

## » opentelekomcloud\_\_images\_\_image\_\_v2

Use this data source to get the ID of an available OpenTelekomCloud image.

### » Example Usage

```
data "opentelekomcloud_images_image_v2" "ubuntu" {
  name = "Ubuntu 16.04"
  most_recent = true
}
```

### » Argument Reference

- **region** - (Optional) The region in which to obtain the V2 Glance client. A Glance client is needed to create an Image that can be used with a compute instance. If omitted, the **region** argument of the provider is used.
- **most\_recent** - (Optional) If more than one result is returned, use the most recent image.
- **name** - (Optional) The name of the image.
- **owner** - (Optional) The owner (UUID) of the image.
- **size\_min** - (Optional) The minimum size (in bytes) of the image to return.
- **size\_max** - (Optional) The maximum size (in bytes) of the image to return.
- **sort\_direction** - (Optional) Order the results in either **asc** or **desc**.
- **sort\_key** - (Optional) Sort images based on a certain key. Defaults to **name**.
- **tag** - (Optional) Search for images with a specific tag.
- **visibility** - (Optional) The visibility of the image. Must be one of "public", "private", "community", or "shared". Defaults to "private".

### » Attributes Reference

**id** is set to the ID of the found image. In addition, the following attributes are exported:

- **checksum** - The checksum of the data associated with the image.
- **created\_at** - The date the image was created.
- **container\_format** - The format of the image's container.
- **disk\_format** - The format of the image's disk.

- **file** - the trailing path after the glance endpoint that represent the location of the image or the path to retrieve it.
- **metadata** - The metadata associated with the image. Image metadata allow for meaningfully define the image properties and tags. See <http://docs.openstack.org/developer/glance/metadefs-concepts.html>.
- **min\_disk\_gb**: The minimum amount of disk space required to use the image.
- **min\_ram\_mb**: The minimum amount of ram required to use the image.
- **protected** - Whether or not the image is protected.
- **schema** - The path to the JSON-schema that represent the image or image
- **size\_bytes** - The size of the image (in bytes).
- **tags** - See Argument Reference above.
- **update\_at** - The date the image was last updated.

## » opentelekomcloud\_networking\_network\_v2

Use this data source to get the ID of an available OpenTelekomCloud network.

### » Example Usage

```
data "opentelekomcloud_networking_network_v2" "network" {
  name = "tf_test_network"
}
```

### » Argument Reference

- **region** - (Optional) The region in which to obtain the V2 Neutron client. A Neutron client is needed to retrieve networks ids. If omitted, the **region** argument of the provider is used.
- **network\_id** - (Optional) The ID of the network.
- **name** - (Optional) The name of the network.
- **matching\_subnet\_cidr** - (Optional) The CIDR of a subnet within the network.
- **tenant\_id** - (Optional) The owner of the network.

### » Attributes Reference

**id** is set to the ID of the found network. In addition, the following attributes are exported:

- **admin\_state\_up** - (Optional) The administrative state of the network.
- **name** - See Argument Reference above.
- **region** - See Argument Reference above.
- **shared** - (Optional) Specifies whether the network resource can be accessed by any tenant or not.

## » opentelekomcloud\_networking\_secgroup\_v2

Use this data source to get the ID of an available OpenTelekomCloud security group.

### » Example Usage

```
data "opentelekomcloud_networking_secgroup_v2" "secgroup" {
  name = "tf_test_secgroup"
}
```

### » Argument Reference

- **region** - (Optional) The region in which to obtain the V2 Neutron client. A Neutron client is needed to retrieve security groups ids. If omitted, the **region** argument of the provider is used.
- **secgroup\_id** - (Optional) The ID of the security group.
- **name** - (Optional) The name of the security group.
- **tenant\_id** - (Optional) The owner of the security group.

### » Attributes Reference

**id** is set to the ID of the found security group. In addition, the following attributes are exported:

- **name** - See Argument Reference above.
- **description** - The description of the security group.
- **region** - See Argument Reference above.

## » opentelekomcloud\_blockstorage\_volume\_v2

Manages a V2 volume resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_blockstorage_volume_v2" "volume_1" {  
  region      = "RegionOne"  
  name        = "volume_1"  
  description = "first test volume"  
  size        = 3  
}
```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to create the volume. If omitted, the **region** argument of the provider is used. Changing this creates a new volume.
- **size** - (Required) The size of the volume to create (in gigabytes). Changing this creates a new volume.
- **availability\_zone** - (Optional) The availability zone for the volume. Changing this creates a new volume.
- **consistency\_group\_id** - (Optional) The consistency group to place the volume in.
- **description** - (Optional) A description of the volume. Changing this updates the volume's description.
- **image\_id** - (Optional) The image ID from which to create the volume. Changing this creates a new volume.
- **metadata** - (Optional) Metadata key/value pairs to associate with the volume. Changing this updates the existing volume metadata.
- **name** - (Optional) A unique name for the volume. Changing this updates the volume's name.
- **snapshot\_id** - (Optional) The snapshot ID from which to create the volume. Changing this creates a new volume.
- **source\_replica** - (Optional) The volume ID to replicate with.
- **source\_vol\_id** - (Optional) The volume ID from which to create the volume. Changing this creates a new volume.
- **volume\_type** - (Optional) The type of volume to create. Changing this creates a new volume.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **size** - See Argument Reference above.
- **name** - See Argument Reference above.
- **description** - See Argument Reference above.
- **availability\_zone** - See Argument Reference above.
- **image\_id** - See Argument Reference above.
- **source\_vol\_id** - See Argument Reference above.
- **snapshot\_id** - See Argument Reference above.
- **metadata** - See Argument Reference above.
- **volume\_type** - See Argument Reference above.
- **attachment** - If a volume is attached to an instance, this attribute will display the Attachment ID, Instance ID, and the Device as the Instance sees it.

## » Import

Volumes can be imported using the `id`, e.g.

```
$ terraform import opentelekomcloud_blockstorage_volume_v2.volume_1 ea257959-eeb1-4c10-8d33-
```

## » opentelekomcloud\_compute\_floatingip\_v2

Manages a V2 floating IP resource within OpenTelekomCloud Nova (compute) that can be used for compute instances. These are similar to Neutron (networking) floating IP resources, but only networking floating IPs can be used with load balancers.

## » Example Usage

```
resource "opentelekomcloud_compute_floatingip_v2" "floatip_1" {  
  pool = "public"  
}
```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Compute client. A Compute client is needed to create a floating IP that can be used with a compute instance. If omitted, the **region** argument of the provider is used. Changing this creates a new floating IP (which may or may not have a different address).
- **pool** - (Required) The name of the pool from which to obtain the floating IP. Changing this creates a new floating IP.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **pool** - See Argument Reference above.
- **address** - The actual floating IP address itself.
- **fixed\_ip** - The fixed IP address corresponding to the floating IP.
- **instance\_id** - UUID of the compute instance associated with the floating IP.

## » Import

Floating IPs can be imported using the id, e.g.

```
$ terraform import opentelekomcloud_compute_floatingip_v2.floatip_1 89c60255-9bd6-460c-822a-
```

## » opentelekomcloud\_compute\_floatingip\_associate\_v2

Associate a floating IP to an instance. This can be used instead of the `floating_ip` options in `opentelekomcloud_compute_instance_v2`.

## » Example Usage

### » Automatically detect the correct network

```
resource "opentelekomcloud_compute_instance_v2" "instance_1" {
  name          = "instance_1"
  image_id      = "ad091b52-742f-469e-8f3c-fd81cadf0743"
  flavor_id     = 3
  key_pair      = "my_key_pair_name"
  security_groups = ["default"]
}
```

```

resource "opentelekomcloud_networking_floatingip_v2" "fip_1" {
  pool = "my_pool"
}

resource "opentelekomcloud_compute_floatingip_associate_v2" "fip_1" {
  floating_ip = "${opentelekomcloud_networking_floatingip_v2.fip_1.address}"
  instance_id = "${opentelekomcloud_compute_instance_v2.instance_1.id}"
}

```

## » Explicitly set the network to attach to

```

resource "opentelekomcloud_compute_instance_v2" "instance_1" {
  name          = "instance_1"
  image_id      = "ad091b52-742f-469e-8f3c-fd81cadf0743"
  flavor_id     = 3
  key_pair      = "my_key_pair_name"
  security_groups = ["default"]

  network {
    name = "my_network"
  }

  network {
    name = "default"
  }
}

resource "opentelekomcloud_networking_floatingip_v2" "fip_1" {
  pool = "my_pool"
}

resource "opentelekomcloud_compute_floatingip_associate_v2" "fip_1" {
  floating_ip = "${opentelekomcloud_networking_floatingip_v2.fip_1.address}"
  instance_id = "${opentelekomcloud_compute_instance_v2.instance_1.id}"
  fixed_ip    = "${opentelekomcloud_compute_instance_v2.instance_1.network.1.fixed_ip_v4}"
}

```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Compute client. Keypairs are associated with accounts, but a Compute client is needed to create one. If omitted, the **region** argument of the provider is used. Changing this creates a new floatingip\_associate.

- `floating_ip` - (Required) The floating IP to associate.
- `instance_id` - (Required) The instance to associate the floating IP with.
- `fixed_ip` - (Optional) The specific IP address to direct traffic to.

## » Attributes Reference

The following attributes are exported:

- `region` - See Argument Reference above.
- `floating_ip` - See Argument Reference above.
- `instance_id` - See Argument Reference above.
- `fixed_ip` - See Argument Reference above.

## » Import

This resource can be imported by specifying all three arguments, separated by a forward slash:

```
$ terraform import opentelekomcloud_compute_floatingip_associate_v2.fip_1 <floating_ip>/<instance_id>
```

## » `opentelekomcloud_compute_instance_v2`

Manages a V2 VM instance resource within OpenTelekomCloud.

## » Example Usage

### » Basic Instance

