Object Storage Service

Utilities

Utilities

ossutil

Download and install the tool

Ossutil allows you to manage OSS data easily using the command line. The current version does not provide complete bucket management and multipart management functions. These functions will be available in subsequent versions. If you need these functions, you can use the osscmd command line tool instead.

Download the tool

Current version

- Current version: 1.0.0

Version update tips

Compared with ossutil 1.0.0.Beta2, this version of ossutil is updated as follows:

Provides the —storage-class option for the mb operation and specifies the storage type when creating a bucket.

The ls and stat operations can display the storage class for buckets and objects.

Provides the restore function.

Provides the create-symlink and read-symlink functions, which can be used to create a symbolic link and view its description.

Provides the —encoding-type option to support URL code inputting for special object names.

The ls operation limits the number of displays and supports the marker function.

When the set-acl and set-meta operations are performed on objects in batches, ossutil does not stop if a single object fails. Instead, it records the failure information in a report file and continues to perform the operations on other objects.

Appropriately reduces the number of concurrent threads for large files for the cp command to prevent contention for thread resources when your network condition is poor.

Runtime environment

- Linux
- Windows
- Mac

Download the binary program

- [linux 64bit] [ossutil]ossutil
- [windows 32bit] [ossutil32]ossutil32.zip
- [windows 64bit] [ossutil64]ossutil64.zip
- [mac] [ossutilmac64]ossutilmac64

Install and use the binary program

Download the binary program or corresponding compressed package for your operating system and run the binary program. (If the binary program is not an executable file, run chmod 755 ossutil to make it executable.) That is:

For a Linux system:

./ossutil

For a Window system, either of the following two methods can be used (64-bit operating system as an example):

1) Decompress the package, double-click the bat file, and enter ossutil64.exe.

2) Decompress the package, run cmd to enter the directory where the binary program resides, and enter ossutil64.exe.

For a MAC system:

./ossutilmac64

Quick start

Set ossutil language

When running commands of ossutil, you can use the -L option to set the language. The value can be CH or EN, that is, Chinese or English. The value is case insensitive. The default value is CH (Chinese). If you set the language to CH (Chinese), you must ensure that your system is UTF-8 encoded. Otherwise, garbled characters may be displayed.

For example:

./ossutil help ls is used to display the ls help in the default language.

./ossutil help ls -L ch is used to display the ls help in Chinese.

./ossutil help ls -L en is used to display the ls help in English.

./ossutil config -L ch is used to run an interactive configuration command of ossutil config. The prompt language is Chinese.

./ossutil config -L en is used to run an interactive configuration command of ossutil config. The prompt language is English.

> **Note:** Errors output by ossutil are in English by default, which will not be affected by the preceding options.

Obtain the command list

./ossutil or ./ossutil help

```
$./ossutil
Usage: ossutil [command] [args...] [options...]
Run ossutil help to display the command help.

Commands:
mb cloud_url [options]
Creates a bucket.
ls [cloud_url] [options]
Lists buckets or objects.
rm cloud_url [options]
Deletes a bucket or object.
stat cloud_url [options]
Displays the description of a bucket or object.
set-acl cloud_url [acl] [options]
Sets the ACL for a bucket or object.
set-meta cloud_url [meta] [options]
Sets the meta information of the uploaded objects.
cp src_url dest_url [options]
```

```
Uploads, downloads, or copies objects.
restore cloud_url [options]
Restores an object from the frozen state to the readable state.
create-symlink cloud_url target_url [options]
Creates a symbolic link.
read-symlink cloud_url [options]
Reads the description of a symbolic link file.

Additional Commands:
help [command]
Obtains the help document of a command.
config [options]
Creates a configuration file to store configuration items.
hash file_url [options]
Computes the crc64 or MD5 of a local file.
update [options]
Updates ossutil.



$./ossutil  -L en
Usage: ossutil [command] [args...] [options...]
Please use 'ossutil help command' to show help of command

Commands:
mb cloud_url [options]
Make Bucket
ls [cloud_url] [options]
List Buckets or Objects
rm cloud_url [options]
Remove Bucket or Objects
stat cloud_url [options]
Display meta information of bucket or objects
set-acl cloud_url [acl] [options]
Set acl on bucket or objects
set-meta cloud_url [meta] [options]
set metadata on already uploaded objects
cp src_url dest_url [options]
Upload, Download or Copy Objects
restore cloud_url [options]
Restore Frozen State Object to Read Ready Status
create-symlink cloud_url target_url [options]
Create symlink of object
read-symlink cloud_url [options]
Display meta information of symlink object

Additional Commands:
help [command]
Get help about commands
config [options]
Create configuration file to store credentials
hash file_url [options]
Get crc64 or md5 of local file
update [options]
Update ossutil
```

View the help document of a command

./ossutil help cmdYou are strongly advised to run the help command to view the help document before running a command.

```
./ossutil  help config -L ch
SYNOPSIS

Creates a configuration file to store configuration items.

SYNTAX

ossutil config [-e endpoint] [-i id] [-k key] [-t token] [-L language] [--output-dir outdir] [-c file]

DETAIL DESCRIPTION

This command is used to create a configuration file, store customized configuration items in the configuration file,
and provide access information when the OSS is accessed using the configuration items. (Whether a command
requires configuration items depends on whether it supports the --config-file option. For details, refer to the
command help.)

You can specify the path for storing the configuration file. The default path is /home/admin/.ossutilconfig. If the
configuration file (for example, a) exists, ossutil stores a in a.bak, creates file a again, and writes file a to the
configuration. If a.bak already exists, it will be overwritten by file a.

NOTE:
(1) If the specified path of the configuration file is not the default path, set the --config-file option to your specified
path of the configuration file. (If the --config-file option is not specified, the /home/admin/.ossutilconfig path will
be read by default when the command is run.)

(2) Some configuration items can be set using options, such as the --endpoint and --access-key-id options, when a
command is run (for details about the options, refer to the help for each command). If you specify the options when
running a command and configure the information in the configuration file, the priority is options > configuration
file.

(3) If you specify the --endpoint, --access-key-id, --access-key-secret, and --sts-token options when running a
command, ossutil does not forcibly require a configuration file.

Usage:

This command can be used in 1) interactive mode or 2) non-interactive mode. The interactive mode is
recommended because it ensures higher security.

1) ossutil config [-c file]
This mode supports interactive information configuration. Ossutil interactively asks you about the following
information:
(1) config file
Specifies the path of a configuration file. If you press Enter, ossutil uses the default configuration file in
/home/admin/.ossutilconfig.
If you specify a configuration file, set the --config-file option to the path of your configuration file when running
the command. For details about commands that support the --config-file option, refer to the help of each
command.
(2) language
During first configuration (the configuration file does not exist), ossutil requires you to set the language. The value
can be CH (Chinese) or EN (English). If you press Enter, ossutil configures the language based on the value of the --
```

```
language option. If you do not set the --language option, ossutil sets the language to CH by default.
If a configuration file exists, ossutil configures the language based on the specified language option and language
information in the configuration file.
Ossutil reads the language option from the configuration file during operating. If this option does not exist or is
invalid, the ossutil sets the language to CH by default.
NOTE: This configuration item takes effect after the config command is successfully run. When the config command
is executed, the displayed language is not affected by your configuration.
(3) endpoint, accessKeyID, accessKeySecret
Enter indicates that a configuration item is skipped. NOTE: The endpoint should be a second-level domain (SLD), for
example, oss.aliyuncs.com.
The preceding options are mandatory.
(4) stsToken
To access the OSS using a temporary token, specify this option. Otherwise, press Enter to skip this option.
(5) outputDir
This option is used to configure the path of the directory where the output files reside. In interactive mode,
configuration of this option is not supported. However, this option is valid in the configuration file.
The default directory of the outputDir option is ossutil_output of the current directory. Ossutil generates all output
files in this folder during operating. Currently, the output files include the report files that record operation errors of
each file when exceptions occur for batch operations by running the cp command.
For details about the outputDir option and report files, refer to the cp command help.
NOTE: If the outputDir option does not exist, ossutil automatically creates the directory when generating output
files. If the outputDir option exists but is not a directory, an error will be reported.

The following interactive Bucket-Endpoint and Bucket-Cname options are removed, but they are still valid in the
configuration file.
(6) Bucket-Endpoint
The Bucket-Endpoint option is used to independently configure the endpoint for each specified bucket. This option
is prior to the default endpoint configuration in the configuration file.
In this version, ossutil removes the Bucket-Endpoint pair configuration in interactive mode. However, this
configuration item is still valid in the configuration file. Therefore, if you want to independently specify the endpoint
for each bucket, you can make configuration in the configuration file. NOTE: The endpoint should be an SLD, for
example, oss.aliyuncs.com.
If the Bucket-Endpoint option is specified, ossutil searches for the endpoint corresponding to a bucket in the option
when performing operations on the bucket. If being found, the endpoint will overwrite the endpoint in the basic
configuration. However, if the --endpoint option is specified when the command is run, the --endpoint option has
the highest priority.
(7) Bucket-Cname
The Bucket-Cname option is used to independently configure the CNAME domain name (CDN domain) for each
specified bucket. This option is prior to the configurations of the Bucket-Endpoint option and endpoint in the
configuration file.
In this version, ossutil removes the Bucket-Cname pair configuration in interactive mode. However, this
configuration item is still valid in the configuration file. Therefore, if you want to independently specify the CNAME
domain name for each bucket, you can make configuration in the configuration file.
If the Bucket-Cname option is specified, ossutil searches for the CNAME domain name corresponding to a bucket in
the option when performing operations on the bucket. If being found, the CNAME domain name will overwrite the
endpoints in the Bucket-Endpoint option and basic configuration. However, if the --endpoint option is specified
when the command is run, the --endpoint option has the highest priority.

Priority: --endpoint > Bucket-Cname > Bucket-Endpoint > endpoint > default endpoint

2) ossutil config options
If you specify any options except the --language and --config-file options when running the command, the
command enters the non-interactive mode. All configuration items are specified using options.


Configuration file format:
```

```
[Credentials]
language = CH
endpoint = oss.aliyuncs.com
accessKeyID = your_key_id
accessKeySecret = your_key_secret
stsToken = your_sts_token
outputDir = your_output_dir
[Bucket-Endpoint]
bucket1 = endpoint1
bucket2 = endpoint2
...
[Bucket-Cname]
bucket1 = cname1
bucket2 = cname2
...

SAMPLE

ossutil config
ossutil config -e oss-cn-hangzhou.aliyuncs.com -c ~/.myconfig

OPTIONS

-c, --config-file
Specifies the configuration file path of ossutil. Ossutil reads configuration from the configuration file during startup
and writes configuration to the file using the config command.

-e, --endpoint
Specifies the basic endpoint configuration of ossutil (the option value will overwrite the corresponding settings in
the configuration file). It must be an SLD.

-i, --access-key-id
Specifies the AccessKeyID used to access the OSS (the option value will overwrite the corresponding settings in the
configuration file).

-k, --access-key-secret
Specifies the AccessKeySecret used to access the OSS (the option value will overwrite the corresponding settings in
the configuration file).

-t, --sts-token
Specifies the STSToken used to access the OSS (the option value will overwrite the corresponding settings in the
configuration file). It is optional.

--output-dir=ossutil_output
Specifies the directory in which output files are located. The output files include the report files generated when
errors occur for copying files in batches using the cp command. (For details about the report files, refer to the cp
command help.) The default value is the ossutil_output sub-directory in the current directory.

-L CH, --language=CH
Specifies the language of ossutil. The value can be CH or EN, and the default value is CH. If the value is CH, ensure
that your system is UTF-8 encoded.
```

Configure ossutil

When using a command to access the OSS, configure the access key pair first. For details about the access key pair, refer to RAM and STS introduction.

Ossutil can be configured to interactive mode or non-interactive mode.

