# » tencentcloud_as_scaling_configs

Use this data source to query scaling configuration information.

## » Example Usage

```
data "tencentcloud_as_scaling_configs" "as_configs" {
  configuration_id   = "asc-oqio4yyj"
  result_output_file = "my_test_path"
}
```

## » Argument Reference

The following arguments are supported:

- `configuration_id` - (Optional) Launch configuration ID.
- `configuration_name` - (Optional) Launch configuration name.
- `result_output_file` - (Optional) Used to save results.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `configuration_list` - A list of configuration. Each element contains the following attributes:
  - `configuration_id` - Launch configuration ID.
  - `configuration_name` - Launch configuration name.
  - `create_time` - The time when the launch configuration was created.
  - `data_disk` - Configurations of data disk.
  - `disk_size` - Volume of disk in GB. Default is 0.
  - `disk_type` - Type of disk.
  - `snapshot_id` - Data disk snapshot ID.
  - `enhanced_monitor_service` - Whether to activate cloud monitor service.
  - `enhanced_security_service` - Whether to activate cloud security service.
  - `image_id` - ID of available image, for example img-8toqc6s3.
  - `instance_tags` - A tag list associates with an instance.
  - `instance_types` - Instance type list of the scaling configuration.
  - `internet_charge_type` - Charge types for network traffic.
  - `internet_max_bandwidth_out` - Max bandwidth of Internet access in Mbps.
  - `key_ids` - ID list of login keys

  - `project_id` - ID of the project to which the configuration belongs. Default value is 0.
  - `public_ip_assigned` - Specify whether to assign an Internet IP address.
  - `security_group_ids` - Security groups to which the instance belongs.
  - `status` - Current statues of a launch configuration.
  - `system_disk_size` - System disk size of the scaling configuration in GB.
  - `system_disk_type` - System disk category of the scaling configuration.
  - `user_data` - Base64-encoded User Data text.

# » tencentcloud_as_scaling_groups

Use this data source to query the detail information of an existing autoscaling group.

## » Example Usage

```
data "tencentcloud_as_scaling_groups" "as_scaling_groups" {
  scaling_group_name = "myasgroup"
  configureation_id  = "asc-oqio4yyj"
  result_output_file = "my_test_path"
}
```

## » Argument Reference

The following arguments are supported:

- `configuration_id` - (Optional) Filter results by launch configuration ID.
- `result_output_file` - (Optional) Used to save results.
- `scaling_group_id` - (Optional) A specified scaling group ID used to query.
- `scaling_group_name` - (Optional) A scaling group name used to query.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `scaling_group_list` - A list of scaling group. Each element contains the following attributes:

- `configuration_id` - Launch configuration ID.
- `create_time` - The time when the AS group was created.
- `default_cooldown` - Default cooldown time of scaling group.
- `desired_capacity` - The desired number of CVM instances.
- `forward_balancer_ids` - A lsit of application clb ids.
- `listener_id` - Listener ID for application load balancers.
- `load_balancer_id` - ID of available load balancers.
- `location_id` - ID of forwarding rules.
- `target_attribute` - Attribute list of target rules.
  * `port` - Port number.
  * `weight` - Weight.
- `instance_count` - Number of instance.
- `load_balancer_ids` - A lsit of traditional clb ids which the CVM instances attached to.
- `max_size` - The maximum number of CVM instances.
- `min_size` - The minimum number of CVM instances.
- `project_id` - ID of the project to which the scaling group belongs. Default value is 0.
- `retry_policy` - A retry policy can be used when a creation fails.
- `scaling_group_id` - Auto scaling group ID.
- `scaling_group_name` - Auto scaling group name.
- `status` - Current status of a scaling group.
- `subnet_ids` - A list of subnet IDs.
- `termination_policies` - A policy used to select a CVM instance to be terminated from the scaling group.
- `vpc_id` - ID of the vpc with which the instance is associated.
- `zones` - A list of available zones.

# » tencentcloud_as_scaling_policies

Use this data source to query detailed information of scaling policy.

## » Example Usage

```
data "tencentcloud_as_scaling_policies" "as_scaling_policies" {
  scaling_policy_id  = "asg-mvyghxu7"
  result_output_file = "mytestpath"
}
```

## » Argument Reference

The following arguments are supported:

- `policy_name` - (Optional) Scaling policy name.
- `result_output_file` - (Optional) Used to save results.
- `scaling_group_id` - (Optional) Scaling group ID.
- `scaling_policy_id` - (Optional) Scaling policy ID.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `scaling_policy_list` - A list of scaling policy. Each element contains the following attributes:
  - `adjustment_type` - Adjustment type of the scaling rule.
  - `adjustment_value` - Adjustment value of the scaling rule.
  - `comparison_operator` - Comparison operator.
  - `continuous_time` - Retry times.
  - `cooldown` - Cooldown time of the scaling rule.
  - `metric_name` - Name of an indicator.
  - `notification_user_group_ids` - Users need to be notified when an alarm is triggered.
  - `period` - Time period in second.
  - `policy_name` - Scaling policy name.
  - `scaling_group_id` - Scaling policy ID.
  - `statistic` - Statistic types.
  - `threshold` - Alarm threshold.

## » 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_favourite_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_cbs_snapshots

Use this data source to query detailed information of CBS snapshots.

### » Example Usage

```
data "tencentcloud_cbs_snapshots" "snapshots" {
  snapshot_id        = "snap-f3io7adt"
  result_output_file = "mytestpath"
}
```

### » Argument Reference

The following arguments are supported:

- `availability_zone` - (Optional) The available zone that the CBS instance locates at.
- `project_id` - (Optional) ID of the project within the snapshot.
- `result_output_file` - (Optional) Used to save results.
- `snapshot_id` - (Optional) ID of the snapshot to be queried.
- `snapshot_name` - (Optional) Name of the snapshot to be queried.
- `storage_id` - (Optional) ID of the the CBS which this snapshot created from.
- `storage_usage` - (Optional) Types of CBS which this snapshot created from, and available values include SYSTEM_DISK and DATA_DISK.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `snapshot_list` - A list of snapshot. Each element contains the following attributes:
  - `availability_zone` - The available zone that the CBS instance locates at.
  - `create_time` - Creation time of snapshot.
  - `encrypt` - Indicates whether the snapshot is encrypted.
  - `percent` - Snapshot creation progress percentage.
  - `project_id` - ID of the project within the snapshot.
  - `snapshot_id` - ID of the snapshot.
  - `snapshot_name` - Name of the snapshot.
  - `storage_id` - ID of the the CBS which this snapshot created from.
  - `storage_size` - Volume of storage which this snapshot created from.
  - `storage_usage` - Types of CBS which this snapshot created from.

## » tencentcloud_cbs_storages

Use this data source to query detailed information of CBS storages.

### » Example Usage

```
data "tencentcloud_cbs_storages" "storages" {
  storage_id         = "disk-kdt0sq6m"
  result_output_file = "mytestpath"
}
```

### » Argument Reference

The following arguments are supported:

- `availability_zone` - (Optional) The available zone that the CBS instance locates at.
- `project_id` - (Optional) ID of the project with which the CBS is associated.
- `result_output_file` - (Optional) Used to save results.
- `storage_id` - (Optional) ID of the CBS to be queried.
- `storage_name` - (Optional) Name of the CBS to be queried.
- `storage_type` - (Optional) Types of storage medium, and available values include CLOUD_BASIC, CLOUD_PREMIUM and CLOUD_SSD.

- `storage_usage` - (Optional) Types of CBS, and available values include SYSTEM_DISK and DATA_DISK.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `storage_list` - A list of storage. Each element contains the following attributes:
  - `attached` - Indicates whether the CBS is mounted the CVM.
  - `availability_zone` - The zone of CBS.
  - `create_time` - Creation time of CBS.
  - `encrypt` - Indicates whether CBS is encrypted.
  - `instance_id` - ID of the CVM instance that be mounted by this CBS.
  - `project_id` - ID of the project.
  - `status` - Status of CBS.
  - `storage_id` - ID of CBS.
  - `storage_name` - Name of CBS.
  - `storage_size` - Volume of CBS.
  - `storage_type` - Types of storage medium.
  - `storage_usage` - Types of CBS.
  - `tags` - The available tags within this CBS.

## » tencentcloud_ccn_bandwidth_limits

Use this data source to query detailed information of CCN bandwidth limits.

### » Example Usage

```
variable "other_region1" {
  default = "ap-shanghai"
}

resource "tencentcloud_ccn" "main" {
  name        = "ci-temp-test-ccn"
  description = "ci-temp-test-ccn-des"
  qos         = "AG"
}

data "tencentcloud_ccn_bandwidth_limits" "limit" {
  ccn_id = "${tencentcloud_ccn.main.id}"
}
```

```
resource "tencentcloud_ccn_bandwidth_limit" "limit1" {
  ccn_id          = "${tencentcloud_ccn.main.id}"
  region          = "${var.other_region1}"
  bandwidth_limit = 500
}
```

### » Argument Reference

The following arguments are supported:

- `ccn_id` - (Required, ForceNew) ID of the CCN to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `limits` - The bandwidth limits of regions
  - `bandwidth_limit` - Limitation of bandwidth.
  - `region` - Limitation of region.

## » tencentcloud_ccn_instances

Use this data source to query detailed information of CCN instances.

### » Example Usage

```
resource "tencentcloud_ccn" "main" {
  name        = "ci-temp-test-ccn"
  description = "ci-temp-test-ccn-des"
  qos         = "AG"
}

data "tencentcloud_ccn_instances" "id_instances" {
  ccn_id = "${tencentcloud_ccn.main.id}"
}

data "tencentcloud_ccn_instances" "name_instances" {
  name = "${tencentcloud_ccn.main.name}"
}
```

### » Argument Reference

The following arguments are supported:

- `ccn_id` - (Optional, ForceNew) ID of the CCN to be queried.
- `name` - (Optional, ForceNew) Name of the CCN to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - Information list of CCN.
  - `attachment_list` - Information list of instance is attached.
  - `attached_time` - Time of attaching.
  - `cidr_block` - A network address block of the instance that is attached.
  - `instance_id` - ID of instance is attached.
  - `instance_region` - The region that the instance locates at.
  - `instance_type` - Type of attached instance network, and available values include VPC, DIRECTCONNECT and BMVPC.
  - `state` - States of instance is attached, and available values include PENDING, ACTIVE, EXPIRED, REJECTED, DELETED, FAILED(asynchronous forced disassociation after 2 hours), ATTACHING, DETACHING and DETACHFAILED(asynchronous forced disassociation after 2 hours).
  - `ccn_id` - ID of the CCN.
  - `create_time` - Creation time of resource.
  - `description` - Description of the CCN.
  - `name` - Name of the CCN.
  - `qos` - Service quality of CCN, and the available value include 'PT', 'AU', 'AG'. The default is 'AU'.
  - `state` - States of instance. The available value include 'ISOLATED'(arrears) and 'AVAILABLE'.

## » tencentcloud_container_cluster_instances

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

**NOTE:** It has been deprecated and replaced by tencentcloud_kubernetes_clusters.

### » 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` - Describe 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.

**NOTE:** It has been deprecated and replaced by tencentcloud_kubernetes_clusters.

### » 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_cos_bucket_object

Use this data source to query the metadata of an object stored inside a bucket.

### » Example Usage

```
data "tencentcloud_cos_bucket_object" "mycos" {
  bucket             = "mycos-test-1258798060"
  key                = "hello-world.py"
  result_output_file = "TFresults"
}
```

### » Argument Reference

The following arguments are supported:

- `bucket` - (Required) Name of the bucket that contains the objects to query.
- `key` - (Required) The full path to the object inside the bucket.
- `result_output_file` - (Optional) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `cache_control` - Specifies caching behavior along the request/reply chain.
- `content_disposition` - Specifies presentational information for the object.
- `content_encoding` - Specifies what content encodings have been applied to the object and thus what decoding mechanisms must be applied to obtain the media-type referenced by the Content-Type header field.
- `content_type` - A standard MIME type describing the format of the object data.
- `etag` - ETag generated for the object which is may not equal to MD5 value.
- `last_modified` - Last modified date of the object.
- `storage_class` - Object storage type such as STANDARD.

## » tencentcloud_cos_buckets

Use this data source to query the COS buckets of the current Tencent Cloud user.

### » Example Usage

```
data "tencentcloud_cos_buckets" "cos_buckets" {
  bucket_prefix      = "tf-bucket-"
  result_output_file = "mytestpath"
}
```

### » Argument Reference

The following arguments are supported:

- `bucket_prefix` - (Optional) A prefix string to filter results by bucket name
- `result_output_file` - (Optional) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `bucket_list` - A list of bucket. Each element contains the following attributes:

- `bucket` - Bucket name, the format likes `<bucket>-<appid>`.
- `cors_rules` - A list of CORS rule configurations.
- `allowed_headers` - Specifies which headers are allowed.
- `allowed_methods` - Specifies which methods are allowed. Can be GET, PUT, POST, DELETE or HEAD.
- `allowed_origins` - Specifies which origins are allowed.
- `expose_headers` - Specifies expose header in the response.
- `max_age_seconds` - Specifies time in seconds that browser can cache the response for a preflight request.
- `lifecycle_rules` - The lifecycle configuration of a bucket.
- `expiration` - Specifies a period in the object's expire.
  - `date` - Specifies the date after which you want the corresponding action to take effect.
  - `days` - Specifies the number of days after object creation when the specific rule action takes effect.
- `filter_prefix` - Object key prefix identifying one or more objects to which the rule applies.
- `transition` - Specifies a period in the object's transitions.
  - `date` - Specifies the date after which you want the corresponding action to take effect.
  - `days` - Specifies the number of days after object creation when the specific rule action takes effect.
  - `storage_class` - Specifies the storage class to which you want the object to transition. Available values include STANDARD, STANDARD_IA and ARCHIVE.
- `website` - A list of one element containing configuration parameters used when the bucket is used as a website.
- `error_document` - An absolute path to the document to return in case of a 4XX error.
- `index_document` - COS returns this index document when requests are made to the root domain or any of the subfolders.

## » tencentcloud_dc_instances

Use this data source to query detailed information of DC instances.

### » Example Usage

```
data "tencentcloud_dc_instances" "name_select" {
  name = "t"
}

data "tencentcloud_dc_instances" "id" {
```

```
  dcx_id = "dc-kax48sg7"
}
```

## » Argument Reference

The following arguments are supported:

- `dc_id` - (Optional, ForceNew) ID of the DC to be queried.
- `name` - (Optional, ForceNew) Name of the DC to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - Information list of the DC.
  - `access_point_id` - Access point ID of tne DC.
  - `bandwidth` - Bandwidth of the DC.
  - `circuit_code` - The circuit code provided by the operator for the DC.
  - `create_time` - Creation time of resource.
  - `customer_address` - Interconnect IP of the DC within client. Note: This field may return null, indicating that no valid values are taken.
  - `customer_email` - Applicant email of the DC, the default is obtained from the account. Note: This field may return null, indicating that no valid values are taken.
  - `customer_name` - Applicant name of the DC, the default is obtained from the account. Note: This field may return null, indicating that no valid values are taken.
  - `customer_phone` - Applicant phone number of the DC, the default is obtained from the account. Note: This field may return null, indicating that no valid values are taken.
  - `dc_id` - ID of the DC.
  - `enabled_time` - Enable time of resource.
  - `expired_time` - Expire date of resource.
  - `fault_report_contact_person` - Contact of reporting a faulty. Note: This field may return null, indicating that no valid values are taken.
  - `fault_report_contact_phone` - Phone number of reporting a faulty. Note: This field may return null, indicating that no valid values are taken.
  - `line_operator` - Operator of the DC, and available values include ChinaTelecom, ChinaMobile, ChinaUnicom, In-houseWiring, ChinaOther and InternationalOperator.
  - `location` - The DC location where the connection is located.

- `name` - Name of the DC.
- `port_type` - Port type of the DC in client, and available values include 100Base-T, 1000Base-T, 1000Base-LX, 10GBase-T and 10GBase-LR. The default value is 1000Base-LX.
- `redundant_dc_id` - ID of the redundant DC.
- `state` - State of the DC, and available values include REJECTED, TOPAY, PAID, ALLOCATED, AVAILABLE, DELETING and DELETED.
- `tencent_address` - Interconnect IP of the DC within Tencent. Note: This field may return null, indicating that no valid values are taken.

## » tencentcloud_dc_gateway_ccn_routes

Use this data source to query detailed information of direct connect gateway route entries.

### » Example Usage

```
resource "tencentcloud_ccn" "main" {
  name        = "ci-temp-test-ccn"
  description = "ci-temp-test-ccn-des"
  qos         = "AG"
}

resource "tencentcloud_dc_gateway" "ccn_main" {
  name                = "ci-cdg-ccn-test"
  network_instance_id = "${tencentcloud_ccn.main.id}"
  network_type        = "CCN"
  gateway_type        = "NORMAL"
}

resource "tencentcloud_dc_gateway_ccn_route" "route1" {
  dcg_id     = "${tencentcloud_dc_gateway.ccn_main.id}"
  cidr_block = "10.1.1.0/32"
}

resource "tencentcloud_dc_gateway_ccn_route" "route2" {
  dcg_id     = "${tencentcloud_dc_gateway.ccn_main.id}"
  cidr_block = "192.1.1.0/32"
}

#You need to sleep for a few seconds because there is a cache on the server
data "tencentcloud_dc_gateway_ccn_routes" "test" {
```

```
  dcg_id = "${tencentcloud_dc_gateway.ccn_main.id}"
}
```

### » Argument Reference

The following arguments are supported:

- `dcg_id` - (Required) ID of the DCG to be queried.
- `result_output_file` - (Optional) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - Information list of the DCG route entries.
  - `as_path` - As_Path list of the BGP.
  - `cidr_block` - A network address segment of IDC.
  - `dcg_id` - ID of the DCG.
  - `route_id` - ID of the DCG route.

## » tencentcloud_dc_gateway_instances

Use this data source to query detailed information of direct connect gateway instances.

### » Example Usage

```
resource "tencentcloud_ccn" "main" {
  name        = "ci-temp-test-ccn"
  description = "ci-temp-test-ccn-des"
  qos         = "AG"
}

resource "tencentcloud_dc_gateway" "ccn_main" {
  name                = "ci-cdg-ccn-test"
  network_instance_id = "${tencentcloud_ccn.main.id}"
  network_type        = "CCN"
  gateway_type        = "NORMAL"
}

#You need to sleep for a few seconds because there is a cache on the server
data "tencentcloud_dc_gateway_instances" "name_select" {
```

```
  name = "${tencentcloud_dc_gateway.ccn_main.name}"
}

data "tencentcloud_dc_gateway_instances" "id_select" {
  dcg_id = "${tencentcloud_dc_gateway.ccn_main.id}"
}
```

### » Argument Reference

The following arguments are supported:

- `dcg_id` - (Optional) ID of the DCG to be queried.
- `name` - (Optional) Name of the DCG to be queried.
- `result_output_file` - (Optional) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - Information list of the DCG.
  - `cnn_route_type` - Type of CCN route, the available value include 'BGP' and 'STATIC'.
  - `create_time` - Creation time of resource.
  - `dcg_id` - ID of the DCG
  - `dcg_ip` - IP of the DCG
  - `enable_bgp` - Indicates whether the BGP is enabled.
  - `gateway_type` - Type of the gateway, the available value include 'NORMAL' and 'NAT'. Default is 'NORMAL'.
  - `name` - Name of the DCG
  - `network_instance_id` - Type of associated network, the available value include 'VPC' and 'CCN'.
  - `network_type` - IP of the DCG

## » tencentcloud_dcx_instances

Use this data source to query detailed information of dedicated tunnels instances.

### » Example Usage

```
data "tencentcloud_dcx_instances" "name_select" {
  name = "main"
```

```
}

data "tencentcloud_dcx_instances" "id" {
  dcx_id = "dcx-3ikuw30k"
}
```

## » Argument Reference

The following arguments are supported:

- `dcx_id` - (Optional, ForceNew) ID of the dedicated tunnels to be queried.
- `name` - (Optional, ForceNew) Name of the dedicated tunnels to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - Information list of the dedicated tunnels.
  - `bandwidth` - Bandwidth of the DC.
  - `bgp_asn` - BGP ASN of the user.
  - `bgp_auth_key` - BGP key of the user.
  - `create_time` - Creation time of resource.
  - `customer_address` - Interconnect IP of the DC within client.
  - `dc_id` - ID of the DC.
  - `dcg_id` - ID of the DC Gateway. Currently only new in the console.
  - `dcx_id` - ID of the dedicated tunnel.
  - `name` - Name of the dedicated tunnel.
  - `network_region` - The region of the dedicated tunnel.
  - `network_type` - Type of the network, and available values include VPC, BMVPC and CCN. The default value is VPC.
  - `route_filter_prefixes` - Static route, the network address of the user IDC.
  - `route_type` - Type of the route, and available values include BGP and STATIC. The default value is BGP.
  - `state` - State of the dedicated tunnels, and available values include PENDING, ALLOCATING, ALLOCATED, ALTERING, DELETING, DELETED, COMFIRMING and REJECTED.
  - `tencent_address` - Interconnect IP of the DC within Tencent.
  - `vlan` - Vlan of the dedicated tunnels, and the range of values is [0-3000]. '0' means that only one tunnel can be created for the physical connect.
  - `vpc_id` - ID of the VPC or BMVPC.