```
resource "opentelekomcloud_compute_instance_v2" "basic" {
  name          = "basic"
  image_id      = "ad091b52-742f-469e-8f3c-fd81cadf0743"
  flavor_id     = "3"
  key_pair      = "my_key_pair_name"
  security_groups = ["default"]

  metadata {
    this = "that"
  }

  network {
    name = "my_network"
  }
}
```



```

    }
}

```

## » Instance With Attached Volume

```

resource "opentelekomcloud_blockstorage_volume_v2" "myvol" {
  name = "myvol"
  size = 1
}

resource "opentelekomcloud_compute_instance_v2" "myinstance" {
  name          = "myinstance"
  image_id      = "ad091b52-742f-469e-8f3c-fd81cadf0743"
  flavor_id     = "3"
  key_pair      = "my_key_pair_name"
  security_groups = ["default"]

  network {
    name = "my_network"
  }
}

resource "opentelekomcloud_compute_volume_attach_v2" "attached" {
  compute_id = "${opentelekomcloud_compute_instance_v2.myinstance.id}"
  volume_id  = "${opentelekomcloud_blockstorage_volume_v2.myvol.id}"
}

```

## » Boot From Volume

```

resource "opentelekomcloud_compute_instance_v2" "boot-from-volume" {
  name          = "boot-from-volume"
  flavor_id     = "3"
  key_pair      = "my_key_pair_name"
  security_groups = ["default"]

  block_device {
    uuid          = "<image-id>"
    source_type   = "image"
    volume_size   = 5
    boot_index    = 0
    destination_type = "volume"
    delete_on_termination = true
  }
}

```

```

    network {
        name = "my_network"
    }
}

```

## » Boot From an Existing Volume

```

resource "opentelekomcloud_blockstorage_volume_v1" "myvol" {
    name      = "myvol"
    size      = 5
    image_id  = "<image-id>"
}

resource "opentelekomcloud_compute_instance_v2" "boot-from-volume" {
    name            = "bootfromvolume"
    flavor_id       = "3"
    key_pair        = "my_key_pair_name"
    security_groups = ["default"]

    block_device {
        uuid                  = "${opentelekomcloud_blockstorage_volume_v1.myvol.id}"
        source_type           = "volume"
        boot_index            = 0
        destination_type      = "volume"
        delete_on_termination = true
    }

    network {
        name = "my_network"
    }
}

```

## » Boot Instance, Create Volume, and Attach Volume as a Block Device

```

resource "opentelekomcloud_compute_instance_v2" "instance_1" {
    name            = "instance_1"
    image_id        = "<image-id>"
    flavor_id       = "3"
    key_pair        = "my_key_pair_name"
    security_groups = ["default"]

    block_device {
        uuid                  = "<image-id>"

```

```

        source_type          = "image"
        destination_type     = "local"
        boot_index           = 0
        delete_on_termination = true
    }

    block_device {
        source_type          = "blank"
        destination_type     = "volume"
        volume_size          = 1
        boot_index           = 1
        delete_on_termination = true
    }
}

```

## » Boot Instance and Attach Existing Volume as a Block Device

```

resource "opentelekomcloud_blockstorage_volume_v2" "volume_1" {
    name = "volume_1"
    size = 1
}

resource "opentelekomcloud_compute_instance_v2" "instance_1" {
    name          = "instance_1"
    image_id      = "<image-id>"
    flavor_id     = "3"
    key_pair      = "my_key_pair_name"
    security_groups = ["default"]

    block_device {
        uuid          = "<image-id>"
        source_type   = "image"
        destination_type = "local"
        boot_index    = 0
        delete_on_termination = true
    }

    block_device {
        uuid          = "${opentelekomcloud_blockstorage_volume_v2.volume_1.id}"
        source_type   = "volume"
        destination_type = "volume"
        boot_index    = 1
        delete_on_termination = true
    }
}

```

## » Instance With Multiple Networks

```
resource "opentelekomcloud_networking_floatingip_v2" "myip" {
  pool = "my_pool"
}

resource "opentelekomcloud_compute_instance_v2" "multi-net" {
  name           = "multi-net"
  image_id       = "ad091b52-742f-469e-8f3c-fd81cadf0743"
  flavor_id      = "3"
  key_pair       = "my_key_pair_name"
  security_groups = ["default"]

  network {
    name = "my_first_network"
  }

  network {
    name = "my_second_network"
  }
}

resource "opentelekomcloud_compute_floatingip_associate_v2" "myip" {
  floating_ip = "${opentelekomcloud_networking_floatingip_v2.myip.address}"
  instance_id = "${opentelekomcloud_compute_instance_v2.multi-net.id}"
  fixed_ip    = "${opentelekomcloud_compute_instance_v2.multi-net.network.1.fixed_ip_v4}"
}
```

## » Instance With Personality

```
resource "opentelekomcloud_compute_instance_v2" "personality" {
  name           = "personality"
  image_id       = "ad091b52-742f-469e-8f3c-fd81cadf0743"
  flavor_id      = "3"
  key_pair       = "my_key_pair_name"
  security_groups = ["default"]

  personality {
    file      = "/path/to/file/on/instance.txt"
    content   = "contents of file"
  }

  network {
    name = "my_network"
  }
}
```

```
}
```

#### » Instance with Multiple Ephemeral Disks

```
resource "opentelekomcloud_compute_instance_v2" "multi-eph" {
  name          = "multi_eph"
  image_id      = "ad091b52-742f-469e-8f3c-fd81cadf0743"
  flavor_id     = "3"
  key_pair      = "my_key_pair_name"
  security_groups = ["default"]

  block_device {
    boot_index          = 0
    delete_on_termination = true
    destination_type    = "local"
    source_type         = "image"
    uuid                = "<image-id>"
  }

  block_device {
    boot_index          = -1
    delete_on_termination = true
    destination_type    = "local"
    source_type         = "blank"
    volume_size         = 1
  }

  block_device {
    boot_index          = -1
    delete_on_termination = true
    destination_type    = "local"
    source_type         = "blank"
    volume_size         = 1
  }
}
```

#### » Instance with User Data (cloud-init)

```
resource "opentelekomcloud_compute_instance_v2" "instance_1" {
  name          = "basic"
  image_id      = "ad091b52-742f-469e-8f3c-fd81cadf0743"
  flavor_id     = "3"
  key_pair      = "my_key_pair_name"
  security_groups = ["default"]
}
```

```

user_data          = "#cloud-config\nhostname: instance_1.example.com\nfqdn: instance_1.example.com\n"

network {
  name = "my_network"
}
}

```

`user_data` can come from a variety of sources: inline, read in from the `file` function, or the `template_cloudinit_config` resource.

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to create the server instance. If omitted, the **region** argument of the provider is used. Changing this creates a new server.
- **name** - (Required) A unique name for the resource.
- **image\_id** - (Optional; Required if **image\_name** is empty and not booting from a volume. Do not specify if booting from a volume.) The image ID of the desired image for the server. Changing this creates a new server.
- **image\_name** - (Optional; Required if **image\_id** is empty and not booting from a volume. Do not specify if booting from a volume.) The name of the desired image for the server. Changing this creates a new server.
- **flavor\_id** - (Optional; Required if **flavor\_name** is empty) The flavor ID of the desired flavor for the server. Changing this resizes the existing server.
- **flavor\_name** - (Optional; Required if **flavor\_id** is empty) The name of the desired flavor for the server. Changing this resizes the existing server.
- **user\_data** - (Optional) The user data to provide when launching the instance. Changing this creates a new server.
- **security\_groups** - (Optional) An array of one or more security group names to associate with the server. Changing this results in adding/removing security groups from the existing server. *Note:* When attaching the instance to networks using Ports, place the security groups on the Port and not the instance.
- **availability\_zone** - (Optional) The availability zone in which to create the server. Changing this creates a new server.
- **network** - (Optional) An array of one or more networks to attach to the instance. The network object structure is documented below. Changing this creates a new server.

- **metadata** - (Optional) Metadata key/value pairs to make available from within the instance. Changing this updates the existing server metadata.
- **config\_drive** - (Optional) Whether to use the config\_drive feature to configure the instance. Changing this creates a new server.
- **admin\_pass** - (Optional) The administrative password to assign to the server. Changing this changes the root password on the existing server.
- **key\_pair** - (Optional) The name of a key pair to put on the server. The key pair must already be created and associated with the tenant's account. Changing this creates a new server.
- **block\_device** - (Optional) Configuration of block devices. The block\_device structure is documented below. Changing this creates a new server. You can specify multiple block devices which will create an instance with multiple disks. This configuration is very flexible, so please see the following reference for more information.
- **scheduler\_hints** - (Optional) Provide the Nova scheduler with hints on how the instance should be launched. The available hints are described below.
- **personality** - (Optional) Customize the personality of an instance by defining one or more files and their contents. The personality structure is described below.
- **stop\_before\_destroy** - (Optional) Whether to try stop instance gracefully before destroying it, thus giving chance for guest OS daemons to stop correctly. If instance doesn't stop within timeout, it will be destroyed anyway.
- **force\_delete** - (Optional) Whether to force the OpenTelekomCloud instance to be forcefully deleted. This is useful for environments that have reclaim / soft deletion enabled.

The **network** block supports:

- **uuid** - (Required unless **port** or **name** is provided) The network UUID to attach to the server. Changing this creates a new server.
- **name** - (Required unless **uuid** or **port** is provided) The human-readable name of the network. Changing this creates a new server.
- **port** - (Required unless **uuid** or **name** is provided) The port UUID of a network to attach to the server. Changing this creates a new server.
- **fixed\_ip\_v4** - (Optional) Specifies a fixed IPv4 address to be used on this network. Changing this creates a new server.
- **fixed\_ip\_v6** - (Optional) Specifies a fixed IPv6 address to be used on this network. Changing this creates a new server.

- **access\_network** - (Optional) Specifies if this network should be used for provisioning access. Accepts true or false. Defaults to false.

The **block\_device** block supports:

- **uuid** - (Required unless **source\_type** is set to "blank" ) The UUID of the image, volume, or snapshot. Changing this creates a new server.
- **source\_type** - (Required) The source type of the device. Must be one of "blank", "image", "volume", or "snapshot". Changing this creates a new server.
- **volume\_size** - The size of the volume to create (in gigabytes). Required in the following combinations: source=image and destination=volume, source=blank and destination=local, and source=blank and destination=volume. Changing this creates a new server.
- **boot\_index** - (Optional) The boot index of the volume. It defaults to 0. Changing this creates a new server.
- **destination\_type** - (Optional) The type that gets created. Possible values are "volume" and "local". Changing this creates a new server.
- **delete\_on\_termination** - (Optional) Delete the volume / block device upon termination of the instance. Defaults to false. Changing this creates a new server.

The **scheduler\_hints** block supports:

- **group** - (Optional) A UUID of a Server Group. The instance will be placed into that group.
- **different\_host** - (Optional) A list of instance UUIDs. The instance will be scheduled on a different host than all other instances.
- **same\_host** - (Optional) A list of instance UUIDs. The instance will be scheduled on the same host of those specified.
- **query** - (Optional) A conditional query that a compute node must pass in order to host an instance.
- **target\_cell** - (Optional) The name of a cell to host the instance.
- **build\_near\_host\_ip** - (Optional) An IP Address in CIDR form. The instance will be placed on a compute node that is in the same subnet.

The **personality** block supports:

- **file** - (Required) The absolute path of the destination file.
- **contents** - (Required) The contents of the file. Limited to 255 bytes.



## » Attributes Reference

The following attributes are exported:

- `region` - See Argument Reference above.
- `name` - See Argument Reference above.
- `access_ip_v4` - The first detected Fixed IPv4 address *or* the Floating IP.
- `access_ip_v6` - The first detected Fixed IPv6 address.
- `metadata` - See Argument Reference above.
- `security_groups` - See Argument Reference above.
- `flavor_id` - See Argument Reference above.
- `flavor_name` - See Argument Reference above.
- `network/uuid` - See Argument Reference above.
- `network/name` - See Argument Reference above.
- `network/port` - See Argument Reference above.
- `network/fixed_ip_v4` - The Fixed IPv4 address of the Instance on that network.
- `network/fixed_ip_v6` - The Fixed IPv6 address of the Instance on that network.
- `network/mac` - The MAC address of the NIC on that network.
- `all_metadata` - Contains all instance metadata, even metadata not set by Terraform.

## » Notes

### » Multiple Ephemeral Disks

It's possible to specify multiple `block_device` entries to create an instance with multiple ephemeral (local) disks. In order to create multiple ephemeral disks, the sum of the total amount of ephemeral space must be less than or equal to what the chosen flavor supports.

The following example shows how to create an instance with multiple ephemeral disks:

```
resource "opentelekomcloud_compute_instance_v2" "foo" {
  name          = "terraform-test"
  security_groups = ["default"]

  block_device {
    boot_index          = 0
    delete_on_termination = true
    destination_type    = "local"
    source_type         = "image"
    uuid                = "<image uuid>"
  }
}
```

```

block_device {
    boot_index          = -1
    delete_on_termination = true
    destination_type     = "local"
    source_type          = "blank"
    volume_size          = 1
}

block_device {
    boot_index          = -1
    delete_on_termination = true
    destination_type     = "local"
    source_type          = "blank"
    volume_size          = 1
}
}

```

## » Instances and Ports

Neutron Ports are a great feature and provide a lot of functionality. However, there are some notes to be aware of when mixing Instances and Ports:

- When attaching an Instance to one or more networks using Ports, place the security groups on the Port and not the Instance. If you place the security groups on the Instance, the security groups will not be applied upon creation, but they will be applied upon a refresh. This is a known Open Telekom Cloud bug.
- Network IP information is not available within an instance for networks that are attached with Ports. This is mostly due to the flexibility Neutron Ports provide when it comes to IP addresses. For example, a Neutron Port can have multiple Fixed IP addresses associated with it. It's not possible to know which single IP address the user would want returned to the Instance's state information. Therefore, in order for a Provisioner to connect to an Instance via its network Port, customize the `connection` information:

```

resource "opentelekomcloud_networking_port_v2" "port_1" {
    name          = "port_1"
    admin_state_up = "true"

    network_id = "0a1d0a27-cffa-4de3-92c5-9d3fd3f2e74d"

    security_group_ids = [
        "2f02d20a-8dca-49b7-b26f-b6ce9fddaf4f",

```

```

        "ca1e5ed7-dae8-4605-987b-fadaeeb30461",
    ]
}

resource "opentelekomcloud_compute_instance_v2" "instance_1" {
    name = "instance_1"

    network {
        port = "${opentelekomcloud_networking_port_v2.port_1.id}"
    }

    connection {
        user      = "root"
        host      = "${opentelekomcloud_networking_port_v2.port_1.fixed_ip.0.ip_address}"
        private_key = "~/path/to/key"
    }

    provisioner "remote-exec" {
        inline = [
            "echo terraform executed > /tmp/foo",
        ]
    }
}

```

## » opentelekomcloud\_compute\_keypair\_v2

Manages a V2 keypair resource within OpenTelekomCloud.

### » Example Usage

```

resource "opentelekomcloud_compute_keypair_v2" "test-keypair" {
    name      = "my-keypair"
    public_key = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDAjpC1hwiOCCmKEWxJ4qzTTsJbKzndLotBCz5L"
}

```

### » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Compute client. Keypairs are associated with accounts, but a Compute client is needed to create one. If omitted, the **region** argument of the provider is used. Changing this creates a new keypair.

- **name** - (Required) A unique name for the keypair. Changing this creates a new keypair.
- **public\_key** - (Required) A pregenerated OpenSSH-formatted public key. Changing this creates a new keypair.
- **value\_specs** - (Optional) Map of additional options.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **name** - See Argument Reference above.
- **public\_key** - See Argument Reference above.

## » Import

Keypairs can be imported using the **name**, e.g.

```
$ terraform import opentelekomcloud_compute_keypair_v2.my-keypair test-keypair
```

## » opentelekomcloud\_compute\_secgroup\_v2

Manages a V2 security group resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_compute_secgroup_v2" "secgroup_1" {
  name          = "my_secgroup"
  description   = "my security group"

  rule {
    from_port    = 22
    to_port      = 22
    ip_protocol   = "tcp"
    cidr         = "0.0.0.0/0"
  }

  rule {
    from_port    = 80
    to_port      = 80
    ip_protocol   = "tcp"
  }
}
```

```

    cidr          = "0.0.0.0/0"
  }
}

```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Compute client. A Compute client is needed to create a security group. If omitted, the **region** argument of the provider is used. Changing this creates a new security group.
- **name** - (Required) A unique name for the security group. Changing this updates the **name** of an existing security group.
- **description** - (Required) A description for the security group. Changing this updates the **description** of an existing security group.
- **rule** - (Optional) A rule describing how the security group operates. The rule object structure is documented below. Changing this updates the security group rules. As shown in the example above, multiple rule blocks may be used.

The **rule** block supports:

- **from\_port** - (Required) An integer representing the lower bound of the port range to open. Changing this creates a new security group rule.
- **to\_port** - (Required) An integer representing the upper bound of the port range to open. Changing this creates a new security group rule.
- **ip\_protocol** - (Required) The protocol type that will be allowed. Changing this creates a new security group rule.
- **cidr** - (Optional) Required if **from\_group\_id** or **self** is empty. The IP range that will be the source of network traffic to the security group. Use 0.0.0.0/0 to allow all IP addresses. Changing this creates a new security group rule. Cannot be combined with **from\_group\_id** or **self**.
- **from\_group\_id** - (Optional) Required if **cidr** or **self** is empty. The ID of a group from which to forward traffic to the parent group. Changing this creates a new security group rule. Cannot be combined with **cidr** or **self**.
- **self** - (Optional) Required if **cidr** and **from\_group\_id** is empty. If true, the security group itself will be added as a source to this ingress rule. Cannot be combined with **cidr** or **from\_group\_id**.

## » Attributes Reference

The following attributes are exported:

- `region` - See Argument Reference above.
- `name` - See Argument Reference above.
- `description` - See Argument Reference above.
- `rule` - See Argument Reference above.

## » Notes

### » ICMP Rules

When using ICMP as the `ip_protocol`, the `from_port` sets the ICMP *type* and the `to_port` sets the ICMP *code*. To allow all ICMP types, set each value to -1, like so:

```
rule {
  from_port = -1
  to_port   = -1
  ip_protocol = "icmp"
  cidr      = "0.0.0.0/0"
}
```

A list of ICMP types and codes can be found [here](#).

### » Referencing Security Groups

When referencing a security group in a configuration (for example, a configuration creates a new security group and then needs to apply it to an instance being created in the same configuration), it is currently recommended to reference the security group by name and not by ID, like this:

```
resource "opentelekomcloud_compute_instance_v2" "test-server" {
  name          = "tf-test"
  image_id      = "ad091b52-742f-469e-8f3c-fd81cadf0743"
  flavor_id     = "3"
  key_pair      = "my_key_pair_name"
  security_groups = ["${opentelekomcloud_compute_secgroup_v2.secgroup_1.name}"]
}
```

### » Import

Security Groups can be imported using the `id`, e.g.

```
$ terraform import opentelekomcloud_compute_secgroup_v2.my_secgroup 1bc30ee9-9d5b-4c30-bdd5-
```

## » opentelekomcloud\_compute\_servergroup\_v2

Manages a V2 Server Group resource within OpenTelekomCloud.

### » Example Usage

```
resource "opentelekomcloud_compute_servergroup_v2" "test-sg" {  
  name      = "my-sg"  
  policies = ["anti-affinity"]  
}
```

### » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Compute client. If omitted, the **region** argument of the provider is used. Changing this creates a new server group.
- **name** - (Required) A unique name for the server group. Changing this creates a new server group.
- **policies** - (Required) The set of policies for the server group. Only two policies are available right now, and both are mutually exclusive. See the Policies section for more information. Changing this creates a new server group.
- **value\_specs** - (Optional) Map of additional options.

### » Policies

- **affinity** - All instances/servers launched in this group will be hosted on the same compute node.
- **anti-affinity** - All instances/servers launched in this group will be hosted on different compute nodes.

### » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **name** - See Argument Reference above.
- **policies** - See Argument Reference above.
- **members** - The instances that are part of this server group.

## » Import

Server Groups can be imported using the id, e.g.

```
$ terraform import opentelekomcloud_compute_servergroup_v2.test-sg 1bc30ee9-9d5b-4c30-bdd5-7
```

## » opentelekomcloud\_\_compute\_\_volume\_\_attach\_\_v2

Attaches a Block Storage Volume to an Instance using the OpenTelekomCloud Compute (Nova) v2 API.

### » Example Usage

#### » Basic attachment of a single volume to a single instance

```
resource "opentelekomcloud_blockstorage_volume_v2" "volume_1" {
  name = "volume_1"
  size = 1
}

resource "opentelekomcloud_compute_instance_v2" "instance_1" {
  name          = "instance_1"
  security_groups = ["default"]
}

resource "opentelekomcloud_compute_volume_attach_v2" "va_1" {
  instance_id = "${opentelekomcloud_compute_instance_v2.instance_1.id}"
  volume_id   = "${opentelekomcloud_blockstorage_volume_v2.volume_1.id}"
}
```

#### » Attaching multiple volumes to a single instance

```
resource "opentelekomcloud_blockstorage_volume_v2" "volumes" {
  count = 2
  name  = "${format("vol-%02d", count.index + 1)}"
  size  = 1
}

resource "opentelekomcloud_compute_instance_v2" "instance_1" {
  name          = "instance_1"
  security_groups = ["default"]
}
```



```

resource "opentelekomcloud_compute_volume_attach_v2" "attachments" {
  count      = 2
  instance_id = "${opentelekomcloud_compute_instance_v2.instance_1.id}"
  volume_id   = "${element(opentelekomcloud_blockstorage_volume_v2.volumes.*, id, count.index)}"
}

output "volume devices" {
  value = "${opentelekomcloud_compute_volume_attach_v2.attachments.*.device}"
}

```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Compute client. A Compute client is needed to create a volume attachment. If omitted, the **region** argument of the provider is used. Changing this creates a new volume attachment.
- **instance\_id** - (Required) The ID of the Instance to attach the Volume to.
- **volume\_id** - (Required) The ID of the Volume to attach to an Instance.
- **device** - (Optional) The device of the volume attachment (ex: `/dev/vdc`). *NOTE:* Being able to specify a device is dependent upon the hypervisor in use. There is a chance that the device specified in Terraform will not be the same device the hypervisor chose. If this happens, Terraform will wish to update the device upon subsequent applying which will cause the volume to be detached and reattached indefinitely. Please use with caution.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **instance\_id** - See Argument Reference above.
- **volume\_id** - See Argument Reference above.
- **device** - See Argument Reference above. *NOTE:* The correctness of this information is dependent upon the hypervisor in use. In some cases, this should not be used as an authoritative piece of information.

## » Import

Volume Attachments can be imported using the Instance ID and Volume ID separated by a slash, e.g.

```
$ terraform import opentelekomcloud_compute_volume_attach_v2.va_1 89c60255-9bd6-460c-822a-e2
```

## » opentelekomcloud\_\_dns\_\_recordset\_\_v2

Manages a DNS record set in the OpenTelekomCloud DNS Service.

### » Example Usage

#### » Automatically detect the correct network

```
resource "opentelekomcloud_dns_zone_v2" "example_zone" {
  name = "example.com."
  email = "email2@example.com"
  description = "a zone"
  ttl = 6000
  type = "PRIMARY"
}

resource "opentelekomcloud_dns_recordset_v2" "rs_example_com" {
  zone_id = "${opentelekomcloud_dns_zone_v2.example_zone.id}"
  name = "rs.example.com."
  description = "An example record set"
  ttl = 3000
  type = "A"
  records = ["10.0.0.1"]
}
```

### » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 DNS client. If omitted, the **region** argument of the provider is used. Changing this creates a new DNS record set.
- **zone\_id** - (Required) The ID of the zone in which to create the record set. Changing this creates a new DNS record set.
- **name** - (Required) The name of the record set. Note the . at the end of the name. Changing this creates a new DNS record set.
- **type** - (Optional) The type of record set. Examples: "A", "MX". Changing this creates a new DNS record set.
- **ttl** - (Optional) The time to live (TTL) of the record set.

- **description** - (Optional) A description of the record set.
- **records** - (Optional) An array of DNS records.
- **value\_specs** - (Optional) Map of additional options. Changing this creates a new record set.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **name** - See Argument Reference above.
- **type** - See Argument Reference above.
- **ttl** - See Argument Reference above.
- **description** - See Argument Reference above.
- **records** - See Argument Reference above.
- **zone\_id** - See Argument Reference above.
- **value\_specs** - See Argument Reference above.

## » Import

This resource can be imported by specifying the zone ID and recordset ID, separated by a forward slash.

```
$ terraform import opentelekomcloud_dns_recordset_v2.recordset_1 <zone_id>/<recordset_id>
```

## » opentelekomcloud\_dns\_zone\_v2

Manages a DNS zone in the OpenTelekomCloud DNS Service.

## » Example Usage

### » Automatically detect the correct network

```
resource "opentelekomcloud_dns_zone_v2" "example.com" {
  name = "example.com."
  email = "jdoe@example.com"
  description = "An example zone"
  ttl = 3000
  type = "PRIMARY"
}
```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Compute client. Keypairs are associated with accounts, but a Compute client is needed to create one. If omitted, the **region** argument of the provider is used. Changing this creates a new DNS zone.
- **name** - (Required) The name of the zone. Note the `.` at the end of the name. Changing this creates a new DNS zone.
- **email** - (Optional) The email contact for the zone record.
- **type** - (Optional) The type of zone. Can either be **PRIMARY** or **SECONDARY**. Changing this creates a new zone.
- **attributes** - (Optional) Attributes for the DNS Service scheduler. Changing this creates a new zone.
- **ttl** - (Optional) The time to live (TTL) of the zone.
- **description** - (Optional) A description of the zone.
- **masters** - (Optional) An array of master DNS servers. For when **type** is **SECONDARY**.
- **value\_specs** - (Optional) Map of additional options. Changing this creates a new zone.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **name** - See Argument Reference above.
- **email** - See Argument Reference above.
- **type** - See Argument Reference above.
- **attributes** - See Argument Reference above.
- **ttl** - See Argument Reference above.
- **description** - See Argument Reference above.
- **masters** - See Argument Reference above.
- **value\_specs** - See Argument Reference above.

## » Import

This resource can be imported by specifying the zone ID:

```
$ terraform import opentelekomcloud_dns_zone_v2.zone_1 <zone_id>
```

## » opentelekomcloud\_images\_image\_v2

Manages a V2 Image resource within OpenTelekomCloud Glance.

### » Example Usage

```
resource "opentelekomcloud_images_image_v2" "rancheros" {
  name      = "RancherOS"
  image_source_url = "https://releases.rancher.com/os/latest/rancheros-openstack.img"
  container_format = "bare"
  disk_format = "qcow2"
}
```

### » Argument Reference

The following arguments are supported:

- **container\_format** - (Required) The container format. Must be one of "ami", "ari", "aki", "bare", "ovf".
- **disk\_format** - (Required) The disk format. Must be one of "ami", "ari", "aki", "vhd", "vmdk", "raw", "qcow2", "vdi", "iso".
- **local\_file\_path** - (Optional) This is the filepath of the raw image file that will be uploaded to Glance. Conflicts with **image\_source\_url**.
- **image\_cache\_path** - (Optional) This is the directory where the images will be downloaded. Images will be stored with a filename corresponding to the url's md5 hash. Defaults to "\$HOME/.terraform/image\_cache"
- **image\_source\_url** - (Optional) This is the url of the raw image that will be downloaded in the **image\_cache\_path** before being uploaded to Glance. Glance is able to download image from internet but the **gophercloud** library does not yet provide a way to do so. Conflicts with **local\_file\_path**.
- **min\_disk\_gb** - (Optional) Amount of disk space (in GB) required to boot image. Defaults to 0.
- **min\_ram\_mb** - (Optional) Amount of ram (in MB) required to boot image. Defaults to 0.
- **name** - (Required) The name of the image.
- **protected** - (Optional) If true, image will not be deletable. Defaults to false.

- **region** - (Optional) The region in which to obtain the V2 Glance client. A Glance client is needed to create an Image that can be used with a compute instance. If omitted, the **region** argument of the provider is used. Changing this creates a new Image.
- **tags** - (Optional) The tags of the image. It must be a list of strings. At this time, it is not possible to delete all tags of an image.
- **visibility** - (Optional) The visibility of the image. Must be one of "public", "private", "community", or "shared". The ability to set the visibility depends upon the configuration of the OpenTelekomCloud cloud.

Note: The **properties** attribute handling in the gophercloud library is currently buggy and needs to be fixed before being implemented in this resource.

## » Attributes Reference

The following attributes are exported:

- **checksum** - The checksum of the data associated with the image.
- **container\_format** - See Argument Reference above.
- **created\_at** - The date the image was created.
- **disk\_format** - See Argument Reference above.
- **file** - the trailing path after the glance endpoint that represent the location of the image or the path to retrieve it.
- **id** - A unique ID assigned by Glance.
- **metadata** - The metadata associated with the image. Image metadata allow for meaningfully define the image properties and tags. See <http://docs.openstack.org/developer/glance/metadefs-concepts.html>.
- **min\_disk\_gb** - See Argument Reference above.
- **min\_ram\_mb** - See Argument Reference above.
- **name** - See Argument Reference above.
- **owner** - The id of the opentelekomcloud user who owns the image.
- **protected** - See Argument Reference above.
- **region** - See Argument Reference above.
- **schema** - The path to the JSON-schema that represent the image or image
- **size\_bytes** - The size in bytes of the data associated with the image.
- **status** - The status of the image. It can be "queued", "active" or "saving".
- **tags** - See Argument Reference above.
- **update\_at** - The date the image was last updated.
- **visibility** - See Argument Reference above.