Run ossutil help config to view the help document of the configuration command.

Configure ossutil in non-interactive mode

./ossutil config

```
$./ossutil config -L ch
This command is used to create a configuration file and store configuration information in it.

You can specify the path for storing the configuration file. The default path is /home/admin/.ossutilconfig. If you press Enter, the default path will be used. If you specify another path, set the --config-file option to this path when running the command.
```

Configure ossutil in non-interactive mode

./ossutil config -e oss.aliyuncs.com -i your_id -k your_key

View all supported options

You can use the -h option to view all options supported by ossutil.

```
$./ossutil -h
Usage of ossutil:
Options:
-s --short-format Used to display the short format. If this option is not specified, the long format is displayed by default.
--snapshot-path= Used to accelerate incremental uploading of files in batches in some scenarios. (File downloading and copying do not support this option currently.) This option is used when ossutil uses the cp command to upload files. Ossutil takes a snapshot of file uploads and stores it in the specified directory. It will read the snapshot from the specified directory for incremental upload when this option is used the next time. The specified snapshot directory must be a writable directory in the local file system. If the directory does not exist, ossutil creates a file to record the snapshot information. If the directory already exists, ossutil reads the snapshot information in the directory, performs incremental uploading accordingly, and updates the snapshot information. (Ossutil only uploads files that fail to be uploaded last time and have been locally modified.) NOTE: By using this option, the local lastModifiedTime of files that have been successfully uploaded is recorded and compared with that of files to be uploaded next time to determine whether to skip uploading of same files. When using this option, ensure that the corresponding objects on the OSS are not modified during the two uploading periods. In other scenarios than this one, use the --update option to incrementally upload files in batches. In addition, ossutil does not actively delete the snapshot information under snapshot-path. To avoid too much snapshot information, clear snapshot-path when confirming that the snapshot information is useless.
-j --jobs= Specifies the number of concurrent tasks when multiple files are operated. The value ranges from 1 to 10000, and the default value is 5.
-v --version Used to display ossutil version (1.0.0.Beta2) and exit.
--output-dir= Specifies the directory in which output files are located. The output files include the report file
```

```
generated when an error occurs for copying files in batches using the cp command. (For details about the report file, refer to the cp command help.) The default value is the ossutil_output sub-directory in the current directory.
--parallel= Specifies the number of concurrent tasks operated in a single file. The value ranges from 1 to 10000. The default value is determined by ossutil based on the operation type and file size.
-L --language= Specifies the language of ossutil. The value can be CH or EN, and the default value is CH.
-t --sts-token= Specifies the STSToken used to access the OSS (the option value will overwrite the corresponding settings in the configuration file). It is optional.
-m --multipart Indicates that the operation objects are the incomplete Multipart events in the bucket, rather than the default objects.
-b --bucket Used to operate a bucket, confirming that an operation is for the bucket.
--delete Used to delete an operation.
-e --endpoint= Specifies the basic endpoint configuration of ossutil (the option value will overwrite the corresponding settings in the configuration file). It must be a second-level domain.
-k --access-key-secret= Specifies the AccessKeySecret used to access the OSS (the option value will overwrite the corresponding settings in the configuration file).
--bigfile-threshold= Specifies the threshold for enabling the resumable data transfer for large files. The value ranges from 0 B to 9223372036854775807 B, and the default value is 100 MB.
--retry-times= Specifies the number of retries when an error occurs. The value ranges from 1 to 500, and the default value is 3.
-a --all-type Indicates that the operation objects are the objects and incomplete Multipart events in the bucket.
-r --recursive Indicates a recursive operation. If this option is specified, commands supporting this option will operate on all objects meeting the criteria in the bucket. Otherwise, the commands operate only on a single object specified in the URL.
-f --force Indicates a forcible operation without asking.
-u --update Indicates an update operation.
-c --config-file= Specifies the configuration file path of ossutil. Ossutil reads configuration from the configuration file during startup and writes configuration to the file using the config command.
-i --access-key-id= Specifies the AccessKeyID used to access the OSS (the option value will overwrite the corresponding settings in the configuration file).
--acl= Used to configure the ACL.
-d --directory Used to return files and sub-directories in the current directory, rather than recursively displaying all objects in all sub-directories.
--checkpoint-dir= Specifies the checkpoint directory path (the default value is .ossutil_checkpoint). If a resumable data transfer fails, ossutil automatically creates this directory and records the checkpoint information in the directory. If a resumable data transfer succeeds, ossutil deletes this directory. If this option is specified, ensure that the specified directory can be deleted.
--type= Specifies the calculation type. The value can be crc64 or md5, and the default value is crc64.
-h --help Show usage message
```

All commands of ossutil supports part of the preceding options. Use the ossutil help command to check options supported by each command.

Bucket-related commands

Ossutil allows you to create, delete, and list buckets, and set the ACL for a bucket. Other management functions related to the bucket are not supported currently. If you need to use these functions, refer to osscmd.

Run the config command to configure the access key pair before running these commands.

Create a bucket

ossutil mb oss://bucket [--acl=acl] [--storage-class sc] [-c file]

If the ACL is not specified, the bucket has the public-read-write permission by default. After a bucket is created, ossutil prints the consumed time and exits. Otherwise, ossutil outputs error information.You can use the --storage-class option to specify the storage mode.

Run ossutil help mb to view help information about creating a bucket.

```
$./ossutil mb oss://test
0.220478(s) elapsed
```

Delete a bucket

Run ossutil help rm to view help information about deleting a bucket.

> **Note:** The -b option must be specified for deleting a bucket.

(1) If you bucket does not contain any data

ossutil rm oss://bucket -b

```
$./ossutil rm oss://test -b
Do you really mean to remove the Bucket: test(y or N)? y
0.220478(s) elapsed
```

(2) If your bucket contains the object, multipart, or other data, delete all data before deleting the bucket. You can run the following command to delete all data and your bucket.

ossutil rm oss://bucket -bar

Run ossutil help rm to view help information about deleting a bucket.

List buckets

./ossutil ls or ./ossutil ls oss://

You can use the -s option to display the short format. Run ossutil help ls to view more help information.

```
$./ossutil ls
CreationTime Region StorageClass BucketName
2016-10-21 16:18:37 +0800 CST oss-cn-hangzhou Archive oss://go-sdk-test-bucket-xyz-for-object
2016-12-01 15:06:21 +0800 CST oss-cn-hangzhou Standard oss://ossutil-test
2016-07-18 17:54:49 +0800 CST oss-cn-hangzhou Standard oss://ossutilconfig
2016-07-20 10:36:24 +0800 CST oss-cn-hangzhou IA oss://ossutilupdate
```

```
2016-11-14 13:08:36 +0800 CST oss-cn-hangzhou IA oss://yyyyy
2016-08-25 09:06:10 +0800 CST oss-cn-hangzhou Archive oss://ztzt
2016-11-21 21:18:39 +0800 CST oss-cn-hangzhou Archive oss://ztztzt
Bucket Number is: 7
0.252174(s) elapsed
```

List files in a bucket

Ossutil can list objects and UploadIDs in a bucket. The objects are displayed by default. You can use the -m option to display UploadIDs and use the -a option to display the objects and UploadIDs simultaneously.

List objects

./ossutil ls oss://bucket

```
$./ossutil ls oss://ossutil-test
LastModifiedTime Size(B) StorageClass ETAG ObjectName
2016-12-01 15:06:37 +0800 CST 10363812 Standard 61DE142E5AFF9A6748707D4A77BFBCFB oss://ossutil-test/a1
2016-12-01 15:06:42 +0800 CST 10363812 Standard 61DE142E5AFF9A6748707D4A77BFBCFB oss://ossutil-test/a2
2016-12-01 15:06:45 +0800 CST 10363812 Standard 61DE142E5AFF9A6748707D4A77BFBCFB oss://ossutil-test/a3
Object Number is: 3
0.007379(s) elapsed
```

List objects and multiparts

./ossutil ls oss://bucket -a

```
$ ossutil ls oss://bucket1 -a
LastModifiedTime Size(B) StorageClass ETAG ObjectName
2015-06-05 14:06:29 +0000 CST 201933 Standard 7E2F4A7F1AC9D2F0996E8332D5EA5B41
oss://bucket1/dir1/obj11
2015-06-05 14:36:21 +0000 CST 201933 Standard 6185CA2E8EB8510A61B3A845EAFE4174 oss://bucket1/obj1
2016-04-08 14:50:47 +0000 CST 6476984 Standard 4F16FDAE7AC404CEC8B727FCC67779D6
oss://bucket1/sample.txt
Object Number is: 3
InitiatedTime UploadID ObjectName
2017-01-13 03:45:26 +0000 CST 15754AF7980C4DFB8193F190837520BB oss://bucket1/obj1
2017-01-13 03:43:13 +0000 CST 2A1F9B4A95E341BD9285CC42BB950EE0 oss://bucket1/obj1
2017-01-13 03:45:25 +0000 CST 3998971ACAF94AD9AC48EAC1988BE863 oss://bucket1/obj2
2017-01-20 11:16:21 +0800 CST A20157A7B2FEC4670626DAE0F4C0073C oss://bucket1/tobj
UploadId Number is: 4
0.191289(s) elapsed
```

You can use the -s option to display the short format.

You can use the -d option to display content in the level 1 directory.

```
$ ossutil ls oss://bucket1 -d
```

```
oss://bucket1/obj1
oss://bucket1/sample.txt
oss://bucket1/dir1/
Object and Directory Number is: 3
UploadID ObjectName
15754AF7980C4DFB8193F190837520BB oss://bucket1/obj1
2A1F9B4A95E341BD9285CC42BB950EE0 oss://bucket1/obj1
3998971ACAF94AD9AC48EAC1988BE863 oss://bucket1/obj2
A20157A7B2FEC4670626DAE0F4C0073C oss://bucket1/tobj
UploadId Number is: 4
0.119884(s) elapsed
```

Set the ACL for a bucket

When a bucket is created, the default ACL for the bucket is public-read-write. You can run the set-acl command to modify the ACL for a bucket.

You need to specify the -b option when setting the ACL for a bucket.

Grant the private permission for bucket1.

./ossutil set-acl oss://bucket1 private -b

Run the help set set-acl command to view more information about setting the ACL.

Object-related commands

Ossutil allows you to upload/download/copy a file, set the ACL and meta of an object, as well as view the meta information of an object.

Run the config command to configure the access key pair before running these commands.

Upload/Download/Copy a file

You are strongly advised to use ossutil help cp to view the help information before running the cp command.

You can run the cp command to upload/download/copy a file, and use the -r option to copy a folder. Ossutil implements multipart upload by default for large files and supports the resumable data transfer (the threshold of large files for which multipart upload is enabled can be set using the --bigfile-threshold option.)

Use the -f option to forcibly upload a file by default. If a file exists with the same name on the target end, the file will be overwritten directly.

If an error occurs to a file during file uploading/downloading/copying in batches, ossutil logs the error information in the report file by default, skips this file, and performs operations on other files.

(Ossutil does not continue to copy other files if the bucket does not exist, or permission verification is invalid due to incorrect accessKeyID/accessKeySecret.) For details, refer to ossutil help cp.

Ossutil supports the incremental uploading policies --update and --snapshot-path in specific scenarios. For details, refer to ossutil help cp.

From ossutil 1.0.0.Beta1, crc64 is enabled by default during file uploading.

(1) Upload a single file:

```
$./ossutil cp a oss://ossutil-test
Succeed: Total num: 1, size: 230. OK num: 1(upload 1 files).
0.699795(s) elapsed
```

(2) Upload a folder:

```
$./ossutil cp -r dir oss://ossutil-test
Succeed: Total num: 35, size: 464,606. OK num: 35(upload 34 files, 1 directories).
0.896320(s) elapsed
```

Performance tuning for uploading/downloading/copying a file

In the cp command, the jobs and -parallel options are used to control the number of concurrent operations. The -jobs option controls the number of concurrent operations enabled between files when multiple files are uploaded/downloaded/copied. The -parallel option controls the number of concurrent operations enabled for a large file when the large file is uploaded/downloaded/copied in multiparts.