## » tencentcloud_clb_instances

Use this data source to query detailed information of CLB

### » Example Usage

```
data "tencentcloud_clb_instances" "foo" {
  clb_id             = "lb-k2zjp9lv"
  network_type       = "OPEN"
  clb_name           = "myclb"
  project_id         = 0
  result_output_file = "mytestpath"
}
```

### » Argument Reference

The following arguments are supported:

- `clb_id` - (Optional) Id of the CLB to be queried.
- `clb_name` - (Optional) Name of the CLB to be queried.
- `network_type` - (Optional) Type of CLB instance, and available values include 'OPEN' and 'INTERNAL'
- `project_id` - (Optional) Project id of the CLB.
- `result_output_file` - (Optional) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `clb_list` - A list of cloud load balancers. Each element contains the following attributes:
  - `clb_id` - Id of CLB.
  - `clb_name` - Name of CLB.
  - `clb_vips` - The virtual service address table of the CLB.
  - `create_time` - Creation time of the CLB
  - `network_type` - Types of CLB.
  - `project_id` - Id of the project.
  - `security_groups` - Id of the security groups.
  - `status_time` - Latest state transition time of CLB.
  - `status` - The status of CLB.
  - `subnet_id` - Id of the subnet
  - `tags` - The available tags within this CLB.
  - `target_region_info_region` - Region information of backend service are attached the CLB.

  - `target_region_info_vpc_id` - VpcId information of backend service are attached the CLB.
  - `vpc_id` - Id of the VPC

## » tencentcloud_clb_listeners

Use this data source to query detailed information of CLB listener

### » Example Usage

```
data "tencentcloud_clb_listeners" "foo" {
  clb_id      = "lb-k2zjp9lv"
  listener_id = "lbl-mwr6vbtv"
  protocol    = "TCP"
  port        = 80
}
```

### » Argument Reference

The following arguments are supported:

- `clb_id` - (Required) Id of the CLB to be queried.
- `listener_id` - (Optional) Id of the listener to be queried.
- `port` - (Optional) Port of the CLB listener.
- `protocol` - (Optional) Type of protocol within the listener, and available values include 'TCP', 'UDP', 'HTTP', 'HTTPS' and 'TCP_SSL'.
- `result_output_file` - (Optional) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `listener_list` - A list of listeners of cloud load balancers. Each element contains the following attributes:
  - `certificate_ca_id` - Id of the client certificate. It must be set when SSLMode is 'mutual'. NOTES: only supported by listeners of 'HTTPS' and 'TCP_SSL' protocol .
  - `certificate_id` - Id of the server certificate. It must be set when protocol is 'HTTPS' or 'TCP_SSL'. NOTES: only supported by listeners of 'HTTPS' and 'TCP_SSL' protocol and must be set when it is available.

- `certificate_ssl_mode` - Type of certificate, and available values inclue 'UNIDIRECTIONAL', 'MUTUAL'. NOTES: Only supports listeners of 'HTTPS' and 'TCP_SSL' protocol and must be set when it is available.
- `clb_id` - Id of the CLB.
- `health_check_health_num` - Health threshold of health check, and the default is 3. If a success result is returned for the health check three consecutive times, the CVM is identified as healthy. The value range is 2-10. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `health_check_interval_time` - Interval time of health check. The value range is 5-300 sec, and the default is 5 sec. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `health_check_switch` - Indicates whether health check is enabled.
- `health_check_time_out` - Response timeout of health check. The value range is 2-60 sec, and the default is 2 sec. Response timeout needs to be less than check interval. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration.
- `health_check_unhealth_num` - Unhealth threshold of health check, and the default is 3. If a success result is returned for the health check three consecutive times, the CVM is identified as unhealthy. The value range is 2-10. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `listener_id` - Id of the listener.
- `listener_name` - Name of the CLB listener.
- `port` - Port of the CLB listener.
- `protocol` - Protocol of the listener. Available values are 'HTTP', 'HTTPS', 'TCP', 'UDP', 'TCP_SSL'.
- `scheduler` - Scheduling method of the CLB listener, and available values include 'WRR' and 'LEAST_CONN'. The default is 'WRR'. NOTES: The listener of 'HTTP' and 'HTTPS' protocol additionally supports the 'IP HASH' method. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `session_expire_time` - Time of session persistence within the CLB listener. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `sni_switch` - Indicates whether SNI is enabled. NOTES: Only supported by 'HTTPS' protocol.

# » tencentcloud_clb_listener_rules

Use this data source to query detailed information of CLB listener rule

## » Example Usage

```
data "tencentcloud_clb_listener_rules" "foo" {
  clb_id      = "lb-k2zjp9lv"
  listener_id = "lbl-mwr6vbtv"
  rule_id     = "loc-inem40hz"
  domain      = "abc.com"
  url         = "/"
  scheduler   = "WRR"
}
```

## » Argument Reference

The following arguments are supported:

- `clb_id` - (Required) Id of the CLB to be queried.
- `listener_id` - (Required) Id of the CLB listener to be queried.
- `domain` - (Optional) Domain name of the forwarding rule to be queried.
- `result_output_file` - (Optional) Used to save results.
- `rule_id` - (Optional) Id of the forwarding rule to be queried.
- `scheduler` - (Optional) Scheduling method of the forwarding rule of thr CLB listener, and available values include 'WRR' , 'IP HASH' and 'LEAST_CONN'. The default is 'WRR'.
- `url` - (Optional) Url of the forwarding rule to be queried.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `rule_list` - A list of forward rules of listeners. Each element contains the following attributes:
  - `certificate_ca_id` - Id of the client certificate. NOTES: Only supports listeners of 'HTTPS' and 'TCP_SSL' protocol.
  - `certificate_id` - Id of the server certificate. NOTES: Only supports listeners of 'HTTPS' and 'TCP_SSL' protocol.
  - `certificate_ssl_mode` - Type of SSL Mode, and available values inclue 'UNIDIRECTIONAL', 'MUTUAL'.NOTES: Only supports listeners of 'HTTPS' and 'TCP_SSL' protocol.
  - `clb_id` - Id of the CLB.

- `health_check_health_num` - Health threshold of health check, and the default is 3. If a success result is returned for the health check three consecutive times, the CVM is identified as healthy. The value range is 2-10. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `health_check_http_code` - HTTP Status Code. The default is 31 and value range is 1-31. '0b0001' means the return value '1xx' is health. '0b0010' means the return value '2xx' is health. '0b0100' means the return value '3xx' is health. '0b1000' means the return value 4xx is health. '0b10000' means the return value '5xx' is health. If you want multiple return codes to indicate health, need to add the corresponding values. NOTES: The 'HTTP' health check of the 'TCP' listener only supports specifying one health check status code. NOTES: Only supports listeners of 'HTTP' and 'HTTPS' protocol.
- `health_check_http_domain` - Domain name of health check. NOTES: Only supports listeners of 'HTTPS' and 'HTTP' protocol.
- `health_check_http_method` - Methods of health check. NOTES: Only supports listeners of 'HTTPS' and 'HTTP' protocol. The default is 'HEAD', the available value include 'HEAD' and 'GET'.
- `health_check_http_path` - Path of health check. NOTES: Only supports listeners of 'HTTPS' and 'HTTP' protocol.
- `health_check_interval_time` - Interval time of health check. The value range is 5-300 sec, and the default is 5 sec. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `health_check_switch` - Indicates whether health check is enabled.
- `health_check_unhealth_num` - Unhealth threshold of health check, and the default is 3. If a success result is returned for the health check three consecutive times, the CVM is identified as unhealthy. The value range is 2-10. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `listener_id` - Id of the listener.
- `rule_id` - Id of the rule.
- `scheduler` - Scheduling method of the CLB listener, and available values include 'WRR', 'IP_HASH' and 'LEAST_CONN'. The default is 'WRR'. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `session_expire_time` - Time of session persistence within the CLB listener. NOTES: Available when scheduler is specified as 'WRR'. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.

# » tencentcloud_clb_attachments

Use this data source to query detailed information of CLB attachments

## » Example Usage

```
data "tencentcloud_clb_attachments" "clblab" {
  listener_id = "lbl-hh141sn9"
  clb_id      = "lb-k2zjp9lv"
  rule_id     = "loc-4xxr2cy7"
}
```

## » Argument Reference

The following arguments are supported:

- `clb_id` - (Required) Id of the CLB to be queried.
- `listener_id` - (Required) Id of the CLB listener to be queried.
- `result_output_file` - (Optional) Used to save results.
- `rule_id` - (Optional) Id of the CLB listener rule. If the protocol of listener is HTTP/HTTPS, this para is required.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `attachment_list` - A list of cloud load redirection configurations. Each element contains the following attributes:
  - `clb_id` - Id of the CLB.
  - `listener_id` - ID of the CLB listener.
  - `protocol_type` - Type of protocol within the listener, and available values include 'TCP', 'UDP', 'HTTP', 'HTTPS' and 'TCP_SSL'.NOTES: TCP_SSL is testing internally, please apply if you need to use.
  - `rule_id` - Id of the CLB listener rule.
  - `targets` - Information of the backends to be attached.
  - `instance_id` - Id of the backend server.
  - `port` - Port of the backend server.
  - `weight` - Forwarding weight of the backend service, the range of [0, 100], defaults to 10.

## » tencentcloud_clb_redirections

Use this data source to query detailed information of CLB redirections

### » Example Usage

```
data "tencentcloud_clb_redirections" "foo" {
  clb_id             = "lb-p7olt9e5"
  source_listener_id = "lbl-jc1dx6ju"
  target_listener_id = "lbl-asj1hzuo"
  source_rule_id     = "loc-ft8fmngv"
  target_rule_id     = "loc-4xxr2cy7"
  result_output_file = "mytestpath"
}
```

### » Argument Reference

The following arguments are supported:

- `clb_id` - (Required) Id of the CLB to be queried.
- `source_listener_id` - (Required) Id of source listener to be queried.
- `source_rule_id` - (Required) Rule id of source listener to be queried.
- `result_output_file` - (Optional) Used to save results.
- `target_listener_id` - (Optional) Id of source listener to be queried.
- `target_rule_id` - (Optional) Rule id of target listener to be queried.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `redirection_list` - A list of cloud load redirection configurations. Each element contains the following attributes:
  - `clb_id` - Id of the CLB.
  - `source_listener_id` - Id of source listener.
  - `source_rule_id` - Rule id of source listener.
  - `target_listener_id` - Id of source listener.
  - `target_rule_id` - Rule id of target listener.

## » 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_gaap_certificates

Use this data source to query GAAP certificate.

### » Example Usage

```
resource "tencentcloud_gaap_certificate" "foo" {
  type    = "BASIC"
  content = "test:tx2KGdo3zJg/."
  name    = "test_certificate"
}

data "tencentcloud_gaap_certificates" "foo" {
  id = "${tencentcloud_gaap_certificate.foo.id}"
}
```

### » Argument Reference

The following arguments are supported:

- `id` - (Optional) ID of the certificate to be queried.
- `name` - (Optional) Name of the certificate to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.
- `type` - (Optional) Type of the certificate to be queried. Available values include: `BASIC`,`CLIENT`,`SERVER`,`REALSERVER` and `PROXY`; `BASIC` means basic certificate; `CLIENT` means client CA certificate; `SERVER` means server SSL certificate; `REALSERVER` means realserver CA certificate; `PROXY` means proxy SSL certificate.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `certificates` - An information list of certificate. Each element contains the following attributes:
  - `begin_time` - Beginning time of the certificate.
  - `create_time` - Creation time of the certificate.
  - `end_time` - Ending time of the certificate.
  - `id` - ID of the certificate.
  - `issuer_cn` - Issuer name of the certificate.
  - `name` - Name of the certificate.
  - `subject_cn` - Subject name of the certificate.
  - `type` - Type of the certificate.

## » tencentcloud_gaap_http_domains

Use this data source to query forward domain of layer7 listeners.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_layer7_listener" "foo" {
```

```
  protocol = "HTTP"
  name     = "ci-test-gaap-l7-listener"
  port     = 80
  proxy_id = "${tencentcloud_gaap_proxy.foo.id}"
}

resource "tencentcloud_gaap_http_domain" "foo" {
  listener_id = "${tencentcloud_gaap_layer7_listener.foo.id}"
  domain      = "www.qq.com"
}

data "tencentcloud_gaap_http_domains" "foo" {
  listener_id = "${tencentcloud_gaap_layer7_listener.foo.id}"
  domain      = "${tencentcloud_gaap_http_domain.foo.domain}"
}
```

## » Argument Reference

The following arguments are supported:

- `domain` - (Required) Forward domain of the layer7 listener to be queried.
- `listener_id` - (Required) ID of the layer7 listener to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `domains` - An information list of forward domain of the layer7 listeners. Each element contains the following attributes:
  - `basic_auth_id` - ID of the basic authentication.
  - `basic_auth` - Indicates whether basic authentication is enable
  - `certificate_id` - ID of the server certificate
  - `client_certificate_id` - ID of the client certificate
  - `domain` - Forward domain of the layer7 listener.
  - `gaap_auth_id` - ID of the SSL certificate.
  - `gaap_auth` - Indicates whether SSL certificate authentication is enable.
  - `realserver_auth` - Indicates whether realserver authentication is enable
  - `realserver_certificate_domain` - CA certificate domain of the realserver.
  - `realserver_certificate_id` - CA certificate ID of the realserver.

## » tencentcloud_gaap_http_rules

Use this data source to query forward rule of layer7 listeners.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_layer7_listener" "foo" {
  protocol = "HTTP"
  name     = "ci-test-gaap-l7-listener"
  port     = 80
  proxy_id = "${tencentcloud_gaap_proxy.foo.id}"
}

resource "tencentcloud_gaap_realserver" "foo" {
  ip   = "1.1.1.1"
  name = "ci-test-gaap-realserver"
}

resource "tencentcloud_gaap_http_rule" "foo" {
  listener_id     = "${tencentcloud_gaap_layer7_listener.foo.id}"
  domain          = "www.qq.com"
  path            = "/"
  realserver_type = "IP"
  health_check    = true

  realservers {
    id   = "${tencentcloud_gaap_realserver.foo.id}"
    ip   = "${tencentcloud_gaap_realserver.foo.ip}"
    port = 80
  }
}

data "tencentcloud_gaap_http_rules" "foo" {
  listener_id = "${tencentcloud_gaap_layer7_listener.foo.id}"
  domain      = "${tencentcloud_gaap_http_rule.foo.domain}"
}
```

### » Argument Reference

The following arguments are supported:

- `listener_id` - (Required) ID of the layer7 listener to be queried.
- `domain` - (Optional) Forward domain of the layer7 listener to be queried.
- `path` - (Optional) Path of the forward rule to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `rules` - An information list of forward rule of the layer7 listeners. Each element contains the following attributes:
  - `connect_timeout` - Timeout of the health check response.
  - `domain` - Forward domain of the layer7 listener.
  - `health_check_method` - Method of the health check.
  - `health_check_path` - Path of health check.
  - `health_check_status_codes` - Return code of confirmed normal.
  - `health_check` - Indicates whether health check is enable.
  - `id` - ID of the forward rule.
  - `interval` - Interval of the health check.
  - `listener_id` - ID of the layer7 listener.
  - `path` - Path of the forward rule.
  - `realserver_type` - Type of the realserver.
  - `realservers` - An information list of GAAP realserver. Each element contains the following attributes:
  - `domain` - Domain of the GAAP realserver.
  - `id` - ID of the GAAP realserver.
  - `ip` - IP of the GAAP realserver.
  - `port` - Port of the GAAP realserver.
  - `status` - Status of the GAAP realserver.
  - `weight` - Scheduling weight.
  - `scheduler` - Scheduling policy of the layer4 listener.

## » tencentcloud__gaap__layer4__listeners

Use this data source to query gaap layer4 listeners.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
```

```
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_realserver" "foo" {
  ip   = "1.1.1.1"
  name = "ci-test-gaap-realserver"
}

resource "tencentcloud_gaap_layer4_listener" "foo" {
  protocol        = "TCP"
  name            = "ci-test-gaap-4-listener"
  port            = 80
  realserver_type = "IP"
  proxy_id        = "${tencentcloud_gaap_proxy.foo.id}"
  health_check    = true
  interval        = 5
  connect_timeout = 2

  realserver_bind_set {
    id   = "${tencentcloud_gaap_realserver.foo.id}"
    ip   = "${tencentcloud_gaap_realserver.foo.ip}"
    port = 80
  }
}

data "tencentcloud_gaap_layer4_listeners" "foo" {
  protocol    = "TCP"
  proxy_id    = "${tencentcloud_gaap_proxy.foo.id}"
  listener_id = "${tencentcloud_gaap_layer4_listener.foo.id}"
}
```

## » Argument Reference

The following arguments are supported:

- `protocol` - (Required) Protocol of the layer4 listener to be queried, and the available values include `TCP` and `UDP`.
- `proxy_id` - (Required) ID of the GAAP proxy to be queried.
- `listener_id` - (Optional) ID of the layer4 listener to be queried.
- `listener_name` - (Optional) Name of the layer4 listener to be queried.
- `port` - (Optional) Port of the layer4 listener to be queried.

- `result_output_file` - (Optional, ForceNew) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `listeners` - An information list of layer4 listeners. Each element contains the following attributes:
  - `connect_timeout` - Timeout of the health check response.
  - `create_time` - Creation time of the layer4 listener.
  - `health_check` - Indicates whether health check is enable.
  - `id` - ID of the layer4 listener.
  - `interval` - Interval of the health check
  - `name` - Name of the layer4 listener.
  - `port` - Port of the layer4 listener.
  - `protocol` - Protocol of the layer4 listener.
  - `realserver_type` - Type of the realserver.
  - `scheduler` - Scheduling policy of the layer4 listener.
  - `status` - Status of the layer4 listener.

## » tencentcloud_gaap_layer7_listeners

Use this data source to query gaap layer7 listeners.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_layer7_listener" "foo" {
  protocol = "HTTP"
  name     = "ci-test-gaap-l7-listener"
  port     = 80
  proxy_id = "${tencentcloud_gaap_proxy.foo.id}"
}

data "tencentcloud_gaap_layer7_listeners" "listenerId" {
  protocol    = "HTTP"
```

```
  proxy_id    = "${tencentcloud_gaap_proxy.foo.id}"
  listener_id = "${tencentcloud_gaap_layer7_listener.foo.id}"
}
```

### » Argument Reference

The following arguments are supported:

- `protocol` - (Required) Protocol of the layer7 listener to be queried, and the available values include `HTTP` and `HTTPS`.
- `proxy_id` - (Required) ID of the GAAP proxy to be queried.
- `listener_id` - (Optional) ID of the layer7 listener to be queried.
- `listener_name` - (Optional) Name of the layer7 listener to be queried.
- `port` - (Optional) Port of the layer7 listener to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `listeners` - An information list of layer7 listeners. Each element contains the following attributes:
  - `auth_type` - Authentication type of the layer7 listener. `0` is one-way authentication and `1` is mutual authentication.
  - `certificate_id` - Certificate ID of the layer7 listener.
  - `client_certificate_id` - ID of the client certificate.
  - `create_time` - Creation time of the layer7 listener.
  - `forward_protocol` - Protocol type of the forwarding.
  - `id` - ID of the layer7 listener.
  - `name` - Name of the layer7 listener.
  - `port` - Port of the layer7 listener.
  - `protocol` - Protocol of the layer7 listener.
  - `status` - Status of the layer7 listener.

