```
rafal@rafal-virtual-machine:~/terraform$ terraform init
Initializing the backend...
Initializing provider plugins...
- Reusing previous version of hashicorp/null from the dependency lock file
- Reusing previous version of terraform-provider-openstack/openstack from the
dependency lock file
- Using previously-installed hashicorp/null v3.2.4
- Using previously-installed terraform-provider-openstack/openstack v1.54.1

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
rafal@rafal-virtual-machine:~/terraform$ terraform plan -var-file="secrets.tfvars"
null_resource.csv_validation: Refreshing state... [id=6933910104420482287]
data.openstack_networking_network_v2.instance_network_lookup["vm1"]: Reading...
data.openstack_networking_network_v2.instance_network_lookup["vm2"]: Reading...
data.openstack_identity_project_v3.target_project: Reading...
data.openstack_networking_network_v2.instance_network_lookup["vm3"]: Reading...
data.openstack_networking_network_v2.instance_network_lookup["vm4"]: Reading...
data.openstack_networking_network_v2.instance_network_lookup["vm5"]: Reading...
data.openstack_identity_project_v3.target_project: Read complete after 0s
[id=b301a728597e4a1a9669a03ca9c40d3f]
data.openstack_networking_secgroup_v2.instance_sg_lookup["vm4"]: Reading...
data.openstack_networking_secgroup_v2.instance_sg_lookup["vm5"]: Reading...
data.openstack_networking_secgroup_v2.instance_sg_lookup["vm3"]: Reading...
data.openstack_networking_secgroup_v2.instance_sg_lookup["vm2"]: Reading...
data.openstack_networking_secgroup_v2.instance_sg_lookup["vm1"]: Reading...
data.openstack_networking_network_v2.instance_network_lookup["vm3"]: Read complete
after 0s [id=ed7ced17-1bfa-409a-b1f4-4b155d0e4e02]
data.openstack_networking_secgroup_v2.instance_sg_lookup["vm3"]: Read complete after 0s
[id=992333f2-d2cb-45bb-b2ff-91492a4aff02]
data.openstack_networking_network_v2.instance_network_lookup["vm1"]: Read complete
after 0s [id=ed7ced17-1bfa-409a-b1f4-4b155d0e4e02]
data.openstack_networking_secgroup_v2.instance_sg_lookup["vm1"]: Read complete after 0s
[id=992333f2-d2cb-45bb-b2ff-91492a4aff02]
data.openstack_networking_network_v2.instance_network_lookup["vm5"]: Read complete
after 0s [id=ed7ced17-1bfa-409a-b1f4-4b155d0e4e02]
data.openstack_networking_secgroup_v2.instance_sg_lookup["vm5"]: Read complete after 0s
[id=992333f2-d2cb-45bb-b2ff-91492a4aff02]
```

```
data.openstack_networking_secgroup_v2.instance_sg_lookup["vm2"]: Read complete after 0s
[id=992333f2-d2cb-45bb-b2ff-91492a4aff02]
data.openstack_networking_network_v2.instance_network_lookup["vm4"]: Read complete
after 0s [id=ed7ced17-1bfa-409a-b1f4-4b155d0e4e02]
data.openstack_networking_secgroup_v2.instance_sg_lookup["vm4"]: Read complete after 0s
[id=992333f2-d2cb-45bb-b2ff-91492a4aff02]
data.openstack_networking_network_v2.instance_network_lookup["vm2"]: Read complete
after 0s [id=ed7ced17-1bfa-409a-b1f4-4b155d0e4e02]

Terraform used the selected providers to generate the following execution plan.
