique version ID.
- Suspended: Disables versioning for the objects in the bucket, All objects added to the bucket receive the version ID null.

If the versioning state has never been set on a bucket, it has no versioning state; a GET versioning request does not return a versioning state value.

SYNTAX

PUT /{bucket}?versioning HTTP/1.1

REQUEST ENTITIES

Name	Type	Description
VersioningConfiguration	Container	A container for the request.
Status	String	Sets the versioning state of the bucket. Valid Values: Suspended/Enabled