

# Object Storage Service

## Go SDK API Reference

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# Contents

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<b>1 Overview</b>	<b>1</b>
<b>2 Initialization</b>	<b>2</b>
2.1 Namespace	2
2.2 ObsClient Initialization	2
2.3 Log Initialization	4
2.4 SDK Custom Errors	5
<b>3 Enumeration Constants</b>	<b>6</b>
3.1 Log Levels	6
3.2 Pre-defined ACLs	7
3.3 Storage Classes	7
3.4 Permission Types	7
3.5 Grantee Types	8
3.6 Authorizable User Groups	8
3.7 Rule Statuses	9
3.8 Redirection Protocols	9
3.9 Versioning Statuses	9
3.10 Replication Policies	10
3.11 Restore Options	10
3.12 Event Types	10
3.13 HTTP Method Types	11
3.14 Sub-resource Types	12
<b>4 Data Types</b>	<b>14</b>
4.1 SDK Common Responses	14
4.2 Request Parameter of PUT Bucket	14
4.3 Request Parameter of GET Buckets	15
4.4 Response Result of GET Buckets	15
4.5 Owner Info	16
4.6 Initiator Info	16
4.7 Bucket Info	16
4.8 Request Parameter of GET Objects	17
4.9 Response Result of GET Objects	18
4.10 Object in a Bucket	19

4.11 Request Parameter of GET Object versions.....	19
4.12 Response Result of GET Object versions.....	20
4.13 Versioning Object in a Bucket.....	21
4.14 Versioning Delete Marker in a Bucket.....	22
4.15 Request Parameter of List Multipart uploads.....	22
4.16 Response Result of List Multipart uploads.....	23
4.17 Multipart Upload in a Bucket.....	24
4.18 Request Parameter of GET Bucket metadata.....	25
4.19 Response Result of GET Bucket metadata.....	25
4.20 Response Result of GET Bucket location.....	26
4.21 Response Result of GET Bucket storage.....	26
4.22 Request Parameter of PUT Bucket quota.....	27
4.23 Response Result of GET Bucket quota.....	27
4.24 Request Parameter of Set Bucket storagePolicy.....	28
4.25 Response Result of GET Bucket storagePolicy.....	28
4.26 Request Parameter of PUT Bucket acl.....	28
4.27 Response Result of GET Bucket acl.....	29
4.28 Grantees' Permission Information.....	29
4.29 Grantee.....	30
4.30 Request Parameter of SET Bucket logging.....	31
4.31 Response Result of GET Bucket logging.....	31
4.32 Request Parameter of PUT Bucket policy.....	32
4.33 Response Result of GET Bucket policy.....	32
4.34 Request Parameter of PUT Bucket lifecycle.....	33
4.35 Response Result of GET Bucket lifecycle.....	33
4.36 Lifecycle Rule of a Bucket.....	34
4.37 Object Transition Policy.....	35
4.38 Expiration Time of an Object.....	35
4.39 Transition Policy of a Noncurrent Object Version.....	36
4.40 Expiration Time of a Noncurrent Object Version.....	37
4.41 Request Parameter of PUT Bucket website.....	37
4.42 Response Result of GET Bucket website.....	38
4.43 Redirection Rule Applying to all Requests.....	38
4.44 Error Page Settings.....	39
4.45 Default Page Settings.....	39
4.46 Redirection Rule.....	40
4.47 Matching Condition of a Redirection Rule.....	40
4.48 Details About a Redirection Request.....	41
4.49 Request Parameter of PUT Bucket versioning.....	42
4.50 Response Result of GET Bucket versioning.....	42
4.51 Request Parameter of PUT Bucket cors.....	43
4.52 Response Result of GET Bucket cors.....	43

4.53 Bucket CORS Rules.....	43
4.54 Request Parameter of PUT Bucket notification.....	44
4.55 Response Result of GET Bucket notification.....	45
4.56 Event Notification Settings.....	45
4.57 Filtering Rule.....	46
4.58 Request Parameter of PUT Bucket tagging.....	46
4.59 Response Result of GET Bucket tagging.....	47
4.60 Bucket Tag.....	47
4.61 SSE-C Header.....	48
4.62 SSE-KMS Header.....	48
4.63 Request Parameter of PUT Object.....	49
4.64 Request Parameter of PUT File.....	50
4.65 Response Result of PUT Object.....	51
4.66 Request Parameter of GET Object.....	52
4.67 Response Result of GET Object.....	53
4.68 Request Parameter of PUT Object - Copy.....	55
4.69 Response Result of PUT Object - Copy.....	57
4.70 Request Parameter of DELETE Object.....	57
4.71 Response Result of DELETE Object.....	58
4.72 Request Parameter of DELETE Objects.....	58
4.73 Response Result of DELETE Objects.....	59
4.74 To-Be-Deleted Object.....	59
4.75 Successfully Deleted Object.....	59
4.76 Object Failed to Be Deleted.....	60
4.77 Request Parameter of GET Bucket metadata.....	60
4.78 Response Result of Obtain Object Metadata.....	61
4.79 Request Parameter of PUT Object acl.....	62
4.80 Request Parameter of GET Object acl.....	63
4.81 Response Result of GET Object acl.....	63
4.82 Request Parameter of Initiate Multipart Upload.....	63
4.83 Response Result of Initiate Multipart Upload.....	64
4.84 Request Parameter of PUT Part.....	65
4.85 Response Result of PUT Part.....	66
4.86 Request Parameter of PUT Part - Copy.....	66
4.87 Response Result of PUT Part - Copy.....	67
4.88 Request Parameter of List Parts.....	68
4.89 Response Result of List Parts.....	68
4.90 Uploaded Part.....	69
4.91 Request Parameter of Complete Multipart Upload.....	70
4.92 Response Result of Complete Multipart Upload.....	70
4.93 Request Parameter of DELETE Multipart upload.....	71
4.94 POST Object restore.....	71

4.95 Request Parameter for Signing a URL.....	72
4.96 Response Result for Signing a URL.....	72
4.97 Request Parameters of Resumable Upload.....	73
4.98 Request Parameters of Resumable Download.....	74
<b>5 Bucket-Related APIs.....</b>	<b>77</b>
5.1 Bucket-Related APIs.....	77
5.2 PUT Bucket.....	77
5.3 GET Buckets.....	78
5.4 HEAD Bucket.....	79
5.5 DELETE Bucket.....	80
5.6 GET Objects.....	81
5.7 GET Object versions.....	82
5.8 List Multipart uploads.....	83
5.9 Obtain Bucket Metadata.....	84
5.10 GET Bucket location.....	85
5.11 GET Bucket storageinfo.....	86
5.12 PUT Bucket quota.....	87
5.13 GET Bucket quota.....	88
5.14 Set Bucket Storage Class.....	89
5.15 GET Bucket Storage Class.....	90
5.16 PUT Bucket acl.....	91
5.17 GET Bucket acl.....	92
5.18 PUT Bucket logging.....	93
5.19 GET Bucket logging.....	94
5.20 PUT Bucket policy.....	95
5.21 GET Bucket policy.....	96
5.22 DELETE Bucket policy.....	97
5.23 PUT Bucket lifecycle.....	98
5.24 GET Bucket lifecycle.....	100
5.25 DELETE Bucket lifecycle.....	101
5.26 PUT Bucket website.....	102
5.27 GET Bucket website.....	103
5.28 DELETE Bucket website.....	104
5.29 PUT Bucket versioning.....	105
5.30 GET Bucket versioning.....	106
5.31 PUT Bucket cors.....	107
5.32 GET Bucket cors.....	108
5.33 DELETE Bucket cors.....	109
5.34 PUT Bucket notification.....	110
5.35 GET Bucket notification.....	111
5.36 PUT Bucket tagging.....	112
5.37 GET Bucket tagging.....	113

5.38 DELETE Bucket tagging.....	114
<b>6 Objects-Related APIs.....</b>	<b>116</b>
6.1 Overview.....	116
6.2 PUT Object.....	116
6.3 PUT File.....	117
6.4 GET Object.....	118
6.5 PUT Object - Copy.....	120
6.6 DELETE Object.....	121
6.7 DELETE Objects.....	122
6.8 Obtain Object Metadata.....	123
6.9 PUT Object acl.....	124
6.10 GET Object acl.....	125
6.11 Initiate Multipart Upload.....	126
6.12 PUT Part.....	127
6.13 PUT Part - Copy.....	128
6.14 List Parts.....	129
6.15 Complete Multipart Upload.....	130
6.16 DELETE Multipart upload.....	131
6.17 Restore Archive Objects.....	132
<b>7 Other APIs.....</b>	<b>133</b>
7.1 Creating a Signed URL.....	133
7.2 Resumable Upload.....	134
7.3 Resumable Download.....	135
<b>A Change History.....</b>	<b>137</b>

# 1 Overview

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This document describes all APIs of OBS (Object Storage Service) Go SDK, including the API description, method definition, and parameter description.

For details about the end-to-end usage of OBS Go SDK (such as installation, initialization, development, and FAQs), application scenarios of interfaces, and code examples in various scenarios, see the [Object Storage Service Go SDK Developer Guide](#).



# 2 Initialization

## 2.1 Namespace

**obs** is the global namespace of OBS Go SDK. All data types and API definitions contained in the SDK belong to this namespace. Before using the SDK, you need to import **obs**.

## 2.2 ObsClient Initialization

### API Description

**ObsClient** functions as the Go client for accessing OBS. It offers users a series of APIs for interaction with OBS. These APIs are used for managing and operating resources, such as buckets and objects, stored in OBS.

### Initialization Method

```
func New(ak, sk, endpoint string, configurers ...configurer) (*ObsClient, error)
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
ak	string	Mandatory	Access key ID (AK)
sk	string	Mandatory	Secret access key (SK)
endpoint	string	Mandatory	Endpoint for accessing OBS, which contains the protocol type, domain name (or IP address), and port ID. For example, https://your-endpoint:443. You can click <a href="#">here</a> to view the endpoints of OBS.

Field	Type	Optional or Mandatory	Description
configs	configs (private type contained in the <b>obs</b> package)	Optional	A group of parameters used to configure <b>ObsClient</b> , including connection timeout period, maximum retries, and maximum number of connections.

## Available Configurers

Configurer	Description
WithSslVerifyAndPemCerts(sslVerify bool, pemCerts []byte)	Specifies whether to verify server-side certificates. Server-side certificates will not be verified by default.
WithHeaderTimeout(headerTimeout int)	Specifies the timeout period of obtaining the response headers. The default value is <b>60</b> .
WithMaxConnections(maxConnectionsPerHost int)	Specifies the maximum number of idle HTTP connections. The default value is 1000.
WithConnectTimeout(connectTimeout int)	Specifies the timeout period for establishing an HTTP/HTTPS connection, in seconds. The default value is <b>60</b> .
WithSocketTimeout(socketTimeout int)	Specifies the timeout duration for transmitting data at the socket layer, in seconds. The default value is <b>60</b> .
WithIdleConnTimeout(idleConnTimeout int)	Specifies the timeout period of an idle HTTP connection in the connection pool, in seconds. The default value is <b>30</b> .
WithMaxRetryCount(maxRetryCount int)	Specifies the maximum number of retries when an HTTP/HTTPS connection is abnormal. The default value is <b>3</b> .
WithProxyUrl(proxyUrl string)	Configures the HTTP proxy.
WithHttpTransport(transport *http.Transport)	Configures custom structs of the <b>Transport</b> type.
WithRequestContext(ctx context.Context)	Configures the context for each HTTP request.
WithMaxRedirectCount(maxRedirectCount int)	Specifies the maximum number of times that the HTTP/HTTPS request is redirected. The default value is <b>3</b> .
WithSecurityToken(securityToken string)	Specifies security token in the temporary access keys.

## Sample Code

```
import (
    "obs"
)

var ak = "**** Provide your Access Key ****"
var sk = "**** Provide your Secret Key ****"
var endpoint = "https://your-endpoint"

var obsClient, _ = obs.New(
    ak,
    sk,
    endpoint,
    obs.WithConnectTimeout(30),
    obs.WithSocketTimeout(60),
    obs.WithMaxConnections(100),
    obs.WithMaxRetryCount(3),
)

func main() {
    obsClient.Close()
}
```

## 2.3 Log Initialization

### API Description

You can enable the SDK log function to record log information generated during API calling into log files for subsequent data analysis or fault location.

### Initialization Method

```
func InitLog(logFullPath string, maxLogSize int64, backups int, level Level, logToConsole bool) error
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
logFullPath	string	Mandatory	Full path to the log file
maxLogSize	int64	Mandatory	Log file size in bytes
backups	int	Mandatory	Maximum number of log files that can be retained
level	<a href="#">Level</a>	Mandatory	Log level
logToConsole	bool	Mandatory	Whether to print logs to the console

### Sample Code

```
import (
    "obs"
)
```

```
)  
  
func main() {  
    obs.InitLog("./logs/OBS-SDK.log", 20480, 10, obs.LEVEL_INFO, false)  
}
```

## 2.4 SDK Custom Errors

### API Description

Each time you fail to call an **ObsClient** API, an SDK custom error — containing an HTTP status code, OBS error code, and error message — is returned, to help you locate and rectify the fault.

### Type Definition

```
type ObsError struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string] []string	HTTP response headers
Status	string	Reason description
Code	string	Error code returned by the OBS server
Message	string	Error description returned by the OBS server
Resource	string	Bucket and object related to the error
HostId	string	Requested server ID

# 3 Enumeration Constants

## 3.1 Log Levels

### Type Definition

```
type Level int
```

### Constants

Constant	Default Value	Description
LEVEL_OFF	500	Close level. If this level is set, logging will be disabled.
LEVEL_ERROR	400	Error level. If this level is set, only error information will be printed.
LEVEL_WARN	300	Warning level. If this level is set, information about logs at the error level and information about partial critical events will be printed.
LEVEL_INFO	200	Information level. If this level is set, information about logs of the warning level, time consumed for each HTTP/HTTPS request, and time consumed for calling the <b>ObsClient</b> API will be printed.
LEVEL_DEBUG	100	Debugging level. If this level is set, information about logs at the information level, HTTP/HTTPS request and response headers, and <b>stringToSign</b> information calculated by authentication algorithm will be printed.

## 3.2 Pre-defined ACLs

### Type Definition

```
type AclType string
```

### Constants

Constant	Default Value	Description
AclPrivate	private	Private read/write
AclPublicRead	public-read	Public read and private write
AclPublicReadWrite	public-read-write	Public read/write
AclPublicReadDelivered	public-read-delivered	Public read on a bucket as well as objects in the bucket
AclPublicReadWriteDelivered	public-read-write-delivered	Public read/write on a bucket as well as objects in the bucket

#### NOTE

**AclPublicReadDelivered** and **AclPublicReadWriteDelivered** cannot be set to objects.

## 3.3 Storage Classes

### Type Definition

```
type StorageClassType string
```

### Constants

Constant	Default Value	Description
StorageClassStandard	STANDARD	OBS Standard
StorageClassWarm	WARM	OBS Infrequent Access
StorageClassCold	COLD	OBS Archive

## 3.4 Permission Types

### Type Definition

```
type PermissionType string
```

## Constants

Constant	Default Value	Description
PermissionRead	READ	Read permission
PermissionWrite	WRITE	Write permission
PermissionReadAcp	READ_ACP	Read_ACP permission
PermissionWriteAcp	WRITE_ACP	Write_ACP permission
PermissionFullControl	FULL_CONTROL	Full control

## 3.5 Grantee Types

### Type Definition

```
type GranteeType string
```

### Constants

Constant	Default Value	Description
GranteeGroup	Group	User group
GranteeUser	CanonicalUser	Individual user

## 3.6 Authorizable User Groups

### Type Definition