## » tencentcloud_gaap_proxies

Use this data source to query gaap proxies.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
```

```
  bandwidth          = 10
  concurrent         = 2
  access_region      = "SouthChina"
  realserver_region = "NorthChina"
}

data "tencentcloud_gaap_proxies" "foo" {
  ids = ["${tencentcloud_gaap_proxy.foo.id}"]
}
```

## » Argument Reference

The following arguments are supported:

- `access_region` - (Optional) Access region of the GAAP proxy to be queried. Conflict with `ids`.
- `ids` - (Optional) ID of the GAAP proxy to be queried. Conflict with `project_id`,`access_region`,`realserver_region`.
- `project_id` - (Optional) Project ID of the GAAP proxy to be queried. Conflict with `ids`.
- `realserver_region` - (Optional) Region of the GAAP realserver to be queried. Conflict with `ids`.
- `result_output_file` - (Optional, ForceNew) Used to save results.
- `tags` - (Optional) Tags of the GAAP proxy to be queried. Support up to 5, display the information as long as it matches one.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `proxies` - An information list of GAAP proxy. Each element contains the following attributes:
  - `access_region` - Access region of the GAAP proxy.
  - `bandwidth` - Maximum bandwidth of the GAAP proxy, unit is Mbps.
  - `concurrent` - Maximum concurrency of the GAAP proxy, unit is 10k.
  - `create_time` - Creation time of the GAAP proxy.
  - `domain` - Access domain of the GAAP proxy.
  - `forward_ip` - Forwarding IP of the GAAP proxy.
  - `id` - ID of the GAAP proxy.
  - `ip` - Access domain of the GAAP proxy.
  - `name` - Name of the GAAP proxy.
  - `policy_id` - Security policy ID of the GAAP proxy.
  - `project_id` - ID of the project within the GAAP proxy, '0' means is Default Project.
  - `realserver_region` - Region of the GAAP realserver.

  - `scalable` - Indicates whether GAAP proxy can scalable.
  - `status` - Status of the GAAP proxy.
  - `support_protocols` - Supported protocols of the GAAP proxy.
  - `tags` - Tags of the GAAP proxy.
  - `version` - Version of the GAAP proxy.

## » tencentcloud_gaap_realservers

Use this data source to query gaap realservers.

### » Example Usage

```
resource "tencentcloud_gaap_realserver" "foo" {
  ip   = "1.1.1.1"
  name = "ci-test-gaap-realserver"
}

data "tencentcloud_gaap_realservers" "foo" {
  ip = "${tencentcloud_gaap_realserver.foo.ip}"
}
```

### » Argument Reference

The following arguments are supported:

- `domain` - (Optional) Domain of the GAAP realserver to be queried, conflict with `ip`.
- `ip` - (Optional) IP of the GAAP realserver to be queried, conflict with `domain`.
- `name` - (Optional) Name of the GAAP realserver to be queried, the maximum length is 30.
- `project_id` - (Optional) ID of the project within the GAAP realserver to be queried, default is '-1' means all projects.
- `result_output_file` - (Optional, ForceNew) Used to save results.
- `tags` - (Optional) Tags of the GAAP proxy to be queried. Support up to 5, display the information as long as it matches one.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `realservers` - An information list of GAAP realserver. Each element contains the following attributes:

- `domain` - Domain of the GAAP realserver.
- `id` - ID of the GAAP realserver.
- `ip` - IP of the GAAP realserver.
- `name` - Name of the GAAP realserver.
- `project_id` - ID of the project within the GAAP realserver.
- `tags` - Tags of the GAAP realserver.

## » tencentcloud_gaap_security_policies

Use this data source to query security policies of GAAP proxy.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_security_policy" "foo" {
  proxy_id = "${tencentcloud_gaap_proxy.foo.id}"
  action   = "ACCEPT"
}

data "tencentcloud_gaap_security_policies" "foo" {
  id = "${tencentcloud_gaap_security_policy.foo.id}"
}
```

### » Argument Reference

The following arguments are supported:

- `id` - (Required) ID of the security policy to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `action` - Default policy.

- `proxy_id` - ID of the GAAP proxy.
- `status` - Status of the security policy.

## » tencentcloud_gaap_security_rules

Use this data source to query security policy rule.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_security_policy" "foo" {
  proxy_id = "${tencentcloud_gaap_proxy.foo.id}"
  action   = "ACCEPT"
}

resource "tencentcloud_gaap_security_rule" "foo" {
  policy_id = "${tencentcloud_gaap_security_policy.foo.id}"
  name      = "ci-test-gaap-s-rule"
  cidr_ip   = "1.1.1.1"
  action    = "ACCEPT"
  protocol  = "TCP"
  port      = "80"
}

data "tencentcloud_gaap_security_rules" "protocol" {
  policy_id = "${tencentcloud_gaap_security_policy.foo.id}"
  protocol  = "${tencentcloud_gaap_security_rule.foo.protocol}"
}
```

### » Argument Reference

The following arguments are supported:

- `policy_id` - (Required) ID of the security policy to be queried.
- `action` - (Optional) Policy of the rule to be queried.

- `cidr_ip` - (Optional) A network address block of the request source to be queried.
- `name` - (Optional) Name of the security policy rule to be queried.
- `port` - (Optional) Port of the security policy rule to be queried.
- `protocol` - (Optional) Protocol of the security policy rule to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.
- `rule_id` - (Optional) ID of the security policy rules to be queried.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `rules` - An information list of security policy rule. Each element contains the following attributes:
  - `action` - Policy of the rule.
  - `cidr_ip` - A network address block of the request source.
  - `id` - ID of the security policy rule.
  - `name` - Name of the security policy rule.
  - `port` - Port of the security policy rule.
  - `protocol` - Protocol of the security policy rule.

## » 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.
- `image_name` - Name of this image.

## » 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_kubernetes_clusters

Use this data source to query detailed information of kubernetes clusters.

### » Example Usage

```
data "tencentcloud_kubernetes_clusters" "name" {
  cluster_name = "terraform"
}

data "tencentcloud_kubernetes_clusters" "id" {
  cluster_id = "cls-godovr32"
}
```

### » Argument Reference

The following arguments are supported:

- `cluster_id` - (Optional) ID of the cluster. Conflict with cluster_name, can not be set at the same time.
- `cluster_name` - (Optional) Name of the cluster. Conflict with cluster_id, can not be set at the same time.
- `result_output_file` - (Optional) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `list` - An information list of kubernetes clusters . Each element contains the following attributes:
  - `cluster_cidr` - A network address block of the cluster. Different from vpc cidr and cidr of other clusters within this vpc.
  - `cluster_deploy_type` - Deployment type of the cluster.

  - `cluster_desc` - Description of the cluster
  - `cluster_ipvs` - Indicates whether ipvs is enabled.
  - `cluster_max_pod_num` - The maximum number of Pods per node in the cluster.
  - `cluster_max_service_num` - The maximum number of services in the cluster.
  - `cluster_name` - Name of the cluster
  - `cluster_node_num` - Number of nodes in the cluster.
  - `cluster_os` - Operating system of the cluster.
  - `cluster_version` - Version of the cluster.
  - `container_runtime` - Container runtime of the cluster.
  - `ignore_cluster_cidr_conflict` - Indicates whether to ignore the cluster cidr conflict error.
  - `project_id` - Project Id of the cluster.
  - `vpc_id` - Vpc Id of the cluster.
  - `worker_instances_list` - An information list of cvm within the WORKER clusters. Each element contains the following attributes.
  - `failed_reason` - Information of the cvm when it is failed.
  - `instance_id` - ID of the cvm
  - `instance_role` - Role of the cvm
  - `instance_state` - State of the cvm

# » tencentcloud_mongodb_instances

Use this data source to query detailed information of Mongodb instances.

## » Example Usage

```
data "tencentcloud_mongodb_instances" "mongodb" {
  instance_id  = "cmgo-l6lwdsel"
  cluster_type = "REPLSET"
}
```

## » Argument Reference

The following arguments are supported:

- `cluster_type` - (Optional) Type of Mongodb cluster, and available values include replica set cluster(expressed with `REPLSET`), sharding cluster(expressed with `SHARD`).
- `instance_id` - (Optional) ID of the Mongodb instance to be queried.
- `instance_name_prefix` - (Optional) Name prefix of the Mongodb instance.

- `result_output_file` - (Optional) Used to store results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - A list of instances. Each element contains the following attributes:
  - `available_zone` - The available zone of the Mongodb.
  - `cluster_type` - Type of Mongodb cluster.
  - `cpu` - Number of cpu's core.
  - `create_time` - Creation time of the Mongodb instance.
  - `engine_version` - Version of the Mongodb engine.
  - `instance_id` - ID of the Mongodb instance.
  - `instance_name` - Name of the Mongodb instance.
  - `machine_type` - Type of Mongodb instance.
  - `memory` - Memory size.
  - `project_id` - ID of the project which the instance belongs.
  - `shard_quantity` - Number of sharding.
  - `status` - Status of the Mongodb, and available values include pending initialization(expressed with 0), processing(expressed with 1), running(expressed with 2) and expired(expressed with -2)
  - `subnet_id` - ID of the subnet.
  - `vip` - IP of the Mongodb instance.
  - `volume` - Disk size.
  - `vpc_id` - ID of the VPC.
  - `vport` - IP port of the Mongodb instance.

## » tencentcloud_mongodb_zone_config

Use this data source to query the available mongodb specifications for different zone.

### » Example Usage

```
data "tencentcloud_mongodb_zone_config" "mongodb" {
  available_zone = "ap-guangzhou-2"
}
```

### » Argument Reference

The following arguments are supported:

- `available_zone` - (Optional) The available zone of the Mongodb.
- `result_output_file` - (Optional) Used to store results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `list` - A list of zone config. Each element contains the following attributes:
  - `available_zone` - The available zone of the Mongodb.
  - `cluster_type` - Type of Mongodb cluster.
  - `cpu` - Number of cpu's core.
  - `default_storage` - Default disk size.
  - `engine_version` - Version of the Mongodb version.
  - `machine_type` - Type of Mongodb instance.
  - `max_storage` - Maximum size of the disk.
  - `memory` - Memory size.
  - `min_storage` - Minimum sie of the disk.

## » tencentcloud_mysql_backup_list

Use this data source to query the list of backup databases.

### » Example Usage

```
data "tencentcloud_mysql_backup_list" "default" {
  mysql_id           = "my-test-database"
  max_number         = 10
  result_output_file = "mytestpath"
}
```

### » Argument Reference

The following arguments are supported:

- `mysql_id` - (Required, ForceNew) Instance ID, such as cdb-c1nl9rpv. It is identical to the instance ID displayed in the database console page.
- `max_number` - (Optional, ForceNew) The latest files to list, rang from 1 to 10000. And the default value is 10.
- `result_output_file` - (Optional, ForceNew) Used to store results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `list` - A list of MySQL backup. Each element contains the following attributes:
  - `backup_id` - ID of Backup task.
  - `backup_model` - Backup method. Supported values include: physical - physical backup, and logical - logical backup.
  - `creator` - The owner of the backup files.
  - `finish_time` - The time at which the backup finishes.
  - `internet_url` - URL for downloads externally.
  - `intranet_url` - URL for downloads internally.
  - `size` - the size of backup file.
  - `time` - The earliest time at which the backup starts. For example, 2 indicates 2:00 am.

## » tencentcloud_mysql_instance

Use this data source to get information about a MySQL instance.

### » Example Usage

```
data "tencentcloud_mysql_instance" "database" {
  mysql_id           = "my-test-database"
  result_output_file = "mytestpath"
}
```

### » Argument Reference

The following arguments are supported:

- `engine_version` - (Optional) The version number of the database engine to use. Supported versions include 5.5/5.6/5.7.
- `init_flag` - (Optional) Initialization mark. Available values: 0 - Uninitialized; 1 – Initialized.
- `instance_name` - (Optional) Name of mysql instance.
- `instance_role` - (Optional) Instance type. Supported values include: master - master instance, dr - disaster recovery instance, and ro - read-only instance.
- `limit` - (Optional) Number of results returned for a single request. Default is 20, and maximum is 2000.

- `mysql_id` - (Optional) Instance ID, such as cdb-c1nl9rpv. It is identical to the instance ID displayed in the database console page.
- `offset` - (Optional) Record offset. Default is 0.
- `result_output_file` - (Optional) Used to store results.
- `security_group_id` - (Optional) Security groups ID of instance.
- `status` - (Optional) Instance status. Available values: 0 - Creating; 1 - Running; 4 - Isolating; 5 – Isolated.
- `with_dr` - (Optional) Indicates whether to query disaster recovery instances.
- `with_master` - (Optional) Indicates whether to query master instances.
- `with_ro` - (Optional) Indicates whether to query read-only instances.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - A list of instances. Each element contains the following attributes:
  - `cpu_core_count` - CPU count.
  - `create_time` - The time at which a instance is created.
  - `device_type` - Supported instance model.HA - high available version; Basic - basic version.
  - `dr_instance_ids` - ID list of disaster-recovory type associated with the current instance.
  - `engine_version` - The version number of the database engine to use. Supported versions include 5.5/5.6/5.7.
  - `init_flag` - Initialization mark. Available values: 0 - Uninitialized; 1 – Initialized.
  - `instance_name` - Name of mysql instance.
  - `instance_role` - Instance type. Supported values include: master - master instance, dr - disaster recovery instance, and ro - read-only instance.
  - `internet_host` - Public network domain name.
  - `internet_port` - Public network port.
  - `internet_status` - Status of public network.
  - `intranet_ip` - Instance IP for internal access.
  - `intranet_port` - Transport layer port number for internal purpose.
  - `memory_size` - Memory size (in MB).
  - `mysql_id` - Instance ID, such as cdb-c1nl9rpv. It is identical to the instance ID displayed in the database console page.
  - `project_id` - Project ID to which the current instance belongs.
  - `ro_instance_ids` - ID list of read-only type associated with the current instance.
  - `slave_sync_mode` - Data replication mode. 0 - Async replication; 1 - Semisync replication; 2 - Strongsync replication.

  - `status` - Instance status. Available values: 0 - Creating; 1 - Running; 4 - Isolating; 5 – Isolated.
  - `subnet_id` - ID of subnet to which the current instance belongs.
  - `volume_size` - Disk capacity (in GB).
  - `vpc_id` - ID of Virtual Private Cloud.
  - `zone` - Information of available zone.

## » tencentcloud_mysql_parameter_list

Use this data source to get information about a parameter group of a database instance.

### » Example Usage

```
data "tencentcloud_mysql_parameter_list" "mysql" {
  mysql_id           = "my-test-database"
  engine_version     = "5.5"
  result_output_file = "mytestpath"
}
```

### » Argument Reference

The following arguments are supported:

- `engine_version` - (Optional) The version number of the database engine to use. Supported versions include 5.5/5.6/5.7.
- `mysql_id` - (Optional) Instance ID.
- `result_output_file` - (Optional) Used to store results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `parameter_list` - A list of parameters. Each element contains the following attributes:
  - `current_value` - Current value.
  - `default_value` - Default value.
  - `description` - Parameter specification description.
  - `enum_value` - Enumerated value.
  - `max` - Maximum value for the parameter.
  - `min` - Minimum value for the parameter.

  - `need_reboot` - Indicates whether reboot is needed to enable the new parameters.
  - `parameter_name` - Parameter name.
  - `parameter_type` - Parameter type.

## » tencentcloud_mysql_zone_config

Use this data source to query the available database specifications for different regions. And a maximum of 20 requests can be initiated per second for this query.

### » Example Usage

```
data "tencentcloud_mysql_zone_config" "mysql" {
  region             = "ap-guangzhou"
  result_output_file = "mytestpath"
}
```

### » Argument Reference

The following arguments are supported:

- `region` - (Optional, ForceNew) Region parameter, which is used to identify the region to which the data you want to work with belongs.
- `result_output_file` - (Optional, ForceNew) Used to store results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `list` - A list of zone config. Each element contains the following attributes:
  - `disaster_recovery_zones` - Information about available zones of recovery.
  - `engine_versions` - The version number of the database engine to use. Supported versions include 5.5/5.6/5.7.
  - `first_slave_zones` - Zone information about first slave instance.
  - `is_default` - Indicates whether the current DC is the default DC for the region. Possible returned values: 0 - No; 1 - Yes.
  - `is_support_disaster_recovery` - Indicates whether recovery is supported: 0 - No; 1 - Yes.
  - `is_support_vpc` - Indicates whether VPC is supported: 0 - No; 1 - Yes.

- `name` - The name of available zone which is equal to a specific datacenter.
- `second_slave_zones` - Zone information about second slave instance.
- `sells` - A list of supported instance types for sell:
- `max_volume_size` - Maximum disk size (in GB).
- `mem_size` - Memory size (in MB).
- `min_volume_size` - Minimum disk size (in GB).
- `qps` - Queries per second.
- `volume_step` - Disk increment (in GB).
- `slave_deploy_modes` - Availability zone deployment method. Available values: 0 - Single availability zone; 1 - Multiple availability zones.
- `support_slave_sync_modes` - Data replication mode. 0 - Async replication; 1 - Semisync replication; 2 - Strongsync replication.

## » 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_redis_instances

Use this data source to query the detail information of redis instance.

### » Example Usage

```
data "tencentcloud_redis_instances" "redislab" {
  zone               = "ap-hongkong-1"
  search_key         = "myredis"
```

```
  project_id         = 0
  limit              = 20
  result_output_file = "/tmp/redis_instances"
}
```

### » Argument Reference

The following arguments are supported:

- `limit` - (Optional, ForceNew) The number limitation of results for a query.
- `project_id` - (Optional, ForceNew) ID of the project to which redis instance belongs.
- `result_output_file` - (Optional, ForceNew) Used to save results.
- `search_key` - (Optional, ForceNew) Key words used to match the results, and the key words can be: instance ID, instance name and IP address.
- `zone` - (Optional, ForceNew) ID of an available zone.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - A list of redis instance. Each element contains the following attributes:
  - `create_time` - The time when the instance is created.
  - `ip` - IP address of an instance.
  - `mem_size` - Memory size in MB
  - `name` - Name of a redis instance.
  - `port` - The port used to access a redis instance.
  - `project_id` - ID of the project to which a redis instance belongs.
  - `redis_id` - ID of a redis instance.
  - `status` - Current status of an instance maybe: init, processing, online, isolate and todelete.
  - `subnet_id` - ID of the vpc subnet.
  - `type` - Instance type. Available values: master_slave_redis, master_slave_ckv, cluster_ckv, cluster_redis and standalone_redis.
  - `vpc_id` - ID of the vpc with which the instance is associated.
  - `zone` - Available zone to which a redis instance belongs.

## » tencentcloud_redis_zone_config

Use this data source to query which instance types of Redis are available in a specific region.

### » Example Usage

```
data "tencentcloud_redis_zone_config" "redislab" {
  region             = "ap-hongkong"
  result_output_file = "/temp/mytestpath"
}
```

### » Argument Reference

The following arguments are supported:

- `region` - (Optional, ForceNew) Name of a region. If this value is not set, the current region getting from provider's configuration will be used.
- `result_output_file` - (Optional, ForceNew) Used to save results.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `list` - A list of zone. Each element contains the following attributes:
  - `mem_sizes` - The memory volume of an available instance in MB .
  - `type` - Instance type. Available values: master_slave_redis, master_slave_ckv, cluster_ckv, cluster_redis and standalone_redis.
  - `version` - Version description of an available instance. Possible values: Redis 3.2, Redis 4.0 .
  - `zone` - ID of available zone.

## » 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.

**NOTE:** It has been deprecated and replaced by tencentcloud_vpc_route_tables.

### » 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

Use this data source to query detailed information of security group.

**NOTE:** It has been deprecated and replaced by tencentcloud_security_groups.

### » Example Usage

```
data "tencentcloud_security_group" "sglab" {
  security_group_id = "${tencentcloud_security_group.sglab.id}"
}
```

### » Argument Reference

The following arguments are supported:

- `security_group_id` - (Required) ID of the security group to be queried.
- `description` - (Optional) Description of the security group.
- `name` - (Optional) Name of the security group to be queried.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `be_associate_count` - Number of security group binding resources.
- `create_time` - Creation time of security group.

## » tencentcloud_security_groups

Use this data source to query detailed information of security groups.

### » Example Usage

```
data "tencentcloud_security_groups" "sglab" {
  security_group_id = "${tencentcloud_security_group.sglab.id}"
}
```

### » Argument Reference

The following arguments are supported:

- `name` - (Optional) Name of the security group to be queried. Conflict with `security_group_id`.
- `project_id` - (Optional) Project ID of the security group. Conflict with `security_group_id`.
- `security_group_id` - (Optional) ID of the security group to be queried. Conflict with `name` and `project_id`.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `security_groups` - Information list of security group.
  - `be_associate_count` - Number of security group binding resources.
  - `create_time` - Creation time of security group.
  - `description` - Description of the security group.
  - `name` - Name of the security group.
  - `project_id` - Project ID of the security group.
  - `security_group_id` - ID of the security group.

## » 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.

**NOTE:** It has been deprecated and replaced by tencentcloud_vpc_subnets.

### » 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" {}
variable "vpc_id" {}

data "tencentcloud_subnet" "selected" {
  vpc_id    = "${var.vpc_id}"
  subnet_id = "${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.
- `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.

**NOTE:** It has been deprecated and replaced by tencentcloud_vpc_instances.

### » 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_vpc_instances

Use this data source to query vpc instances' information.

### » Example Usage

```
resource "tencentcloud_vpc" "foo" {
  name       = "guagua_vpc_instance_test"
  cidr_block = "10.0.0.0/16"
}

data "tencentcloud_vpc_instances" "id_instances" {
  vpc_id = "${tencentcloud_vpc.foo.id}"
}

data "tencentcloud_vpc_instances" "name_instances" {
  name = "${tencentcloud_vpc.foo.name}"
```

