s3cmd S3 command line

START HERE

s3cmd --configure
Set up keys and endpoint

s3cmd mb s3://<bucket>
Make a bucket

s3cmd ls [s3://<bucket>]
List buckets or objects

s3cmd put <file> s3://<bucket>/
Upload a file

s3cmd get s3://<bucket>/<key> <file>
Download an object

s3cmd sync <dir>/ s3://<bucket>/<prefix>/
Mirror a directory

s3cmd del s3://<bucket>/<key>
Delete an object

s3cmd signurl s3://<bucket>/<key> +3600
Temporary download link

CONCEPTS

s3cmd reads ~/.s3cfg. For S3-compatible stores (Ceph, MinIO, Wasabi) set host_base and host_bucket there, or pass --host and --host-bucket.

~/.s3cfg keys, endpoint
↓ loads
s3cmd command + options
↓ signs and sends
Bucket s3://bucket
↓ holds
Objects key = prefix/name

A trailing slash matters: sync <dir>/ copies the contents, sync <dir> puts the directory name into the key. Always try -n first.

SETUP

s3cmd --configure
Interactive setup, writes ~/.s3cfg

-c <file>
Use another config file

--host=<host> --host-bucket=<tmpl>
Point at an S3-compatible endpoint
Template such as %(bucket)s.host. Without virtual-host DNS, use the host name alone as the template.

BUCKETS

s3cmd mb s3://<bucket>
Make a bucket

s3cmd mb s3://<bucket> --region=<region>
Make a bucket in a region

s3cmd rb s3://<bucket>
Remove an empty bucket

s3cmd ls
List your buckets

s3cmd du -H [s3://<bucket>]
Disk usage, human readable

LIST OBJECTS

s3cmd ls s3://<bucket>/<prefix>/
List one prefix

s3cmd ls -r s3://<bucket>
List recursively

UPLOAD AND DOWNLOAD

s3cmd put <file>... s3://<bucket>/[<prefix>]
Upload files

put -r <dir> s3://<bucket>/
Upload a directory tree

put -P <file> s3://<bucket>/
Upload world-readable

put --storage-class=<class>
Choose a storage class
STANDARD, STANDARD_IA, ONEZONE_IA, INTELLIGENT_TIERING, GLACIER or DEEP_ARCHIVE.

put --add-header=<Name:Value>
Set an HTTP header such as Cache-Control

put --multipart-chunk-size-mb=<n>
Set the multipart chunk size
Default 15 MB, minimum 5 MB.

s3cmd get s3://<bucket>/<key> [<file>]
Download an object

get -r s3://<bucket>/<prefix>/ <dir>/
Download a prefix

get --continue
Resume a partial download

s3cmd cp s3://<b1>/<k1> s3://<b2>/<k2>
Copy between keys or buckets

s3cmd mv s3://<b1>/<k1> s3://<b2>/<k2>
Move an object

SYNC

s3cmd sync <dir>/ s3://<bucket>/<prefix>/
Upload changed files

SYNC (cont.)

s3cmd sync s3://<bucket>/<prefix>/ <dir>/
Download changed objects

-n
Dry run: show what would happen
Still makes listing requests.

--delete-removed
Delete destination extras
Combine with -n first, and cap with --max-delete.

--max-delete=<n>
Refuse to delete more than n

--exclude=<glob> / --include=<glob>
Filter by pattern
Includes override earlier excludes.

--no-check-md5
Compare sizes only (faster)
May miss changed files of equal size.

DELETE

s3cmd del s3://<bucket>/<key>
Delete an object

s3cmd rm -r s3://<bucket>/<prefix>/
Delete a whole prefix
rm is an alias for del.

del --max-delete=<n>
Limit how many are deleted

s3cmd restore s3://<bucket>/<key>
Restore from Glacier

ACCESS AND SHARING

s3cmd setacl --acl-public s3://<bucket>/<key>
Make an object public

setacl --acl-private
Restrict to the owner

setacl -r
Apply to every object under a prefix

setacl --acl-grant=<perm>:<id or email>
Grant a permission to a user
Perms: read, write, read_acp, write_acp, full_control, all.

ACCESS AND SHARING (cont.)

s3cmd signurl s3://<bucket>/<key> +<seconds>
Pre-signed URL, relative expiry

METADATA AND LIFECYCLE

s3cmd expire s3://<bucket> --expiry-days=<n>
Auto-expire objects
Add --expiry-prefix=<p> to limit it.

s3cmd multipart s3://<bucket>
List unfinished multipart uploads

s3cmd abortmp s3://<bucket>/<key> <id>
Abort a multipart upload

DEBUG

-d
Debug output with HTTP traffic

-v
Verbose output

RECIPES

Safe backup mirror

```
s3cmd sync -n --delete-removed
--max-delete=20 ./data/ s3://
backups/data/
# looks right? repeat without -
n
s3cmd sync --delete-removed --
max-delete=20 ./data/ s3://
backups/data/
```

Publish a static site

```
s3cmd sync -P --
exclude='*.tmp' ./public/ s3://
my-site/
```

Share a file for an hour

```
s3cmd put report.pdf s3://
files/report.pdf
s3cmd signurl s3://files/
report.pdf +3600
```

Use an S3-compatible server

```
s3cmd --
host=minio.example.com:9000 --
host-
bucket=minio.example.com:9000
ls
```