TencentCloud Provider

The TencentCloud provider is used to interact with the many resources supported by TencentCloud (https://intl.cloud.tencent.com). The provider needs to be configured with the proper credentials before it can be used.

Use the navigation to the left to read about the available resources.

Example Usage

```
# Configure the TencentCloud Provider
provider "tencentcloud" {
 secret_id = "${var.secret_id}"
 secret_key = "${var.secret_key}"
 region = "${var.region}"
# Create a web server
resource "tencentcloud_instance" "web" {
 instance_name = "ruby on rails example"
 instance_type = "S1"
 key_name
                         = "${tencentcloud_key_pair.my_ssh_key.id}"
 security_groups = ["${tencentcloud_security_group.default.id}"]
 internet_max_bandwidth_out = 20
 count
}
# Create key pair with your public key
resource "tencentcloud_key_pair" "my_ssh_key" {
 key_name = "from_terraform_public_key"
 public_key = "ssh-rsa AAAAB3NzaSuperLongString foo@bar"
# Create security group
// Create Security Group with 2 rules
resource "tencentcloud_security_group" "default" {
 name = "web accessibility"
 description = "make it accessable for both production and stage ports"
resource "tencentcloud_security_group_rule" "web" {
 security_group_id = "${tencentcloud_security_group.default.id}"
       = "ingress"
 type
 cidr_ip
                = "0.0.0.0/0"
 policy
                 = "accept"
resource "tencentcloud_security_group_rule" "ssh" {
 security_group_id = "${tencentcloud_security_group.default.id}"
 type = "ingress"
cidr_ip = "200 110
                = "202.119.230.10/32"
 ip_protocol = "tcp"
port range = "co"
                = "22"
 port_range
                 = "accept"
 policy
}
```

Authentication

The TencentCloud provider offers a flexible means of providing credentials for authentication. The following methods are supported, in this order, and explained below:

- Static credentials
- Environment variables

Static credentials

Static credentials can be provided by adding an secret_id secret_key and region in-line in the tencentcloud provider block:

Usage:

```
provider "tencentcloud" {
  secret_id = "${var.secret_id}"
  secret_key = "${var.secret_key}"
  region = "${var.region}"
}
```

Environment variables

You can provide your credentials via TENCENTCLOUD_SECRET_ID and TENCENTCLOUD_SECRET_KEY, environment variables, representing your TencentCloud Access Key and Secret Key, respectively. TENCENTCLOUD_REGION is also used, if applicable:

```
provider "tencentcloud" {}
```

Usage:

```
$ export TENCENTCLOUD_SECRET_ID="your_fancy_accesskey"
$ export TENCENTCLOUD_SECRET_KEY="your_fancy_secretkey"
$ export TENCENTCLOUD_REGION="ap-guangzhou"
$ terraform plan
```

Argument Reference

The following arguments are supported:

- secret_id (Optional) This is the TencentCloud access key. It must be provided, but it can also be sourced from the TENCENTCLOUD_SECRET_ID environment variable.
- secret_key (Optional) This is the TencentCloud secret key. It must be provided, but it can also be sourced from the TENCENTCLOUD_SECRET_KEY environment variable.
- region (Required) This is the TencentCloud region. It must be provided, but it can also be sourced from the TENCENTCLOUD_REGION environment variables. The default input value is ap-guangzhou.

Testing

Credentials must be provided via the TENCENTCLOUD_SECRET_ID, and TENCENTCLOUD_SECRET_KEY environment variables in order to run acceptance tests.

tencentcloud_availability_zones

Use this data source to get the available zones in the current region. By default only AVAILABLE zones will be returned, but UNAVAILABLE zones can also be fetched when include_unavailable is specified.

Example Usage

```
data "tencentcloud_availability_zones" "my_favarate_zone" {
   name = "ap-guangzhou-3"
}
```

Argument Reference

- include_unavailable (Optional) A bool variable Indicates that the query will include UNAVAILABLE zones.
- name (Optional) When specified, only the zone with the exactly name match will return.

Attributes Reference

A list of zones will be exported and its every element contains the following attributes:

- id An internal id for the zone, like 200003, usually not so useful for end user.
- name The english name for the zone, like ap-guangzhou-3.
- description The description for the zone, unfortunately only Chinese characters at this stage.
- state The state for the zone, indicate availability using AVAILABLE and UNAVAILABLE values.

tencentcloud_container_cluster_instances

Use this data source to get all instances in a specific cluster.

Example Usage

```
data "tencentcloud_container_cluster_instances" "foo_instance" {
   cluster_id = "cls-abcdefg"
}
```

Argument Reference

- cluster_id (Required) An id identify the cluster, like cls-xxxxxx.
- limit (Optional) An int variable describe how many instances in return at most.

Attributes Reference

• total_count - Describe how many nodes in the cluster.

A list of nodes will be exported and its every element contains the following attributes:

- abnormal_reason Describe the reason when node is in abnormal state(if it was).
- cpu Describe the cpu of the node.
- mem Describe the memory of the node.
- instance_id An id identify the node, provided by cvm.
- is_normal Describe whether the node is normal.
- wan_ip Describe the wan ip of the node.
- lan_ip Descirbe the lan ip of the node.

tencentcloud_container_clusters

Use this data source to get container clusters in the current region. By default every clusters in current region will be returned.

Example Usage

```
data "tencentcloud_container_clusters" "foo" {
}
```

Argument Reference

- cluster_id (Optional) An id identify the cluster, like cls-xxxxxx.
- limit (Optional) An int variable describe how many cluster in return at most.

Attributes Reference

A list of clusters will be exported and its every element contains the following attributes:

- cluster_id An id identify the cluster, like cls-xxxxxx.
- security_certification_authority Describe the certificate string needed for using kubectl to access to kubernetes.
- security_cluster_external_endpoint Describe the address needed for using kubectl to access to kubernetes.
- security_username Describe the username needed for using kubectl to access to kubernetes.
- security_password Describe the password needed for using kubectl to access to kubernetes.
- description The description of the cluster.
- kubernetes_version Describe the running kubernetes version on the cluster.
- nodes_num Describe how many cluster instances in the cluster.
- nodes_status Describe the current status of the instances in the cluster.
- total_cpu Describe the total cpu of each instance in the cluster.
- total_mem Describe the total memory of each instance in the cluster.

tencentcloud_eip

The EIP data source fetch proper EIP from user's EIP pool.

