» 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

The following arguments are supported:

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

» Attributes Reference

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

- `zones` - A list of zones will be exported and its every element contains the following attributes:
  - `description` - The description for the zone, unfortunately only Chinese characters at this stage.
  - `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`.
  - `state` - The state for the zone, indicate availability using `AVAILABLE` and `UNAVAILABLE` values.

» tencentcloud_dayu_cc_http_policies

Use this data source to query dayu CC http policies

» Example Usage

```
data "tencentcloud_dayu_cc_http_policies" "id_test" {
  resource_type = tencentcloud_dayu_cc_http_policy.test_policy.resource_type
  resource_id   = tencentcloud_dayu_cc_http_policy.test_policy.resource_id
  policy_id     = tencentcloud_dayu_cc_http_policy.test_policy.policy_id
}
data "tencentcloud_dayu_cc_http_policies" "name_test" {
  resource_type = tencentcloud_dayu_cc_http_policy.test_policy.resource_type
  resource_id   = tencentcloud_dayu_cc_http_policy.test_policy.resource_id
  name          = tencentcloud_dayu_cc_http_policy.test_policy.name
}
```

» Argument Reference

The following arguments are supported:

- `resource_id` - (Required) Id of the resource that the CC http policy works for.
- `resource_type` - (Required) Type of the resource that the CC http policy works for, valid values are `bgpip`, `bgp`, `bgp-multip` and `net`.
- `name` - (Optional) Name of the CC http policy to be queried.
- `policy_id` - (Optional) Id of the CC http policy to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `list` - A list of CC http policies. Each element contains the following attributes:
  - `action` - Action mode.
  - `create_time` - Create time of the CC self-define http policy.
  - `frequency` - Max frequency per minute.
  - `ip_list` - Ip of the CC self-define http policy.
  - `name` - Name of the CC self-define http policy.
  - `policy_id` - Id of the CC self-define http policy.
  - `resource_id` - ID of the resource that the CC self-define http policy works for.
  - `resource_type` - Type of the resource that the CC self-define http policy works for.
  - `smode` - Match mode.
  - `switch` - Indicate the CC self-define http policy takes effect or not.

» tencentcloud_dayu_cc_https_policies

Use this data source to query dayu CC https policies

» Example Usage

```
data "tencentcloud_dayu_cc_https_policies" "name_test" {
  resource_type = tencentcloud_dayu_cc_https_policy.test_policy.resource_type
  resource_id   = tencentcloud_dayu_cc_https_policy.test_policy.resource_id
  name          = tencentcloud_dayu_cc_https_policy.test_policy.name
}
data "tencentcloud_dayu_cc_https_policies" "id_test" {
  resource_type = tencentcloud_dayu_cc_https_policy.test_policy.resource_type
  resource_id   = tencentcloud_dayu_cc_https_policy.test_policy.resource_id
  policy_id     = tencentcloud_dayu_cc_https_policy.test_policy.policy_id
}
```

» Argument Reference

The following arguments are supported:

- `resource_id` - (Required) Id of the resource that the CC https policy works for.
- `resource_type` - (Required) Type of the resource that the CC https policy works for, valid value is `bgpip`.
- `name` - (Optional) Name of the CC https policy to be queried.
- `policy_id` - (Optional) Id of the CC https policy to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `list` - A list of CC https policies. Each element contains the following attributes:
  - `action` - Action mode.
  - `create_time` - Create time of the CC self-define https policy.
  - `domain` - Domain that the CC self-define https policy works for.
  - `ip_list` - Ip of the CC self-define https policy.
  - `name` - Name of the CC self-define https policy.
  - `policy_id` - Id of the CC self-define https policy.
  - `resource_id` - ID of the resource that the CC self-define https policy works for.

  - `resource_type` - Type of the resource that the CC self-define https policy works for.
  - `rule_id` - Rule id of the domain that the CC self-define https policy works for.
  - `switch` - Indicate the CC self-define https policy takes effect or not.

» tencentcloud_dayu_ddos_policies

Use this data source to query dayu DDoS policies

» Example Usage

```
data "tencentcloud_dayu_ddos_policies" "id_test" {
  resource_type = tencentcloud_dayu_ddos_policy.test_policy.resource_type
  policy_id     = tencentcloud_dayu_ddos_policy.test_policy.policy_id
}
```

» Argument Reference

The following arguments are supported:

- `resource_type` - (Required) Type of the resource that the DDoS policy works for, valid values are `bgpip`, `bgp`, `bgp-multip` and `net`.
- `policy_id` - (Optional) Id of the DDoS policy to be query.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `list` - A list of DDoS policies. Each element contains the following attributes:
  - `create_time` - Create time of the DDoS policy.
  - `drop_options` - Option list of abnormal check of the DDoS policy.
  - `bad_conn_threshold` - The number of new connections based on destination IP that trigger suppression of connections.
  - `check_sync_conn` - Indicate whether to check null connection or not.
  - `conn_timeout` - Connection timeout of abnormal connection check.
  - `d_conn_limit` - The limit of concurrent connections based on destination IP.
  - `d_new_limit` - The limit of new connections based on destination IP.
  - `drop_icmp` - Indicate whether to drop ICMP protocol or not.

- `drop_other` - Indicate whether to drop other protocols(exclude TCP/UDP/ICMP) or not.
- `drop_tcp` - Indicate whether to drop TCP protocol or not.
- `drop_udp` - Indicate to drop UDP protocol or not.
- `icmp_mbps_limit` - The limit of ICMP traffic rate.
- `null_conn_enable` - Indicate to enable null connection or not.
- `other_mbps_limit` - The limit of other protocols(exclude TCP/UDP/ICMP) traffic rate.
- `s_conn_limit` - The limit of concurrent connections based on source IP.
- `s_new_limit` - The limit of new connections based on source IP.
- `syn_limit` - The limit of syn of abnormal connection check.
- `syn_rate` - The percentage of syn in ack of abnormal connection check.
- `tcp_mbps_limit` - The limit of TCP traffic.
- `udp_mbps_limit` - The limit of UDP traffic rate.
- `name` - Name of the DDoS policy.
- `packet_filters` - Message filter options list.
- `action` - Action of port to take.
- `d_end_port` - End port of the destination.
- `d_start_port` - Start port of the destination.
- `depth` - The depth of match.
- `is_include` - Indicate whether to include the key word/regular expression or not.
- `match_begin` - Indicate whether to check load or not.
- `match_str` - The key word or regular expression.
- `match_type` - Match type.
- `offset` - The offset of match.
- `pkt_length_max` - The max length of the packet.
- `pkt_length_min` - The minimum length of the packet.
- `protocol` - Protocol.
- `s_end_port` - End port of the source.
- `s_start_port` - Start port of the source.
- `policy_id` - Id of policy.
- `port_filters` - Port limits of abnormal check of the DDoS policy.
- `action` - Action of port to take.
- `end_port` - End port.
- `kind` - The type of forbidden port, and valid values are 0, 1, 2. 0 for destination port, 1 for source port and 2 for both destination and source posts.
- `protocol` - Protocol.
- `start_port` - Start port.
- `scene_id` - Id of policy case that the DDoS policy works for.
- `watermark_filters` - Watermark policy options, and only support one watermark policy at most.
- `auto_remove` - Indicate whether to auto-remove the watermark or

not.
  - `offset` - The offset of watermark.
  - `open_switch` - Indicate whether to open watermark or not.
  - `tcp_port_list` - Port range of TCP.
  - `udp_port_list` - Port range of TCP.
  - `watermark_key` - Watermark content.
  - `content` - Content of the watermark.
  - `id` - Id of the watermark.
  - `open_switch` - Indicate whether to auto-remove the watermark or not.

» tencentcloud_dayu_ddos_policy_attachments

Use this data source to query detailed information of dayu DDoS policy attachments

» Example Usage

```
data "tencentcloud_dayu_ddos_policy_attachments" "foo_type" {
  resource_type = tencentcloud_dayu_ddos_policy_attachment.dayu_ddos_policy_attachment.resou
}
data "tencentcloud_dayu_ddos_policy_attachments" "foo_resource" {
  resource_id   = tencentcloud_dayu_ddos_policy_attachment.dayu_ddos_policy_attachment.resou
  resource_type = tencentcloud_dayu_ddos_policy_attachment.dayu_ddos_policy_attachment.resou
}
data "tencentcloud_dayu_ddos_policy_attachments" "foo_policy" {
  resource_type = tencentcloud_dayu_ddos_policy_attachment.dayu_ddos_policy_attachment.resou
  policy_id     = tencentcloud_dayu_ddos_policy_attachment.dayu_ddos_policy_attachment.polic
}
```

» Argument Reference

The following arguments are supported:

- `resource_type` - (Required) Type of the resource that the DDoS policy works for, valid values are `bgpip`, `bgp`, `bgp-multip` and `net`.
- `policy_id` - (Optional) Id of the policy to be queried.
- `resource_id` - (Optional) Id of the attached resource to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `dayu_ddos_policy_attachment_list` - A list of dayu DDoS policy attachments. Each element contains the following attributes:
  - `policy_id` - Id of the policy.
  - `resource_id` - Id of the attached resource.
  - `resource_type` - Type of the resource that the DDoS policy works for.

» tencentcloud_dayu_ddos_policy_cases

Use this data source to query dayu DDoS policy cases

» Example Usage

```
data "tencentcloud_dayu_ddos_policy_cases" "id_test" {
  resource_type = tencentcloud_dayu_ddos_policy_case.test_policy_case.resource_type
  scene_id      = tencentcloud_dayu_ddos_policy_case.test_policy_case.scene_id
}
```

» Argument Reference

The following arguments are supported:

- `resource_type` - (Required) Type of the resource that the DDoS policy case works for, valid values are `bgpip`, `bgp`, `bgp-multip` and `net`.
- `scene_id` - (Required) Id of the DDoS policy case to be query.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `list` - A list of DDoS policy cases. Each element contains the following attributes:
  - `app_protocols` - App protocol set of the DDoS policy case.
  - `app_type` - App type of the DDoS policy case.
  - `create_time` - Create time of the DDoS policy case.
  - `has_abroad` - Indicate whether the service involves overseas or not.
  - `has_initiate_tcp` - Indicate whether the service actively initiates TCP requests or not.

- `has_initiate_udp` - Indicate whether the actively initiate UDP requests or not.
- `has_vpn` - Indicate whether the service involves VPN service or not.
- `max_tcp_package_len` - The max length of TCP message package.
- `max_udp_package_len` - The max length of UDP message package.
- `min_tcp_package_len` - The minimum length of TCP message package.
- `min_udp_package_len` - The minimum length of UDP message package.
- `name` - Name of the DDoS policy case.
- `peer_tcp_port` - The port that actively initiates TCP requests.
- `peer_udp_port` - The port that actively initiates UDP requests.
- `platform_types` - Platform set of the DDoS policy case.
- `resource_type` - Type of the resource that the DDoS policy case works for.
- `scene_id` - Id of the DDoS policy case.
- `tcp_end_port` - End port of the TCP service.
- `tcp_footprint` - The fixed signature of TCP protocol load.
- `tcp_start_port` - Start port of the TCP service.
- `udp_end_port` - End port of the UDP service.
- `udp_footprint` - The fixed signature of TCP protocol load.
- `udp_start_port` - Start port of the UDP service.
- `web_api_urls` - Web API url set.

» tencentcloud_dayu_l4_rules

Use this data source to query dayu layer 4 rules

» Example Usage

```
data "tencentcloud_dayu_l4_rules" "name_test" {
  resource_type = tencentcloud_dayu_l4_rule.test_rule.resource_type
  resource_id   = tencentcloud_dayu_l4_rule.test_rule.resource_id
  name          = tencentcloud_dayu_l4_rule.test_rule.name
}
data "tencentcloud_dayu_l4_rules" "id_test" {
  resource_type = tencentcloud_dayu_l4_rule.test_rule.resource_type
  resource_id   = tencentcloud_dayu_l4_rule.test_rule.resource_id
  rule_id       = tencentcloud_dayu_l4_rule.test_rule.rule_id
}
```

» Argument Reference

The following arguments are supported:

- `resource_id` - (Required) Id of the resource that the layer 4 rule works for.
- `resource_type` - (Required) Type of the resource that the layer 4 rule works for, valid values are `bgpip`, `bgp`, `bgp-multip` and `net`.
- `name` - (Optional) Name of the layer 4 rule to be queried.
- `result_output_file` - (Optional) Used to save results.
- `rule_id` - (Optional) Id of the layer 4 rule to be queried.

» Attributes Reference

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

- `list` - A list of layer 4 rules. Each element contains the following attributes:
  - `d_port` - The destination port of the layer 4 rule.
  - `health_check_health_num` - Health threshold of health check.
  - `health_check_interval` - Interval time of health check.
  - `health_check_switch` - Indicates whether health check is enabled.
  - `health_check_timeout` - HTTP Status Code. 1 means the return value '1xx' is health. 2 means the return value '2xx' is health. 4 means the return value '3xx' is health. 8 means the return value '4xx' is health. 16 means the return value '5xx' is health. If you want multiple return codes to indicate health, need to add the corresponding values.
  - `health_check_unhealth_num` - Unhealthy threshold of health check.
  - `lb_type` - LB type of the rule, 1 for weight cycling and 2 for IP hash.
  - `name` - Name of the rule.
  - `protocol` - Protocol of the rule.
  - `rule_id` - Id of the 4 layer rule.
  - `s_port` - The source port of the layer 4 rule.
  - `session_switch` - Indicate that the session will keep or not.
  - `session_time` - Session keep time, only valid when `session_switch` is true, the available value ranges from 1 to 300 and unit is second.
  - `source_type` - Source type, 1 for source of host, 2 for source of ip.

» tencentcloud__dayu__l7__rules

Use this data source to query dayu layer 7 rules

» Example Usage

```
data "tencentcloud_dayu_l7_rules" "domain_test" {
  resource_type = tencentcloud_dayu_l7_rule.test_rule.resource_type
  resource_id   = tencentcloud_dayu_l7_rule.test_rule.resource_id
  domain        = tencentcloud_dayu_l7_rule.test_rule.domain
}
data "tencentcloud_dayu_l7_rules" "id_test" {
  resource_type = tencentcloud_dayu_l7_rule.test_rule.resource_type
  resource_id   = tencentcloud_dayu_l7_rule.test_rule.resource_id
  rule_id       = tencentcloud_dayu_l7_rule.test_rule.rule_id
}
```

» Argument Reference

The following arguments are supported:

- `resource_id` - (Required) Id of the resource that the layer 7 rule works for.
- `resource_type` - (Required) Type of the resource that the layer 7 rule works for, valid value is `bgpip`.
- `domain` - (Optional) Domain of the layer 7 rule to be queried.
- `result_output_file` - (Optional) Used to save results.
- `rule_id` - (Optional) Id of the layer 7 rule to be queried.

» Attributes Reference

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

- `list` - A list of layer 7 rules. Each element contains the following attributes:
  - `domain` - Domain that the 7 layer rule works for.
  - `health_check_code` - HTTP Status Code. 1 means the return value '1xx' is health. 2 means the return value '2xx' is health. 4 means the return value '3xx' is health. 8 means the return value '4xx' is health. 16 means the return value '5xx' is health. If you want multiple return codes to indicate health, need to add the corresponding values.
  - `health_check_health_num` - Health threshold of health check.
  - `health_check_interval` - Interval time of health check.
  - `health_check_method` - Methods of health check.
  - `health_check_path` - Path of health check.
  - `health_check_switch` - Indicates whether health check is enabled.
  - `health_check_unhealth_num` - Unhealthy threshold of health check.
  - `name` - Name of the rule.
  - `protocol` - Protocol of the rule.

- `rule_id` - Id of the 7 layer rule.
- `source_list` - Source list of the rule.
- `source_type` - Source type, 1 for source of host, 2 for source of ip.
- `ssl_id` - SSL id.
- `status` - Status of the rule. 0 for create/modify success, 2 for create/modify fail, 3 for delete success, 5 for waiting to be created/modified, 7 for waiting to be deleted and 8 for waiting to get SSL id.
- `switch` - Indicate the rule will take effect or not.
- `threshold` - Threshold of the rule.

» tencentcloud_dayu_cc_http_policy

Use this resource to create a dayu CC self-define http policy

» Example Usage

```
resource "tencentcloud_dayu_cc_http_policy" "test_bgpip" {
  resource_type = "bgpip"
  resource_id   = "bgpip-00000294"
  name          = "policy_match"
  smode         = "matching"
  action        = "drop"
  switch        = true
  rule_list {
    skey     = "host"
    operator = "include"
    value    = "123"
  }
}

resource "tencentcloud_dayu_cc_http_policy" "test_net" {
  resource_type = "net"
  resource_id   = "net-0000007e"
  name          = "policy_match"
  smode         = "matching"
  action        = "drop"
  switch        = true
  rule_list {
    skey     = "cgi"
    operator = "equal"
    value    = "123"
  }
```

```
}

resource "tencentcloud_dayu_cc_http_policy" "test_bgpmultip" {
  resource_type = "bgp-multip"
  resource_id   = "bgp-0000008o"
  name          = "policy_match"
  smode         = "matching"
  action        = "alg"
  switch        = true
  ip            = "111.230.178.25"

  rule_list {
    skey     = "referer"
    operator = "not_include"
    value    = "123"
  }
}

resource "tencentcloud_dayu_cc_http_policy" "test_bgp" {
  resource_type = "bgp"
  resource_id   = "bgp-000006mq"
  name          = "policy_match"
  smode         = "matching"
  action        = "alg"
  switch        = true

  rule_list {
    skey     = "ua"
    operator = "not_include"
    value    = "123"
  }
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required, ForceNew) Name of the CC self-define http policy. Length should between 1 and 20.
- `resource_id` - (Required, ForceNew) ID of the resource that the CC self-define http policy works for.
- `resource_type` - (Required, ForceNew) Type of the resource that the CC self-define http policy works for, valid values are `bgpip`, `bgp`, `bgp-multip` and `net`.
- `action` - (Optional) Action mode, only valid when `smode` is `matching`.

Valid values are `alg` and `drop`.

- `frequency` - (Optional) Max frequency per minute, only valid when `smode` is `speedlimit`, the valid value ranges from 1 to 10000.
- `ip` - (Optional) Ip of the CC self-define http policy, only valid when `resource_type` is `bgp-multip`. The num of list items can only be set one.
- `rule_list` - (Optional) Rule list of the CC self-define http policy, only valid when `smode` is `matching`.
- `smode` - (Optional) Match mode, and valid values are `matching`, `speedlimit`. Note: the speed limit type CC self-define policy can only set one.
- `switch` - (Optional) Indicate the CC self-define http policy takes effect or not.

The `rule_list` object supports the following:

- `operator` - (Optional) Operator of the rule, valid values are `include`, `not_include`, `equal`.
- `skey` - (Optional) Key of the rule, valid values are `host`, `cgi`, `ua`, `referer`.
- `value` - (Optional) Rule value, then length should be less than 31 bytes.

» Attributes Reference

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

- `create_time` - Create time of the CC self-define http policy.
- `policy_id` - Id of the CC self-define http policy.

» tencentcloud_dayu_cc_https_policy

Use this resource to create a dayu CC self-define https policy

NOTE: creating CC self-define https policy need a valid resource `tencentcloud_dayu_l7_rule`; The resource only support Anti-DDoS of resource type `bgpip`.

» Example Usage

```
resource "tencentcloud_dayu_cc_https_policy" "test_policy" {
  resource_type = tencentcloud_dayu_l7_rule.test_rule.resource_type
  resource_id   = tencentcloud_dayu_l7_rule.test_rule.resource_id
  rule_id       = tencentcloud_dayu_l7_rule.test_rule.rule_id
  domain        = tencentcloud_dayu_l7_rule.test_rule.domain
  name          = "policy_test"
```

```
  action        = "drop"
  switch        = true

  rule_list {
    skey     = "cgi"
    operator = "include"
    value    = "123"
  }
}
```

» Argument Reference

The following arguments are supported:

- `domain` - (Required, ForceNew) Domain that the CC self-define https policy works for, only valid when `protocol` is `https`.
- `name` - (Required, ForceNew) Name of the CC self-define https policy. Length should between 1 and 20.
- `resource_id` - (Required, ForceNew) ID of the resource that the CC self-define https policy works for.
- `resource_type` - (Required, ForceNew) Type of the resource that the CC self-define https policy works for, valid value is `bgpip`.
- `rule_id` - (Required, ForceNew) Rule id of the domain that the CC self-define https policy works for, only valid when `protocol` is `https`.
- `rule_list` - (Required) Rule list of the CC self-define https policy.
- `action` - (Optional) Action mode. Valid values are `alg` and `drop`.
- `switch` - (Optional) Indicate the CC self-define https policy takes effect or not.

The `rule_list` object supports the following:

- `operator` - (Required) Operator of the rule, valid values are `include` and `equal`.
- `skey` - (Required) Key of the rule, valid values are `cgi`, `ua` and `referer`.
- `value` - (Required) Rule value, then length should be less than 31 bytes.

» Attributes Reference

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

- `create_time` - Create time of the CC self-define https policy.
- `ip_list` - Ip of the CC self-define https policy.
- `policy_id` - Id of the CC self-define https policy.

» tencentcloud_dayu_ddos_policy

Use this resource to create dayu DDoS policy

» Example Usage