```
type GroupUriType string
```

### Constants

Constant	Default Value	Description
GroupAllUsers	AllUsers	All users
GroupAuthenticatedUsers	AuthenticatedUsers	Indicates the authorized users. This constant is deprecated.
GroupLogDelivery	LogDelivery	Log delivery group. This constant is deprecated.

## 3.7 Rule Statuses

### Type Definition

```
type RuleStatusType string
```

### Constants

Constant	Default Value	Description
RuleStatusEnabled	Enabled	Enabled
RuleStatusDisabled	Disabled	Disabled

## 3.8 Redirection Protocols

### Type Definition

```
type ProtocolType string
```

### Constants

Constant	Default Value	Description
ProtocolHttp	http	HTTP protocol used for redirection
ProtocolHttps	https	HTTP protocol used in the request for redirection

## 3.9 Versioning Statuses

### Type Definition

```
type VersioningStatusType string
```

### Constants

Constant	Default Value	Description
VersioningStatusEnabled	Enabled	Enabled
VersioningStatusSuspended	Suspended	Suspended



## 3.10 Replication Policies

### Type Definition

```
type MetadataDirectiveType string
```

### Constants

Constant	Default Value	Description
CopyMetadata	COPY	When copying an object, the object's properties are also copied.
ReplaceMetadata	REPLACE	When copying an object, the object's properties are replaced.

## 3.11 Restore Options

### Type Definition

```
type RestoreTierType string
```

### Constants

Constant	Default Value	Description
RestoreTierExpedited	Expedited	Expedited restoration, which restores an object in 1 to 5 minutes.
RestoreTierStandard	Standard	Standard restoration, which restores an object in 3 to 5 hours.

## 3.12 Event Types

### Type Definition

```
type EventType string
```

### Constants

Constant	Default Value	Description
ObjectCreatedAll	ObjectCreated:*	All events for creating object through PUT, POST, Copy, Combine methods
ObjectCreatedPut	ObjectCreated:Put	PUT Object events

Constant	Default Value	Description
ObjectCreatedPost	ObjectCreated:Post	POST Object events
ObjectCreatedCopy	ObjectCreated:Copy	PUT Object - Copy events
ObjectCreatedCompleteMultipartUpload	ObjectCreated:CompleteMultipartUpload	Complete Multipart Upload events
ObjectRemovedAll	ObjectRemoved:*	Events of calling the APIs for deletion and aborting multipart uploads Events for deleting objects without specifying object version IDs, when versioning is enabled, as well as deleting objects by specifying object version IDs
ObjectRemovedDelete	ObjectRemoved:Delete	Events for deleting objects by specifying object version IDs
ObjectRemovedDeleteMarkerCreated	ObjectRemoved:DeleteMarkerCreated	Events for deleting objects without specifying object version IDs, when versioning is enabled

## 3.13 HTTP Method Types

### Type Definition

```
type HttpMethodType string
```

### Constants

Constant	Default Value	Description
HttpMethodGet	GET	HTTP GET request
HttpMethodPut	POST	HTTP POST request
HttpMethodPost	PUT	HTTP PUT request
HttpMethodDelete	DELETE	HTTP DELETE request
HttpMethodHead	HEAD	HTTP HEAD request
HttpMethodOptions	OPTIONS	HTTP OPTIONS request

## 3.14 Sub-resource Types

### Type Definition

```
type SubResourceType string
```

### Constants

Constant	Default Value	Applicable API
SubResourceStoragePolicy	storagePolicy	Sets or obtains bucket storage classes.
SubResourceQuota	quota	Sets or obtains bucket quotas.
SubResourceStorageInfo	storageinfo	Obtains bucket storage information.
SubResourceLocation	location	Obtains bucket locations.
SubResourceAcl	acl	Sets or obtains bucket ACLs or object ACLs.
SubResourcePolicy	policy	Sets, obtains, or deletes bucket policies.
SubResourceCors	cors	Sets, obtains, or deletes bucket CORS configurations.
SubResourceVersioning	versioning	Sets or obtains bucket version statuses.
SubResourceWebsite	website	Sets, obtains, or deletes bucket website configurations.
SubResourceLogging	logging	Sets or obtains bucket logging settings.
SubResourceLifecycle	lifecycle	Sets, obtains, or deletes lifecycle rules of buckets.
SubResourceNotification	notification	Sets or obtains the notification configuration of buckets.
SubResourceTagging	tagging	Sets, obtains, or deletes bucket tags.
SubResourceDelete	delete	Batch deletes objects.
SubResourceVersions	versions	Lists versioning objects in buckets.

Constant	Default Value	Applicable API
SubResourceUploads	uploads	Lists or initializes multipart uploads in buckets.
SubResourceRestore	restore	Restores Archive objects.

# 4 Data Types

## 4.1 SDK Common Responses

### Type Definition

```
type BaseModel struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string] []string	HTTP response headers

## 4.2 Request Parameter of PUT Bucket

### Type Definition

```
type CreateBucketInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name

Field	Type	Optional or Mandatory	Description
Location	string	Mandatory unless the region where the OBS service resides is not the default region.	Bucket location This parameter is not required if the endpoint belongs to the default North China 1 region (cn-north-1). This parameter is a must if the endpoint belongs to any other regions. Click <a href="#">here</a> to query currently valid regions. For details about OBS regions and endpoints, see <a href="#">Regions and Endpoints</a> .
ACL	<a href="#">AclType</a>	Optional	ACL that can be pre-defined during the bucket creation
StorageClasses	<a href="#">StorageClassType</a>	Optional	Bucket storage class that can be pre-defined during the bucket creation

## 4.3 Request Parameter of GET Buckets

### Type Definition

```
type ListBucketsInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
QueryLocation	bool	Optional	Whether to query the bucket location

## 4.4 Response Result of GET Buckets

### Type Definition

```
type ListBucketsOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server

Field	Type	Description
ResponseHeaders	map[string][]string	HTTP response headers
Owner	<b>Owner</b>	Bucket owner
Buckets	[] <b>Bucket</b>	Bucket list

## 4.5 Owner Info

### Type Definition

```
type Owner struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
ID	string	Mandatory when used as a request parameter	ID of the domain to which the owner belongs

## 4.6 Initiator Info

### Type Definition

```
type Initiator struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
ID	string	Mandatory when used as a request parameter	ID of the domain to which the initiator belongs

## 4.7 Bucket Info

### Type Definition

```
type Bucket struct
```

## Parameter Description

Field	Type	Description
Name	string	Bucket name
CreationDate	time.Time	Creation time of the bucket
Location	string	Bucket location

## 4.8 Request Parameter of GET Objects

### Type Definition

```
type ListObjectsInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Marker	string	Optional	Object name to start with when listing objects in a bucket. All objects are listed in the lexicographical order.
Prefix	string	Optional	Name prefix that the objects to be listed must contain
MaxKeys	int	Optional	Maximum number of objects returned in the response. The value ranges from 1 to 1000. If the value is not in this range, 1000 is returned by default.
Delimiter	string	Optional	Character used to group object names. If the object name contains the <b>Delimiter</b> parameter, the character string from the first character to the first delimiter in the object name is grouped under a single result element, <b>CommonPrefix</b> . (If a prefix is specified in the request, the prefix must be removed from the object name.)
Origin	string	Optional	Origin specified in the preflight request. Generally, it is a domain name.



Field	Type	Optional or Mandatory	Description
RequestHeader	string	Optional	HTTP headers in a cross-origin request

## 4.9 Response Result of GET Objects

### Type Definition

```
type ListObjectsOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Location	string	Bucket location
Name	string	Bucket name
Prefix	string	Object name prefix, which is consistent with that set in the request
Marker	string	Start position for listing objects, which is consistent with that set in the request
Delimiter	string	Character used to group object names, which is consistent with that set in the request
MaxKeys	int	Maximum number of listed objects, which is consistent with that set in the request
IsTruncated	bool	Whether all versioning objects are returned. If the field value is <b>true</b> , not all versioning objects are returned. If the field value is <b>false</b> , all versioning objects are returned.
NextMarker	string	Object name to start with upon next request for listing objects
Contents	[]Content	List of objects in the bucket

Field	Type	Description
CommonPrefixes	[]string	List of object name prefixes grouped according to the <b>Delimiter</b> parameter (if specified)

## 4.10 Object in a Bucket

### Type Definition

```
type Content struct
```

### Parameter Description

Field	Type	Description
Key	string	Object name
LastModified	time.Time	Time when the last modification was made to the object
ETag	string	MD5 value of the object (If the object is encrypted using server-side encryption, the ETag is not the MD5 value of the object.)
Size	int64	Object size in bytes
Owner	<b>Owner</b>	Object owner
StorageClass	string	Storage class of the object

## 4.11 Request Parameter of GET Object versions

### Type Definition

```
type ListVersionsInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
KeyMarker	string	Optional	Object name to start with when listing versioning objects in a bucket. All versioning objects following this parameter are listed in the lexicographical order.

Field	Type	Optional or Mandatory	Description
VersionIdMarker	string	Optional	Object name to start with when listing versioning objects in a bucket. All versioning objects are listed in the lexicographical order by object name and version ID. This parameter must be used together with <b>KeyMarker</b> . If the value of <b>VersionIdMarker</b> is not a version ID specified by <b>KeyMarker</b> , <b>VersionIdMarker</b> is ineffective.
Prefix	string	Optional	Name prefix that the objects to be listed must contain
MaxKeys	int	Optional	Maximum number of objects returned. The value ranges from 1 to 1000. If the value is not in this range, 1000 is returned by default.
Delimiter	string	Optional	Character used to group object names. If the object name contains the <b>Delimiter</b> parameter, the character string from the first character to the first delimiter in the object name is grouped under a single result element, <b>CommonPrefix</b> . (If a prefix is specified in the request, the prefix must be removed from the object name.)
Origin	string	Optional	Origin specified in the preflight request. Generally, it is a domain name.
RequestHeader	string	Optional	HTTP headers in a cross-origin request

## 4.12 Response Result of GET Object versions

### Type Definition

```
type ListVersionsOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server

Field	Type	Description
ResponseHeaders	map[string] []string	HTTP response headers
Location	string	Bucket location
Name	string	Bucket name
Prefix	string	Object name prefix, which is consistent with that set in the request
KeyMarker	string	Object name to start with for listing versioning objects, which is consistent with that set in the request
VersionIdMarker	string	Start position for listing objects, which is consistent with that set in the request
Delimiter	string	Character used to group object names, which is consistent with that set in the request
MaxKeys	int	Maximum number of listed versioning objects, which is consistent with that set in the request
IsTruncated	bool	Whether all versioning objects are returned. If the field value is <b>true</b> , not all versioning objects are returned. If the field value is <b>false</b> , all versioning objects are returned.
NextKeyMarker	string	Object name to start with upon the next request for listing versioning objects in a bucket
NextVersionIdMarker	string	Version ID to start with upon the next request for listing versioning objects. It is used with the <b>NextKeyMarker</b> parameter.
Versions	[] <a href="#">Version</a>	List of versioning objects in the bucket
DeleteMarkers	[] <a href="#">DeleteMarker</a>	List of versioning delete markers in the bucket
CommonPrefixes	[]string	List of object name prefixes grouped according to the <b>Delimiter</b> parameter (if specified)

## 4.13 Versioning Object in a Bucket

### Type Definition

```
type Version struct
```

## Parameter Description

Field	Type	Description
Key	string	Object name
VersionId	string	Object version ID
LastModified	time.Time	Time when the last modification was made to the object
ETag	string	MD5 value of the object
Size	int64	Object size in bytes
Owner	<a href="#">Owner</a>	Object owner
StorageClass	<a href="#">StorageClassType</a>	Storage class of the object
IsLatest	bool	Whether the object is of the latest version. If the parameter value is <b>True</b> , the object is of the latest version.

## 4.14 Versioning Delete Marker in a Bucket

### Type Definition

```
type DeleteMarker struct
```

### Parameter Description

Field	Type	Description
Key	string	Object name
VersionId	string	Object version ID
IsLatest	bool	Whether the object is of the latest version. If the parameter value is <b>True</b> , the object is of the latest version.
LastModified	time.Time	Time when the last modification was made to the object
Owner	<a href="#">Owner</a>	Object owner

## 4.15 Request Parameter of List Multipart uploads

### Type Definition

```
type ListMultipartUploadsInput struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Prefix	string	Optional	Prefix that the object names in the multipart uploads to be listed must contain
MaxUploads	int	Optional	Maximum number of returned multipart uploads. The value ranges from 1 to 1000. If the value is not in this range, 1000 is returned by default.
Delimiter	string	Optional	Character used to group object names involved in multipart uploads. If the object name contains the <b>Delimiter</b> parameter, the character string from the first character to the first delimiter in the object name is grouped under a single result element, <b>CommonPrefix</b> . (If a prefix is specified in the request, the prefix must be removed from the object name.)
KeyMarker	string	Optional	Object name to start with when listing multipart uploads
UploadIdMarker	string	Optional	Upload ID after which the multipart upload listing begins. It is effective only when used with <b>KeyMarker</b> so that multipart uploads after <b>UploadIdMarker</b> of <b>KeyMarker</b> will be listed.

## 4.16 Response Result of List Multipart uploads

### Type Definition

```
type ListMultipartUploadsOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server

Field	Type	Description
ResponseHeaders	map[string] []string	HTTP response headers
Bucket	string	Bucket name
KeyMarker	string	Object name after which listing multipart uploads begins, which is consistent with that set in the request
UploadIdMarker	string	Upload ID after which the multipart upload listing begins, which is consistent with that set in the request
NextKeyMarker	string	Object name to start with upon the next request for listing multipart uploads
NextUploadIdMarker	string	Upload ID to start with upon the next request for listing multipart uploads. It is used with the <b>nextKeyMarker</b> parameter.
MaxUploads	int	Maximum number of listed multipart uploads, which is consistent with the same parameter in the request
IsTruncated	bool	Whether all versioning objects are returned. If the field value is <b>true</b> , not all versioning objects are returned. If the field value is <b>false</b> , all versioning objects are returned.
Prefix	string	Object name prefix in multipart uploads, which is consistent with the same parameter in the request
Delimiter	string	Character used to group object names in multipart uploads, which is consistent with that set in the request
Uploads	[] <b>Upload</b>	List of multipart uploads
CommonPrefixes	[]string	List of object name prefixes grouped according to the <b>Delimiter</b> parameter (if specified)

## 4.17 Multipart Upload in a Bucket

### Type Definition

```
type ListMultipartUploadsOutput struct
```

## Parameter Description

Field	Type	Description
Key	string	Name of the object to be uploaded
UploadId	string	Multipart upload ID
Initiator	<b>Initiator</b>	Initiator of the multipart upload
Owner	<b>Owner</b>	Owner of the multipart upload, which is consistent with <b>Initiator</b>
StorageClass	<b>StorageClassType</b>	Storage class of the object to be uploaded
Initiated	time.Time	Time when the multipart upload is initiated

## 4.18 Request Parameter of GET Bucket metadata

### Type Definition

```
type GetBucketMetadataInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Origin	string	Optional	Origin specified in the preflight request. Generally, it is a domain name.
RequestHeader	string	Optional	HTTP headers in a cross-origin request

## 4.19 Response Result of GET Bucket metadata

### Type Definition

```
type GetBucketMetadataOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server



Field	Type	Description
ResponseHeaders	map[string] []string	HTTP response headers
Location	string	Bucket location
StorageClass	<a href="#">StorageClass Type</a>	Storage class of the bucket. When the storage class is OBS Standard, the value is <b>nil</b> .
AllowOrigin	string	If <b>Origin</b> in the request meets the CORS rules of the bucket, <b>AllowedOrigin</b> in the CORS rules is returned.
AllowHeader	string	If <b>RequestHeader</b> in the request meets the CORS rules of the bucket, <b>AllowedHeader</b> in the CORS rules is returned.
AllowMethod	string	<b>AllowedMethod</b> in the CORS rules of the bucket
ExposeHeader	string	<b>ExposeHeader</b> in the CORS rules of the bucket
MaxAgeSeconds	int	<b>MaxAgeSeconds</b> in the CORS rules of the bucket

## 4.20 Response Result of GET Bucket location

### Type Definition