Example Usage

```
data "tencentcloud_eip" "my_eip" {
  filter {
   name = "address-status"
   values = ["UNBIND"]
  }
}
```

Argument Reference

• filter-(Optional) One or more name/value pairs to filter off of. There are several valid keys: address-id,address-name,address-ip. For a full reference, check out Describelmages in the TencentCloud API reference (https://intl.cloud.tencent.com/document/api/213/9451#filter).

Attributes Reference

- id An EIP id indicate the uniqueness of a certain EIP, which can be used for instance binding or network interface binding.
- public_ip An public IP address for the EIP.
- status The status of the EIP, there are several status like BIND, UNBIND, and BIND_ENI. For a full reference, check out Describelmages in the TencentCloud API reference (https://intl.cloud.tencent.com/document/api/213/9452#eip_state).

tencentcloud_image

The Images data source fetch proper image, which could be one of the private images of the user and images of system resources provided by TencentCloud, as well as other public images and those available on the image market.

Example Usage

```
data "tencentcloud_image" "my_favorate_image" {
   os_name = "centos"

   filter {
      name = "image-type"
      values = ["PUBLIC_IMAGE"]
   }
}
```

Argument Reference

- image_name_regex (Optional) A regex string to apply to the image list returned by TencentCloud. **NOTE**: it is not wildcard, should look like image_name_regex = "^CentOS\\s+6\\.8\\s+64\\w*".
- os_name (Optional) A string to apply with fuzzy match to the os_name attribute on the image list returned by TencentCloud. **NOTE**: when os_name is provided, highest priority is applied in this field instead of image_name_regex.
- filter (Optional) One or more name/value pairs to filter off of. There are several valid keys: image-id,image-type,image-name. For a full reference, check out DescribeImages in the TencentCloud API reference (https://intl.cloud.tencent.com/document/api/213/9451#filter).

Attributes Reference

• image_id - An image id indicate the uniqueness of a certain image, which can be used for instance creation or resetting.

tencentcloud_instance_types

The Instance Types data source list the cvm_instance_types of TencentCloud.

Example Usage

```
data "tencentcloud_instance_types" "lowest_cost_config" {
   filter {
    name = "instance-family"
    values = ["S1"]
   }
   cpu_core_count = 1
   memory_size = 1
}
```

Argument Reference

- filter (Optional) One or more name/value pairs to filter off of. There are several valid keys: zone,instance-family. For a full reference, check out DescribeInstanceTypeConfigs in the TencentCloud API reference (https://intl.cloud.tencent.com/document/api/213/9391).
 - cpu_core_count (Optional) Limit search to specific cpu core count.
 - memory_size (Optional) Limit search to specific memory size.

Attributes Reference

- availability_zone Indicate the availability zone for this instance type.
- instance_type TencentCloud instance type of the cvm instance.
- cpu_core_count Number of CPU cores.
- memory_size Size of memory, measured in GB.
- family The instance type family.

tencentcloud_nats

The NATs data source lists a number of NATs resource information owned by an TencentCloud account.

Example Usage

Basic usage:

```
# Query the NAT gateway by ID
data "tencentcloud_nats" "anat" {
   id = "nat-k6ualnp2"
}

# Query the list of normal NAT gateways
data "tencentcloud_nats" "nat_state" {
   state = 0
}

# Multi conditional query NAT gateway list
data "tencentcloud_nats" "multi_nat" {
   name = "terraform test"
   vpc_id = "vpc-ezij4ltv"
   max_concurrent = 3000000
   bandwidth = 500
}
```

Argument Reference

The following arguments are supported:

- id (Optional) The ID for NAT Gateway.
- name (Optional) The name for NAT Gateway.
- vpc_id (Optional) The VPC ID for NAT Gateway.
- max_concurrent (Optional) The upper limit of concurrent connection of NAT gateway, for example: 1000000, 3000000, 10000000. To learn more, please refer to Virtual Private Cloud Gateway Description (https://intl.cloud.tencent.com/doc/product/215/1682).
- bandwidth (Optional) The maximum public network output bandwidth of the gateway (unit: Mbps), for example: 10, 20, 50, 100, 200, 500, 1000, 2000, 5000. For more information, please refer to Virtual Private Cloud Gateway Description (https://intl.cloud.tencent.com/doc/product/215/1682).
- assigned_eip_set (Optional) Elastic IP arrays bound to the gateway, For more information on elastic IP, please refer to Elastic IP (/docs/providers/tencentcloud/d/eip.html).
- state (Optional) NAT gateway status, 0: Running, 1: Unavailable, 2: Be in arrears and out of service

Attributes Reference

- id The ID of the NAT Gateway.
- name The name of the NAT Gateway.
- max_concurrent The upper limit of concurrent connection of the NAT gateway.
- bandwidth The maximum public network output bandwidth of the NAT gateway (unit: Mbps).
- assigned_eip_set Elastic IP arrays bound to the NAT gateway
- state NAT gateway status, 0: Running, 1: Unavailable, 2: Be in arrears and out of service
- create_time The create time of the NAT gateway

tencentcloud_route_table

tencentcloud_route_table provides details about a specific Route Table.

This resource can prove useful when a module accepts a Subnet id as an input variable and needs to, for example, add a route in the Route Table.