```
resource "tencentcloud_dayu_ddos_policy" "test_policy" {
  resource_type = "bgpip"
  name          = "tf_test_policy"
  black_ips     = ["1.1.1.1"]
  white_ips = ["2.2.2.2]

  drop_options{
    drop_tcp  = true
    drop_udp  = true
    drop_icmp  = true
    drop_other  = true
    drop_abroad  = true
    check_sync_conn = true
    s_new_limit = 100
    d_new_limit = 100
    s_conn_limit = 100
    d_conn_limit = 100
    tcp_mbps_limit = 100
    udp_mbps_limit = 100
    icmp_mbps_limit = 100
    other_mbps_limit = 100
    bad_conn_threshold = 100
    null_conn_enable = true
    conn_timeout = 500
    syn_rate = 50
    syn_limit = 100
  }

  port_limits{
    start_port = " 2000 "
    end_port = " 2500 "
    protocol = " all "
    action = " drop "
    kind = 1
  }

  packet_filters{
    protocol = " tcp "
```

```
    action = " drop "
    d_start_port = 1000
    d_end_port = 1500
    s_start_port = 2000
    s_end_port = 2500
    pkt_length_max = 1400
    pkt_length_min = 1000
    is_include = true
    match_begin = " begin_l5 "
    match_type = " pcre "
    depth = 1000
    offset = 500
  }

  watermark_filters{
    tcp_port_list = [" 2000 - 3000 ", " 3500 - 4000 "]
    udp_port_list = [" 5000 - 6000 "]
    offset = 50
    auto_remove = true
    open_switch = true
  }
}
```

» Argument Reference

The following arguments are supported:

- `drop_options` - (Required) Option list of abnormal check of the DDos policy, should set at least one policy.
- `name` - (Required) Name of the DDoS policy. Length should between 1 and 32.
- `resource_type` - (Required, ForceNew) Type of the resource that the DDoS policy works for, valid values are `bgpip`, `bgp`, `bgp-multip` and `net`.
- `black_ips` - (Optional) Black ip list.
- `packet_filters` - (Optional) Message filter options list.
- `port_filters` - (Optional) Port limits of abnormal check of the DDos policy.
- `watermark_filters` - (Optional) Watermark policy options, and only support one watermark policy at most.
- `white_ips` - (Optional) White ip list.

The `drop_options` object supports the following:

- `bad_conn_threshold` - (Required) The number of new connections based on destination IP that trigger suppression of connections, and valid value is range from 0 to 4294967295.

- `check_sync_conn` - (Required) Indicate whether to check null connection or not.
- `conn_timeout` - (Required) Connection timeout of abnormal connection check, and valid value is range from 0 to 65535.
- `d_conn_limit` - (Required) The limit of concurrent connections based on destination IP, and valid value is range from 0 to 4294967295.
- `d_new_limit` - (Required) The limit of new connections based on destination IP, and valid value is range from 0 to 4294967295.
- `drop_abroad` - (Required) Indicate whether to drop abroad traffic or not.
- `drop_icmp` - (Required) Indicate whether to drop ICMP protocol or not.
- `drop_other` - (Required) Indicate whether to drop other protocols(exclude TCP/UDP/ICMP) or not.
- `drop_tcp` - (Required) Indicate whether to drop TCP protocol or not.
- `drop_udp` - (Required) Indicate to drop UDP protocol or not.
- `icmp_mbps_limit` - (Required) The limit of ICMP traffic rate, and valid value is range from 0 to 4294967295(Mbps).
- `null_conn_enable` - (Required) Indicate to enable null connection or not.
- `other_mbps_limit` - (Required) The limit of other protocols(exclude TCP/UDP/ICMP) traffic rate, and valid value is range from 0 to 4294967295(Mbps).
- `s_conn_limit` - (Required) The limit of concurrent connections based on source IP, and valid value is range from 0 to 4294967295.
- `s_new_limit` - (Required) The limit of new connections based on source IP, and valid value is range from 0 to 4294967295.
- `syn_limit` - (Required) The limit of syn of abnormal connection check, and valid value is range from 0 to 100.
- `tcp_mbps_limit` - (Required) The limit of TCP traffic, and valid value is range from 0 to 4294967295(Mbps).
- `udp_mbps_limit` - (Required) The limit of UDP traffic rate, and valid value is range from 0 to 4294967295(Mbps).
- `syn_rate` - (Optional) The percentage of syn in ack of abnormal connection check, and valid value is range from 0 to 100.

The `packet_filters` object supports the following:

- `action` - (Optional) Action of port to take, valid values area `drop`(drop the packet), `drop_black`(drop the packet and black the ip),`drop_rst`(drop the packet and disconnect),`drop_black_rst`(drop the packet, black the ip and disconnect),`transmit`(transmit the packet).
- `d_end_port` - (Optional) End port of the destination, valid value is range from 0 to 65535. It must be greater than `d_start_port`.
- `d_start_port` - (Optional) Start port of the destination, valid value is range from 0 to 65535.
- `depth` - (Optional) The depth of match, and valid value is range from 0 to 1500.
- `is_include` - (Optional) Indicate whether to include the key word/regular expression or not.

- `match_begin` - (Optional) Indicate whether to check load or not, `begin_l5` means to match and `no_match` means not.
- `match_str` - (Optional) The key word or regular expression.
- `match_type` - (Optional) Match type, valid values are `sunday` and `pcre`, `sunday` means key word match while `pcre` means regular match.
- `offset` - (Optional) The offset of match, and valid value is range from 0 to 1500.
- `pkt_length_max` - (Optional) The max length of the packet, and valid value is range from 0 to 1500(Mbps). It must be greater than `pkt_length_min`.
- `pkt_length_min` - (Optional) The minimum length of the packet, and valid value is range from 0 to 1500(Mbps).
- `protocol` - (Optional) Protocol, valid values are `tcp`, `udp`, `icmp`, `all`.
- `s_end_port` - (Optional) End port of the source, valid value is range from 0 to 65535. It must be greater than `s_start_port`.
- `s_start_port` - (Optional) Start port of the source, valid value is range from 0 to 65535.

The `port_filters` object supports the following:

- `action` - (Optional) Action of port to take, valid values area `drop`, `transmit`.
- `end_port` - (Optional) End port, valid value is range from 0 to 65535. It must be greater than `start_port`.
- `kind` - (Optional) The type of forbidden port, and valid values are 0, 1, 2. 0 for destination ports make effect, 1 for source ports make effect. 2 for both destination and source ports.
- `protocol` - (Optional) Protocol, valid values are `tcp`, `udp`, `icmp`, `all`.
- `start_port` - (Optional) Start port, valid value is range from 0 to 65535.

The `watermark_filters` object supports the following:

- `auto_remove` - (Optional) Indicate whether to auto-remove the watermark or not.
- `offset` - (Optional) The offset of watermark, and valid value is range from 0 to 100.
- `open_switch` - (Optional) Indicate whether to open watermark or not. It muse be set `true` when any field of watermark was set.
- `tcp_port_list` - (Optional) Port range of TCP, the format is like `2000-3000`.
- `udp_port_list` - (Optional) Port range of TCP, the format is like `2000-3000`.

» Attributes Reference

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

- `create_time` - Create time of the DDoS policy.
- `policy_id` - Id of policy.
- `scene_id` - Id of policy case that the DDoS policy works for.
- `watermark_key` - Watermark content.
  - `content` - Content of the watermark.
  - `id` - Id of the watermark.
  - `open_switch` - Indicate whether to auto-remove the watermark or not.

» tencentcloud_dayu_ddos_policy_attachment

Provides a resource to create a dayu DDoS policy attachment.

» Example Usage

```
resource "tencentcloud_dayu_ddos_policy_attachment" "dayu_ddos_policy_attachment_basic" {
  resource_type = tencentcloud_dayu_ddos_policy.test_policy.resource_type
  resource_id   = "bgpip-00000294"
  policy_id     = tencentcloud_dayu_ddos_policy.test_policy.policy_id
}
```

» Argument Reference

The following arguments are supported:

- `policy_id` - (Required, ForceNew) Id of the policy.
- `resource_id` - (Required, ForceNew) Id of the attached resource.
- `resource_type` - (Required, ForceNew) Type of the resource that the DDoS policy works for, valid values are `bgpip`, `bgp`, `bgp-multip`, `net`.

» tencentcloud_dayu_ddos_policy_case

Use this resource to create dayu DDoS policy case

NOTE: when a dayu DDoS policy case is created, there will be a dayu DDoS policy created with the same prefix name in the same time. This resource only supports Anti-DDoS of type `bgp`, `bgp-multip` and `bgpip`. One Anti-DDoS resource can only has one DDoS policy case resource. When there is only one Anti-DDoS resource and one policy case, those two resource will be bind automatically.

» Example Usage

```
resource "tencentcloud_dayu_ddos_policy_case" "foo" {
  resource_type       = "bgpip"
  name                = "tf_test_policy_case"
  platform_types      = ["PC", "MOBILE"]
  app_type            = "WEB"
  app_protocols       = ["tcp", "udp"]
  tcp_start_port      = "1000"
  tcp_end_port        = "2000"
  udp_start_port      = "3000"
  udp_end_port        = "4000"
  has_abroad          = "yes"
  has_initiate_tcp    = "yes"
  has_initiate_udp    = "yes"
  peer_tcp_port       = "1111"
  peer_udp_port       = "3333"
  tcp_footprint       = "511"
  udp_footprint       = "500"
  web_api_urls        = ["abc.com", "test.cn/aaa.png"]
  min_tcp_package_len = "1000"
  max_tcp_package_len = "1200"
  min_udp_package_len = "1000"
  max_udp_package_len = "1200"
  has_vpn             = "yes"
}
```

» Argument Reference

The following arguments are supported:

- `app_protocols` - (Required) App protocol set of the DDoS policy case.
- `app_type` - (Required) App type of the DDoS policy case, and valid values are `WEB`, `GAME`, `APP` and `OTHER`.
- `has_abroad` - (Required) Indicate whether the service involves overseas or not, valid values are `no` and `yes`.
- `has_initiate_tcp` - (Required) Indicate whether the service actively initiates TCP requests or not, valid values are `no` and `yes`.
- `name` - (Required, ForceNew) Name of the DDoS policy case. Length should between 1 and 64.
- `platform_types` - (Required) Platform set of the DDoS policy case.
- `resource_type` - (Required, ForceNew) Type of the resource that the DDoS policy case works for, valid values are `bgpip`, `bgp` and `bgp-multip`.
- `tcp_end_port` - (Required) End port of the TCP service, valid value is range from 0 to 65535. It must be greater than `tcp_start_port`.

- `tcp_start_port` - (Required) Start port of the TCP service, valid value is range from 0 to 65535.
- `udp_end_port` - (Required) End port of the UDP service, valid value is range from 0 to 65535. It must be greater than `udp_start_port`.
- `udp_start_port` - (Required) Start port of the UDP service, valid value is range from 0 to 65535.
- `web_api_urls` - (Required) Web API url set.
- `has_initiate_udp` - (Optional) Indicate whether the actively initiate UDP requests or not, valid values are `no` and `yes`.
- `has_vpn` - (Optional) Indicate whether the service involves VPN service or not, valid values are `no` and `yes`.
- `max_tcp_package_len` - (Optional) The max length of TCP message package, valid value length should be greater than 0 and less than 1500. It should be greater than `min_tcp_package_len`.
- `max_udp_package_len` - (Optional) The max length of UDP message package, valid value length should be greater than 0 and less than 1500. It should be greater than `min_udp_package_len`.
- `min_tcp_package_len` - (Optional) The minimum length of TCP message package, valid value length should be greater than 0 and less than 1500.
- `min_udp_package_len` - (Optional) The minimum length of UDP message package, valid value length should be greater than 0 and less than 1500.
- `peer_tcp_port` - (Optional) The port that actively initiates TCP requests, valid value is range from 1 to 65535.
- `peer_udp_port` - (Optional) The port that actively initiates UDP requests, valid value is range from 1 to 65535.
- `tcp_footprint` - (Optional) The fixed signature of TCP protocol load, valid value length is range from 1 to 512.
- `udp_footprint` - (Optional) The fixed signature of TCP protocol load, valid value length is range from 1 to 512.

» Attributes Reference

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

- `create_time` - Create time of the DDoS policy case.
- `scene_id` - Id of the DDoS policy case.

» tencentcloud_dayu_l4_rule

Use this resource to create dayu layer 4 rule

NOTE: This resource only support resource Anti-DDoS of type `bgpip` and `net`

» Example Usage

```
resource "tencentcloud_dayu_l4_rule" "test_rule" {
  resource_type             = "bgpip"
  resource_id               = "bgpip-00000294"
  name                      = "rule_test"
  protocol                  = "TCP"
  s_port                    = 80
  d_port                    = 60
  source_type               = 2
  health_check_switch       = true
  health_check_timeout      = 30
  health_check_interval     = 35
  health_check_health_num   = 5
  health_check_unhealth_num = 10
  session_switch            = false
  session_time              = 300

  source_list {
    source = "1.1.1.1"
    weight = 100
  }
  source_list {
    source = "2.2.2.2"
    weight = 50
  }
}
```

» Argument Reference

The following arguments are supported:

- `d_port` - (Required) The destination port of the L4 rule.
- `name` - (Required, ForceNew) Name of the rule. When the `resource_type` is `net`, this field should be set with valid domain.
- `protocol` - (Required) Protocol of the rule, valid values are `http`, `https`. When `source_type` is 1(host source), the value of this field can only set with `tcp`.
- `resource_id` - (Required, ForceNew) ID of the resource that the layer 4 rule works for.
- `resource_type` - (Required, ForceNew) Type of the resource that the layer 4 rule works for, valid values are `bgpip` and `net`.
- `s_port` - (Required) The source port of the L4 rule.
- `source_list` - (Required) Source list of the rule, it can be a set of ip sources or a set of domain sources. The number of items ranges from 1 to

20.

- `source_type` - (Required, ForceNew) Source type, 1 for source of host, 2 for source of ip.
- `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.
- `health_check_interval` - (Optional) Interval time of health check. The value range is 10-60 sec, and the default is 15 sec.
- `health_check_switch` - (Optional) Indicates whether health check is enabled. The default is `false`. Only valid when source list has more than one source item.
- `health_check_timeout` - (Optional) HTTP Status Code. The default is 26 and value range is 2-60.
- `health_check_unhealth_num` - (Optional) Unhealthy threshold of health check, and the default is 3. If the unhealthy result is returned 3 consecutive times, indicates that the forwarding is abnormal. The value range is 2-10.
- `session_switch` - (Optional) Indicate that the session will keep or not, and default value is `false`.
- `session_time` - (Optional) Session keep time, only valid when `session_switch` is true, the available value ranges from 1 to 300 and unit is second.

The `source_list` object supports the following:

- `source` - (Required) Source ip or domain, valid format of ip is like `1.1.1.1` and valid format of host source is like `abc.com`.
- `weight` - (Required) Weight of the source, the valid value ranges from 0 to 100.

» Attributes Reference

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

- `lb_type` - LB type of the rule, 1 for weight cycling and 2 for IP hash.
- `rule_id` - Id of the layer 4 rule.

» tencentcloud_dayu_l7_rule

Use this resource to create dayu layer 7 rule

NOTE: This resource only support resource Anti-DDoS of type `bgpip`

» Example Usage

```
resource "tencentcloud_dayu_l7_rule" "test_rule" {
  resource_type             = "bgpip"
  resource_id               = "bgpip-00000294"
  name                      = "rule_test"
  domain                    = "zhaoshaona.com"
  protocol                  = "https"
  switch                    = true
  source_type               = 2
  source_list               = ["1.1.1.1:80", "2.2.2.2"]
  ssl_id                    = "%s"
  health_check_switch       = true
  health_check_code         = 31
  health_check_interval     = 30
  health_check_method       = "GET"
  health_check_path         = "/"
  health_check_health_num   = 5
  health_check_unhealth_num = 10
}
```

» Argument Reference

The following arguments are supported:

- `domain` - (Required, ForceNew) Domain that the layer 7 rule works for. Valid string length ranges from 0 to 80.
- `name` - (Required, ForceNew) Name of the rule.
- `protocol` - (Required) Protocol of the rule, valid values are `http`, `https`.
- `resource_id` - (Required, ForceNew) ID of the resource that the layer 7 rule works for.
- `resource_type` - (Required, ForceNew) Type of the resource that the layer 7 rule works for, valid value is `bgpip`.
- `source_list` - (Required) Source list of the rule, it can be a set of ip sources or a set of domain sources. The number of items ranges from 1 to 16.
- `source_type` - (Required) Source type, 1 for source of host, 2 for source of ip.
- `switch` - (Required) Indicate the rule will take effect or not.
- `health_check_code` - (Optional) HTTP Status Code. The default is 26 and value range is 1-31. 1 means the return value '1xx' is health. 2 means the return value '2xx' is health. 4 means the return value '3xx' is health. 8 means the return value '4xx' is health. 16 means the return value '5xx' is health. If you want multiple return codes to indicate health, need to add the corresponding values.

- `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.
- `health_check_interval` - (Optional) Interval time of health check. The value range is 10-60 sec, and the default is 15 sec.
- `health_check_method` - (Optional) Methods of health check. The default is 'HEAD', the available value are 'HEAD' and 'GET'.
- `health_check_path` - (Optional) Path of health check. The default is `/`.
- `health_check_switch` - (Optional) Indicates whether health check is enabled. The default is `false`.
- `health_check_unhealth_num` - (Optional) Unhealthy 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.
- `ssl_id` - (Optional) SSL id, when the `protocol` is `https`, the field should be set with valid SSL id.

» Attributes Reference

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

- `rule_id` - Id of the layer 7 rule.
- `status` - Status of the rule. 0 for create/modify success, 2 for create/modify fail, 3 for delete success, 5 for delete failed, 6 for waiting to be created/modified, 7 for waiting to be deleted and 8 for waiting to get SSL id.

» 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"
  configuration_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.
- `tags` - (Optional) Tags 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 list 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 list 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.
  - `tags` - Tags of the scaling group.
  - `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_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_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_types          = ["SCALE_OUT_FAILED", "SCALE_IN_SUCCESSFUL", "SCALE_IN_FAILED
  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_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 `BANDWIDTH_PREPAID`, `TRAFFIC_POSTPAID_BY_HOUR`, `TRAFFIC_POSTPAID_BY_HOUR` and `BANDWIDTH_PACKAGE`.
- `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) Specifies 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.
- `tags` - (Optional) Tags of a scaling group.
- `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:

- `create_time` - The time when the AS group was created.
- `instance_count` - Instance number of a scaling group.
- `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_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_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 balancer attachment 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_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 set 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_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. 1 means the return value '1xx' is health. 2 means the return value '2xx' is health. 4 means the return value '3xx' is health. 8 means the return value 4xx is health. 16 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_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 are '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` - Unhealthy 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 are '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_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 target 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 balancer 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 target listener.
  - `target_rule_id` - Rule id of target listener.

» tencentcloud_alb_server_attachment

Provides an tencentcloud application load balancer servers attachment as a resource, to attach and detach instances from load balancer.

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:

- `backends` - (Required) list of backend server.
- `listener_id` - (Required, ForceNew) listener ID.
- `loadbalancer_id` - (Required, ForceNew) loadbalancer ID.
- `location_id` - (Optional, ForceNew) location ID, only support for layer 7 loadbalancer.

The `backends` object 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

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

- `protocol_type` - The protocol type, http or tcp.

» 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_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       = "VjANRdz8"
  certificate_ca_id    = "VfqO4zkB"
  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              = "VjANRdz8"
  certificate_ca_id           = "VfqO4zkB"
  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 are '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 are '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) Unhealthy 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 are '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     = 2
  health_check_http_path     = "Default Path"
  health_check_http_domain   = "Default Domain"
  health_check_http_method   = "GET"
  certificate_ssl_mode       = "MUTUAL"
  certificate_id             = "VjANRdz8"
  certificate_ca_id          = "VfqO4zkB"
  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. 1 means the return value '1xx' is health. 2 means the return value '2xx' is health. 4 means the return value '3xx' is health. 8 means the return value '4xx' is health. 16 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 are '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) Unhealthy 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 are '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_redirection

Provides a resource to create a CLB redirection.

» Example Usage

Manual Rewrite

```
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"
}
```

Auto Rewrite

```
resource "tencentcloud_clb_redirection" "foo" {
  clb_id             = "lb-p7olt9e5"
  target_listener_id = "lbl-asj1hzuo"
  target_rule_id     = "loc-4xxr2cy7"
  is_auto_rewrite    = true
}
```

» Argument Reference

The following arguments are supported:

- `clb_id` - (Required, ForceNew) Id of CLB instance.
- `target_listener_id` - (Required, ForceNew) Id of source listener.
- `target_rule_id` - (Required, ForceNew) Rule id of target listener.
- `is_auto_rewrite` - (Optional, ForceNew) Indicates whether automatic forwarding is enable, default is false. If enabled, the source listener and location should be empty, the target listener must be https protocol and port is 443.
- `source_listener_id` - (Optional, ForceNew) Id of source listener.
- `source_rule_id` - (Optional, ForceNew) Rule id of source 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

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

» Argument Reference

The following arguments are supported:

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

» Attributes Reference

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

- `status` - The status of the LB.

» 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.
- `tags` - (Optional) Tags to filter bucket.

» 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.
  - `tags` - The tags of a bucket.

- `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_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. Bucket format should be [custom name]-[appid], for example `mycos-1258798060`.
- `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).
- `tags` - (Optional) The tags of a bucket.
- `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 `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 `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 `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. Bucket format should be [custom name]-[appid], for example `mycos-1258798060`.
- `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_eip

Provides an available EIP for the user.

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

NOTE: It has been deprecated and replaced by tencentcloud_eips.

» Example Usage

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

» Argument Reference

The following arguments are supported:

- `filter` - (Optional) One or more name/value pairs to filter.
- `include_arrears` - (Optional) Whether the IP is arrears.
- `include_blocked` - (Optional) Whether the IP is blocked.

The `filter` object supports the following:

- `name` - (Required) Key of the filter, valid keys: `address-id`,`address-name`,`address-ip`.
- `values` - (Required) Value of the filter.

» Attributes Reference

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

- `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`.

» tencentcloud_eips

Use this data source to query eip instances.

» Example Usage

