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

aws configure list-profiles
List all profile names

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

--dry-run
Check permissions without acting (EC2)

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

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