Example Usage

The following example shows how one might accept a vpc id as a variable and use this data source to obtain the data necessary to create a route.

```
variable "route_table_id" {}

data "tencentcloud_route_table" "selected" {
   route_table_id = "${var.route_table_id}"
}

resource "tencentcloud_route_entry" "rtb_entry_instance" {
   vpc_id = "{data.tencentcloud_route_table.selected.vpc_id}"
   route_table_id = "${var.route_table_id}"
   cidr_block = "10.4.8.0/24"
   next_type = "instance"
   next_hub = "10.16.1.7"
}
```

Argument Reference

The arguments of this data source act as filters for querying the available Route Table in the current region. The given filters must match exactly one Route Table whose data will be exported as attributes.

• route_table_id - (Required) The Route Table ID.

Attributes Reference

- name The name for Route Table.
- vpc_id The VPC ID.
- routes routes are also exported with the following attributes, when there are relevants: Each route supports the following:
 - o cidr block The RouteEntry's target network segment.
 - next_type The next_hub type.
 - next_hub The RouteEntry's next hub.
 - description The RouteEntry's description.
- subnet_num Number of associated subnets.

• create_time - Creation time of routing table, for example: 2018-01-22 17:50:21.

tencentcloud_security_group

tencentcloud_security_group provides details about a specific Security Group.

Example Usage

Basic usage:

```
variable "security_group_id" {}

data "tencentcloud_security_group" "selected" {
  id = "${var.security_group_id}"
}
```

Argument Reference

The following arguments are supported:

• security_group_id - (Required) The ID of the security group.

Attributes Reference

- name The name of the security group.
- description The description of the security group.
- be_associate_count Number of associated instances.
- create_time Creation time of security group, for example: 2018-01-22 17:50:21.

tencentcloud_subnet

tencentcloud_subnet provides details about a specific VPC subnet.

This resource can prove useful when a module accepts a subnet id as an input variable and needs to, for example, determine the id of the VPC that the subnet belongs to.

Example Usage

The following example shows how one might accept a subnet id as a variable and use this data source to obtain the data necessary to create a security group that allows connections from hosts in that subnet.

```
variable "subnet_id" {}
data "tencentcloud_subnet" "selected" {
  id = "${var.subnet_id}"
resource "tencentcloud_security_group" "default" {
            = "test subnet data"
  description = "test subnet data description"
}
resource "tencentcloud_security_group_rule" "subnet" {
 security_group_id = "${tencentcloud_security_group.default.id}"
                 = "ingress"
 type
                 = "${data.tencentcloud_subnet.selected.cidr_block}"
 cidr_ip
                 = "tcp"
 ip_protocol
                  = "80,8080"
 port_range
                   = "accept"
 policy
```

Argument Reference

The arguments of this data source act as filters for querying the available subnets in the current region. The given filters must match exactly one subnet whose data will be exported as attributes.

- vpc_id (Required) The VPC ID.
- subnet_id (Required) The ID of the Subnet.

Attributes Reference

- name The name for the Subnet.
- cidr_block The CIDR block of the Subnet.
- availability_zone- The AZ for the subnet.

• route_table_id - The Route Table ID.

tencentcloud_vpc

tencentcloud_vpc provides details about a specific VPC.

This resource can prove useful when a module accepts a vpc id as an input variable and needs to, for example, determine the CIDR block of that VPC.

Example Usage

The following example shows how one might accept a VPC id as a variable and use this data source to obtain the data necessary to create a subnet within it.

Argument Reference

The following arguments are supported:

- id (Optional) The id of the specific VPC to retrieve.
- name (Optional) VPC name. Fuzzy search is supported, as defined by the underlying TencentCloud API (https://intl.cloud.tencent.com/document/product/215/1372).

Attributes Reference

All of the argument attributes except filter blocks are also exported as result attributes. This data source will complete the data by populating any fields that are not included in the configuration with the data for the selected VPC.

The following attribute is additionally exported:

- cidr_block The CIDR block of the VPC.
- is_default Whether or not the default VPC.
- is_multicast Whether or not the VPC has Multicast support.

tencentcloud_alb_server_attachment

Provides Load Balancer server attachment resource.

NOTE: Currently only support existing loadbalancer_id listener_id location_id and Application layer 7 load balancer

Example Usage

```
resource "tencentcloud_alb_server_attachment" "service1" {
  loadbalancer_id = "lb-qk1dqox5"
  listener_id = "loc-i858qv11"
  backends = [
      {
        instance_id = "ins-4j30i5pe"
        port = 80
        weight = 50
      },
      {
        instance_id = "ins-4j30i5pe"
        port = 8080
        weight = 50
    }
}
```

Argument Reference

The following arguments are supported:

- loadbalancer_id (Required, Forces new resource) loadbalancer ID.
- listener_id (Required, Forces new resource) listener ID.
- location_id (Optional) location ID only support for layer 7 loadbalancer
- backends (Required) list of backend server. Valid value range [1-100].

Block backends

The backends mapping supports the following:

- instance_id (Required) A list backend instance ID (CVM instance ID).
- port (Required) The port used by the backend server. Valid value range: [1-65535].
- weight (Optional) Weight of the backend server. Valid value range: [0-100]. Default to 10.

Attributes Reference

- loadbalancer_id loadbalancer ID.
- \bullet listener_id listener ID.
- location_id location ID (only support for layer 7 loadbalancer)
- protocol_type http or tcp

tencentcloud_cbs_storage

Provides a CBS resource.

NOTE: At present, only 'PREPAID' storage is supported to create. 'PREPAID' storage cannot be deleted, once created, must wait it to be expired and release it automatically.

Example Usage

Argument Reference

The following arguments are supported:

- storage_type (Required) Type of CBS medium. cloudBasic refers to a HDD cloud storage, cloudPremium refers to a Premium cloud storage, cloudSSD refers to a SSD cloud storage. **NOTE**, storage_type do not support modification.
- storage_size (Required) Size of the storage (GB). The value range is 10GB 4,000GB (HDD cloud storages), 500GB 4,000GB (Premium cloud storages), 100GB 4,000GB (SSD cloud storages). The increment is 10GB. **NOTE**, storage_size do not support modification.
- period (Required) The tenancy (time unit is month) of the perpaid storage, the legal values are [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, 36, 48, 60]. **NOTE**, period do not support modification.
- availability_zone (Required) The available zone that the CBS instance locates at. NOTE, availability_zone do
 not support modification.
- storage_name (Optional) The name of the CBS. This storage_name can have a string of 1 to 64 characters, must contain only alphanumeric characters or hyphens, such as "-",".","_". If not specified, the default name is CBS-Instance. It is supported to modify storage_name after the storage is created
- snapshot_id (Optional) For a new storage, this indicate which snapshot to use to create the new storage. For a exist storage, change this field whill case a rollback operation: your storage will rollback to the moment the snapshot created, your must change this filed carefully, please ensure your data in this storage is saved or out of use.