## » Import

Images can be imported using the **id**, e.g.

```
$ terraform import opentelekomcloud_images_image_v2.rancheros 89c60255-9bd6-460c-822a-e2b95
```

## » opentelekomcloud\_networking\_floatingip\_v2

Manages a V2 floating IP resource within OpenTelekomCloud Neutron (networking) that can be used for load balancers. These are similar to Nova (compute) floating IP resources, but only compute floating IPs can be used with compute instances.

### » Example Usage

```
resource "opentelekomcloud_networking_floatingip_v2" "floatip_1" {  
  pool = "public"  
}
```

### » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Networking client. A Networking client is needed to create a floating IP that can be used with another networking resource, such as a load balancer. If omitted, the **region** argument of the provider is used. Changing this creates a new floating IP (which may or may not have a different address).
- **pool** - (Required) The name of the pool from which to obtain the floating IP. Changing this creates a new floating IP.
- **port\_id** - (Optional) ID of an existing port with at least one IP address to associate with this floating IP.
- **tenant\_id** - (Optional) The target tenant ID in which to allocate the floating IP, if you specify this together with a **port\_id**, make sure the target port belongs to the same tenant. Changing this creates a new floating IP (which may or may not have a different address).
- **fixed\_ip** - Fixed IP of the port to associate with this floating IP. Required if the port has multiple fixed IPs.
- **value\_specs** - (Optional) Map of additional options.

### » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **pool** - See Argument Reference above.
- **address** - The actual floating IP address itself.
- **port\_id** - ID of associated port.
- **tenant\_id** - the ID of the tenant in which to create the floating IP.
- **fixed\_ip** - The fixed IP which the floating IP maps to.

## » Import

Floating IPs can be imported using the id, e.g.

```
$ terraform import opentelekomcloud_networking_floatingip_v2.floatip_1 2c7f39f3-702b-48d1-9a
```

## » opentelekomcloud\_networking\_network\_v2

Manages a V2 Neutron network resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_networking_network_v2" "network_1" {
  name          = "network_1"
  admin_state_up = "true"
}

resource "opentelekomcloud_networking_subnet_v2" "subnet_1" {
  name          = "subnet_1"
  network_id    = "${opentelekomcloud_networking_network_v2.network_1.id}"
  cidr          = "192.168.199.0/24"
  ip_version    = 4
}

resource "opentelekomcloud_compute_secgroup_v2" "secgroup_1" {
  name          = "secgroup_1"
  description   = "a security group"

  rule {
    from_port    = 22
    to_port      = 22
    ip_protocol   = "tcp"
    cidr         = "0.0.0.0/0"
  }
}
```



```

resource "opentelekomcloud_networking_port_v2" "port_1" {
  name          = "port_1"
  network_id    = "${opentelekomcloud_networking_network_v2.network_1.id}"
  admin_state_up = "true"
  security_group_ids = ["${opentelekomcloud_compute_secgroup_v2.secgroup_1.id}"]

  fixed_ip {
    "subnet_id" = "${opentelekomcloud_networking_subnet_v2.subnet_1.id}"
    "ip_address" = "192.168.199.10"
  }
}

resource "opentelekomcloud_compute_instance_v2" "instance_1" {
  name          = "instance_1"
  security_groups = ["${opentelekomcloud_compute_secgroup_v2.secgroup_1.name}"]

  network {
    port = "${opentelekomcloud_networking_port_v2.port_1.id}"
  }
}

```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Networking client. A Networking client is needed to create a Neutron network. If omitted, the **region** argument of the provider is used. Changing this creates a new network.
- **name** - (Optional) The name of the network. Changing this updates the name of the existing network.
- **shared** - (Optional) Specifies whether the network resource can be accessed by any tenant or not. Changing this updates the sharing capabilities of the existing network.
- **tenant\_id** - (Optional) The owner of the network. Required if admin wants to create a network for another tenant. Changing this creates a new network.
- **admin\_state\_up** - (Optional) The administrative state of the network. Acceptable values are "true" and "false". Changing this value updates the state of the existing network.
- **segments** - (Optional) An array of one or more provider segment objects.
- **value\_specs** - (Optional) Map of additional options.

The `segments` block supports:

- `physical_network` - The physical network where this network is implemented.
- `segmentation_id` - An isolated segment on the physical network.
- `network_type` - The type of physical network.

## » Attributes Reference

The following attributes are exported:

- `region` - See Argument Reference above.
- `name` - See Argument Reference above.
- `shared` - See Argument Reference above.
- `tenant_id` - See Argument Reference above.
- `admin_state_up` - See Argument Reference above.

## » Import

Networks can be imported using the `id`, e.g.

```
$ terraform import opentelekomcloud_networking_network_v2.network_1 d90ce693-5ccf-4136-a0ed-
```

## » opentelekomcloud\_networking\_port\_v2

Manages a V2 port resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_networking_network_v2" "network_1" {
  name          = "network_1"
  admin_state_up = "true"
}

resource "opentelekomcloud_networking_port_v2" "port_1" {
  name          = "port_1"
  network_id    = "${opentelekomcloud_networking_network_v2.network_1.id}"
  admin_state_up = "true"
}
```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 networking client. A networking client is needed to create a port. If omitted, the **region** argument of the provider is used. Changing this creates a new port.
- **name** - (Optional) A unique name for the port. Changing this updates the **name** of an existing port.
- **network\_id** - (Required) The ID of the network to attach the port to. Changing this creates a new port.
- **admin\_state\_up** - (Optional) Administrative up/down status for the port (must be "true" or "false" if provided). Changing this updates the **admin\_state\_up** of an existing port.
- **mac\_address** - (Optional) Specify a specific MAC address for the port. Changing this creates a new port.
- **tenant\_id** - (Optional) The owner of the Port. Required if admin wants to create a port for another tenant. Changing this creates a new port.
- **device\_owner** - (Optional) The device owner of the Port. Changing this creates a new port.
- **security\_group\_ids** - (Optional) A list of security group IDs to apply to the port. The security groups must be specified by ID and not name (as opposed to how they are configured with the Compute Instance).
- **device\_id** - (Optional) The ID of the device attached to the port. Changing this creates a new port.
- **fixed\_ip** - (Optional) An array of desired IPs for this port. The structure is described below.
- **allowed\_address\_pairs** - (Optional) An IP/MAC Address pair of additional IP addresses that can be active on this port. The structure is described below.
- **value\_specs** - (Optional) Map of additional options.

The **fixed\_ip** block supports:

- **subnet\_id** - (Required) Subnet in which to allocate IP address for this port.
- **ip\_address** - (Optional) IP address desired in the subnet for this port. If you don't specify **ip\_address**, an available IP address from the specified subnet will be allocated to this port.

The `allowed_address_pairs` block supports:

- `ip_address` - (Required) The additional IP address.
- `mac_address` - (Optional) The additional MAC address.

## » Attributes Reference

The following attributes are exported:

- `region` - See Argument Reference above.
- `admin_state_up` - See Argument Reference above.
- `mac_address` - See Argument Reference above.
- `tenant_id` - See Argument Reference above.
- `device_owner` - See Argument Reference above.
- `security_group_ids` - See Argument Reference above.
- `device_id` - See Argument Reference above.
- `fixed_ip` - See Argument Reference above.
- `all_fixed_ips` - The collection of Fixed IP addresses on the port in the order returned by the Network v2 API.

## » Import

Ports can be imported using the `id`, e.g.

```
$ terraform import opentelekomcloud_networking_port_v2.port_1 eae26a3e-1c33-4cc1-9c31-0cd729
```

## » Notes

### » Ports and Instances

There are some notes to consider when connecting Instances to networks using Ports. Please see the `opentelekomcloud_compute_instance_v2` documentation for further documentation.

## » `opentelekomcloud_networking_router_interface_v2`

Manages a V2 router interface resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_networking_network_v2" "network_1" {
```

```

    name          = "tf_test_network"
    admin_state_up = "true"
  }

  resource "opentelekomcloud_networking_subnet_v2" "subnet_1" {
    network_id = "${opentelekomcloud_networking_network_v2.network_1.id}"
    cidr       = "192.168.199.0/24"
    ip_version = 4
  }

  resource "opentelekomcloud_networking_router_v2" "router_1" {
    name          = "my_router"
    external_gateway = "f67f0d72-0ddf-11e4-9d95-e1f29f417e2f"
  }

  resource "opentelekomcloud_networking_router_interface_v2" "router_interface_1" {
    router_id = "${opentelekomcloud_networking_router_v2.router_1.id}"
    subnet_id = "${opentelekomcloud_networking_subnet_v2.subnet_1.id}"
  }

```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 networking client. A networking client is needed to create a router. If omitted, the **region** argument of the provider is used. Changing this creates a new router interface.
- **router\_id** - (Required) ID of the router this interface belongs to. Changing this creates a new router interface.
- **subnet\_id** - ID of the subnet this interface connects to. Changing this creates a new router interface.
- **port\_id** - ID of the port this interface connects to. Changing this creates a new router interface.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **router\_id** - See Argument Reference above.
- **subnet\_id** - See Argument Reference above.
- **port\_id** - See Argument Reference above.

## » opentelekomcloud\_networking\_router\_route\_v2

Creates a routing entry on a OpenTelekomCloud V2 router.

### » Example Usage

```
resource "opentelekomcloud_networking_router_v2" "router_1" {
  name           = "router_1"
  admin_state_up = "true"
}

resource "opentelekomcloud_networking_network_v2" "network_1" {
  name           = "network_1"
  admin_state_up = "true"
}

resource "opentelekomcloud_networking_subnet_v2" "subnet_1" {
  network_id = "${opentelekomcloud_networking_network_v2.network_1.id}"
  cidr       = "192.168.199.0/24"
  ip_version = 4
}

resource "opentelekomcloud_networking_router_interface_v2" "int_1" {
  router_id = "${opentelekomcloud_networking_router_v2.router_1.id}"
  subnet_id = "${opentelekomcloud_networking_subnet_v2.subnet_1.id}"
}

resource "opentelekomcloud_networking_router_route_v2" "router_route_1" {
  depends_on      = ["opentelekomcloud_networking_router_interface_v2.int_1"]
  router_id       = "${opentelekomcloud_networking_router_v2.router_1.id}"
  destination_cidr = "10.0.1.0/24"
  next_hop        = "192.168.199.254"
}
```

### » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 networking client. A networking client is needed to configure a routing entry on a router. If omitted, the **region** argument of the provider is used. Changing this creates a new routing entry.
- **router\_id** - (Required) ID of the router this routing entry belongs to. Changing this creates a new routing entry.

- **destination\_cidr** - (Required) CIDR block to match on the packet's destination IP. Changing this creates a new routing entry.
- **next\_hop** - (Required) IP address of the next hop gateway. Changing this creates a new routing entry.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **router\_id** - See Argument Reference above.
- **destination\_cidr** - See Argument Reference above.
- **next\_hop** - See Argument Reference above.

## » Notes

The **next\_hop** IP address must be directly reachable from the router at the `opentelekomcloud_networking_router_route_v2` resource creation time. You can ensure that by explicitly specifying a dependency on the `opentelekomcloud_networking_router_interface_v2` resource that connects the next hop to the router, as in the example above.

## » opentelekomcloud\_networking\_router\_v2

Manages a V2 router resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_networking_router_v2" "router_1" {
  name           = "my_router"
  external_gateway = "f67f0d72-0ddf-11e4-9d95-e1f29f417e2f"
}
```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 networking client. A networking client is needed to create a router. If omitted, the **region** argument of the provider is used. Changing this creates a new router.