Ossutil calculates the number of parallel operations based on the file size by default (this option does not work for small files, and the threshold for large files to be uploaded/downloaded/copied in multiparts can be controlled by the —bigfile-threshold option). When large files are uploaded/downloaded/copied in batches, the actual number of concurrent operations is calculated by multiplying the number of jobs by the number of parallel operations. If the default number of concurrent operations set by ossutil cannot meet your performance requirements, you can adjust these two options to improve or reduce the performance.

Note:
If the number of concurrent operations is too large, ossutil’ s uploading/downloading/copying performance may be reduced due to inter-thread resource switching and snatching. Therefore, adjust the values of these two options based on the actual machine conditions. To perform pressure testing, set the two options to small values first, and slowly adjust them to the optimal values.
If the values of the —jobs and —parallel options are too large, an EOF error may occur due to the slow network transfer speed if machine resources are limited. In this case, appropriately reduce the values of the —jobs and —parallel options.

Configure the ACL of an object

Ossutil uses the set-acl command to configure the ACL of an object. You can use the -r option to configure the ACLs of objects in batches.

For details, refer to ossutil help set-acl.

```
$./ossutil set-acl oss://dest/a private
0.074507(s) elapsed
```

Configure the ACLs of objects in batches:

```
$./ossutil set-acl oss://dest/a private -r
Do you really mean to recursivlly set acl on objects of oss://dest/a(y or N)? y
Succeed: Total 3 objects. Setted acl on 3 objects.
0.963934(s) elapsed
```

Configure the meta of an object

Ossutil uses the set-meta command to configure the meta information of an object. You can use the -r option to configure the metas of objects in batches.

For details, refer to ossutil help set-meta.

```
./ossutil set-meta oss://dest/a x-oss-object-acl:private -u
```

View the object description (meta)

Ossutil uses the stat command to view the object description (meta).

For details, refer to ossutil help stat.

```
$./ossutil stat oss://dest/a
ACL : default
Accept-Ranges : bytes
Content-Length : 230
Content-Md5 : +5vbQC/MSQK0xXSiyKBZog==
Content-Type : application/octet-stream
Etag : FB9BDB402FCC4902B4C574A2C8A059A2
Last-Modified : 2017-01-13 15:14:22 +0800 CST
Owner : aliyun
X-Oss-Hash-Crc64ecma : 12488808046134286088
X-Oss-Object-Type : Normal
0.125417(s) elapsed
```

Restore an object from the frozen state to the readable state

Ossutil uses the restore command to restore an object from the frozen state to the readable state. You can use the -r option to restore objects from the frozen state to the readable state in batches.

For details, refer to ossutil help restore.

```
$./ossutil restore oss://utiltest/a
0.037729(s) elapsed
```

Create a symbolic link

Ossutil uses the create-symlink command to create a symbolic link.

For details, refer to ossutil help create-symlink.

```
$./ossutil create-symlink oss://utiltest/b a
0.037729(s) elapsed
```

Read the description of a symbolic link file

Ossutil uses the read-symlink command to read the description of a symbolic link file.

For details, refer to ossutil help read-symlink.

```
$./ossutil read-symlink oss://utiltest/b
Etag : D7257B62AA6A26D66686391037B7D61A
Last-Modified : 2017-04-26 15:34:27 +0800 CST
X-Oss-Symlink-Target : a
0.112494(s) elapsed
```

Multipart-related commands

Ossutil allows you to list an UploadID and delete all UploadIDs of the specified object. Other management functions related to the Multipart UploadID are not supported currently. If you need to use these functions, refer to osscmd.

For details about the multipart, refer to Multipart upload.

> Note: When uploading/copying a large file, ossutil automatically implements multipart upload and resumable data transfer, without running the UploadPart command.

List an UploadID

Use the -m option to list all incomplete UploadIDs of the specified object, and use the -a option to list objects and UploadIDs.

```
$ ossutil ls oss://bucket1/obj1 -m
InitiatedTime UploadID ObjectName
2017-01-13 03:45:26 +0000 CST 15754AF7980C4DFB8193F190837520BB oss://bucket1/obj1
2017-01-13 03:43:13 +0000 CST 2A1F9B4A95E341BD9285CC42BB950EE0 oss://bucket1/obj1
UploadId Number is: 2
0.070070(s) elapsed
```

Delete all UploadIDs of the specified object

Use the -m option to delete all incomplete UploadIDs of the specified object. If the -r option is specified simultaneously, incomplete UploadIDs of all objects that use the specified object as the prefix are deleted.

Assume that bucket1 contains the following objects:

```
$ ossutil ls oss://bucket1 -a
LastModifiedTime Size(B) StorageClass ETAG ObjectName
2015-06-05 14:06:29 +0000 CST 201933 Standard 7E2F4A7F1AC9D2F0996E8332D5EA5B41
oss://bucket1/dir1/obj11
2015-06-05 14:36:21 +0000 CST 241561 Standard 6185CA2E8EB8510A61B3A845EAFE4174 oss://bucket1/obj1
2016-04-08 14:50:47 +0000 CST 6476984 Standard 4F16FDAE7AC404CEC8B727FCC67779D6
oss://bucket1/sample.txt
Object Number is: 3
InitiatedTime UploadID ObjectName
2017-01-13 03:45:26 +0000 CST 15754AF7980C4DFB8193F190837520BB oss://bucket1/obj1
2017-01-13 03:43:13 +0000 CST 2A1F9B4A95E341BD9285CC42BB950EE0 oss://bucket1/obj1
2017-01-13 03:45:25 +0000 CST 3998971ACAF94AD9AC48EAC1988BE863 oss://bucket1/obj2
2017-01-20 11:16:21 +0800 CST A20157A7B2FEC4670626DAE0F4C0073C oss://bucket1/tobj
UploadId Number is: 4
0.191289(s) elapsed
```

Delete the two UploadIDs of obj1:

```
$./ossutil rm -m oss://bucket1/obj1
Succeed: Total 2 uploadIds. Removed 2 uploadIds.
1.922915(s) elapsed
```

Delete the three UploadIDs of obj1 and obj2:

```
$./ossutil rm -m oss://bucket1/ob
Succeed: Total 4 uploadIds. Removed 4 uploadIds.
1.922915(s) elapsed
```

Delete obj1 and the three UploadIDs of obj1 and obj2 simultaneously:

```
$./ossutil rm  oss://dest1/.a  -a -r -f
Do you really mean to remove recursively objects and multipart uploadIds of oss://dest1/.a(y or N)? y
Succeed: Total 1 objects, 3 uploadIds. Removed 1 objects, 3 uploadIds.
```

ossftp

Quick installation

Introduction

The OSS FTP is a special FTP server that maps the operations on files and folders into your OSS instance upon receiving a common FTP request. This utility allows you to use the FTP protocol to manage files stored on your OSS instance.

Key features

- **Cross-Platform:** This utility can run on Windows, Linux, and Mac operating systems, either 32 or 64 bit, either on a graphic or command-line interface.
- **Free of Installation:** You can run this utility directly after extraction.
- **Free of Configuration:** You can run the utility without any further configurations.
- **Transparent:** The FTP utility was written in Python, so you can see the complete source code. We will soon make the open source available on GitHub.

Key functions

- Supports file/folder upload, download, delete, and other operations
- Supports multipart upload of large files
- Supports most FTP commands and can satisfy daily needs

Note

1. Currently, for the ease of installation and deployment, OSS FTP V1.0 does not support TLS encryption. The FTP protocol implements plaintext transmission. **To prevent password leaks, we recommend that you run the FTP server and client on the same machine** and access using 127.0.0.1:port.

2. The utility does not support rename and move operations.
3. Do not include any Chinese characters in the extract-to path of the installation package.
4. The FTP server’ s management control page may fail to be opened on early IE browsers.
5. Supported Python versions: Python 2.6 and Python 2.7

Downloads

- Windows: ossftp-1.0.2-win.zip

Now that Python 2.7 is not installed on Windows by default, it is contained in the installation package and is ready for use after extraction, without the hassle of installation and configuration.

- Linux/Mac: ossftp-1.0.2-linux-mac.zip

Because Python 2.7 or 2.6 is installed on Linux and Mac systems by default, the installation packages for Linux and Mac do not contain an executable Python program, but only relevant dependent libraries.

Running

First, extract the downloaded file. Then, select an appropriate running mode based on environmental conditions.

- Windows: Double-click start.vbs to run it.
- Linux: Start the terminal and run it.

```
$ bash start.sh
```

- Mac: Double-click start.command or run it on a terminal.

```
$ bash start.command
```

The preceding process starts an FTP server, which listens to port 2048 at 127.0.0.1 by default.
In addition, for ease of control over the status of the FTP server, the program also activates a web server, which listens to port 8192 at 127.0.0.1.
If your system has a graphic interface, the control page will be automatically opened.

> In most situations, you do not need to configure any settings before running the FTP server. If you make any configuration, remember to restart it to make the changes take effect.

Connecting to the FTP Server

We recommend using the FileZilla Client to connect to the FTP server. After download and installation, connect to the FTP server as follows:

- Host: 127.0.0.1
- Login type: normal
- User: access_key_id/bucket_name (The slash sign (/) means that both, not either items are required. For example, the user could be ‘tSxyiUM3NKswPMEp/test-hz-jh-002’.)
- Password: access_key_secret

Advanced use

Manage the ftpserver from the console page

Modify the Listener Address
If you need to access the ftpserver over a network, you must modify the listener address because the default address, 127.0.0.1, only allows local access. You can change it to an intranet IP or Internet IP.

Modify the Listening Port
Modify the ftpserver’s listening port. We suggest using a port over 1024 because ports below 1024 require administrator permissions.

Modify the Log Level
Set the ftpserver’s log level. The ftpserver’s log is output to the data/ossftp/ directory. You can view it only by pressing the Log button on the console page. The default log level is INFO and little information is printed in the log. If you need more detailed log information, you can change the level to DEBUG. If you want the log to output less information, you can set the level to WARNING or ERROR.

Set Bucket Endpoints
By default, the ftpserver will search for the bucket’s location information, so it can send subsequent requests to the corresponding region (such as oss-cn-hangzhou.aliyuncs.com or oss-cn-beijing.aliyuncs.com). The ftpserver will first try to access the OSS instance over the intranet.
If you set bucket endpoints, for example, ‘test-bucket-a.oss-cn-hangzhou.aliyuncs.com’, when you access test-bucket-a, you will go to the ‘oss-cn-hangzhou.aliyuncs.com’ domain name.

Note : The system must be restarted for modifications to take effect.

All the above modifications are actually changes to the ftp directory’ s config.json file. Thus, you can also modify this file directly.

Directly launch ftpserver (Linux/Mac)You can simply launch the ftpserver.py file in the ossftp directory to avoid web_server overhead.

```
$ python ossftp/ftpserver.py &
```

The configuration modification method is the same as above.

Possible problems

If you encounter an error when connecting to the FTP server.

There are two possible causes:

- There may be an error in the entered access_key_id or access_key_secret.Solution: Enter the correct information and try again.

- The used access_key information may be a RAM sub-account access_key for a sub-account without list buckets permission.

  Solution: When using a sub-account, specify bucket endpoints on the console page to tell the ftpserver which endpoint should be used to access a certain bucket. Also, the sub-account must have the required permissions. For information on implementing access control by using RAM to access OSS, refer to RAM. The details about permissions are as follow:

  - **Read-only**: The OSS-FTP must have these permissions:[‘ListObjects’ , ‘GetObject’ , ‘HeadObject’].For information on creating a RAM sub-account with **Read-only** permission, refer to the graphic tutorial How to Integrate RAM for File Sharing.