```
}
```

### » Argument Reference

The following arguments are supported:

- `name` - (Optional, ForceNew) Name of the VPC to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.
- `vpc_id` - (Optional, ForceNew) ID of the VPC to be queried.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - The information list of the VPC.
  - `cidr_block` - A network address block of a VPC CIDR.
  - `create_time` - Creation time of VPC.
  - `dns_servers` - A list of DNS servers which can be used within the VPC.
  - `is_default` - Indicates whether it is the default VPC for this region.
  - `is_multicast` - Indicates whether VPC multicast is enabled.
  - `name` - Name of the VPC.
  - `subnet_ids` - A ID list of subnets within this VPC.
  - `vpc_id` - ID of the VPC.

## » tencentcloud_vpc_route_tables

Use this data source to query vpc route tables information.

### » Example Usage

```
variable "availability_zone" {
  default = "ap-guangzhou-3"
}

resource "tencentcloud_vpc" "foo" {
  name       = "guagua-ci-temp-test"
  cidr_block = "10.0.0.0/16"
}

resource "tencentcloud_route_table" "route_table" {
  vpc_id = "${tencentcloud_vpc.foo.id}"
```

```
  name   = "ci-temp-test-rt"
}

data "tencentcloud_vpc_route_tables" "id_instances" {
  route_table_id = "${tencentcloud_route_table.route_table.id}"
}

data "tencentcloud_vpc_route_tables" "name_instances" {
  name = "${tencentcloud_route_table.route_table.name}"
}
```

## » Argument Reference

The following arguments are supported:

- `name` - (Optional, ForceNew) Name of the routing table to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.
- `route_table_id` - (Optional, ForceNew) ID of the routing table to be queried.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - The information list of the VPC.
  - `create_time` - Creation time of the routing table.
  - `is_default` - Indicates whether it is the default routing table.
  - `name` - Name of the routing table.
  - `route_entry_infos` - Detailed information of each entry of the route table.
  - `description` - Description information user defined for a route table rule.
  - `destination_cidr_block` - The destination address block.
  - `next_hub` - ID of next-hop gateway. Note: when 'next_type' is EIP, GatewayId will fix the value '0'.
  - `next_type` - Type of next-hop, and available values include CVM, VPN, DIRECTCONNECT, PEERCONNECTION, SSLVPN, NAT, NORMAL_CVM, EIP and CCN.
  - `route_entry_id` - ID of a route table entry.
  - `route_table_id` - ID of the routing table.
  - `subnet_ids` - List of subnet IDs bound to the route table.
  - `vpc_id` - ID of the VPC.

## » tencentcloud_vpc_subnets

Use this data source to query vpc subnets information.

### » Example Usage

```
variable "availability_zone" {
  default = "ap-guangzhou-3"
}

resource "tencentcloud_vpc" "foo" {
  name       = "guagua_vpc_instance_test"
  cidr_block = "10.0.0.0/16"
}

resource "tencentcloud_subnet" "subnet" {
  availability_zone = "${var.availability_zone}"
  name              = "guagua_vpc_subnet_test"
  vpc_id            = "${tencentcloud_vpc.foo.id}"
  cidr_block        = "10.0.20.0/28"
  is_multicast      = false
}

data "tencentcloud_vpc_subnets" "id_instances" {
  subnet_id = "${tencentcloud_subnet.subnet.id}"
}

data "tencentcloud_vpc_subnets" "name_instances" {
  name = "${tencentcloud_subnet.subnet.name}"
}
```

### » Argument Reference

The following arguments are supported:

- `name` - (Optional, ForceNew) Name of the subnet to be queried.
- `result_output_file` - (Optional, ForceNew) Used to save results.
- `subnet_id` - (Optional, ForceNew) ID of the subnet to be queried.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_list` - List of subnets.

- `availability_zone` - The availability zone of the subnet.
- `available_ip_count` - The number of available IPs.
- `cidr_block` - A network address block of the subnet.
- `create_time` - Creation time of the subnet resource.
- `is_default` - Indicates whether it is the default subnet of the VPC for this region.
- `is_multicast` - Indicates whether multicast is enabled.
- `name` - Name of the subnet.
- `route_table_id` - ID of the routing table.
- `subnet_id` - ID of the subnet.
- `vpc_id` - ID of the VPC.

## » tencentcloud_as_scaling_config

Provides a resource to create a configuration for an AS (Auto scaling) instance.

### » Example Usage

```
resource "tencentcloud_as_scaling_config" "launch_configuration" {
  configuration_name = "launch-configuration"
  image_id           = "img-9qabwvbn"
  instance_types     = ["SA1.SMALL1"]
  project_id         = 0
  system_disk_type   = "CLOUD_PREMIUM"
  system_disk_size   = "50"

  data_disk = {
    disk_type = "CLOUD_PREMIUM"
    disk_size = 50
  }

  internet_charge_type       = "TRAFFIC_POSTPAID_BY_HOUR"
  internet_max_bandwidth_out = 10
  public_ip_assigned         = true
  password                   = "test123#"
  enhanced_security_service  = false
  enhanced_monitor_service   = false
  user_data                  = "dGVzdA=="

  instance_tags = {
    tag = "as"
  }
}
```

## » Argument Reference

The following arguments are supported:

- `configuration_name` - (Required) Name of a launch configuration.
- `image_id` - (Required) An available image ID for a cvm instance.
- `instance_types` - (Required) Specified types of CVM instances.
- `data_disk` - (Optional) Configurations of data disk.
- `enhanced_monitor_service` - (Optional) To specify whether to enable cloud monitor service. Default is TRUE.
- `enhanced_security_service` - (Optional) To specify whether to enable cloud security service. Default is TRUE.
- `instance_tags` - (Optional) A list of tags used to associate different resources.
- `internet_charge_type` - (Optional) Charge types for network traffic. Available values include TRAFFIC_POSTPAID_BY_HOUR.
- `internet_max_bandwidth_out` - (Optional) Max bandwidth of Internet access in Mbps. Default is 0.
- `keep_image_login` - (Optional) Specify whether to keep original settings of a CVM image. And it can't be used with password or key_ids together.
- `key_ids` - (Optional) ID list of keys.
- `password` - (Optional) Password to access.
- `project_id` - (Optional) Specifys to which project the configuration belongs.
- `public_ip_assigned` - (Optional) Specify whether to assign an Internet IP address.
- `security_group_ids` - (Optional) Security groups to which a CVM instance belongs.
- `system_disk_size` - (Optional) Volume of system disk in GB. Default is 50.
- `system_disk_type` - (Optional) Type of a CVM disk, and available values include CLOUD_PREMIUM and CLOUD_SSD. Default is CLOUD_PREMIUM
- `user_data` - (Optional) ase64-encoded User Data text, the length limit is 16KB.

The `data_disk` object supports the following:

- `disk_size` - (Optional) Volume of disk in GB. Default is 0.
- `disk_type` - (Optional) Types of disk available values: CLOUD_PREMIUM and CLOUD_SSD.
- `snapshot_id` - (Optional) Data disk snapshot ID.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - The time when the launch configuration was created.
- `status` - Current statues of a launch configuration.

### » Import

AutoScaling Configuration can be imported using the id, e.g.

```
$ terraform import tencentcloud_as_scaling_config.scaling_config asc-n32ymck2
```

## » tencentcloud_as_scaling_group

Provides a resource to create a group of AS (Auto scaling) instances.

### » Example Usage

```
resource "tencentcloud_as_scaling_group" "scaling_group" {
  scaling_group_name   = "tf-as-scaling-group"
  configuration_id     = "asc-oqio4yyj"
  max_size             = 1
  min_size             = 0
  vpc_id               = "vpc-3efmz0z"
  subnet_ids           = ["subnet-mc3egos"]
  project_id           = 0
  default_cooldown     = 400
  desired_capacity     = 1
  termination_policies = ["NEWEST_INSTANCE"]
  retry_policy         = "INCREMENTAL_INTERVALS"

  forward_balancer_ids {
    load_balancer_id = "lb-hk693b1l"
    listener_id      = "lbl-81wr497k"
    rule_id          = "loc-kiodx943"

    target_attribute {
      port   = 80
      weight = 90
    }
  }
}
```

## » Argument Reference

The following arguments are supported:

- `configuration_id` - (Required) An available ID for a launch configuration.
- `max_size` - (Required) Maximum number of CVM instances (0~2000).
- `min_size` - (Required) Minimum number of CVM instances (0~2000).
- `scaling_group_name` - (Required) Name of a scaling group.
- `vpc_id` - (Required) ID of VPC network.
- `default_cooldown` - (Optional) Default cooldown time in second, and default value is 300.
- `desired_capacity` - (Optional) Desired volume of CVM instances, which is between max_size and min_size.
- `forward_balancer_ids` - (Optional) List of application load balancers, which can't be specified with load_balancer_ids together.
- `load_balancer_ids` - (Optional) ID list of traditional load balancers.
- `project_id` - (Optional) Specifys to which project the scaling group belongs.
- `retry_policy` - (Optional) Available values for retry policies include IMMEDIATE_RETRY and INCREMENTAL_INTERVALS.
- `subnet_ids` - (Optional) ID list of subnet, and for VPC it is required.
- `termination_policies` - (Optional) Available values for termination policies include OLDEST_INSTANCE and NEWEST_INSTANCE.
- `zones` - (Optional) List of available zones, for Basic network it is required.

The `forward_balancer_ids` object supports the following:

- `listener_id` - (Required) Listener ID for application load balancers.
- `load_balancer_id` - (Required) ID of available load balancers.
- `target_attribute` - (Required) Attribute list of target rules.
- `rule_id` - (Optional) ID of forwarding rules.

The `target_attribute` object supports the following:

- `port` - (Required) Port number.
- `weight` - (Required) Weight.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `instance_count` - The time when the AS group was created.
- `status` - Current status of a scaling group.

### » Import

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

```
$ terraform import tencentcloud_as_scaling_group.scaling_group asg-n32ymck2
```

## » tencentcloud_as_attachment

Provides a resource to attach or detach CVM instances to a specified scaling group.

### » Example Usage

```
resource "tencentcloud_as_attachment" "attachment" {
  scaling_group_id = "sg-afasfa"
  instance_ids     = ["ins-01", "ins-02"]
}
```

### » Argument Reference

The following arguments are supported:

- `instance_ids` - (Required) ID list of CVM instances to be attached to the scaling group.
- `scaling_group_id` - (Required, ForceNew) ID of a scaling group.

## » tencentcloud_as_scaling_policy

Provides a resource for an AS (Auto scaling) policy.

### » Example Usage

```
resource "tencentcloud_as_scaling_policy" "scaling_policy" {
  scaling_group_id    = "asg-n32ymck2"
  policy_name         = "tf-as-scaling-policy"
  adjustment_type     = "EXACT_CAPACITY"
  adjustment_value    = 0
  comparison_operator = "GREATER_THAN"
  metric_name         = "CPU_UTILIZATION"
  threshold           = 80
  period              = 300
```

```
  continuous_time     = 10
  statistic           = "AVERAGE"
  cooldown            = 360
}
```

### » Argument Reference

The following arguments are supported:

- `adjustment_type` - (Required) Specifies whether the adjustment is an absolute number or a percentage of the current capacity. Available values include CHANGE_IN_CAPACITY, EXACT_CAPACITY and PERCENT_CHANGE_IN_CAPACITY.
- `adjustment_value` - (Required) Define the number of instances by which to scale.For CHANGE_IN_CAPACITY type or PERCENT_CHANGE_IN_CAPACITY, a positive increment adds to the current capacity and a negative value removes from the current capacity. For EXACT_CAPACITY type, it defines an absolute number of the existing Auto Scaling group size.
- `comparison_operator` - (Required) Comparison operator, of which valid values can be GREATER_THAN, GREATER_THAN_OR_EQUAL_TO, LESS_THAN, LESS_THAN_OR_EQUAL_TO, EQUAL_TO and NOT_EQUAL_TO.
- `continuous_time` - (Required) Retry times (1~10).
- `metric_name` - (Required) Name of an indicator, which can be CPU_UTILIZATION, MEM_UTILIZATION, LAN_TRAFFIC_OUT, LAN_TRAFFIC_IN, WAN_TRAFFIC_OUT and WAN_TRAFFIC_IN.
- `period` - (Required) Time period in second, of which valid values can be 60 and 300.
- `policy_name` - (Required) Name of a policy used to define a reaction when an alarm is triggered.
- `scaling_group_id` - (Required, ForceNew) ID of a scaling group.
- `threshold` - (Required) Alarm threshold.
- `cooldown` - (Optional) Cooldwon time in second. Default is 300.
- `notification_user_group_ids` - (Optional) An ID group of users to be notified when an alarm is triggered.
- `statistic` - (Optional) Statistic types, include AVERAGE, MAXIMUM and MINIMUM. Default is AVERAGE.

## » tencentcloud_as_schedule

Provides a resource for an AS (Auto scaling) schedule.

### » Example Usage

```
resource "tencentcloud_as_schedule" "schedule" {
  scaling_group_id     = "sg-12af45"
  schedule_action_name = "tf-as-schedule"
  max_size             = 10
  min_size             = 0
  desired_capacity     = 0
  start_time           = "2019-01-01T00:00:00+08:00"
  end_time             = "2019-12-01T00:00:00+08:00"
  recurrence           = "0 0 * * *"
}
```

### » Argument Reference

The following arguments are supported:

- `desired_capacity` - (Required) The desired number of CVM instances that should be running in the group.
- `max_size` - (Required) The maximum size for the Auto Scaling group.
- `min_size` - (Required) The minimum size for the Auto Scaling group.
- `scaling_group_id` - (Required, ForceNew) ID of a scaling group.
- `schedule_action_name` - (Required) The name of this scaling action.
- `start_time` - (Required) The time for this action to start, in "YYYY-MM-DDThh:mm:ss+08:00" format (UTC+8).
- `end_time` - (Optional) The time for this action to end, in "YYYY-MM-DDThh:mm:ss+08:00" format (UTC+8).
- `recurrence` - (Optional) The time when recurring future actions will start. Start time is specified by the user following the Unix cron syntax format. And this argument should be set with end_time together.

## » tencentcloud_as_lifecycle_hook

Provides a resource for an AS (Auto scaling) lifecycle hook.

### » Example Usage

```
resource "tencentcloud_as_lifecycle_hook" "lifecycle_hook" {
  scaling_group_id         = "sg-12af45"
  lifecycle_hook_name      = "tf-as-lifecycle-hook"
  lifecycle_transition     = "INSTANCE_LAUNCHING"
  default_result           = "CONTINUE"
  heartbeat_timeout        = 500
```

```
  notification_metadata    = "tf test"
  notification_target_type = "CMQ_QUEUE"
  notification_queue_name  = "lifcyclehook"
}
```

### » Argument Reference

The following arguments are supported:

- `lifecycle_hook_name` - (Required) The name of the lifecycle hook.
- `lifecycle_transition` - (Required) The instance state to which you want to attach the lifecycle hook. The valid values are INSTANCE_LAUNCHING and INSTANCE_TERMINATING.
- `scaling_group_id` - (Required, ForceNew) ID of a scaling group.
- `default_result` - (Optional) Defines the action the AS group should take when the lifecycle hook timeout elapses or if an unexpected failure occurs. The valid values are CONTINUE and ABANDON. The default value is CONTINUE.
- `heartbeat_timeout` - (Optional) Defines the amount of time, in seconds, that can elapse before the lifecycle hook times out. The range is 30 to 3600, and default value is 300.
- `notification_metadata` - (Optional) Contains additional information that you want to include any time AS sends a message to the notification target.
- `notification_queue_name` - (Optional) For CMQ_QUEUE type, a name of queue must be set.
- `notification_target_type` - (Optional) Target type, which can be CMQ_QUEUE or CMQ_TOPIC.
- `notification_topic_name` - (Optional) For CMQ_TOPIC type, a name of topic must be set.

## » tencentcloud_as_notification

Provides a resource for an AS (Auto scaling) notification.

### » Example Usage

```
resource "tencentcloud_as_notification" "as_notification" {
  scaling_group_id            = "sg-12af45"
  notification_type           = ["SCALE_OUT_FAILED", "SCALE_IN_SUCCESSFUL", "SCALE_IN_FAILEI
  notification_user_group_ids = ["76955"]
}
```

### » Argument Reference

The following arguments are supported:

- `notification_types` - (Required) A list of Notification Types that trigger notifications. Acceptable values are SCALE_OUT_FAILED, SCALE_IN_SUCCESSFUL, SCALE_IN_FAILED, REPLACE_UNHEALTHY_INSTANCE_SUCCES and REPLACE_UNHEALTHY_INSTANCE_FAILED.
- `notification_user_group_ids` - (Required) A group of user IDs to be notified.
- `scaling_group_id` - (Required, ForceNew) ID of a scaling group.

## » tencentcloud_cbs_storage

Provides a resource to create a CBS.

### » Example Usage

```
resource "tencentcloud_cbs_storage" "storage" {
  storage_name      = "mystorage"
  storage_type      = "CLOUD_SSD"
  storage_size      = "50"
  availability_zone = "ap-guangzhou-3"
  project_id        = 0
  encrypt           = false

  tags = {
    test = "tf"
  }
}
```

### » Argument Reference

The following arguments are supported:

- `availability_zone` - (Required, ForceNew) The available zone that the CBS instance locates at.
- `storage_name` - (Required) Name of CBS. The maximum length can not exceed 60 bytes.
- `storage_size` - (Required) Volume of CBS.
- `storage_type` - (Required, ForceNew) Type of CBS medium, and available values include CLOUD_BASIC, CLOUD_PREMIUM and CLOUD_SSD.

- `encrypt` - (Optional, ForceNew) Indicates whether CBS is encrypted.
- `period` - (Optional) The purchased usage period of CBS, and value range [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, 36].
- `project_id` - (Optional) ID of the project to which the instance belongs.
- `snapshot_id` - (Optional) ID of the snapshot. If specified, created the CBS by this snapshot.
- `tags` - (Optional) The available tags within this CBS.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `attached` - Indicates whether the CBS is mounted the CVM.
- `storage_status` - Status of CBS, and available values include UNATTACHED, ATTACHING, ATTACHED, DETACHING, EXPANDING, ROLLBACKING, TORECYCLE and DUMPING.

### » Import

CBS storage can be imported using the id, e.g.

```
$ terraform import tencentcloud_cbs_storage.storage disk-41s6jwy4
```

## » tencentcloud_cbs_storage_attachment

Provides a CBS storage attachment resource.

### » Example Usage

```
resource "tencentcloud_cbs_storage_attachment" "attachment" {
  storage_id  = "disk-kdt0sq6m"
  instance_id = "ins-jqlegd42"
}
```

### » Argument Reference

The following arguments are supported:

- `instance_id` - (Required, ForceNew) ID of the CVM instance.
- `storage_id` - (Required, ForceNew) ID of the mounted CBS.

# » tencentcloud_cbs_snapshot

Provides a resource to create a CBS snapshot.

## » Example Usage

```
resource "tencentcloud_cbs_snapshot" "snapshot" {
  snapshot_name = "unnamed"
  storage_id    = "disk-kdt0sq6m"
}
```

## » Argument Reference

The following arguments are supported:

- `snapshot_name` - (Required) Name of the snapshot.
- `storage_id` - (Required, ForceNew) ID of the the CBS which this snapshot created from.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Creation time of snapshot.
- `disk_type` - Types of CBS which this snapshot created from.
- `percent` - Snapshot creation progress percentage. If the snapshot has created successfully, the constant value is 100.
- `snapshot_status` - Status of the snapshot.
- `storage_size` - Volume of storage which this snapshot created from.

## » Import

CBS snapshot can be imported using the id, e.g.

```
$ terraform import tencentcloud_cbs_snapshot.snapshot snap-3sa3f39b
```

# » tencentcloud_cbs_snapshot_policy

Provides a snapshot policy resource.

### » Example Usage

```
resource "tencentcloud-cbs_snapshot_policy" "snapshot_policy" {
  snapshot_policy_name = "mysnapshotpolicyname"
  repeat_weekdays      = [1, 4]
  repeat_hours         = [1]
  retention_days       = 7
}
```

### » Argument Reference

The following arguments are supported:

- `repeat_hours` - (Required) Trigger times of periodic snapshot, the available values are 0 to 23. The 0 means 00:00, and so on.
- `repeat_weekdays` - (Required) Periodic snapshot is enabled, the available values are [0, 1, 2, 3, 4, 5, 6]. 0 means Sunday, 1-6 means Monday to Saturday.
- `snapshot_policy_name` - (Required) Name of snapshot policy. The maximum length can not exceed 60 bytes.
- `retention_days` - (Optional) Retention days of the snapshot, and the default value is 7.

### » Import

CBS snapshot policy can be imported using the id, e.g.

```
$ terraform import tencentcloud_cbs_snapshot_policy.snapshot_policy asp-jliex1tn
```

## » tencentcloud_ccn

Provides a resource to create a CCN instance.

### » Example Usage

```
resource "tencentcloud_ccn" "main" {
  name        = "ci-temp-test-ccn"
  description = "ci-temp-test-ccn-des"
  qos         = "AG"
}
```

### » Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the CCN to be queried, and maximum length does not exceed 60 bytes.
- `description` - (Optional) Description of CCN, and maximum length does not exceed 100 bytes.
- `qos` - (Optional, ForceNew) Service quality of CCN, and the available value include 'PT', 'AU', 'AG'. The default is 'AU'.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Creation time of resource.
- `instance_count` - Number of attached instances.
- `state` - States of instance. The available value include 'ISOLATED'(arrears) and 'AVAILABLE'.

### » Import

Ccn instance can be imported, e.g.

