

Manual Guide

REQUIREMENTS: Terraform needs to be installed in your machine.

I. Installing and setting Vault

1. First download vault form: <https://developer.hashicorp.com/vault/downloads>.
2. The “./vault/data” directory that raft storage backend uses must exist in the same directory as the “config.hcl” file, so you must create it:

```
mkdir -p ./vault/data
```

3. `vault server -config=<Path of your config.hcl file>`

Then in another (terminal/cmd) tab run (don't close the first tab):

4. `$env:VAULT_ADDR = "http://127.0.0.1:8200"`

5. `vault operator init` # when initializing Vault for the first time you will get the 5 **Unseal Keys** and the **Root Token** preserve them in a secret place.

6. `vault operator unseal` # repeat the command three times (each time providing the corresponding unsealing key).

7. `vault login` # provide the Initial Root Token

8. `vault secrets enable aws`

9. `vault write aws/config/root \`

```
access_key=<YOUR_AWS_ACCESS_KEY> \
```

```
secret_key=<YOUR_AWS_SECRET_KEY> \
```

```
region=<AWS_REGION>
```

10. `vault write aws/roles/terraform-role credential_type=iam_user`

```
policy_arns=arn:aws:iam::aws:policy/AdministratorAccess
```

11. `$env:VAULT_TOKEN="your-vault-token"`

II. Running Vault

after installing and setting up vault run the following commands to start and run the vault server:

1. `vault server -config=<Path of your config.hcl file>`

Then in another (terminal/cmd) tab run (don't close the first tab):

2. `$env:VAULT_ADDR = "http://127.0.0.1:8200"`

3. `vault operator init` # when initializing Vault for the first time you will get the 5 Unseal Keys and the Root Token preserve them in a secret place.

4. `vault operator unseal` # repeat the command three times (each time providing the corresponding unsealing key).

5. `vault login` # provide the Initial Root Token

III. running Terraform

after running vault lets run Terraform with those commands:

1. `terraform init`

2. `terraform plan`

3. `terraform apply` # if you wish to apply this configuration enter yes.

NOTE: The "I. Installing and setting Vault" is done once and the others need to be done whenever you wish to run terraform.