

AWS S3 Boto3 Client Functions

Bucket Operations

- create_bucket - Creates a new S3 bucket.
- delete_bucket - Deletes an existing bucket.
- list_buckets - Lists all S3 buckets owned by the AWS account.
- head_bucket - Retrieves metadata about a bucket without returning the object itself.

Object Operations

- put_object - Uploads an object to a bucket.
- get_object - Downloads an object from a bucket.
- delete_object - Deletes an object from a bucket.
- delete_objects - Deletes multiple objects in a single request.
- copy_object - Copies an object from one bucket to another.
- list_objects_v2 - Lists objects in a bucket (newer version).
- list_objects - Lists objects in a bucket (older version).
- head_object - Retrieves metadata about an object without returning the object itself.

Multipart Upload Operations

- create_multipart_upload - Initiates a multipart upload.
- upload_part - Uploads a part in a multipart upload.
- complete_multipart_upload - Completes a multipart upload.
- abort_multipart_upload - Aborts a multipart upload.
- list_multipart_uploads - Lists ongoing multipart uploads.
- list_parts - Lists the parts uploaded for a specific multipart upload.

Presigned URLs

- generate_presigned_url - Generates a temporary URL for accessing an object.
- generate_presigned_post - Generates a temporary URL for uploading an object.

Bucket Policy & ACLs

- get_bucket_policy - Retrieves the bucket's policy.
- put_bucket_policy - Sets the bucket policy.
- delete_bucket_policy - Deletes the bucket policy.
- get_bucket_acl - Retrieves the bucket's Access Control List (ACL).
- put_bucket_acl - Updates the bucket ACL.

- get_object_acl - Retrieves the ACL of an object.
- put_object_acl - Updates the ACL of an object.

CORS Configuration

- get_bucket_cors - Retrieves the CORS configuration for a bucket.
- put_bucket_cors - Sets the CORS configuration for a bucket.
- delete_bucket_cors - Deletes the CORS configuration for a bucket.

Logging Configuration

- get_bucket_logging - Retrieves the logging configuration of a bucket.
- put_bucket_logging - Sets the logging configuration for a bucket.

Tagging

- get_bucket_tagging - Retrieves the tags of a bucket.
- put_bucket_tagging - Adds tags to a bucket.
- delete_bucket_tagging - Removes all tags from a bucket.
- get_object_tagging - Retrieves the tags of an object.
- put_object_tagging - Adds tags to an object.
- delete_object_tagging - Removes all tags from an object.

Versioning

- get_bucket_versioning - Retrieves the versioning configuration of a bucket.
- put_bucket_versioning - Enables or disables versioning on a bucket.

Lifecycle Configuration

- get_bucket_lifecycle_configuration - Retrieves the lifecycle rules for a bucket.
- put_bucket_lifecycle_configuration - Updates lifecycle rules for a bucket.
- delete_bucket_lifecycle - Deletes the lifecycle configuration of a bucket.

Replication

- get_bucket_replication - Retrieves the replication configuration of a bucket.
- put_bucket_replication - Sets up cross-region replication for a bucket.
- delete_bucket_replication - Deletes the replication configuration of a bucket.

Encryption

- get_bucket_encryption - Retrieves the default encryption configuration of a bucket.
- put_bucket_encryption - Sets the default encryption configuration for a bucket.

- delete_bucket_encryption - Removes the default encryption configuration from a bucket.

Notifications

- get_bucket_notification_configuration - Retrieves the notification configuration of a bucket.
- put_bucket_notification_configuration - Updates the notification configuration of a bucket.

Transfer Acceleration

- get_bucket_accelerate_configuration - Retrieves the transfer acceleration state of a bucket.
- put_bucket_accelerate_configuration - Enables or disables transfer acceleration for a bucket.

Request Payment Configuration

- get_bucket_request_payment - Retrieves the payment configuration of a bucket.
- put_bucket_request_payment - Updates the request payment configuration of a bucket.

Object Lock Configuration

- get_object_lock_configuration - Retrieves the object lock configuration of a bucket.
- put_object_lock_configuration - Updates the object lock configuration of a bucket.
- get_object_retention - Retrieves the retention settings of an object.
- put_object_retention - Updates the retention settings of an object.
- get_object_legal_hold - Retrieves the legal hold status of an object.
- put_object_legal_hold - Updates the legal hold status of an object.

Inventory & Metrics

- get_bucket_inventory_configuration - Retrieves an inventory configuration for a bucket.
- put_bucket_inventory_configuration - Sets an inventory configuration for a bucket.
- delete_bucket_inventory_configuration - Deletes an inventory configuration from a bucket.
- list_bucket_inventory_configurations - Lists all inventory configurations for a bucket.

Public Access Block Configuration

- get_public_access_block - Retrieves the public access block configuration of a bucket.
- put_public_access_block - Sets the public access block configuration for a bucket.
- delete_public_access_block - Deletes the public access block configuration from a bucket.

Select Object Content (Query CSV/JSON Files in S3)

- select_object_content - Runs a SQL-like query on an object stored in S3.

Advanced Features

- write_get_object_response - Writes a response for an object retrieved via S3 Object Lambda.
- restore_object - Restores an object from Glacier storage.
- list_bucket_analytics_configurations - Lists analytics configurations for a bucket.
- list_bucket_intelligent_tiering_configurations - Lists intelligent tiering configurations for a bucket.
- list_bucket_metrics_configurations - Lists metrics configurations for a bucket.

Example Syntax

```
s3_client.put_object(  
    Bucket='example-bucket',  
    Key='example.txt',  
    Body=b'Hello, world!'  
)
```