```
data "tencentcloud_eips" "foo" {
  eip_id = "eip-ry9h95hg"
}
```

» Argument Reference

The following arguments are supported:

- `eip_id` - (Optional) ID of the eip to be queried.
- `eip_name` - (Optional) Name of the eip to be queried.
- `public_ip` - (Optional) The elastic ip address.
- `result_output_file` - (Optional) Used to save results.
- `tags` - (Optional) The tags of eip.

» Attributes Reference

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

- `eip_list` - An information list of eip. Each element contains the following attributes:
  - `create_time` - Creation time of the eip.
  - `eip_id` - ID of the eip.
  - `eip_name` - Name of the eip.
  - `eip_type` - Type of the eip.
  - `eni_id` - The eni id to bind with the eip.
  - `instance_id` - The instance id to bind with the eip.
  - `public_ip` - The elastic ip address.
  - `status` - The eip current status.
  - `tags` - Tags of the eip.

» tencentcloud_image

Provides an available image for the user.

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.

NOTE: This data source will be deprecated, please use `tencentcloud_images` instead.

» Example Usage

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

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

» Argument Reference

The following arguments are supported:

- `filter` - (Optional) One or more name/value pairs to filter.
- `image_name_regex` - (Optional) A regex string to apply to the image list returned by TencentCloud. **NOTE**: it is not wildcard, should look like `image_name_regex = "^CentOS\s+6\.8\s+64\w*"`.
- `os_name` - (Optional) A string to apply with fuzzy match to the os_name attribute on the image list returned by TencentCloud. **NOTE**: when os_name is provided, highest priority is applied in this field instead of `image_name_regex`.
- `result_output_file` - (Optional) Used to save results.

The `filter` object supports the following:

- `name` - (Required) Key of the filter, valid keys: `image-id`, `image-type`, `image-name`.
- `values` - (Required) Values of the filter.

» Attributes Reference

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

- `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_images

Use this data source to query images.

» Example Usage

```
data "tencentcloud_images" "foo" {
  image_type = ["PUBLIC_IMAGE"]
  os_name    = "centos 7.5"
}
```

» Argument Reference

The following arguments are supported:

- `image_id` - (Optional) ID of the image to be queried.
- `image_name_regex` - (Optional) A regex string to apply to the image list returned by TencentCloud, conflict with 'os_name'. **NOTE**: it is not wildcard, should look like `image_name_regex = "^CentOS\s+6\.8\s+64\w*"`.
- `image_type` - (Optional) A list of the image type to be queried. Available values include: 'PUBLIC_IMAGE', 'PRIVATE_IMAGE', 'SHARED_IMAGE', 'MARKET_IMAGE'.
- `os_name` - (Optional) A string to apply with fuzzy match to the os_name attribute on the image list returned by TencentCloud, conflict with 'image_name_regex'.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `images` - An information list of image. Each element contains the following attributes:
  - `architecture` - Architecture of the image.
  - `created_time` - Created time of the image.
  - `image_creator` - Image creator of the image.
  - `image_description` - Description of the image.
  - `image_id` - ID of the image.
  - `image_name` - Name of the image.
  - `image_size` - Size of the image.
  - `image_source` - Image source of the image.
  - `image_state` - State of the image.
  - `image_type` - Type of the image.
  - `os_name` - OS name of the image.
  - `platform` - Platform of the image.
  - `support_cloud_init` - Whether support cloud-init.
  - `sync_percent` - Sync percent of the image.

» tencentcloud_instance_types

Use this data source to query instances type.

» Example Usage

```
data "tencentcloud_instance_types" "foo" {
  availability_zone = "ap-guangzhou-2"
  cpu_core_count    = 2
  memory_size       = 4
}
```

» Argument Reference

The following arguments are supported:

- `availability_zone` - (Optional) The available zone that the CVM instance locates at. This field is conflict with `filter`.
- `cpu_core_count` - (Optional) The number of CPU cores of the instance.
- `filter` - (Optional) One or more name/value pairs to filter. This field is conflict with `availability_zone`.
- `gpu_core_count` - (Optional) The number of GPU cores of the instance.
- `memory_size` - (Optional) Instance memory capacity, unit in GB.
- `result_output_file` - (Optional) Used to save results.

The `filter` object supports the following:

- `name` - (Required) The filter name, the available values include `zone` and `instance-family`.
- `values` - (Required) The filter values.

» Attributes Reference

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

- `instance_types` - An information list of cvm instance. Each element contains the following attributes:
  - `availability_zone` - The available zone that the CVM instance locates at.
  - `cpu_core_count` - The number of CPU cores of the instance.
  - `family` - Type series of the instance.
  - `gpu_core_count` - The number of GPU cores of the instance.
  - `instance_type` - Type of the instance.
  - `memory_size` - Instance memory capacity, unit in GB.

» tencentcloud_instances

Use this data source to query cvm instances.

» Example Usage

```
data "tencentcloud_instances" "foo" {
  instance_id = "ins-da412f5a"
}
```

» Argument Reference

The following arguments are supported:

- `availability_zone` - (Optional) The available zone that the CVM instance locates at.
- `instance_id` - (Optional) ID of the instances to be queried.
- `instance_name` - (Optional) Name of the instances to be queried.
- `project_id` - (Optional) The project CVM belongs to.
- `result_output_file` - (Optional) Used to save results.
- `subnet_id` - (Optional) ID of a vpc subnetwork.
- `vpc_id` - (Optional) ID of the vpc to be queried.

» Attributes Reference

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

- `instance_list` - An information list of cvm instance. Each element contains the following attributes:
  - `allocate_public_ip` - Indicates whether public ip is assigned.
  - `availability_zone` - The available zone that the CVM instance locates at.
  - `cpu` - The number of CPU cores of the instance.
  - `create_time` - Creation time of the instance.
  - `data_disks` - An information list of data disk. Each element contains the following attributes:
  - `data_disk_id` - Image ID of the data disk.
  - `data_disk_size` - Size of the data disk.
  - `data_disk_type` - Type of the data disk.
  - `delete_with_instance` - Indicates whether the data disk is destroyed with the instance.
  - `expired_time` - Expired time of the instance.
  - `image_id` - ID of the image.
  - `instance_charge_type` - The charge type of the instance.

  - `instance_id` - ID of the instances.
  - `instance_name` - Name of the instances.
  - `instance_type` - Type of the instance.
  - `internet_charge_type` - The charge type of the instance.
  - `internet_max_bandwidth_out` - Public network maximum output bandwidth of the instance.
  - `memory` - Instance memory capacity, unit in GB.
  - `private_ip` - Private ip of the instance.
  - `project_id` - The project CVM belongs to.
  - `public_ip` - Public ip of the instance.
  - `security_groups` - Security groups of the instance.
  - `status` - Status of the instance.
  - `subnet_id` - ID of a vpc subnetwork.
  - `system_disk_id` - Image ID of the system disk.
  - `system_disk_size` - Size of the system disk.
  - `system_disk_type` - Type of the system disk.
  - `tags` - Tags of the instance.
  - `vpc_id` - ID of the vpc.

» tencentcloud_key_pairs

Use this data source to query key pairs.

» Example Usage

```
data "tencentcloud_key_pairs" "foo" {
  key_id = "skey-ie97i3ml"
}

data "tencentcloud_key_pairs" "name" {
  key_name = "^test$"
}
```

» Argument Reference

The following arguments are supported:

- `key_id` - (Optional) ID of the key pair to be queried.
- `key_name` - (Optional) Name of the key pair to be queried. Support regular expression search, only `^` and `$` are supported.
- `project_id` - (Optional) Project id of the key pair to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `key_pair_list` - An information list of key pair. Each element contains the following attributes:
  - `create_time` - Creation time of the key pair.
  - `key_id` - ID of the key pair.
  - `key_name` - Name of the key pair.
  - `project_id` - Project id of the key pair.
  - `public_key` - public key of the key pair.

» tencentcloud_placement_groups

Use this data source to query placement groups.

» Example Usage

```
data "tencentcloud_placement_groups" "foo" {
  placement_group_id = "ps-21q9ibvr"
  name               = "test"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Optional) Name of the placement group to be queried.
- `placement_group_id` - (Optional) ID of the placement group to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `placement_group_list` - An information list of placement group. Each element contains the following attributes:
  - `create_time` - Creation time of the placement group.
  - `current_num` - Number of hosts in the placement group.
  - `cvm_quota_total` - Maximum number of hosts in the placement group.
  - `instance_ids` - Host IDs in the placement group.

  - `name` - Name of the placement group.
  - `placement_group_id` - ID of the placement group.
  - `type` - Type of the placement group.

» tencentcloud_reserved_instance_configs

Use this data source to query reserved instances configuration.

» Example Usage

```
data "tencentcloud_reserved_instance_configs" "config" {
  availability_zone = "na-siliconvalley-1"
}
```

» Argument Reference

The following arguments are supported:

- `availability_zone` - (Optional) The available zone that the reserved instance locates at.
- `duration` - (Optional) Validity period of the reserved instance. Valid values are 31536000(1 year) and 94608000(3 years).
- `instance_type` - (Optional) The type of reserved instance.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `config_list` - An information list of reserved instance configuration. Each element contains the following attributes:
  - `availability_zone` - Availability zone of the purchasable reserved instance.
  - `config_id` - Configuration ID of the purchasable reserved instance.
  - `currency_code` - Settlement currency of the reserved instance, which is a standard currency code as listed in ISO 4217.
  - `duration` - Validity period of the reserved instance.
  - `instance_type` - Instance type of the reserved instance.
  - `platform` - Platform of the reserved instance.
  - `price` - Purchase price of the reserved instance.

» tencentcloud_reserved_instances

Use this data source to query reserved instances.

» Example Usage

```
data "tencentcloud_reserved_instances" "instances" {
  availability_zone = "na-siliconvalley-1"
  instance_type     = "S2.MEDIUM8"
}
```

» Argument Reference

The following arguments are supported:

- `availability_zone` - (Optional) The available zone that the reserved instance locates at.
- `instance_type` - (Optional) The type of reserved instance.
- `reserved_instance_id` - (Optional) ID of the reserved instance to be query.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `reserved_instance_list` - An information list of reserved instance. Each element contains the following attributes:
  - `availability_zone` - Availability zone of the reserved instance.
  - `end_time` - Expiry time of the reserved instance.
  - `instance_count` - Number of reserved instance.
  - `instance_type` - The type of reserved instance.
  - `reserved_instance_id` - ID of the reserved instance.
  - `start_time` - Start time of the reserved instance.
  - `status` - Status of the reserved instance.

» tencentcloud_eip

Provides an EIP resource.

» Example Usage

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

» Argument Reference

The following arguments are supported:

- `anycast_zone` - (Optional, ForceNew) The zone of anycast, and available values include `ANYCAST_ZONE_GLOBAL` and `ANYCAST_ZONE_OVERSEAS`.
- `applicable_for_clb` - (Optional, **Deprecated**) It has been deprecated from version 1.27.0. Indicates whether the anycast eip can be associated to a CLB.
- `internet_charge_type` - (Optional, ForceNew) The charge type of eip, and available values include `BANDWIDTH_PACKAGE`, `BANDWIDTH_POSTPAID_BY_HOUR` and `TRAFFIC_POSTPAID_BY_HOUR`.
- `internet_max_bandwidth_out` - (Optional, ForceNew) The bandwidth limit of eip, unit is Mbps, and the range is 1-1000.
- `internet_service_provider` - (Optional, ForceNew) Internet service provider of eip, and available values include `BGP`, `CMCC`, `CTCC` and `CUCC`.
- `name` - (Optional) The name of eip.
- `tags` - (Optional) The tags of eip.
- `type` - (Optional, ForceNew) The type of eip, and available values include `EIP` and `AnycastEIP`. Default is `EIP`.

» Attributes Reference

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

- `public_ip` - The elastic ip address.
- `status` - The eip current status.

» Import

EIP 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, ENI and CLB.

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

» Example 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, ForceNew) The id of eip.
- `instance_id` - (Optional, ForceNew) The CVM or CLB instance id going to bind with the eip. This field is conflict with `network_interface_id` and `private_ip fields`.
- `network_interface_id` - (Optional, ForceNew) Indicates the network interface id like `eni-xxxxxx`. This field is conflict with `instance_id`.
- `private_ip` - (Optional, ForceNew) Indicates an IP belongs to the `network_interface_id`. This field is conflict with `instance_id`.

» tencentcloud_instance

Provides a CVM instance resource.

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

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

» Example Usage

```
data "tencentcloud_images" "my_favorite_image" {
  image_type = ["PUBLIC_IMAGE"]
  os_name    = "centos"
}

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

  cpu_core_count = 1
  memory_size    = 1
}

data "tencentcloud_availability_zones" "my_favorite_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_favorite_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.zones
  image_id                   = data.tencentcloud_images.my_favorite_image.images.0.image_id
  instance_type              = data.tencentcloud_instance_types.my_favorite_instance_types.i
  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, ForceNew) 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. Windows instance: The name should be a combination of 2 to 15 characters comprised of letters (case insensitive), numbers, and hyphens (-). Period (.) is not supported, and the name cannot be a string of pure numbers. Other types (such as Linux) of instances: The name should be a combination of 2 to 60 characters, supporting multiple periods (.). The piece between two periods is composed of letters (case insensitive), numbers, and hyphens (-).
- `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. Note: TencentCloud International only supports POSTPAID_BY_HOUR. PREPAID instance may not allow to delete before expired. SPOTPAID instance must set spot_instance_type and spot_max_price at the same time.
- instance_name - (Optional) The name of the CVM. The max length of instance_name is 60, and default value is Terraform-CVM-Instance.
- instance_type - (Optional) 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). 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.
- placement_group_id - (Optional, ForceNew) The id of a placement group.
- 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.
- spot_instance_type - (Optional) Type of spot instance, only support ONE-TIME now. Note: it only works when instance_charge_type is set to SPOTPAID.
- spot_max_price - (Optional, ForceNew) Max price of spot instance, is the format of decimal string, for example "0.50". Note: it only works when instance_charge_type is set to SPOTPAID.
- 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, ForceNew) 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, ForceNew) Size of the data disk, and unit is GB. If disk type is `CLOUD_SSD`, the size range is [100, 16000], and the others are [10-16000].
- `data_disk_type` - (Required, ForceNew) 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, ForceNew) Decides whether the disk is deleted with instance(only applied to `CLOUD_BASIC`, `CLOUD_SSD` and `CLOUD_PREMIUM` disk with `POSTPAID_BY_HOUR` instance), default is 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_key_pair

Provides a key pair resource.

» Example Usage

```
resource "tencentcloud_key_pair" "foo" {
  key_name   = "terraform_test"
  public_key = "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAAAgQDjd8fTnp7Dcuj4mLaQxf9Zs/ORgUL9fQxRCNKl
}
```

» Argument Reference

The following arguments are supported:

- `key_name` - (Required) The key pair's name. It is the only in one TencentCloud account.
- `public_key` - (Required, ForceNew) You can import an existing public key and using TencentCloud key pair to manage it.
- `project_id` - (Optional, ForceNew) Specifys to which project the key pair belongs.

» Import

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

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

» tencentcloud_placement_group

Provide a resource to create a placement group.

» Example Usage

```
resource "tencentcloud_placement_group" "foo" {
  name = "test"
  type = "HOST"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the placement group, 1-60 characters in length.
- `type` - (Required, ForceNew) Type of the placement group, the available values include `HOST`,`SW` and `RACK`.

» Attributes Reference

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

- `create_time` - Creation time of the placement group.
- `current_num` - Number of hosts in the placement group.
- `cvm_quota_total` - Maximum number of hosts in the placement group.

» Import

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

```
$ terraform import tencentcloud_placement_group.foo ps-ilan8vjf
```

» tencentcloud_reserved_instance

Provides a reserved instance resource.

NOTE: Reserved instance cannot be deleted and updated. The reserved instance still exist which can be extracted by reserved_instances data source when reserved instance is destroied.

» Example Usage

```
resource "tencentcloud_reserved_instance" "ri" {
  config_id      = "469043dd-28b9-4d89-b557-74f6a8326259"
  instance_count = 2
}
```

» Argument Reference

The following arguments are supported:

- `config_id` - (Required) Configuration id of the reserved instance.

- `instance_count` - (Required) Number of reserved instances to be purchased.

» Attributes Reference

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

- `end_time` - Expiry time of the RI.
- `start_time` - Start time of the RI.
- `status` - Status of the RI at the time of purchase.

» Import

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

```
$ terraform import tencentcloud_reserved_instance.foo 6cc16e7c-47d7-4fae-9b44-ce5c0f59a920
```

» tencentcloud_cam_group_memberships

Use this data source to query detailed information of CAM group memberships

» Example Usage

```
data "tencentcloud_cam_group_memberships" "foo" {
  group_id = tencentcloud_cam_group.foo.id
}
```

» Argument Reference

The following arguments are supported:

- `group_id` - (Optional) Id of CAM group to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `membership_list` - A list of CAM group membership. Each element contains the following attributes:
  - `group_id` - Id of CAM group.
  - `user_ids` - Id set of the CAM group members.

» tencentcloud_cam_group_policy_attachments

Use this data source to query detailed information of CAM group policy attachments

» Example Usage

```
# query by group_id
data "tencentcloud_cam_group_policy_attachments" "foo" {
  group_id = tencentcloud_cam_group.foo.id
}

# query by group_id and policy_id
data "tencentcloud_cam_group_policy_attachments" "bar" {
  group_id  = tencentcloud_cam_group.foo.id
  policy_id = tencentcloud_cam_policy.foo.id
}
```

» Argument Reference

The following arguments are supported:

- `group_id` - (Required) Id of the attached CAM group to be queried.
- `create_mode` - (Optional) Mode of Creation of the CAM user policy attachment. 1 means the cam policy attachment is created by production, and the others indicate syntax strategy ways.
- `policy_id` - (Optional) Id of CAM policy to be queried.
- `policy_type` - (Optional) Type of the policy strategy. 'User' means customer strategy and 'QCS' means preset strategy.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `group_policy_attachment_list` - A list of CAM group policy attachments. Each element contains the following attributes:
  - `create_mode` - Mode of Creation of the CAM group policy attachment. 1 means the cam policy attachment is created by production, and the others indicate syntax strategy ways.
  - `create_time` - Create time of the CAM group policy attachment.
  - `group_id` - Id of CAM group.
  - `policy_id` - Name of CAM group.
  - `policy_name` - Name of the policy.

  - `policy_type` - Type of the policy strategy. 'User' means customer strategy and 'QCS' means preset strategy.

» tencentcloud_cam_groups

Use this data source to query detailed information of CAM groups

» Example Usage

```
# query by group_id
data "tencentcloud_cam_groups" "foo" {
  group_id = tencentcloud_cam_group.foo.id
}

# query by name
data "tencentcloud_cam_groups" "bar" {
  name = "cam-group-test"
}
```

» Argument Reference

The following arguments are supported:

- `group_id` - (Optional) Id of CAM group to be queried.
- `name` - (Optional) Name of the CAM group to be queried.
- `remark` - (Optional) Description of the cam group to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `group_list` - A list of CAM groups. Each element contains the following attributes:
  - `create_time` - Create time of the CAM group.
  - `group_id` - Id of the CAM group.
  - `name` - Name of CAM group.
  - `remark` - Description of CAM group.

» tencentcloud_cam_policies

Use this data source to query detailed information of CAM policies

» Example Usage

```
# query by policy_id
data "tencentcloud_cam_policies" "foo" {
  policy_id = tencentcloud_cam_policy.foo.id
}

# query by policy_id and name
data "tencentcloud_cam_policies" "bar" {
  policy_id = tencentcloud_cam_policy.foo.id
  name      = "tf-auto-test"
}
```

» Argument Reference

The following arguments are supported:

- `create_mode` - (Optional) Mode of creation of policy strategy. 1 means policy was created with console, and 2 means it was created by strategies.
- `description` - (Optional) The description of the CAM policy.
- `name` - (Optional) Name of the CAM policy to be queried.
- `policy_id` - (Optional) Id of CAM policy to be queried.
- `result_output_file` - (Optional) Used to save results.
- `type` - (Optional) Type of the policy strategy. 1 means customer strategy and 2 means preset strategy.

» Attributes Reference

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

- `policy_list` - A list of CAM policies. Each element contains the following attributes:
  - `attachments` - Number of attached users.
  - `create_mode` - Mode of creation of policy strategy. 1 means policy was created with console, and 2 means it was created by strategies.
  - `create_time` - Create time of the CAM policy.
  - `description` - Description of CAM policy.
  - `name` - Name of CAM policy.
  - `policy_id` - Id of the policy strategy.
  - `service_type` - Name of attached products.

  - `type` - Type of the policy strategy. 1 means customer strategy and 2 means preset strategy.