```
$ terraform import tencentcloud_ccn.test ccn-id
```

## » tencentcloud_ccn_attachment

Provides a CCN attaching resource.

### » Example Usage

```
variable "region" {
  default = "ap-guangzhou"
}

resource "tencentcloud_vpc" "vpc" {
  name         = "ci-temp-test-vpc"
  cidr_block   = "10.0.0.0/16"
  dns_servers  = ["119.29.29.29", "8.8.8.8"]
  is_multicast = false
}
```

```
resource "tencentcloud_ccn" "main" {
  name        = "ci-temp-test-ccn"
  description = "ci-temp-test-ccn-des"
  qos         = "AG"
}

resource "tencentcloud_ccn_attachment" "attachment" {
  ccn_id          = "${tencentcloud_ccn.main.id}"
  instance_type   = "VPC"
  instance_id     = "${tencentcloud_vpc.vpc.id}"
  instance_region = "${var.region}"
}
```

### » Argument Reference

The following arguments are supported:

- `ccn_id` - (Required, ForceNew) ID of the CCN
- `instance_id` - (Required, ForceNew) ID of instance is attached.
- `instance_region` - (Required, ForceNew) The region that the instance locates at.
- `instance_type` - (Required, ForceNew) Type of attached instance network, and available values include VPC, DIRECTCONNECT and BMVPC.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `attached_time` - Time of attaching.
- `cidr_block` - A network address block of the instance that is attached.
- `state` - States of instance is attached, and available values include PENDING, ACTIVE, EXPIRED, REJECTED, DELETED, FAILED(asynchronous forced disassociation after 2 hours), ATTACHING, DETACHING and DETACHFAILED(asynchronous forced disassociation after 2 hours).

## » tencentcloud_ccn_bandwidth_limit

Provides a resource to limit CCN bandwidth.

### » Example Usage

```
variable "other_region1" {
  default = "ap-shanghai"
}

resource "tencentcloud_ccn" "main" {
  name        = "ci-temp-test-ccn"
  description = "ci-temp-test-ccn-des"
  qos         = "AG"
}

resource "tencentcloud_ccn_bandwidth_limit" "limit1" {
  ccn_id          = "${tencentcloud_ccn.main.id}"
  region          = "${var.other_region1}"
  bandwidth_limit = 500
}
```

### » Argument Reference

The following arguments are supported:

- `ccn_id` - (Required, ForceNew) ID of the CCN
- `region` - (Required, ForceNew) Limitation of region.
- `bandwidth_limit` - (Optional) Limitation of bandwidth.

## » tencentcloud_container_cluster

Provides a Container Cluster resource.

**NOTE:** It has been deprecated and replaced by tencentcloud_kubernetes_cluster.

### » 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 description 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.

**NOTE:** It has been deprecated and replaced by tencentcloud_kubernetes_scale_worker.

### » 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` - Describe the lan ip of the node.

## » tencentcloud_clb_instance

Provides a resource to create a CLB instance.

### » Example Usage

INTERNAL CLB

```
resource "tencentcloud_clb_instance" "internal_clb" {
  network_type = "INTERNAL"
  clb_name     = "myclb"
  project_id   = 0
  vpc_id       = "vpc-7007ll7q"
  subnet_id    = "subnet-12rastkr"

  tags = {
    test = "tf"
  }
}
```

OPEN CLB

```
resource "tencentcloud_clb_instance" "open_clb" {
  network_type              = "OPEN"
  clb_name                  = "myclb"
  project_id                = 0
  vpc_id                    = "vpc-da7ffa61"
  security_groups           = ["sg-o0ek7r93"]
  target_region_info_region = "ap-guangzhou"
```

```
  target_region_info_vpc_id = "vpc-da7ffa61"

  tags = {
    test = "tf"
  }
}
```

### » Argument Reference

The following arguments are supported:

- `clb_name` - (Required) Name of the CLB. The name can only contain Chinese characters, English letters, numbers, underscore and hyphen '-'.
- `network_type` - (Required, ForceNew) Type of CLB instance, and available values include 'OPEN' and 'INTERNAL'.
- `project_id` - (Optional, ForceNew) Id of the project within the CLB instance, '0' - Default Project.
- `security_groups` - (Optional) Security groups of the CLB instance. Only supports 'OPEN' CLBs.
- `subnet_id` - (Optional, ForceNew) Subnet id of the CLB. Effective only for CLB within the VPC. Only supports 'INTERNAL' CLBs.
- `tags` - (Optional, ForceNew) The available tags within this CLB.
- `target_region_info_region` - (Optional) Region information of backend services are attached the CLB instance. Only supports 'OPEN' CLBs.
- `target_region_info_vpc_id` - (Optional) Vpc information of backend services are attached the CLB instance. Only supports 'OPEN' CLBs.
- `vpc_id` - (Optional, ForceNew) VPC id of the CLB.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `clb_vips` - The virtual service address table of the CLB.

### » Import

CLB instance can be imported using the id, e.g.

```
$ terraform import tencentcloud_clb_instance.foo lb-7a0t6zqb
```

## » tencentcloud_clb_listener

Provides a resource to create a CLB listener.

## » Example Usage

HTTP Listener

```
resource "tencentcloud_clb_listener" "HTTP_listener" {
  clb_id        = "lb-0lh5au7v"
  listener_name = "test_listener"
  port          = 80
  protocol      = "HTTP"
}
```

TCP/UDP Listener

```
resource "tencentcloud_clb_listener" "TCP_listener" {
  clb_id                      = "lb-0lh5au7v"
  listener_name               = "test_listener"
  port                        = 80
  protocol                    = "TCP"
  health_check_switch         = true
  health_check_time_out       = 2
  health_check_interval_time = 5
  health_check_health_num     = 3
  health_check_unhealth_num   = 3
  session_expire_time         = 30
  scheduler                   = "WRR"
}
```

HTTPS Listener

```
resource "tencentcloud_clb_listener" "HTTPS_listener" {
  clb_id               = "lb-0lh5au7v"
  listener_name        = "test_listener"
  port                 = "80"
  protocol             = "HTTPS"
  certificate_ssl_mode = "MUTUAL"
  certificate_id       = "VjAYq9xc"
  certificate_ca_id    = "VfqcL1ME"
  sni_switch           = true
}
```

TCP SSL Listener

```
resource "tencentcloud_clb_listener" "TCPSSL_listener" {
  clb_id                      = "lb-0lh5au7v"
  listener_name               = "test_listener"
  port                        = "80"
  protocol                    = "TCP_SSL"
  certificate_ssl_mode        = "MUTUAL"
  certificate_id              = "VjAYq9xc"
```

```
  certificate_ca_id          = "VfqcL1ME"
  health_check_switch        = true
  health_check_time_out      = 2
  health_check_interval_time = 5
  health_check_health_num    = 3
  health_check_unhealth_num  = 3
  scheduler                  = "WRR"
}
```

## » Argument Reference

The following arguments are supported:

- `clb_id` - (Required, ForceNew) Id of the CLB.
- `listener_name` - (Required) Name of the CLB listener, and available values can only be Chinese characters, English letters, numbers, underscore and hyphen '-'.
- `protocol` - (Required, ForceNew) Type of protocol within the listener, and available values include 'TCP', 'UDP', 'HTTP', 'HTTPS' and 'TCP_SSL'.
- `certificate_ca_id` - (Optional) Id of the client certificate. NOTES: Only supports listeners of 'HTTPS' and 'TCP_SSL' protocol and must be set when the ssl mode is 'MUTUAL'.
- `certificate_id` - (Optional) Id of the server certificate. NOTES: Only supports listeners of 'HTTPS' and 'TCP_SSL' protocol and must be set when it is available.
- `certificate_ssl_mode` - (Optional) Type of certificate, and available values inclue 'UNIDIRECTIONAL', 'MUTUAL'. NOTES: Only supports listeners of 'HTTPS' and 'TCP_SSL' protocol and must be set when it is available.
- `health_check_health_num` - (Optional) Health threshold of health check, and the default is 3. If a success result is returned for the health check for 3 consecutive times, the backend CVM is identified as healthy. The value range is 2-10. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `health_check_interval_time` - (Optional) Interval time of health check. The value range is 5-300 sec, and the default is 5 sec. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `health_check_switch` - (Optional) Indicates whether health check is enabled.
- `health_check_time_out` - (Optional) Response timeout of health check. The value range is 2-60 sec, and the default is 2 sec. Response timeout needs to be less than check interval. NOTES: Only supports listeners of

'TCP','UDP','TCP_SSL' protocol.

- `health_check_unhealth_num` - (Optional) Unhealth threshold of health check, and the default is 3. If a success result is returned for the health check 3 consecutive times, the CVM is identified as unhealthy. The value range is 2-10. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `port` - (Optional, ForceNew) Port of the CLB listener.
- `scheduler` - (Optional) Scheduling method of the CLB listener, and available values include 'WRR' and 'LEAST_CONN'. The default is 'WRR'. NOTES: The listener of HTTP and 'HTTPS' protocol additionally supports the 'IP Hash' method. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `session_expire_time` - (Optional) Time of session persistence within the CLB listener. NOTES: Available when scheduler is specified as 'WRR', and not available when listener protocol is 'TCP_SSL'. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `sni_switch` - (Optional, ForceNew) Indicates whether SNI is enabled, and only supported with protocol 'HTTPS'. If enabled, you can set a certificate for each rule in `tencentcloud_clb_listener_rule`, otherwise all rules have a certificate.

# » tencentcloud_clb_listener_rule

Provides a resource to create a CLB listener rule.

**NOTE:** This resource only be applied to the HTTP or HTTPS listeners.

## » Example Usage

```
resource "tencentcloud_clb_listener_rule" "foo" {
  listener_id                = "lbl-hh141sn9"
  clb_id                     = "lb-k2zjp9lv"
  domain                     = "foo.net"
  url                        = "/bar"
  health_check_switch        = true
  health_check_interval_time = 5
  health_check_health_num    = 3
  health_check_unhealth_num  = 3
  health_check_http_code     = "http_1xx"
  health_check_http_path     = "Default Path"
```

```
  health_check_http_domain   = "Default Domain"
  health_check_http_method   = "GET"
  certificate_ssl_mode       = "MUTUAL"
  certificate_id             = "mycert server ID "
  certificate_ca_id          = "mycert ca ID"
  session_expire_time        = 30
  scheduler                  = "WRR"
}
```

## » Argument Reference

The following arguments are supported:

- `clb_id` - (Required) Id of CLB instance.
- `domain` - (Required, ForceNew) Domain name of the listener rule.
- `listener_id` - (Required, ForceNew) Id of CLB listener.
- `url` - (Required, ForceNew) Url of the listener rule.
- `certificate_ca_id` - (Optional, ForceNew) Id of the client certificate. NOTES: Only supports listeners of 'HTTPS' protocol.
- `certificate_id` - (Optional, ForceNew) Id of the server certificate. NOTES: Only supports listeners of 'HTTPS' protocol.
- `certificate_ssl_mode` - (Optional, ForceNew) Type of certificate, and available values inclue 'UNIDIRECTIONAL', 'MUTUAL'. NOTES: Only supports listeners of 'HTTPS' protocol.
- `health_check_health_num` - (Optional) Health threshold of health check, and the default is 3. If a success result is returned for the health check 3 consecutive times, indicates that the forwarding is normal. The value range is 2-10. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `health_check_http_code` - (Optional) HTTP Status Code. The default is 31 and value range is 1-31. '0b0001' means the return value '1xx' is health. '0b0010' means the return value '2xx' is health. '0b0100' means the return value '3xx' is health. '0b1000' means the return value '4xx' is health. 0b10000 means the return value '5xx' is health. If you want multiple return codes to indicate health, need to add the corresponding values. NOTES: The 'HTTP' health check of the 'TCP' listener only supports specifying one health check status code. NOTES: Only supports listeners of 'HTTP' and 'HTTPS' protocol.
- `health_check_http_domain` - (Optional) Domain name of health check. NOTES: Only supports listeners of 'HTTP' and 'HTTPS' protocol.
- `health_check_http_method` - (Optional) Methods of health check. NOTES: Only supports listeners of 'HTTP' and 'HTTPS' protocol. The default is 'HEAD', the available value include 'HEAD' and 'GET'.
- `health_check_http_path` - (Optional) Path of health check. NOTES:

Only supports listeners of 'HTTP' and 'HTTPS' protocol.

- `health_check_interval_time` - (Optional) Interval time of health check. The value range is 5-300 sec, and the default is 5 sec. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `health_check_switch` - (Optional) Indicates whether health check is enabled.
- `health_check_unhealth_num` - (Optional) Unhealth threshold of health check, and the default is 3. If the unhealth result is returned 3 consecutive times, indicates that the forwarding is abnormal. The value range is 2-10. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `scheduler` - (Optional) Scheduling method of the CLB listener rules, and available values include 'WRR', 'IP HASH' and 'LEAST_CONN'. The default is 'WRR'. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.
- `session_expire_time` - (Optional) Time of session persistence within the CLB listener. NOTES: Available when scheduler is specified as 'WRR', and not available when listener protocol is 'TCP_SSL'. NOTES: TCP/UDP/TCP_SSL listener allows direct configuration, HTTP/HTTPS listener needs to be configured in tencentcloud_clb_listener_rule.

# » tencentcloud_clb_attachment

Provides a resource to create a CLB attachment.

## » Example Usage

```
resource "tencentcloud_clb_attachment" "foo" {
  clb_id      = "lb-k2zjp9lv"
  listener_id = "lbl-hh141sn9"
  rule_id     = "loc-4xxr2cy7"

  targets {
    instance_id = "ins-1flbqyp8"
    port        = 80
    weight      = 10
  }
}
```

### » Argument Reference

The following arguments are supported:

- `clb_id` - (Required, ForceNew) Id of the clb.
- `listener_id` - (Required, ForceNew) Id of the clb listener.
- `targets` - (Required) Information of the backends to be attached.
- `rule_id` - (Optional, ForceNew) Id of the clb listener rule. Only supports listeners of 'HTTPS' and 'HTTP' protocol.

The `targets` object supports the following:

- `instance_id` - (Required) Id of the backend server.
- `port` - (Required) Port of the backend server.
- `weight` - (Optional) Forwarding weight of the backend service, the range of [0, 100], defaults to 10.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `protocol_type` - Type of protocol within the listener.

### » Import

CLB attachment can be imported using the id, e.g.

```
$ terraform import tencentcloud_clb_attachment.foo loc-4xxr2cy7#lbl-hh141sn9#lb-7a0t6zqb
```

## » tencentcloud_clb_redirection

Provides a resource to create a CLB redirection.

### » Example Usage

```
resource "tencentcloud_clb_redirection" "foo" {
  clb_id             = "lb-p7olt9e5"
  source_listener_id = "lbl-jc1dx6ju"
  target_listener_id = "lbl-asj1hzuo"
  source_rule_id     = "loc-ft8fmngv"
  target_rule_id     = "loc-4xxr2cy7"
}
```

### » Argument Reference

The following arguments are supported:

- `clb_id` - (Required, ForceNew) Id of CLB instance.
- `source_listener_id` - (Required, ForceNew) Id of source listener.
- `source_rule_id` - (Required, ForceNew) Rule id of source listener.
- `target_listener_id` - (Required, ForceNew) Id of source listener.
- `target_rule_id` - (Required, ForceNew) Rule id of target listener.

### » Import

CLB redirection can be imported using the id, e.g.

```
$ terraform import tencentcloud_clb_redirection.foo loc-ft8fmngv#loc-4xxr2cy7#lbl-jc1dx6ju#l
```

## » tencentcloud_lb

Provides a Load Balancer resource.

**NOTE:** It has been deprecated and replaced by `tencentcloud_clb_instance`.

### » Example Usage

Basic usage:

```
resource "tencentcloud_lb" "classic" {
  type       = "OPEN"
  forward    = "APPLICATION"
  name       = "tf-test-classic"
  project_id = 0
}
```

### » Argument Reference

The following arguments are supported:

- `type` - (Required) The network type of the LB, valid choices: "OPEN", "INTERNAL".
- `forward` - (Optional) The type of the LB, valid choices: "CLASSIC", "APPLICATION".
- `name` - (Optional) The name of the LB.
- `vpc_id` - (Optional) The VPC ID of the LB, unspecified or 0 stands for CVM basic network.

- `project_id` - (Optional) The project id of the LB, unspecified or 0 stands for default project.

### » Attributes Reference

The following attributes are exported in addition to the arguments listed above:

- `status` - The status of the LB.

## » tencentcloud_alb_server_attachment

Provides Load Balancer server attachment resource.

**NOTE:** It has been deprecated and replaced by `tencentcloud_clb_attachment`.

**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_cos_bucket

Provides a COS resource to create a COS bucket and set its attributes.

## » Example Usage

Private Bucket

```
resource "tencentcloud_cos_bucket" "mycos" {
  bucket = "mycos-1258798060"
  acl    = "private"
}
```

Static Website

```
resource "tencentcloud_cos_bucket" "mycos" {
  bucket = "mycos-1258798060"

  website = {
```

```
    index_document = "index.html"
    error_document = "error.html"
  }
}
```

Using CORS

```
resource "tencentcloud_cos_bucket" "mycos" {
  bucket = "mycos-1258798060"
  acl    = "public-read-write"

  cors_rules {
    allowed_origins = ["http://*.abc.com"]
    allowed_methods = ["PUT", "POST"]
    allowed_headers = ["*"]
    max_age_seconds = 300
    expose_headers  = ["Etag"]
  }
}
```

Using object lifecycle

```
resource "tencentcloud_cos_bucket" "mycos" {
  bucket = "mycos-1258798060"
  acl    = "public-read-write"

  lifecycle_rules {
    filter_prefix = "path1/"

    transition {
      date          = "2019-06-01"
      storage_class = "STANDARD_IA"
    }

    expiration {
      days = 90
    }
  }
}
```

## » Argument Reference

The following arguments are supported:

- `bucket` - (Required, ForceNew) The name of a bucket to be created.
- `acl` - (Optional) The canned ACL to apply. Available values include private, public-read, and public-read-write. Defaults to private.

- `cors_rules` - (Optional) A rule of Cross-Origin Resource Sharing (documented below).
- `lifecycle_rules` - (Optional) A configuration of object lifecycle management (documented below).
- `website` - (Optional) A website object(documented below).

The `cors_rules` object supports the following:

- `allowed_headers` - (Required) Specifies which headers are allowed.
- `allowed_methods` - (Required) Specifies which methods are allowed. Can be GET, PUT, POST, DELETE or HEAD.
- `allowed_origins` - (Required) Specifies which origins are allowed.
- `expose_headers` - (Optional) Specifies expose header in the response.
- `max_age_seconds` - (Optional) Specifies time in seconds that browser can cache the response for a preflight request.

The `lifecycle_rules` object supports the following:

- `filter_prefix` - (Required) Object key prefix identifying one or more objects to which the rule applies.
- `expiration` - (Optional) Specifies a period in the object's expire (documented below).
- `transition` - (Optional) Specifies a period in the object's transitions (documented below).

The `transition` object supports the following:

- `storage_class` - (Required) Specifies the storage class to which you want the object to transition. Available values include STANDARD, STANDARD_IA and ARCHIVE.
- `date` - (Optional) Specifies the date after which you want the corresponding action to take effect.
- `days` - (Optional) Specifies the number of days after object creation when the specific rule action takes effect.

The `expiration` object supports the following:

- `date` - (Optional) Specifies the date after which you want the corresponding action to take effect.
- `days` - (Optional) Specifies the number of days after object creation when the specific rule action takes effect.

The `website` object supports the following:

- `error_document` - (Optional) An absolute path to the document to return in case of a 4XX error.
- `index_document` - (Optional) COS returns this index document when requests are made to the root domain or any of the subfolders.

### » Import

COS bucket can be imported, e.g.