Attributes Reference

- id The storage ID, something looks like disk-xxxxxx.
- storage_type Type of CBS medium.
- $\bullet \ \ \mbox{storage_size} \ \mbox{-} \ \mbox{Size} \ \mbox{-} \ \mbox{Size} \ \mbox{of} \ \mbox{the storage}.$
- period The tenancy of the storage.
- availability_zone The available zone that the CBS instance.
- storage_status The status of storage. The standard values are as follows, normal: Normal, toRecycle: To be terminated, attaching: Mounting, detaching: Unmounting.
- attached The attach status of storage. 1 indicates that storage has been mounted, 0 indicates the storage unmounted.

tencentcloud_instance

Provides CBS stoarge attachment resource.

Example Usage

```
data "tencentcloud_image" "my_favorate_image" {
  os_name = "centos"
 filter {
   name = "image-type"
   values = ["PUBLIC IMAGE"]
  }
}
data "tencentcloud_instance_types" "my_favorate_instance_types" {
 filter {
         = "instance-family"
   name
   values = ["S2"]
  cpu_core_count = 2
  memory_size
data "tencentcloud_availability_zones" "my_favorate_zones" {}
resource "tencentcloud_instance" "instance-without-specified-image-id-example" {
  instance_name = "my-instance"
  availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.ones.0.name}"
            = "${data.tencentcloud_image.my_favorate_image.image_id}"
  instance_type = "${data.tencentcloud_instance_types.my_favorate_instance_types.instance_types.0.ins
tance_type}"
resource "tencentcloud_cbs_storage" "my-storage" {
 storage_type
               = "cloudBasic"
 storage_size
                   = 10
 period
 availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.o.name}"
                 = "my-storage"
  storage_name
}
resource "tencentcloud_cbs_storage_attachment" "my-attachment" {
  storage_id = "${tencentcloud_cbs_storage.my-storage.id}"
  instance_id = "${tencentcloud_instance.instance-without-specified-image-id-example.id}"
}
```

Argument Reference

The following arguments are supported:

- storage_id (Required, Forces new resource) ID of the storage to be attached.
- instance_id (Required, Forces new resource) ID of the CVM instance to attache to.

Attributes Reference

- storage_id ID of the storage.
- instance_id ID of the CVM instance.

tencentcloud_container_cluster

Provides a Container Cluster resource.

Example Usage

Basic Usage

```
resource "tencentcloud_container_cluster" "foo" {
cluster_name = "terraform-acc-test"
     = 1
os_name = "ubuntu16.04.1 LTSx86_64"
bandwidth = 1
bandwidth_type = "PayByHour"
require_wan_ip = 1
subnet_id = "subnet-abcdabc"
is_vpc_gateway = 0
storage_size = 0
root_size = 50
goods_num = 1
password = "Admin12345678"
vpc_id = "vpc-abcdabc"
cluster_cidr = "10.0.2.0/24"
ignore_cluster_cidr_conflict = 0
cvm_type = "PayByHour"
cluster_desc = "foofoofoo"
period = 1
zone_id = 100004
instance type = "S2.SMALL1"
mount_target = ""
docker_graph_path = ""
instance name = "bar-vm"
cluster_version = "1.7.8"
```

Argument Reference

The following arguments are supported:

- cluster_name (Required) The name of the cluster.
- cpu (Required) The cpu of the node.
- mem (Required) The memory of the node.
- os_name (Required) The system os name of the node.
- bandwidth (Required) The network bandwidth of the node.
- bandwidth_type (Required) The network type of the node.
- subnet_id (Required) The subnet id which the node stays in.
- is_vpc_gateway (Required) Describe whether the node enable the gateway capability.

- storage_size (Required) The size of the data volumn.
- storage_type (Optional) The type of the data volumn. see more from CVM.
- root_size (Required) The size of the root volumn.
- root_type (Optional) The type of the root volumn. see more from CVM.
- goods_num (Required) The node number is going to create in the cluster.
- vpc_id (Required) Specify vpc which the node(s) stay in.
- cluster_cidr (Required) The CIDR which the cluster is going to use.
- cluster_desc (Optional) The descirption of the cluster.
- cvm_type (Optional) The type of node needed by cvm.
- period (Optional) The puchase duration of the node needed by cvm.
- zone_id (Required) The zone which the node stays in.
- instance_type (Optional) The instance type of the node needed by cvm.
- sg_id (Optional) The safe-group id.
- mount_target (Optional) The path which volumn is going to be mounted.
- docker_graph_path (Optional) The docker graph path is going to mounted.
- instance_name (Optional) The name ot node.
- cluster_version (Optional) The kubernetes version of the cluster.
- password (Optional) The password of each node.
- key_id (Optional) The key_id of each node(if using key pair to access).
- require_wan_ip (Optional) Indicate whether wan ip is needed.
- user_script (Optional) User defined script in a base64-format. The script runs after the kubernetes component is ready on node. see more from CCS api documents.

Attributes Reference

- kubernetes_version The kubernetes version of the cluster
- nodes_num The node number of the cluster
- nodes_status The node status of the cluster
- total_cpu The total cpu of the cluster
- total_mem The total memory of the cluster

tencentcloud_container_cluster_instance

Provides a Container Cluster Instance resource.

