

Chapter 3: How to Manage Terraform State

what is?

- terraform.tfstate JSON file
- output **terraform plan** is a «diff» with **terraform.tfstate**
- state file is a private API, for internal use of terraform and can change in any moment
 - to modify, **terraform import** and **terraform state**
- share state in workgroups
 - shared location
 - not good idea to share in a git (manual errors, forget commit last update, no-locking, secrets exposed, etc)
 - local backend VS remote backend (supported by Amazon S3, Azure Storage, Google Cloud Storage, Hashicorp's Terraform Cloud)
 - locked
 - **-lock-timeout=10m** waits for locked state to relaunch command
 - isolation (big structures, environments)
- terraform backends limitations
 - chicken-and-egg situation (create local backend to create the infrastructure needed for remote backend)
 - no variables or references in backend block (copy-and-paste in all projects)
 - be aware to use unique «key» (paths) to store terraform.tfstate of every project
 - use **backend.hcl** for fixed information in backend block and **backend.tf** for variable information (like path), and `terraform init -backend-config=backend.hcl`
 - use **terragrunt**
- Isolating State Files
 - separate by environment
 - what happens when terraform brokes:
 - <https://charity.wtf/2016/03/30/terraform-vpc-and-why-you-want-a-tfstate-file-per-env/>
 - by workspaces
 - `terraform workspace show`
 - `terraform workspace new <NAME>`
 - `terraform workspace list`
 - `terraform workspace select <NAME>`
 - variables
 - `terraform.workspace`
 - drawbacks¹⁾:
 - all state files (for each workspace) are in the same backend → same credentials/authentication
 - workspaces are not visible in the code, more difficult to have a global point of view
 - human errors applying changes on the incorrect workspace
 - by Isolation via File Layout

¹⁾

inconvenientes

From:
<https://matebcn.eu/> - miguel angel torres egea

Permanent link:
<https://matebcn.eu/info:libros:terraform-upandrunning:cap3>

Last update: **15/05/2020 14:06**



