
Terraform Modules

unknown

Jan 29, 2022

TABLE OF CONTENTS

- 1 Terraform Modules 3**
 - 1.1 Usage 3
 - 1.2 Development 4
 - 1.3 Links 4
- 2 Example 5**
- 3 Example 7**
 - 3.1 Ansible User 7
 - 3.2 SSHD Config 7
- 4 Example 9**

For Easy Provide Infrastructure, here some Terraform modules. The Modules wrappped the [hcloud](#) terraform provider, with some preconfiguration elements. This modules build the basic Infrastructure, from [nolte/personal-storage-infrastructure](#) and [nolte/minecraft-infrastructure](#).

TERRAFORM MODULES

Repository for Shared, reuseable Terraform Modules. At the Moment the modules only useable for the [hetzner.de/cloud](#), with the [terraform](#) Provider.

1.1 Usage

```
module "private_access_key" {  
    source = "git::https://github.com/nolte/terraform-infrastructure-modules.git//  
    ↪[module_name]?ref=v0.0.5.dev"  
    ...  
}
```

1.1.1 Modules

module	description
project_access_elements	Handle the Access Keys from a Project (wrapper for the hcloud_ssh_key).
storage_elements	Handle Storage Volumes (wrapper for hcloud_volume).
computing_elements	Handle Computing Instances (wrapper for hcloud_server), execute a preconfiguration with CloudInit.

1.2 Development

```
virtualenv -p python3 ~/venvs/development
source ~/venvs/development/bin/activate
pip install -r requirements.txt
pre-commit install
```

Add Required asdf Plugin Repositories for install additional tools.

```
asdf plugin-add terraform-docs https://github.com/looztra/asdf-terraform-docs
asdf plugin-add task https://github.com/nolte/asdf-task.git
```

```
asdf install
```

List Existing tasks

```
$ task -l

task: Available tasks for this project:
* default:                                Generate All Module Readme Files
* tfdocs_computing_elements:              Readme for Computing Elements
* tfdocs_project_access_elements:         Readme for Project Access Elements
* tfdocs_storage_elements:                Readme for Storage Elements
```

1.2.1 Testing

```
export PASSWORD_STORE_DIR=~/.password-store
export HCLOUD_TOKEN=$(pass internet/hetzner.com/projects/minecraft/terraform-token)
export TF_machine_access_pass_path=private/keyfiles/ssh/online/onlineSecond_rsa.pub

go test -v -timeout 30m
```

1.2.2 Docs

```
tox -e docs
```

1.3 Links

- [nolte/gh-plumbing](#) for a standardized build process.
- [hcloud](#) Terraform Provider.

EXAMPLE

Listing 1: Handle a Storage Volume

```
module "minio_storage_runtime" {  
  source      = "git::https://github.com/nolte/terraform-infrastructure-modules.git//  
↪storage_elements?ref=v0.0.5.dev"  
  
  storage_name = "minio_storage_runtime"  
  storage_size = 30  
  storage_labels = {  
    service = "storagebox"  
    type    = "runtime_storage"  
  }  
}
```

For more Information take a look to the source at `storage_elements/main.tf` and `storage_elements/variables.tf`

EXAMPLE

Crate a Ready For Configure VM, with mounted Volumes and preconfigured Ansible User (ready for, [nolte/ansible_playbook-baseline-online-server](#)).

Listing 1: handle a reconfigured computing instance

```
module "minio_computing_elements" {  
  source = "git::https://github.com/nolte/  
↳terraform-infrastructure-modules.git//computing_elements?ref=v0.0.5.dev"  
  
  computing_instance_name = "${var.minio_computing_instance_  
↳name}"  
  computing_instance_usage_root_key = "${data.hcloud_ssh_key.machine_key.  
↳id}"  
  computing_instance_labels = "${local.merged_minio_computing_  
↳instance_labels}"  
  computing_instance_ssh_machine_key_id_var = "${data.hcloud_ssh_key.machine_key.  
↳public_key}"  
  computing_instance_ssh_private_key_id_var = "${data.hcloud_ssh_key.private_key.  
↳public_key}"  
  computing_instance_additional_volumes_cloud_init = "${data.template_file.cloudinit_  
↳mounts.rendered}"  
}
```

you will find some example used in [nolte/personal-storage-infrastructure](#) or [nolte/minecraft-infrastructure](#).

3.1 Ansible User

3.2 SSHD Config

EXAMPLE

Required: [camptocamp/terraform-provider-pass](#)

Listing 1: Create a SSH Key from given pass path

```
module "management_access_key" {  
  source = "git::https://github.com/nolte/terraform-infrastructure-modules.git//project_  
↪access_elements?ref=v0.0.5.dev"  
  
  name      = "management_key"  
  pass_path = "${var.machine_access_pass_path}"  
  labels = {  
    usage = "machine"  
  }  
}
```

For more Information take a look to the source at `project_access_elements/main.tf` and `project_access_elements/variables.tf`