AWS CLI Amazon cloud CLI

CONCEPTS

Shape: aws <service> <operation> [--options]. Add help at any level. Always check sts get-caller-identity before changing anything.

Command aws ec2 describe-...
↓ profile + region
Credentials env, config, SSO, role
↓ signed request
AWS API JSON response
↓ --query, --output
Your terminal json, table, text

This sheet covers AWS CLI v2. Output goes through a pager by default; AWS_PAGER="" or --no-cli-pager turns it off for scripts.

SETUP AND PROFILES

`aws configure`
Prompt for keys, region and output

`aws configure --profile <name>`
Create or edit a named profile

`aws configure sso`
Set up an IAM Identity Center profile

`aws sso login --profile <name>`
Sign in through the browser

`aws configure list`
Show where each setting comes from

`aws configure set <key> <value>`
Write one config value

`export AWS_PROFILE=<name>`
Use a profile for the whole shell

`aws sts get-caller-identity`
Show the account and identity in use

GLOBAL OPTIONS

`--profile <name>`
Use this profile for one command

`--region <region>`
Override the region

GLOBAL OPTIONS (cont.)

`--output json|table|text|yaml`
Choose the output format

`--query '<jmespath>'`
Filter and reshape the result

S3 TRANSFERS

`aws s3 ls`
List buckets

`aws s3 ls s3://<bucket>/<prefix>/`
List objects under a prefix

`aws s3 cp <file> s3://<bucket>/<key>`
Upload a file

`aws s3 cp s3://<bucket>/<key> <file>`
Download an object

`aws s3 cp <dir> s3://<bucket>/ --recursive`
Upload a folder

`aws s3 sync <dir> s3://<bucket>/<prefix>`
Make the target match the source

`aws s3 rm s3://<bucket>/<key>`
Delete one object

`aws s3 mb s3://<bucket>`
Create a bucket

`--exclude '<glob>' --include '<glob>'`
Filter transfers (later flags win)

`--dryrun`
Preview s3 cp, sync, mv or rm

`aws s3 presign s3://<bucket>/<key> --expires-in <sec>`
Make a temporary download URL

S3 API

`aws s3api list-objects-v2 --bucket <b> --prefix <p>`
List objects with full metadata

`aws s3api head-object --bucket <b> --key <k>`
Show size, type and metadata

EC2

`aws ec2 describe-instances`
List instances

EC2 (cont.)

`aws ec2 describe-instances --instance-ids <id>`
Show one instance

`aws ec2 describe-instances --filters Name=tag:Name,Values=<name>`
Filter by tag

`aws ec2 start-instances --instance-ids <id>`
Start an instance

`aws ec2 stop-instances --instance-ids <id>`
Stop an instance

`aws ec2 run-instances --image-id <ami> --instance-type <type> --key-name <key>`
Launch an instance

IAM

`aws sts assume-role --role-arn <arn> --role-session-name <n>`
Get temporary role credentials

OUTPUT AND QUERIES

`--query 'Reservations[].Instances[].InstanceId'`
Flatten to a list of values

`--query 'Buckets[?starts_with(Name, \`<p>\`)].Name'`
Filter list items

`--query 'Reservations[].Instances[].{ID:InstanceId, State:State.Name}'`
Build a custom object per item

`--output text`
Plain tab-separated values for scripts

HELP AND DISCOVERY

`aws <service> help`
List a service's operations

`aws <service> <operation> help`
Show options and examples

`aws logs tail <group> --follow`
Stream CloudWatch logs