```
$ terraform import tencentcloud_cos_bucket.bucket bucket-name
```

## » tencentcloud_cos_bucket_object

Provides a COS object resource to put an object(content or file) to the bucket.

### » Example Usage

Uploading a file to a bucket

```
resource "tencentcloud_cos_bucket_object" "myobject" {
  bucket = "mycos-1258798060"
  key    = "new_object_key"
  source = "path/to/file"
}
```

Uploading a content to a bucket

```
resource "tencentcloud_cos_bucket" "mycos" {
  bucket = "mycos-1258798060"
  acl    = "public-read"
}

resource "tencentcloud_cos_bucket_object" "myobject" {
  bucket  = "${tencentcloud_cos_bucket.mycos.bucket}"
  key     = "new_object_key"
  content = "the content that you want to upload."
}
```

### » Argument Reference

The following arguments are supported:

- `bucket` - (Required, ForceNew) The name of a bucket to use.
- `key` - (Required, ForceNew) The name of the object once it is in the bucket.
- `acl` - (Optional) The canned ACL to apply. Available values include private, public-read, and public-read-write. Defaults to private.
- `cache_control` - (Optional) Specifies caching behavior along the request/reply chain.For further details RFC2616 can be referred.
- `content_disposition` - (Optional) Specifies presentational information for the object.

- `content_encoding` - (Optional) Specifies what content encodings have been applied to the object and thus what decoding mechanisms must be applied to obtain the media-type referenced by the Content-Type header field.
- `content_type` - (Optional) A standard MIME type describing the format of the object data.
- `content` - (Optional) Literal string value to use as the object content, which will be uploaded as UTF-8-encoded text.
- `etag` - (Optional) The ETag generated for the object (an MD5 sum of the object content).
- `source` - (Optional) The path to the source file being uploaded to the bucket.
- `storage_class` - (Optional) Object storage type, Available values include STANDARD, STANDARD_IA and ARCHIVE.

# » 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 = "centos"

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

data "tencentcloud_instance_types" "my_favorate_instance_types" {
  filter {
    name   = "instance-family"
    values = ["S3"]
  }

  cpu_core_count = 1
  memory_size    = 1
```

```
}

data "tencentcloud_availability_zones" "my_favorate_zones" {}

// 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 2 CVM instances to host awesome_app
resource "tencentcloud_instance" "my_awesome_app" {
  instance_name              = "awesome_app"
  availability_zone          = "${data.tencentcloud_availability_zones.my_favorate_zones.zon
  image_id                   = "${data.tencentcloud_image.my_favorate_image.image_id}"
  instance_type              = "${data.tencentcloud_instance_types.my_favorate_instance_type
  system_disk_type           = "CLOUD_PREMIUM"
  system_disk_size           = 50
  hostname                   = "user"
  project_id                 = 0
  vpc_id                     = "${tencentcloud_vpc.app.id}"
  subnet_id                  = "${tencentcloud_subnet.app.id}"
  internet_max_bandwidth_out = 20
  count                      = 2

  data_disks {
    data_disk_type = "CLOUD_PREMIUM"
    data_disk_size = 50
  }

  tags = {
    tagKey = "tagValue"
  }
}
```

## » Argument Reference

The following arguments are supported:

- availability_zone - (Required, ForceNew) The available zone that the CVM instance locates at.
- image_id - (Required, ForceNew) The Image to use for the instance. Change 'image_id' will case instance destroy and re-created.
- allocate_public_ip - (Optional, ForceNew) Associate a public ip address with an instance in a VPC or Classic. Boolean value, Default is false.
- data_disks - (Optional) Settings for data disk.
- 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.
- 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.
- hostname - (Optional, ForceNew) The hostname of CVM.
- instance_charge_type_prepaid_period - (Optional) The tenancy (time unit is month) of the prepaid instance, NOTE: it only works when instance_charge_type is set to PREPAID. Valid values are 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, 36.
- 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. Valid values are NOTIFY_AND_AUTO_RENEW, NOTIFY_AND_MANUAL_RENEW and DISABLE_NOTIFY_AND_MANUAL_RENEW. NOTE: it only works when instance_charge_type is set to PREPAID.
- instance_charge_type - (Optional, ForceNew) The charge type of instance. Valid values are PREPAID, POSTPAID_BY_HOUR and SPOTPAID, The default is POSTPAID_BY_HOUR.
- instance_name - (Optional) The name of the CVM. The max length of instance_name is 60, and default value is Terrafrom-CVM-Instance.
- instance_type - (Optional, ForceNew) The type of instance to start.
- internet_charge_type - (Optional, ForceNew) Internet charge type of the instance, Valid values are BANDWIDTH_PREPAID, TRAFFIC_POSTPAID_BY_HOUR, BANDWIDTH_POSTPAID_BY_HOUR and BANDWIDTH_PACKAGE. The default is TRAFFIC_POSTPAID_BY_HOUR.
- internet_max_bandwidth_out - (Optional, ForceNew) Maximum outgoing bandwidth to the public network, measured in Mbps (Mega bit per second). Value range: [0, 100], If this value is not specified, then automatically sets it to 0 Mbps.
- 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.
- private_ip - (Optional) The private ip to be assigned to this instance, must be in the provided subnet and available.
- project_id - (Optional) The project CVM belongs to, default to 0.
- running_flag - (Optional) Set instance to running or stop. Default value

is true, the instance will shutdown when flag is false.

- `security_groups` - (Optional) A list of security group ids to associate with.
- `subnet_id` - (Optional) The id of a VPC subnetwork. If you want to create instances in VPC network, this parameter must be set.
- `system_disk_id` - (Optional) System disk snapshot ID used to initialize the system disk. When system disk type is `LOCAL_BASIC` and `LOCAL_SSD`, disk id is not supported.
- `system_disk_size` - (Optional) Size of the system disk. Value range: [50, 1000], and unit is GB. Default is 50GB.
- `system_disk_type` - (Optional, ForceNew) Type of the system disk. Valid values are `LOCAL_BASIC`, `LOCAL_SSD`, `CLOUD_BASIC`, `CLOUD_SSD` and `CLOUD_PREMIUM`, default value is `CLOUD_BASIC`. NOTE: `LOCAL_BASIC` and `LOCAL_SSD` are deprecated.
- `tags` - (Optional) A mapping of tags to assign to the resource. For tag limits, please refer to Use Limits.
- `user_data_raw` - (Optional, ForceNew) The user data to be specified into this instance, plain text. Conflicts with `user_data`. Limited in 16 KB after encrypted in base64 format.
- `user_data` - (Optional, ForceNew) The user data to be specified into this instance. Must be encrypted in base64 format and limited in 16 KB.
- `vpc_id` - (Optional) The id of a VPC network. If you want to create instances in VPC network, this parameter must be set.

The `data_disks` object supports the following:

- `data_disk_size` - (Required) Size of the system disk. Value range: [50, 16000], and unit is GB.
- `data_disk_type` - (Required) Type of the data disk. Valid values are `LOCAL_BASIC`, `LOCAL_SSD`, `CLOUD_BASIC`, `CLOUD_SSD` and `CLOUD_PREMIUM`. NOTE: `LOCAL_BASIC` and `LOCAL_SSD` are deprecated.
- `data_disk_id` - (Optional) Data disk snapshot ID used to initialize the data disk. When data disk type is `LOCAL_BASIC` and `LOCAL_SSD`, disk id is not supported.
- `delete_with_instance` - (Optional) Decides whether the disk is deleted with instance(only applied to cloud disk), default to true.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Create time of the instance.
- `expired_time` - Expired time of the instance.
- `instance_status` - Current status of the instance.
- `public_ip` - Public ip of the instance.

### » Import

CVM instance can be imported using the id, e.g.

```
terraform import tencentcloud_instance.foo ins-2qol3a80
```

## » 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.

**NOTE:** Please DO NOT define `allocate_public_ip` in `tencentcloud_instance` resource when using `tencentcloud_eip_association`.

## » 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_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_dcx

Provides a resource to creating dedicated tunnels instances.

**NOTE:** 1. ID of the DC is queried, can only apply for this resource offline.

## » Example Usage

```
variable "dc_id" {
  default = "dc-kax48sg7"
}

variable "dcg_id" {
  default = "dcg-dmbhf7jf"
}

variable "vpc_id" {
  default = "vpc-4h9v4mo3"
}

resource "tencentcloud_dcx" "bgp_main" {
  bandwidth    = 900
  dc_id        = "${var.dc_id}"
  dcg_id       = "${var.dcg_id}"
  name         = "bgp_main"
  network_type = "VPC"
  route_type   = "BGP"
  vlan         = 306
  vpc_id       = "${var.vpc_id}"
}

resource "tencentcloud_dcx" "static_main" {
  bandwidth             = 900
  dc_id                 = "${var.dc_id}"
  dcg_id                = "${var.dcg_id}"
  name                  = "static_main"
  network_type          = "VPC"
  route_type            = "STATIC"
  vlan                  = 301
  vpc_id                = "${var.vpc_id}"
  route_filter_prefixes = ["10.10.10.101/32"]
  tencent_address       = "100.93.46.1/30"
  customer_address      = "100.93.46.2/30"
}
```

## » Argument Reference

The following arguments are supported:

- `dc_id` - (Required, ForceNew) ID of the DC to be queried, application deployment offline.

- `dcg_id` - (Required, ForceNew) ID of the DC Gateway. Currently only new in the console.
- `name` - (Required) Name of the dedicated tunnel.
- `vpc_id` - (Required, ForceNew) ID of the VPC or BMVPC.
- `bandwidth` - (Optional, ForceNew) Bandwidth of the DC.
- `bgp_asn` - (Optional, ForceNew) BGP ASN of the user. A required field within BGP.
- `bgp_auth_key` - (Optional, ForceNew) BGP key of the user.
- `customer_address` - (Optional, ForceNew) Interconnect IP of the DC within client.
- `network_type` - (Optional, ForceNew) Type of the network, and available values include VPC, BMVPC and CCN. The default value is VPC.
- `route_filter_prefixes` - (Optional, ForceNew) Static route, the network address of the user IDC. It can be modified after setting but cannot be deleted. AN unable field within BGP.
- `route_type` - (Optional, ForceNew) Type of the route, and available values include BGP and STATIC. The default value is BGP.
- `tencent_address` - (Optional, ForceNew) Interconnect IP of the DC within Tencent.
- `vlan` - (Optional, ForceNew) Vlan of the dedicated tunnels, and the range of values is [0-3000]. '0' means that only one tunnel can be created for the physical connect.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Creation time of resource.
- `state` - State of the dedicated tunnels, and available values include PENDING, ALLOCATING, ALLOCATED, ALTERING, DELETING, DELETED, COMFIRMING and REJECTED.

## » tencentcloud_dc_gateway

Provides a resource to creating direct connect gateway instance.

### » Example Usage

```
resource "tencentcloud_vpc" "main" {
  name       = "ci-vpc-instance-test"
  cidr_block = "10.0.0.0/16"
}
```

```
resource "tencentcloud_dc_gateway" "vpc_main" {
  name                = "ci-cdg-vpc-test"
  network_instance_id = "${tencentcloud_vpc.main.id}"
  network_type        = "VPC"
  gateway_type        = "NAT"
}
```

### » Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the DCG.
- `network_instance_id` - (Required, ForceNew) If the 'network_type' value is 'VPC', the available value is VPC ID. But when the 'network_type' value is 'CCN', the available value is CCN instance ID.
- `network_type` - (Required, ForceNew) Type of associated network, the available value include 'VPC' and 'CCN'.
- `gateway_type` - (Optional, ForceNew) Type of the gateway, the available value include 'NORMAL' and 'NAT'. Default is 'NORMAL'. NOTES: CCN only supports 'NORMAL' and a vpc can create two DCGs, the one is NAT type and the other is non-NAT type.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `cnn_route_type` - Type of CCN route, the available value include 'BGP' and 'STATIC'. The property is available when the DCG type is CCN gateway and BGP enabled.
- `create_time` - Creation time of resource.
- `enable_bgp` - Indicates whether the BGP is enabled.

### » Import

Direct connect gateway instance can be imported, e.g.

```
$ terraform import tencentcloud_dc_gateway.instance dcg-id
```

## » tencentcloud_dc_gateway_ccn_route

Provides a resource to creating direct connect gateway route entry.

### » Example Usage

```
resource "tencentcloud_ccn" "main" {
  name        = "ci-temp-test-ccn"
  description = "ci-temp-test-ccn-des"
  qos         = "AG"
}

resource "tencentcloud_dc_gateway" "ccn_main" {
  name                = "ci-cdg-ccn-test"
  network_instance_id = "${tencentcloud_ccn.main.id}"
  network_type        = "CCN"
  gateway_type        = "NORMAL"
}

resource "tencentcloud_dc_gateway_ccn_route" "route1" {
  dcg_id     = "${tencentcloud_dc_gateway.ccn_main.id}"
  cidr_block = "10.1.1.0/32"
}

resource "tencentcloud_dc_gateway_ccn_route" "route2" {
  dcg_id     = "${tencentcloud_dc_gateway.ccn_main.id}"
  cidr_block = "192.1.1.0/32"
}
```

### » Argument Reference

The following arguments are supported:

- `cidr_block` - (Required, ForceNew) A network address segment of IDC.
- `dcg_id` - (Required, ForceNew) ID of the DCG

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `as_path` - As_Path list of the BGP.

## » tencentcloud_gaap_proxy

Provides a resource to create a GAAP proxy.

## » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"

  tags = {
    test = "test"
  }
}
```

## » Argument Reference

The following arguments are supported:

- `access_region` - (Required, ForceNew) Access region of the GAAP proxy. The available values include `NorthChina`, `EastChina`, `SouthChina`, `SouthwestChina`, `Hongkong`, `SL_TAIWAN`, `SoutheastAsia`, `Korea`, `SL_India`, `SL_Australia`, `Europe`, `SL_UK`, `SL_SouthAmerica`, `NorthAmerica`, `SL_MiddleUSA`, `Canada`, `SL_VIET`, `WestIndia`, `Thailand`, `Virginia`, `Russia`, `Japan`, `SL_Indonesia`
- `bandwidth` - (Required) Maximum bandwidth of the GAAP proxy, unit is Mbps. The available values include `10,20,50,100,200,500,1000`.
- `concurrent` - (Required) Maximum concurrency of the GAAP proxy, unit is 10k. The available values include `2,5,10,20,30,40,50,60,70,80,90,100`.
- `name` - (Required) Name of the GAAP proxy, the maximum length is 30.
- `realserver_region` - (Required, ForceNew) Region of the GAAP realserver. The available values include `NorthChina`, `EastChina`, `SouthChina`, `SouthwestChina`, `Hongkong`, `SL_TAIWAN`, `SoutheastAsia`, `Korea`, `SL_India`, `SL_Australia`, `Europe`, `SL_UK`, `SL_SouthAmerica`, `NorthAmerica`, `SL_MiddleUSA`, `Canada`, `SL_VIET`, `WestIndia`, `Thailand`, `Virginia`, `Russia`, `Japan`, `SL_Indonesia`
- `enable` - (Optional) Indicates whether GAAP proxy is enabled, default is true.
- `project_id` - (Optional) ID of the project within the GAAP proxy, '0' means is Default Project.
- `tags` - (Optional) Tags of the GAAP proxy.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Creation time of the GAAP proxy.
- `domain` - Access domain of the GAAP proxy.
- `forward_ip` - Forwarding IP of the GAAP proxy.
- `ip` - Access IP of the GAAP proxy.
- `scalable` - Indicates whether GAAP proxy can scalable.
- `status` - Status of the GAAP proxy.
- `support_protocols` - Supported protocols of the GAAP proxy.

### » Import

GAAP proxy can be imported using the id, e.g.

```
$ terraform import tencentcloud_gaap_proxy.foo link-11112222
```

## » tencentcloud_gaap_realserver

Provides a resource to create a GAAP realserver.

### » Example Usage

```
resource "tencentcloud_gaap_realserver" "foo" {
  ip   = "1.1.1.1"
  name = "ci-test-gaap-realserver"

  tags = {
    test = "test"
  }
}
```

### » Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the GAAP realserver, the maximum length is 30.
- `domain` - (Optional, ForceNew) Domain of the GAAP realserver, conflict with `ip`.
- `ip` - (Optional, ForceNew) IP of the GAAP realserver, conflict with `domain`.
- `project_id` - (Optional, ForceNew) ID of the project within the GAAP realserver, '0' means is Default Project.
- `tags` - (Optional) Tags of the GAAP realserver.

### » Import

GAAP realserver can be imported using the id, e.g.

```
$ terraform import tencentcloud_gaap_realserver.foo rs-4ftghy6
```

## » tencentcloud_gaap_layer4_listener

Provides a resource to create a layer4 listener of GAAP.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_realserver" "foo" {
  ip   = "1.1.1.1"
  name = "ci-test-gaap-realserver"
}

resource "tencentcloud_gaap_realserver" "bar" {
  ip   = "119.29.29.29"
  name = "ci-test-gaap-realserver2"
}

resource "tencentcloud_gaap_layer4_listener" "foo" {
  protocol        = "TCP"
  name            = "ci-test-gaap-4-listener"
  port            = 80
  realserver_type = "IP"
  proxy_id        = "${tencentcloud_gaap_proxy.foo.id}"
  health_check    = true

  realserver_bind_set {
    id   = "${tencentcloud_gaap_realserver.foo.id}"
    ip   = "${tencentcloud_gaap_realserver.foo.ip}"
    port = 80
  }
```

```
  realserver_bind_set {
    id   = "${tencentcloud_gaap_realserver.bar.id}"
    ip   = "${tencentcloud_gaap_realserver.bar.ip}"
    port = 80
  }
}
```

## » Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the layer4 listener, the maximum length is 30.
- `port` - (Required, ForceNew) Port of the layer4 listener.
- `protocol` - (Required, ForceNew) Protocol of the layer4 listener, and the available values include `TCP` and `UDP`.
- `proxy_id` - (Required, ForceNew) ID of the GAAP proxy.
- `realserver_type` - (Required, ForceNew) Type of the realserver, and the available values include `IP`,`DOMAIN`. NOTES: when the `protocol` is specified as `TCP` and the `scheduler` is specified as `wrr`, the item can only be set to `IP`.
- `connect_timeout` - (Optional) Timeout of the health check response, should less than interval, default is 2s. NOTES: Only supports listeners of `TCP` protocol and require less than `interval`.
- `health_check` - (Optional) Indicates whether health check is enable, default is false. NOTES: Only supports listeners of `TCP` protocol.
- `interval` - (Optional) Interval of the health check, default is 5s. NOTES: Only supports listeners of `TCP` protocol.
- `realserver_bind_set` - (Optional) An information list of GAAP realserver. Each element contains the following attributes:
- `scheduler` - (Optional) Scheduling policy of the layer4 listener, default is `rr`. Available values include `rr`,`wrr` and `lc`.

The `realserver_bind_set` object supports the following:

- `id` - (Required) ID of the GAAP realserver.
- `ip` - (Required) IP of the GAAP realserver.
- `port` - (Required) Port of the GAAP realserver.
- `weight` - (Optional) Scheduling weight, default is 1. The range of values is [1,100].

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Creation time of the layer4 listener.
- `status` - Status of the layer4 listener.

# » tencentcloud_gaap_layer7_listener

Provides a resource to create a layer7 listener of GAAP.

## » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_layer7_listener" "foo" {
  protocol = "HTTP"
  name     = "ci-test-gaap-l7-listener"
  port     = 80
  proxy_id = "${tencentcloud_gaap_proxy.foo.id}"
}
```

## » Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the layer7 listener, the maximum length is 30.
- `port` - (Required, ForceNew) Port of the layer7 listener.
- `protocol` - (Required, ForceNew) Protocol of the layer7 listener, and the available values include `HTTP` and `HTTPS`.
- `proxy_id` - (Required, ForceNew) ID of the GAAP proxy.
- `auth_type` - (Optional, ForceNew) Authentication type of the layer7 listener. `0` is one-way authentication and `1` is mutual authentication. NOTES: Only supports listeners of `HTTPS` protocol.
- `certificate_id` - (Optional) Certificate ID of the layer7 listener. NOTES: Only supports listeners of `HTTPS` protocol.
- `client_certificate_id` - (Optional) ID of the client certificate. Set only when `auth_type` is specified as mutual authentication. NOTES: Only supports listeners of `HTTPS` protocol.
- `forward_protocol` - (Optional, ForceNew) Protocol type of the forwarding, the available values include `HTTP` and `HTTPS`. NOTES: Only supports listeners of `HTTPS` protocol.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Creation time of the layer7 listener.
- `status` - Status of the layer7 listener.

## » tencentcloud_gaap_http_domain

Provides a resource to create a forward domain of layer7 listener.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_layer7_listener" "foo" {
  protocol = "HTTP"
  name     = "ci-test-gaap-l7-listener"
  port     = 80
  proxy_id = "${tencentcloud_gaap_proxy.foo.id}"
}

resource "tencentcloud_gaap_http_domain" "foo" {
  listener_id = "${tencentcloud_gaap_layer7_listener.foo.id}"
  domain      = "www.qq.com"
}
```

### » Argument Reference

The following arguments are supported:

- `domain` - (Required, ForceNew) Forward domain of the layer7 listener.
- `listener_id` - (Required, ForceNew) ID of the layer7 listener.
- `basic_auth_id` - (Optional) ID of the basic authentication.
- `basic_auth` - (Optional) Indicates whether basic authentication is enable, default is `false`.