» tencentcloud_cam_role_policy_attachments

Use this data source to query detailed information of CAM role policy attachments

» Example Usage

```
# query by role_id
data "tencentcloud_cam_role_policy_attachments" "foo" {
  role_id = tencentcloud_cam_role.foo.id
}

# query by role_id and policy_id
data "tencentcloud_cam_role_policy_attachments" "bar" {
  role_id   = tencentcloud_cam_role.foo.id
  policy_id = tencentcloud_cam_policy.foo.id
}
```

» Argument Reference

The following arguments are supported:

- `role_id` - (Required) Id of the attached CAM role to be queried.
- `create_mode` - (Optional) Mode of Creation of the CAM user policy attachment. 1 means the cam policy attachment is created by production, and the others indicate syntax strategy ways.
- `policy_id` - (Optional) Id of CAM policy to be queried.
- `policy_type` - (Optional) Type of the policy strategy. Valid values are 'User', 'QCS', '', 'User' means customer strategy and 'QCS' means preset strategy.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `role_policy_attachment_list` - A list of CAM role policy attachments. Each element contains the following attributes:

  - `create_mode` - Mode of Creation of the CAM role policy attachment. 1 means the cam policy attachment is created by production, and the others indicate syntax strategy ways.
  - `create_time` - Create time of the CAM role policy attachment.
  - `policy_id` - Name of CAM role.
  - `policy_name` - Name of the policy.
  - `policy_type` - Type of the policy strategy. 'User' means customer strategy and 'QCS' means preset strategy.
  - `role_id` - Id of CAM role.

» tencentcloud_cam_roles

Use this data source to query detailed information of CAM roles

» Example Usage

```
# query by role_id
data "tencentcloud_cam_roles" "foo" {
  role_id = tencentcloud_cam_role.foo.id
}

# query by name
data "tencentcloud_cam_roles" "bar" {
  name = "cam-role-test"
}
```

» Argument Reference

The following arguments are supported:

- `description` - (Optional) The description of the CAM role to be queried.
- `name` - (Optional) Name of the CAM policy to be queried.
- `result_output_file` - (Optional) Used to save results.
- `role_id` - (Optional) Id of the CAM role to be queried.

» Attributes Reference

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

- `role_list` - A list of CAM roles. Each element contains the following attributes:
  - `console_login` - Indicate whether the CAM role can be login or not.

  - `create_time` - The create time of the CAM role.
  - `description` - Description of CAM role.
  - `document` - Policy document of CAM role.
  - `name` - Name of CAM role.
  - `role_id` - Id of CAM role.
  - `update_time` - The last update time of the CAM role.

» tencentcloud_cam_saml_providers

Use this data source to query detailed information of CAM SAML providers

» Example Usage

```
data "tencentcloud_cam_saml_providers" "foo" {
  name = "cam-test-provider"
}
```

» Argument Reference

The following arguments are supported:

- `description` - (Optional) The description of the CAM SAML provider.
- `name` - (Optional) Name of the CAM SAML provider to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `provider_list` - A list of CAM SAML providers. Each element contains the following attributes:
  - `create_time` - Create time of the CAM SAML provider.
  - `description` - Description of CAM SAML provider.
  - `modify_time` - The last modify time of the CAM SAML provider.
  - `name` - Name of CAM SAML provider.

» tencentcloud_cam_user_policy_attachments

Use this data source to query detailed information of CAM user policy attachments

» Example Usage

```
# query by user_id
data "tencentcloud_cam_user_policy_attachments" "foo" {
  user_id = tencentcloud_cam_user.foo.id
}

# query by user_id and policy_id
data "tencentcloud_cam_user_policy_attachments" "bar" {
  user_id   = tencentcloud_cam_user.foo.id
  policy_id = tencentcloud_cam_policy.foo.id
}
```

» Argument Reference

The following arguments are supported:

- `user_id` - (Required) Id of the attached CAM user to be queried.
- `create_mode` - (Optional) Mode of Creation of the CAM user policy attachment. 1 means the cam policy attachment is created by production, and the others indicate syntax strategy ways.
- `policy_id` - (Optional) Id of CAM policy to be queried.
- `policy_type` - (Optional) Type of the policy strategy. 'User' means customer strategy and 'QCS' means preset strategy.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `user_policy_attachment_list` - A list of CAM user policy attachments. Each element contains the following attributes:
  - `create_mode` - Mode of Creation of the CAM user policy attachment. 1 means the cam policy attachment is created by production, and the others indicate syntax strategy ways.
  - `create_time` - The create time of the CAM user policy attachment.
  - `policy_id` - Name of CAM user.
  - `policy_name` - The name of the policy.
  - `policy_type` - Type of the policy strategy. 'User' means customer strategy and 'QCS' means preset strategy.
  - `user_id` - Id of CAM user.

» tencentcloud_cam_users

Use this data source to query detailed information of CAM users

» Example Usage

```
# query by name
data "tencentcloud_cam_users" "foo" {
  name = "cam-user-test"
}

# query by email
data "tencentcloud_cam_users" "bar" {
  email = "hello@test.com"
}

# query by phone
data "tencentcloud_cam_users" "far" {
  phone_num = "12345678910"
}
```

» Argument Reference

The following arguments are supported:

- `console_login` - (Optional) Indicate whether the user can login in.
- `country_code` - (Optional) Country code of the CAM user to be queried.
- `email` - (Optional) Email of the CAM user to be queried.
- `name` - (Optional) Name of CAM user to be queried.
- `phone_num` - (Optional) Phone num of the CAM user to be queried.
- `remark` - (Optional) Remark of the CAM user to be queried.
- `result_output_file` - (Optional) Used to save results.
- `uid` - (Optional) Uid of the CAM user to be queried.
- `uin` - (Optional) Uin of the CAM user to be queried.

» Attributes Reference

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

- `user_list` - A list of CAM users. Each element contains the following attributes:
  - `country_code` - Country code of the CAM user.
  - `email` - Email of the CAM user.
  - `name` - Name of CAM user.

  - `phone_num` - Phone num of the CAM user.
  - `remark` - Remark of the CAM user.
  - `uid` - Uid of the CAM user.
  - `uin` - Uin of the CAM user.

» tencentcloud_cam_group

Provides a resource to create a CAM group.

» Example Usage

```
resource "tencentcloud_cam_group" "foo" {
  name   = "cam-group-test"
  remark = "test"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Name of CAM group.
- `remark` - (Optional) Description of the CAM group.

» Attributes Reference

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

- `create_time` - Create time of the CAM group.

» Import

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

```
$ terraform import tencentcloud_cam_group.foo 90496
```

» tencentcloud_cam_group_membership

Provides a resource to create a CAM group membership.

» Example Usage

```
resource "tencentcloud_cam_group_membership" "foo" {
  group_id = tencentcloud_cam_group.foo.id
  user_ids = [tencentcloud_cam_user.foo.id, tencentcloud_cam_user.bar.id]
}
```

» Argument Reference

The following arguments are supported:

- `group_id` - (Required) Id of CAM group.
- `user_ids` - (Required) Id set of the CAM group members.

» Import

CAM group membership can be imported using the id, e.g.

```
$ terraform import tencentcloud_cam_group_membership.foo 12515263
```

» tencentcloud_cam_group_policy_attachment

Provides a resource to create a CAM group policy attachment.

» Example Usage

```
resource "tencentcloud_cam_group_policy_attachment" "foo" {
  group_id  = tencentcloud_cam_group.foo.id
  policy_id = tencentcloud_cam_policy.foo.id
}
```

» Argument Reference

The following arguments are supported:

- `group_id` - (Required, ForceNew) Id of the attached CAM group.
- `policy_id` - (Required, ForceNew) Id of the policy.

» Attributes Reference

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

- `create_mode` - Mode of Creation of the CAM group policy attachment. 1 means the cam policy attachment is created by production, and the others indicate syntax strategy ways.
- `create_time` - Create time of the CAM group policy attachment.
- `policy_name` - Name of the policy.
- `policy_type` - Type of the policy strategy. 'Group' means customer strategy and 'QCS' means preset strategy.

» Import

CAM group policy attachment can be imported using the id, e.g.

```
$ terraform import tencentcloud_cam_group_policy_attachment.foo 12515263#26800353
```

» tencentcloud_cam_policy

Provides a resource to create a CAM policy.

» Example Usage

```
resource "tencentcloud_cam_policy" "foo" {
  name        = "cam-policy-test"
  document    = <<EOF
{
  "version": "2.0",
  "statement": [
    {
      "action": [
        "name/sts:AssumeRole"
      ],
      "effect": "allow",
      "resource": [
        "*"
      ]
    }
  ]
}
EOF
  description = "test"
```

```
}
```

» Argument Reference

The following arguments are supported:

- `document` - (Required) Document of the CAM policy. The syntax refers to https://intl.cloud.tencent.com/document/product/598/10604. There are some notes when using this para in terraform: 1. The elements in JSON claimed supporting two types as `string` and `array` only support type `array`; 2. Terraform does not support the `root` syntax, when it appears, it must be replaced with the uin it stands for.
- `name` - (Required, ForceNew) Name of CAM policy.
- `description` - (Optional) Description of the CAM policy.

» Attributes Reference

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

- `create_time` - Create time of the CAM policy.
- `type` - Type of the policy strategy. 1 means customer strategy and 2 means preset strategy.
- `update_time` - The last update time of the CAM policy.

» Import

CAM policy can be imported using the id, e.g.

```
$ terraform import tencentcloud_cam_policy.foo 26655801
```

» tencentcloud_cam_role

Provides a resource to create a CAM role.

» Example Usage

```
resource "tencentcloud_cam_role" "foo" {
  name          = "cam-role-test"
  document      = <<EOF
{
  "version": "2.0",
  "statement": [
```

```
    {
      "action": ["name/sts:AssumeRole"],
      "effect": "allow",
      "principal": {
        "qcs": ["qcs::cam::uin/3374997817:uin/3374997817"]
      }
    }
  ]
}
EOF
  description   = "test"
  console_login = true
}
```

» Argument Reference

The following arguments are supported:

- `document` - (Required) Document of the CAM role. The syntax refers to https://intl.cloud.tencent.com/document/product/598/10604. There are some notes when using this para in terraform: 1. The elements in json claimed supporting two types as `string` and `array` only support type `array`; 2. Terraform does not support the `root` syntax, when appears, it must be replaced with the uin it stands for.
- `name` - (Required, ForceNew) Name of CAM role.
- `console_login` - (Optional, ForceNew) Indicade whether the CAM role can login or not.
- `description` - (Optional) Description of the CAM role.

» Attributes Reference

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

- `create_time` - Create time of the CAM role.
- `update_time` - The last update time of the CAM role.

» Import

CAM role can be imported using the id, e.g.

```
$ terraform import tencentcloud_cam_role.foo 4611686018427733635
```

» tencentcloud_cam_role_policy_attachment

Provides a resource to create a CAM role policy attachment.

» Example Usage

```
resource "tencentcloud_cam_role_policy_attachment" "foo" {
  role_id   = tencentcloud_cam_role.foo.id
  policy_id = tencentcloud_cam_policy.foo.id
}
```

» Argument Reference

The following arguments are supported:

- `policy_id` - (Required, ForceNew) Id of the policy.
- `role_id` - (Required, ForceNew) Id of the attached CAM role.

» Attributes Reference

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

- `create_mode` - Mode of Creation of the CAM role policy attachment. 1 means the CAM policy attachment is created by production, and the others indicate syntax strategy ways.
- `create_time` - The create time of the CAM role policy attachment.
- `policy_name` - The name of the policy.
- `policy_type` - Type of the policy strategy. 'User' means customer strategy and 'QCS' means preset strategy.

» Import

CAM role policy attachment can be imported using the id, e.g.

```
$ terraform import tencentcloud_cam_role_policy_attachment.foo 461168601842792272 5#26800353
```

» tencentcloud_cam_saml_provider

Provides a resource to create a CAM SAML provider.

» Example Usage

```
resource "tencentcloud_cam_saml_provider" "saml_provider_basic" {
  name        = "cam-saml-provider-test"
  meta_data   = "PD94bWwgdmVyc2lvbj0iMS4wIiBlbmNvZGluZz0iVVRGLTgiPz48bWQ6RW50aXR5RGVzY3JpcHR
  description = "test"
}
```

» Argument Reference

The following arguments are supported:

- `description` - (Required) The description of the CAM SAML provider.
- `meta_data` - (Required) The meta data document of the CAM SAML provider.
- `name` - (Required, ForceNew) Name of CAM SAML provider.

» Attributes Reference

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

- `create_time` - The create time of the CAM SAML provider.
- `provider_arn` - The arn of the CAM SAML provider.
- `update_time` - The last update time of the CAM SAML provider.

» Import

CAM SAML provider can be imported using the id, e.g.

```
$ terraform import tencentcloud_cam_saml_provider.foo cam-SAML-provider-test
```

» tencentcloud_cam_user

Provides a resource to manage CAM user.

» Example Usage

```
resource "tencentcloud_cam_user" "foo" {
  name                = "cam-user-test"
  remark              = "test"
  console_login       = true
  use_api             = true
```

```
  need_reset_password = true
  password            = "Gail@1234"
  phone_num           = "12345678910"
  email               = "hello@test.com"
  country_code        = "86"
  force_delete        = true
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required, ForceNew) Name of the CAM user.
- `console_login` - (Optional) Indicate whether the CAM user can login to the web console or not.
- `country_code` - (Optional) Country code of the phone number, for example: '86'.
- `email` - (Optional) Email of the CAM user.
- `force_delete` - (Optional) Indicate whether to force deletes the CAM user. If set false, the API secret key will be checked and failed when exists; otherwise the user will be deleted directly. Default is false.
- `need_reset_password` - (Optional) Indicate whether the CAM user need to reset the password when first logins.
- `password` - (Optional) The password of the CAM user. Password should be at least 8 characters and no more than 32 characters, includes uppercase letters, lowercase letters, numbers and special characters. Only required when `console_login` is true. If not set, a random password will be automatically generated.
- `phone_num` - (Optional) Phone number of the CAM user.
- `remark` - (Optional) Remark of the CAM user.
- `use_api` - (Optional) Indicate whether to generate the API secret key or not.

» Attributes Reference

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

- `secret_id` - Secret ID of the CAM user.
- `secret_key` - Secret key of the CAM user.
- `uid` - ID of the CAM user.
- `uin` - Uin of the CAM User.

» Import

CAM user can be imported using the user name, e.g.

```
$ terraform import tencentcloud_cam_user.foo cam-user-test
```

» tencentcloud_cam_user_policy_attachment

Provides a resource to create a CAM user policy attachment.

» Example Usage

```
resource "tencentcloud_cam_user_policy_attachment" "foo" {
  user_id   = tencentcloud_cam_user.foo.id
  policy_id = tencentcloud_cam_policy.foo.id
}
```

» Argument Reference

The following arguments are supported:

- `policy_id` - (Required, ForceNew) Id of the policy.
- `user_id` - (Required, ForceNew) Id of the attached CAM user.

» Attributes Reference

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

- `create_mode` - Mode of Creation of the CAM user policy attachment. 1 means the CAM policy attachment is created by production, and the others indicate syntax strategy ways.
- `create_time` - Create time of the CAM user policy attachment.
- `policy_name` - Name of the policy.
- `policy_type` - Type of the policy strategy. 'User' means customer strategy and 'QCS' means preset strategy.

» Import

CAM user policy attachment can be imported using the id, e.g.

```
$ terraform import tencentcloud_cam_user_policy_attachment.foo cam-test#26800353
```

» tencentcloud_cbs_snapshot_policies

Use this data source to query detailed information of CBS snapshot policies.

» Example Usage

```
data "tencentcloud_cbs_snapshot_policies" "policies" {
  snapshot_policy_id   = "snap-f3io7adt"
  snapshot_policy_name = "test"
}
```

» Argument Reference

The following arguments are supported:

- `result_output_file` - (Optional) Used to save results.
- `snapshot_policy_id` - (Optional) ID of the snapshot policy to be queried.
- `snapshot_policy_name` - (Optional) Name of the snapshot policy to be queried.

» Attributes Reference

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

- `snapshot_policy_list` - A list of snapshot policy. Each element contains the following attributes:
  - `attached_storage_ids` - Storage ids that the snapshot policy attached.
  - `create_time` - Create time of the snapshot policy.
  - `repeat_hours` - Trigger hours of periodic snapshot.
  - `repeat_weekdays` - Trigger days of periodic snapshot.
  - `retention_days` - Retention days of the snapshot.
  - `snapshot_policy_id` - ID of the snapshot policy.
  - `snapshot_policy_name` - Name of the snapshot policy.
  - `status` - Status of the snapshot policy.

» 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_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_cbs_snapshot_policy_attachment

Provides a CBS snapshot policy attachment resource.

» Example Usage

```
resource "tencentcloud_cbs_snapshot_policy_attachment" "foo" {
  storage_id         = tencentcloud_cbs_storage.foo.id
  snapshot_policy_id = tencentcloud_cbs_snapshot_policy.policy.id
}
```

» Argument Reference

The following arguments are supported:

- `snapshot_policy_id` - (Required, ForceNew) ID of CBS snapshot policy.
- `storage_id` - (Required, ForceNew) ID of CBS.

» 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, and unit is GB. If storage type is `CLOUD_SSD`, the size range is [100, 16000], and the others are [10-16000].
- `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_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) ID of the CCN to be queried.
- `result_output_file` - (Optional) 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) ID of the CCN to be queried.
- `name` - (Optional) Name of the CCN 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 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_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_cfs_access_groups

Use this data source to query the detail information of CFS access group.

» Example Usage

```
data "tencentcloud_cfs_access_groups" "access_groups" {
  access_group_id = "pgroup-7nx89k7l"
  name            = "test"
}
```

» Argument Reference

The following arguments are supported:

- `access_group_id` - (Optional) A specified access group ID used to query.
- `name` - (Optional) A access group Name used to query.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `access_group_list` - An information list of CFS access group. Each element contains the following attributes:
  - `access_group_id` - ID of the access group.
  - `create_time` - Creation time of the access group.
  - `description` - Description of the access group.
  - `name` - Name of the access group.

» tencentcloud_cfs_access_rules

Use this data source to query the detail information of CFS access rule.

» Example Usage

```
data "tencentcloud_cfs_access_rules" "access_rules" {
  access_group_id = "pgroup-7nx89k7l"
  access_rule_id  = "rule-qcndbqzj"
}
```

» Argument Reference

The following arguments are supported:

- `access_group_id` - (Required) A specified access group ID used to query.
- `access_rule_id` - (Optional) A specified access rule ID used to query.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `access_rule_list` - An information list of CFS access rule. Each element contains the following attributes:
  - `access_rule_id` - ID of the access rule.
  - `auth_client_ip` - Allowed IP of the access rule.
  - `priority` - The priority level of access rule.
  - `rw_permission` - Read and write permissions.
  - `user_permission` - The permissions of accessing users.

» tencentcloud_cfs_file_systems

Use this data source to query the detail information of cloud file systems(CFS).

» Example Usage

```
data "tencentcloud_cfs_file_systems" "file_systems" {
  file_system_id    = "cfs-6hgquxmj"
  name              = "test"
  availability_zone = "ap-guangzhou-3"
}
```

» Argument Reference

The following arguments are supported:

- `availability_zone` - (Optional) The available zone that the file system locates at.
- `file_system_id` - (Optional) A specified file system ID used to query.
- `name` - (Optional) A file system name used to query.
- `result_output_file` - (Optional) Used to save results.
- `subnet_id` - (Optional) ID of a vpc subnetwork.
- `vpc_id` - (Optional) ID of the vpc to be queried.

» Attributes Reference

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

- `file_system_list` - An information list of cloud file system. Each element contains the following attributes:
  - `access_group_id` - ID of the access group.
  - `availability_zone` - The available zone that the file system locates at.
  - `create_time` - Creation time of the file system.
  - `file_system_id` - ID of the file system.
  - `name` - Name of the file system.
  - `protocol` - Protocol of the file system.
  - `size_limit` - Size limit of the file system.
  - `size_used` - Size used of the file system.
  - `status` - Status of the file system.
  - `storage_type` - Storage type of the file system.

» tencentcloud_cfs_access_group

Provides a resource to create a CFS access group.

» Example Usage

```
resource "tencentcloud_cfs_access_group" "foo" {
  name        = "test_access_group"
  description = "test"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the access group, and max length is 64.
- `description` - (Optional) Description of the access group, and max length is 255.

» Attributes Reference

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

- `create_time` - Create time of the access group.

» Import

CFS access group can be imported using the id, e.g.

```
$ terraform import tencentcloud_cfs_access_group.foo pgroup-7nx89k7l
```

» tencentcloud__cfs__access__rule

Provides a resource to create a CFS access rule.

» Example Usage

```
resource "tencentcloud_cfs_access_rule" "foo" {
  access_group_id = "pgroup-7nx89k7l"
  auth_client_ip  = "10.10.1.0/24"
  priority        = 1
  rw_permission   = "RO"
  user_permission = "root_squash"
}
```

» Argument Reference

The following arguments are supported:

- `access_group_id` - (Required, ForceNew) ID of a access group.
- `auth_client_ip` - (Required) A single IP or a single IP address range such as 10.1.10.11 or 10.10.1.0/24 indicates that all IPs are allowed. Please note that the IP entered should be CVM's private IP.
- `priority` - (Required) The priority level of rule. The range is 1-100, and 1 indicates the highest priority.
- `rw_permission` - (Optional) Read and write permissions. Valid values are `RO` and `RW`, and default is `RO`.
- `user_permission` - (Optional) The permissions of accessing users. Valid values are `all_squash`, `no_all_squash`, `root_squash` and `no_root_squash`, and default is `root_squash`. `all_squash` indicates that all access users are mapped as anonymous users or user groups; `no_all_squash` indicates that access users will match local users first and be mapped to anonymous users or user groups after matching failed; `root_squash` indicates that map access root users to anonymous users or user groups; `no_root_squash` indicates that access root users keep root account permission.

» tencentcloud_cfs_file_system

Provides a resource to create a cloud file system(CFS).

» Example Usage

```
resource "tencentcloud_cfs_file_system" "foo" {
  name              = "test_file_system"
  availability_zone = "ap-guangzhou-3"
  access_group_id   = "pgroup-7nx89k7l"
  protocol          = "NFS"
  vpc_id            = "vpc-ah9fbkap"
  subnet_id         = "subnet-9mu2t9iw"
}
```

» Argument Reference

The following arguments are supported:

- `access_group_id` - (Required) ID of a access group.
- `availability_zone` - (Required, ForceNew) The available zone that the file system locates at.
- `subnet_id` - (Required, ForceNew) ID of a subnet.
- `vpc_id` - (Required, ForceNew) ID of a VPC network.
- `mount_ip` - (Optional, ForceNew) IP of mount point.
- `name` - (Optional) Name of a file system.
- `protocol` - (Optional, ForceNew) File service protocol. Valid values are `NFS` and `CIFS`, and the default is `NFS`.

» Attributes Reference

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

- `create_time` - Create time of the file system.

» Import

Cloud file system can be imported using the id, e.g.