```
type GetBucketLocationOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string] []string	HTTP response headers
Location	string	Bucket location

## 4.21 Response Result of GET Bucket storage

### Type Definition

```
type GetBucketStorageInfoOutput struct
```

## Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Size	int64	Bucket size
ObjectNumber	int	Number of objects in the bucket

## 4.22 Request Parameter of PUT Bucket quota

### Type Definition

```
type SetBucketQuotaInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Quota	int64	Mandatory	Bucket quota. The value is a non-negative integer.

## 4.23 Response Result of GET Bucket quota

### Type Definition

```
type GetBucketQuotaOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Quota	int64	Bucket quota

## 4.24 Request Parameter of Set Bucket storagePolicy

### Type Definition

```
type SetBucketStoragePolicyInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
StorageClasses	<a href="#">StorageClassType</a>	Mandatory	Storage class of the bucket

## 4.25 Response Result of GET Bucket storagePolicy

### Type Definition

```
type GetBucketStoragePolicyOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
StorageClass	<a href="#">StorageClassType</a>	Storage class of the bucket

## 4.26 Request Parameter of PUT Bucket acl

### Type Definition

```
type SetBucketAclInput struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
ACL	<a href="#">AclType</a>	Optional	Pre-defined ACL
Owner	<a href="#">Owner</a>	Optional	Bucket owner
Grants	<a href="#">[]Grant</a>	Optional	Grantees' ACL information

### NOTE

**Owner** and **Grants** must be used together and they cannot be used with **ACL**.

## 4.27 Response Result of GET Bucket acl

### Type Definition

```
type GetBucketAclOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Owner	<a href="#">Owner</a>	Bucket owner
Grants	<a href="#">[]Grant</a>	Grantees' ACL information

## 4.28 Grantees' Permission Information

### Type Definition

```
type Grant struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
Grantee	<a href="#">Grantee</a>	Mandatory when used as a request parameter	Grantee
Permission	<a href="#">PermissionType</a>	Mandatory when used as a request parameter	Granted permission

## 4.29 Grantee

### Type Definition

```
type Grantee struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Type	<a href="#">GranteeType</a>	Mandatory when used as a request parameter	ID of the domain to which the grantee belongs
ID	string	Mandatory when the parameter is used as a request parameter and <b>Type</b> is <b>nil</b>	ID of the domain to which the grantee belongs
DisplayName	string	Optional when used as a request parameter	Grantee name

Field	Type	Optional or Mandatory	Description
URI	<a href="#">GroupUriType</a>	Mandatory when the parameter is used as a request parameter and <code>grantee_id</code> is <code>nil</code>	Authorized user group

## 4.30 Request Parameter of SET Bucket logging

### Type Definition

```
type SetBucketLoggingConfigurationInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Agency	string	Mandatory when the parameter is in a request to configure the bucket logging	Agency name
TargetBucket	string	Optional	Target bucket for which logs are generated
TargetPrefix	string	Optional	Name prefix of a to-be-logged object in the target bucket
TargetGrants	<a href="#">[]Grant</a>	Optional	List of grantees' permission information

## 4.31 Response Result of GET Bucket logging

### Type Definition

```
type GetBucketLoggingConfigurationOutput struct
```

## Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Agency	string	Agency name
TargetBucket	string	Target bucket for which logs are generated
TargetPrefix	string	Name prefix of a to-be-logged object in the target bucket
TargetGrants	[]Grant	List of grantees' permission information

## 4.32 Request Parameter of PUT Bucket policy

### Type Definition

```
type SetBucketPolicyInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Policy	string	Mandatory	Policy information in JSON format For details about the format, see <a href="#">Policy Format</a> .

#### NOTICE

The bucket name contained in the **Resource** field in **Policy** must be the one specified for the bucket policy.

## 4.33 Response Result of GET Bucket policy

### Type Definition

```
type GetBucketPolicyOutput struct
```

## Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Policy	string	Policy information in JSON format

## 4.34 Request Parameter of PUT Bucket lifecycle

### Type Definition

```
type SetBucketLifecycleConfigurationInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
LifecycleRules	[]LifecycleRule	Mandatory	Lifecycle rules of the bucket

## 4.35 Response Result of GET Bucket lifecycle

### Type Definition

```
type GetBucketLifecycleConfigurationOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
LifecycleRules	[]LifecycleRule	Lifecycle rules of the bucket



## 4.36 Lifecycle Rule of a Bucket

### Type Definition

`type LifecycleRule struct`

### Parameter Description

Field	Type	Optional or Mandatory	Description
ID	string	Optional when used as a request parameter	Rule ID. It is a string of 1 to 255 characters.
Prefix	string	Mandatory when used as a request parameter	Object name prefix identifying one or more objects to which the rule applies. The value can empty, indicating that the rule applies to all objects in the bucket.
Status	<a href="#">RuleStatus Type</a>	Mandatory when used as a request parameter	Whether the rule is enabled
Transitions	<a href="#">[]Transition</a>	Optional when used as a request parameter	List of object transition policies
Expiration	<a href="#">Expiration</a>	Optional when used as a request parameter	Expiration time of the object
NoncurrentVersionTransitions	<a href="#">[]NoncurrentVersionTransition</a>	Optional when used as a request parameter	List of noncurrent object version transition policies
NoncurrentVersionExpiration	<a href="#">NoncurrentVersionExpiration</a>	Optional when used as a request parameter	Expiration time of a noncurrent object version

#### NOTE

**Transitions, Expiration, NoncurrentVersionTransitions, and NoncurrentVersionExpiration** cannot be all null.

## 4.37 Object Transition Policy

### Type Definition

```
type Transition struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
StorageClass	<a href="#">StorageClassType</a>	Mandatory when used as a request parameter	Storage class of the object after transition <b>NOTE</b> The Standard storage class is not supported.
Date	time.Time	Mandatory when the parameter is used as a request parameter and <b>Days</b> is not set	Date when an object will be transited.
Days	int	Mandatory when the parameter is used as a request parameter and <b>Date</b> is not set	Number of days after which an object will be transited since its creation. The value must be a positive integer.

## 4.38 Expiration Time of an Object

### Type Definition

```
type Expiration struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
Date	time. Time	Mandatory when the parameter is used as a request parameter and <b>Days</b> is not set	Date when an object will be transited.
Days	int	Mandatory when the parameter is used as a request parameter and <b>Date</b> is not set	Number of days after which an object will be transited since its creation. The value must be a positive integer.

## 4.39 Transition Policy of a Noncurrent Object Version

### Type Definition

```
type NoncurrentVersionTransition struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
StorageClass	<a href="#">StorageClassType</a>	Mandatory when used as a request parameter	Storage class of the noncurrent object version after transition <b>NOTE</b> The Standard storage class is not supported.
NoncurrentDays	int	Mandatory when used as a request parameter	Number of days after which an object will be transited since it becomes a noncurrent version. The parameter value must be a positive integer.

## 4.40 Expiration Time of a Noncurrent Object Version

### Type Definition

`type NoncurrentVersionExpiration struct`

### Parameter Description

Field	Type	Optional or Mandatory	Description
NoncurrentDays	int	Mandatory when used as a request parameter	Number of days after which an object expires since it becomes a noncurrent version. The parameter value must be a positive integer.

## 4.41 Request Parameter of PUT Bucket website

### Type Definition

`type SetBucketWebsiteConfigurationInput struct`

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
RedirectAllRequestsTo	<a href="#">RedirectAllRequestTo</a>	Optional	Redirection rule of all requests
IndexDocument	<a href="#">IndexDocument</a>	Optional	Default page configuration, which includes the <b>Suffix</b> field
ErrorDocument	<a href="#">ErrorDocument</a>	Optional	Error page configuration, which includes the <b>Key</b> field
RoutingRules	<a href="#">[]RoutingRule</a>	Optional	Redirection rule list

 NOTE

- **ErrorDocument**, **IndexDocument**, and **RoutingRules** must be used together and they cannot be used with **RedirectAllRequestsTo**.
- When **ErrorDocument**, **IndexDocument**, and **RoutingRules** are used together, **RoutingRules** can be **nil**.
- You must set either these three fields or **RedirectAllRequestsTo**.

## 4.42 Response Result of GET Bucket website

### Type Definition

`type GetBucketWebsiteConfigurationOutput struct`

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string] []string	HTTP response headers
RedirectAllRequestsTo	<a href="#">RedirectAllRequestsTo</a>	Redirection rule of all requests
IndexDocument	<a href="#">IndexDocument</a>	Default page configuration, which includes the <b>Suffix</b> field
ErrorDocument	<a href="#">ErrorDocument</a>	Error page configuration, which includes the <b>Key</b> field
RoutingRules	[] <a href="#">RoutingRule</a>	Redirection rule list

## 4.43 Redirection Rule Applying to all Requests

### Type Definition

`type RedirectAllRequestsTo struct`

## Parameter Description

Field	Type	Optional or Mandatory	Description
HostName	string	Mandatory when used as a request parameter	Host name used for redirection
Protocol	<b>ProtocolType</b>	Optional when used as a request parameter	Host name used for redirection

## 4.44 Error Page Settings

### Type Definition

```
type ErrorDocument struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Key	string	Optional when used as a request parameter	Page that is returned when a <b>4XX</b> error occurs

## 4.45 Default Page Settings

### Type Definition

```
type IndexDocument struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
Suffix	string	Mandatory when used as a request parameter	Suffix that is appended to a request initiated for a folder. For example, if the suffix is <b>index.html</b> and you request for <b>samplebucket/images/</b> , the returned data will be the object named <b>images/index.html</b> in the <b>samplebucket</b> bucket. The suffix can neither be <b>nil</b> nor contain slashes (/).

## 4.46 Redirection Rule

### Type Definition

`type RoutingRule struct`

### Parameter Description

Field	Type	Optional or Mandatory	Description
Condition	<b>Condition</b>	Optional when used as a request parameter	Matching condition of a redirection rule
Redirect	<b>Redirect</b>	Mandatory when used as a request parameter	Details about a redirection request

## 4.47 Matching Condition of a Redirection Rule

### Type Definition

`type Condition struct`

### Parameter Description

Field	Type	Optional or Mandatory	Description
KeyPrefixEquals	string	Optional when used as a request parameter	Object name prefix to be matched when a redirection rule takes effect
HttpErrorCodeReturnedEquals	string	Optional when used as a request parameter	HTTP error code to be matched when a redirection rule takes effect

## 4.48 Details About a Redirection Request

### Type Definition

`type Redirect struct`

### Parameter Description

Field	Type	Optional or Mandatory	Description
Protocol	<b>ProtocolType</b>	Optional when used as a request parameter	Protocol used for redirection
HostName	string	Optional when used as a request parameter	Host name used for redirection
ReplaceKeyPrefix-With	string	Optional when used as a request parameter	Object name prefix used in the redirection request
ReplaceKeyWith	string	Optional when used as a request parameter	Object name used in the redirection request. This parameter cannot be used together with <b>replaceKeyPrefix-With</b> .



Field	Type	Optional or Mandatory	Description
HttpRedirectCode	string	Optional when used as a request parameter	HTTP status code in the response to the redirection request

## 4.49 Request Parameter of PUT Bucket versioning

### Type Definition

```
type SetBucketVersioningInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Status	<a href="#">VersioningStatusType</a>	Mandatory	Versioning status of the bucket

## 4.50 Response Result of GET Bucket versioning

### Type Definition

```
type GetBucketVersioningOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Status	<a href="#">VersioningStatusType</a>	Versioning status of the bucket

## 4.51 Request Parameter of PUT Bucket cors

### Type Definition

```
type SetBucketCorsInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
CorsRules	[] <a href="#">CorsRule</a>	Mandatory	CORS rule list of the bucket

## 4.52 Response Result of GET Bucket cors

### Type Definition

```
type GetBucketCorsOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string] []string	HTTP response headers
CorsRules	[] <a href="#">CorsRule</a>	CORS rule list of the bucket

## 4.53 Bucket CORS Rules

### Type Definition

```
type CorsRule struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
ID	string	Optional when used as a request parameter	CORS rule ID. It is a string of 1 to 255 characters.
AllowedMethod	[]string	Mandatory when used as a request parameter	HTTP methods allowed by the CORS rule. Possible values are: <ul style="list-style-type: none"> <li>• GET</li> <li>• PUT</li> <li>• HEAD</li> <li>• POST</li> <li>• DELETE</li> </ul>
AllowedOrigin	[]string	Mandatory when used as a request parameter	Origins (character strings representing domain names) allowed by the CORS rule. The value can contain one wildcard character (*). Each <b>AllowedOrigin</b> can only contain one or zero wildcard character (*).
AllowedHeader	[]string	Optional when used as a request parameter	Request headers allowed by the CORS rule. The value can contain one wildcard character (*). Each <b>AllowedHeader</b> can only contain one or zero wildcard character (*).
MaxAgeSeconds	int	Optional when used as a request parameter	Cache duration (in seconds) of the cross-region request result in the client allowed by the CORS rule. The value must be an integer.
ExposeHeader	[]string	Optional when used as a request parameter	Additional response headers allowed by the CORS rule. It cannot contain spaces.

## 4.54 Request Parameter of PUT Bucket notification

### Type Definition

```
type SetBucketNotificationInput struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
TopicConfigurations	<a href="#">[]TopicConfiguration</a>	Optional	Event notification setting list of the bucket

## 4.55 Response Result of GET Bucket notification

### Type Definition

```
type GetBucketNotificationOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
TopicConfigurations	<a href="#">[]TopicConfiguration</a>	Event notification setting list of the bucket

## 4.56 Event Notification Settings

### Type Definition

```
type TopicConfiguration struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
ID	string	Optional when used as a request parameter	Event notification setting ID

Field	Type	Optional or Mandatory	Description
Topic	string	Mandatory when used as a request parameter	URN of the event notification topic. After detecting a specific event, OBS sends a message to the topic.
Events	[]EventTy pe	Mandatory when used as a request parameter	Type of events that need to be notified.
FilterRules	[]FilterRu le	Optional when used as a request parameter	List of filtering rules

## 4.57 Filtering Rule

### Type Definition

```
type FilterRule struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Name	string	Optional when used as a request parameter	Prefix or suffix of object names for filtering. Possible values are: <ul style="list-style-type: none"> <li>• prefix</li> <li>• suffix</li> </ul>
Value	string	Optional when used as a request parameter	Keyword of object names for filtering objects by prefix or suffix

## 4.58 Request Parameter of PUT Bucket tagging

### Type Definition

```
type SetBucketTaggingInput struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Tags	[]Tag	Mandatory	Bucket tag set

## 4.59 Response Result of GET Bucket tagging

### Type Definition

```
type GetBucketTaggingOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Tags	[]Tag	Bucket tag set

## 4.60 Bucket Tag

### Type Definition

```
type Tag struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Key	string	Mandatory when used as a request parameter	Tag name, which consists of up to 36 characters and cannot include non-printable ASCII characters (0–31) and the following special characters: * < > \ = The tag keys in one bucket must be unique.

Field	Type	Optional or Mandatory	Description
Value	string	Mandatory when used as a request parameter	Tag value, which consists of up to 43 characters and cannot include non-printable ASCII characters (0–31) and the following special characters: *<> =

## 4.61 SSE-C Header

### Type Definition

```
type SseCHeader struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Encryption	string	Mandatory when used as a request parameter	Algorithm used in SSE-C encryption. The value can be: <ul style="list-style-type: none"> <li>AES256</li> </ul>
Key	string	Mandatory when used as a request parameter	Key used in SSE-C encryption/decryption, which is calculated by using AES-256 and then encoded by Base64
KeyMD5	string	Optional when used as a request parameter	Key check value used in SSE-C encryption/decryption, which is the key value encrypted by MD5 and then encoded by Base64

