Azure CLI Microsoft cloud CLI

Login user, service principal, identity → `token cache` → **Subscription** billing and access scope → `--resource-group` → **Resource group** container for resources → `az <group> <cmd>` → **Resource** vm, aks, storage, ... → `--query, -o` → **Your terminal** json, table, tsv

CONCEPTS

Shape: az <group> [<subgroup>] <command> --options. Add -h at any level. Check az account show before changing anything.

Resource group, location and name are the three arguments most commands need. Set defaults with az config set defaults.group=<rg> defaults.location=<region>.

LOGIN AND ACCOUNTS

`az login`
Sign in through the browser

`az login --use-device-code`
Sign in on a headless machine

`az account show`
Show the active subscription

`az account list -o table`
List subscriptions you can use

`az account set -s <name-or-id>`
Switch subscription

RESOURCE GROUPS

`az group list -o table`
List resource groups

`az group create -n <rg> -l <region>`
Create a resource group

`az group delete -n <rg> --yes --no-wait`
Delete a group and all its contents

`az resource list -g <rg> -o table`
List everything in a group

VIRTUAL MACHINES

`az vm list -g <rg> -o table`
List VMs

`az vm create -g <rg> -n <name> --image Ubuntu2204 --generate-ssh-keys`
Create a Linux VM

`az vm start -g <rg> -n <name>`
Start a VM

`az vm deallocate -g <rg> -n <name>`
Stop and release compute billing

STORAGE

Storage commands default to account keys. Add --account-name <acct> --auth-mode login to use your Entra ID login instead.

`az storage account list -o table`
List storage accounts

`az storage account create -n <acct> -g <rg> -l <region> --sku Standard_LRS`
Create a storage account

`az storage container create -n <container>`
Create a blob container

`az storage blob upload -f <file> -c <container> -n <blob>`
Upload a blob

`az storage blob list -c <container> -o table`
List blobs

AKS AND CONTAINERS

`az aks get-credentials -g <rg> -n <name>`
Merge cluster access into kubeconfig

ROLES AND IDENTITY

`az role assignment list --assignee <user-or-id> --all -o table`
List a principal's roles

`az role assignment create --assignee <id> --role <role> --scope <scope>`
Grant a role

`az role assignment delete --assignee <id> --role <role> --scope <scope>`
Remove a role

OUTPUT AND --QUERY

`-o table`
Human-readable table

`-o json / -o jsonc`
JSON (default) or coloured JSON

`-o tsv`
Plain values for scripts

`--query "[].name"`
Pick one field from every item

`--query "[].{Name:name, Loc:location}"`
Build a custom table

OUTPUT AND --QUERY (cont.)

`--query "[?location=='westeurope'].name"`
Filter items

JMESPath quoting

Literal	Write it as
String	`'value'` (single quotes)
Number or false	`` `50` ``, `` `false` `` (backticks)
Whole query (bash)	`"..."` or `'...'`
Backticks in bash "..."	escape them: `` \`50\` ``

In bash wrap the query in single quotes so backticks stay literal; in PowerShell double the backticks or escape them. Double quotes inside a filter give empty output.

-o tsv strips JSON quotes, so VAR=$(az ... -o tsv) gives a clean value.

HELP AND EXTENSIONS

`az <group> -h`
List subgroups and commands