```
$ terraform import tencentcloud_cfs_file_system.foo cfs-6hgquxmj
```

» tencentcloud_container_cluster_instances

Get all instances of the specific cluster.

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

The following arguments are supported:

- `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

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

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

» tencentcloud_container_clusters

Get container clusters in the current region.

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

The following arguments are supported:

- `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

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

- `clusters` - An information list of kubernetes clusters.
  - `cluster_id` - An id identify the cluster, like `cls-xxxxxx`.
  - `cluster_name` - Name the cluster.
  - `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.
  - `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_password` - Describe the password needed for using kubectl to access to kubernetes.
  - `security_username` - Describe the username needed for using kubectl to access to kubernetes.
  - `total_cpu` - Describe the total cpu of each instance in the cluster.
  - `total_mem` - Describe the total memory of each instance in the cluster.
- `total_count` - Number of clusters.

» tencentcloud_container_cluster

Provides a TencentCloud Container Cluster resource.

NOTE: It has been deprecated and replaced by tencentcloud_kubernetes_cluster.

» Example 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:

- `bandwidth_type` - (Required) The network type of the node.
- `bandwidth` - (Required) The network bandwidth of the node.
- `cluster_cidr` - (Required) The CIDR which the cluster is going to use.
- `cluster_name` - (Required) The name of the cluster.

- `goods_num` - (Required) The node number is going to create in the cluster.
- `instance_type` - (Required) The instance type of the node needed by cvm.
- `is_vpc_gateway` - (Required) Describe whether the node enable the gateway capability.
- `os_name` - (Required) The system os name of the node.
- `root_size` - (Required) The size of the root volume.
- `storage_size` - (Required) The size of the data volume.
- `subnet_id` - (Required) The subnet id which the node stays in.
- `vpc_id` - (Required) Specify vpc which the node(s) stay in.
- `zone_id` - (Required) The zone which the node stays in.
- `cluster_desc` - (Optional) The description of the cluster.
- `cluster_version` - (Optional) The kubernetes version of the cluster.
- `cpu` - (Optional, **Deprecated**) It has been deprecated from version 1.16.0. Set 'instance_type' instead. The cpu of the node.
- `cvm_type` - (Optional) The type of node needed by cvm.
- `docker_graph_path` - (Optional) The docker graph path is going to mounted.
- `instance_name` - (Optional) The name ot node.
- `key_id` - (Optional) The key_id of each node(if using key pair to access).
- `mem` - (Optional, **Deprecated**) It has been deprecated from version 1.16.0. Set 'instance_type' instead. The memory of the node.
- `mount_target` - (Optional) The path which volume is going to be mounted.
- `password` - (Optional) The password of each node.
- `period` - (Optional) The puchase duration of the node needed by cvm.
- `require_wan_ip` - (Optional) Indicate whether wan ip is needed.
- `root_type` - (Optional) The type of the root volume. see more from CVM.
- `sg_id` - (Optional) The security group id.
- `storage_type` - (Optional) The type of the data volume. see more from CVM.
- `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

In addition to all arguments above, 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 TencentCloud Container Cluster Instance resource.

NOTE: It has been deprecated and replaced by tencentcloud_kubernetes_scale_worker.

» Example 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:

- `bandwidth_type` - (Required) The network type of the node.
- `bandwidth` - (Required) The network bandwidth of the node.
- `cluster_id` - (Required) The id of the cluster.
- `is_vpc_gateway` - (Required) Describe whether the node enable the gateway capability.
- `root_size` - (Required) The size of the root volume.
- `storage_size` - (Required) The size of the data volume.
- `subnet_id` - (Required) The subnet id which the node stays in.
- `zone_id` - (Required) The zone which the node stays in.

- `cpu` - (Optional, **Deprecated**) It has been deprecated from version 1.16.0. Set 'instance_type' instead. The cpu of the node.
- `cvm_type` - (Optional) The type of node needed by cvm.
- `docker_graph_path` - (Optional) The docker graph path is going to mounted.
- `instance_name` - (Optional) The name ot node.
- `instance_type` - (Optional) The instance type of the node needed by cvm.
- `key_id` - (Optional) The key_id of each node(if using key pair to access).
- `mem` - (Optional, **Deprecated**) It has been deprecated from version 1.16.0. Set 'instance_type' instead. The memory of the node.
- `mount_target` - (Optional) The path which volume is going to be mounted.
- `password` - (Optional) The password of each node.
- `period` - (Optional) The puchase duration of the node needed by cvm.
- `require_wan_ip` - (Optional) Indicate whether wan ip is needed.
- `root_type` - (Optional) The type of the root volume. see more from CVM.
- `sg_id` - (Optional) The security group id.
- `storage_type` - (Optional) The type of the data volume. see more from CVM.
- `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

In addition to all arguments above, 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.
- `lan_ip` - Describe the lan ip of the node.
- `wan_ip` - Describe the wan ip of the node.

» 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_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_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) ID of the DC to be queried.
- `name` - (Optional) Name of the DC 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 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_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) ID of the dedicated tunnels to be queried.
- `name` - (Optional) Name of the dedicated tunnels 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 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_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_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) Used to save results.
- `type` - (Optional) Type of the certificate to be queried, the 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_domain_error_pages

Use this data source to query custom GAAP HTTP domain error page info list.

» 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 = "%s"
}

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

resource tencentcloud_gaap_domain_error_page "foo" {
  listener_id    = tencentcloud_gaap_layer7_listener.foo.id
  domain         = tencentcloud_gaap_http_domain.foo.domain
  error_codes    = [406, 504]
  new_error_code = 502
  body           = "bad request"
  clear_headers  = ["Content-Length", "X-TEST"]

  set_headers = {
    "X-TEST" = "test"
  }
```

```
}

data tencentcloud_gaap_domain_error_pages "foo" {
  listener_id = tencentcloud_gaap_domain_error_page.foo.listener_id
  domain      = tencentcloud_gaap_domain_error_page.foo.domain
}
```

» Argument Reference

The following arguments are supported:

- `domain` - (Required) HTTP domain to be queried.
- `listener_id` - (Required) ID of the layer7 listener to be queried.
- `ids` - (Optional) List of the error page info ID to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `error_page_info_list` - An information list of error page info detail. Each element contains the following attributes:
  - `body` - New response body.
  - `clear_headers` - Response headers to be removed.
  - `domain` - HTTP domain.
  - `error_codes` - Original error codes.
  - `id` - ID of the error page info.
  - `listener_id` - ID of the layer7 listener.
  - `new_error_codes` - New error code.
  - `set_headers` - Response headers to be set.

» 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) 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` - (**Deprecated**) It has been deprecated from version 1.26.0. Use `client_certificate_ids` instead. ID of the client certificate.
  - `client_certificate_ids` - ID list 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` - (**Deprecated**) It has been deprecated from version 1.28.0. Use `realserver_certificate_ids` instead. CA certificate ID of the realserver.
- `realserver_certificate_ids` - CA certificate ID list 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.
- `forward_host` - (Optional) Requested host which is forwarded to the realserver by the listener to be queried.
- `path` - (Optional) Path of the forward rule to be queried.
- `result_output_file` - (Optional) 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 forward rule.
  - `forward_host` - Requested host which is forwarded to the realserver by the 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 forward rule.

» 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, the available values include `TCP` and `UDP`.
- `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.
- `proxy_id` - (Optional) ID of the GAAP proxy to be queried.
- `result_output_file` - (Optional) 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, the available values include `HTTP` and `HTTPS`.
- `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.
- `proxy_id` - (Optional) ID of the GAAP proxy to be queried.
- `result_output_file` - (Optional) 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` - (**Deprecated**) It has been deprecated from version 1.26.0. Use `client_certificate_ids` instead. ID of the client certificate.
  - `client_certificate_ids` - ID list 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` and `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) 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 value is `-1`, no set means all projects.
- `result_output_file` - (Optional) 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) 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) 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_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, the 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 `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_domain_error_page

Provide a resource to custom error page info for a GAAP HTTP domain.

» 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"
}

resource tencentcloud_gaap_domain_error_page "foo" {
  listener_id = tencentcloud_gaap_layer7_listener.foo.id
  domain      = tencentcloud_gaap_http_domain.foo.domain
  error_codes = [404, 503]
  body        = "bad request"
}
```

» Argument Reference

The following arguments are supported:

- `body` - (Required, ForceNew) New response body.
- `domain` - (Required, ForceNew) HTTP domain.
- `error_codes` - (Required, ForceNew) Original error codes.
- `listener_id` - (Required, ForceNew) ID of the layer7 listener.
- `clear_headers` - (Optional, ForceNew) Response headers to be removed.
- `new_error_code` - (Optional, ForceNew) New error code.
- `set_headers` - (Optional, ForceNew) Response headers to be set.

» 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 value is `false`.
- `certificate_id` - (Optional) ID of the server certificate, default value is `default`.
- `client_certificate_id` - (Optional, **Deprecated**) It has been deprecated from version 1.26.0. Set `client_certificate_ids` instead. ID of the client certificate, default value is `default`.
- `client_certificate_ids` - (Optional) ID list of the poly client certificate.
- `gaap_auth_id` - (Optional) ID of the SSL certificate.
- `gaap_auth` - (Optional) Indicates whether SSL certificate authentication is enable, default value is `false`.
- `realserver_auth` - (Optional) Indicates whether realserver authentication is enable, default value is `false`.
- `realserver_certificate_domain` - (Optional) CA certificate domain of the realserver.

- `realserver_certificate_id` - (Optional, **Deprecated**) It has been deprecated from version 1.28.0. Set `realserver_certificate_ids` instead. CA certificate ID of the realserver.
- `realserver_certificate_ids` - (Optional) CA certificate ID list of the realserver.

» Import

GAAP http domain can be imported using the id, e.g.

NOTE: The format of tencentcloud_gaap_http_domain id is `[listener-id]+[protocol]+[domain]`.

```
$ terraform import tencentcloud_gaap_http_domain.foo listener-11112222+HTTP+www.qq.com
```

» 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 domain of the forward rule.
- `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, the available values include `IP` and `DOMAIN`.
- `realservers` - (Required) An information list of GAAP realserver.
- `connect_timeout` - (Optional) Timeout of the health check response, default value is 2s.
- `forward_host` - (Optional) The default value of requested host which is forwarded to the realserver by the listener is `default`.

- `health_check_method` - (Optional) Method of the health check, the 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, the available values include `100`, `200`, `300`, `400` and `500`.
- `interval` - (Optional) Interval of the health check, default value is 5s.
- `scheduler` - (Optional) Scheduling policy of the forward rule, default value is `rr`, the 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 value is `1`. The range of values is [1,100].

» Import

GAAP http rule can be imported using the id, e.g.

```
$ terraform import tencentcloud_gaap_http_rule.foo rule-3bsuu01r
```

» 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, the available values include `TCP` and `UDP`.
- `proxy_id` - (Required, ForceNew) ID of the GAAP proxy.
- `realserver_type` - (Required, ForceNew) Type of the realserver, the available values include `IP` and `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 value is 2s. NOTES: Only supports listeners of `TCP` protocol and require less than `interval`.
- `health_check` - (Optional) Indicates whether health check is enable, default value is `false`. NOTES: Only supports listeners of `TCP` protocol.
- `interval` - (Optional) Interval of the health check, default value is 5s. NOTES: Only supports listeners of `TCP` protocol.

- `realserver_bind_set` - (Optional) An information list of GAAP realserver.
- `scheduler` - (Optional) Scheduling policy of the layer4 listener, default value is `rr`, the 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 value 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.

» Import

GAAP layer4 listener can be imported using the id, e.g.

```
$ terraform import tencentcloud_gaap_layer4_listener.foo listener-11112222
```

» 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, 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, **Deprecated**) It has been deprecated from version 1.26.0. Set `client_certificate_ids` instead. ID of the client certificate. Set only when `auth_type` is specified as mutual authentication. NOTES: Only supports listeners of `HTTPS` protocol.
- `client_certificate_ids` - (Optional) ID list 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.

» Import

GAAP layer7 listener can be imported using the id, e.g.

```
$ terraform import tencentcloud_gaap_layer7_listener.foo listener-11112222
```

» 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` and `SL_Indonesia`.
- `bandwidth` - (Required) Maximum bandwidth of the GAAP proxy, unit is Mbps, the available values include `10`, `20`, `50`, `100`, `200`, `500` and `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` and `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` and `SL_Indonesia`.
- `enable` - (Optional) Indicates whether GAAP proxy is enabled, default value 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_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 include `ACCEPT` and `DROP`.
- `proxy_id` - (Required, ForceNew) ID of the GAAP proxy.
- `enable` - (Optional) Indicates whether policy is enable, default value 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 include `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. Default value is `ALL`, the available values include `80`, `80,443` and `3306-20000`.
- `protocol` - (Optional, ForceNew) Protocol of the security policy rule. Default value is `ALL`, the available values include `TCP`, `UDP` and `ALL`.

» Import

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

```
$ terraform import tencentcloud_gaap_security_rule.foo sr-xxxxxxxx
```

» 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.
- `tags` - (Optional) Tags of the cluster.

» 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:

- `certification_authority` - The certificate used for access.
- `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_external_endpoint` - External network address to access.
- `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` - (**Deprecated**) It has been deprecated from version 1.18.1. Container runtime of the cluster.
- `domain` - Domain name for access.
- `ignore_cluster_cidr_conflict` - Indicates whether to ignore the cluster cidr conflict error.
- `password` - Password of account.
- `pgw_endpoint` - The Intranet address used for access.
- `project_id` - Project Id of the cluster.
- `security_policy` - Access policy.
- `tags` - Tags of the cluster.
- `user_name` - User name of account.
- `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_kubernetes_as_scaling_group

Provide a resource to create an auto scaling group for kubernetes cluster.

» Example Usage

```
resource "tencentcloud_kubernetes_as_scaling_group" "test" {

  cluster_id = "cls-kb32pbv4"
```

```
  auto_scaling_group {
    scaling_group_name   = "tf-guagua-as-group"
    max_size             = "5"
    min_size             = "0"
    vpc_id               = "vpc-dk8zmwuf"
    subnet_ids           = ["subnet-pqfek0t8"]
    project_id           = 0
    default_cooldown     = 400
    desired_capacity     = "0"
    termination_policies = ["NEWEST_INSTANCE"]
    retry_policy         = "INCREMENTAL_INTERVALS"

    tags = {
      "test" = "test"
    }

  }

  auto_scaling_config {
    configuration_name = "tf-guagua-as-config"
    instance_type      = "SN3ne.8XLARGE64"
    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

    instance_tags = {
      tag = "as"
    }

  }
}
```

» Argument Reference

The following arguments are supported:

- `auto_scaling_config` - (Required, ForceNew) Auto scaling config parameters.
- `auto_scaling_group` - (Required, ForceNew) Auto scaling group parameters.
- `cluster_id` - (Required, ForceNew) ID of the cluster.

The `auto_scaling_config` object supports the following:

- `configuration_name` - (Required, ForceNew) Name of a launch configuration.
- `instance_type` - (Required, ForceNew) Specified types of CVM instance.
- `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_tags` - (Optional, ForceNew) A list of tags used to associate different resources.
- `internet_charge_type` - (Optional, ForceNew) Charge types for network traffic. Available values include `BANDWIDTH_PREPAID`, `TRAFFIC_POSTPAID_BY_HOUR`, `TRAFFIC_POSTPAID_BY_HOUR` and `BANDWIDTH_PACKAGE`.
- `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.
- `project_id` - (Optional, ForceNew) Specifys to which project the configuration belongs.
- `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.

The `auto_scaling_group` object supports the following:

- `max_size` - (Required, ForceNew) Maximum number of CVM instances (0~2000).
- `min_size` - (Required, ForceNew) Minimum number of CVM instances (0~2000).
- `scaling_group_name` - (Required, ForceNew) Name of a scaling group.

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

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 `forward_balancer_ids` object supports the following:

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

The `target_attribute` object supports the following:

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

» 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_internet` - (Optional) Open internet access or not.
- `cluster_intranet_subnet_id` - (Optional) Subnet id who can access this independent cluster, this field must and can only set when `cluster_intranet` is true. `cluster_intranet_subnet_id` can not modify once be set.
- `cluster_intranet` - (Optional) Open intranet access or not.
- `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_type` - (Optional, ForceNew) Image type of the cluster os, the available values include: 'DOCKER_CUSTOMIZE','GENERAL'.

Default is 'GENERAL'. 'DOCKER_CUSTOMIZE' means 'TKE-Optimized'. Only 'centos7.6x86_64' or 'ubuntu18.04.1 LTSx86_64' support 'DOCKER_CUSTOMIZE' now.

- `cluster_os` - (Optional, ForceNew) Operating system of the cluster, the available values include: 'centos7.2x86_64','centos7.6x86_64','ubuntu16.04.1 LTSx86_64','ubuntu18.04.1 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.
- `managed_cluster_internet_security_policies` - (Optional) Security policies for managed cluster internet, like:'192.168.1.0/24' or '113.116.51.27', '0.0.0.0/0' means all. This field can only set when field `cluster_deploy_type` is 'MANAGED_CLUSTER' and `cluster_internet` is true. `managed_cluster_internet_security_policies` can not delete or empty once be set.
- `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.
- `tags` - (Optional) The tags of the cluster.
- `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 `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 `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_charge_type_prepaid_period` - (Optional, ForceNew) 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, ForceNew) 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` and `POSTPAID_BY_HOUR`, The default is `POSTPAID_BY_HOUR`. Note: TencentCloud International only supports `POSTPAID_BY_HOUR`, `PREPAID` instance will not terminated after cluster deleted, and may not allow to delete before expired.
- `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, should be set if `password` not set.
- `password` - (Optional, ForceNew) Password to access, should be set if `key_ids` not set.
- `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 `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_charge_type_prepaid_period` - (Optional, ForceNew) 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, ForceNew) 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` and `POSTPAID_BY_HOUR`, The default is `POSTPAID_BY_HOUR`. Note: TencentCloud International only supports `POSTPAID_BY_HOUR`, `PREPAID` instance will not terminated after cluster deleted, and may not allow to delete before expired.
- `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, should be set if `password` not set.
- `password` - (Optional, ForceNew) Password to access, should be set if `key_ids` not set.
- `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.

» Attributes Reference

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

- `certification_authority` - The certificate used for access.
- `cluster_external_endpoint` - External network address to access.
- `cluster_node_num` - Number of nodes in the cluster.
- `domain` - Domain name for access.

- `password` - Password of account.
- `pgw_endpoint` - The Intranet address used for access.
- `security_policy` - Access policy.
- `user_name` - User name of account.
- `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 `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_charge_type_prepaid_period` - (Optional, ForceNew) 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, ForceNew) When enabled, the CVM instance will be renew automatically when it reach the end of the prepaid tenancy. Valid val-

ues 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 and POSTPAID_BY_HOUR, The default is POSTPAID_BY_HOUR. Note: TencentCloud International only supports POSTPAID_BY_HOUR, PREPAID instance will not terminated after cluster deleted, and may not allow to delete before expired.
- 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, should be set if password not set.
- password - (Optional, ForceNew) Password to access, should be set if key_ids not set.
- 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.

» 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_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.
- `tags` - (Optional) Tags of the Mongodb instance to be queried.

» 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.
  - `tags` - Tags of the Mongodb instance.
  - `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_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. The minimum value is 2, and unit is GB.
- `password` - (Required) Password of this Mongodb account.
- `volume` - (Required) Disk size. The minimum value is 25, and unit is GB.
- `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.
- `tags` - (Optional) The tags of the Mongodb.
- `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. The minimum value is 2, and unit is GB.
- `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. The minimum value is 25, and unit is GB.
- `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.
- `tags` - (Optional) The tags of the Mongodb.
- `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_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) Instance ID, such as cdb-c1nl9rpv. It is identical to the instance ID displayed in the database console page.
- `max_number` - (Optional) The latest files to list, rang from 1 to 10000. And the default value is 10.
- `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 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.
- `pay_type` - (Optional) Pay type of instance, 0: prepay, 1: postpay. NOTES: Only prepay is supported.
- `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:
  - `auto_renew_flag` - Auto renew flag. NOTES: Only supported prepay instance.
  - `cpu_core_count` - CPU count.
  - `create_time` - The time at which a instance is created.
  - `dead_line_time` - Expire date of instance. NOTES: Only supported prepay instance.
  - `device_type` - Supported instance model.HA - high available version; Basic - basic version.
  - `dr_instance_ids` - ID list of disaster-recovery 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.
- `master_instance_id` - Indicates the master instance ID of recovery instances.
- `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.
- `pay_type` - Pay type of instance, 0: prepay, 1: postpay. NOTES: Only prepay is supported.
- `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) Region parameter, which is used to identify the region to which the data you want to work with belongs.
- `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:
  - `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_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.

NOTE: It has been deprecated and replaced by tencentcloud_mysql_privilege.

» 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_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).
- `auto_renew_flag` - (Optional) Auto renew flag. NOTES: Only supported prepay instance.
- `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.
- `pay_type` - (Optional, ForceNew) Pay type of instance, 0: prepay, 1: postpay. NOTES: Only supported prepay instance.
- `period` - (Optional) Period of instance. NOTES: Only supported prepay instance.
- `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_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_instance" "default" {
  mem_size          = 1000
  volume_size       = 25
  instance_name     = "guagua"
  engine_version    = "5.7"
  root_password     = "0153Y474"
  availability_zone = "ap-guangzhou-3"
  internet_service  = 1

}

resource "tencentcloud_mysql_account" "mysql_account2" {
  mysql_id    = tencentcloud_mysql_instance.default.id
  name        = "test11"
  password    = "test1234"
  description = "test from terraform"
}

resource "tencentcloud_mysql_privilege" "tttt" {
  mysql_id     = tencentcloud_mysql_instance.default.id
  account_name = tencentcloud_mysql_account.mysql_account2.name
  global       = ["TRIGGER"]
  database {
    privileges    = ["SELECT", "INSERT", "UPDATE", "DELETE", "CREATE"]
    database_name = "sys"
  }
  database {
    privileges    = ["SELECT"]
    database_name = "performance_schema"
```

```
  }

  table {
    privileges    = ["SELECT", "INSERT", "UPDATE", "DELETE", "CREATE"]
    database_name = "mysql"
    table_name    = "slow_log"
  }

  table {
    privileges    = ["SELECT", "INSERT", "UPDATE"]
    database_name = "mysql"
    table_name    = "user"
  }

  column {
    privileges    = ["SELECT", "INSERT", "UPDATE", "REFERENCES"]
    database_name = "mysql"
    table_name    = "user"
    column_name   = "host"
  }
}
```

» Argument Reference

The following arguments are supported:

- `account_name` - (Required, ForceNew) Account name.the forbidden value is:root,mysql.sys,tencentroot.
- `global` - (Required) Global privileges. available values for Privileges:SELECT,INSERT,UPDATE,DELETE,CREATE,PROCESS,DROP,REFERENCES,INDEX,ALTE DATABASES,CREATE TEMPORARY TABLES,LOCK TABLES,EXECUTE,CREATE VIEW,SHOW VIEW,CREATE ROUTINE,ALTER ROUTINE,EVENT,TRIGGER.
- `mysql_id` - (Required, ForceNew) Instance ID.
- `column` - (Optional) Column privileges list.
- `database` - (Optional) Database privileges list.
- `table` - (Optional) Table privileges list.

