» 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_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_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_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 DescribeImages in the TencentCloud API reference.

» 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 DescribeImages in the TencentCloud API reference.

» 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 atrribute 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.

» 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.
  - `cpu_core_count` - (Optional) Limit search to specific cpu core count.
  - `memory_size` - (Optional) Limit search to specific memory size.

» Attributes Reference

The following attributes are exported

- `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.
- `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.
- `assigned_eip_set` - (Optional) Elastic IP arrays bound to the gateway, For more information on elastic IP, please refer to Elastic IP.
- `state` - (Optional) NAT gateway status, 0: Running, 1: Unavailable, 2: Be in arrears and out of service

» Attributes Reference

The following attributes are exported:

- `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:
  - `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

The following attributes are exported:

- `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" {
  name        = "test subnet data"
  description = "test subnet data description"
}

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

» 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.

9

- `subnet_id` - (Required) The ID of the Subnet.

» Attributes Reference

The following attributes are exported:

- `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.

```
variable "vpc_id" {}

data "tencentcloud_vpc" "selected" {
  id = "${var.vpc_id}"
}

resource "tencentcloud_subnet" "main" {
  name              = "my test subnet"
  cidr_block        = "${cidrsubnet(data.tencentcloud_vpc.selected.cidr_block, 4, 1)}"
  availability_zone = "eu-frankfurt-1"
  vpc_id            = "${data.tencentcloud_vpc.selected.id}"
}
```

» 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.

» 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_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

```
data "tencentcloud_availability_zones" "my_favorate_zones" {}

resource "tencentcloud_cbs_storage" "my-storage" {
  storage_type      = "cloudBasic"
  storage_size      = 50
  period            = 3
  availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.zones.0.name
  storage_name      = "my-storage"
}
```

» 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

The following attributes are exported:

- **id** - The storage ID, something looks like `disk-xxxxxx`.
- **storage_type** - Type of CBS medium.
- **storage_size** - Size of 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 {
    name   = "instance-family"
    values = ["S2"]
  }

  cpu_core_count = 2
  memory_size    = 4
}

data "tencentcloud_availability_zones" "my_favorate_zones" {}

resource "tencentcloud_instance" "instance-without-specified-image-id-example" {
  instance_name     = "my-instance"
  availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.zones.0.name
  image_id          = "${data.tencentcloud_image.my_favorate_image.image_id}"
  instance_type     = "${data.tencentcloud_instance_types.my_favorate_instance_types.instan
}

resource "tencentcloud_cbs_storage" "my-storage" {
  storage_type      = "cloudBasic"
  storage_size      = 10
  period            = 1
  availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.zones.0.name
  storage_name      = "my-storage"
}

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

The following attributes are exported:

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

» 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

The following attributes are exported:

- `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_container_cluster

Provides a Container Cluster resource.