Example Usage

Basic Usage

```
resource "tencentcloud_container_cluster_instance" "bar_instance" {
     = 1
      = 1
mem
bandwidth = 1
bandwidth_type = "PayByHour"
require_wan_ip
is_vpc_gateway = 0
storage_size = 10
root_size = 50
password = "Admin12345678"
cvm_type = "PayByMonth"
period = 1
zone_id = 100004
instance type = "CVM.S2"
mount_target = "/data"
docker_graph_path = ""
subnet_id = "subnet-abcdedf"
cluster id = "cls-abcdef"
}
```

Argument Reference

The following arguments are supported:

- cluster_id (Required) The id of the cluster.
- cpu (Required) The cpu of the node.
- mem (Required) The memory of the node.
- bandwidth (Required) The network bandwidth of the node.
- bandwidth_type (Required) The network type of the node.
- require_wan_ip (Optional) Indicate whether wan ip is needed.
- subnet_id (Required) The subnet id which the node stays in.
- is_vpc_gateway (Required) Describe whether the node enable the gateway capability.
- storage_size (Required) The size of the data volumn.
- storage_type (Optional) The type of the data volumn. see more from CVM.
- root_size (Required) The size of the root volumn.
- root_type (Optional) The type of the root volumn. see more from CVM.

- vpc_id (Required) Specify vpc which the node(s) stay in.
- cvm_type (Optional) The type of node needed by cvm.
- period (Optional) The puchase duration of the node needed by cvm.
- zone_id (Required) The zone which the node stays in.
- instance_type (Optional) The instance type of the node needed by cvm.
- sg_id (Optional) The safe-group id.
- mount_target (Optional) The path which volumn is going to be mounted.
- docker_graph_path (Optional) The docker graph path is going to mounted.
- password (Optional) The password of each node.
- key_id (Optional) The key_id of each node(if using key pair to access).
- unschedulable (Optional) Determine whether the node will be schedulable. 0 is the default meaning node will be schedulable. 1 for unschedulable.
- user_script (Optional) User defined script in a base64-format. The script runs after the kubernetes component is ready on node. see more from CCS api documents.

Attributes Reference

- abnormal reason Describe the reason when node is in abnormal state(if it was).
- instance_id An id identify the node, provided by cvm.
- is_normal Describe whether the node is normal.
- wan_ip Describe the wan ip of the node.
- lan_ip Descirbe the lan ip of the node.

tencentcloud_dnat

Provides a port mapping/forwarding of destination network address port translation (DNAT/DNAPT) resource.

Example Usage

Basic usage:

```
data "tencentcloud_availability_zones" "my_favorate_zones" {}
data "tencentcloud image" "my favorate image" {
 filter {
         = "image-type"
   name
   values = ["PUBLIC_IMAGE"]
}
# Create VPC and Subnet
resource "tencentcloud_vpc" "main" {
          = "terraform test"
  cidr_block = "10.6.0.0/16"
resource "tencentcloud_subnet" "main_subnet" {
           = "${tencentcloud_vpc.main.id}"
                   = "terraform test subnet"
                 = "10.6.7.0/24"
 cidr block
  availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.ones.0.name}"
# Create EIP
resource "tencentcloud_eip" "eip_dev_dnat" {
  name = "terraform_test"
resource "tencentcloud_eip" "eip_test_dnat" {
 name = "terraform_test"
# Create NAT Gateway
resource "tencentcloud_nat_gateway" "my_nat" {
           = "${tencentcloud_vpc.main.id}"
                 = "terraform test"
 name
 max_concurrent = 3000000
 bandwidth
                  = 500
 assigned_eip_set = [
   "${tencentcloud_eip.eip_dev_dnat.public_ip}",
   "${tencentcloud_eip.eip_test_dnat.public_ip}",
  ]
}
# Create CVM
resource "tencentcloud instance" "foo" {
 availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.zones.0.name}"
 image_id = "${data.tencentcloud_image.my_favorate_image.image_id}"
                 = "${tencentcloud_vpc.main.id}"
                 = "${tencentcloud_subnet.main_subnet.id}"
  subnet_id
# Add DNAT Entry
resource "tencentcloud_dnat" "dev_dnat" {
  vpc_id
              = "${tencentcloud_nat_gateway.my_nat.vpc_id}"
```

```
nat id
            = "${tencentcloud nat gateway.my nat.id}"
  protocol
            = "tcp"
  elastic_ip = "${tencentcloud_eip.eip_dev_dnat.public_ip}"
  elastic_port = "80"
  private_ip = "${tencentcloud_instance.foo.private_ip}"
  private_port = "9001"
resource "tencentcloud_dnat" "test_dnat" {
              = "${tencentcloud_nat_gateway.my_nat.vpc_id}"
              = "${tencentcloud_nat_gateway.my_nat.id}"
 nat_id
 protocol
 elastic_ip = "${tencentcloud_eip.eip_test_dnat.public_ip}"
 elastic_port = "8080"
 private_ip = "${tencentcloud_instance.foo.private_ip}"
  private_port = "9002"
}
```

Argument Reference

The following arguments are supported:

- nat_id (Required, Forces new resource) The ID for the NAT Gateway.
- vpc_id (Required, Forces new resource) The VPC ID for the NAT Gateway.
- protocol (Required, Forces new resource) The ip protocal, valid value is tcp | udp.
- elastic_ip (Required, Forces new resource) The elastic IP of NAT gateway association, must a Elastic IP (/docs/providers/tencentcloud/r/eip.html).
- elastic_port (Required, Forces new resource) The external port, valid value is 1~65535.
- private_ip (Required, Forces new resource) The internal ip, must a private ip (VPC IP).
- private_port (Required, Forces new resource) The internal port, valid value is 1~65535

tencentcloud_eip

Provides an EIP resource.

Example Usage

Basic Usage

```
resource "tencentcloud_eip" "foo" {
   name = "awesome_gateway_ip"
}
```

Argument Reference

The following arguments are supported:

• name - (Optional) The eip's name.