The `column` object supports the following:

- `column_name` - (Required) Column name.
- `database_name` - (Required) Database name.
- `privileges` - (Required) Column privilege.available values for Privileges:SELECT,INSERT,UPDATE,REFERENCES.
- `table_name` - (Required) Table name.

The `database` object supports the following:

- `database_name` - (Required) Database name.
- `privileges` - (Required) Database privilege.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,TRIGGER.

The `table` object supports the following:

- `database_name` - (Required) Database name.
- `privileges` - (Required) Table privilege.available values for Privileges:SELECT,INSERT,UPDATE,DELETE,CREATE,DROP,REFERENCES,INDEX,ALTER,CREATE VIEW,SHOW VIEW,TRIGGER.
- `table_name` - (Required) Table name.

» 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).
- `auto_renew_flag` - (Optional) Auto renew flag. NOTES: Only supported prepay instance.
- `intranet_port` - (Optional) Public access port, rang form 1024 to 65535 and default value is 3306.
- `pay_type` - (Optional, ForceNew) Pay type of instance, 0: prepay, 1: postpay. NOTES: Only supported prepay instance.
- `period` - (Optional) Period of instance. NOTES: Only supported prepay instance.
- `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_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) The number limitation of results for a query.
- `project_id` - (Optional) ID of the project to which redis instance belongs.
- `result_output_file` - (Optional) Used to save results.
- `search_key` - (Optional) Key words used to match the results, and the key words can be: instance ID, instance name and IP address.
- `tags` - (Optional) Tags of redis instance.
- `zone` - (Optional) 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.
  - `tags` - Tags of an instance.
  - `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) 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) 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_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_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, please refer to tencentcloud_redis_zone_config.list.
- `mem_size` - (Required) The memory volume of an available instance(in MB), please 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.
- `tags` - (Optional) Instance tags.
- `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_ssl_certificates

Use this data source to query SSL certificate.

» Example Usage

```
data "tencentcloud_ssl_certificates" "foo" {
  name = "certificate"
}
```

» Argument Reference

The following arguments are supported:

- `id` - (Optional) ID of the SSL certificate to be queried.

- `name` - (Optional) Name of the SSL certificate to be queried.
- `result_output_file` - (Optional) Used to save results.
- `type` - (Optional) Type of the SSL certificate to be queried. Available values includes: `CA` and `SVR`.

» 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 SSL certificate.
  - `cert` - Content of the SSL certificate.
  - `create_time` - Creation time of the SSL certificate.
  - `domain` - Primary domain of the SSL certificate.
  - `end_time` - Ending time of the SSL certificate.
  - `id` - ID of the SSL certificate.
  - `name` - Name of the SSL certificate.
  - `product_zh_name` - Certificate authority.
  - `project_id` - Project ID of the SSL certificate.
  - `status` - Status of the SSL certificate.
  - `subject_names` - ALL domains included in the SSL certificate. Including the primary domain name.
  - `type` - Type of the SSL certificate.

» tencentcloud_ssl_certificate

Provides a resource to create a SSL certificate.

» Example Usage

```
resource "tencentcloud_ssl_certificate" "foo" {
  name       = "test-ssl-certificate"
  type       = "CA"
  project_id = 0
  cert       = "-----BEGIN CERTIFICATE-----\nMIIERzCCAq+gAwIBAgIBAjANBgkqhkiG9w0BAQsFADAoMQ
}
```

» Argument Reference

The following arguments are supported:

- `cert` - (Required, ForceNew) Content of the SSL certificate. Not allowed newline at the start and end.
- `type` - (Required, ForceNew) Type of the SSL certificate. Available values includes: `CA` and `SVR`.
- `key` - (Optional, ForceNew) Key of the SSL certificate and required when certificate type is `SVR`. Not allowed newline at the start and end.
- `name` - (Optional, ForceNew) Name of the SSL certificate.
- `project_id` - (Optional, ForceNew) Project ID of the SSL certificate. Default is `0`.

» Attributes Reference

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

- `begin_time` - Beginning time of the SSL certificate.
- `create_time` - Creation time of the SSL certificate.
- `domain` - Primary domain of the SSL certificate.
- `end_time` - Ending time of the SSL certificate.
- `product_zh_name` - Certificate authority.
- `status` - Status of the SSL certificate.
- `subject_names` - ALL domains included in the SSL certificate. Including the primary domain name.

» Import

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

```
$ terraform import tencentcloud_ssl_certificate.cert GjTNRoK7
```

» tencentcloud_scf_functions

Use this data source to query SCF functions.

» Example Usage

```
resource "tencentcloud_scf_function" "foo" {
  name    = "ci-test-function"
  handler = "main.do_it"
  runtime = "Python3.6"

  cos_bucket_name   = "scf-code-1234567890"
  cos_object_name   = "code.zip"
```

```
  cos_bucket_region = "ap-guangzhou"
}

data "tencentcloud_scf_functions" "foo" {
  name = tencentcloud_scf_function.foo.name
}
```

» Argument Reference

The following arguments are supported:

- `description` - (Optional) Description of the SCF function to be queried.
- `name` - (Optional) Name of the SCF function to be queried.
- `namespace` - (Optional) Namespace of the SCF function to be queried.
- `result_output_file` - (Optional) Used to save results.
- `tags` - (Optional) Tags of the SCF function to be queried, can use up to 10 tags.

» Attributes Reference

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

- `functions` - An information list of functions. Each element contains the following attributes:
  - `cls_logset_id` - CLS logset ID of the SCF function.
  - `cls_topic_id` - CLS topic ID of the SCF function.
  - `code_error` - Code error of the SCF function.
  - `code_result` - Code result of the SCF function.
  - `code_size` - Code size of the SCF function.
  - `create_time` - Create time of the SCF function.
  - `description` - Description of the SCF function.
  - `eip_fixed` - Whether EIP is a fixed IP.
  - `eips` - EIP list of the SCF function.
  - `environment` - Environment variable of the SCF function.
  - `err_no` - Errno of the SCF function.
  - `handler` - Handler of the SCF function.
  - `host` - Host of the SCF function.
  - `install_dependency` - Whether to automatically install dependencies.
  - `l5_enable` - Whether to enable L5.
  - `mem_size` - Memory size of the SCF function runtime, unit is M.
  - `modify_time` - Modify time of the SCF function.
  - `name` - Name of the SCF function.
  - `namespace` - Namespace of the SCF function.
  - `role` - CAM role of the SCF function.

- `runtime` - Runtime of the SCF function.
- `status_desc` - Status description of the SCF function.
- `status` - Status of the SCF function.
- `subnet_id` - Subnet ID of the SCF function.
- `tags` - Tags of the SCF function.
- `timeout` - Timeout of the SCF function maximum execution time, unit is second.
- `trigger_info` - Trigger details list the SCF function. Each element contains the following attributes:
- `create_time` - Create time of the SCF function trigger.
- `custom_argument` - user-defined parameter of the SCF function trigger.
- `enable` - Whether to enable SCF function trigger.
- `modify_time` - Modify time of the SCF function trigger.
- `name` - Name of the SCF function trigger.
- `trigger_desc` - TriggerDesc of the SCF function trigger.
- `type` - Type of the SCF function trigger.
- `vip` - Vip of the SCF function.
- `vpc_id` - VPC ID of the SCF function.

» tencentcloud_scf_logs

Use this data source to query SCF function logs.

» Example Usage

```
resource "tencentcloud_scf_function" "foo" {
  name    = "ci-test-function"
  handler = "main.do_it"
  runtime = "Python3.6"

  cos_bucket_name   = "scf-code-1234567890"
  cos_object_name   = "code.zip"
  cos_bucket_region = "ap-guangzhou"
}

data "tencentcloud_scf_logs" "foo" {
  function_name = tencentcloud_scf_function.foo.name
}
```

» Argument Reference

The following arguments are supported:

- `function_name` - (Required) Name of the SCF function to be queried.
- `end_time` - (Optional) The end time of the query, the format is `2017-05-16 20:00:00`, which can only be within one day from `start_time`.
- `invoke_request_id` - (Optional) Corresponding requestId when executing function.
- `limit` - (Optional) Number of logs, the default is `10000`, offset+limit cannot be greater than 10000.
- `namespace` - (Optional) Namespace of the SCF function to be queried.
- `offset` - (Optional) Log offset, default is `0`, offset+limit cannot be greater than 10000.
- `order_by` - (Optional) Sort the logs according to the following fields: `function_name`, `duration`, `mem_usage`, `start_time`, default `start_time`.
- `order` - (Optional) Order to sort the log, optional values `desc` and `asc`, default `desc`.
- `result_output_file` - (Optional) Used to save results.
- `ret_code` - (Optional) Use to filter log, optional value: `not0` only returns the error log. `is0` only returns the correct log. `TimeLimitExceeded` returns the log of the function call timeout. `ResourceLimitExceeded` returns the function call generation resource overrun log. `UserCodeException` returns logs of the user code error that occurred in the function call. Not passing the parameter means returning all logs.
- `start_time` - (Optional) The start time of the query, the format is `2017-05-16 20:00:00`, which can only be within one day from `end_time`.

» Attributes Reference

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

- `logs` - An information list of logs. Each element contains the following attributes:
  - `bill_duration` - Function billing time, according to duration up to the last 100ms, unit is ms.
  - `duration` - Function execution time-consuming, unit is ms.
  - `function_name` - Name of the SCF function.
  - `invoke_finished` - Whether the function call ends, `1` means the execution ends, other values indicate the call exception.
  - `level` - Log level.
  - `log` - Log output during function execution.

  - `mem_usage` - The actual memory size consumed in the execution of the function, unit is Byte.
  - `request_id` - Execute the requestId corresponding to the function.
  - `ret_code` - Execution result of function, `0` means the execution is successful, other values indicate failure.
  - `ret_msg` - Return value after function execution is completed.
  - `source` - Log source.
  - `start_time` - Point in time at which the function begins execution.

» tencentcloud_scf_namespaces

Use this data source to query SCF namespaces.

» Example Usage

```
resource "tencentcloud_scf_namespace" "foo" {
  namespace = "ci-test-scf"
}

data "tencentcloud_scf_namespaces" "foo" {
  namespace = tencentcloud_scf_namespace.foo.id
}
```

» Argument Reference

The following arguments are supported:

- `description` - (Optional) Description of the SCF namespace to be queried.
- `namespace` - (Optional) Name of the SCF namespace to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `namespaces` - An information list of namespace. Each element contains the following attributes:
  - `create_time` - Create time of the SCF namespace.
  - `description` - Description of the SCF namespace.
  - `modify_time` - Modify time of the SCF namespace.
  - `namespace` - Name of the SCF namespace.

– `type` - Type of the SCF namespace.

» tencentcloud_scf_function

Provide a resource to create a SCF function.

» Example Usage

```
resource "tencentcloud_scf_function" "foo" {
  name    = "ci-test-function"
  handler = "main.do_it"
  runtime = "Python3.6"

  cos_bucket_name   = "scf-code-1234567890"
  cos_object_name   = "code.zip"
  cos_bucket_region = "ap-guangzhou"
}
```

» Argument Reference

The following arguments are supported:

- `handler` - (Required) Handler of the SCF function. The format of name is `<filename>.<method_name>`, and it supports 26 English letters, numbers, connectors, and underscores, it should start with a letter. The last character cannot be `-` or `_`. Available length is 2-60.
- `name` - (Required, ForceNew) Name of the SCF function. Name supports 26 English letters, numbers, connectors, and underscores, it should start with a letter. The last character cannot be `-` or `_`. Available length is 2-60.
- `runtime` - (Required) Runtime of the SCF function, only supports `Python2.7`, `Python3.6`, `Nodejs6.10`, `Nodejs8.9`, `Nodejs10.15`, `PHP5`, `PHP7`, `Golang1`, and `Java8`.
- `cls_logset_id` - (Optional) cls logset id of the SCF function.
- `cls_topic_id` - (Optional) cls topic id of the SCF function.
- `cos_bucket_name` - (Optional) Cos bucket name of the SCF function, such as `cos-1234567890`, conflict with `zip_file`.
- `cos_bucket_region` - (Optional) Cos bucket region of the SCF function, conflict with `zip_file`.
- `cos_object_name` - (Optional) Cos object name of the SCF function, should have suffix `.zip` or `.jar`, conflict with `zip_file`.

- `description` - (Optional) Description of the SCF function. Description supports English letters, numbers, spaces, commas, newlines, periods and Chinese, the maximum length is 1000.
- `environment` - (Optional) Environment of the SCF function.
- `l5_enable` - (Optional) Enable L5 for SCF function, default is `false`.
- `mem_size` - (Optional) Memory size of the SCF function, unit is MB. The default is `128`MB. The range is 128M-1536M, and the ladder is 128M.
- `namespace` - (Optional, ForceNew) Namespace of the SCF function, default is `default`.
- `role` - (Optional) Role of the SCF function.
- `subnet_id` - (Optional) Subnet id of the SCF function.
- `tags` - (Optional) Tags of the SCF function.
- `timeout` - (Optional) Timeout of the SCF function, unit is second. Default `3`. Available value is 1-300.
- `triggers` - (Optional) Trigger list of the SCF function, note that if you modify the trigger list, all existing triggers will be deleted, and then create triggers in the new list. Each element contains the following attributes:
- `vpc_id` - (Optional) VPC id of the SCF function.
- `zip_file` - (Optional) Zip file of the SCF function, content is encoded by base64, conflict with `cos_bucket_name`, `cos_object_name`, `cos_bucket_region`.

The `triggers` object supports the following:

- `name` - (Required) Name of the SCF function trigger, if `type` is `ckafka`, the format of name must be `<ckafkaInstanceId>-<topicId>`; if `type` is `cos`, the name is cos bucket id, other In any case, it can be combined arbitrarily. It can only contain English letters, numbers, connectors and underscores. The maximum length is 100.
- `trigger_desc` - (Required) TriggerDesc of the SCF function trigger, parameter format of `timer` is linux cron expression; parameter of `cos` type is json string `{"event":"cos:ObjectCreated:*","filter":{"Prefix":"","Suffix":""}}`, where `event` is the cos event trigger, `Prefix` is the corresponding file prefix filter condition, `Suffix` is the suffix filter condition, if not need filter condition can not pass; `cmq` type does not pass this parameter; `ckafka` type parameter format is json string `{"maxMsgNum":"1","offset":"latest"}`; `apigw` type parameter format is json string `{"api":{"authRequired":"FALSE","requestConfig":{"method":"ANY"},"isIntegrate`
- `type` - (Required) Type of the SCF function trigger, support `cos`, `cmq`, `timer`, `ckafka`, `apigw`.
- `cos_region` - (Optional) Region of cos bucket. if `type` is `cos`, `cos_region` is required.

» Attributes Reference

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

- `code_error` - SCF function code error message.
- `code_result` - SCF function code is correct.
- `code_size` - SCF function code size, unit is M.
- `eip_fixed` - Whether EIP is a fixed IP.
- `eips` - SCF function EIP list.
- `err_no` - SCF function code error code.
- `host` - SCF function domain name.
- `install_dependency` - Whether to automatically install dependencies.
- `modify_time` - SCF function last modified time.
- `status_desc` - SCF status description.
- `status` - SCF function status.
- `trigger_info` - SCF trigger details list. Each element contains the following attributes:
  - `create_time` - Create time of SCF function trigger.
  - `custom_argument` - User-defined parameters of SCF function trigger.
  - `enable` - Whether SCF function trigger is enable.
  - `modify_time` - Modify time of SCF function trigger.
  - `name` - Name of SCF function trigger.
  - `trigger_desc` - TriggerDesc of SCF function trigger.
  - `type` - Type of SCF function trigger.
- `vip` - SCF function vip.

» Import

SCF function can be imported, e.g.

NOTE: function id is `<function namespace>+<function name>`

```
$ terraform import tencentcloud_scf_function.test default+test
```

» tencentcloud_scf_namespace

Provide a resource to create a SCF namespace.

» Example Usage

```
resource "tencentcloud_scf_namespace" "foo" {
  namespace = "ci-test-scf"
}
```

» Argument Reference

The following arguments are supported:

- `namespace` - (Required, ForceNew) Name of the SCF namespace.
- `description` - (Optional) Description of the SCF namespace.

» Attributes Reference

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

- `create_time` - SCF namespace creation time.
- `modify_time` - SCF namespace last modified time.
- `type` - SCF namespace type.

» Import

SCF namespace can be imported, e.g.

```
$ terraform import tencentcloud_scf_function.test default
```

» tencentcloud_tcaplus_applications

Use this data source to query tcaplus applications

» Example Usage

```
data "tencentcloud_tcaplus_applications" "name" {
  app_name = "app"
}
data "tencentcloud_tcaplus_applications" "id" {
  app_id = tencentcloud_tcaplus_application.test.id
}
data "tencentcloud_tcaplus_applications" "idname" {
  app_id   = tencentcloud_tcaplus_application.test.id
  app_name = "app"
}
```

» Argument Reference

The following arguments are supported:

- `app_id` - (Optional) Id of the tcapplus application to be query.
- `app_name` - (Optional) Name of the tcapplus application to be query.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `list` - A list of tcaplus application. Each element contains the following attributes.
  - `api_access_id` - Access id of the tcapplus application.For TcaplusDB SDK connect.
  - `api_access_ip` - Access ip of the tcapplus application.For TcaplusDB SDK connect.
  - `api_access_port` - Access port of the tcapplus application.For TcaplusDB SDK connect.
  - `create_time` - Create time of the tcapplus application.
  - `idl_type` - Idl type of the tcapplus application.
  - `network_type` - Network type of the tcapplus application.
  - `old_password_expire_time` - This field will display the old password expiration time,if password_status is `unmodifiable` means the old password has not yet expired, otherwise `-`.
  - `password_status` - Password status of the tcapplus application.`unmodifiable` means:can not change password now,`modifiable` means:can change password now.
  - `password` - Password of the tcapplus application.
  - `subnet_id` - Subnet id of the tcapplus application.
  - `vpc_id` - VPC id of the tcapplus application.

» tencentcloud_tcaplus_idls

Use this data source to query tcaplus idl files

» Example Usage

```
data "tencentcloud_tcaplus_idls" "id_test" {
  app_id = "19162256624"
}
```

» Argument Reference

The following arguments are supported:

- `app_id` - (Required) Id of the tcapplus application to be query.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `list` - A list of tcaplus idls. Each element contains the following attributes.
  - `idl_id` - Id of this idl.

» tencentcloud_tcaplus_tables

Use this data source to query tcaplus tables

» Example Usage

```
data "tencentcloud_tcaplus_tables" "null" {
  app_id = "19162256624"
}

data "tencentcloud_tcaplus_tables" "zone" {
  app_id  = "19162256624"
  zone_id = "19162256624:3"
}

data "tencentcloud_tcaplus_tables" "name" {
  app_id     = "19162256624"
  zone_id    = "19162256624:3"
  table_name = "guagua"
}

data "tencentcloud_tcaplus_tables" "id" {
  app_id   = "19162256624"
  table_id = "tcaplus-faa65eb7"
}
data "tencentcloud_tcaplus_tables" "all" {
  app_id     = "19162256624"
  zone_id    = "19162256624:3"
  table_id   = "tcaplus-faa65eb7"
  table_name = "guagua"
}
```

» Argument Reference

The following arguments are supported:

- `app_id` - (Required) Id of the tcapplus application to be query.
- `result_output_file` - (Optional) Used to save results.
- `table_id` - (Optional) Table id to be query.
- `table_name` - (Optional) Table name to be query.
- `zone_id` - (Optional) Zone id to be query.

