

Terraform CLI — Quick View

Initializing			
	Command	Description	Example
	terraform init	Initialize working directory, download providers/modules, configure backend. Required before any plan/apply.	terraform init
	terraform init -backend-config	Load backend config file or key=value pairs; supports S3, GCS, TFC.	terraform init -backend-config=prod.s3.tfbackend
	terraform init -upgrade	Re-check registry for newer allowable provider/module versions and upgrade if needed.	terraform init -upgrade
	terraform init -migrate-state	Migrate existing state to new backend (S3→TFC, etc.).	terraform init -migrate-state
	terraform init -reconfigure	Ignore cached backend settings; force new re-initialization.	terraform init -reconfigure
	terraform get	Download modules referenced by root module.	terraform get -update
	terraform metadata	Show internal metadata (Terraform 1.5+).	terraform metadata

Planning			
	Command	Description	Example
	terraform plan	Preview infra changes; shows additions, updates, destroys. Essential before apply.	terraform plan
	terraform plan -out=<file_name>	Save a binary plan file for reproducible apply.	terraform plan -out=prod.tfplan
	terraform plan -refresh-only	Detect drift without modifying state.	terraform plan -refresh-only
	terraform plan -var '<key>=<value>' / -var-file	Pass input variables from CLI or file.	terraform plan -var-file=prod.tfvars
	terraform plan -replace <resource>	Show the plan. Force recreation of specific resource instances.	terraform plan -replace=aws_instance.web
	terraform plan -target <resource>	Create Plan for specific module or resource. Partial planning—can miss dependencies; only for recovery/emergencies.	terraform plan -target=aws_s3_bucket.logs

Apply & Destroy			
	Command	Description	Example
	terraform apply	Apply the plan and make real cloud changes.	terraform apply
	terraform apply <planfile>	Execute saved plan exactly as generated; prevents drift.	terraform apply prod.tfplan
	terraform apply -auto-approve	Skip approval for automation pipelines.	terraform apply -auto-approve
	terraform apply -target <resource>	To create or update only specific resource	terraform apply -target=aws_s3_bucket.logs
	terraform apply -replace <resource>	Force the replacement of a specific resource (destroyed/recreated)	terraform apply -replace=aws_instance.web -replace=module.app.aws_autoscaling_group.main
	terraform destroy	Destroy entire infrastructure; requires caution.	terraform destroy
	terraform destroy -target <resource>	Destroy the specific resource. (considered a niche/edge-use feature)	terraform destroy -target=module.storage.aws_s3_bucket.logs

State Management			
	Command	Description	Example
	terraform show	Show the current state in human-readable form	terraform show
	terraform show <file>	Show a human-readable state or plan from mentioned file	terraform show plan.tfplan
	terraform show -json <file>	Full JSON representation of plan/state.	terraform show -json plan.tfplan
	terraform state list	List all resources tracked in state.	terraform state list
	terraform state show <addr>	Show attributes of resource in state.	terraform state show aws_vpc.main
	terraformstate mv <source> <destination>	Move resource addresses within state, useful after refactoring.	terraform state mv aws_iam_user.dev module.users.aws_iam_user.dev
	terraform state rm <resource>	Remove resource from state without deleting it—risky.	terraform state rm aws_s3_bucket.orphan
	terraform state replace-provider <from> <to>	Change provider references in state—required after upgrading providers.	terraform state replace-provider registry.terraform.io/-/aws registry.terraform.io/hashicorp/aws
	terraform state pull	Download remote state to stdout.	terraform state pull
	terraform force-unlock <lock_id>	Release a stuck remote backend lock.	terraform force-unlock -force 1234
	terraform import <resource> <remote_id>	Map existing cloud resources into Terraform state.	terraform import aws_instance.web i-012345678
	terraform refresh (deprecated)	Updates state from cloud, but replaced by plan/apply -refresh-only.	terraform refresh

Outputs			
	Command	Description	Example
	terraform output	Show all output values from root module.	terraform output
	terraform output <name>	Show a specific output Value	terraform output db_password
	terraform output -json	Structured machine output.	terraform output -json
	terraform output -raw <name>	Print raw value (string/number/bool).	terraform output -raw db_password
	terraform show -json	Full JSON representation of plan/state.	terraform show -json plan.tfplan

Workspaces			
	Command	Description	Example
	terraform workspace list	List workspaces. The Workspace having a * sign it the current workspace	terraform workspace list
	terraform workspace show	Show the name of current workspace	terraform workspace show
	terraform workspace new <name>	Create isolated state.	terraform workspace new dev
	terraform workspace select <name>	Switch workspace.	terraform workspace select prod
	terraform workspace delete <name>	Delete workspace.	terraform workspace delete dev

Providers			
	Command	Description	Example
	terraform providers	Show all providers required.	terraform providers
	terraform providers mirror	Create local mirror repo for offline use.	terraform providers mirror ./mirror
	terraform providers schema -json	Output full provider resource/data source schema.	terraform providers schema -json > schema.json
	terraform login/logout	Authenticate to Terraform Cloud or private registries.	terraform login app.terraform.io

Utilities & Tools			
	Command	Description	Example
	terraform console	Evaluate expressions interactively.	terraform console
	terraform graph	Output Graphviz dependency graph.	terraform graph dot -Tpng > graph.png
	terraform fmt	Reformat code to canonical HCL style.	terraform fmt -recursive
	terraform validate	Validate syntax and provider config.	terraform validate
	terraform modules	Show declared modules in working directory.	terraform modules
	terraform -chdir (global)	Run a Terraform command from another directory.	terraform -chdir=prod plan
	terraform -help	Show help for any subcommand.	terraform plan -help

For More on this see my Git repository: <https://github.com/mohakhan03uk/terraform/>