  - If you want to allow a RAM sub-account to **upload files**, assign [‘PutObject’] permission.

  - If you want to allow a RAM sub-account to **delete files**, assign [‘DeleteObject’] permission.

If you are running the FTP server on Linux, you may encounter the following error when using FileZilla to connect to the server:

501 can't decode path (server filesystem encoding is ANSI_X3.4-1968)

This is usually generated when errors occur in local Chinese code. Input the following command in the terminal where you want to run start.sh. Then, restart the program.

```
$ export LC_ALL=en_US.UTF-8; export LANG="en_US.UTF-8"; locale
```

How to store remote attachments to your OSS instance with Discuz

Preface

The website remote attachment function refers to directly storing uploaded attachments to a remote storage server, which is usually a remote FTP server, over the FTP.

Currently, Discuz forums, PHPWind forums, and WordPress websites support the remote attachment function.

This document instructs you on storing remote attachments from a Discuz-based forum.

Preparation

Apply for an OSS account and create a **public-read** bucket. You must set the permission to public-read because it must allow anonymous access.

Procedures

Here the Discuz version we use is **Discuz! X3.1** and the detailed configuration process is shown below.

Log on to the Discuz website and go to the management interface. Click **Global** and then **Upload Settings**.

Select **Remote Attachments** and configure the function.

Set “Enable remote attachment” to **Yes**.

Set “Enable SSL connection” to “**No** “.

Set the “FTP Server Address”, that is, the address that runs the OSS-FTP. Generally, this is “**127.0.0.1** “.

Set “FTP service port No.” to the default “**2048** “.

Set “FTP Account” in the format of **AccessKeyID/BucketName**, where “**/** “ does not mean “**or** “.

Set “FTP Password” to **AccessKeySecret**.

Set “Passive Mode Connection” to the default “**Yes** “.

Set “Remote Attachment Directory” to “**.** “, that is, to create a directory for upload under the root directory of the bucket.

Set “Remote URL” to http://BucketName.Endpoint.

Here, we will test the bucket test-hz-jh-002 from the Hangzhou region. Therefore, we enter http://test-hz-jh-002.oss-cn-hangzhou.aliyuncs.com, **where the BucketName must match the endpoint**.

Set the timeout time to 0, that is, to use the default setting of the service.

After the configuration is complete, click “Test Remote Attachment”. If the test is successful, an information box will be displayed.

- Verification

Ok, now let’s publish a post on the forum to test the function. On any board, create a post and upload an image as attachment in the post.

Right-click the image and select “Open image in new tab”.

In the browser, you can see the image URL is http://test-hz-jh-002.oss-cn-hangzhou.aliyuncs.com/forum/201512/18/171012mzvkku2z3na2w2wa.png. This indicates that the image has been uploaded to test-hz-jh-002 in the OSS.

How to store remote attachments to your OSS instance with PHPWind

Preface

The website remote attachment function refers to directly storing uploaded attachments to a remote storage server, which is usually a remote FTP server, over the FTP.

Currently, Discuz forums, PHPWind forums, and WordPress websites support the remote attachment function.

This document instructs you on storing remote attachments from a PHPWind-based forum.

Preparation

Apply for an OSS account and create a **public-read** bucket. You must set the permission to public-read because it must allow anonymous access.

Procedures

The PHPWind we use is **PHPWind 8.7** and the configuration process is as follows.

Log on to the website.

Go to the management interface and select **Global** -> **Upload Settings** -> **Remote Attachments**.

Configure the function.

i. Set “**Enable FTP uploads** ” to “**Yes** ”.
ii. Set “**Website Attachment Address** ” to “http://bucket-name.endpoint ”. Here, we will test the bucket test-hz-jh-002 from the Hangzhou region. Therefore, we enter http://test-hz-jh-002.oss-cn-hangzhou.aliyuncs.com, **where the BucketName must match the endpoint**.
iii. Set the FTP server address, that is, the address that runs the OSS-FTP. Generally, this is **127.0.0.1**.
iv. Set “FTP service port No.” to the default “**2048** ”.

v. Set "Remote attachment directory" to "**.** ", that is, to create a directory for upload under the root directory of the bucket.
vi. Set "FTP Account" in the format of **AccessKeyID/BucketName**, where "**/** " does not mean "**or** ".
vii. Set "FTP Password" to **AccessKeySecret**. To obtain the AccessKeyID and AccessKeySecret, you can log on to the Alibaba Cloud console and go to Access Key Management.
viii. Set the FTP timeout time. If you set it to "10" , a timeout response is sent if a request does not receive a response within 10 seconds.

Verification

PHPWind does not allow users to directly test the function by clicking a test button. Therefore, we must publish a post with an image to verify the function.

Right-click the image and select "Open image in new tab" . The image is displayed in a new tab.

The image URL indicates that the image has been uploaded to bucket test-hz-jh-002 in the OSS.

How to store remote attachments to your OSS instance with WordPress

Preface

The website remote attachment function refers to directly storing uploaded attachments to a remote storage server, which is usually a remote FTP server, over the FTP.

Currently, Discuz forums, PHPWind forums, and WordPress websites support the remote attachment function.

This document instructs you on storing remote attachments from a WordPress-based forum.

Preparation

Apply for an OSS account and create a **public-read** bucket. You must set the permission to public-read because it must allow anonymous access.

Procedures

WordPress does not have inherent support for this function, but implements remote attachment using a third-party plug-in. The WordPress we use is WordPress **4.3.1** and the plug-in is **Hacklog Remote Attachment**. The specific configuration process is as follows:

1. Log on to the WordPress website and select “Install Plug-in”. Search for the keyword “FTP” and choose to install **Hacklog Remote Attachment**.

   Configuration.

   i. Set the FTP server address, that is, the address that runs the OSS-FTP. Generally, this is **127.0.0.1**.
   ii. Set “FTP service port No.” to the default “**2048** “.
   iii. Set “FTP Account” in the format of **AccessKeyID/BucketName**, where “**/** “ does not mean “**or** “.
   iv. Set “FTP Password” to **AccessKeySecret**.

   > To obtain the AccessKeyID and AccessKeySecret, you can log on to the Alibaba Cloud console and go to Access Key Management.

   v. Set the FTP timeout to the default value, 30 seconds.
   vi. Set “Remote Basic URL” to http://BucketName.Endpoint/wp. Here, we will test the bucket test-hz-jh-002 from the Hangzhou region. Therefore, we enterhttp://test-hz-jh-002.oss-cn-hangzhou.aliyuncs.com/wp
   vii. Set “FTP Remote Path”. We enter “wp”, that is, to save all attachments to the bucket’s wp directory.Note that this field is related to the “Remote Basic URL” field.
   viii. Set “HTTP Remote Path” to “.”.

   Verification.
   After the configuration is complete, click “Save” and a test starts automatically. The test results are shown at the top of the page.

   Post a new article and insert an image.
   Now you can write a new article and test the remote attachment function. After creating an article, click “Add Media” to upload an attachment.

   When the attachment is uploaded, click “Post” to view your article.

   Right-click the image and click “Open image in new tab” to see the image URL.

   The image URL indicates that the image has been successfully uploaded to the OSS.

How to integrate RAM for file sharing

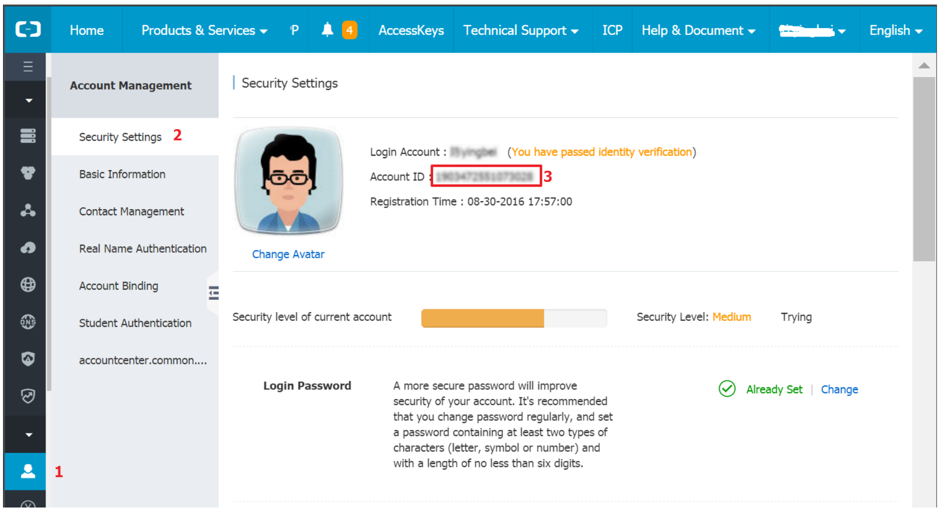
Introduction

This document instructs you on integrating the RAM service to share files and folders in user buckets. Other users will have read-only permission, while the bucket owner can edit the objects.

> Process: Activate RAM -> Create a read-only authorization policy -> Create sub-accounts -> Grant permissions to the sub-accounts -> Verify FTP logon

Retrieve account ID

Retrieve your account ID, as shown in the image below:



Security Settings

Login Account : [redacted] (You have passed identity verification)

Account ID : [redacted]

Registration Time : 08-30-2016 17:57:00

Security level of current account Security Level: Medium Trying

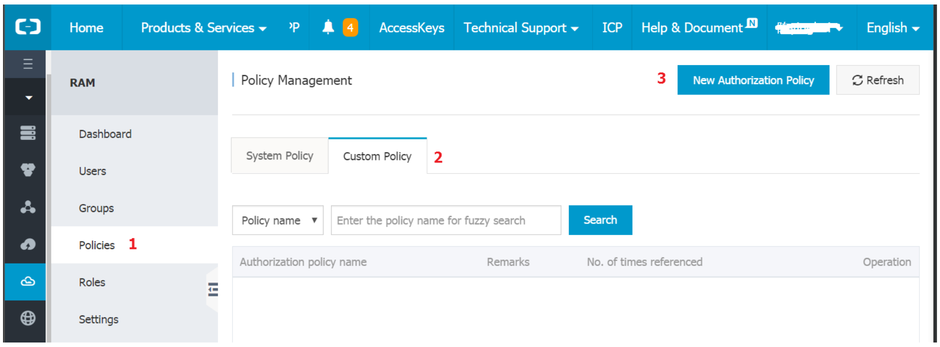
Login Password A more secure password will improve security of your account. It's recommended that you change password regularly, and set a password containing at least two types of characters (letter, symbol or number) and with a length of no less than six digits.