Attributes Reference

The following attributes are exported:

- id The EIP id, something like eip-xxxxxxx, use this for EIP assocication.
- public_ip The elastic ip address.
- status The EIP current status.

Import

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

terraform import tencentcloud_eip.foo eip-nyvf60va

tencentcloud_eip_association

Provides an eip resource associated with other resource like CVM or ENI.

Example Usage

Basic Usage

```
resource "tencentcloud_eip_association" "foo" {
   eip_id = "eip-xxxxxx"
   instance_id = "ins-xxxxxx"
}
```

or

```
resource "tencentcloud_eip_association" "bar" {
    eip_id = "eip-xxxxxx"
    network_interface_id = "eni-xxxxxx"
    private_ip = "10.0.1.22"
}
```

Argument Reference

The following arguments are supported:

- eip_id (Required) The eip's id.
- instance_id (Optional) The instance id going to bind with the EIP. This field is conflict with network_interface_id and private_ip fields.
- network_interface_id (Optional) Indicates the network interface id like eni-xxxxxx. This field is conflict with instance_id.
- private_ip (Optional) Indicates an IP belongs to the network_interface_id. This field is conflict with instance_id.

Attributes Reference

- id The association id.
- eip_id The id of the EIP.
- instance_id The instance id of the EIP bound with.
- network_interface_id The network interface id.
- private_ip (Optional) The IP belongs to the network_interface_id.

tencentcloud_instance

Provides a CVM instance resource.

NOTE: You can launch an CVM instance for a VPC network via specifying parameter vpc_id. One instance can only belong to one VPC.

NOTE: At present, 'PREPAID' instance cannot be deleted and must wait it to be outdated and released automatically.

Example Usage

```
data "tencentcloud_image" "my_favorate_image" {
 os_name = "ubuntu"
 filter {
         = "image-type"
   values = ["PUBLIC_IMAGE"]
  }
data "tencentcloud_instance_types" "my_favorate_instance_types" {
   name = "instance-family"
   values = ["S1"]
  cpu_core_count = 1
 memory_size = 1
data "tencentcloud_availability_zones" "my_favorate_zones" {}
// Create Security Group with 2 rules
resource "tencentcloud_security_group" "app" {
            = "web accessibility"
  description = "make it accessable for both production and stage ports"
resource "tencentcloud_security_group_rule" "web" {
 security_group_id = "${tencentcloud_security_group.app.id}"
                 = "ingress"
 type
                 = "0.0.0.0/0"
 cidr_ip
                 = "tcp"
 ip_protocol
                 = "80,3000,8080"
 port_range
                   = "accept"
 policy
resource "tencentcloud_security_group_rule" "ssh" {
 security_group_id = "${tencentcloud_security_group.app.id}"
                  = "ingress"
                  = "202.119.230.10/32"
 cidr_ip
                  = "tcp"
 ip_protocol
                   = "22"
 port range
  policy
                   = "accept"
// Create VPC resource
resource "tencentcloud_vpc" "app" {
  cidr block = "10 0 0 0/16"
```

```
CIUI DIOCK - 10.0.0.0/10
          = "awesome_app_vpc"
 name
}
resource "tencentcloud subnet" "app" {
 vpc id = "${tencentcloud vpc.app.id}"
  availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.ones.0.name}"
               = "awesome_app_subnet"
  cidr_block
                  = "10.0.1.0/24"
}
// Create 10 CVM instances to host awesome_app
resource "tencentcloud instance" "my awesome app" {
                 = "awesome_app"
  instance name
  availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.ones.0.name}"
                = "${data.tencentcloud_image.my_favorate_image.image_id}"
  image_id
  instance_type = "${data.tencentcloud_instance_types.my_favorate_instance_types.instance_types.0.ins
tance_type}"
                  = "${tencentcloud_key_pair.random_key.id}"
  key_name
 security_groups = [
   "${tencentcloud_security_group.app.id}",
 vpc_id = "${tencentcloud_vpc.app.id}"
  subnet_id = "${tencentcloud_subnet.app.id}"
  internet_max_bandwidth_out = 20
  count
                            = 10
}
```

Argument Reference

The following arguments are supported:

- image_id (Required) The Image to use for the instance. CVM instance's image can be replaced via changing 'image id'.
- availability_zone (Required) The available zone that the CVM instance locates at.
- instance_name (Optional) The name of the CVM. This instance_name can have a string of 2 to 128 characters, must contain only alphanumeric characters or hyphens, such as "-",".","_", and must not begin or end with a hyphen, and must not begin with http:// or https://. If not specified, Terraform will autogenerate a default name is CVM-Instance.
- instance_type (Required) The type of instance to start.
- instance_charge_type (Optional) Valid values are PREPAID, POSTPAID_BY_HOUR, The default is POSTPAID_BY_HOUR.
- instance_charge_type_prepaid_period (Optional) The tenancy (time unit is month) of the perpaid instance, **NOTE**: it only works when instance_charge_type is set to PREPAID.
- instance_charge_type_prepaid_renew_flag (Optional) When enabled, the CVM instance will be renew automatically when it reach the end of the prepaid tenancy, **NOTE**: it only works when instance_charge_type is set to PREPAID.
- internet_charge_type (Optional) Internet charge type of the instance, Valid values are BANDWIDTH_PREPAID, TRAFFIC_POSTPAID_BY_HOUR, BANDWIDTH_POSTPAID_BY_HOUR and BANDWIDTH_PACKAGE. Default is TRAFFIC_POSTPAID_BY_HOUR.