## 4.62 SSE-KMS Header

### Type Definition

```
type SseKmsHeader struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
Encryption	string	Mandatory when used as a request parameter	Algorithm used in SSE-KMS encryption. The value can be: <ul style="list-style-type: none"> <li>kms</li> </ul>
Key	string	Optional when used as a request parameter	Master key used in SSE-KMS encryption/decryption. The value can be <b>nil</b> .

## 4.63 Request Parameter of PUT Object

### Type Definition

```
type PutObjectInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
ContentMD5	string	Optional	Base64-encoded MD5 value of the object data to be uploaded. It is provided for the OBS server to verify data integrity.
ACL	<a href="#">AclType</a>	Optional	ACL that can be pre-defined during the object creation
WebsiteRedirectLocation	string	Optional	Location where the object is redirected to, when the bucket is configured with website hosting.
ContentType	string	Optional	MIME type of the object
ContentLength	int64	Optional	Object size in bytes



Field	Type	Optional or Mandatory	Description
SseHeader	<a href="#">SseCHeader</a> or <a href="#">SseKmsHeader</a>	Optional	Header for server-side encryption
StorageClasses	<a href="#">StorageClassType</a>	Optional	Storage class specified for the to-be-created object
Metadata	map[string]string	Optional	Customized metadata of the object
Body	io.Reader	Optional	Data flow of the object

## 4.64 Request Parameter of PUT File

### Type Definition

```
type PutFileInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
ContentMD5	string	Optional	Base64-encoded MD5 value of the object data to be uploaded. It is provided for the OBS server to verify data integrity.
ACL	<a href="#">AclType</a>	Optional	ACL that can be pre-defined during the object creation
WebsiteRedirectLocation	string	Optional	Location where the object is redirected to, when the bucket is configured with website hosting.
ContentType	string	Optional	MIME type of the object
ContentLength	int64	Optional	Object size in bytes

Field	Type	Optional or Mandatory	Description
SseHeader	<a href="#">SseHeader</a> or <a href="#">SseKmsHeader</a>	Optional	Header for server-side encryption
StorageClass	<a href="#">StorageClassType</a>	Optional	Storage class specified for the to-be-created object
Metadata	map[string]string	Optional	Customized metadata of the object
SourceFile	string	Optional	Path to the source file of the object

## 4.65 Response Result of PUT Object

### Type Definition

```
type PutObjectOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string]string	HTTP response headers
StorageClass	<a href="#">StorageClassType</a>	Storage class of the object. When the storage class is OBS Standard, the value is <b>nil</b> .
VersionId	string	Object version ID
ETag	string	Object ETag
SseHeader	<a href="#">SseHeader</a> or <a href="#">SseKmsHeader</a>	Header for server-side encryption

## 4.66 Request Parameter of GET Object

### Type Definition

```
type GetObjectInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
ResponseCacheControl	string	Optional	Rewrites the <b>Cache-Control</b> header when obtaining the object.
ResponseContentDisposition	string	Optional	Rewrites the <b>Content-Disposition</b> header when obtaining the object.
ResponseContentEncoding	string	Optional	Rewrites the <b>Content-Encoding</b> header when obtaining the object.
ResponseContentLanguage	string	Optional	Rewrites the <b>Content-Language</b> header when obtaining the object.
ResponseContentType	string	Optional	Rewrites the <b>Content-Type</b> header when obtaining the object.
ResponseExpires	string	Optional	Rewrites the <b>Expires</b> header when obtaining the object.
VersionId	string	Optional	Object version ID
RangeStart	int64	Optional	Start position for object download. The value is a non-negative integer.
RangeEnd	int64	Optional	Endpoint for object download. If the value is larger than the object length minus 1, the actual object length = Object length - 1.
IfMatch	string	Optional	Returns the source object if its ETag is the same as the one specified by this parameter; otherwise, an error is returned.
IfNoneMatch	string	Optional	Returns the source object if its ETag is different from the one specified by this parameter; otherwise, an error is returned.

Field	Type	Optional or Mandatory	Description
IfModifiedSince	time.Time	Optional	Returns the object if it is modified after the time specified by this parameter; otherwise, an error is returned.
IfUnmodifiedSince	time.Time	Optional	Returns the object if it remains unchanged since the time specified by this parameter; otherwise, an error is returned.
Origin	string	Optional	Origin specified in the preflight request. Generally, it is a domain name.
RequestHeader	string	Optional	HTTP headers in a cross-origin request
SseHeader	<a href="#">SseCHeader</a>	Optional	Header for server-side decryption

 NOTE

- If a request includes **IfUnmodifiedSince** or **IfMatch** and the specified condition is not met, the object download will fail with error information **412 Precondition Failed** returned.
- If a request includes **IfModifiedSince** or **IfNoneMatch** and the specified condition is not met, the object download will fail with error information **304 Not Modified** returned.

## 4.67 Response Result of GET Object

### Type Definition

```
type GetObjectOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Body	io.ReadCloser	Data flow of the object

Field	Type	Description
DeleteMarker	bool	Whether the deleted object is a delete marker
StorageClass	<a href="#">StorageClassType</a>	Storage class of the object
AllowOrigin	string	If <b>Origin</b> in the request meets the CORS rules of the bucket, <b>AllowedOrigin</b> in the CORS rules is returned.
AllowHeader	string	If <b>RequestHeader</b> in the request meets the CORS rules of the bucket, <b>AllowedHeader</b> in the CORS rules is returned.
AllowMethod	string	<b>AllowedMethod</b> in the CORS rules of the bucket
ExposeHeader	string	<b>ExposeHeader</b> in the CORS rules of the bucket
MaxAgeSeconds	int	<b>MaxAgeSeconds</b> in the CORS rules of the bucket
ContentLength	int64	Object size in bytes
CacheControl	string	<b>Cache-Control</b> header in the response
ContentDisposition	string	<b>Content-Disposition</b> header in the response
ContentEncoding	string	<b>Content-Encoding</b> header in the response
ContentLanguage	string	<b>Content-Language</b> header in the response
ContentType	string	MIME type of the object
Expires	string	<b>Expires</b> header in the response
LastModified	time.Time	Time when the last modification was made to the object
ETag	string	Object ETag
VersionId	string	Object version ID
Restore	string	Restore status of the Archive object. If the object is not in the OBS Archive storage class, the value is <b>nil</b> .
Expiration	string	Expiration details
SseHeader	<a href="#">SseHeader</a> or <a href="#">SseKmsHeader</a>	Header for server-side encryption

Field	Type	Description
WebsiteRedirectLocation	string	Location where the object is redirected to, when the bucket is configured with website hosting.
Metadata	map[string]string	Customized metadata of the object

#### NOTICE

After reading data from the **Body** field, you must call its **Close** method to close the connection.

## 4.68 Request Parameter of PUT Object - Copy

### Type Definition

```
type CopyObjectInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Target bucket name
Key	string	Mandatory	Target object name
CopySourceBucket	string	Mandatory	Source bucket name
CopySourceKey	string	Mandatory	Source object name
CopySourceVersionId	string	Optional	Source object version ID
ACL	<a href="#">AclType</a>	Optional	ACL that can be pre-defined during the object copy
MetadataDirective	<a href="#">MetadataDirectiveType</a>	Optional	Policy specifying that the source object's properties will also be copied
CopySourceIfMatch	string	Optional	Copies the source object if its ETag is the same as the one specified by this parameter; otherwise, an error is returned.

Field	Type	Optional or Mandatory	Description
CopySourceIfNoneMatch	string	Optional	Copies the source object if its ETag is different from the one specified by this parameter; otherwise, an error is returned.
CopySourceIfUnmodifiedSince	time.Time	Optional	Copies the source object if it is changed after the time specified by this parameter; otherwise, an error is returned.
CopySourceIfModifiedSince	time.Time	Optional	Copies the source object if it is changed before the time specified by this parameter; otherwise, an error is returned.
WebsiteRedirectLocation	string	Optional	Location where the object is redirected to, when the bucket is configured with website hosting.
SseHeader	<a href="#">SseCHeader</a> or <a href="#">SseKmsHeader</a>	Optional	Header for server-side encryption. It is used to encrypt the target object.
SourceSseHeader	<a href="#">SseCHeader</a>	Optional	Header for server-side decryption. It is used to decrypt the source object.
CacheControl	string	Optional	Rewrites the <b>Cache-Control</b> header in the response.
ContentDisposition	string	Optional	Rewrites the <b>Content-Disposition</b> header in the response.
ContentEncoding	string	Optional	Rewrites the <b>Content-Encoding</b> header in the response.
ContentLanguage	string	Optional	Rewrites the <b>Content-Language</b> header in the response.
ContentType	string	Optional	Rewrites the <b>Content-Type</b> header in the response.
Expires	string	Optional	Rewrites the <b>Expires</b> header in the response.
StorageClass	<a href="#">StorageClassType</a>	Optional	Object storage class set during the object copy
Metadata	map[string]string	Optional	Customized metadata of the target object

 NOTE

If the object copy request includes **CopySourceIfUnmodifiedSince**, **CopySourceIfMatch**, **CopySourceIfModifiedSince**, or **CopySourceIfNoneMatch**, and the specified condition is not met, the object copy will fail with error information **412 Precondition Failed** returned.

## 4.69 Response Result of PUT Object - Copy

### Type Definition

```
type CopyObjectOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
LastModified	time.Time	Time when the last modification was made to the target object
ETag	string	ETag of the target object
CopySourceVersionId	string	Version ID of the source object
VersionId	string	Version ID of the target object
SseHeader	<b>SseCHeader</b> or <b>SseKmsHeader</b>	Header for server-side encryption

## 4.70 Request Parameter of DELETE Object

### Type Definition

```
type DeleteObjectInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name



Field	Type	Optional or Mandatory	Description
Key	string	Mandatory	Object name
VersionId	string	Optional	Version ID of the object to be deleted

## 4.71 Response Result of DELETE Object

### Type Definition

```
type DeleteObjectOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
DeleteMarker	bool	Whether the deleted object is a delete marker
VersionId	str	Object version ID

## 4.72 Request Parameter of DELETE Objects

### Type Definition

```
type DeleteObjectsInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Quiet	bool	Optional	Response mode of a batch deletion request. If this field is set to <b>false</b> , objects involved in the deletion will be returned. If this field is set to <b>true</b> , only objects failed to be deleted will be returned.

Field	Type	Optional or Mandatory	Description
Objects	[] <a href="#">ObjectToDelete</a>	Mandatory	List of objects to be deleted

## 4.73 Response Result of DELETE Objects

### Type Definition

```
type DeleteObjectsOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Deleted	[] <a href="#">Deleted</a>	List of successfully deleted objects
Errors	[] <a href="#">Error</a>	List of objects failed to be deleted

## 4.74 To-Be-Deleted Object

### Type Definition

```
type ObjectToDelete struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Key	string	Mandatory	Object name
VersionId	string	Optional	Object version ID

## 4.75 Successfully Deleted Object

### Type Definition

```
type Deleted struct
```

## Parameter Description

Field	Type	Description
Key	string	Object name
VersionId	string	Object version ID
DeleteMarker	bool	Whether the deleted object is a delete marker
DeleteMarkerVersionId	string	Version ID of the delete marker

## 4.76 Object Failed to Be Deleted

### Type Definition

```
type Error struct
```

### Parameter Description

Field	Type	Description
Key	string	Object name
VersionId	string	Object version ID
Code	string	Error code of the deletion failure
Message	string	Error message of the deletion failure

## 4.77 Request Parameter of GET Bucket metadata

### Type Definition

```
type GetObjectMetadataInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
VersionId	string	Optional	Object version ID

Field	Type	Optional or Mandatory	Description
Origin	string	Optional	Origin specified in the preflight request. Generally, it is a domain name.
RequestHeader	string	Optional	HTTP headers in a cross-origin request
SseHeader	<a href="#">SseHeader</a>	Optional	Header for server-side decryption

## 4.78 Response Result of Obtain Object Metadata

### Type Definition

```
type GetObjectMetadataOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
StorageClass	<a href="#">StorageClassType</a>	Storage class of the object
AllowOrigin	string	If <b>Origin</b> in the request meets the CORS rules of the bucket, <b>AllowedOrigin</b> in the CORS rules is returned.
AllowHeader	string	If <b>RequestHeader</b> in the request meets the CORS rules of the bucket, <b>AllowedHeader</b> in the CORS rules is returned.
AllowMethod	string	<b>AllowedMethod</b> in the CORS rules of the bucket
ExposeHeader	string	<b>ExposeHeader</b> in the CORS rules of the bucket
MaxAgeSeconds	int	<b>MaxAgeSeconds</b> in the CORS rules of the bucket
ContentLength	int64	Object size in bytes
ContentType	string	MIME type of the object

Field	Type	Description
LastModified	time.Time	Time when the last modification was made to the object
ETag	string	Object ETag
VersionId	string	Object version ID
Restore	string	Restore status of the Archive object. If the object is not in the OBS Archive storage class, the value is <b>nil</b> .
Expiration	string	Expiration details
SseHeader	<b>SseCHeader</b> or <b>SseKmsHeader</b>	Header for server-side encryption
WebsiteRedirectLocation	string	Location where the object is redirected to, when the bucket is configured with website hosting.
Metadata	map[string]string	Customized metadata of the object

## 4.79 Request Parameter of PUT Object acl

### Type Definition

```
type SetObjectAclInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
VersionId	string	Optional	Object version ID
ACL	<b>AclType</b>	Optional	Pre-defined ACL
Owner	<b>Owner</b>	Optional	Object owner
Grants	<b>[]Grant</b>	Optional	Grantees' ACL information

 NOTE

**Owner** and **Grants** must be used together and they cannot be used with **ACL**.

## 4.80 Request Parameter of GET Object acl

### Type Definition

```
type GetObjectAclInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
VersionId	string	Optional	Object version ID

## 4.81 Response Result of GET Object acl

### Type Definition

```
type GetObjectAclOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
VersionId	string	Object version ID
Owner	<b>Owner</b>	Object owner
Grants	[] <b>Grant</b>	Grantees' ACL information

## 4.82 Request Parameter of Initiate Multipart Upload

### Type Definition

```
type InitiateMultipartUploadInput struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
ACL	<a href="#">AclType</a>	Optional	Pre-defined ACL
WebsiteRedirectLocation	string	Optional	Location where the object is redirected to, when the bucket is configured with website hosting.
ContentType	string	Optional	MIME type of the object
SseHeader	<a href="#">SseCHeader</a> or <a href="#">SseKmsHeader</a>	Optional	Header for server-side encryption
StorageClass	<a href="#">StorageClassType</a>	Optional	Storage class of the object
Metadata	map[string]string	Optional	Customized metadata of the object

## 4.83 Response Result of Initiate Multipart Upload

### Type Definition

`type InitiateMultipartUploadOutput struct`

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
Bucket	string	Name of the bucket involved in the multipart upload
Key	string	Name of the object to be uploaded
UploadId	string	Multipart upload ID

Field	Type	Description
SseHeader	<a href="#">SseCHeader</a> or <a href="#">SseKmsHeader</a>	Header for server-side encryption

## 4.84 Request Parameter of PUT Part

### Type Definition

type UploadPartInput struct

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
PartNumber	int	Mandatory	Part number, which ranges from 1 to 10000
UploadId	string	Mandatory	Multipart upload ID
ContentMD5	string	Optional	Base64-encoded MD5 value of the part to be uploaded. It is provided for the OBS server to verify data integrity.
SseHeader	<a href="#">SseCHeader</a>	Optional	Header for server-side encryption
Body	io.Reader	Optional	Data flow of the part
SourceFile	string	Optional	Path to the source file of the part
Offset	int64	Optional	Start offset (in bytes) of a part in the source file. The default value is <b>0</b> .
PartSize	int64	Optional	Size (in bytes) of a part in the source file. The default value is the file size minus <b>Offset</b> .



 NOTE

- **Body** and **SourceFile** cannot be used together.
- If both **Body** and **SourceFile** are **nil**, the size of the uploaded object is **0** bytes.
- **Offset**, **PartSize**, and **SourceFile** are used together to specify a part of the source file to be uploaded.

## 4.85 Response Result of PUT Part

### Type Definition