» Example Usage

Basic Usage

```
resource "tencentcloud_container_cluster" "foo" {
 cluster_name = "terraform-acc-test"
 cpu     = 1
 mem     = 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

The following attributes are exported:

- `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" {
 cpu     = 1
 mem     = 1
 bandwidth  = 1
 bandwidth_type = "PayByHour"
 require_wan_ip   = 1
 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

The following attributes are exported:

- `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_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 association.
- `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

The following attributes are exported:

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

data "tencentcloud_instance_types" "my_favorate_instance_types" {
```

```
  filter {
    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" {
  name        = "web accessibility"
  description = "make it accessable for both production and stage ports"
}
resource "tencentcloud_security_group_rule" "web" {
  security_group_id = "${tencentcloud_security_group.app.id}"
  type              = "ingress"
  cidr_ip           = "0.0.0.0/0"
  ip_protocol       = "tcp"
  port_range        = "80,3000,8080"
  policy            = "accept"
}
resource "tencentcloud_security_group_rule" "ssh" {
  security_group_id = "${tencentcloud_security_group.app.id}"
  type              = "ingress"
  cidr_ip           = "202.119.230.10/32"
  ip_protocol       = "tcp"
  port_range        = "22"
  policy            = "accept"
}

// Create VPC resource
resource "tencentcloud_vpc" "app" {
  cidr_block = "10.0.0.0/16"
  name       = "awesome_app_vpc"
}
resource "tencentcloud_subnet" "app" {
  vpc_id = "${tencentcloud_vpc.app.id}"
  availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.zones.0.name
  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" {
  instance_name     = "awesome_app"
  availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.zones.0.name
  image_id          = "${data.tencentcloud_image.my_favorate_image.image_id}"
  instance_type     = "${data.tencentcloud_instance_types.my_favorate_instance_types.instanc
  key_name          = "${tencentcloud_key_pair.random_key.id}"

  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.

23

» Attributes Reference

The following attributes are exported:

- `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_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 = "lbl-ghoke4tl"
  location_id = "loc-i858qv1l"
  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**

The following attributes are exported:

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

» **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 {
    name   = "image-type"
    values = ["PUBLIC_IMAGE"]
  }
}

# Create VPC and Subnet
resource "tencentcloud_vpc" "main" {
  name       = "terraform test"
  cidr_block = "10.6.0.0/16"
}
resource "tencentcloud_subnet" "main_subnet" {
  vpc_id            = "${tencentcloud_vpc.main.id}"
```

```
  name             = "terraform test subnet"
  cidr_block       = "10.6.7.0/24"
  availability_zone = "${data.tencentcloud_availability_zones.my_favorate_zones.zones.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" {
  vpc_id         = "${tencentcloud_vpc.main.id}"
  name           = "terraform test"
  max_concurrent = 3000000
  bandwidth      = 500
  assigned_eip_set = [
    "${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}"
  vpc_id            = "${tencentcloud_vpc.main.id}"
  subnet_id         = "${tencentcloud_subnet.main_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" {
  vpc_id       = "${tencentcloud_nat_gateway.my_nat.vpc_id}"
  nat_id       = "${tencentcloud_nat_gateway.my_nat.id}"
```

```
  protocol     = "udp"
  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.
- `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_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          = "${tencentcloud_vpc.main.id}"
  name            = "terraform test"
  max_concurrent  = 3000000
  bandwidth       = 500
  assigned_eip_set = [
    "${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.
- `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.
- `assigned_eip_set` - (Required) Elastic IP arrays bound to the gateway, For more information on elastic IP, please refer to Elastic IP.

» Attributes Reference

The following attributes are exported:

- `id` - The ID of the NAT Gateway.
- `name` - The name of the NAT Gateway.
- `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" {
  vpc_id        = "${tencentcloud_route_table.main.vpc_id}"
  route_table_id = "${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" {
  vpc_id        = "${tencentcloud_route_table.main.vpc_id}"
  route_table_id = "${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`. `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

The following attributes are exported:

- `route_table_id` - The ID of the route table.
- `cidr_block` - The RouteEntry's target network 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

The following attributes are exported:

- `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:

```
resource "tencentcloud_security_group" "sg" {
  name        = "test security group"
  description = "For testing security groups"
}
```

» 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

The following attributes are exported:

- `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}"
  type              = "ingress"
  cidr_ip           = "0.0.0.0/0"
  ip_protocol       = "tcp"
  port_range        = "80,8080"
  policy            = "accept"
}

resource "tencentcloud_security_group_rule" "ssh-in" {
  security_group_id = "${tencentcloud_security_group.default.id}"
  type              = "ingress"
  cidr_ip           = "0.0.0.0/0"
  ip_protocol       = "tcp"
  port_range        = "22"
  policy            = "accept"
}

resource "tencentcloud_security_group_rule" "egress-drop" {
  security_group_id = "${tencentcloud_security_group.default.id}"
  type              = "egress"
  cidr_ip           = "10.2.3.0/24"
  ip_protocol       = "udp"
  port_range        = "3000-4000"
  policy            = "drop"
}
```

» 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".

33

» Attributes Reference

The following attributes are exported:

- `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_subnet

Provides an VPC subnet resource.

» Example Usage

Basic usage:

```
resource "tencentcloud_subnet" "main" {
  name              = "my test subnet"
  cidr_block        = "10.0.1.0/24"
  availability_zone = "ap-guangzhou-3"
  vpc_id            = "${tencent_vpc.main.id}"
}
```

» 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

The following attributes are exported:

- `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:

```
resource "tencentcloud_vpc" "main" {
  name       = "my test vpc"
  cidr_block = "10.0.0.0/16"
}
```

» 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

The following attributes are exported:

- `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.