Activate RAM

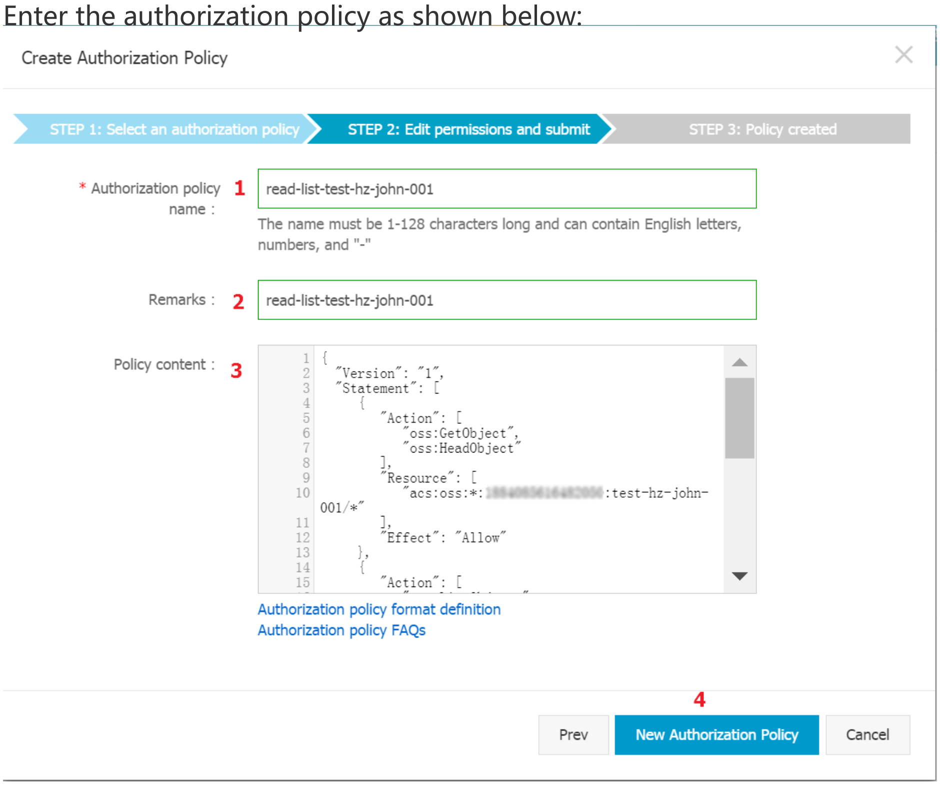
Resource Access Management (RAM) is an Alibaba Cloud service designed for controlling resource access. By creating a policy, you can create a shared read account. Users can use this account to log on to the FTP tool and read your files.

Create an authorization policy

After activating RAM, go to the RAM console and click “Policies” on the left side. Follow the steps shown in the diagram below to create a new authorization policy:



Enter the authorization policy as shown below:


Create Authorization Policy
STEP 1: Select an authorization policy
STEP 2: Edit permissions and submit
STEP 3: Policy created

* Authorization policy name : 1 read-list-test-hz-john-001

The name must be 1-128 characters long and can contain English letters, numbers, and "-"

Remarks : 2 read-list-test-hz-john-001

Policy content : 3

```
{
  "Version": "1",
  "Statement": [
    {
      "Action": [
        "oss:GetObject",
        "oss:HeadObject"
      ],
      "Resource": [
        "acs:oss:*:[redacted]:test-hz-john-
001/*"
      ],
      "Effect": "Allow"
    },
    {
      "Action": [
```

Authorization policy format definition
Authorization policy FAQs
4
Prev
New Authorization Policy
Cancel

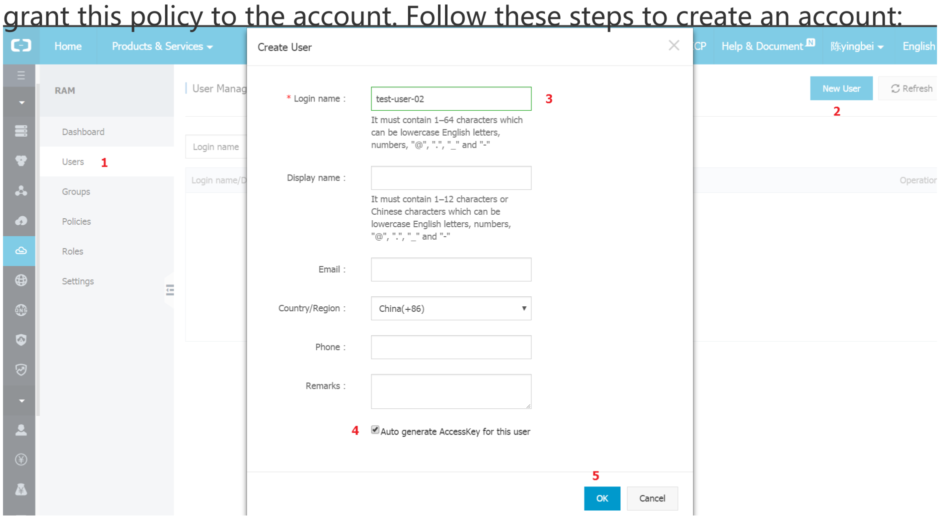
Specify policy name and remarks (fields 1 and 2) as needed. “Policy content” in field 3 determines the policy.

```
{
"Version": "1",
"Statement": [
{
"Action": [
"oss:GetObject",
"oss:HeadObject"
],
"Resource": [
"acs:oss:*:***************:test-hz-john-001/*"
],
"Effect": "Allow"
},
{
"Action": [
"oss:ListObjects",
"oss:GetBucketAcl",
"oss:GetBucketLocation"
],
"Resource": [
"acs:oss:*:****************:test-hz-john-001"
],
"Effect": "Allow"
},
{
"Action": [
"oss:ListBuckets"
],
"Resource": [
"acs:oss:*:****************:*"
],
"Effect": "Allow"
}
]
}
```

In the example above, replace **************** with your own account ID and replace test-hz-john-001 with your bucket name. Then, copy all the content and paste it in "Policy content". Finally, click "New Authorization Policy".

Create an account

The above authorization policy produces a read-only policy. Below, we will create an account and grant this policy to the account. Follow these steps to create an account:



Create User

* Login name : test-user-02

It must contain 1–64 characters which can be lowercase English letters, numbers, "@", ".", "_" and "-"

Display name :

It must contain 1–12 characters or Chinese characters which can be lowercase English letters, numbers, "@", ".", "_" and "-"

Email :

Country/Region : China(+86)

Phone :

Remarks :

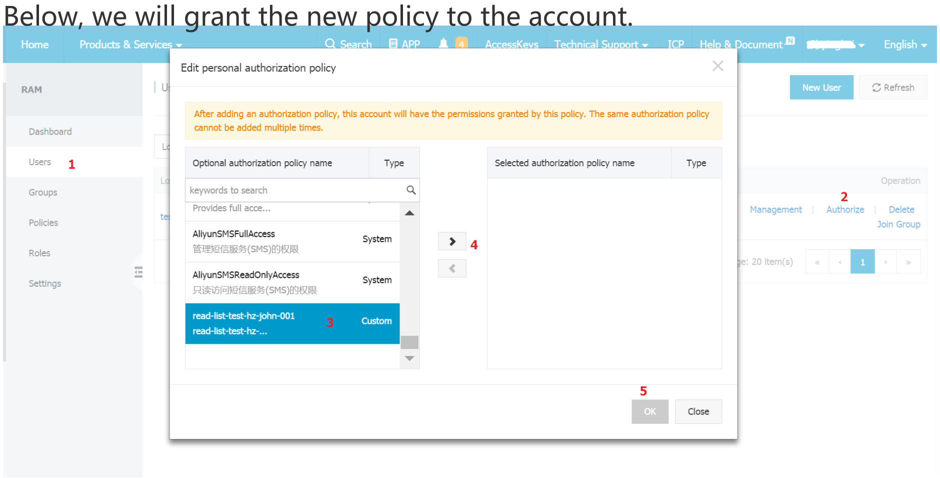
☑ Auto generate AccessKey for this user

OK Cancel

Remember to record the new account' s access_key.

Authorize the account

Below, we will grant the new policy to the account.



Edit personal authorization policy

After adding an authorization policy, this account will have the permissions granted by this policy. The same authorization policy cannot be added multiple times.

Optional authorization policy name	Type
keywords to search	
Provides full acce...	
AliyunSMSFullAccess 管理短信服务(SMS)的权限	System
AliyunSMSReadOnlyAccess 只读访问短信服务(SMS)的权限	System
read-list-test-hz-john-001 read-list-test-hz-... 3	Custom

Selected authorization policy name	Type

Log on with the sub-account

Use the sub-account’ s access_key and the bucket in the authorization policy to log on. Now, you can download files and folders, but upload operations will fail.

ossfs

Quick installation

Introduction

ossfs allows you to mount Alibaba Cloud OSS buckets to local files in Linux systems. In the system, you can quickly use the local file system to perform operations on OSS objects, achieving data sharing.

Functions

The ossfs is constructed based on S3FS and incorporates all S3FS functions. Key functions include:

- Support for most functions of the POSIX file system, including file reading/writing, directories, link operations, permissions, UID/GID, and extended attributes.
- Uploads of large files using the OSS multipart function.
- MD5 checksum to ensure data integrity.

Limitations

Compared to a local file system, the functions and performance provided by ossfs have certain limitations. These include:

- Random write and append operations will overwrite the entire file.
- The performance of metadata operations, such as list directory, is poor because the system has to remotely access the OSS server.
- The file/folder rename operation is not atomic.
- When multiple clients are attached to a single OSS bucket, you must coordinate the actions of each client manually. For example, you need to avoid multiple clients writing the same file.
- Hard link is not supported.
- This system is not suitable for highly-concurrent read/write scenarios, as this will greatly increase the system load.

Installation and use

Installation package download:

Released Linux	Download
Ubuntu 16.04 (x64)	ossfs_1.80.2_ubuntu16.04_amd64.deb
Ubuntu 14.04 (x64)	ossfs_1.80.2_ubuntu14.04_amd64.deb
CentOS 7.0 (x64)	ossfs_1.80.2_centos7.0_x86_64.rpm
CentOS 6.5 (x64)	ossfs_1.80.2_centos6.5_x86_64.rpm

Install the ossfs

- Run these commands to install Ubuntu:

```
sudo apt-get update
sudo apt-get install gdebi-core
sudo gdebi your_ossfs_package
```

- Run these commands to install CentOS 6.5 or above:

```
sudo yum localinstall your_ossfs_package
```

- Run these commands to install CentOS 5 or above:

```
sudo yum localinstall your_ossfs_package --nogpgcheck
```

Use the ossfs

Set bucket name and AccessKeyId/Secret and save it to the /etc/passwd-ossfs file.

Note that the permissions for this file must be set correctly. We suggest setting it to 640.

```
echo my-bucket:my-access-key-id:my-access-key-secret > /etc/passwd-ossfs
chmod 640 /etc/passwd-ossfs
```

Mount the OSS bucket to the specified directory.

```
ossfs my-bucket my-mount-point -ourl=my-oss-endpoint
```

Example

Mount the bucket my-bucket to the /tmp/ossfs directory. The AccessKeyId is faint,the AccessKeySecret is 123, and the OSS endpoint is http://oss-cn-hangzhou.aliyuncs.com.

```
echo my-bucket:faint:123 > /etc/passwd-ossfs
chmod 640 /etc/passwd-ossfs
mkdir /tmp/ossfs
ossfs my-bucket /tmp/ossfs -ourl=http://oss-cn-hangzhou.aliyuncs.com
```

Unmount the bucket:

```
fusermount -u /tmp/ossfs
```

For more information, refer to https://github.com/aliyun/ossfs#ossfs.

Release log

Refer to https://github.com/aliyun/ossfs/blob/master/ChangeLog.

FAQ

- Q: For what programs is ossfs suitable?
  - ossfs mounts OSS buckets locally. If you want a program that does not support OSS to automatically sync the data to the OSS, ossfs is a great option.
- Q: What are the limitations of ossfs?
  - Because data must be synced to the cloud over the network, the performance and functions of ossfs may differ from those of local file systems. If you want to run a

database or other applications with frequent I/O operations on a mounted ossfs disk, you must consider this carefully. ossfs differs from local file systems in the following ways:

- Random write and append operations will overwrite the entire file.
- The performance of metadata operations, such as list directory, is poor because the system has to remotely access the OSS server.
- The file/folder rename operation is not atomic.
- When multiple clients are attached to a single OSS bucket, you must coordinate the actions of each client manually. For example, you need to avoid multiple clients writing the same file.
- Hard link is not supported.