```
type UploadPartOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
PartNumber	int	Part number
ETag	string	ETag of the uploaded part
SseHeader	<a href="#">SseHeader</a> or <a href="#">SseKmsHeader</a>	Header for server-side encryption

## 4.86 Request Parameter of PUT Part - Copy

### Type Definition

```
type CopyPartInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Target bucket name
Key	string	Mandatory	Target object name
PartNumber	int	Mandatory	Part number, which ranges from 1 to 10000

Field	Type	Optional or Mandatory	Description
UploadId	string	Mandatory	Multipart upload ID
CopySourceBucket	string	Mandatory	Source bucket name
CopySourceKey	string	Mandatory	Source object name
CopySourceVersionId	string	Optional	Source object version ID
CopySourceRangeStart	int64	Optional	Start position for object copy. The value is a non-negative integer.
CopySourceRangeEnd	int64	Optional	Endpoint for object copy. If the value is larger than the source object length minus 1, the actual object length = Source object length - 1.
SseHeader	<a href="#">SseHeader</a>	Optional	Header for server-side encryption. It is used to encrypt the target object.
SourceSseHeader	<a href="#">SseHeader</a>	Optional	Header for server-side decryption. It is used to decrypt the source object.

## 4.87 Response Result of PUT Part - Copy

### Type Definition

```
type CopyPartOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string][]string	HTTP response headers
ETag	string	ETag of the target part
LastModified	time.Time	Time when the target part was last modified

Field	Type	Description
SseHeader	<a href="#">SseCHeader</a> or <a href="#">SseKmsHeader</a>	Header for server-side encryption

## 4.88 Request Parameter of List Parts

### Type Definition

```
type ListPartsInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
UploadId	string	Mandatory	Multipart upload ID
MaxParts	int	Optional	Part number after which listing uploaded parts begins. Only parts whose part numbers are larger than this value will be listed.
PartNumberMarker	int	Optional	Maximum number of uploaded parts that can be listed per page
EncodingType	string	Optional	Encodes the key in the response based on the specified type. If a key contains control characters that are not supported by the XML 1.0 standard, you can set EncodingType to encode the key in the response. Optional value: <b>url</b>

## 4.89 Response Result of List Parts

### Type Definition

```
type ListPartsOutput struct
```

## Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string] []string	HTTP response headers
Bucket	string	Bucket name
Key	string	Object name
UploadId	string	Multipart upload ID
Initiator	<b>Initiator</b>	Initiator of the multipart upload
Owner	<b>Owner</b>	Owner of the multipart upload, which is consistent with <b>Initiator</b>
StorageClass	string	Storage class of the object to be uploaded
PartNumberMarker	int	Part number after which listing parts begins, which is consistent with that set in the request
NextPartNumberMarker	int	Part number to start with upon the next request for listing parts
MaxParts	int	Maximum number of listed parts, which is consistent with that set in the request
IsTruncated	bool	Whether all versioning objects are returned. If the field value is <b>true</b> , not all versioning objects are returned. If the field value is <b>false</b> , all versioning objects are returned.
Parts	[] <b>Part</b>	List of uploaded parts

## 4.90 Uploaded Part

### Type Definition

```
type Part struct
```

### Parameter Description

Field	Type	Description
PartNumber	int	Part number

Field	Type	Description
LastModified	time.Time	Time when the part was last modified
ETag	string	Part ETag
Size	int64	Part size

## 4.91 Request Parameter of Complete Multipart Upload

### Type Definition

```
type CompleteMultipartUploadInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
UploadId	string	Mandatory	Multipart upload ID
Parts	[]Part	Mandatory	List of parts to be combined

## 4.92 Response Result of Complete Multipart Upload

### Type Definition

```
type CompleteMultipartUploadOutput struct
```

### Parameter Description

Field	Type	Description
StatusCode	int	HTTP status code
RequestId	string	Request ID returned by the OBS server
ResponseHeaders	map[string] []string	HTTP response headers
ETag	string	ETag calculated based on the ETags of all combined parts
Bucket	string	Bucket in which parts are combined
Key	string	Object name obtained after part combination

Field	Type	Description
Location	string	URL of the generated object after part combination
VersionId	string	Version ID of the object obtained after part combination
SseHeader	<a href="#">SseCHeader</a> or <a href="#">SseKmsHead er</a>	Header for server-side encryption

## 4.93 Request Parameter of DELETE Multipart upload

### Type Definition

`type AbortMultipartUploadInput struct`

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
UploadId	string	Mandatory	Multipart upload ID

## 4.94 POST Object restore

### Type Definition

`type RestoreObjectInput struct`

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
Version Id	string	Optional	Version ID of the to-be-restored Archive object

Field	Type	Optional or Mandatory	Description
Days	int	Mandatory	Retention period of the restored object, in days. The value ranges from 1 to 30.
Tier	<a href="#">RestoreTierType</a>	Optional	Restore option. The value defaults to standard restoration.

## 4.95 Request Parameter for Signing a URL

`type CreateSignedUrlInput struct`

### Parameter Description

Field	Type	Optional or Mandatory	Description
Method	<a href="#">HttpMethodType</a>	Mandatory	HTTP method type
Bucket	string	Optional	Bucket name
Key	string	Optional	Object name
SubResource	<a href="#">SubResourceType</a>	Optional	Sub-resource to be accessed
Expires	int	Optional	Expiration time of the signed URL, in seconds. The default value is <b>300</b> .
Headers	map[string]string	Optional	Headers in the request
QueryParams	map[string]string	Optional	Query parameters in the request

## 4.96 Response Result for Signing a URL

### Type Definition

`type CreateSignedUrlOutput struct`

### Parameter Description

Field	Type	Description
SignedUrl	string	Signed URL

Field	Type	Description
ActualSignedRequestHeaders	http.Header	Actual headers in the request initiated by using the signed URL

## 4.97 Request Parameters of Resumable Upload

### Type Definition

```
type UploadFileInput struct
```

### Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
UploadFile	string	Mandatory	Name of the local file to be uploaded
PartSize	int64	Mandatory	Part size, in bytes. The value ranges from 100 KB to 5 GB.
TaskNum	int	Optional	Maximum number of files that can be uploaded concurrently in multipart mode.
EnableCheckpoint	bool	Optional	Whether to enable the resumable upload mode. The default value is <b>False</b> , indicating that this mode is disabled.



Field	Type	Optional or Mandatory	Description
CheckpointFile	string	Optional	File used to record the upload progress. This parameter is effective only in the resumable upload mode. If the value of this parameter is empty, the file will be in the same directory as the local file to be uploaded.
ACL	<a href="#">AclType</a>	Optional	Pre-defined ACL
WebsiteRedirectLocation	string	Optional	Location where the object is redirected to, when the bucket is configured with website hosting.
ContentType	string	Optional	MIME type of the object
SseHeader	<a href="#">SseCHeader</a> or <a href="#">SseKmsHeader</a>	Optional	Header for server-side encryption
StorageClass	<a href="#">StorageClassType</a>	Optional	Storage class of the object
Metadata	map[string]string	Optional	Customized metadata of the object
Expires	int64	Optional	Lifecycle of the object to be uploaded, in days.

## 4.98 Request Parameters of Resumable Download

### Type Definition

```
type DownloadFileInput struct
```

## Parameter Description

Field	Type	Optional or Mandatory	Description
Bucket	string	Mandatory	Bucket name
Key	string	Mandatory	Object name
VersionId	string	Optional	Object version ID
DownloadFile	string	Optional	Full path of the local directory to which the object is downloaded. If the value is empty, the downloaded object is saved in the directory where the program is executed.
PartSize	int64	Optional	Part size, in bytes.
TaskNum	int	Optional	Maximum number of files that can be downloaded concurrently in multipart mode.
EnableCheckpoint	bool	Optional	Whether to enable the resumable download mode. The default value is <b>False</b> , indicating that this mode is disabled.
CheckpointFile	string	Optional	File used to record the download progress. This parameter is effective only in the resumable download mode. If the value is empty, the file is in the same local directory as the downloaded object.
Origin	string	Optional	Origin specified in the preflight request. Generally, it is a domain name.
RequestHeader	string	Optional	HTTP headers in a cross-origin request

Field	Type	Optional or Mandatory	Description
SseHeader	<a href="#">SseHeader</a>	Optional	Header for server-side decryption
IfMatch	string	Optional	Returns the source object if its ETag is the same as the one specified by this parameter; otherwise, an error is returned.
IfNoneMatch	string	Optional	Returns the source object if its ETag is different from the one specified by this parameter; otherwise, an error is returned.
IfModifiedSince	time.Time	Optional	Returns the object if it is modified after the time specified by this parameter; otherwise, an error is returned.
IfUnmodifiedSince	time.Time	Optional	Returns the object if it remains unchanged since the time specified by this parameter; otherwise, an error is returned.

# 5 Bucket-Related APIs

## 5.1 Bucket-Related APIs

OBS Go SDK provides methods for every bucket-related API to access OBS using a signed URL. Such method may contain three parameters respectively specifying the signed URL, the headers carried by the request, and data carried by the request (optional). For details about how to generate a signed URL, see [Creating a Signed URL](#).

## 5.2 PUT Bucket

### API Description

You can use this API to create a bucket and name it as you specify. The created bucket name must be unique in OBS. If a user repeatedly creates buckets with the same name in one region, status code **200** is returned. In other cases, status code **409** is returned. Each user can create a maximum of 100 buckets.

### Method Definition

```
func (obsClient ObsClient) CreateBucket(input *CreateBucketInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) CreateBucketWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*CreateBucketInput</a>	Mandatory

## Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

## Sample Code

```
func main() {
    input := &obs.CreateBucketInput{}
    input.Bucket = "bucketname"
    input.ACL = obs.AclPrivate
    input.StorageClass = obs.StorageClassWarm
    output, err := obsClient.CreateBucket(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.3 GET Buckets

### API Description

You can use this API to obtain the bucket list. In the list, bucket names are displayed in lexicographical order.

### Method Definition

```
func (obsClient ObsClient) ListBuckets(input *ListBucketsInput) (output *ListBucketsOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) ListBucketsWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *ListBucketsOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*ListBucketsInput</a>	Optional

## Returned Result

Field	Type
output	<a href="#">*ListBucketsOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.ListBuckets(nil)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("Owner.ID:%s\n", output.Owner.ID)
        for index, val := range output.Buckets {
            fmt.Printf("Bucket[%d]-Name:%s,CreationDate:%s\n", index, val.Name, val.CreationDate)
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.4 HEAD Bucket

### API Description

You can use this API to check whether a bucket exists. If the returned HTTP status code is **200**, the bucket exists. If the returned HTTP status code is **404**, the bucket does not exist.

### Method Definition

```
func (obsClient ObsClient) HeadBucket(bucketName string) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) HeadBucketWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

## Sample Code

```
func main() {
    _, err := obsClient.HeadBucket("bucketname")
    if err == nil {
        fmt.Println("Bucket exists")
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            if obsError.StatusCode == 404 {
                fmt.Println("Bucket does not exists")
            } else {
                fmt.Printf("StatusCode:%d\n", obsError.StatusCode)
            }
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.5 DELETE Bucket

### API Description

You can use this API to delete a bucket. The bucket to be deleted must be empty (containing no objects, noncurrent object versions, or part fragments).

### Method Definition

```
func (obsClient ObsClient) DeleteBucket(bucketName string) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) DeleteBucketWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.DeleteBucket("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.6 GET Objects

### API Description

You can use this API to list objects in a bucket. By default, a maximum of 1000 objects are listed.

### Method Definition

```
func (obsClient ObsClient) ListObjects(input *ListObjectsInput) (output *ListObjectsOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) ListObjectsWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *ListObjectsOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*ListObjectsInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*ListObjectsOutput</a>



Field	Type
err	error

## Sample Code

```
func main() {
    input := &obs.ListObjectsInput{}
    input.Bucket = "bucketname"
    output, err := obsClient.ListObjects(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        for index, val := range output.Contents {
            fmt.Printf("Content[%d]-OwnerId:%s, ETag:%s, Key:%s, LastModified:%s, Size:%d\n",
                index, val.Owner.ID, val.ETag, val.Key, val.LastModified, val.Size)
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.7 GET Object versions

### API Description

You can use this API to list versioning objects in a bucket. By default, a maximum of 1000 versioning objects are listed.

### Method Definition

```
func (obsClient ObsClient) ListVersions(input *ListVersionsInput) (output *ListVersionsOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) ListVersionsWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *ListVersionsOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*ListVersionsInput</a>	Mandatory

## Returned Result

Field	Type
output	<a href="#">*ListVersionsOutput</a>
err	error

## Sample Code

```
func main() {
    input := &obs.ListVersionsInput{}
    input.Bucket = "bucketname"
    input.MaxKeys = 100
    output, err := obsClient.ListVersions(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        for index, val := range output.Versions {
            fmt.Printf("Version[%d]-OwnerId:%s, ETag:%s, Key:%s, VersionId:%s, LastModified:%s, Size:
%d\n",
                index, val.Owner.ID, val.ETag, val.Key, val.VersionId, val.LastModified, val.Size)
        }
        for index, val := range output.DeleteMarkers {
            fmt.Printf("DeleteMarker[%d]-OwnerId:%s, Key:%s, VersionId:%s, LastModified:%s\n",
                index, val.Owner.ID, val.Key, val.VersionId, val.LastModified)
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.8 List Multipart uploads

### API Description

You can use this API to list the multipart uploads that are initialized but not combined or aborted in a specified bucket.

### Method Definition

```
func (obsClient ObsClient) ListMultipartUploads(input *ListMultipartUploadsInput) (output *ListMultipartUploadsOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) ListMultipartUploadsWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *ListMultipartUploadsOutput, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*ListMultipartUploadsInput</a>	Mandatory

## Returned Result

Field	Type
output	<a href="#">*ListMultipartUploadsOutput</a>
err	error

## Sample Code

```
func main() {
    input := &obs.ListMultipartUploadsInput{}
    input.Bucket = "bucketname"
    input.MaxUploads = 10
    output, err := obsClient.ListMultipartUploads(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        for index, upload := range output.Uploads {
            fmt.Printf("Upload[%d]-OwnerId:%s, UploadId:%s, Key:%s, Initiated:%s\n",
                index, upload.Owner.ID, upload.UploadId, upload.Key, upload.Initiated)
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.9 Obtain Bucket Metadata

### API Description

You can use this API to send a HEAD request to a bucket to obtain the bucket metadata such as the storage class and CORS rules (if set).

### Method Definition

```
func (obsClient ObsClient) GetBucketMetadata(input *GetBucketMetadataInput) (output *GetBucketMetadataOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketMetadataWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketMetadataOutput, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*GetBucketMetadataInput</a>	Mandatory

## Returned Result

Field	Type
output	<a href="#">*GetBucketMetadataOutput</a>
err	error

## Sample Code

```
func main() {
    input := &obs.GetBucketMetadataInput{}
    input.Bucket = "bucketname"
    output, err := obsClient.GetBucketMetadata(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("StorageClass:%s\n", output.StorageClass)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Printf("StatusCode:%d\n", obsError.StatusCode)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.10 GET Bucket location

### API Description

You can use this API to obtain the bucket location.