- `certificate_id` - (Optional) ID of the server certificate, default value is `default`.
- `client_certificate_id` - (Optional) ID of the client certificate, default value is `default`.
- `gaap_auth_id` - (Optional) ID of the SSL certificate.
- `gaap_auth` - (Optional) Indicates whether SSL certificate authentication is enable, default is `false`.
- `realserver_auth` - (Optional) Indicates whether realserver authentication is enable, default is `false`.
- `realserver_certificate_domain` - (Optional) CA certificate domain of the realserver.
- `realserver_certificate_id` - (Optional) CA certificate ID of the realserver.

## » tencentcloud_gaap_http_rule

Provides a resource to create a forward rule of layer7 listener.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_layer7_listener" "foo" {
  protocol = "HTTP"
  name     = "ci-test-gaap-l7-listener"
  port     = 80
  proxy_id = "${tencentcloud_gaap_proxy.foo.id}"
}

resource "tencentcloud_gaap_realserver" "foo" {
  ip   = "1.1.1.1"
  name = "ci-test-gaap-realserver"
}

resource "tencentcloud_gaap_realserver" "bar" {
  ip   = "8.8.8.8"
  name = "ci-test-gaap-realserver"
```

```
}

resource "tencentcloud_gaap_http_domain" "foo" {
  listener_id = "${tencentcloud_gaap_layer7_listener.foo.id}"
  domain      = "www.qq.com"
}

resource "tencentcloud_gaap_http_rule" "foo" {
  listener_id               = "${tencentcloud_gaap_layer7_listener.foo.id}"
  domain                    = "${tencentcloud_gaap_http_domain.foo.domain}"
  path                      = "/"
  realserver_type           = "IP"
  health_check              = true
  health_check_path         = "/"
  health_check_method       = "GET"
  health_check_status_codes = [200]

  realservers {
    id   = "${tencentcloud_gaap_realserver.foo.id}"
    ip   = "${tencentcloud_gaap_realserver.foo.ip}"
    port = 80
  }

  realservers {
    id   = "${tencentcloud_gaap_realserver.bar.id}"
    ip   = "${tencentcloud_gaap_realserver.bar.ip}"
    port = 80
  }
}
```

## » Argument Reference

The following arguments are supported:

- `domain` - (Required, ForceNew) Forward rule domain of the layer7 listener.
- `health_check` - (Required) Indicates whether health check is enable.
- `listener_id` - (Required, ForceNew) ID of the layer7 listener.
- `path` - (Required) Path of the forward rule. Maximum length is 80.
- `realserver_type` - (Required, ForceNew) Type of the realserver, and the available values include `IP`,`DOMAIN`.
- `realservers` - (Required) An information list of GAAP realserver. Each element contains the following attributes:
- `connect_timeout` - (Optional) Timeout of the health check response, default is 2s.
- `health_check_method` - (Optional) Method of the health check. Available

values includes GET and HEAD.
- health_check_path - (Optional) Path of health check. Maximum length is 80.
- health_check_status_codes - (Optional) Return code of confirmed normal. Available values includes 100,200,300,400 and 500.
- interval - (Optional) Interval of the health check, default is 5s.
- scheduler - (Optional) Scheduling policy of the layer4 listener, default is rr. Available values include rr,wrr and lc.

The realservers object supports the following:

- id - (Required) ID of the GAAP realserver.
- ip - (Required) IP of the GAAP realserver.
- port - (Required) Port of the GAAP realserver.
- weight - (Optional) Scheduling weight, default is 1. The range of values is [1,100].

# » tencentcloud_gaap_certificate

Provides a resource to create a certificate of GAAP.

## » Example Usage

```
resource "tencentcloud_gaap_certificate" "foo" {
  type    = "BASIC"
  content = "test:tx2KGdo3zJg/."
  name    = "test_certificate"
}
```

## » Argument Reference

The following arguments are supported:

- content - (Required, ForceNew) Content of the certificate, and URL encoding. When the certificate is basic authentication, use the user:xxx password:xxx format, where the password is encrypted with htpasswd or openssl; When the certificate is CA or SSL, the format is pem.
- type - (Required, ForceNew) Type of the certificate. Available values include: BASIC,CLIENT,SERVER,REALSERVER and PROXY; BASIC means basic certificate; CLIENT means client CA certificate; SERVER means server SSL certificate; REALSERVER means realserver CA certificate; PROXY means proxy SSL certificate.
- key - (Optional, ForceNew) Key of the CA or SSL certificate.
- name - (Optional) Name of the certificate.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `begin_time` - Beginning time of the certificate.
- `create_time` - Creation time of the certificate.
- `end_time` - Ending time of the certificate.
- `issuer_cn` - Issuer name of the certificate.
- `subject_cn` - Subject name of the certificate.

### » Import

GAAP certificate can be imported using the id, e.g.

```
$ terraform import tencentcloud_gaap_certificate.foo cert-d5y6ei3b
```

## » tencentcloud_gaap_security_policy

Provides a resource to create a security policy of GAAP proxy.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_security_policy" "foo" {
  proxy_id = "${tencentcloud_gaap_proxy.foo.id}"
  action   = "DROP"
}
```

### » Argument Reference

The following arguments are supported:

- `action` - (Required, ForceNew) Default policy, the available values includes `ACCEPT` and `DROP`.
- `proxy_id` - (Required, ForceNew) ID of the GAAP proxy.
- `enable` - (Optional) Indicates whether policy is enable, default is true.

### » Import

GAAP security policy can be imported using the id, e.g.

```
$ terraform import tencentcloud_gaap_security_policy.foo pl-xxxx
```

## » tencentcloud_gaap_security_rule

Provides a resource to create a security policy rule.

### » Example Usage

```
resource "tencentcloud_gaap_proxy" "foo" {
  name              = "ci-test-gaap-proxy"
  bandwidth         = 10
  concurrent        = 2
  access_region     = "SouthChina"
  realserver_region = "NorthChina"
}

resource "tencentcloud_gaap_security_policy" "foo" {
  proxy_id = "${tencentcloud_gaap_proxy.foo.id}"
  action   = "ACCEPT"
}

resource "tencentcloud_gaap_security_rule" "foo" {
  policy_id = "${tencentcloud_gaap_security_policy.foo.id}"
  cidr_ip   = "1.1.1.1"
  action    = "ACCEPT"
  protocol  = "TCP"
}
```

### » Argument Reference

The following arguments are supported:

- `action` - (Required, ForceNew) Policy of the rule, the available values includes `ACCEPT` and `DROP`.
- `cidr_ip` - (Required, ForceNew) A network address block of the request source.
- `policy_id` - (Required, ForceNew) ID of the security policy.
- `name` - (Optional) Name of the security policy rule. Maximum length is 30.

- `port` - (Optional, ForceNew) Target port. Available values includes `80,80,443,3306-20000`.
- `protocol` - (Optional, ForceNew) Protocol of the security policy rule. Default is `ALL`, the available values includes `TCP`,`UDP` and `ALL`.

## » tencentcloud_kubernetes_cluster

Provide a resource to create a kubernetes cluster.

### » Example Usage

```
variable "availability_zone" {
  default = "ap-guangzhou-3"
}

variable "vpc" {
  default = "vpc-dk8zmwuf"
}

variable "subnet" {
  default = "subnet-pqfek0t8"
}

variable "default_instance_type" {
  default = "SA1.LARGE8"
}

#examples for MANAGED_CLUSTER  cluster
resource "tencentcloud_kubernetes_cluster" "managed_cluster" {
  vpc_id                  = "${var.vpc}"
  cluster_cidr            = "10.1.0.0/16"
  cluster_max_pod_num     = 32
  cluster_name            = "test"
  cluster_desc            = "test cluster desc"
  cluster_max_service_num = 32

  worker_config {
    count                      = 2
    availability_zone          = "${var.availability_zone}"
    instance_type              = "${var.default_instance_type}"
    system_disk_type           = "CLOUD_SSD"
    system_disk_size           = 60
    internet_charge_type       = "TRAFFIC_POSTPAID_BY_HOUR"
```

```
    internet_max_bandwidth_out = 100
    public_ip_assigned         = true
    subnet_id                  = "${var.subnet}"

    data_disk {
      disk_type = "CLOUD_PREMIUM"
      disk_size = 50
    }

    enhanced_security_service = false
    enhanced_monitor_service  = false
    user_data                 = "dGVzdA=="
    password                  = "ZZXXccvv1212"
  }

  cluster_deploy_type = "MANAGED_CLUSTER"
}

#examples for INDEPENDENT_CLUSTER  cluster
resource "tencentcloud_kubernetes_cluster" "independing_cluster" {
  vpc_id                  = "${var.vpc}"
  cluster_cidr            = "10.1.0.0/16"
  cluster_max_pod_num     = 32
  cluster_name            = "test"
  cluster_desc            = "test cluster desc"
  cluster_max_service_num = 32

  master_config {
    count                      = 3
    availability_zone          = "${var.availability_zone}"
    instance_type              = "${var.default_instance_type}"
    system_disk_type           = "CLOUD_SSD"
    system_disk_size           = 60
    internet_charge_type       = "TRAFFIC_POSTPAID_BY_HOUR"
    internet_max_bandwidth_out = 100
    public_ip_assigned         = true
    subnet_id                  = "${var.subnet}"

    data_disk {
      disk_type = "CLOUD_PREMIUM"
      disk_size = 50
    }

    enhanced_security_service = false
    enhanced_monitor_service  = false
    user_data                 = "dGVzdA=="
```

```
    password                  = "MMMZZXXccvv1212"
  }

  worker_config {
    count                      = 2
    availability_zone          = "${var.availability_zone}"
    instance_type              = "${var.default_instance_type}"
    system_disk_type           = "CLOUD_SSD"
    system_disk_size           = 60
    internet_charge_type       = "TRAFFIC_POSTPAID_BY_HOUR"
    internet_max_bandwidth_out = 100
    public_ip_assigned         = true
    subnet_id                  = "${var.subnet}"

    data_disk {
      disk_type = "CLOUD_PREMIUM"
      disk_size = 50
    }

    enhanced_security_service = false
    enhanced_monitor_service  = false
    user_data                 = "dGVzdA=="
    password                  = "ZZXXccvv1212"
  }

  cluster_deploy_type = "INDEPENDENT_CLUSTER"
}
```

## » Argument Reference

The following arguments are supported:

- `cluster_cidr` - (Required, ForceNew) A network address block of the cluster. Different from vpc cidr and cidr of other clusters within this vpc. Must be in 10./192.168/172.[16-31] segments.
- `vpc_id` - (Required, ForceNew) Vpc Id of the cluster.
- `cluster_deploy_type` - (Optional, ForceNew) Deployment type of the cluster, the available values include: 'MANAGED_CLUSTER' and 'INDEPENDENT_CLUSTER', Default is 'MANAGED_CLUSTER'.
- `cluster_desc` - (Optional, ForceNew) Description of the cluster.
- `cluster_ipvs` - (Optional, ForceNew) Indicates whether ipvs is enabled. Default is true.
- `cluster_max_pod_num` - (Optional, ForceNew) The maximum number of Pods per node in the cluster. Default is 256. Must be a multiple of 16 and large than 32.

- `cluster_max_service_num` - (Optional, ForceNew) The maximum number of services in the cluster. Default is 256. Must be a multiple of 16.
- `cluster_name` - (Optional, ForceNew) Name of the cluster.
- `cluster_os` - (Optional, ForceNew) Operating system of the cluster, the available values include: 'centos7.2x86_64' and 'ubuntu16.04.1 LTSx86_64'. Default is 'ubuntu16.04.1 LTSx86_64'.
- `cluster_version` - (Optional, ForceNew) Version of the cluster, Default is '1.10.5'.
- `container_runtime` - (Optional, ForceNew) Runtime type of the cluster, the available values include: 'docker' and 'containerd'. Default is 'docker'.
- `ignore_cluster_cidr_conflict` - (Optional, ForceNew) Indicates whether to ignore the cluster cidr conflict error. Default is false.
- `master_config` - (Optional, ForceNew) Deploy the machine configuration information of the 'MASTER_ETCD' service, and create <=7 units for common users.
- `project_id` - (Optional, ForceNew) Project ID, default value is 0.
- `worker_config` - (Optional, ForceNew) Deploy the machine configuration information of the 'WORKER' service, and create <=20 units for common users. The other 'WORK' service are added by 'tencentcloud_kubernetes_worker'.

The `master_config` object supports the following:

- `instance_type` - (Required, ForceNew) Specified types of CVM instance.
- `subnet_id` - (Required, ForceNew) Private network ID.
- `availability_zone` - (Optional, ForceNew) Indicates which availability zone will be used.
- `count` - (Optional, ForceNew) Number of cvm.
- `data_disk` - (Optional, ForceNew) Configurations of data disk.
- `enhanced_monitor_service` - (Optional, ForceNew) To specify whether to enable cloud monitor service. Default is TRUE.
- `enhanced_security_service` - (Optional, ForceNew) To specify whether to enable cloud security service. Default is TRUE.
- `instance_name` - (Optional, ForceNew) Name of the CVMs.
- `internet_charge_type` - (Optional, ForceNew) Charge types for network traffic. Available values include TRAFFIC_POSTPAID_BY_HOUR.
- `internet_max_bandwidth_out` - (Optional, ForceNew) Max bandwidth of Internet access in Mbps. Default is 0.
- `key_ids` - (Optional, ForceNew) ID list of keys.
- `password` - (Optional, ForceNew) Password to access.
- `public_ip_assigned` - (Optional, ForceNew) Specify whether to assign an Internet IP address.
- `security_group_ids` - (Optional, ForceNew) Security groups to which a CVM instance belongs.
- `system_disk_size` - (Optional, ForceNew) Volume of system disk in GB. Default is 50.
- `system_disk_type` - (Optional, ForceNew) Type of a CVM disk, and

available values include CLOUD_PREMIUM and CLOUD_SSD. Default is CLOUD_PREMIUM
- `user_data` - (Optional, ForceNew) ase64-encoded User Data text, the length limit is 16KB.

The `data_disk` object supports the following:

- `disk_size` - (Optional, ForceNew) Volume of disk in GB. Default is 0.
- `disk_type` - (Optional, ForceNew) Types of disk available values: CLOUD_PREMIUM and CLOUD_SSD.
- `snapshot_id` - (Optional, ForceNew) Data disk snapshot ID.

The `worker_config` object supports the following:

- `instance_type` - (Required, ForceNew) Specified types of CVM instance.
- `subnet_id` - (Required, ForceNew) Private network ID.
- `availability_zone` - (Optional, ForceNew) Indicates which availability zone will be used.
- `count` - (Optional, ForceNew) Number of cvm.
- `data_disk` - (Optional, ForceNew) Configurations of data disk.
- `enhanced_monitor_service` - (Optional, ForceNew) To specify whether to enable cloud monitor service. Default is TRUE.
- `enhanced_security_service` - (Optional, ForceNew) To specify whether to enable cloud security service. Default is TRUE.
- `instance_name` - (Optional, ForceNew) Name of the CVMs.
- `internet_charge_type` - (Optional, ForceNew) Charge types for network traffic. Available values include TRAFFIC_POSTPAID_BY_HOUR.
- `internet_max_bandwidth_out` - (Optional, ForceNew) Max bandwidth of Internet access in Mbps. Default is 0.
- `key_ids` - (Optional, ForceNew) ID list of keys.
- `password` - (Optional, ForceNew) Password to access.
- `public_ip_assigned` - (Optional, ForceNew) Specify whether to assign an Internet IP address.
- `security_group_ids` - (Optional, ForceNew) Security groups to which a CVM instance belongs.
- `system_disk_size` - (Optional, ForceNew) Volume of system disk in GB. Default is 50.
- `system_disk_type` - (Optional, ForceNew) Type of a CVM disk, and available values include CLOUD_PREMIUM and CLOUD_SSD. Default is CLOUD_PREMIUM
- `user_data` - (Optional, ForceNew) ase64-encoded User Data text, the length limit is 16KB.

The `data_disk` object supports the following:

- `disk_size` - (Optional, ForceNew) Volume of disk in GB. Default is 0.
- `disk_type` - (Optional, ForceNew) Types of disk available values: CLOUD_PREMIUM and CLOUD_SSD.
- `snapshot_id` - (Optional, ForceNew) Data disk snapshot ID.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `cluster_node_num` - Number of nodes in the cluster.
- `worker_instances_list` - An information list of cvm within the 'WORKER' clusters. Each element contains the following attributes:
  - `failed_reason` - Information of the cvm when it is failed.
  - `instance_id` - ID of the cvm
  - `instance_role` - Role of the cvm
  - `instance_state` - State of the cvm

## » tencentcloud_kubernetes_scale_worker

Provide a resource to increase instance to cluster

### » Example Usage

```
variable "availability_zone" {
  default = "ap-guangzhou-3"
}

variable "subnet" {
  default = "subnet-pqfek0t8"
}

variable "scale_instance_type" {
  default = "S2.LARGE16"
}

resource tencentcloud_kubernetes_scale_worker test_scale {
  cluster_id = "cls-godovr32"

  worker_config {
    count                      = 3
    availability_zone          = "${var.availability_zone}"
    instance_type              = "${var.scale_instance_type}"
    subnet_id                  = "${var.subnet}"
    system_disk_type           = "CLOUD_SSD"
    system_disk_size           = 50
    internet_charge_type       = "TRAFFIC_POSTPAID_BY_HOUR"
    internet_max_bandwidth_out = 100
    public_ip_assigned         = true
```

```
    data_disk {
      disk_type = "CLOUD_PREMIUM"
      disk_size = 50
    }

    enhanced_security_service = false
    enhanced_monitor_service  = false
    user_data                 = "dGVzdA=="
    password                  = "AABBccdd1122"
  }
}
```

## » Argument Reference

The following arguments are supported:

- `cluster_id` - (Required, ForceNew) ID of the cluster.
- `worker_config` - (Required, ForceNew) Deploy the machine configuration information of the 'WORK' service, and create <=20 units for common users.

The `worker_config` object supports the following:

- `instance_type` - (Required, ForceNew) Specified types of CVM instance.
- `subnet_id` - (Required, ForceNew) Private network ID.
- `availability_zone` - (Optional, ForceNew) Indicates which availability zone will be used.
- `count` - (Optional, ForceNew) Number of cvm.
- `data_disk` - (Optional, ForceNew) Configurations of data disk.
- `enhanced_monitor_service` - (Optional, ForceNew) To specify whether to enable cloud monitor service. Default is TRUE.
- `enhanced_security_service` - (Optional, ForceNew) To specify whether to enable cloud security service. Default is TRUE.
- `instance_name` - (Optional, ForceNew) Name of the CVMs.
- `internet_charge_type` - (Optional, ForceNew) Charge types for network traffic. Available values include TRAFFIC_POSTPAID_BY_HOUR.
- `internet_max_bandwidth_out` - (Optional, ForceNew) Max bandwidth of Internet access in Mbps. Default is 0.
- `key_ids` - (Optional, ForceNew) ID list of keys.
- `password` - (Optional, ForceNew) Password to access.
- `public_ip_assigned` - (Optional, ForceNew) Specify whether to assign an Internet IP address.
- `security_group_ids` - (Optional, ForceNew) Security groups to which a CVM instance belongs.
- `system_disk_size` - (Optional, ForceNew) Volume of system disk in GB. Default is 50.

- `system_disk_type` - (Optional, ForceNew) Type of a CVM disk, and available values include CLOUD_PREMIUM and CLOUD_SSD. Default is CLOUD_PREMIUM
- `user_data` - (Optional, ForceNew) ase64-encoded User Data text, the length limit is 16KB.

The `data_disk` object supports the following:

- `disk_size` - (Optional, ForceNew) Volume of disk in GB. Default is 0.
- `disk_type` - (Optional, ForceNew) Types of disk available values: CLOUD_PREMIUM and CLOUD_SSD.
- `snapshot_id` - (Optional, ForceNew) Data disk snapshot ID.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `worker_instances_list` - An information list of kubernetes cluster 'WORKER' . Each element contains the following attributes:
  - `failed_reason` - Information of the cvm when it is failed.
  - `instance_id` - ID of the cvm
  - `instance_role` - Role of the cvm
  - `instance_state` - State of the cvm

## » tencentcloud_mongodb_instance

Provide a resource to create a Mongodb instance.

### » Example Usage

```
resource "tencentcloud_mongodb_instance" "mongodb" {
  instance_name  = "mongodb"
  memory         = 4
  volume         = 100
  engine_version = "MONGO_3_WT"
  machine_type   = "GIO"
  available_zone = "ap-guangzhou-2"
  vpc_id         = "vpc-mz3efvbw"
  subnet_id      = "subnet-lk0svi3p"
  project_id     = 0
  password       = "mypassword"
}
```

### » Argument Reference

The following arguments are supported:

- `available_zone` - (Required, ForceNew) The available zone of the Mongodb.
- `engine_version` - (Required, ForceNew) Version of the Mongodb, and available values include MONGO_3_WT, MONGO_3_ROCKS and MONGO_36_WT.
- `instance_name` - (Required) Name of the Mongodb instance.
- `machine_type` - (Required, ForceNew) Type of Mongodb instance, and available values include GIO and TGIO.
- `memory` - (Required) Memory size.
- `password` - (Required) Password of this Mongodb account.
- `volume` - (Required) Disk size.
- `project_id` - (Optional) ID of the project which the instance belongs.
- `security_groups` - (Optional) ID of the security group.
- `subnet_id` - (Optional, ForceNew) ID of the subnet within this VPC. The vaule is required if VpcId is set.
- `vpc_id` - (Optional, ForceNew) ID of the VPC.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Creation time of the Mongodb instance.
- `status` - Status of the Mongodb instance, and available values include pending initialization(expressed with 0), processing(expressed with 1), running(expressed with 2) and expired(expressed with -2)
- `vip` - IP of the Mongodb instance.
- `vport` - IP port of the Mongodb instance.