» Attributes Reference

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

- `list` - A list of tcaplus zones. Each element contains the following attributes.
  - `create_time` - Create time of the tcapplus table.
  - `description` - Description of this table.
  - `error` - Show if this table create error.
  - `idl_id` - Idl file id for this table.
  - `reserved_read_qps` - Table reserved read QPS.
  - `reserved_volume` - Table reserved capacity(GB).
  - `reserved_write_qps` - Table reserved write QPS.
  - `status` - Status of this table.
  - `table_id` - Id of this table.
  - `table_idl_type` - Type of this table idl.
  - `table_name` - Name of this table.
  - `table_size` - Size of this table.
  - `table_type` - Type of this table.
  - `zone_id` - Zone of this table belongs.

» tencentcloud_tcaplus_zones

Use this data source to query tcaplus zones

» Example Usage

```
data "tencentcloud_tcaplus_zones" "null" {
  app_id = "19162256624"
}
data "tencentcloud_tcaplus_zones" "id" {
  app_id  = "19162256624"
  zone_id = "19162256624:1"
}
data "tencentcloud_tcaplus_zones" "name" {
  app_id    = "19162256624"
  zone_name = "test"
```

```
}
data "tencentcloud_tcaplus_zones" "all" {
  app_id    = "19162256624"
  zone_id   = "19162256624:1"
  zone_name = "test"
}
```

» Argument Reference

The following arguments are supported:

- `app_id` - (Required) Id of the tcapplus application to be query.
- `result_output_file` - (Optional) Used to save results.
- `zone_id` - (Optional) Zone id to be query.
- `zone_name` - (Optional) Zone name to be query.

» Attributes Reference

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

- `list` - A list of tcaplus zones. Each element contains the following attributes.
  - `create_time` - Create time of the tcapplus zone.
  - `table_count` - Number of tables.
  - `total_size` - The total storage(MB).
  - `zone_id` - Id of the tcapplus zone.
  - `zone_name` - Name of the tcapplus zone.

» tencentcloud_tcaplus_application

Use this resource to create tcaplus application

NOTE: tcaplus now only supports the following regions:ap-shanghai,ap-hongkong,na-siliconvalley,ap-singapore,ap-seoul,ap-tokyo,eu-frankfurt

» Example Usage

» Argument Reference

The following arguments are supported:

- `app_name` - (Required) Name of the tcapplus application. length should between 1 and 30.

- `idl_type` - (Required, ForceNew) Idl type of the tcapplus application.Valid values are PROTO,TDR,MIX.
- `password` - (Required) Password of the tcapplus application. length should between 12 and 16,a-z and 0-9 and A-Z must contain.
- `subnet_id` - (Required, ForceNew) Subnet id of the tcapplus application.
- `vpc_id` - (Required, ForceNew) VPC id of the tcapplus application.
- `old_password_expire_last` - (Optional) Old password expected expiration seconds after change password,must >= 300.

» Attributes Reference

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

- `api_access_id` - Access id of the tcapplus application.For TcaplusDB SDK connect.
- `api_access_ip` - Access ip of the tcapplus application.For TcaplusDB SDK connect.
- `api_access_port` - Access port of the tcapplus application.For TcaplusDB SDK connect.
- `create_time` - Create time of the tcapplus application.
- `network_type` - Network type of the tcapplus application.
- `old_password_expire_time` - This field will display the old password expiration time,if password_status is `unmodifiable` means the old password has not yet expired, otherwise `-`.
- `password_status` - Password status of the tcapplus application.`unmodifiable` means:can not change password now,`modifiable` means:can change password now.

» Import

tcaplus application can be imported using the id, e.g.

```
$ terraform import tencentcloud_tcaplus_application.test 26655801
```

» tencentcloud_tcaplus_idl

Use this resource to create tcaplus idl file

» Example Usage

```
resource "tencentcloud_tcaplus_application" "test" {
```

```
  idl_type                 = "PROTO"
  app_name                 = "tf_tcaplus_app_test"
  vpc_id                   = "vpc-7k6gzox6"
  subnet_id                = "subnet-akwgvfa3"
  password                 = "1qaA2k1wgvfa3ZZZ"
  old_password_expire_last = 3600
}

resource "tencentcloud_tcaplus_zone" "zone" {
  app_id    = tencentcloud_tcaplus_application.test.id
  zone_name = "tf_test_zone_name"
}

resource "tencentcloud_tcaplus_idl" "main" {
  app_id        = tencentcloud_tcaplus_application.test.id
  zone_id       = tencentcloud_tcaplus_zone.zone.id
  file_name     = "tf_idl_test"
  file_type     = "PROTO"
  file_ext_type = "proto"
  file_content  = <<EOF
    syntax = "proto2";
    package myTcaplusTable;
    import "tcaplusservice.optionv1.proto";
    message tb_online {
        option(tcaplusservice.tcaplus_primary_key) = "uin,name,region";
        required int64 uin = 1;
        required string name = 2;
        required int32 region = 3;
        required int32 gamesvrid = 4;
        optional int32 logintime = 5 [default = 1];
        repeated int64 lockid = 6 [packed = true];
        optional bool is_available = 7 [default = false];
        optional pay_info pay = 8;
    }

    message pay_info {
        required int64 pay_id = 1;
        optional uint64 total_money = 2;
        optional uint64 pay_times = 3;
        optional pay_auth_info auth = 4;
        message pay_auth_info {
            required string pay_keys = 1;
            optional int64 update_time = 2;
        }
    }
    EOF
```

```
}
```

» Argument Reference

The following arguments are supported:

- `app_id` - (Required, ForceNew) Application id of the idl belongs..
- `file_content` - (Required, ForceNew) Idl file content.
- `file_ext_type` - (Required, ForceNew) File ext type of this idl file. if `file_type` is PROTO `file_ext_type` must be 'proto',if `file_type` is TDR `file_ext_type` must be 'xml',if `file_type` is MIX `file_ext_type` must be 'xml' or 'proto'.
- `file_name` - (Required, ForceNew) Name of this idl file.
- `file_type` - (Required, ForceNew) Type of this idl file, Valid values are PROTO,TDR,MIX.
- `zone_id` - (Required, ForceNew) Zone of this idl belongs.

» Attributes Reference

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

- `table_infos` - Table infos in this idl.
  - `error` - Show if this table error.
  - `index_key_set` - Index key set of this table.
  - `key_fields` - Key fields of this table.
  - `sum_key_field_size` - Key fields size of this table.
  - `sum_value_field_size` - Value fields size of this table.
  - `table_name` - Name of this table.
  - `value_fields` - Value fields of this table.

» tencentcloud_tcaplus_table

Use this resource to create tcaplus table

» Example Usage

```
resource "tencentcloud_tcaplus_application" "test" {
  idl_type                 = "PROTO"
  app_name                 = "tf_tcaplus_app_test"
  vpc_id                   = "vpc-7k6gzox6"
  subnet_id                = "subnet-akwgvfa3"
  password                 = "1qaA2k1wgvfa3ZZZ"
```

```
  old_password_expire_last = 3600
}

resource "tencentcloud_tcaplus_zone" "zone" {
  app_id    = tencentcloud_tcaplus_application.test.id
  zone_name = "tf_test_zone_name"
}

resource "tencentcloud_tcaplus_idl" "main" {
  app_id        = tencentcloud_tcaplus_application.test.id
  zone_id       = tencentcloud_tcaplus_zone.zone.id
  file_name     = "tf_idl_test_2"
  file_type     = "PROTO"
  file_ext_type = "proto"
  file_content  = <<EOF
    syntax = "proto2";
    package myTcaplusTable;
    import "tcaplusservice.optionv1.proto";
    message tb_online {
       option(tcaplusservice.tcaplus_primary_key) = "uin,name,region";
        required int64 uin = 1;
        required string name = 2;
        required int32 region = 3;
        required int32 gamesvrid = 4;
        optional int32 logintime = 5 [default = 1];
        repeated int64 lockid = 6 [packed = true];
        optional bool is_available = 7 [default = false];
        optional pay_info pay = 8;
    }

    message pay_info {
        required int64 pay_id = 1;
        optional uint64 total_money = 2;
        optional uint64 pay_times = 3;
        optional pay_auth_info auth = 4;
        message pay_auth_info {
            required string pay_keys = 1;
            optional int64 update_time = 2;
        }
    }
    EOF
}

resource "tencentcloud_tcaplus_table" "table" {
  app_id             = tencentcloud_tcaplus_application.test.id
  zone_id            = tencentcloud_tcaplus_zone.zone.id
```

```
  table_name         = "tb_online"
  table_type         = "GENERIC"
  description        = "test"
  idl_id             = tencentcloud_tcaplus_idl.main.id
  table_idl_type     = "PROTO"
  reserved_read_qps  = 1000
  reserved_write_qps = 20
  reserved_volume    = 1
}
```

» Argument Reference

The following arguments are supported:

- `app_id` - (Required, ForceNew) Application of this table belongs.
- `idl_id` - (Required) Idl file for this table.
- `reserved_read_qps` - (Required, ForceNew) Table reserved read QPS.
- `reserved_volume` - (Required, ForceNew) Table reserved capacity(GB).
- `reserved_write_qps` - (Required, ForceNew) Table reserved write QPS.
- `table_idl_type` - (Required) Type of this table idl, Valid values are PROTO,TDR.
- `table_name` - (Required, ForceNew) Name of this table.
- `table_type` - (Required, ForceNew) Type of this table, Valid values are GENERIC,LIST.
- `zone_id` - (Required, ForceNew) Zone of this table belongs.
- `description` - (Optional) Description of this table.

» Attributes Reference

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

- `create_time` - Create time of the tcapplus table.
- `error` - Show if this table create error.
- `status` - Status of this table.
- `table_size` - Size of this table.

» tencentcloud_tcaplus_zone

Use this resource to create tcaplus zone

» Example Usage

```
resource "tencentcloud_tcaplus_application" "test" {
```

```
  idl_type                 = "PROTO"
  app_name                 = "tf_tcaplus_app_test"
  vpc_id                   = "vpc-7k6gzox6"
  subnet_id                = "subnet-akwgvfa3"
  password                 = "1qaA2k1wgvfa3ZZZ"
  old_password_expire_last = 3600
}

resource "tencentcloud_tcaplus_zone" "zone" {
  app_id    = tencentcloud_tcaplus_application.test.id
  zone_name = "tf_test_zone_name"
}
```

» Argument Reference

The following arguments are supported:

- `app_id` - (Required, ForceNew) Application of the tcapplus zone belongs.
- `zone_name` - (Required) Name of the tcapplus zone. length should between 1 and 30.

» Attributes Reference

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

- `create_time` - Create time of the tcapplus zone.
- `table_count` - Number of tables.
- `total_size` - The total storage(MB).

» tencentcloud_dnats

Use this data source to query detailed information of DNATs.

» Example Usage

```
# query by nat gateway id
data "tencentcloud_dnats" "foo" {
  nat_id = "nat-xfaq1"
}

# query by vpc id
data "tencentcloud_dnats" "foo" {
```

```
  vpc_id = "vpc-xfqag"
}

# query by elastic ip
data "tencentcloud_dnats" "foo" {
  elastic_ip = "123.207.115.136"
}
```

» Argument Reference

The following arguments are supported:

- `description` - (Optional) Description of the NAT forward.
- `elastic_ip` - (Optional) Network address of the EIP.
- `elastic_port` - (Optional) Port of the EIP.
- `nat_id` - (Optional) Id of the NAT gateway.
- `private_ip` - (Optional) Network address of the backend service.
- `private_port` - (Optional) Port of intranet.
- `result_output_file` - (Optional) Used to save results.
- `vpc_id` - (Optional) Id of the VPC.

» Attributes Reference

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

- `dnat_list` - Information list of the DNATs.
  - `elastic_ip` - Network address of the EIP.
  - `elastic_port` - Port of the EIP.
  - `nat_id` - Id of the NAT.
  - `private_ip` - Network address of the backend service.
  - `private_port` - Port of intranet.
  - `protocol` - Type of the network protocol, the available values include: `TCP` and `UDP`.
  - `vpc_id` - Id of the VPC.

» tencentcloud_enis

Use this data source to query query ENIs.

» Example Usage

```
data "tencentcloud_enis" "name" {
```

```
  name = "test eni"
}
```

» Argument Reference

The following arguments are supported:

- `description` - (Optional) Description of the ENI. Conflict with `ids`.
- `ids` - (Optional) ID of the ENIs to be queried. Conflict with `vpc_id`,`subnet_id`,`instance_id`,`security_group`,`name`,`ipv4` and `tags`.
- `instance_id` - (Optional) ID of the instance which bind the ENI. Conflict with `ids`.
- `ipv4` - (Optional) Intranet IP of the ENI. Conflict with `ids`.
- `name` - (Optional) Name of the ENI to be queried. Conflict with `ids`.
- `result_output_file` - (Optional) Used to save results.
- `security_group` - (Optional) A set of security group IDs which bind the ENI. Conflict with `ids`.
- `subnet_id` - (Optional) ID of the subnet within this vpc to be queried. Conflict with `ids`.
- `tags` - (Optional) Tags of the ENI. Conflict with `ids`.
- `vpc_id` - (Optional) ID of the vpc to be queried. Conflict with `ids`.

» Attributes Reference

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

- `enis` - An information list of ENIs. Each element contains the following attributes:
  - `create_time` - Creation time of the ENI.
  - `description` - Description of the ENI.
  - `id` - ID of the ENI.
  - `instance_id` - ID of the instance which bind the ENI.
  - `ipv4s` - A set of intranet IPv4s.
  - `description` - Description of the IP.
  - `ip` - Intranet IP.
  - `primary` - Indicates whether the IP is primary.
  - `mac` - MAC address.
  - `name` - Name of the ENI.
  - `primary` - Indicates whether the IP is primary.
  - `security_groups` - A set of security group IDs which bind the ENI.
  - `state` - States of the ENI.
  - `subnet_id` - ID of the subnet within this vpc.
  - `tags` - Tags of the ENI.
  - `vpc_id` - ID of the vpc.

» tencentcloud_ha_vip_eip_attachments

Use this data source to query detailed information of HA VIP EIP attachments

» Example Usage

```
data "tencentcloud_ha_vip_eip_attachments" "foo" {
  havip_id   = "havip-kjqwe4ba"
  address_ip = "1.1.1.1"
}
```

» Argument Reference

The following arguments are supported:

- `havip_id` - (Required) Id of the attached HA VIP to be queried.
- `address_ip` - (Optional) Public IP address of EIP to be queried.
- `result_output_file` - (Optional) Used to save results.

» Attributes Reference

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

- `ha_vip_eip_attachment_list` - A list of HA VIP EIP attachments. Each element contains the following attributes:
  - `address_ip` - Public IP address of EIP.
  - `havip_id` - Id of the attached HA VIP.

» tencentcloud_ha_vips

Use this data source to query detailed information of HA VIPs.

» Example Usage

```
data "tencentcloud_ha_vips" "havips" {
  id         = "havip-kjqwe4ba"
  name       = "test"
  vpc_id     = "vpc-gzea3dd7"
  subnet_id  = "subnet-4d4m4cd4"
  address_ip = "10.0.4.16"
}
```

» Argument Reference

The following arguments are supported:

- `address_ip` - (Optional) EIP of the HA VIP to be queried.
- `id` - (Optional) Id of the HA VIP to be queried.
- `name` - (Optional) Name of the HA VIP. The length of character is limited to 1-60.
- `result_output_file` - (Optional) Used to save results.
- `subnet_id` - (Optional) Subnet id of the HA VIP to be queried.
- `vpc_id` - (Optional) VPC id of the HA VIP to be queried.

» Attributes Reference

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

- `ha_vip_list` - Information list of the dedicated HA VIPs.
  - `address_ip` - EIP that is associated.
  - `create_time` - Create time of the HA VIP.
  - `id` - Id of the HA VIP.
  - `instance_id` - Instance id that is associated.
  - `name` - Name of the HA VIP.
  - `network_interface_id` - Network interface id that is associated.
  - `state` - State of the HA VIP, values are `AVAILABLE`, `UNBIND`.
  - `subnet_id` - Subnet id.
  - `vip` - Virtual IP address, it must not be occupied and in this VPC network segment. If not set, it will be assigned after resource created automatically.
  - `vpc_id` - VPC id.

» tencentcloud_nat_gateways

Use this data source to query detailed information of NAT gateways.

» Example Usage

```
data "tencentcloud_nat_gateways" "foo" {
  name   = "main"
  vpc_id = "vpc-xfqag"
  id     = "nat-xfaq1"
}
```

» Argument Reference

The following arguments are supported:

- `id` - (Optional) Id of the NAT gateway.
- `name` - (Optional) Name of the NAT gateway.
- `result_output_file` - (Optional) Used to save results.
- `vpc_id` - (Optional) Id of the VPC.

» Attributes Reference

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

- `nats` - Information list of the dedicated NATs.
  - `assigned_eip_set` - EIP IP address set bound to the gateway. The value of at least 1.
  - `bandwidth` - The maximum public network output bandwidth of NAT gateway (unit: Mbps), the available values include: 20,50,100,200,500,1000,2000,5000. Default is 100.
  - `create_time` - Create time of the NAT gateway.
  - `id` - Id of the NAT gateway.
  - `max_concurrent` - The upper limit of concurrent connection of NAT gateway, the available values include: 1000000,3000000,10000000. Default is 1000000.
  - `name` - Name of the NAT gateway.
  - `state` - State of the NAT gateway.
  - `vpc_id` - Id of the VPC.

» tencentcloud_nats

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

NOTE: It has been deprecated and replaced by tencentcloud_nat_gateways.

» Example 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:

- `bandwidth` - (Optional) The maximum public network output bandwidth of the gateway (unit: Mbps), for example: 10, 20, 50, 100, 200, 500, 1000, 2000, 5000.
- `id` - (Optional) The ID for NAT Gateway.
- `max_concurrent` - (Optional) The upper limit of concurrent connection of NAT gateway, for example: 1000000, 3000000, 10000000.
- `name` - (Optional) The name for NAT Gateway.
- `state` - (Optional) NAT gateway status, 0: Running, 1: Unavailable, 2: Be in arrears and out of service.
- `vpc_id` - (Optional) The VPC ID for NAT Gateway.

» Attributes Reference

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

- `nats` - Information list of the dedicated tunnels.
  - `assigned_eip_set` - Elastic IP arrays bound to the gateway.
  - `bandwidth` - The maximum public network output bandwidth of the gateway (unit: Mbps), for example: 10, 20, 50, 100, 200, 500, 1000, 2000, 5000.
  - `create_time` - The create time of the NAT gateway.
  - `id` - The ID for NAT Gateway.
  - `max_concurrent` - The upper limit of concurrent connection of NAT gateway, for example: 1000000, 3000000, 10000000.
  - `name` - The name for NAT Gateway.
  - `state` - NAT gateway status, 0: Running, 1: Unavailable, 2: Be in arrears and out of service.
  - `vpc_id` - The VPC ID for NAT Gateway.

» 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

```
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 following arguments are supported:

- `route_table_id` - (Required) The Route Table ID.
- `name` - (Optional) The Route Table name.

» Attributes Reference

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

- `create_time` - Creation time of routing table.
- `routes` - The information list of the VPC route table.
  - `cidr_block` - The RouteEntry's target network segment.
  - `description` - The RouteEntry's description.
  - `next_hub` - The RouteEntry's next hub.
  - `next_type` - The `next_hub` type.
- `subnet_num` - Number of associated subnets.
- `vpc_id` - The VPC ID.

» 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:

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

» 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.
- `description` - Description of the security group.
- `project_id` - Project ID of the 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 to be queried. Conflict with `security_group_id`.
- `result_output_file` - (Optional) Used to save results.
- `security_group_id` - (Optional) ID of the security group to be queried. Conflict with `name` and `project_id`.
- `tags` - (Optional) Tags of the security group to be queried. Conflict with `security_group_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.
  - `egress` - Egress rules set. For items like `[action]#[cidr_ip]#[port]#[protocol]`, it means a regular rule; for items like `sg-XXXX`, it means a nested security group.
  - `ingress` - Ingress rules set. For items like `[action]#[cidr_ip]#[port]#[protocol]`, it means a regular rule; for items like `sg-XXXX`, it means a nested security group.
  - `name` - Name of the security group.
  - `project_id` - Project ID of the security group.
  - `security_group_id` - ID of the security group.
  - `tags` - Tags of the security group.

» 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

```
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 following arguments are supported:

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

» Attributes Reference

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

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

» 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

```
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) The name of the specific VPC to retrieve.

» Attributes Reference

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

- `is_default` - (Optional) Filter default or no default vpcs.
- `name` - (Optional) Name of the VPC to be queried.
- `result_output_file` - (Optional) Used to save results.
- `tags` - (Optional) Tags of the VPC to be queried.
- `vpc_id` - (Optional) 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.
  - `tags` - Tags of the 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"

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

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
}

data "tencentcloud_vpc_route_tables" "tags_instances" {
  tags = tencentcloud_route_table.route_table.tags
}
```

» Argument Reference

The following arguments are supported:

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

  tags = {
```

```
    "test" = "test"
  }
}

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

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

data "tencentcloud_vpc_subnets" "tags_instances" {
  tags = tencentcloud_subnet.subnet.tags
}
```

» Argument Reference

The following arguments are supported:

- `availability_zone` - (Optional) Zone of the subnet to be queried.
- `is_default` - (Optional) Filter default or no default subnets.
- `name` - (Optional) Name of the subnet to be queried.
- `result_output_file` - (Optional) Used to save results.
- `subnet_id` - (Optional) ID of the subnet to be queried.
- `tags` - (Optional) Tags of the subnet to be queried.
- `vpc_id` - (Optional) ID of the VPC 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.
  - `tags` - Tags of the subnet resource.
  - `vpc_id` - ID of the VPC.

» tencentcloud_dnat

Provides a resource to create a NAT forwarding.

» Example Usage

```
resource "tencentcloud_dnat" "foo" {
  vpc_id       = "vpc-asg3sfa3"
  nat_id       = "nat-2515tdg"
  protocol     = "tcp"
  elastic_ip   = "139.199.232.238"
  elastic_port = 80
  private_ip   = "10.0.0.1"
  private_port = 22
  description  = "test"
}
```

» Argument Reference

The following arguments are supported:

- `elastic_ip` - (Required, ForceNew) Network address of the EIP.
- `elastic_port` - (Required, ForceNew) Port of the EIP.
- `nat_id` - (Required, ForceNew) Id of the NAT gateway.
- `private_ip` - (Required, ForceNew) Network address of the backend service.
- `private_port` - (Required, ForceNew) Port of intranet.
- `protocol` - (Required, ForceNew) Type of the network protocol, the available values are: `TCP` and `UDP`.
- `vpc_id` - (Required, ForceNew) Id of the VPC.
- `description` - (Optional) Description of the NAT forward.

» Import

NAT forwarding can be imported using the id, e.g.