### Method Definition

```
func (obsClient ObsClient) GetBucketLocation(bucketName string) (output *GetBucketLocationOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketLocationWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketLocationOutput, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	<a href="#">*GetBucketLocationOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketLocation("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("Location:%s\n", output.Location)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

# 5.11 GET Bucket storageinfo

## API Description

You can use this API to obtain storage information about a bucket, including the bucket size and number of objects in the bucket.

## Method Definition

```
func (obsClient ObsClient) GetBucketStorageInfo(bucketName string) (output *GetBucketStorageInfoOutput, err error)
```

## Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketStorageInfoWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketStorageInfoOutput, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	* <a href="#">GetBucketStorageInfoOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketStorageInfo("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("Size:%d, ObjectNumber:%d\n", output.Size, output.ObjectNumber)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.12 PUT Bucket quota

### API Description

You can use this API to set the bucket quota. A bucket quota must be expressed in bytes and the maximum value is  $2^{63}-1$ . Value **0** indicates that no upper limit is set for the bucket quota.

### Method Definition

```
func (obsClient ObsClient) SetBucketQuota(input *SetBucketQuotaInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketQuotaWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*SetBucketQuotaInput</a>	Mandatory

## Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

## Sample Code

```
func main() {
    input := &obs.SetBucketQuotaInput{}
    input.Bucket = "bucketname"
    input.Quota = 1024 * 1024 * 1024
    output, err := obsClient.SetBucketQuota(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

# 5.13 GET Bucket quota

## API Description

You can use this API to obtain the bucket quota. Value **0** indicates that no upper limit is set for the bucket quota.

## Method Definition

```
func (obsClient ObsClient) GetBucketQuota(bucketName string) (output *GetBucketQuotaOutput, err error)
```

## Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketQuotaWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketQuotaOutput, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	<a href="#">*GetBucketQuotaOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketQuota("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("Quota:%d\n", output.Quota)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.14 Set Bucket Storage Class

### API Description

You can use this API to set storage classes for buckets. The storage class of an object defaults to be that of its residing bucket.

### Method Definition

```
func (obsClient ObsClient) SetBucketStoragePolicy(input *SetBucketStoragePolicyInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketStoragePolicyWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```



## Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*SetBucketStoragePolicyInput</a>	Mandatory

## Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

## Sample Code

```
func main() {
    input := &obs.SetBucketStoragePolicyInput{}
    input.Bucket = "bucketname"
    input.StorageClass = obs.StorageClassWarm
    output, err := obsClient.SetBucketStoragePolicy(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

# 5.15 GET Bucket Storage Class

## API Description

You can use this API to obtain the storage class of a bucket.

## Method Definition

```
func (obsClient ObsClient) GetBucketStoragePolicy(bucketName string) (output *GetBucketStoragePolicyOutput, err error)
```

## Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketStoragePolicyWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketStoragePolicyOutput, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	<a href="#">*GetBucketStoragePolicyOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketStoragePolicy("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("StorageClass:%s\n", output.StorageClass)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

# 5.16 PUT Bucket acl

## API Description

You can use this API to set the ACL for a bucket.

## Method Definition

```
func (obsClient ObsClient) SetBucketAcl(input *SetBucketAclInput) (output *BaseModel, err error)
```

## Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketAclWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*SetBucketAclInput</a>	Mandatory

## Returned Result

Field	Type
output	*BaseModel
err	error

## Sample Code

```
func main() {
    input := &obs.SetBucketAclInput{}
    input.Bucket = "bucketname"
    input.Owner.ID = "ownerid"
    var grants [3]obs.Grant
    grants[0].Grantee.Type = obs.GranteeGroup
    grants[0].Grantee.URI = obs.GroupAuthenticatedUsers
    grants[0].Permission = obs.PermissionRead

    grants[1].Grantee.Type = obs.GranteeUser
    grants[1].Grantee.ID = "userid"
    grants[1].Permission = obs.PermissionWrite

    grants[2].Grantee.Type = obs.GranteeUser
    grants[2].Grantee.ID = "userid"
    grants[2].Permission = obs.PermissionRead
    input.Grants = grants[0:3]
    output, err := obsClient.SetBucketAcl(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.17 GET Bucket acl

### API Description

You can use this API to obtain a bucket ACL.

### Method Definition

```
func (obsClient ObsClient) GetBucketAcl(bucketName string) (output *GetBucketAclOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketAclWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketAclOutput, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	<a href="#">*GetBucketAclOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketAcl("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("Owner.ID:%s\n", output.Owner.ID)
        for index, grant := range output.Grants {
            fmt.Printf("Grant[%d]-Type:%s, ID:%s, URI:%s, Permission:%s\n", index, grant.Grantee.Type,
grant.Grantee.ID, grant.Grantee.URI, grant.Permission)
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

# 5.18 PUT Bucket logging

## API Description

You can use this API to configure access logging for a bucket.

## Method Definition

```
func (obsClient ObsClient) SetBucketLoggingConfiguration(input *SetBucketLoggingConfigurationInput)
(output *BaseModel, err error)
```

## Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketLoggingConfigurationWithSignedUrl(signedUrl string,
actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*SetBucketLoggingConfigurationInput</a>	Mandatory

## Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

## Sample Code

```
func main() {
    input := &obs.SetBucketLoggingConfigurationInput{}
    input.Bucket = "bucketname"
    input.TargetPrefix = "your-agency"
    input.TargetBucket = "target-bucket"
    input.TargetPrefix = "prefix"
    output, err := obsClient.SetBucketLoggingConfiguration(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.19 GET Bucket logging

### API Description

You can use this API to obtain the access logging settings of a bucket.

### Method Definition

```
func (obsClient ObsClient) GetBucketLoggingConfiguration(bucketName string) (output *GetBucketLoggingConfigurationOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketLoggingConfigurationWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketLoggingConfigurationOutput, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	<a href="#">*GetBucketLoggingConfigurationOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketLoggingConfiguration("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("TargetBucket:%s, TargetPrefix:%s\n", output.TargetBucket, output.TargetPrefix)
        for index, grant := range output.TargetGrants {
            fmt.Printf("Grant[%d]-Type:%s, ID:%s, URI:%s, Permission:%s\n", index, grant.Grantee.Type,
                grant.Grantee.ID, grant.Grantee.URI, grant.Permission)
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.20 PUT Bucket policy

### API Description

You can use this API to set a bucket policy. If the bucket already has a policy, the policy will be overwritten by the one specified in this request.

### Method Definition

```
func (obsClient ObsClient) SetBucketPolicy(input *SetBucketPolicyInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketPolicyWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*SetBucketPolicyInput</a>	Mandatory

## Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

## Sample Code

```
func main() {
    input := &obs.SetBucketPolicyInput{}
    input.Bucket = "bucketname"
    input.Policy = "your policy"
    output, err := obsClient.SetBucketPolicy(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.21 GET Bucket policy

### API Description

You can use this API to obtain the policy of a bucket.

### Method Definition

```
func (obsClient ObsClient) GetBucketPolicy(bucketName string) (output *GetBucketPolicyOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketPolicyWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketPolicyOutput, err error)
```

## Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	<a href="#">*GetBucketPolicyOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketPolicy("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("Policy:%s\n", output.Policy)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.22 DELETE Bucket policy

### API Description

You can use this API to delete the policy of a bucket.

### Method Definition

```
func (obsClient ObsClient) DeleteBucketPolicy(bucketName string) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) DeleteBucketPolicyWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name



## Returned Result

Field	Type
output	*BaseModel
err	error

## Sample Code

```
func main() {
    output, err := obsClient.DeleteBucketPolicy("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.23 PUT Bucket lifecycle

### API Description

You can use this API to set lifecycle rules for a bucket, to periodically transit storage classes of objects and delete objects in the bucket.

### Method Definition

```
func (obsClient ObsClient) SetBucketLifecycleConfiguration(input *SetBucketLifecycleConfigurationInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketLifecycleConfigurationWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	*SetBucketLifecycleConfigurationInput	Mandatory

## Returned Result

Field	Type
output	* <a href="#">BaseModel</a>
err	error

## Sample Code

```
func main() {
    input := &obs.SetBucketLifecycleConfigurationInput{}
    input.Bucket = "bucketname"

    var lifecycleRules [2]obs.LifecycleRule
    lifecycleRule0 := obs.LifecycleRule{}
    lifecycleRule0.ID = "rule0"
    lifecycleRule0.Prefix = "prefix0"
    lifecycleRule0.Status = obs.RuleStatusEnabled

    var transitions [2]obs.Transition
    transitions[0] = obs.Transition{}
    transitions[0].Days = 30
    transitions[0].StorageClass = obs.StorageClassWarm

    transitions[1] = obs.Transition{}
    transitions[1].Days = 60
    transitions[1].StorageClass = obs.StorageClassCold
    lifecycleRule0.Transitions = transitions[:]

    lifecycleRule0.Expiration.Days = 100
    lifecycleRule0.NoncurrentVersionExpiration.NoncurrentDays = 20

    lifecycleRules[0] = lifecycleRule0

    lifecycleRule1 := obs.LifecycleRule{}
    lifecycleRule1.Status = obs.RuleStatusEnabled
    lifecycleRule1.ID = "rule1"
    lifecycleRule1.Prefix = "prefix1"
    lifecycleRule1.Expiration.Date = time.Now().Add(time.Duration(24) * time.Hour)

    var noncurrentTransitions [2]obs.NoncurrentVersionTransition
    noncurrentTransitions[0] = obs.NoncurrentVersionTransition{}
    noncurrentTransitions[0].NoncurrentDays = 30
    noncurrentTransitions[0].StorageClass = obs.StorageClassWarm

    noncurrentTransitions[1] = obs.NoncurrentVersionTransition{}
    noncurrentTransitions[1].NoncurrentDays = 60
    noncurrentTransitions[1].StorageClass = obs.StorageClassCold
    lifecycleRule1.NoncurrentVersionTransitions = noncurrentTransitions[:]
    lifecycleRules[1] = lifecycleRule1

    input.LifecycleRules = lifecycleRules[:]

    output, err := obsClient.SetBucketLifecycleConfiguration(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.24 GET Bucket lifecycle

### API Description

You can use this API to obtain the lifecycle rules of a bucket.

### Method Definition

```
func (obsClient ObsClient) GetBucketLifecycleConfiguration(bucketName string) (output *GetBucketLifecycleConfigurationOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketLifecycleConfigurationWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketLifecycleConfigurationOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

### Returned Result

Field	Type
output	* <a href="#">GetBucketPolicyOutput</a>
err	error

### Sample Code

```
func main() {
    output, err := obsClient.GetBucketLifecycleConfiguration("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        for index, lifecycleRule := range output.LifecycleRules {
            fmt.Printf("LifecycleRule[%d]:\n", index)
            fmt.Printf("ID:%s, Prefix:%s, Status:%s\n", lifecycleRule.ID, lifecycleRule.Prefix,
lifecycleRule.Status)

            date := ""
            for _, transition := range lifecycleRule.Transitions {
                if !transition.Date.IsZero() {
                    date = transition.Date.String()
                }
                fmt.Printf("transition.StorageClass:%s, Transition.Date:%s, Transition.Days:%d\n",
transition.StorageClass, date, transition.Days)
            }

            date = ""
            if !lifecycleRule.Expiration.Date.IsZero() {
                date = lifecycleRule.Expiration.Date.String()
            }
        }
    }
}
```

```
        fmt.Printf("Expiration.Date:%s, Expiration.Days:%d\n", lifecycleRule.Expiration.Date,
lifecycleRule.Expiration.Days)

        for _, noncurrentVersionTransition := range lifecycleRule.NoncurrentVersionTransitions {
            fmt.Printf("noncurrentVersionTransition.StorageClass:%s,
noncurrentVersionTransition.NoncurrentDays:%d\n",
                noncurrentVersionTransition.StorageClass,
noncurrentVersionTransition.NoncurrentDays)
        }
        fmt.Printf("NoncurrentVersionExpiration.NoncurrentDays:%d\n",
lifecycleRule.NoncurrentVersionExpiration.NoncurrentDays)
    }
} else {
    if obsError, ok := err.(obs.ObsError); ok {
        fmt.Println(obsError.Code)
        fmt.Println(obsError.Message)
    } else {
        fmt.Println(err)
    }
}
}
```

## 5.25 DELETE Bucket lifecycle

### API Description

You can use this API to delete all lifecycle rules of a bucket.

### Method Definition

```
func (obsClient ObsClient) DeleteBucketLifecycleConfiguration(bucketName string) (output *BaseModel,
err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) DeleteBucketLifecycleConfigurationWithSignedUrl(signedUrl string,
actualSignedRequestHeaders http.Header) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

### Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

### Sample Code

```
func main() {
    output, err := obsClient.DeleteBucketLifecycleConfiguration("bucketname")
}
```

```
if err == nil {
    fmt.Printf("RequestId:%s\n", output.RequestId)
} else {
    if obsError, ok := err.(obs.ObsError); ok {
        fmt.Println(obsError.Code)
        fmt.Println(obsError.Message)
    } else {
        fmt.Println(err)
    }
}
}
```

## 5.26 PUT Bucket website

### API Description

You can use this API to set website hosting for a bucket.

### Method Definition

```
func (obsClient ObsClient) SetBucketWebsiteConfiguration(input *SetBucketWebsiteConfigurationInput)
(output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketWebsiteConfigurationWithSignedUrl(signedUrl string,
actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*SetBucketWebsiteConfigurationInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

### Sample Code

```
func main() {
    input := &obs.SetBucketWebsiteConfigurationInput{}
    input.Bucket = "bucketname"
    input.IndexDocument.Suffix = "suffix"
    input.ErrorDocument.Key = "key"

    var routingRules [2]obs.RoutingRule
    routingRule0 := obs.RoutingRule{}
```

```
routingRule0.Redirect.HostName = "www.a.com"
routingRule0.Redirect.Protocol = obs.ProtocolHttp
routingRule0.Redirect.ReplaceKeyPrefixWith = "prefix"
routingRule0.Redirect.HttpRedirectCode = "304"
routingRules[0] = routingRule0

routingRule1 := obs.RoutingRule{}

routingRule1.Redirect.HostName = "www.b.com"
routingRule1.Redirect.Protocol = obs.ProtocolHttps
routingRule1.Redirect.ReplaceKeyWith = "replaceKey"
routingRule1.Redirect.HttpRedirectCode = "304"

routingRule1.Condition.HttpErrorCodeReturnedEquals = "404"
routingRule1.Condition.KeyPrefixEquals = "prefix"

routingRules[1] = routingRule1

input.RoutingRules = routingRules[:]
output, err := obsClient.SetBucketWebsiteConfiguration(input)
if err == nil {
    fmt.Printf("RequestId:%s\n", output.RequestId)
} else {
    if obsError, ok := err.(obs.ObsError); ok {
        fmt.Println(obsError.Code)
        fmt.Println(obsError.Message)
    } else {
        fmt.Println(err)
    }
}
}
```

## 5.27 GET Bucket website

### API Description

You can use this API to obtain the website hosting settings of a bucket.

### Method Definition

```
func (obsClient ObsClient) GetBucketWebsiteConfiguration(bucketName string) (output *GetBucketWebsiteConfigurationOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketWebsiteConfigurationWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketWebsiteConfigurationOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	* <a href="#">GetBucketWebsiteConfigurationOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketWebsiteConfiguration("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("Suffix:%s\n", output.IndexDocument.Suffix)
        fmt.Printf("Key:%s\n", output.ErrorDocument.Key)
        for index, routingRule := range output.RoutingRules {
            fmt.Printf("Condition[%d]-KeyPrefixEquals:%s, HttpStatusCodeReturnedEquals:%s\n", index,
routingRule.Condition.KeyPrefixEquals, routingRule.Condition.HttpStatusCodeReturnedEquals)
            fmt.Printf("Redirect[%d]-Protocol:%s, HostName:%s, ReplaceKeyPrefixWith:%s,
HttpRedirectCode:%s\n",
                index, routingRule.Redirect.Protocol, routingRule.Redirect.HostName,
routingRule.Redirect.ReplaceKeyPrefixWith, routingRule.Redirect.HttpRedirectCode)
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.28 DELETE Bucket website

### API Description

You can use this API to delete the website hosting settings of a bucket.

### Method Definition

```
func (obsClient ObsClient) DeleteBucketWebsiteConfiguration(bucketName string) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) DeleteBucketWebsiteConfigurationWithSignedUrl(signedUrl string,
actualSignedRequestHeaders http.Header) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.DeleteBucketWebsiteConfiguration("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.29 PUT Bucket versioning

### API Description

You can use this API to set the versioning status for a bucket.