Resource actions are indicated with the following symbols:
  + create

Terraform will perform the following actions:

  # openstack_compute_instance_v2.basic["vm1"] will be created
  + resource "openstack_compute_instance_v2" "basic" {
      + access_ip_v4        = (known after apply)
      + access_ip_v6        = (known after apply)
      + all_metadata        = (known after apply)
      + all_tags            = (known after apply)
      + availability_zone   = (known after apply)
      + created             = (known after apply)
      + flavor_id           = (known after apply)
      + flavor_name         = "m1.tiny"
      + force_delete        = false
      + id                  = (known after apply)
      + image_id            = (known after apply)
      + image_name          = "cirros-0.6.3-x86_64-disk"
      + key_pair            = "mykey"
      + name                = "vm1"
      + power_state         = "active"
      + region              = (known after apply)
      + security_groups     = [
          + "default",
        ]
      + stop_before_destroy = false
      + updated             = (known after apply)

      + network {
          + access_network = false
          + fixed_ip_v4    = (known after apply)
          + fixed_ip_v6    = (known after apply)
          + floating_ip    = (known after apply)
          + mac            = (known after apply)
          + name           = (known after apply)
```

```
        + port           = (known after apply)
        + uuid           = "ed7ced17-1bfa-409a-b1f4-4b155d0e4e02"
      }
  }

# openstack_compute_instance_v2.basic["vm2"] will be created
+ resource "openstack_compute_instance_v2" "basic" {
    + access_ip_v4        = (known after apply)
    + access_ip_v6        = (known after apply)
    + all_metadata        = (known after apply)
    + all_tags            = (known after apply)
    + availability_zone   = (known after apply)
    + created             = (known after apply)
    + flavor_id           = (known after apply)
    + flavor_name         = "m1.tiny"
    + force_delete        = false
    + id                  = (known after apply)
    + image_id            = (known after apply)
    + image_name          = "cirros-0.6.3-x86_64-disk"
    + key_pair            = "mykey"
    + name                = "vm2"
    + power_state         = "active"
    + region              = (known after apply)
    + security_groups     = [
        + "default",
      ]
    + stop_before_destroy = false
    + updated             = (known after apply)

    + network {
        + access_network = false
        + fixed_ip_v4    = (known after apply)
        + fixed_ip_v6    = (known after apply)
        + floating_ip    = (known after apply)
        + mac            = (known after apply)
        + name           = (known after apply)
        + port           = (known after apply)
        + uuid           = "ed7ced17-1bfa-409a-b1f4-4b155d0e4e02"
      }
  }

# openstack_compute_instance_v2.basic["vm3"] will be created
+ resource "openstack_compute_instance_v2" "basic" {
    + access_ip_v4        = (known after apply)
    + access_ip_v6        = (known after apply)
    + all_metadata        = (known after apply)
```

```
      + all_tags            = (known after apply)
      + availability_zone   = (known after apply)
      + created             = (known after apply)
      + flavor_id           = (known after apply)
      + flavor_name         = "m1.tiny"
      + force_delete        = false
      + id                  = (known after apply)
      + image_id            = (known after apply)
      + image_name          = "cirros-0.6.3-x86_64-disk"
      + key_pair            = "mykey"
      + name                = "vm3"
      + power_state         = "active"
      + region              = (known after apply)
      + security_groups     = [
          + "default",
        ]
      + stop_before_destroy = false
      + updated             = (known after apply)

      + network {
          + access_network = false
          + fixed_ip_v4    = (known after apply)
          + fixed_ip_v6    = (known after apply)
          + floating_ip    = (known after apply)
          + mac            = (known after apply)
          + name           = (known after apply)
          + port           = (known after apply)
          + uuid           = "ed7ced17-1bfa-409a-b1f4-4b155d0e4e02"
        }
    }

  # openstack_compute_instance_v2.basic["vm4"] will be created
  + resource "openstack_compute_instance_v2" "basic" {
      + access_ip_v4        = (known after apply)
      + access_ip_v6        = (known after apply)
      + all_metadata        = (known after apply)
      + all_tags            = (known after apply)