- **name** - (Optional) A unique name for the router. Changing this updates the **name** of an existing router.
- **admin\_state\_up** - (Optional) Administrative up/down status for the router (must be "true" or "false" if provided). Changing this updates the **admin\_state\_up** of an existing router.
- **distributed** - (Optional) Indicates whether or not to create a distributed router. The default policy setting in Neutron restricts usage of this property to administrative users only.
- **external\_gateway** - (Optional) The network UUID of an external gateway for the router. A router with an external gateway is required if any compute instances or load balancers will be using floating IPs. Changing this updates the **external\_gateway** of an existing router.
- **tenant\_id** - (Optional) The owner of the floating IP. Required if admin wants to create a router for another tenant. Changing this creates a new router.
- **value\_specs** - (Optional) Map of additional driver-specific options.

## » Attributes Reference

The following attributes are exported:

- **id** - ID of the router.
- **region** - See Argument Reference above.
- **name** - See Argument Reference above.
- **admin\_state\_up** - See Argument Reference above.
- **external\_gateway** - See Argument Reference above.
- **tenant\_id** - See Argument Reference above.
- **value\_specs** - See Argument Reference above.

## » opentelekomcloud\_networking\_subnet\_v2

Manages a V2 Neutron subnet resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_networking_network_v2" "network_1" {
  name          = "tf_test_network"
  admin_state_up = "true"
}
```



```
resource "opentelekomcloud_networking_subnet_v2" "subnet_1" {
  network_id = "${opentelekomcloud_networking_network_v2.network_1.id}"
  cidr      = "192.168.199.0/24"
}
```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Networking client. A Networking client is needed to create a Neutron subnet. If omitted, the **region** argument of the provider is used. Changing this creates a new subnet.
- **network\_id** - (Required) The UUID of the parent network. Changing this creates a new subnet.
- **cidr** - (Required) CIDR representing IP range for this subnet, based on IP version. Changing this creates a new subnet.
- **ip\_version** - (Optional) IP version, either 4 (default) or 6. Changing this creates a new subnet.
- **name** - (Optional) The name of the subnet. Changing this updates the name of the existing subnet.
- **tenant\_id** - (Optional) The owner of the subnet. Required if admin wants to create a subnet for another tenant. Changing this creates a new subnet.
- **allocation\_pools** - (Optional) An array of sub-ranges of CIDR available for dynamic allocation to ports. The **allocation\_pool** object structure is documented below. Changing this creates a new subnet.
- **gateway\_ip** - (Optional) Default gateway used by devices in this subnet. Leaving this blank and not setting **no\_gateway** will cause a default gateway of .1 to be used. Changing this updates the gateway IP of the existing subnet.
- **no\_gateway** - (Optional) Do not set a gateway IP on this subnet. Changing this removes or adds a default gateway IP of the existing subnet.
- **enable\_dhcp** - (Optional) The administrative state of the network. Acceptable values are "true" and "false". Changing this value enables or disables the DHCP capabilities of the existing subnet. Defaults to true.
- **dns\_nameservers** - (Optional) An array of DNS name server names used by hosts in this subnet. Changing this updates the DNS name servers for the existing subnet.
- **host\_routes** - (Optional) An array of routes that should be used by devices with IPs from this subnet (not including local subnet route). The

host\_route object structure is documented below. Changing this updates the host routes for the existing subnet.

- **value\_specs** - (Optional) Map of additional options.

The **allocation\_pools** block supports:

- **start** - (Required) The starting address.
- **end** - (Required) The ending address.

The **host\_routes** block supports:

- **destination\_cidr** - (Required) The destination CIDR.
- **next\_hop** - (Required) The next hop in the route.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **network\_id** - See Argument Reference above.
- **cidr** - See Argument Reference above.
- **ip\_version** - See Argument Reference above.
- **name** - See Argument Reference above.
- **tenant\_id** - See Argument Reference above.
- **allocation\_pools** - See Argument Reference above.
- **gateway\_ip** - See Argument Reference above.
- **enable\_dhcp** - See Argument Reference above.
- **dns\_nameservers** - See Argument Reference above.
- **host\_routes** - See Argument Reference above.

## » Import

Subnets can be imported using the id, e.g.

```
$ terraform import opentelekomcloud_networking_subnet_v2.subnet_1 da4faf16-5546-41e4-8330-4
```

## » opentelekomcloud\_networking\_secgroup\_v2

Manages a V2 neutron security group resource within OpenTelekomCloud. Unlike Nova security groups, neutron separates the group from the rules and also allows an admin to target a specific tenant\_id.

## » Example Usage

```
resource "opentelekomcloud_networking_secgroup_v2" "secgroup_1" {  
  name      = "secgroup_1"  
  description = "My neutron security group"  
}
```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 networking client. A networking client is needed to create a port. If omitted, the **region** argument of the provider is used. Changing this creates a new security group.
- **name** - (Required) A unique name for the security group.
- **description** - (Optional) A unique name for the security group.
- **tenant\_id** - (Optional) The owner of the security group. Required if admin wants to create a port for another tenant. Changing this creates a new security group.
- **delete\_default\_rules** - (Optional) Whether or not to delete the default egress security rules. This is **false** by default. See the below note for more information.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **name** - See Argument Reference above.
- **description** - See Argument Reference above.
- **tenant\_id** - See Argument Reference above.

## » Default Security Group Rules

In most cases, OpenTelekomCloud will create some egress security group rules for each new security group. These security group rules will not be managed by Terraform, so if you prefer to have *all* aspects of your infrastructure managed by Terraform, set **delete\_default\_rules** to **true** and then create separate security group rules such as the following:

```

resource "opentelekomcloud_networking_secgroup_rule_v2" "secgroup_rule_v4" {
  direction = "egress"
  ethertype = "IPv4"
  security_group_id = "${opentelekomcloud_networking_secgroup_v2.secgroup.id}"
}

resource "opentelekomcloud_networking_secgroup_rule_v2" "secgroup_rule_v6" {
  direction = "egress"
  ethertype = "IPv6"
  security_group_id = "${opentelekomcloud_networking_secgroup_v2.secgroup.id}"
}

```

Please note that this behavior may differ depending on the configuration of the OpenTelekomCloud cloud. The above illustrates the current default Neutron behavior. Some OpenTelekomCloud clouds might provide additional rules and some might not provide any rules at all (in which case the `delete_default_rules` setting is moot).

## » Import

Security Groups can be imported using the id, e.g.

```
$ terraform import opentelekomcloud_networking_secgroup_v2.secgroup_1 38809219-5e8a-4852-913
```

## » opentelekomcloud\_networking\_secgroup\_rule\_v2

Manages a V2 neutron security group rule resource within OpenTelekomCloud. Unlike Nova security groups, neutron separates the group from the rules and also allows an admin to target a specific `tenant_id`.

## » Example Usage

```

resource "opentelekomcloud_networking_secgroup_v2" "secgroup_1" {
  name      = "secgroup_1"
  description = "My neutron security group"
}

resource "opentelekomcloud_networking_secgroup_rule_v2" "secgroup_rule_1" {
  direction      = "ingress"
  ethertype      = "IPv4"
  protocol       = "tcp"
  port_range_min = 22
  port_range_max = 22
}

```

```

remote_ip_prefix = "0.0.0.0/0"
security_group_id = "${opentelekomcloud_networking_secgroup_v2.secgroup_1.id}"
}

```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 networking client. A networking client is needed to create a port. If omitted, the **region** argument of the provider is used. Changing this creates a new security group rule.
- **direction** - (Required) The direction of the rule, valid values are **ingress** or **egress**. Changing this creates a new security group rule.
- **ethertype** - (Required) The layer 3 protocol type, valid values are **IPv4** or **IPv6**. Changing this creates a new security group rule.
- **protocol** - (Optional) The layer 4 protocol type, valid values are following. Changing this creates a new security group rule. This is required if you want to specify a port range.
  - **tcp**
  - **udp**
  - **icmp**
  - **ah**
  - **dccp**
  - **egp**
  - **esp**
  - **gre**
  - **igmp**
  - **ipv6-encap**
  - **ipv6-frag**
  - **ipv6-icmp**
  - **ipv6-nonxt**
  - **ipv6-opts**
  - **ipv6-route**
  - **ospf**
  - **pgm**
  - **rsvp**
  - **sctp**
  - **udplite**
  - **vrrp**
- **port\_range\_min** - (Optional) The lower part of the allowed port range, valid integer value needs to be between 1 and 65535. Changing this creates a new security group rule.

- **port\_range\_max** - (Optional) The higher part of the allowed port range, valid integer value needs to be between 1 and 65535. Changing this creates a new security group rule.
- **remote\_ip\_prefix** - (Optional) The remote CIDR, the value needs to be a valid CIDR (i.e. 192.168.0.0/16). Changing this creates a new security group rule.
- **remote\_group\_id** - (Optional) The remote group id, the value needs to be an OpenTelekomCloud ID of a security group in the same tenant. Changing this creates a new security group rule.
- **security\_group\_id** - (Required) The security group id the rule should belong to, the value needs to be an OpenTelekomCloud ID of a security group in the same tenant. Changing this creates a new security group rule.
- **tenant\_id** - (Optional) The owner of the security group. Required if admin wants to create a port for another tenant. Changing this creates a new security group rule.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **direction** - See Argument Reference above.
- **ethertype** - See Argument Reference above.
- **protocol** - See Argument Reference above.
- **port\_range\_min** - See Argument Reference above.
- **port\_range\_max** - See Argument Reference above.
- **remote\_ip\_prefix** - See Argument Reference above.
- **remote\_group\_id** - See Argument Reference above.
- **security\_group\_id** - See Argument Reference above.
- **tenant\_id** - See Argument Reference above.

## » Import

Security Group Rules can be imported using the id, e.g.