### Method Definition

```
func (obsClient ObsClient) SetBucketVersioning(input *SetBucketVersioningInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketVersioningWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*SetBucketVersioningInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*BaseModel</a>



Field	Type
err	error

## Sample Code

```
func main() {
    input := &obs.SetBucketVersioningInput{}
    input.Bucket = "bucketname"
    input.Status = obs.VersioningStatusEnabled
    output, err := obsClient.SetBucketVersioning(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.30 GET Bucket versioning

### API Description

You can use this API to obtain the versioning status of a bucket.

### Method Definition

```
func (obsClient ObsClient) GetBucketVersioning(bucketName string) (output *GetBucketVersioningOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketVersioningWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketVersioningOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

### Returned Result

Field	Type
output	* <a href="#">GetBucketVersioningOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketVersioning("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("Status:%s\n", output.Status)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.31 PUT Bucket cors

### API Description

You can use this API to set CORS rules for a bucket to allow client browsers to send cross-origin requests.

### Method Definition

```
func (obsClient ObsClient) SetBucketCors(input *SetBucketCorsInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketCorsWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*SetBucketCorsInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

## Sample Code

```
func main() {
    input := &obs.SetBucketCorsInput{}
    input.Bucket = "bucketname"
    var corsRules [2]obs.CorsRule
    corsRule0 := obs.CorsRule{
```

```
corsRule0.ID = "rule1"
corsRule0.AllowedOrigin = []string{"http://www.a.com", "http://www.b.com"}
corsRule0.AllowedMethod = []string{"GET", "PUT", "POST", "HEAD"}
corsRule0.AllowedHeader = []string{"header1", "header2"}
corsRule0.MaxAgeSeconds = 100
corsRule0.ExposeHeader = []string{"obs-1", "obs-2"}
corsRules[0] = corsRule0
corsRule1 := obs.CorsRule{}

corsRule1.ID = "rule2"
corsRule1.AllowedOrigin = []string{"http://www.c.com", "http://www.d.com"}
corsRule1.AllowedMethod = []string{"GET", "PUT", "POST", "HEAD"}
corsRule1.AllowedHeader = []string{"header3", "header4"}
corsRule1.MaxAgeSeconds = 50
corsRule1.ExposeHeader = []string{"obs-3", "obs-4"}
corsRules[1] = corsRule1
input.CorsRules = corsRules[:]
output, err := obsClient.SetBucketCors(input)
if err == nil {
    fmt.Printf("RequestId:%s\n", output.RequestId)
} else {
    if obsError, ok := err.(obs.ObsError); ok {
        fmt.Println(obsError.Code)
        fmt.Println(obsError.Message)
    } else {
        fmt.Println(err)
    }
}
}
```

## 5.32 GET Bucket cors

### API Description

You can use this API to obtain the CORS rules of a specified bucket.

### Method Definition

```
func (obsClient ObsClient) GetBucketCors(bucketName string) (output *GetBucketCorsOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketCorsWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketCorsOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

### Returned Result

Field	Type
output	<a href="#">*GetBucketCorsOutput</a>

Field	Type
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketCors("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        for _, corsRule := range output.CorsRules {
            fmt.Printf("ID:%s, AllowedOrigin:%s, AllowedMethod:%s, AllowedHeader:%s, MaxAgeSeconds:%d, ExposeHeader:%s\n",
                corsRule.ID, strings.Join(corsRule.AllowedOrigin, "|"),
                strings.Join(corsRule.AllowedMethod, "|"),
                strings.Join(corsRule.AllowedHeader, "|"), corsRule.MaxAgeSeconds,
                strings.Join(corsRule.ExposeHeader, "|"))
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.33 DELETE Bucket cors

### API Description

You can use this API to delete the CORS rules of a specified bucket.

### Method Definition

```
func (obsClient ObsClient) DeleteBucketCors(bucketName string) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) DeleteBucketCorsWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.DeleteBucketCors("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.34 PUT Bucket notification

### API Description

You can use this API to configure event notification for a bucket. You will be notified of all specified operations performed on the bucket.

### Method Definition

```
func (obsClient ObsClient) SetBucketNotification(input *SetBucketNotificationInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketNotificationWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*SetBucketNotificationInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*BaseModel</a>

Field	Type
err	error

## Sample Code

```
func main() {
    input := &obs.SetBucketNotificationInput{}
    input.Bucket = "bucketname"
    var topicConfigurations [1]obs.TopicConfiguration
    topicConfigurations[0] = obs.TopicConfiguration{}
    topicConfigurations[0].ID = "001"
    topicConfigurations[0].Topic = "topic"
    topicConfigurations[0].Events = []obs.EventType{obs.ObjectCreatedAll}

    var filterRules [2]obs.FilterRule

    filterRules[0] = obs.FilterRule{Name: "prefix", Value: "smn"}
    filterRules[1] = obs.FilterRule{Name: "suffix", Value: ".jpg"}
    topicConfigurations[0].FilterRules = filterRules[:]

    input.TopicConfigurations = topicConfigurations[:]
    output, err := obsClient.SetBucketNotification(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.35 GET Bucket notification

### API Description

You can use this API to obtain the event notification configuration of a bucket.

### Method Definition

```
func (obsClient ObsClient) GetBucketNotification(bucketName string) (output *GetBucketNotificationOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketNotificationWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketNotificationOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	* <a href="#">GetBucketNotificationOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketNotification("bucketname")
    for index, topicConfiguration := range output.TopicConfigurations {
        fmt.Printf("TopicConfiguration[%d]\n", index)
        fmt.Printf("ID:%s, Topic:%s, Events:%v\n", topicConfiguration.ID, topicConfiguration.Topic,
topicConfiguration.Events)
    }
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.36 PUT Bucket tagging

### API Description

You can use this API to set bucket tags.

### Method Definition

```
func (obsClient ObsClient) SetBucketTagging(input *SetBucketTaggingInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetBucketTaggingWithSignedUrl(signedUrl string, actualSignedRequestHeaders
http.Header, data io.Reader) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	* <a href="#">SetBucketTaggingInput</a>	Mandatory

## Returned Result

Field	Type
output	*BaseModel
err	error

## Sample Code

```
func main() {
    input := &obs.SetBucketTaggingInput{}
    input.Bucket = "bucketname"
    var tags [2]obs.Tag
    tags[0] = obs.Tag{Key: "key0", Value: "value0"}
    tags[1] = obs.Tag{Key: "key1", Value: "value1"}
    input.Tags = tags[:]
    output, err := obsClient.SetBucketTagging(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.37 GET Bucket tagging

### API Description

You can use this API to obtain the tags of a specified bucket.

### Method Definition

```
func (obsClient ObsClient) GetBucketTagging(bucketName string) (output *GetBucketTaggingOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetBucketTaggingWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetBucketTaggingOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name



## Returned Result

Field	Type
output	* <a href="#">GetBucketTaggingOutput</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.GetBucketTagging("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        for index, tag := range output.Tags {
            fmt.Printf("Tag[%d]-Key:%s, Value:%s\n", index, tag.Key, tag.Value)
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 5.38 DELETE Bucket tagging

### API Description

You can use this API to delete the tags of a specified bucket.

### Method Definition

```
func (obsClient ObsClient) DeleteBucketTagging(bucketName string) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) DeleteBucketTaggingWithSignedUrl(signedUrl string,
    actualSignedRequestHeaders http.Header) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory	Description
bucketName	string	Mandatory	Bucket name

## Returned Result

Field	Type
output	* <a href="#">BaseModel</a>
err	error

## Sample Code

```
func main() {
    output, err := obsClient.DeleteBucketTagging("bucketname")
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

# 6 Objects-Related APIs

## 6.1 Overview

OBS Go SDK provides methods for every object-related API to access OBS using a signed URL. Such method (except **ObsClient.PutFileWithSignedUrl**) may contain three parameters respectively specifying the signed URL, the headers carried by the request, and data carried by the request (optional). For details about how to generate a signed URL, see [Creating a Signed URL](#).

## 6.2 PUT Object

### API Description

You can use this API to upload an object to a specified bucket.

### Method Definition

```
func (obsClient ObsClient) PutObject(input *PutObjectInput) (output *PutObjectOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) PutObjectWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *PutObjectOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*PutObjectInput</a>	Mandatory

## Returned Result

Field	Type
output	<a href="#">*PutObjectOutput</a>
err	error

## Sample Code

```
func main() {
    input := &obs.PutObjectInput{}
    input.Bucket = "bucketname"
    input.Key = "objectkey"
    input.Body = strings.NewReader("Hello OBS")
    output, err := obsClient.PutObject(input)

    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("ETag:%s, StorageClass:%s\n", output.ETag, output.StorageClass)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 6.3 PUT File

### API Description

You can use this API to upload a file to a specified bucket.

### Method Definition

```
func (obsClient ObsClient) PutFile(input *PutFileInput) (output *PutObjectOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) PutFileWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, sourceFile string) (output *PutObjectOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*PutFileInput</a>	Mandatory

## Returned Result

Field	Type
output	<a href="#">*PutObjectOutput</a>
err	error

## Sample Code

```
func main() {
    input := &obs.PutFileInput{}
    input.Bucket = "bucketname"
    input.Key = "objectkey"
    input.SourceFile = "localfile"
    output, err := obsClient.PutFile(input)

    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("ETag:%s, StorageClass:%s\n", output.ETag, output.StorageClass)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

## 6.4 GET Object

### API Description

You can use this API to download an object in a specified bucket.

### Method Definition

```
func (obsClient ObsClient) GetObject(input *GetObjectInput) (output *GetObjectOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetObjectWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetObjectOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*GetObjectInput</a>	Mandatory

## Returned Result

Field	Type
output	*GetObjectOutput
err	error

## Sample Code

- Downloading an object:

```
func main() {
    input := &obs.GetObjectInput{}
    input.Bucket = "bucketname"
    input.Key = "objectkey"
    output, err := obsClient.GetObject(input)
    if err == nil {
        defer output.Body.Close()
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("StorageClass:%s, ETag:%s, ContentType:%s, ContentLength:%d, LastModified:%s\n",
            output.StorageClass, output.ETag, output.ContentType, output.ContentLength,
            output.LastModified)
        p := make([]byte, 1024)
        var readErr error
        var readCount int
        for {
            readCount, readErr = output.Body.Read(p)
            if readCount > 0 {
                fmt.Printf("%s", p[:readCount])
            }
            if readErr != nil {
                break
            }
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

- Download an object and save it to the local PC:

```
func main() {
    input := &obs.GetObjectInput{}
    input.Bucket = "bucketname"
    input.Key = "objectkey"
    output, err := obsClient.GetObject(input)
    if err == nil {
        defer output.Body.Close()
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("StorageClass:%s, ETag:%s, ContentType:%s, ContentLength:%d, LastModified:%s\n",
            output.StorageClass, output.ETag, output.ContentType, output.ContentLength,
            output.LastModified)
        p, err := ioutil.ReadAll(output.Body)
        if err == nil {
            ioutil.WriteFile("***your file path***", p, os.ModeAppend);
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
        }
    }
}
```

```

        fmt.Println(obsError.Message)
    } else {
        fmt.Println(err)
    }
}
}

```

## 6.5 PUT Object - Copy

### API Description

You can use this API to create a copy for an object in a specified bucket.

### Method Definition

```
func (obsClient ObsClient) CopyObject(input *CopyObjectInput) (output *CopyObjectOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) CopyObjectWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *CopyObjectOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*CopyObjectInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*CopyObjectOutput</a>
err	error

### Sample Code

```

func main() {
    input := &obs.CopyObjectInput{}
    input.Bucket = "bucketname"
    input.Key = "objectkey"
    input.CopySourceBucket = "sourcebucketname"
    input.CopySourceKey = "sourceobjectkey"
    output, err := obsClient.CopyObject(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("ETag:%s, LastModified:%s\n",
            output.ETag, output.LastModified)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}

```

```
}  
}  
}
```

## 6.6 DELETE Object

### API Description

You can use this API to delete an object from a specified bucket.

### Method Definition

```
func (obsClient ObsClient) DeleteObject(input *DeleteObjectInput) (output *DeleteObjectOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) DeleteObjectWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *DeleteObjectOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*DeleteObjectInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*DeleteObjectOutput</a>
err	error

### Sample Code

```
func main() {  
    input := &obs.DeleteObjectInput{}  
    input.Bucket = "bucketname"  
    input.Key = "objectkey"  
    output, err := obsClient.DeleteObject(input)  
    if err == nil {  
        fmt.Printf("RequestId:%s\n", output.RequestId)  
    } else {  
        if obsError, ok := err.(obs.ObsError); ok {  
            fmt.Println(obsError.Code)  
            fmt.Println(obsError.Message)  
        } else {  
            fmt.Println(err)  
        }  
    }  
}
```



## 6.7 DELETE Objects

### API Description

You can use this API to batch delete objects from a specified bucket.

### Method Definition

```
func (obsClient ObsClient) DeleteObjects(input *DeleteObjectsInput) (output *DeleteObjectsOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) DeleteObjectsWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *DeleteObjectsOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*DeleteObjectsInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*DeleteObjectsOutput</a>
err	error

### Sample Code

```
func main() {
    input := &obs.DeleteObjectsInput{}
    input.Bucket = "bucketname"
    var objects [3]obs.ObjectToDelete
    objects[0] = obs.ObjectToDelete{Key: "key1"}
    objects[1] = obs.ObjectToDelete{Key: "key2"}
    objects[2] = obs.ObjectToDelete{Key: "key3"}

    input.Objects = objects[:]
    output, err := obsClient.DeleteObjects(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        for index, deleted := range output.Deleted {
            fmt.Printf("Deleted[%d]-Key:%s, VersionId:%s\n", index, deleted.Key, deleted.VersionId)
        }
        for index, err := range output.Errors {
            fmt.Printf("Error[%d]-Key:%s, Code:%s\n", index, err.Key, err.Code)
        }
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        }
    }
}
```

```

    } else {
        fmt.Println(err)
    }
}

```

## 6.8 Obtain Object Metadata

### API Description

You can use this API to send a HEAD request to the object of a specified bucket to obtain its metadata.

### Method Definition

```
func (obsClient ObsClient) GetObjectMetadata(input *GetObjectMetadataInput) (output *GetObjectMetadataOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetObjectMetadataWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetObjectMetadataOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*GetObjectMetadataInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*GetObjectMetadataOutput</a>
err	error

### Sample Code

```

func main() {
    input := &obs.GetObjectMetadataInput{}
    input.Bucket = "bucketname"
    input.Key = "objectkey"
    output, err := obsClient.GetObjectMetadata(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("StorageClass:%s, ETag:%s, ContentType:%s, ContentLength:%d, LastModified:%s\n",
            output.StorageClass, output.ETag, output.ContentType, output.ContentLength,
            output.LastModified)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.StatusCode)
        } else {
            fmt.Println(err)
        }
    }
}

```

```
}
}
}
```

## 6.9 PUT Object acl

### API Description

You can use this API to set the ACL for an object in a specified bucket.