- internet_max_bandwidth_out (Optional) Maximum outgoing bandwidth to the public network, measured in Mbps (Mega bit per second). Value range: [0, 200], If this value is not specified, then automatically sets it to 0 Mbps.
- allocate_public_ip (Optional) Associate a public ip address with an instance in a VPC or Classic. Boolean value,
 Default is false.
- vpc_id (Optional) The id of a VPC network. If you want to create instances in VPC network, this parameter must be set.
- subnet_id (Optional) The id of a VPC subnetwork. If you want to create instances in VPC network, this parameter must be set.
- private_ip (Optional) The private ip to be assigned to this instance, must be in the provided subnet and available.
- security_groups (Optional) A list of security group ids to associate with.
- system_disk_type (Optional) Valid values are LOCAL_BASIC, LOCAL_SSD, CLOUD_BASIC and CLOUD_SSD.
- system_disk_size (Optional) Size of the system disk, value range: 50GB ~ 1TB. Default is 50GB.
- data_disks (Optional) Settings for data disk. In each disk, data_disk_type indicates the disk type, valid values are LOCAL_BASIC, LOCAL_SSD, CLOUD_BASIC and CLOUD_SSD. **NOTE**, it must follow the system_disk_type, and all disks must be the same type. data_disk_size is the size of the data disk, value range: 60GB~1.6TB.
- disable_security_service (Optional) Disable enhance service for security, it is enabled by default. When this
 options is set, security agent won't be installed.
- disable_monitor_service (Optional) Disable enhance service for monitor, it is enabled by default. When this options is set, monitor agent won't be installed.
- key_name (Optional) The key pair to use for the instance, it looks like skey-16jig7tx.
- password (Optional) Password to an instance. In order to take effect new password, the instance will be restarted after modifying the password.
- user_data (Optional) The user data to be specified into this instance. Must be encrypted in base64 format and limited in 16 KB.

Attributes Reference

- id The instance ID, something looks like ins-xxxxxx.
- instance_status The Status of the instance.
- private_ip The Local IP Address of the instance.
- public_ip The instance public ip.
- vpc_id The VPC Id associated with the instance.
- subnet_id The Subnet Id associated with the instance.
- system_disk_type The system disk type on the instance.

- system_disk_size The system disk type on the instance.
- data_disks The data disks info. In each data disk, data_disk_type is the disk type. data_disk_size is the size of the disk.
- key_name The key pair id of the instance.

tencentcloud_key_pair

Provides a key pair resource.

Example Usage

Basic Usage

```
resource "tencentcloud_key_pair" "foo" {
   key_name = "from_terraform_public_key"
   public_key = "ssh-rsa AAAAB3NzaSuperLongString foo@bar"
}
```

Argument Reference

The following arguments are supported:

- key_name (Force new resource) The key pair's name. It is the only in one TencentCloud account.
- public_key (Force new resource) You can import an existing public key and using TencentCloud key pair to manage it.

Attributes Reference

• id - The id of the key pair, something like skey-xxxxxxx, use this for instance creation and resetting.

Import

Key pairs can be imported using the id, e.g.

```
terraform import tencentcloud_key_pair.foo skey-17634f05
```

tencentcloud_nat_gateway

Provides a resource to create a VPC NAT Gateway.

Example Usage

Basic usage:

```
resource "tencentcloud_vpc" "main" {
 name = "terraform test"
  cidr block = "10.6.0.0/16"
# Create EIP
resource "tencentcloud_eip" "eip_dev_dnat" {
 name = "terraform_test"
resource "tencentcloud_eip" "eip_test_dnat" {
 name = "terraform_test"
# Create NAT Gateway
resource "tencentcloud_nat_gateway" "my_nat" {
 vpc_id = "${tencentcloud_vpc.main.id}"
                = "terraform test"
 max_concurrent = 3000000
 bandwidth = 500
 assigned_eip_set = [
   "${tencentcloud_eip.eip_dev_dnat.public_ip}",
    "${tencentcloud_eip.eip_test_dnat.public_ip}",
  ]
}
```

Argument Reference

The following arguments are supported:

- name (Required) The name for the NAT Gateway.
- vpc_id (Required, Forces new resource) The VPC ID.
- max_concurrent (Required) The upper limit of concurrent connection of NAT gateway, for example: 1000000, 3000000, 10000000. To learn more, please refer to Virtual Private Cloud Gateway Description (https://intl.cloud.tencent.com/doc/product/215/1682).
- bandwidth (Required) The maximum public network output bandwidth of the gateway (unit: Mbps), for example: 10, 20, 50, 100, 200, 500, 1000, 2000, 5000. For more information, please refer to Virtual Private Cloud Gateway Description (https://intl.cloud.tencent.com/doc/product/215/1682).
- assigned_eip_set (Required) Elastic IP arrays bound to the gateway, For more information on elastic IP, please refer to Elastic IP (/docs/providers/tencentcloud/r/eip.html).

Attributes Reference

- $\bullet \;\; \mbox{id} \; \mbox{-} \; \mbox{The ID of the NAT Gateway.}$
- $\bullet \;\;$ name The name of the NAT Gateway.
- \bullet $\mbox{\tt max_concurrent}$ The upper limit of concurrent connection of NAT gateway.
- bandwidth The maximum public network output bandwidth of the gateway (unit: Mbps).
- assigned_eip_set Elastic IP arrays bound to the gateway

tencentcloud_route_entry

Provides a resource to create a routing entry in a VPC routing table.

Example Usage

Basic usage:

```
resource "tencentcloud_vpc" "main" {
 name = "Used to test the routing entry"
 cidr block = "10.4.0.0/16"
resource "tencentcloud_route_table" "r" {
 name = "Used to test the routing entry"
  vpc_id = "${tencent_vpc.main.id}"
resource "tencentcloud_route_entry" "rtb_entry_instance" {
         = "${tencentcloud_route_table.main.vpc_id}"
 route_table_id = "${tencentcloud_route_table.r.id}"
 cidr_block = "10.4.8.0/24"
 next_type = "instance"
next_hub = "10.16.1.7"
resource "tencentcloud_route_entry" "rtb_entry_instance" {
         = "${tencentcloud_route_table.main.vpc_id}"
 route_table_id = "${tencentcloud_route_table.r.id}"
 cidr_block = "10.4.5.0/24"
 next_type = "vpn_gateway"
  next_hub
              = "vpngw-db52irtl"
```

Argument Reference

The following arguments are supported:

- vpc_id (Required, Forces new resource) The VPC ID.
- route_table_id (Required, Forces new resource) The ID of the route table.
- cidr_block (Required, Forces new resource) The RouteEntry's target network segment.
- next_type (Required, Forces new resource) The next hop type. Available value is public_gateway、vpn_gateway、sslvpn_gateway、dc_gateway、peering_connection、nat_gateway and instance points to CVM Instance.
- next_hub (Required, Forces new resource) The route entry's next hub. CVM instance ID or VPC router interface ID.