```
$ terraform import opentelekomcloud_networking_secgroup_rule_v2.secgroup_rule_1 aeb68ee3-6e5
```

## » opentelekomcloud\_lb\_loadbalancer\_v2

Manages a V2 loadbalancer resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_lb_loadbalancer_v2" "lb_1" {  
  vip_subnet_id = "d9415786-5f1a-428b-b35f-2f1523e146d2"  
}
```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Networking client. A Networking client is needed to create an LB member. If omitted, the **region** argument of the provider is used. Changing this creates a new LB member.
- **vip\_subnet\_id** - (Required) The network on which to allocate the Loadbalancer's address. A tenant can only create Loadbalancers on networks authorized by policy (e.g. networks that belong to them or networks that are shared). Changing this creates a new loadbalancer.
- **name** - (Optional) Human-readable name for the Loadbalancer. Does not have to be unique.
- **description** - (Optional) Human-readable description for the Loadbalancer.
- **tenant\_id** - (Optional) Required for admins. The UUID of the tenant who owns the Loadbalancer. Only administrative users can specify a tenant UUID other than their own. Changing this creates a new loadbalancer.
- **vip\_address** - (Optional) The ip address of the load balancer. Changing this creates a new loadbalancer.
- **admin\_state\_up** - (Optional) The administrative state of the Loadbalancer. A valid value is true (UP) or false (DOWN).
- **flavor** - (Optional) The UUID of a flavor. Changing this creates a new loadbalancer.
- **loadbalancer\_provider** - (Optional) The name of the provider. Changing this creates a new loadbalancer.
- **security\_group\_ids** - (Optional) A list of security group IDs to apply to the loadbalancer. The security groups must be specified by ID and not name (as opposed to how they are configured with the Compute Instance).

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **vip\_subnet\_id** - See Argument Reference above.
- **name** - See Argument Reference above.
- **description** - See Argument Reference above.
- **tenant\_id** - See Argument Reference above.
- **vip\_address** - See Argument Reference above.
- **admin\_state\_up** - See Argument Reference above.
- **flavor** - See Argument Reference above.
- **loadbalancer\_provider** - See Argument Reference above.
- **security\_group\_ids** - See Argument Reference above.
- **vip\_port\_id** - The Port ID of the Load Balancer IP.

## » opentelekomcloud\_lb\_listener\_v2

Manages a V2 listener resource within OpenTelekomCloud.

### » Example Usage

```
resource "opentelekomcloud_lb_listener_v2" "listener_1" {
  protocol      = "HTTP"
  protocol_port = 8080
  loadbalancer_id = "d9415786-5f1a-428b-b35f-2f1523e146d2"
}
```

### » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Networking client. A Networking client is needed to create an . If omitted, the **region** argument of the provider is used. Changing this creates a new Listener.
- **protocol** - (Required) The protocol - can either be TCP, HTTP, HTTPS or TERMINATED\_HTTPS. Changing this creates a new Listener.
- **protocol\_port** - (Required) The port on which to listen for client traffic. Changing this creates a new Listener.
- **tenant\_id** - (Optional) Required for admins. The UUID of the tenant who owns the Listener. Only administrative users can specify a tenant UUID other than their own. Changing this creates a new Listener.
- **loadbalancer\_id** - (Required) The load balancer on which to provision this Listener. Changing this creates a new Listener.



- **name** - (Optional) Human-readable name for the Listener. Does not have to be unique.
- **default\_pool\_id** - (Optional) The ID of the default pool with which the Listener is associated. Changing this creates a new Listener.
- **description** - (Optional) Human-readable description for the Listener.
- **connection\_limit** - (Optional) The maximum number of connections allowed for the Listener.
- **default\_tls\_container\_ref** - (Optional) A reference to a Barbican Secrets container which stores TLS information. This is required if the protocol is `TERMINATED_HTTPS`. See here for more information.
- **sni\_container\_refs** - (Optional) A list of references to Barbican Secrets containers which store SNI information. See here for more information.
- **admin\_state\_up** - (Optional) The administrative state of the Listener. A valid value is `true` (UP) or `false` (DOWN).

## » Attributes Reference

The following attributes are exported:

- **id** - The unique ID for the Listener.
- **protocol** - See Argument Reference above.
- **protocol\_port** - See Argument Reference above.
- **tenant\_id** - See Argument Reference above.
- **name** - See Argument Reference above.
- **default\_port\_id** - See Argument Reference above.
- **description** - See Argument Reference above.
- **connection\_limit** - See Argument Reference above.
- **default\_tls\_container\_ref** - See Argument Reference above.
- **sni\_container\_refs** - See Argument Reference above.
- **admin\_state\_up** - See Argument Reference above.

## » opentelekomcloud\_lb\_pool\_v2

Manages a V2 pool resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_lb_pool_v2" "pool_1" {
  protocol    = "HTTP"
  lb_method   = "ROUND_ROBIN"
```

```

listener_id = "d9415786-5f1a-428b-b35f-2f1523e146d2"

persistence {
  type      = "HTTP_COOKIE"
  cookie_name = "testCookie"
}
}

```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Networking client. A Networking client is needed to create an . If omitted, the **region** argument of the provider is used. Changing this creates a new pool.
- **tenant\_id** - (Optional) Required for admins. The UUID of the tenant who owns the pool. Only administrative users can specify a tenant UUID other than their own. Changing this creates a new pool.
- **name** - (Optional) Human-readable name for the pool.
- **description** - (Optional) Human-readable description for the pool.
- **protocol** = (Required) The protocol - can either be TCP, HTTP or HTTPS. Changing this creates a new pool.
- **loadbalancer\_id** - (Optional) The load balancer on which to provision this pool. Changing this creates a new pool. Note: One of LoadbalancerID or ListenerID must be provided.
- **listener\_id** - (Optional) The Listener on which the members of the pool will be associated with. Changing this creates a new pool. Note: One of LoadbalancerID or ListenerID must be provided.
- **lb\_method** - (Required) The load balancing algorithm to distribute traffic to the pool's members. Must be one of ROUND\_ROBIN, LEAST\_CONNECTIONS, or SOURCE\_IP.
- **persistence** - Omit this field to prevent session persistence. Indicates whether connections in the same session will be processed by the same Pool member or not. Changing this creates a new pool.
- **admin\_state\_up** - (Optional) The administrative state of the pool. A valid value is true (UP) or false (DOWN).

The **persistence** argument supports:

- **type** - (Required) The type of persistence mode. The current specification supports SOURCE\_IP, HTTP\_COOKIE, and APP\_COOKIE.

- **cookie\_name** - (Optional) The name of the cookie if persistence mode is set appropriately. Required if **type** = **APP\_COOKIE**.

## » Attributes Reference

The following attributes are exported:

- **id** - The unique ID for the pool.
- **tenant\_id** - See Argument Reference above.
- **name** - See Argument Reference above.
- **description** - See Argument Reference above.
- **protocol** - See Argument Reference above.
- **lb\_method** - See Argument Reference above.
- **persistence** - See Argument Reference above.
- **admin\_state\_up** - See Argument Reference above.

## » opentelekomcloud\_lb\_member\_v2

Manages a V2 member resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_lb_member_v2" "member_1" {
  address      = "192.168.199.23"
  protocol_port = 8080
}
```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Networking client. A Networking client is needed to create an . If omitted, the **region** argument of the provider is used. Changing this creates a new member.
- **pool\_id** - (Required) The id of the pool that this member will be assigned to.
- **subnet\_id** - (Required) The subnet in which to access the member
- **name** - (Optional) Human-readable name for the member.
- **tenant\_id** - (Optional) Required for admins. The UUID of the tenant who owns the member. Only administrative users can specify a tenant UUID other than their own. Changing this creates a new member.

- **address** - (Required) The IP address of the member to receive traffic from the load balancer. Changing this creates a new member.
- **protocol\_port** - (Required) The port on which to listen for client traffic. Changing this creates a new member.
- **weight** - (Optional) A positive integer value that indicates the relative portion of traffic that this member should receive from the pool. For example, a member with a weight of 10 receives five times as much traffic as a member with a weight of 2.
- **admin\_state\_up** - (Optional) The administrative state of the member. A valid value is true (UP) or false (DOWN).

## » Attributes Reference

The following attributes are exported:

- **id** - The unique ID for the member.
- **name** - See Argument Reference above.
- **weight** - See Argument Reference above.
- **admin\_state\_up** - See Argument Reference above.
- **tenant\_id** - See Argument Reference above.
- **subnet\_id** - See Argument Reference above.
- **pool\_id** - See Argument Reference above.
- **address** - See Argument Reference above.
- **protocol\_port** - See Argument Reference above.