- Q: Do I need to use Alibaba Cloud hosts for ossfs?
  - ossfs does not need to be used with Alibaba Cloud intranet. It can be used on external Internet hosts.
- Q: Can ossfs simultaneously mount multiple OSS buckets?
  - Yes, just write multiple OSS configuration information entries in the passwd-ossfs file. Buckets from different OSS accounts are supported.
- Q: When trying to mount a bucket, why do I receive the error “ossfs: unable to access MOUNTPOINT /tmp/ossfs: Transport endpoint is not connected”?
  - First, run the umount command for the corresponding directory.
  - When mounting with ossfs, check that the entered URL parameter is correct and the bucket, access key ID, and access key secret match.
  - DO NOT include the bucket name in the URL. For example, if the bucket domain name isossfs-test-1.oss-cn-hangzhou.aliyuncs.com on the OSS console, set the URL to http://oss-cn-hangzhou.aliyuncs.com.
- Q: Why does ossfs display “ossfs: unable to access MOUNTPOINT /tmp/odat: No such file or directory”?
  - This error occurs if the directory is not yet created. You must create the directory before mounting.
- Q: Why does the “operation not permitted” error occur after I mount the bucket locally and run the ls command for the directory?
  - In your bucket, check if the directory name contains any OSS objects with invisible characters. The file system has strict restrictions for file/directory names. If the directory name fails to meet the restrictions, this error occurs. Use another tool to rename these objects and run the ls command, the directory content can be correctly displayed.
- Q: How do I set permissions during ossfs mounting?
  - If you want to allow other users to access mounted folders, specify the allow_other parameter as follows when running ossfs:
    - ossfs your_bucket your_mount_point -ourl=your_endpoint -o allow_other
  - If you want to allow the mounting of folders (/tmp/ossfs) that belong to another user, you must create and mount a folder and use OSSFS as this user:
    - sudo -u user mkdir /tmp/ossfs

        - sudo -u user ossfs bucket-name /tmp/ossfs

- Q: How can I mount ossfs automatically when the device starts up?
    - Step 1: Write the bucket name, access key ID/secret, and other information into /etc/passwd-ossfs, and change the permissions for this file to 640.
        - echo your_bucket_name:your_access_key_id:your_access_key_secret > /etc/passwd-ossfs
        - chmod 640 /etc/passwd-ossfs

Step 2: Make the appropriate settings (the setting methods differ for different system versions).

- Step 2A: Use the fstab method to automatically mount the ossfs (applies to Ubuntu 14.04 and CentOS 6.5).
    - Add the following command in /etc/fstab:
    - ossfs#your_bucket_name your_mount_point fuse _netdev,url=your_url,allow_other 0 0
    - In the above command, replace ‘your_xxx’ with your actual bucket name and other information.
    - Save the /etc/fstab file. Execute the mount -a command. If no error is reported, the settings are correct.
    - Now, Ubuntu 14.04 can automatically mount the ossfs. For CentOS 6.5, also execute the following command:
    - chkconfig netfs on
- Step 2B: Mount ossfs using a boot script (applies to CentOS 7.0 and above).
    - Create the file ossfs in the /etc/init.d/ directory. Copy the content in the Template File to the new file. Here, replace ‘your_xxx’ with your own information.
    - Execute the command: chmod a+x /etc/init.d/ossfs.
    - The above command will grant execution permission to the new ossfs script. You can now execute this script. If there are no errors in the script content, the OSS bucket has been mounted to the specified directory.
    - Execute the command: chkconfig ossfs on.
    - The above command sets the ossfs boot script as another service, so it will be automatically started when the device starts up.
    - ossfs can now automatically mount upon startup. To sum up, if you use Ubuntu 14.04 or CentOS 6.5, perform Steps 1 and 2A; if you use CentOS 7.0, perform Steps 1 and 2B.

Q: I need to use a www user to mount ossfs. In this case, how do I set up automatic mounting?

Refer to the answer to the question above. Perform Step 1 as stated. Perform Step 2B with the command in the /etc/init.d/ossfs file changed to:

sudo -u www ossfs your_bucket your_mountpoint -ourl=your_url

- Set the boot script to allow the use of sudo to edit /etc/sudoers. Change the Defaults requiretty line to #Defaults requiretty (comment out this line).

- Q: How do I solve the fusermount: failed to open current directory: Permission denied error?

- This is a fuse bug. It requires the current user to have read permission for the current directory (unmounted directory). To solve this problem, run the cd command to change to a directory with read permission and then run the ossfs command again.

osscmd

Quick installation

Environment requirement

Python SDK requires a Python-ready environment. Python versions: Version 2.5 to Version 2.7. SDK is applicable to Windows and Linux, but as Python3.0 is not fully compatible with SDK Version 2.x, SDK does not support Python3.0 or above.

After Python is installed:

- Input **python** in Linux shell and press Enter to view the Python version. As shown below:

```
Python 2.5.4 (r254:67916, Mar 10 2010, 22:43:17)
[GCC 4.1.2 20080704 (Red Hat 4.1.2-46)] on linux2
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

- Input **python** in Windows cmd and press Enter to view the Python version. As shown below:

```
C:\Documents and Settings\Administrator>python
Python 2.7.5 (default, May 15 2013, 22:43:36) [MSC v.1500 32 bit (Intel)] on win
32
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

The above shows the Python has been installed successfully.

Exception: After entering **python** in Windows cmd and pressing Enter, the system prompts **Not an**

internal or external command. In such a case, check the configuration **Environment variables** > **Path** and add the Python installation path.

If the Python is not installed, you can get its installer from Python official website. The website provides detailed instructions and guidance for installing and using Python.

Installation and usage

Click here to view how to download the file. Unzip the downloaded Python SDK to the directory of the osscmd and then execute python osscmd + operation. For example, upload an object to the bucket:

```
python  osscmd  put  myfile.txt  oss://mybucket
```

Please note that in osscmd, we use oss://bucket or oss://bucket/object to indicate a bucket or an object. oss:// is merely a way to indicate the resource with no other meanings.

If you need the detailed command list, enter: python osscmd.

If you need the detailed parameter list instructions, enter: python osscmd help.

Example

Install and configure osscmd

After you download SDK installer in Linux or Windows, unzip the downloaded packet to start using osscmd.

You can directly invoke python osscmd to get instructions for use. Every command has two modes for execution. Take querying the user-created bucket for example. The gs command (short for “get service”) will be executed.

- Method 1: No ID or Key is specified, and osscmd will read the ID and Key from default files.

```
$ python osscmd gs
can't get accessid/accesskey, setup use : config --id=accessid --key=accesskey
```

Note: In the case of such prompts, it indicates that the ID and Key are not properly configured. See the configuration command in Step 2.

Once the ID and Key are properly configured and valid, run the command

```
$ python osscmd gs
2013-07-19 08:11 test-oss-sample
Bucket Number is: 1
```

- Method 2: Specify the ID and Key in the command and osscmd will read ID and Key from the command line. If the ID and Key are valid, run the command and the following result will show.

```
$ python osscmd gs --id=your_id --key=your_key
2013-07-19 08:11 test-oss-sample
Bucket Number is: 1
```

To configure users’ ID and Key to the default files, run the following commands. The default oss host is oss.aliyuncs.com.

```
$python osscmd config --id=YOUR_ID --key=YOUR_KEY
```

If you see a prompt saying “Your configuration is saved into” or similar, it indicates the ID and Key have been saved successfully.

Basic operations

List Created Bucket

```
$python osscmd getallbucket
```

The output will be empty if the OSS user didn’t create any buckets.

Create Bucket

Create a bucket named mybucketname.

```
$python osscmd createbucket mybucketname
```

Creating a bucket named “mybucketname” may fail because the name of the bucket in OSS is globally unique and someone might have created this bucket. In this case, you need to change the name. For example, you can add a specific date to the bucket name.

Check whether the bucket has been created successfully.

```
$python osscmd getallbucket
```

If it fails, check the error message returned.

View Object

After a bucket is successfully created, check the objects in the bucket.

```
$python osscmd list oss://mybucketname/
```

There is no objects in the bucket, so the output is empty.

Upload Object

Upload an object to the bucket. If the local file is named local_existed_file, its MD5 value is shown as below.

```
$ md5sum local_existed_file 7625e1adc3a4b129763d580ca0a78e44 local_existed_file
$ python osscmd put local_existed_file oss://mybucketname/test_object
```

View Object Again

If it is successfully created, check the object again in bucket.

```
$python osscmd list oss://mybucketname/
```

Download Object

Download an object from the bucket to local and compare the md5 value of the file downloaded.

```
$ python osscmd get oss://mybucketname/test_object download_file
$ md5sum download_file
7625e1adc3a4b129763d580ca0a78e44 download_file
```

Delete Object

```
$ python osscmd delete oss://mybucketname/test_object
```

Delete Bucket

Note: If there are objects in the bucket, the bucket cannot be deleted.

```
$ python osscmd deletebucket test-oss-aliyun-com
```

Usage Lifecycle

Configure an xml text file for lifecycle

```
<LifecycleConfiguration>
<Rule>
<ID>1125</ID>
<Prefix>log_backup/</Prefix>
```

```
<Status>Enabled</Status>
<Expiration>
<Days>2</Days>
</Expiration>
</Rule>
</LifecycleConfiguration>
```

This indicates deleting the objects of more than two days old to the current time and with the prefix of log_backup/ in the bucket. For detailed rule configuration, refer to API Reference.

Write Lifecycle

```
python osscmd putlifecycle oss://mybucket lifecycle.xml
0.150(s) elapsed
```

Read Lifecycle

```
python osscmd getlifecycle oss://mybucket
<?xml version="1.0" encoding="UTF-8"?>
<LifecycleConfiguration>
<Rule>
<ID>1125</ID>
<Prefix>log_backup/</Prefix>
<Status>Enabled</Status>
<Expiration>
<Days>2</Days>
</Expiration>
</Rule>
</LifecycleConfiguration>

0.027(s) elapsed
```

Delete Lifecycle

```
python osscmd deletelifecycle oss://mybucket
0.139(s) elapsed
```

Read Lifecycle

```
python osscmd getlifecycle oss://mybucket
Error Headers:

[('content-length', '288'), ('server', 'AliyunOSS'), ('connection', 'close'), ('x-oss-request-id',
'54C74FEE5D7F6B24E5042630'), ('date', 'Tue, 27 Jan 2015 08:44:30 GMT'), ('content-type', 'application/xml')]
Error Body:

<?xml version="1.0" encoding="UTF-8"?>
<Error>
<BucketName>mybucket</BucketName>
<Code>NoSuchLifecycle</Code>
<Message>No Row found in Lifecycle Table.</Message>
```

```
<RequestId>54C74FEE5D7F6B24E5042630</RequestId>
<HostId>mybucket.oss-maque-hz-a.alibaba.net</HostId>
</Error>

Error Status:

404
getlifecycle Failed!
```

Anti-leech Settings

Allow access of blank referer

```
$osscmd putreferer oss://test --allow_empty_referer=true
0.004(s) elapsed
```

Get Configured Referer

```
$osscmd getreferer oss://test
<?xml version="1.0" encoding="UTF-8"?>
<RefererConfiguration>
<AllowEmptyReferer>true</AllowEmptyReferer>
<RefererList />
</RefererConfiguration>
```

Do not allow blank referer. Only allow test referer requests

```
$osscmd putreferer oss://test --allow_empty_referer=false --referer='www.test.com'
0.092(s) elapsed
```

Get Configured Referer

```
$osscmd getreferer oss://test
<?xml version="1.0" encoding="UTF-8"?>
<RefererConfiguration>
<AllowEmptyReferer>false</AllowEmptyReferer>
<RefererList>
<Referer>www.test.com</Referer>
</RefererList>
</RefererConfiguration>
```

Do not allow blank referer. Only allow test and test1 referer requests

```
$osscmd putreferer oss://test --allow_empty_referer=false --referer='www.test.com,www.test1.com'
```

Get Configured Referer

```
$osscmd getreferer oss://test
<?xml version="1.0" encoding="UTF-8"?>
<RefererConfiguration>
<AllowEmptyReferer>false</AllowEmptyReferer>
<RefererList>
<Referer>www.test.com</Referer>
<Referer>www.test1.com</Referer>
</RefererList>
</RefererConfiguration>
```

Bucket commands

config

Command instructions:

config --id=[accessid] --key=[accesskey] --host=[host] --sts_token=[sts_token]

Configure the default host, ID and Key of the osscmd. The default host is oss.aliyuncs.com.To access oss-internal.aliyuncs.com, you can add —host=oss-internal.aliyuncs.com.The sts_token parameter is not requisite. When sts_token is filled, the tool will perform authentication in STS method.