Attributes Reference

- route_table_id The ID of the route table.
- $\bullet \ \ \mathsf{cidr_block} \ \text{-} \ \mathsf{The} \ \mathsf{RouteEntry's} \ \mathsf{target} \ \mathsf{network} \ \mathsf{segment}.$
- next_type The next hub type.
- next_hub The route entry's next hub.

tencentcloud_route_table

Provides a resource to create a VPC routing table.

Example Usage

Basic usage:

```
resource "tencentcloud_route_table" "r" {
  name = "my test route table"
  vpc_id = "${tencent_vpc.main.id}"
}
```

Argument Reference

The following arguments are supported:

- name (Required) The name for the Route Table.
- vpc_id (Required, Forces new resource) The VPC ID.

Attributes Reference

- id The ID of the Route Table.
- name The name for Route Table.
- vpc_id The VPC ID.

tencentcloud_security_group

Provides a security group resource.

Example Usage

Basic usage:

Argument Reference

The following arguments are supported:

- name (Required) The name of the security group. Name should be unique in each project, and no more than 60 characters.
- description (Optional) The security group's description, maximum length is 100 characters.

Attributes Reference

- id The ID of the security group.
- name The name of the security group.
- description The description of the security group.

tencentcloud_security_group_rule

Provides a security group rule resource. Represents a single ingress or egress group rule, which can be added to external Security Groups.

Example Usage

Basic usage:

```
resource "tencentcloud_security_group" "default" {
 name = "${var.security_group_name}"
  description = "test security group rule"
}
resource "tencentcloud_security_group_rule" "http-in" {
 security_group_id = "${tencentcloud_security_group.default.id}"
                 = "ingress"
 cidr_ip
                 = "0.0.0.0/0"
                = "tcp"
 ip_protocol
                = "80,8080"
 port_range
                  = "accept"
 policy
}
resource "tencentcloud_security_group_rule" "ssh-in" {
 security_group_id = "${tencentcloud_security_group.default.id}"
                 = "ingress"
 type
                 = "0.0.0.0/0"
 cidr_ip
                 = "tcp"
 ip_protocol
                  = "22"
 port_range
 policy
                  = "accept"
}
resource "tencentcloud_security_group_rule" "egress-drop" {
 security_group_id = "${tencentcloud_security_group.default.id}"
       = "egress"
 type
                 = "10.2.3.0/24"
 cidr_ip
                 = "udp"
 ip_protocol
                 = "3000-4000"
 port_range
                  = "drop"
 policy
}
```

Argument Reference

The following arguments are supported:

- security_group_id (Required, Forces new resource) The security group to apply this rule to.
- type (Required, Forces new resource) The type of rule being created. Valid options are "ingress" (inbound) or "egress" (outbound).
- cidr_ip (Required, Forces new resource) can be IP, or CIDR block.
- ip_protocol (Optional, Forces new resource) Support "UDP"、"TCP"、"ICMP", Not configured means all protocols.

- port_range (Optional, Forces new resource) examples, Single port: "53"、Multiple ports: "80,8080,443"、Continuous port: "80-90", Not configured to represent all ports.
- policy (Required, Forces new resource) Policy of rule, "accept" or "drop".

Attributes Reference

- id The ID of the security group rule.
- type The type of rule, "ingress" or "egress".
- cidr_ip The source of rule, IP or CIDR block.
- ip_protocol The protocol used.
- port_range The port used.
- policy The policy of rule, "accept" or "drop".

tencentcloud_cbs_snapshot

Provides a snapshot resource.

Example Usage

```
resource "tencentcloud_cbs_snapshot" "my-snapshot" {
   storage_id = "disk-4vmyor8k"
   snapshot_name = "my-snapshot"
}
```

Argument Reference

The following arguments are supported:

- storage_id (Required) Source Storage to create this snapshot.
- snapshot_name (Optional) The name of the snapshot. This snapshot_name can have a string of 1 to 64 characters. It is supported to modify snapshot_name after the snapshot is created.

Attributes Reference

- id The snapshot ID, something looks like snapshot-xxxxxx.
- storage_id The storage ID which this snapshot created from.
- storage_size The size of assiciated storage. You can create new larger or same size storage use this snapshot.
- snapshot_name Name of snapshot
- percent The creation progress of this snapshot.
- disk_type The disk type of this snapshot, root or data.
- snapshot_status The status of this snapshot. "creating" means the snapshot is creating; "normal" means the snapshot is ready to use.

tencentcloud_subnet

Provides an VPC subnet resource.

Example Usage

Basic usage:

Argument Reference

The following arguments are supported:

- name (Required) The name for the Subnet.
- cidr_block (Required, Forces new resource) The CIDR block for the Subnet.
- availability_zone- (Required, Forces new resource) The AZ for the subnet.
- vpc_id (Required, Forces new resource) The VPC ID.

Attributes Reference

- id The ID of the Subnet.
- name The name for the Subnet.
- cidr_block The CIDR block of the Subnet.
- availability_zone- The AZ for the subnet.
- vpc_id The VPC ID.
- route_table_id The Route Table ID.

tencentcloud_vpc

Provides an VPC resource.

Example Usage

Basic usage:

Argument Reference

The following arguments are supported:

- name (Required) The name for the VPC.
- cidr_block (Required) The CIDR block for the VPC.

Attributes Reference

- id The ID of the VPC.
- name The name for the VPC.
- cidr_block The CIDR block of the VPC.
- is_default Whether or not the default VPC.
- is_multicast Whether or not the VPC has Multicast support.