### » Import

Mongodb instance can be imported using the id, e.g.

```
$ terraform import tencentcloud_mongodb_instance.mongodb cmgo-41s6jwy4
```

## » tencentcloud_mongodb_sharding_instance

Provide a resource to create a Mongodb sharding instance.

## » Example Usage

```
resource "tencentcloud_mongodb_sharding_instance" "mongodb" {
  instance_name   = "mongodb"
  shard_quantity  = 2
  nodes_per_shard = 3
  memory          = 4
  volume          = 100
  engine_version  = "MONGO_3_WT"
  machine_type    = "GIO"
  available_zone  = "ap-guangzhou-3"
  vpc_id          = "vpc-mz3efvbw"
  subnet_id       = "subnet-lk0svi3p"
  project_id      = 0
  password        = "mypassword"
}
```

## » Argument Reference

The following arguments are supported:

- `available_zone` - (Required, ForceNew) The available zone of the Mongodb.
- `engine_version` - (Required, ForceNew) Version of the Mongodb, and available values include MONGO_3_WT, MONGO_3_ROCKS and MONGO_36_WT.
- `instance_name` - (Required) Name of the Mongodb instance
- `machine_type` - (Required, ForceNew) Type of Mongodb instance, and available values include GIO and TGIO.
- `memory` - (Required) Memory size.
- `nodes_per_shard` - (Required, ForceNew) Number of nodes per shard, at least 3(one master and two slaves).
- `password` - (Required) Password of this Mongodb account.
- `shard_quantity` - (Required, ForceNew) Number of sharding.
- `volume` - (Required) Disk size.
- `project_id` - (Optional) ID of the project which the instance belongs.
- `security_groups` - (Optional) ID of the security group.
- `subnet_id` - (Optional, ForceNew) ID of the subnet within this VPC. The vaule is required if VpcId is set.
- `vpc_id` - (Optional, ForceNew) ID of the VPC.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Creation time of the Mongodb instance.
- `status` - Status of the Mongodb instance, and available values include pending initialization(expressed with 0), processing(expressed with 1), running(expressed with 2) and expired(expressed with -2)
- `vip` - IP of the Mongodb instance.
- `vport` - IP port of the Mongodb instance.

### » Import

Mongodb sharding instance can be imported using the id, e.g.

```
$ terraform import tencentcloud_mongodb_sharding_instance.mongodb cmgo-41s6jwy4
```

## » tencentcloud_mysql_instance

Provides a mysql instance resource to create master database instances.

**NOTE:** If this mysql has readonly instance, the terminate operation of the mysql does NOT take effect immediately maybe takes for several hours. so during that time, VPCs associated with that mysql instance can't be terminated also.

### » Example Usage

```
resource "tencentcloud_mysql_instance" "default" {
  internet_service = 1
  engine_version   = "5.7"

  root_password     = "********"
  slave_deploy_mode = 0
  first_slave_zone  = "ap-guangzhou-4"
  second_slave_zone = "ap-guangzhou-4"
  slave_sync_mode   = 1
  availability_zone = "ap-guangzhou-4"
  project_id        = 201901010001
  instance_name     = "myTestMysql"
  mem_size          = 128000
  volume_size       = 250
  vpc_id            = "vpc-12mt3l31"
  subnet_id         = "subnet-9uivyb1g"
  intranet_port     = 3306
  security_groups   = ["sg-ot8eclwz"]
```

```
  tags = {
    name = "test"
  }

  parameters = {
    max_connections = "1000"
  }
}
```

## » Argument Reference

The following arguments are supported:

- `instance_name` - (Required) The name of a mysql instance.
- `mem_size` - (Required) Memory size (in MB).
- `root_password` - (Required) Password of root account. This parameter can be specified when you purchase master instances, but it should be ignored when you purchase read-only instances or disaster recovery instances.
- `volume_size` - (Required) Disk size (in GB).
- `availability_zone` - (Optional, ForceNew) Indicates which availability zone will be used.
- `engine_version` - (Optional, ForceNew) The version number of the database engine to use. Supported versions include 5.5/5.6/5.7, and default is 5.7.
- `first_slave_zone` - (Optional, ForceNew) Zone information about first slave instance.
- `internet_service` - (Optional) Indicates whether to enable the access to an instance from public network: 0 - No, 1 - Yes.
- `intranet_port` - (Optional) Public access port, rang form 1024 to 65535 and default value is 3306.
- `parameters` - (Optional) List of parameters to use.
- `project_id` - (Optional) Project ID, default value is 0.
- `second_slave_zone` - (Optional, ForceNew) Zone information about second slave instance.
- `security_groups` - (Optional) Security groups to use.
- `slave_deploy_mode` - (Optional, ForceNew) Availability zone deployment method. Available values: 0 - Single availability zone; 1 - Multiple availability zones.
- `slave_sync_mode` - (Optional, ForceNew) Data replication mode. 0 - Async replication; 1 - Semisync replication; 2 - Strongsync replication.
- `subnet_id` - (Optional) Private network ID. If vpc_id is set, this value is required.
- `tags` - (Optional) Instance tags.
- `vpc_id` - (Optional) ID of VPC, which can be modified once every 24

hours and can't be removed.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `gtid` - Indicates whether GTID is enable. 0 - Not enabled; 1 - Enabled.
- `internet_host` - host for public access.
- `internet_port` - Access port for public access.
- `intranet_ip` - instance intranet IP.
- `locked` - Indicates whether the instance is locked. 0 - No; 1 - Yes.
- `status` - Instance status. Available values: 0 - Creating; 1 - Running; 4 - Isolating; 5 – Isolated.
- `task_status` - Indicates which kind of operations is being executed.

## » tencentcloud_mysql_readonly_instance

Provides a mysql instance resource to create read-only database instances.

**NOTE:** The terminate operation of read only mysql does NOT take effect immediately maybe takes for several hours. so during that time, VPCs associated with that mysql instance can't be terminated also.

### » Example Usage

```
resource "tencentcloud_mysql_readonly_instance" "default" {
  master_instance_id = "cdb-dnqksd9f"
  instance_name      = "myTestMysql"
  mem_size           = 128000
  volume_size        = 255
  vpc_id             = "vpc-12mt3l31"
  subnet_id          = "subnet-9uivyb1g"
  intranet_port      = 3306
  security_groups    = ["sg-ot8eclwz"]

  tags = {
    name = "test"
  }
}
```

### » Argument Reference

The following arguments are supported:

- `instance_name` - (Required) The name of a mysql instance.
- `master_instance_id` - (Required, ForceNew) Indicates the master instance ID of recovery instances.
- `mem_size` - (Required) Memory size (in MB).
- `volume_size` - (Required) Disk size (in GB).
- `intranet_port` - (Optional) Public access port, rang form 1024 to 65535 and default value is 3306.
- `security_groups` - (Optional) Security groups to use.
- `subnet_id` - (Optional) Private network ID. If vpc_id is set, this value is required.
- `tags` - (Optional) Instance tags.
- `vpc_id` - (Optional) ID of VPC, which can be modified once every 24 hours and can't be removed.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `intranet_ip` - instance intranet IP.
- `locked` - Indicates whether the instance is locked. 0 - No; 1 - Yes.
- `status` - Instance status. Available values: 0 - Creating; 1 - Running; 4 - Isolating; 5 – Isolated.
- `task_status` - Indicates which kind of operations is being executed.

## » tencentcloud_mysql_account

Provides a MySQL account resource for database management. A MySQL instance supports multiple database account.

### » Example Usage

```
resource "tencentcloud_mysql_account" "default" {
  mysql_id    = "my-test-database"
  name        = "tf_account"
  password    = "********"
  description = "My test account"
}
```

### » Argument Reference

The following arguments are supported:

- `mysql_id` - (Required, ForceNew) Instance ID to which the account belongs.
- `name` - (Required, ForceNew) Account name.
- `password` - (Required) Operation password.
- `description` - (Optional) Database description.

# » tencentcloud_mysql_account_privilege

Provides a mysql account privilege resource to grant different access privilege to different database. A database can be granted by multiple account.

## » Example Usage

```
resource "tencentcloud_mysql_account_privilege" "default" {
  mysql_id       = "my-test-database"
  account_name   = "tf_account"
  privileges     = ["SELECT"]
  database_names = ["instance.name"]
}
```

## » Argument Reference

The following arguments are supported:

- `account_name` - (Required, ForceNew) Account name.
- `database_names` - (Required) List of specified database name.
- `mysql_id` - (Required, ForceNew) Instance ID.
- `privileges` - (Optional) Database permissions. Available values for Privileges: "SELECT", "INSERT", "UPDATE", "DELETE", "CREATE", "DROP", "REFERENCES", "INDEX", "ALTER", "CREATE TEMPORARY TABLES", "LOCK TABLES","EXECUTE", "CREATE VIEW", "SHOW VIEW", "CREATE ROUTINE", "ALTER ROUTINE", "EVENT", and "TRIGGER".

# » tencentcloud_mysql_backup_policy

Provides a mysql policy resource to create a backup policy.

**NOTE:** This attribute `backup_model` only support 'physical' in Terraform TencentCloud provider version 1.16.2

### » Example Usage

```
resource "tencentcloud_mysql_backup_policy" "default" {
  mysql_id         = "cdb-dnqksd9f"
  retention_period = 7
  backup_model     = "physical"
  backup_time      = "02:00-06:00"
}
```

### » Argument Reference

The following arguments are supported:

- `mysql_id` - (Required, ForceNew) Instance ID to which policies will be applied.
- `backup_model` - (Optional) Backup method. Supported values include: 'physical' - physical backup
- `backup_time` - (Optional) Instance backup time, in the format of "HH:mm-HH:mm". Time setting interval is four hours. Default to "02:00-06:00". The following value can be supported: 02:00-06:00, 06:00-10:00, 10:00-14:00, 14:00-18:00, 18:00-22:00, and 22:00-02:00.
- `retention_period` - (Optional) Instance backup retention days. Valid values: [7-730]. And default value is 7.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `binlog_period` - Retention period for binlog in days.

## » tencentcloud_redis_instance

Provides a resource to create a Redis instance and set its attributes.

### » Example Usage

```
resource "tencentcloud_redis_instance" "redis_instance_test" {
  availability_zone = "ap-hongkong-3"
  type              = "master_slave_redis"
  password          = "test12345789"
  mem_size          = 8192
  name              = "terrform_test"
```

```
  port              = 6379
}
```

## » Argument Reference

The following arguments are supported:

- `availability_zone` - (Required, ForceNew) The available zone ID of an instance to be created., refer to tencentcloud_redis_zone_config.list
- `mem_size` - (Required) The memory volume of an available instance(in MB), refer to tencentcloud_redis_zone_config.list[zone].mem_sizes
- `password` - (Required) Password for a Redis user which should be 8 to 16 characters.
- `name` - (Optional) Instance name.
- `port` - (Optional, ForceNew) The port used to access a redis instance. The default value is 6379. And this value can't be changed after creation, or the Redis instance will be recreated.
- `project_id` - (Optional) Specifies which project the instance should belong to.
- `security_groups` - (Optional, ForceNew) ID of security group. If both vpc_id and subnet_id are not set, this argument should not be set either.
- `subnet_id` - (Optional, ForceNew) Specifies which subnet the instance should belong to.
- `type` - (Optional, ForceNew) Instance type. Available values: master_slave_redis.
- `vpc_id` - (Optional, ForceNew) ID of the vpc with which the instance is to be associated.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - The time when the instance was created.
- `ip` - IP address of an instance.
- `status` - Current status of an instance maybe: init, processing, online, isolate and todelete.

## » Import

Redis instance can be imported, e.g.

```
$ terraform import tencentcloud_redis_instance.redislab redis-id
```

# » tencentcloud_redis_backup_config

Use this data source to query which instance types of Redis are available in a specific region.

## » Example Usage

```
resource "tencentcloud_redis_backup_config" "redislab" {
  redis_id      = "crs-7yl0q0dd"
  backup_time   = "04:00-05:00"
  backup_period = ["Monday"]
}
```

## » Argument Reference

The following arguments are supported:

- `backup_period` - (Required) Specifys which day the backup action should take place. Supported values include: Monday Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.
- `backup_time` - (Required) Specifys what time the backup action should take place.
- `redis_id` - (Required, ForceNew) ID of a Redis instance to which the policy will be applied.

## » Import

Redis backup config can be imported, e.g.

```
$ terraform import tencentcloud_redis_backup_config.redisconfig redis-id
```

# » tencentcloud_vpc

Provide a resource to create a VPC.

## » Example Usage

```
resource "tencentcloud_vpc" "foo" {
  name         = "ci-temp-test-updated"
  cidr_block   = "10.0.0.0/16"
  dns_servers  = ["119.29.29.29", "8.8.8.8"]
```

```
  is_multicast = false
}
```

### » Argument Reference

The following arguments are supported:

- `cidr_block` - (Required, ForceNew) A network address block which should be a subnet of the three internal network segments (10.0.0.0/16, 172.16.0.0/12 and 192.168.0.0/16).
- `name` - (Required) The name of the VPC.
- `dns_servers` - (Optional) The DNS server list of the VPC. And you can specify 0 to 5 servers to this list.
- `is_multicast` - (Optional) Indicates whether VPC multicast is enabled. The default value is 'true'.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Creation time of VPC.
- `is_default` - Indicates whether it is the default VPC for this region.

### » Import

Vpc instance can be imported, e.g.

```
$ terraform import tencentcloud_vpc.test vpc-id
```

## » tencentcloud_subnet

Provide a resource to create a VPC subnet.

### » Example Usage

```
variable "availability_zone" {
  default = "ap-guangzhou-3"
}

resource "tencentcloud_vpc" "foo" {
  name       = "guagua-ci-temp-test"
  cidr_block = "10.0.0.0/16"
```

```
}

resource "tencentcloud_subnet" "subnet" {
  availability_zone = "${var.availability_zone}"
  name              = "guagua-ci-temp-test"
  vpc_id            = "${tencentcloud_vpc.foo.id}"
  cidr_block        = "10.0.20.0/28"
  is_multicast      = false
}
```

### » Argument Reference

The following arguments are supported:

- `availability_zone` - (Required, ForceNew) The availability zone within which the subnet should be created.
- `cidr_block` - (Required, ForceNew) A network address block of the subnet.
- `name` - (Required) The name of subnet to be created.
- `vpc_id` - (Required, ForceNew) ID of the VPC to be associated.
- `is_multicast` - (Optional) Indicates whether multicast is enabled. The default value is 'true'.
- `route_table_id` - (Optional) ID of a routing table to which the subnet should be associated.

### » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `available_ip_count` - The number of available IPs.
- `create_time` - Creation time of subnet resource.
- `is_default` - Indicates whether it is the default VPC for this region.

### » Import

Vpc subnet instance can be imported, e.g.

```
$ terraform import tencentcloud_subnet.test subnet_id
```

## » tencentcloud_security_group

Provides a resource to create security group.

### » Example Usage

```
resource "tencentcloud_security_group" "sglab" {
  name        = "mysg"
  description = "favourite sg"
  project_id  = 0
}
```

### » Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the security group to be queried.
- `description` - (Optional) Description of the security group.
- `project_id` - (Optional, ForceNew) Project ID of the security group.

### » Import

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

```
$ terraform import tencentcloud_security_group.sglab sg-ey3wmiz1
```

## » tencentcloud_security_group_rule

Provides a resource to create security group rule.

### » Example Usage

Source is CIDR ip

```
resource "tencentcloud_security_group" "sglab_1" {
  name        = "mysg_1"
  description = "favourite sg_1"
  project_id  = 0
}

resource "tencentcloud_security_group_rule" "sglab_1" {
  security_group_id = "${tencentcloud_security_group.sglab_1.id}"
  type              = "ingress"
  cidr_ip           = "10.0.0.0/16"
  ip_protocol       = "TCP"
  port_range        = "80"
  policy            = "ACCEPT"
```

```
  description       = "favourite sg rule_1"
}
```

Source is a security group id

```
resource "tencentcloud_security_group" "sglab_2" {
  name        = "mysg_2"
  description = "favourite sg_2"
  project_id  = 0
}

resource "tencentcloud_security_group" "sglab_3" {
  name        = "mysg_3"
  description = "favourite sg_3"
  project_id  = 0
}

resource "tencentcloud_security_group_rule" "sglab_2" {
  security_group_id = "${tencentcloud_security_group.sglab_2.id}"
  type              = "ingress"
  ip_protocol       = "TCP"
  port_range        = "80"
  policy            = "ACCEPT"
  source_sgid       = "${tencentcloud_security_group.sglab_3.id}"
  description       = "favourite sg rule_2"
}
```

## » Argument Reference

The following arguments are supported:

- `policy` - (Required, ForceNew) Rule policy of security group, the available value include `ACCEPT` and `DROP`.
- `security_group_id` - (Required, ForceNew) ID of the security group to be queried.
- `type` - (Required, ForceNew) Type of the security group rule, the available value include `ingress` and `egress`.
- `cidr_ip` - (Optional, ForceNew) An IP address network or segment, and conflict with `source_sgid`.
- `description` - (Optional, ForceNew) Description of the security group rule.
- `ip_protocol` - (Optional, ForceNew) Type of ip protocol, the available value include `TCP`, `UDP` and `ICMP`. Default to all types protocol.
- `port_range` - (Optional, ForceNew) Range of the port. The available value can be one, multiple or one segment. E.g. `80`, `80,90` and `80-90`. Default to all ports.

- `source_sgid` - (Optional, ForceNew) ID of the nested security group, and conflict with `cidr_ip`.

# » tencentcloud_route_table

Provides a resource to create a VPC routing table.

## » Example Usage

```
resource "tencentcloud_vpc" "foo" {
  name       = "ci-temp-test"
  cidr_block = "10.0.0.0/16"
}

resource "tencentcloud_route_table" "foo" {
  vpc_id = "${tencentcloud_vpc.foo.id}"
  name   = "ci-temp-test-rt"
}
```

## » Argument Reference

The following arguments are supported:

- `name` - (Required) The name of routing table.
- `vpc_id` - (Required, ForceNew) ID of VPC to which the route table should be associated.

## » Attributes Reference

In addition to all arguments above, the following attributes are exported:

- `create_time` - Creation time of the routing table.
- `is_default` - Indicates whether it is the default routing table.
- `route_entry_ids` - ID list of the routing entries.
- `subnet_ids` - ID list of the subnets associated with this route table.

## » Import

Vpc routetable instance can be imported, e.g.

```
$ terraform import tencentcloud_route_table.test route_table_id
```

# » tencentcloud_route_entry

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

**NOTE:** It has been deprecated and replaced by tencentcloud_route_table_entry.

## » 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_entry

Provides a resource to create an entry of a routing table.

### » Example Usage

```
variable "availability_zone" {
  default = "na-siliconvalley-1"
}

resource "tencentcloud_vpc" "foo" {
  name       = "ci-temp-test"
  cidr_block = "10.0.0.0/16"
}

resource "tencentcloud_subnet" "foo" {
  vpc_id            = "${tencentcloud_vpc.foo.id}"
  name              = "terraform test subnet"
  cidr_block        = "10.0.12.0/24"
  availability_zone = "${var.availability_zone}"
  route_table_id    = "${tencentcloud_route_table.foo.id}"
}

resource "tencentcloud_route_table" "foo" {
  vpc_id = "${tencentcloud_vpc.foo.id}"
  name   = "ci-temp-test-rt"
}
```

```
resource "tencentcloud_route_table_entry" "instance" {
  route_table_id         = "${tencentcloud_route_table.foo.id}"
  destination_cidr_block = "10.4.4.0/24"
  next_type              = "EIP"
  next_hub               = "0"
  description            = "ci-test-route-table-entry"
}
```

### » Argument Reference

The following arguments are supported:

- `destination_cidr_block` - (Required, ForceNew) Destination address block.
- `next_hub` - (Required, ForceNew) ID of next-hop gateway. Note: when 'next_type' is EIP, GatewayId should be '0'.
- `next_type` - (Required, ForceNew) Type of next-hop, and available values include CVM, VPN, DIRECTCONNECT, PEERCONNECTION, SSLVPN, NAT, NORMAL_CVM, EIP and CCN.
- `route_table_id` - (Required, ForceNew) ID of routing table to which this entry belongs.
- `description` - (Optional, ForceNew) Description of the routing table entry.

## » 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 protocol, 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