Example:

- python osscmd config --id=your_id --key=your_key
- python osscmd config --id=your_id --key=your_key --host=oss-internal.aliyuncs.com

getallbucket(gs)

Command instructions:

getallbucket(gs)

Show the bucket the user has created. The gs is the short form of get service. The gs achieves the same effect with getallbucket.

Example:

- python osscmd getallbucket
- python osscmd gs

createbucket(cb,mb,pb)

Command instructions:

createbucket(cb,mb,pb) oss://bucket --acl=[acl]

Create bucket commands. The cb is short for create bucket, mb is short for make bucket, pb is short for put bucket and oss://bucket indicates the bucket. The —acl parameter can be included but it is not required. The several commands all achieve the same effect.

Example:

```
- python osscmd createbucket oss://mybucket
- python osscmd cb oss://myfirstbucket --acl=public-read
- python osscmd mb oss://mysecondbucket --acl=private
- python osscmd pb oss://mythirdbucket
```

deletebucket(db)

Command instructions:

deletebucket(db) oss://bucket

Delete bucket commands. The db is short for delete bucket. Deletebucket achieves the same effect with db.

Example:

```
- python osscmd deletebucket oss://mybucket
- python osscmd db oss://myfirstbucket
```

deletewholebucket

> **Note:** This command is very risky as it will erase all the data and the erased data cannot be restored. Use it with caution.

Command instructions:

deletewholebucket oss://bucket

Delete bucket and its objects as well as the multipart contents.

Example:

```
- python osscmd deletewholebucket oss://mybucket
```

getacl

Command instructions:

getacl oss://bucket

Get bucket access and control privilege.

Example:

- python osscmd getacl oss://mybucket

setacl

Command instructions:

setacl oss://bucket --acl=[acl]

Modify bucket access and control privilege. The acl can only be one of the three, private, public-read, or public-read-write.

Example:

- python osscmd setacl oss://mybucket --acl=private

putlifecycle

Command instructions:

putlifecycle oss://mybucket lifecycle.xml

Set lifecycle rules. The lifecycle.xml is the configuration file of lifecycle. For detailed rule configuration, refer to API Reference.

Example:

- python osscmd putlifecycle oss://mybucket lifecycle.xml

The lifecycle.xml contains the configuration rules of lifecycle. E.g.:

```
<LifecycleConfiguration>
<Rule>
<ID>1125</ID>
<Prefix>log_backup/</Prefix>
<Status>Enabled</Status>
<Expiration>
<Days>2</Days>
</Expiration>
</Rule>
</LifecycleConfiguration>
```

getlifecycle

Command instructions:

osscmd getlifecycle oss://bucket

Get rules of the bucket lifecycle.

Example:

- python osscmd getlifecycle oss://mybucket

deletelifecycle

Command instructions:

osscmd deletelifecycle oss://bucket

Delete all the lifecycle rules under the bucket.

Example:

- python osscmd deletelifecycle oss://mybucket

putreferer

Command instructions:

osscmd putreferer oss://bucket --allow_empty_referer=[true|false] --referer=[referer]

Set anti-leech rules. The allow_empty_referer parameter is requisite and used to set whether it is allowed to be null. The referer parameter is used to set the allowed white list for access, e.g., “www.test1.com,www.test2.com”, with “,” as the separator. For detailed rule configuration, refer to Product documentation.

Example:

- python osscmd putreferer oss://mybucket --allow_empty_referer=true --referer="www.test1.com,www.test2.com"

getreferer

Command instructions:

osscmd getreferer oss://bucket

Get the anti-leech rules of the bucket.

Example:

- python osscmd getreferer oss://mybucket

putlogging

Command instructions:

osscmd putlogging oss://source_bucket oss://target_bucket/[prefix]

The source_bucket indicates the bucket for logs, and the target_bucket indicates where the logs can be stored. You can set a prefix for the log files generated in the source bucket for the convenience of categorized query.

Example:

```
- python osscmd putlogging oss://mybucket oss://myloggingbucket/mb
```

getlogging

Command instructions:

osscmd getlogging oss://bucket

Get the logging rules of the bucket and an xml file will be returned.

Example:

```
- python osscmd getlogging oss://mybucket
```

Object commands

ls(list)

Command instructions:

ls(list) oss://bucket/[prefix] [marker] [delimiter] [maxkeys]

List object in the bucket.

Example:

```
- python osscmd ls oss://mybucket/folder1/folder2
- python osscmd ls oss://mybucket/folder1/folder2 maker1
- python osscmd ls oss://mybucket/folder1/folder2 maker1 /
- python osscmd ls oss://mybucket/
- python osscmd list oss://mybucket/ "" "" 100
```

Command instructions:

ls(list) oss://bucket/[prefix] --marker=xxx --delimiter=xxx --maxkeys=xxx

List object in the bucket.

Example:

```
- python osscmd ls oss://mybucket/folder1/folder2 --delimiter=/
- python osscmd ls oss://mybucket/folder1/folder2 --maker=a
- python osscmd ls oss://mybucket/folder1/folder2 --maxkeys=10
```

mkdir

Command instructions:

mkdir oss://bucket/dirname

Create an object ending with “/” of a size of 0.

Example:

```
- python osscmd mkdir oss://mybucket/folder
```

listallobject

Command instructions:

listallobject oss://bucket/[prefix]

Show all objects in the bucket, and the prefix can be specified.

Example:

```
- python osscmd listallobject oss://mybucket
- python osscmd listallobject oss://mybucket/testfolder/
```

deleteallobject

Command instructions:

deleteallobject oss://bucket/[prefix]

Delete all objects in the bucket, and the prefix can be specified.

Example:

```
- python osscmd deleteallobject oss://mybucket
- python osscmd deleteallobject oss://mybucket/testfolder/
```

downloadallobject

Command instructions:

downloadallobject oss://bucket/[prefix] localdir --replace=false --thread_num=5

Download the objects in the bucket to a local directory, with the directory structure unchanged. The prefix can be specified for downloading. —replace=false indicates that if a local file already exists with the same name, it will not be replaced during the download. —replace=true indicates that the local file with the same name will be replaced. The thread_num can be used to configure the download threading.

Example:

- python osscmd downloadallobject oss://mybucket /tmp/folder
- python osscmd downloadallobject oss://mybucket /tmp/folder –-replace=false
- python osscmd downloadallobject oss://mybucket /tmp/folder –-replace=true --thread_num=5

downloadtodir

Command instructions:

downloadallobject oss://bucket/[prefix] localdir --replace=false

Download the objects in the bucket to a local directory, with the directory structure unchanged. The prefix can be specified for downloading. —replace=false indicates that if a local file already exists with the same name, it will not be replaced during the download. —replace=true indicates that the local file with the same name will be replaced. It achieves the same effect with the downloadallobject.

Example:

- python osscmd downloadtodir oss://mybucket /tmp/folder
- python osscmd downloadtodir oss://mybucket /tmp/folder –-replace=false
- python osscmd downloadtodir oss://mybucket /tmp/folder –-replace=true

uploadfromdir

Command instructions:

uploadfromdir localdir oss://bucket/[prefix] --check_point=check_point_file --replace=false --check_md5=false --thread_num=5

Upload local files into the bucket. E.g., the localdir is /tmp/

There are three files a/b, a/c, and a, and they will be oss://bucket/a/b, oss://bucket/a/c, oss://bucket/a after being uploaded into the OSS. If the prefix is specified as mytest, the uploaded files to OSS will be oss://bucket/mytest/a/b, oss://bucket/mytest/a/c, and oss://bucket/mytest/a.

--check_point=check_point_file is the specified file. After the files are specified, osscmd will put the uploaded local files into check_point_file as time stamps, and the uploadfromdir command will compare the time stamps of the files being uploaded with that recorded in check_point_file. If there are changes, the files will be re-uploaded. Otherwise the file will be skipped. The check_point_file does not exist by default. --replace=false indicates that if a local file already exists with the same name, it will not be replaced during the download. —replace=true indicates that the local file with the same name will be replaced. --check_md5=false indicates that when the files are being uploaded, the Content-MD5 request header will not undergo verification. True indicates that the Content-MD5 request header will undergo verification.

> Note: the logs in the check_point_file involve all the uploaded files. When there are too many files uploaded, the check_point_file will be sizable.

Example:

- python osscmd uploadfromdir /mytemp/folder oss://mybucket
- python osscmd uploadfromdir /mytemp/folder oss://mybucket --check_point_file=/tmp/mytemp_record.txt
- python osscmd uploadfromdir C:\Documents and Settings\User\My Documents\Downloads oss://mybucket --check_point_file=C:\cp.txt

put

Command instructions:

put localfile oss://bucket/object --content-type=[content_type] --headers="key1:value1#key2:value2" --check_md5=false

When uploading a local file into the bucket, you can specify the object content-type, or specify customized headers. --check_md5=false indicates that when the files are being uploaded, the Content-MD5 request header will not undergo verification. True indicates that the Content-MD5 request header will undergo verification.

Example:

- python osscmd put myfile.txt oss://mybucket
- python osscmd put myfile.txt oss://mybucket/myobject.txt
- python osscmd put myfile.txt oss://mybucket/test.txt --content-type=plain/text --headers= “x-oss-meta-des:test#x-oss-meta-location:CN”
- python osscmd put myfile.txt oss://mybucket/test.txt --content-type=plain/text

upload

Command instructions:

upload localfile oss://bucket/object --content-type=[content_type] --check_md5=false

Upload local files in object group. Not recommended. --check_md5=false indicates that when the files are being uploaded, the Content-MD5 request header will not undergo verification. True indicates that the Content-MD5 request header will undergo verification.

Example:

```
- python osscmd upload myfile.txt oss://mybucket/test.txt --content-type=plain/text
```

get

Command Instructions:

get oss://bucket/object localfile

Download the object to local.

Example:

```
- python osscmd get oss://mybucket/myobject /tmp/localfile
```

multiget(multi_get)

Command instructions:

multiget(multi_get) oss://bucket/object localfile --thread_num=5

Download the object to local in multithreading. The thread count can be configured.

Example:

```
- python osscmd multiget oss://mybucket/myobject /tmp/localfile
- python osscmd multi_get oss://mybucket/myobject /tmp/localfile
```

cat

Command instructions:

cat oss://bucket/object

Read object content and print them out directly. Do not use it when the object content is big in size.

Example:

```
- python osscmd cat oss://mybucket/myobject
```

meta

Command instructions:

meta oss://bucket/object

Read the meta information of the object and print it out. The meta information includes the content-type, file length, custom meta, etc.

Example:

```
- python osscmd meta oss://mybucket/myobject
```

copy

Command instructions:

copy oss://source_bucket/source_object oss://target_bucket/target_object --headers="key1:value1#key2:value2"

Copy the source object of the source bucket to the destination object in the destination bucket.

Example:

```
- python osscmd copy oss://bucket1/object1 oss://bucket2/object2
```

rm(delete,del)

Command instructions:

rm(delete,del) oss://bucket/object

Delete object.