### Method Definition

```
func (obsClient ObsClient) SetObjectAcl(input *SetObjectAclInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) SetObjectAclWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*SetObjectAclInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

### Sample Code

```
func main() {
    input := &obs.SetObjectAclInput{}
    input.Bucket = "bucketname"
    input.Key = "objectkey"
    input.Owner.ID = "ownerid"
    var grants [3]obs.Grant
    grants[0].Grantee.Type = obs.GranteeGroup
    grants[0].Grantee.URI = obs.GroupAuthenticatedUsers
    grants[0].Permission = obs.PermissionRead

    grants[1].Grantee.Type = obs.GranteeUser
    grants[1].Grantee.ID = "userid"
    grants[1].Permission = obs.PermissionWrite

    grants[2].Grantee.Type = obs.GranteeUser
    grants[2].Grantee.ID = "userid"
    grants[2].Permission = obs.PermissionRead
    input.Grants = grants[0:3]
    output, err := obsClient.SetObjectAcl(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    }
}
```

```
    } else {  
        if obsError, ok := err.(obs.ObsError); ok {  
            fmt.Println(obsError.Code)  
            fmt.Println(obsError.Message)  
        } else {  
            fmt.Println(err)  
        }  
    }  
}
```

## 6.10 GET Object acl

### API Description

You can use this API to obtain the ACL of an object in a specified bucket.

### Method Definition

```
func (obsClient ObsClient) GetObjectAcl(input *GetObjectAclInput) (output *GetObjectAclOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) GetObjectAclWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *GetObjectAclOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*GetObjectAclInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*GetObjectAclOutput</a>
err	error

### Sample Code

```
func main() {  
    input := &obs.GetObjectAclInput{}  
    input.Bucket = "bucketname"  
    input.Key = "objectkey"  
    output, err := obsClient.GetObjectAcl(input)  
    if err == nil {  
        fmt.Printf("RequestId:%s\n", output.RequestId)  
        fmt.Printf("Owner.ID:%s\n", output.Owner.ID)  
        for index, grant := range output.Grants {  
            fmt.Printf("Grant[%d]-Type:%s, ID:%s, URI:%s, Permission:%s\n", index, grant.Grantee.Type,  
grant.Grantee.ID, grant.Grantee.URI, grant.Permission)  
        }  
    } else {  
        if obsError, ok := err.(obs.ObsError); ok {  
            fmt.Println(obsError.Code)  
        }  
    }  
}
```

```
        fmt.Println(obsError.Message)
    } else {
        fmt.Println(err)
    }
}
```

## 6.11 Initiate Multipart Upload

### API Description

You can use this API to initialize a multipart upload in a specified bucket.

### Method Definition

```
func (obsClient ObsClient) InitiateMultipartUpload(input *InitiateMultipartUploadInput) (output *InitiateMultipartUploadOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) InitiateMultipartUploadWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *InitiateMultipartUploadOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*InitiateMultipartUploadInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*InitiateMultipartUploadOutput</a>
err	error

### Sample Code

```
func main() {
    input := &obs.InitiateMultipartUploadInput{}
    input.Bucket = "bucketname"
    input.Key = "objectkey"
    output, err := obsClient.InitiateMultipartUpload(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("UploadId:%s\n", output.UploadId)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        } else {
            fmt.Println(err)
        }
    }
}
```

```
}  
}
```

## 6.12 PUT Part

### API Description

After a multipart upload is initialized, you can use this API to upload a part to a specified bucket by using the multipart upload ID. Except for the last uploaded part whose size ranges from 0 to 5 GB, sizes of the other parts range from 100 KB to 5 GB. The upload part ID ranges from 1 to 10000.

### Method Definition

```
func (obsClient ObsClient) UploadPart(input *UploadPartInput) (output *UploadPartOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) UploadPartWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *UploadPartOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*UploadPartInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*UploadPartOutput</a>
err	error

### Sample Code

```
func main() {  
    input := &obs.UploadPartInput{  
        input.Bucket = "bucketname"  
        input.Key = "objectkey"  
        input.UploadId = "uploadid"  
        input.PartNumber = 1  
        input.Body = strings.NewReader("Hello OBS")  
        output, err := obsClient.UploadPart(input)  
        if err == nil {  
            fmt.Printf("RequestId:%s\n", output.RequestId)  
            fmt.Printf("ETag:%s\n", output.ETag)  
        } else {  
            if obsError, ok := err.(obs.ObsError); ok {  
                fmt.Println(obsError.Code)  
                fmt.Println(obsError.Message)  
            } else {  
                fmt.Println(err)  
            }  
        }  
    }  
}
```

```
}  
}
```

## 6.13 PUT Part - Copy

### API Description

After a multipart upload is initialized, you can use this API to copy a part to a specified bucket by using the multipart upload ID.

### Method Definition

```
func (obsClient ObsClient) CopyPart(input *CopyPartInput) (output *CopyPartOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) CopyPartWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *CopyPartOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	*CopyPartInput	Mandatory

### Returned Result

Field	Type
output	*CopyPartOutput
err	error

### Sample Code

```
func main() {  
    input := &obs.CopyPartInput{  
        input.Bucket = "bucketname"  
        input.Key = "objectkey"  
        input.CopySourceBucket = "sourcebucketname"  
        input.CopySourceKey = "sourceobjectkey"  
        input.UploadId = "uploadid"  
        input.PartNumber = 1  
        input.CopySourceRangeStart = 0  
        input.CopySourceRangeEnd = 1024  
        output, err := obsClient.CopyPart(input)  
        if err == nil {  
            fmt.Printf("RequestId:%s\n", output.RequestId)  
            fmt.Printf("ETag:%s\n", output.ETag)  
        } else {  
            if obsError, ok := err.(obs.ObsError); ok {  
                fmt.Println(obsError.Code)  
                fmt.Println(obsError.Message)  
            } else {  
                fmt.Println(err)  
            }  
        }  
    }  
}
```

```
}  
}
```

## 6.14 List Parts

### API Description

You can use this API to list the uploaded parts in a bucket by using the multipart upload ID.

### Method Definition

```
func (obsClient ObsClient) ListParts(input *ListPartsInput) (output *ListPartsOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) ListPartsWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *ListPartsOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	*ListPartsInput	Mandatory

### Returned Result

Field	Type
output	*ListPartsOutput
err	error

### Sample Code

```
func main() {  
    input := &obs.ListPartsInput{}  
    input.Bucket = "bucketname"  
    input.Key = "objectkey"  
    input.UploadId = "uploadid"  
    output, err := obsClient.ListParts(input)  
    if err == nil {  
        fmt.Printf("RequestId:%s\n", output.RequestId)  
        for index, part := range output.Parts {  
            fmt.Printf("Part[%d]-ETag:%s, PartNumber:%d, LastModified:%s, Size:%d\n", index, part.ETag,  
                part.PartNumber, part.LastModified, part.Size)  
        }  
    } else {  
        if obsError, ok := err.(obs.ObsError); ok {  
            fmt.Println(obsError.Code)  
            fmt.Println(obsError.Message)  
        } else {  
            fmt.Println(err)  
        }  
    }  
}
```



## 6.15 Complete Multipart Upload

### API Description

You can use this API to combine the uploaded parts in a specified bucket by using the multipart upload ID.

### Method Definition

```
func (obsClient ObsClient) CompleteMultipartUpload(input *CompleteMultipartUploadInput) (output *CompleteMultipartUploadOutput, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) CompleteMultipartUploadWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *CompleteMultipartUploadOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*CompleteMultipartUploadInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*CompleteMultipartUploadOutput</a>
err	error

### Sample Code

```
func main() {
    input := &obs.CompleteMultipartUploadInput{}
    input.Bucket = "bucketname"
    input.Key = "objectkey"
    input.UploadId = "uploadid"
    input.Parts = []obs.Part{
        obs.Part{PartNumber: 1, ETag: "etag1"},
        obs.Part{PartNumber: 2, ETag: "etag2"},
        obs.Part{PartNumber: 3, ETag: "etag3"},
    }
    output, err := obsClient.CompleteMultipartUpload(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("Location:%s, Bucket:%s, Key:%s, ETag:%s\n", output.Location, output.Bucket,
output.Key, output.ETag)
    } else {
        if obsError, ok := err.(obs.ObsError); ok {
            fmt.Println(obsError.Code)
            fmt.Println(obsError.Message)
        }
    }
}
```

```
    } else {  
        fmt.Println(err)  
    }  
}
```

## 6.16 DELETE Multipart upload

### API Description

You can use this API to abort a multipart upload in a specified bucket by using the multipart upload ID.

### Method Definition

```
func (obsClient ObsClient) AbortMultipartUpload(input *AbortMultipartUploadInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) AbortMultipartUploadWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*AbortMultipartUploadInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*BaseModel</a>
err	error

### Sample Code

```
func main() {  
    input := &obs.AbortMultipartUploadInput{}  
    input.Bucket = "bucketname"  
    input.Key = "objectkey"  
    input.UploadId = "uploadid"  
    output, err := obsClient.AbortMultipartUpload(input)  
    if err == nil {  
        fmt.Printf("RequestId:%s\n", output.RequestId)  
    } else {  
        if obsError, ok := err.(obs.ObsError); ok {  
            fmt.Println(obsError.Code)  
            fmt.Println(obsError.Message)  
        } else {  
            fmt.Println(err)  
        }  
    }  
}
```

```
}  
}
```

## 6.17 Restore Archive Objects

### API Description

You can use this API to restore an Archive object in a specified bucket.

### Method Definition

```
func (obsClient ObsClient) RestoreObject(input *RestoreObjectInput) (output *BaseModel, err error)
```

### Method Definition If a Signed URL Is Used

```
func (obsClient ObsClient) RestoreObjectWithSignedUrl(signedUrl string, actualSignedRequestHeaders http.Header, data io.Reader) (output *BaseModel, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	*RestoreObjectInput	Mandatory

### Returned Result

Field	Type
output	*BaseModel
err	error

### Sample Code

```
func main() {  
    input := &obs.RestoreObjectInput{}  
    input.Bucket = "bucketname"  
    input.Key = "objectkey"  
    input.Days = 1  
    input.Tier = obs.RestoreTierExpedited  
    output, err := obsClient.RestoreObject(input)  
    if err == nil {  
        fmt.Printf("RequestId:%s\n", output.RequestId)  
    } else {  
        if obsError, ok := err.(obs.ObsError); ok {  
            fmt.Println(obsError.Code)  
            fmt.Println(obsError.Message)  
        } else {  
            fmt.Println(err)  
        }  
    }  
}
```

# 7 Other APIs

## 7.1 Creating a Signed URL

### API Description

You can use this API to generate a signed URL whose **Query** parameters are carried with authentication information, by specifying the AK and SK, HTTP method, and request parameters. A signed URL allows you to perform specific operations on OBS.

### Method Definition

```
func (obsClient ObsClient) CreateSignedUrl(input *CreateSignedUrlInput) (output *CreateSignedUrlOutput, err error)
```

### Request Parameter

Field	Type	Optional or Mandatory
input	<a href="#">*CreateSignedUrlInput</a>	Mandatory

### Returned Result

Field	Type
output	<a href="#">*CreateSignedUrlOutput</a>
err	error

### Sample Code

```
func main() {  
    // Generate a signed URL for uploading an object.  
    putObjectInput := &obs.CreateSignedUrlInput{}  
    putObjectInput.Method = obs.HttpMethodPut  
}
```

```

putObjectInput.Bucket = "bucketname"
putObjectInput.Key = "objectkey"
putObjectInput.Expires = 3600
putObjectOutput, err := obsClient.CreateSignedUrl(putObjectInput)
if err == nil {
    fmt.Printf("SignedUrl:%s\n", putObjectOutput.SignedUrl)
    fmt.Printf("ActualSignedRequestHeaders:%v\n", putObjectOutput.ActualSignedRequestHeaders)
} else {
    fmt.Println(err)
}

// Generate a signed URL for downloading an object.
getObjectInput := &obs.CreateSignedUrlInput{}
getObjectInput.Method = obs.HttpMethodGet
getObjectInput.Bucket = "bucketname"
getObjectInput.Key = "objectkey"
getObjectInput.Expires = 3600
getObjectOutput, err := obsClient.CreateSignedUrl(getObjectInput)
if err == nil {
    fmt.Printf("SignedUrl:%s\n", getObjectOutput.SignedUrl)
    fmt.Printf("ActualSignedRequestHeaders:%v\n", getObjectOutput.ActualSignedRequestHeaders)
} else {
    fmt.Println(err)
}

// Generate a signed URL for deleting an object.
deleteObjectInput := &obs.CreateSignedUrlInput{}
deleteObjectInput.Method = obs.HttpMethodDelete
deleteObjectInput.Bucket = "bucketname"
deleteObjectInput.Key = "objectkey"
deleteObjectInput.Expires = 3600
deleteObjectOutput, err := obsClient.CreateSignedUrl(deleteObjectInput)
if err == nil {
    fmt.Printf("SignedUrl:%s\n", deleteObjectOutput.SignedUrl)
    fmt.Printf("ActualSignedRequestHeaders:%v\n", deleteObjectOutput.ActualSignedRequestHeaders)
} else {
    fmt.Println(err)
}
}

```

## 7.2 Resumable Upload

### API Description

This API is an encapsulated and enhanced version of multipart upload, and aims to eliminate large file upload failures caused by poor network conditions and program breakdowns.

### Method Definition

```
func (obsClient ObsClient) UploadFile(input *UploadFileInput) (output *CompleteMultipartUploadOutput, err error)
```

### Request Parameters

Field	Type	Optional or Mandatory
input	<a href="#">*UploadFileInput</a>	Mandatory

## Returned Results

Field	Type
output	<a href="#">*CompleteMultipartUploadOutput</a>
err	error

## Sample Code

```
func main() {
    input := &obs.UploadFileInput{}
    input.Bucket = "bucketname"
    input.Key = "objectname"
    input.UploadFile = "localfile" // Path of the local file to be uploaded. The file name must be specified.
    input.EnableCheckpoint = true // Enable the resumable upload mode.
    input.PartSize = 9 * 1024 * 1024 // Set the part size to 9 MB.
    input.TaskNum = 5 // Specify the maximum number of parts that can be concurrently uploaded.
    output, err := obsClient.UploadFile(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
        fmt.Printf("ETag:%s\n", output.ETag)
    } else if obsError, ok := err.(obs.ObsError); ok {
        fmt.Printf("Code:%s\n", obsError.Code)
        fmt.Printf("Message:%s\n", obsError.Message)
    }
}
```

## 7.3 Resumable Download

### API Description

This API is an encapsulated and enhanced version of partial download, and aims to eliminate large file download failures caused by poor network conditions and program breakdowns.

### Method Definition

```
func (obsClient ObsClient) DownloadFile(input *DownloadFileInput) (output *GetObjectMetadataOutput, err error)
```

### Request Parameters

Field	Type	Optional or Mandatory
input	<a href="#">*DownloadFileInput</a>	Mandatory

### Returned Results

Field	Type
output	<a href="#">*GetObjectMetadataOutput</a>

Field	Type
err	error

## Sample Code

```
func main() {
    input := &obs.DownloadFileInput{}
    input.Bucket = "bucketname"
    input.Key = "objectname"
    input.DownloadFile = "localfile" // Full path to which objects are downloaded.
    input.EnableCheckpoint = true // Enable the resumable download mode.
    input.PartSize = 9 * 1024 * 1024 // Set the part size to 9 MB.
    input.TaskNum = 5 // Specify the maximum number of parts that can be concurrently downloaded.
    output, err := obsClient.DownloadFile(input)
    if err == nil {
        fmt.Printf("RequestId:%s\n", output.RequestId)
    } else if obsError, ok := err.(obs.ObsError); ok {
        fmt.Printf("Code:%s\n", obsError.Code)
        fmt.Printf("Message:%s\n", obsError.Message)
    }
}
```

# A Change History

---

Release Date	What's New
2020-07-31	This is the second official release. Added the following sections: <a href="#">Request Parameters of Resumable Upload, Resumable Upload</a> <a href="#">Request Parameters of Resumable Download, Resumable Download</a>
2020-2-29	This is the first official release.