## » opentelekomcloud\_lb\_monitor\_v2

Manages a V2 monitor resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_lb_monitor_v2" "monitor_1" {
  pool_id      = "${opentelekomcloud_lb_pool_v2.pool_1.id}"
  type         = "PING"
  delay        = 20
  timeout      = 10
  max_retries  = 5
}
```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the V2 Networking client. A Networking client is needed to create an . If omitted, the **region** argument of the provider is used. Changing this creates a new monitor.
- **pool\_id** - (Required) The id of the pool that this monitor will be assigned to.
- **name** - (Optional) The Name of the Monitor.
- **tenant\_id** - (Optional) Required for admins. The UUID of the tenant who owns the monitor. Only administrative users can specify a tenant UUID other than their own. Changing this creates a new monitor.
- **type** - (Required) The type of probe, which is PING, TCP, HTTP, or HTTPS, that is sent by the load balancer to verify the member state. Changing this creates a new monitor.
- **delay** - (Required) The time, in seconds, between sending probes to members.
- **timeout** - (Required) Maximum number of seconds for a monitor to wait for a ping reply before it times out. The value must be less than the delay value.
- **max\_retries** - (Required) Number of permissible ping failures before changing the member's status to INACTIVE. Must be a number between 1 and 10..
- **url\_path** - (Optional) Required for HTTP(S) types. URI path that will be accessed if monitor type is HTTP or HTTPS.
- **http\_method** - (Optional) Required for HTTP(S) types. The HTTP method used for requests by the monitor. If this attribute is not specified, it defaults to "GET".
- **expected\_codes** - (Optional) Required for HTTP(S) types. Expected HTTP codes for a passing HTTP(S) monitor. You can either specify a single status like "200", or a range like "200-202".
- **admin\_state\_up** - (Optional) The administrative state of the monitor. A valid value is true (UP) or false (DOWN).

## » Attributes Reference

The following attributes are exported:

- **id** - The unique ID for the monitor.

- `tenant_id` - See Argument Reference above.
- `type` - See Argument Reference above.
- `delay` - See Argument Reference above.
- `timeout` - See Argument Reference above.
- `max_retries` - See Argument Reference above.
- `url_path` - See Argument Reference above.
- `http_method` - See Argument Reference above.
- `expected_codes` - See Argument Reference above.
- `admin_state_up` - See Argument Reference above.

## » `opentelekomcloud_fw_firewall_group_v2`

Manages a v1 firewall group resource within OpenTelekomCloud.

### » Example Usage

```
resource "opentelekomcloud_fw_rule_v2" "rule_1" {
  name           = "my-rule-1"
  description    = "drop TELNET traffic"
  action         = "deny"
  protocol       = "tcp"
  destination_port = "23"
  enabled        = "true"
}

resource "opentelekomcloud_fw_rule_v2" "rule_2" {
  name           = "my-rule-2"
  description    = "drop NTP traffic"
  action         = "deny"
  protocol       = "udp"
  destination_port = "123"
  enabled        = "false"
}

resource "opentelekomcloud_fw_policy_v2" "policy_1" {
  name = "my-policy"

  rules = [
    "${opentelekomcloud_fw_rule_v2.rule_1.id}",
    "${opentelekomcloud_fw_rule_v2.rule_2.id}",
  ]
}

resource "opentelekomcloud_fw_firewall_group_v2" "firewall_group_1" {
```

```

    name          = "my-firewall-group"
    ingress_policy_id = "${opentelekomcloud_fw_policy_v2.policy_1.id}"
  }

```

## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the v1 networking client. A networking client is needed to create a firewall group. If omitted, the **region** argument of the provider is used. Changing this creates a new firewall group.
- **ingress\_policy\_id** - The ingress policy resource id for the firewall group. Changing this updates the **ingress\_policy\_id** of an existing firewall group.
- **egress\_policy\_id** - The egress policy resource id for the firewall group. Changing this updates the **egress\_policy\_id** of an existing firewall group.
- **name** - (Optional) A name for the firewall group. Changing this updates the **name** of an existing firewall group.
- **description** - (Required) A description for the firewall group. Changing this updates the **description** of an existing firewall group.
- **admin\_state\_up** - (Optional) Administrative up/down status for the firewall group (must be "true" or "false" if provided - defaults to "true"). Changing this updates the **admin\_state\_up** of an existing firewall group.
- **tenant\_id** - (Optional) The owner of the floating IP. Required if admin wants to create a firewall group for another tenant. Changing this creates a new firewall group.
- **ports** - (Optional) Port(s) to associate this firewall group instance with. Must be a list of strings. Changing this updates the associated routers of an existing firewall group.
- **value\_specs** - (Optional) Map of additional options.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **policy\_id** - See Argument Reference above.
- **name** - See Argument Reference above.
- **description** - See Argument Reference above.

- `admin_state_up` - See Argument Reference above.
- `tenant_id` - See Argument Reference above.
- `ports` - See Argument Reference above.

## » Import

Firewall Groups can be imported using the `id`, e.g.

```
$ terraform import opentelekomcloud_fw_firewall_group_v2.firewall_group_1 c9e39fb2-ce20-46c8
```

## » `opentelekomcloud_fw_policy_v2`

Manages a v1 firewall policy resource within OpenTelekomCloud.

## » Example Usage

```
resource "opentelekomcloud_fw_rule_v2" "rule_1" {
  name           = "my-rule-1"
  description    = "drop TELNET traffic"
  action         = "deny"
  protocol       = "tcp"
  destination_port = "23"
  enabled        = "true"
}

resource "opentelekomcloud_fw_rule_v2" "rule_2" {
  name           = "my-rule-2"
  description    = "drop NTP traffic"
  action         = "deny"
  protocol       = "udp"
  destination_port = "123"
  enabled        = "false"
}

resource "opentelekomcloud_fw_policy_v2" "policy_1" {
  name = "my-policy"

  rules = [
    "${opentelekomcloud_fw_rule_v2.rule_1.id}",
    "${opentelekomcloud_fw_rule_v2.rule_2.id}",
  ]
}
```



## » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the v1 networking client. A networking client is needed to create a firewall policy. If omitted, the **region** argument of the provider is used. Changing this creates a new firewall policy.
- **name** - (Optional) A name for the firewall policy. Changing this updates the **name** of an existing firewall policy.
- **description** - (Optional) A description for the firewall policy. Changing this updates the **description** of an existing firewall policy.
- **rules** - (Optional) An array of one or more firewall rules that comprise the policy. Changing this results in adding/removing rules from the existing firewall policy.
- **audited** - (Optional) Audit status of the firewall policy (must be "true" or "false" if provided - defaults to "false"). This status is set to "false" whenever the firewall policy or any of its rules are changed. Changing this updates the **audited** status of an existing firewall policy.
- **shared** - (Optional) Sharing status of the firewall policy (must be "true" or "false" if provided). If this is "true" the policy is visible to, and can be used in, firewalls in other tenants. Changing this updates the **shared** status of an existing firewall policy. Only administrative users can specify if the policy should be shared.
- **value\_specs** - (Optional) Map of additional options.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **name** - See Argument Reference above.
- **description** - See Argument Reference above.
- **audited** - See Argument Reference above.
- **shared** - See Argument Reference above.

## » Import

Firewall Policies can be imported using the **id**, e.g.

```
$ terraform import opentelekomcloud_fw_policy_v2.policy_1 07f422e6-c596-474b-8b94-fe2c12506
```

## » opentelekomcloud\_fw\_rule\_v2

Manages a v2 firewall rule resource within OpenTelekomCloud.

### » Example Usage

```
resource "opentelekomcloud_fw_rule_v2" "rule_1" {
  name           = "my_rule"
  description    = "drop TELNET traffic"
  action         = "deny"
  protocol       = "tcp"
  destination_port = "23"
  enabled        = "true"
}
```

### » Argument Reference

The following arguments are supported:

- **region** - (Optional) The region in which to obtain the v1 Compute client. A Compute client is needed to create a firewall rule. If omitted, the **region** argument of the provider is used. Changing this creates a new firewall rule.
- **name** - (Optional) A unique name for the firewall rule. Changing this updates the **name** of an existing firewall rule.
- **description** - (Optional) A description for the firewall rule. Changing this updates the **description** of an existing firewall rule.
- **protocol** - (Required) The protocol type on which the firewall rule operates. Valid values are: **tcp**, **udp**, **icmp**, and **any**. Changing this updates the **protocol** of an existing firewall rule.
- **action** - (Required) Action to be taken ( must be "allow" or "deny") when the firewall rule matches. Changing this updates the **action** of an existing firewall rule.
- **ip\_version** - (Optional) IP version, either 4 (default) or 6. Changing this updates the **ip\_version** of an existing firewall rule.
- **source\_ip\_address** - (Optional) The source IP address on which the firewall rule operates. Changing this updates the **source\_ip\_address** of an existing firewall rule.
- **destination\_ip\_address** - (Optional) The destination IP address on which the firewall rule operates. Changing this updates the **destination\_ip\_address** of an existing firewall rule.

- **source\_port** - (Optional) The source port on which the firewall rule operates. Changing this updates the **source\_port** of an existing firewall rule.
- **destination\_port** - (Optional) The destination port on which the firewall rule operates. Changing this updates the **destination\_port** of an existing firewall rule.
- **enabled** - (Optional) Enabled status for the firewall rule (must be "true" or "false" if provided - defaults to "true"). Changing this updates the **enabled** status of an existing firewall rule.
- **tenant\_id** - (Optional) The owner of the firewall rule. Required if admin wants to create a firewall rule for another tenant. Changing this creates a new firewall rule.
- **value\_specs** - (Optional) Map of additional options.

## » Attributes Reference

The following attributes are exported:

- **region** - See Argument Reference above.
- **name** - See Argument Reference above.
- **description** - See Argument Reference above.
- **protocol** - See Argument Reference above.
- **action** - See Argument Reference above.
- **ip\_version** - See Argument Reference above.
- **source\_ip\_address** - See Argument Reference above.
- **destination\_ip\_address** - See Argument Reference above.
- **source\_port** - See Argument Reference above.
- **destination\_port** - See Argument Reference above.
- **enabled** - See Argument Reference above.
- **tenant\_id** - See Argument Reference above.

## » Import

Firewall Rules can be imported using the **id**, e.g.

```
$ terraform import opentelekomcloud_fw_rule_v2.rule_1 8dbc0c28-e49c-463f-b712-5c5d1bbac327
```