Example:

```
- python osscmd rm oss://mybucket/myobject
- python osscmd delete oss://mybucket/myobject
- python osscmd del oss://mybucket/myobject
```

signurl(sign)

Command instructions:

signurl(sign) oss://bucket/object --timeout=[timeout_seconds]

Generate a URL containing the signature and specify the timeout value. This is applicable to the scenario where the private bucket provides the specified object for others’ accesses.

Example:

```
- python osscmd sign oss://mybucket/myobject
- python osscmd signurl oss://mybucket/myobject
```

Mutipart commands

init

Command instructions:

init oss://bucket/object

Initiate and generate an Upload ID. The Upload ID can be used in combination with the multiupload command.

Example:

- python osscmd init oss://mybucket/myobject

listpart

Command instructions:

listpart oss://bucket/object --upload_id=xxx

Show the uploaded parts of an Upload ID in the designated object. See OSS API Reference for related concepts. The Upload ID must be designated.

Example:

- python osscmd listpart oss://mybucket/myobject --upload_id= 75835E389EA648C0B93571B6A46023F3

listparts

Command instructions:

listparts oss://bucket

Show the uncompleted multipart Upload ID and objects in the bucket. When you want to delete a bucket but system prompts that the bucket is not empty, this command can be used to check whether there are multipart contents.

Example:

- python osscmd listparts oss://mybucket

getallpartsize

Command instructions:

getallpartsize oss://bucket

Show the total size of parts of the existing Upload ID in the bucket.

Example:

```
- python osscmd getallpartsize oss://mybucket
```

cancel

Command instructions:

cancel oss://bucket/object --upload_id=xxx

Terminate the Multipart Upload event of the Upload ID.

Example:

```
- python osscmd cancel oss://mybucket/myobject --upload_id=
  D9D278DB6F8845E9AFE797DD235DC576
```

multiupload(multi_upload,mp)

Command instructions:

multiupload(multi_upload,mp) localfile oss://bucket/object --check_md5=false --thread_num=10

Upload local files to the OSS by multipart.

Example:

```
- python osscmd multiupload /tmp/localfile.txt oss://mybucket/object
- python osscmd multiup_load /tmp/localfile.txt oss://mybucket/object
- python osscmd mp /tmp/localfile.txt oss://mybucket/object
```

Command instructions:

multiupload(multi_upload,mp) localfile oss://bucket/object --upload_id=xxx --thread_num=10 --max_part_num=1000 --check_md5=false

Upload local files to the OSS by multipart. The part count of the local file is defined in max_part_num. This command will first judge whether the ETag of corresponding parts of the Upload ID is consistent with the MD5 value of the local file. If yes, the upload will be skipped. So if an Upload ID is generated before use, it will be included as a parameter. Even if the upload fails, it can be resumed by repeating the multiupload command. --check_md5=false indicates that when the files are being uploaded, the Content-MD5 request header will not undergo verification. True indicates that the Content-MD5 request header will undergo verification.

Example:

- python osscmd multiupload /tmp/localfile.txt oss://mybucket/object --upload_id= D9D278DB6F8845E9AFE797DD235DC576
- python osscmd multiup_load /tmp/localfile.txt oss://mybucket/object --thread_num=5
- python osscmd mp /tmp/localfile.txt oss://mybucket/object --max_part_num=100

copylargefile

Command instructions:

copylargefile oss://source_bucket/source_object oss://target_bucket/target_object --part_size=10*1024*1024 --upload_id=xxx

When copying a large file of over 1G, the object can be copied to the destination location through multipart (The source bucket and the destination bucket must be in the same region). The upload_id is an optional parameter. If you need to resume the transmission of a multipart copy event, you can include the upload_id. The part_size is used to define the part size. A single part should be 100KB at minimal, and up to 10,000 parts are supported. If the set value of part_size conflicts with the OSS limit, the application will automatically adjust the part size.

Example:

- python osscmd copylargefile oss://source_bucket/source_object oss://target_bucket/target_object --part_size=10*1024*1024

uploadpartfromfile (upff)

Command instructions:

uploadpartfromfile (upff) localfile oss://bucket/object --upload_id=xxx --part_number=xxx

This command is mainly used for test and not recommended for actual use.

uploadpartfromstring(upfs)

Command instructions:

uploadpartfromstring(upfs) oss://bucket/object --upload_id=xxx --part_number=xxx --data=xxx

This command is mainly used for test and not recommended for actual use.

ossprobe

Introduction

The ossprobe is an OSS access detection tool used to troubleshoot problems caused by network errors or incorrect settings of basic parameters during the upload and download processes. If an error occurs after you run a command to upload or download data, the ossprobe displays the possible cause to help you identify the error quickly.

Version

Version: 1.0.0

Key functions

- Checks whether the network environment is normal
- Checks whether basic parameters are correct
- Tests the upload and download speeds

Platforms

- Linux
- Windows
- Mac

Download software

- windows64 ossprobe
- linux64 ossprobe
- mac ossprobe

Detect download problems

Usage

```
    ossprobe --download  [-i AccessKeyId] [-k AccessKeySecret] [-p EndPoint] [-b BucketName] [-o ObjectName] [-t LocalPath]
[-f Url] [-a Address]

-f --from Object的Url
-i --id AccessKeyId
-k --key AccessKeySecret
-p --endpoint EndPoint
```

```
-b --bucket BucketName
-o --object ObjectName
-t --to Save path for the downloaded content. By default, it is the path to a temporary file in the current directory.
-a --addr Network address for detection. The default address is www.aliyun.com. If you are using private cloud,
select an accessible address in the private cloud.

TIP: If the -f parameter is present, a URL is used for download. If the -f parameter is not present, you must set the
AccessKeyID, AccessKeySecret, EndPoint, and BucketName parameters.
```

Example

To check whether URL-based download is normal (How to obtain a URL), run the following commands:

Method	Command
Download from a specified URL	ossprobe --download -f Url
Download from a specified URL and save the downloaded content to a specified file	ossprobe --download -f Url -t tmp/example.txt
Download from a specified URL and detect the network condition of a specified address	ossprobe --download -f Url -a Addr

To check whether download using specified parameters (AccessKeyID, AccessKeySecret, EndPoint, and BucketName) is normal, run the following commands:

Method	Command
Download a random file	ossprobe --download -i AccessKeyId -k AccessKeySecret -p EndPoint -b BucketName
Download a specified file	ossprobe --download -i AccessKeyId -k AccessKeySecret -p EndPoint -b BucketName -o ObjectName
Download a specified file and save the downloaded content to a specified local file	ossprobe --download -i AccessKeyId -k AccessKeySecret -p EndPoint -b BucketName -o ObjectName -t tmp/example.txt
Download a random file and detect the network condition of a specified address	ossprobe --download -i AccessKeyId -k AccessKeySecret -p EndPoint -b BucketName -a Addr

TIP:

- The file you downloaded is a binary executable program, and you need to add the ossprobe executable permissions through chmod +x ossprobe in the Linux system.
- By default, the -t parameter indicates the path to a temporary file in the current directory (the file name format is ossfilestore20160315060101).
- If the -t parameter indicates a directory, a temporary file is generated in the directory to save data (the file name format is ossfilestore20160315060101).
- If a file is downloaded from a URL, the file is named after the last string following the

forward slash “/ ” in the URL. For example, if the URL is http://aliyun.com/a.jpg, then the file is saved as a.jpg.

Detect upload problems

Usage

```
ossprobe --upload -i AccessKeyId -k AccessKeySecret -p EndPoint  -b BucketName [-m normal|append|multipart]
[-s UploadFilePath] [-o ObjectName] [-a Addr]

-i --id AccessKeyID
-k --key AccessKeySecret
-p --endpoint EndPoint
-b --bucket BucketName
-s --src Path to the file you want to upload. By default, it is the path to a local temporary file.
-m --mode File upload mode. The default is normal upload.
-o --object Uploaded object name. By default, the object name is the name of the uploaded file if -s is not null. If -s
is null, by default, the object name is the name of the temporary file starting with tem.
-a --addr Network address for detection. The default address is the address of the Alibaba Cloud website. If you are
using private cloud, select an accessible address in the private cloud.
```

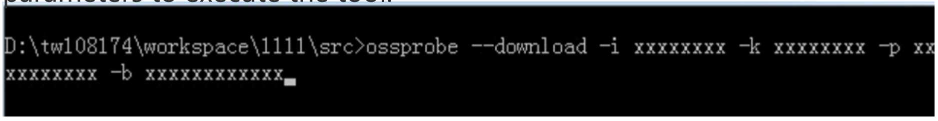
Example

Method	Command
Generate a temporary file and upload it in normal mode	ossprobe --upload -i AccessKeyId -k AccessKeySecret -p EndPoint -b BucketName
Generate a temporary file and upload it in append mode	ossprobe --upload -i AccessKeyId -k AccessKeySecret -p EndPoint -b BucketName -o ObjectName -m append
Generate a temporary file and upload it in multipart mode	ossprobe --upload -i AccessKeyId -k AccessKeySecret -p EndPoint -b BucketName -o ObjectName -m multipart
Upload specified content in multipart mode	ossprobe --upload -i AccessKeyId -k AccessKeySecret -p EndPoint -b BucketName -o ObjectName -m multipart -s src
Upload specified content in multipart mode and specify the object name	ossprobe --upload -i AccessKeyId -k AccessKeySecret -p EndPoint -b BucketName -m multipart -s src -o example.txt
Generate a temporary file, upload it in normal mode, and detect the network condition of a specified address	ossprobe --upload -i AccessKeyId -k AccessKeySecret -p EndPoint -b BucketName -a Addr

TIP: The name of a randomly generated file starts with ossuploadtmp.

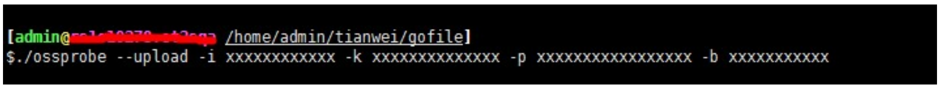
Platform differences

- Windows
  Press Win+R to bring up the “Run” dialog box, enter cmd, and press Enter. On the command-line interface (CLI), enter the path to the tool and fill in related detection parameters to execute the tool.



```
D:\tw108174\workspace\1111\src>ossprobe --download -i xxxxxxxx -k xxxxxxxx -p xx
xxxxxxxx -b xxxxxxxxxxxx
```

- Linux and Mac
  Open the terminal. On the displayed interface, enter the path to the tool and fill in related detection parameters to execute the tool.



```
[admin@[redacted] /home/admin/tianwei/gofile]
$./ossprobe --upload -i xxxxxxxxxxxx -k xxxxxxxxxxxxxx -p xxxxxxxxxxxxxxxxx -b xxxxxxxxxxx
```

View report data

After command execution, a report named logOssProbe20060102150405.txt is generated (the numbers following logOssProbe indicate the formatted date of report generation). The possible error cause is printed in command line mode. If you think the error message is not specific, you can view the report. If the problem persists, you can submit a ticket attached with the detection report.

Console display

The console displays the following main information:

- After execution, the steps marked with × fail, whereas the steps not marked with × are successful.
- The result indicates whether the upload or download operation is successful. If the upload or download operation is successful, the console displays the file size and upload/download time.
- The “Suggested Change” column shows the error cause or change suggestions.
- If you are familiar with OSS error codes, you can perform troubleshooting based on the error message returned by OSS.
- The “Log Info” columns shows the log name and address, allowing you to find the log.

(TIP: No change suggestions may be given when an error is detected. When this happens, perform troubleshooting based on the returned error code by referring to OSS error code.)

Log file

Different from console display, log files contain network detection details. Ping is used to detect a specified network or the network of a specified EndPoint, tracert is used to detect the route for EndPoint access, and nslookup is used for DNS detection.

References

OSS error code

Naming conventions of buckets and objects

How to obtain a URL

Official migration tool