      + availability_zone   = (known after apply)
      + created             = (known after apply)
      + flavor_id           = (known after apply)
      + flavor_name         = "m1.tiny"
      + force_delete        = false
      + id                  = (known after apply)
      + image_id            = (known after apply)
      + image_name          = "cirros-0.6.3-x86_64-disk"
      + key_pair            = "mykey"
```

```
      + name                = "vm4"
      + power_state         = "active"
      + region              = (known after apply)
      + security_groups     = [
          + "default",
        ]
      + stop_before_destroy = false
      + updated             = (known after apply)

      + network {
          + access_network = false
          + fixed_ip_v4    = (known after apply)
          + fixed_ip_v6    = (known after apply)
          + floating_ip    = (known after apply)
          + mac            = (known after apply)
          + name           = (known after apply)
          + port           = (known after apply)
          + uuid           = "ed7ced17-1bfa-409a-b1f4-4b155d0e4e02"
        }
    }

  # openstack_compute_instance_v2.basic["vm5"] will be created
  + resource "openstack_compute_instance_v2" "basic" {
      + access_ip_v4        = (known after apply)
      + access_ip_v6        = (known after apply)
      + all_metadata        = (known after apply)
      + all_tags            = (known after apply)
      + availability_zone   = (known after apply)
      + created             = (known after apply)
      + flavor_id           = (known after apply)
      + flavor_name         = "m1.tiny"
      + force_delete        = false
      + id                  = (known after apply)
      + image_id            = (known after apply)
      + image_name          = "cirros-0.6.3-x86_64-disk"
      + key_pair            = "mykey"
      + name                = "vm5"
      + power_state         = "active"
      + region              = (known after apply)
      + security_groups     = [
          + "default",
        ]
      + stop_before_destroy = false
      + updated             = (known after apply)

      + network {
```

```
          + access_network = false
          + fixed_ip_v4    = (known after apply)
          + fixed_ip_v6    = (known after apply)
          + floating_ip    = (known after apply)
          + mac            = (known after apply)
          + name           = (known after apply)
          + port           = (known after apply)
          + uuid           = "ed7ced17-1bfa-409a-b1f4-4b155d0e4e02"
        }
    }

  # openstack_compute_keypair_v2.managed_keys["mykey"] will be created
  + resource "openstack_compute_keypair_v2" "managed_keys" {
      + fingerprint = (known after apply)
      + id          = (known after apply)
      + name        = "mykey"
      + private_key = (sensitive value)
      + public_key  = <<-EOT
            ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAABAQCsI1dw+XzTPVtrimTRM6dvTLqZi8F8pk+w3BJTb5WNjZ54u7PI+t47s0Z
gtFOdHeLMZ01fwNWCbIqL4v83/qwhpoiL1wN9mr2mLX1lScZ16WNPqosSNFLAd6J5qI3pSzrVkhnVrTWHFVWQJD
AnouOx40jKiO0iXcETc+r/1c6pcG/qPik+0BRupVJZweBzrwJJSwPmL1ou4uQ/rxpyiptQ++hmddbYTQuBaUTEm
YZBrpm7ihtuqS1HGjNKxFRvFF9E817Lo8OubeXeOIdC+BzkW9w/AzylnHws/CYTNNXjp+aJz8cRSJoEiKCCZhcS
j/a0HXbpiJC6G1vK1b7PPISt openstack_key
        EOT
      + region      = (known after apply)
      + user_id     = (known after apply)
    }

Plan: 6 to add, 0 to change, 0 to destroy.

Changes to Outputs:
  + created_vm_details    = {
      + vm1 = {
          + id         = (known after apply)
          + ip_address = (known after apply)
        }
      + vm2 = {
          + id         = (known after apply)
          + ip_address = (known after apply)
        }
      + vm3 = {
          + id         = (known after apply)
          + ip_address = (known after apply)
        }
      + vm4 = {
```

```
          + id         = (known after apply)
          + ip_address = (known after apply)
        }
      + vm5 = {
          + id         = (known after apply)
          + ip_address = (known after apply)
        }
    }

| Warning: Argument is deprecated
|
|   with provider["registry.terraform.io/terraform-provider-openstack/openstack"],
|   on main.tf line 26, in provider "openstack":
|   26: provider "openstack" {
|
| Users not using loadbalancer resources can ignore this message. Support for
neutron-lbaas will be removed on next major release. Octavia will be the only supported
method for loadbalancer resources.
| Users using octavia will have to remove 'use_octavia' option from the provider
configuration block. Users using neutron-lbaas will have to migrate/upgrade to octavia.
|
| (and one more similar warning elsewhere)
|
```