```
$ terraform import tencentcloud_dnat.foo tcp://vpc-asg3sfa3:nat-1asg3t63@127.15.2.3:8080
```

» tencentcloud_eni

Provides a resource to create an ENI.

» Example Usage

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

resource "tencentcloud_subnet" "foo" {
  availability_zone = "ap-guangzhou-3"
  name              = "ci-test-eni-subnet"
  vpc_id            = tencentcloud_vpc.foo.id
  cidr_block        = "10.0.0.0/16"
  is_multicast      = false
}

resource "tencentcloud_eni" "foo" {
  name        = "ci-test-eni"
  vpc_id      = tencentcloud_vpc.foo.id
  subnet_id   = tencentcloud_subnet.foo.id
  description = "eni desc"
  ipv4_count  = 1
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the ENI, maximum length 60.
- `subnet_id` - (Required, ForceNew) ID of the subnet within this vpc.
- `vpc_id` - (Required, ForceNew) ID of the vpc.
- `description` - (Optional) Description of the ENI, maximum length 60.
- `ipv4_count` - (Optional) The number of intranet IPv4s. When it is greater than 1, there is only one primary intranet IP. The others are auxiliary intranet IPs, which conflict with `ipv4s`.
- `ipv4s` - (Optional) Applying for intranet IPv4s collection, conflict with `ipv4_count`. When there are multiple ipv4s, can only be one primary IP, and the maximum length of the array is 30. Each element contains the following attributes:
- `security_groups` - (Optional) A set of security group IDs.
- `tags` - (Optional) Tags of the ENI.

The `ipv4s` object supports the following:

- `ip` - (Required) Intranet IP.
- `primary` - (Required) Indicates whether the IP is primary.
- `description` - (Optional) Description of the IP, maximum length 25.

» Attributes Reference

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

- `create_time` - Creation time of the ENI.
- `ipv4_info` - An information list of IPv4s. Each element contains the following attributes:
  - `description` - Description of the IP.
  - `ip` - Intranet IP.
  - `primary` - Indicates whether the IP is primary.
- `mac` - MAC address.
- `primary` - Indicates whether the IP is primary.
- `state` - State of the ENI.

» Import

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

```
$ terraform import tencentcloud_eni.foo eni-qka182br
```

» tencentcloud_eni_attachment

Provides a resource to detailed information of attached backend server to an ENI.

» Example Usage

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

resource "tencentcloud_subnet" "foo" {
  availability_zone = "ap-guangzhou-3"
  name              = "ci-test-eni-subnet"
  vpc_id            = tencentcloud_vpc.foo.id
  cidr_block        = "10.0.0.0/16"
  is_multicast      = false
}

resource "tencentcloud_eni" "foo" {
  name        = "ci-test-eni"
  vpc_id      = tencentcloud_vpc.foo.id
```

```
  subnet_id   = tencentcloud_subnet.foo.id
  description = "eni desc"
  ipv4_count  = 1
}

data "tencentcloud_images" "my_favorite_image" {
  image_type = ["PUBLIC_IMAGE"]
  os_name    = "centos"
}

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

  cpu_core_count = 1
  memory_size    = 1
}

data "tencentcloud_availability_zones" "my_favorite_zones" {
}

resource "tencentcloud_instance" "foo" {
  instance_name            = "ci-test-eni-attach"
  availability_zone        = data.tencentcloud_availability_zones.my_favorite_zones.zones.0
  image_id                 = data.tencentcloud_images.my_favorite_image.images.0.image_id
  instance_type            = data.tencentcloud_instance_types.my_favorite_instance_types.ins
  system_disk_type         = "CLOUD_PREMIUM"
  disable_security_service = true
  disable_monitor_service  = true
  vpc_id                   = tencentcloud_vpc.foo.id
  subnet_id                = tencentcloud_subnet.foo.id
}

resource "tencentcloud_eni_attachment" "foo" {
  eni_id      = tencentcloud_eni.foo.id
  instance_id = tencentcloud_instance.foo.id
}
```

» Argument Reference

The following arguments are supported:

- `eni_id` - (Required, ForceNew) ID of the ENI.

- `instance_id` - (Required, ForceNew) ID of the instance which bind the ENI.

» Import

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

```
$ terraform import tencentcloud_eni_attachment.foo eni-gtlvkjvz+ins-0h3a5new
```

» tencentcloud_ha_vip

Provides a resource to create a HA VIP.

» Example Usage

```
resource "tencentcloud_ha_vip" "foo" {
  name      = "terraform_test"
  vpc_id    = "vpc-gzea3dd7"
  subnet_id = "subnet-4d4m4cd4s"
  vip       = "10.0.4.16"
}
```

» Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the HA VIP. The length of character is limited to 1-60.
- `subnet_id` - (Required, ForceNew) Subnet id.
- `vpc_id` - (Required, ForceNew) VPC id.
- `vip` - (Optional, ForceNew) Virtual IP address, it must not be occupied and in this VPC network segment. If not set, it will be assigned after resource created automatically.

» Attributes Reference

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

- `address_ip` - EIP that is associated.
- `create_time` - Create time of the HA VIP.
- `instance_id` - Instance id that is associated.
- `network_interface_id` - Network interface id that is associated.

- `state` - State of the HA VIP, values are `AVAILABLE`, `UNBIND`.

» Import

HA VIP can be imported using the id, e.g.

```
$ terraform import tencentcloud_ha_vip.foo havip-kjqwe4ba
```

» tencentcloud_ha_vip_eip_attachment

Provides a resource to create a HA VIP EIP attachment.

» Example Usage

```
resource "tencentcloud_ha_vip_eip_attachment" "foo" {
  havip_id   = "havip-kjqwe4ba"
  address_ip = "1.1.1.1"
}
```

» Argument Reference

The following arguments are supported:

- `address_ip` - (Required, ForceNew) Public address of the EIP.
- `havip_id` - (Required, ForceNew) Id of the attached HA VIP.

» Import

HA VIP EIP attachment can be imported using the id, e.g.

```
$ terraform import tencentcloud_ha_vip_eip_attachment.foo havip-kjqwe4ba#1.1.1.1
```

» tencentcloud_nat_gateway

Provides a resource to create a NAT gateway.

» Example Usage

```
resource "tencentcloud_nat_gateway" "foo" {
  name             = "test_nat_gateway"
  vpc_id           = "vpc-4xxr2cy7"
  bandwidth        = 100
  max_concurrent   = 1000000
  assigned_eip_set = ["1.1.1.1"]
}
```

» Argument Reference

The following arguments are supported:

- `assigned_eip_set` - (Required) EIP IP address set bound to the gateway. The value of at least 1 and at most 10.
- `name` - (Required) Name of the NAT gateway.
- `vpc_id` - (Required, ForceNew) ID of the vpc.
- `bandwidth` - (Optional) The maximum public network output bandwidth of NAT gateway (unit: Mbps), the available values include: 20,50,100,200,500,1000,2000,5000. Default is 100.
- `max_concurrent` - (Optional) The upper limit of concurrent connection of NAT gateway, the available values include: 1000000,3000000,10000000. Default is 1000000.

» Attributes Reference

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

- `created_time` - Create time of the NAT gateway.

» Import

NAT gateway can be imported using the id, e.g.

```
$ terraform import tencentcloud_nat_gateway.foo nat-1asg3t63
```

» 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

```
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 = tencentcloud_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:

- `cidr_block` - (Required, ForceNew) The RouteEntry's target network segment.
- `next_hub` - (Required, ForceNew) The route entry's next hub. CVM instance ID or VPC router interface ID.
- `next_type` - (Required, ForceNew) 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.
- `route_table_id` - (Required, ForceNew) The ID of the route table.
- `vpc_id` - (Required, ForceNew) The VPC ID.

» 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.
- `tags` - (Optional) The tags of routing table.

» 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_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_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.
- `tags` - (Optional) Tags 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_lite_rule

Provide a resource to create security group some lite rules quickly.

NOTE: It can't be used with tencentcloud_security_group_rule.

» Example Usage

```
resource "tencentcloud_security_group" "foo" {
  name = "ci-temp-test-sg"
}

resource "tencentcloud_security_group_lite_rule" "foo" {
  security_group_id = tencentcloud_security_group.foo.id

  ingress = [
    "ACCEPT#192.168.1.0/24#80#TCP",
    "DROP#8.8.8.8#80,90#UDP",
    "ACCEPT#0.0.0.0/0#80-90#TCP",
  ]

  egress = [
    "ACCEPT#192.168.0.0/16#ALL#TCP",
    "ACCEPT#10.0.0.0/8#ALL#ICMP",
    "DROP#0.0.0.0/0#ALL#ALL",
  ]
}
```

» Argument Reference

The following arguments are supported:

- `security_group_id` - (Required, ForceNew) ID of the security group.
- `egress` - (Optional) Egress rules set. A rule must match the following format: [action]#[cidr_ip]#[port]#[protocol]. The available value of 'action' is `ACCEPT` and `DROP`. The 'cidr_ip' must be an IP address network or segment. The 'port' valid format is `80`, `80,443`, `80-90` or `ALL`. The available value of 'protocol' is `TCP`, `UDP`, `ICMP` and `ALL`. When 'protocol' is `ICMP` or `ALL`, the 'port' must be `ALL`.
- `ingress` - (Optional) Ingress rules set. A rule must match the following format: [action]#[cidr_ip]#[port]#[protocol]. The available value of 'action' is `ACCEPT` and `DROP`. The 'cidr_ip' must be an IP address network or segment. The 'port' valid format is `80`, `80,443`, `80-90` or `ALL`. The available value of 'protocol' is `TCP`, `UDP`, `ICMP` and `ALL`. When 'protocol' is `ICMP` or `ALL`, the 'port' must be `ALL`.

» Import

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

```
$ terraform import tencentcloud_security_group_lite_rule.foo 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_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.
- `tags` - (Optional) Tags of the subnet.

» 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_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

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

» 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'.
- `tags` - (Optional) Tags of the VPC.

» 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_vpn_connections

Use this data source to query detailed information of VPN connections.

» Example Usage

```
data "tencentcloud_vpn_connections" "foo" {
  name                = "main"
  id                  = "vpnx-xfqag"
  vpn_gateway_id      = "vpngw-8ccsnclt"
  vpc_id              = "cgw-xfqag"
  customer_gateway_id = ""
  tags = {
    test = "tf"
  }
}
```

» Argument Reference

The following arguments are supported:

- `customer_gateway_id` - (Optional) Customer gateway ID of the VPN connection.
- `id` - (Optional) ID of the VPN connection.
- `name` - (Optional) Name of the VPN connection. The length of character is limited to 1-60.
- `result_output_file` - (Optional) Used to save results.
- `tags` - (Optional) Tags of the VPN connection to be queried.
- `vpc_id` - (Optional) ID of the VPC.
- `vpn_gateway_id` - (Optional) VPN gateway ID of the VPN connection.

» Attributes Reference

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

- `connection_list` - Information list of the dedicated connections.
  - `create_time` - Create time of the VPN connection.
  - `customer_gateway_id` - ID of the customer gateway.
  - `encrypt_proto` - Encrypt proto of the VPN connection.
  - `id` - ID of the VPN connection.
  - `ike_dh_group_name` - DH group name of the IKE operation specification.
  - `ike_exchange_mode` - Exchange mode of the IKE operation specification.
  - `ike_local_address` - Local address of the IKE operation specification.
  - `ike_local_fqdn_name` - Local FQDN name of the IKE operation specification.

- `ike_local_identity` - Local identity of the IKE operation specification.
- `ike_proto_authen_algorithm` - Proto authenticate algorithm of the IKE operation specification.
- `ike_proto_encry_algorithm` - Proto encrypt algorithm of the IKE operation specification.
- `ike_remote_address` - Remote address of the IKE operation specification.
- `ike_remote_fqdn_name` - Remote FQDN name of the IKE operation specification.
- `ike_remote_identity` - Remote identity of the IKE operation specification.
- `ike_sa_lifetime_seconds` - SA lifetime of the IKE operation specification, unit is `second`.
- `ike_version` - Version of the IKE operation specification.
- `ipsec_encrypt_algorithm` - Encrypt algorithm of the IPSEC operation specification.
- `ipsec_integrity_algorithm` - Integrity algorithm of the IPSEC operation specification.
- `ipsec_pfs_dh_group` - PFS DH group name of the IPSEC operation specification.
- `ipsec_sa_lifetime_seconds` - SA lifetime of the IPSEC operation specification, unit is `second`.
- `ipsec_sa_lifetime_traffic` - SA lifetime traffic of the IPSEC operation specification, unit is `KB`.
- `name` - Name of the VPN connection.
- `net_status` - Net status of the VPN connection.
- `pre_share_key` - Pre-shared key of the VPN connection.
- `route_type` - Route type of the VPN connection.
- `security_group_policy` - Security group policy of the VPN connection.
- `local_cidr_block` - Local cidr block.
- `remote_cidr_block` - Remote cidr block list.
- `state` - State of the VPN connection.
- `tags` - A list of tags used to associate different resources.
- `vpc_id` - ID of the VPC.
- `vpn_gateway_id` - ID of the VPN gateway.
- `vpn_proto` - Vpn proto of the VPN connection.

» tencentcloud__vpn__customer__gateways

Use this data source to query detailed information of VPN customer gateways.

» Example Usage

```
data "tencentcloud_customer_gateways" "foo" {
  name              = "main"
  id                = "cgw-xfqag"
  public_ip_address = "1.1.1.1"
  tags = {
    test = "tf"
  }
}
```

» Argument Reference

The following arguments are supported:

- `id` - (Optional) ID of the VPN customer gateway.
- `name` - (Optional) Name of the customer gateway. The length of character is limited to 1-60.
- `public_ip_address` - (Optional) Public ip address of the VPN customer gateway.
- `result_output_file` - (Optional) Used to save results.
- `tags` - (Optional) Tags of the VPN customer gateway to be queried.

» Attributes Reference

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

- `gateway_list` - Information list of the dedicated gateways.
  - `create_time` - Create time of the VPN customer gateway.
  - `id` - ID of the VPN customer gateway.
  - `name` - Name of the VPN customer gateway.
  - `public_ip_address` - Public ip address of the VPN customer gateway.
  - `tags` - Tags of the VPN customer gateway.

» tencentcloud_vpn_gateways

Use this data source to query detailed information of VPN gateways.

» Example Usage

```
data "tencentcloud_vpn_gateways" "foo" {
```

```
  name              = "main"
  id                = "vpngw-8ccsnclt"
  public_ip_address = "1.1.1.1"
  zone              = "ap-guangzhou-3"
  vpc_id            = "vpc-dk8zmwuf"
  tags = {
    test = "tf"
  }
}
```

» Argument Reference

The following arguments are supported:

- `id` - (Optional) ID of the VPN gateway.
- `name` - (Optional) Name of the VPN gateway. The length of character is limited to 1-60.
- `public_ip_address` - (Optional) Public ip address of the VPN gateway.
- `result_output_file` - (Optional) Used to save results.
- `tags` - (Optional) Tags of the VPN gateway to be queried.
- `vpc_id` - (Optional) ID of the VPC.
- `zone` - (Optional) Zone of the VPN gateway.

» Attributes Reference

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

- `gateway_list` - Information list of the dedicated gateways.
  - `bandwidth` - The maximum public network output bandwidth of VPN gateway (unit: Mbps), the available values include: 5,10,20,50,100. Default is 5.
  - `charge_type` - Charge Type of the VPN gateway, valid values are `PREPAID`, `POSTPAID_BY_HOUR` and default is `POSTPAID_BY_HOUR`.
  - `create_time` - Create time of the VPN gateway.
  - `expired_time` - Expired time of the VPN gateway when charge type is `PREPAID`.
  - `id` - ID of the VPN gateway.
  - `is_address_blocked` - Indicates whether ip address is blocked.
  - `name` - Name of the VPN gateway.
  - `new_purchase_plan` - The plan of new purchase, valid value is `PREPAID_TO_POSTPAID`.
  - `prepaid_renew_flag` - Flag indicates whether to renew or not, valid values are `NOTIFY_AND_RENEW`, `NOTIFY_AND_AUTO_RENEW`, `NOT_NOTIFY_AND_NOT_RENEW`.
  - `public_ip_address` - Public ip of the VPN gateway.

  - `restrict_state` - Restrict state of VPN gateway, valid values are `PRETECIVELY_ISOLATED`, `NORMAL`.
  - `state` - State of the VPN gateway, valid values are `PENDING`, `DELETING`, `AVAILABLE`.
  - `tags` - A list of tags used to associate different resources.
  - `type` - Type of gateway instance, valid values are `IPSEC`, `SSL`.
  - `vpc_id` - ID of the VPC.
  - `zone` - Zone of the VPN gateway.

» tencentcloud_vpn_customer_gateway

Provides a resource to create a VPN customer gateway.

» Example Usage

```
resource "tencentcloud_vpn_customer_gateway" "foo" {
  name              = "test_vpn_customer_gateway"
  public_ip_address = "1.1.1.1"

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

» Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the customer gateway. The length of character is limited to 1-60.
- `public_ip_address` - (Required, ForceNew) Public ip of the customer gateway.
- `tags` - (Optional) A list of tags used to associate different resources.

» Attributes Reference

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

- `create_time` - Create time of the customer gateway.

» Import

VPN customer gateway can be imported using the id, e.g.

```
$ terraform import tencentcloud_vpn_customer_gateway.foo cgw-xfqag
```

» tencentcloud_vpn_gateway

Provides a resource to create a VPN gateway.

NOTE: The prepaid VPN gateway do not support renew operation or delete operation with terraform.

» Example Usage

POSTPAID_BY_HOUR VPN gateway

```
resource "tencentcloud_vpn_gateway" "my_cgw" {
  name      = "test"
  vpc_id    = "vpc-dk8zmwuf"
  bandwidth = 5
  zone      = "ap-guangzhou-3"

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

PREPAID VPN gateway

```
resource "tencentcloud_vpn_gateway" "my_cgw" {
  name           = "test"
  vpc_id         = "vpc-dk8zmwuf"
  bandwidth      = 5
  zone           = "ap-guangzhou-3"
  charge_type    = "PREPAID"
  prepaid_period = 1

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

» Argument Reference

The following arguments are supported:

- `name` - (Required) Name of the VPN gateway. The length of character is limited to 1-60.
- `vpc_id` - (Required, ForceNew) ID of the VPC.
- `zone` - (Required, ForceNew) Zone of the VPN gateway.
- `bandwidth` - (Optional) The maximum public network output bandwidth of VPN gateway (unit: Mbps), the available values include: 5,10,20,50,100. Default is 5. When charge type is `PREPAID`, bandwidth degradation operation is unsupported.
- `charge_type` - (Optional) Charge Type of the VPN gateway, valid values are `PREPAID`, `POSTPAID_BY_HOUR` and default is `POSTPAID_BY_HOUR`.
- `prepaid_period` - (Optional) Period of instance to be prepaid. Valid values are 1, 2, 3, 4, 6, 7, 8, 9, 12, 24, 36 and unit is month. Caution: when this para and renew_flag para are valid, the request means to renew several months more pre-paid period. This para can only be set to take effect in create operation.
- `prepaid_renew_flag` - (Optional) Flag indicates whether to renew or not, valid values are `NOTIFY_AND_RENEW`, `NOTIFY_AND_AUTO_RENEW`, `NOT_NOTIFY_AND_NOT_RENEW`. This para can only be set to take effect in create operation.
- `tags` - (Optional) A list of tags used to associate different resources.

» Attributes Reference

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

- `create_time` - Create time of the VPN gateway.
- `expired_time` - Expired time of the VPN gateway when charge type is `PREPAID`.
- `is_address_blocked` - Indicates whether ip address is blocked.
- `new_purchase_plan` - The plan of new purchase, valid value is `PREPAID_TO_POSTPAID`.
- `public_ip_address` - Public ip of the VPN gateway.
- `restrict_state` - Restrict state of gateway, valid values are `PRETECIVELY_ISOLATED`, `NORMAL`.
- `state` - State of the VPN gateway, valid values are `PENDING`, `DELETING`, `AVAILABLE`.
- `type` - Type of gateway instance, valid values are `IPSEC`, `SSL`.

» Import

VPN gateway can be imported using the id, e.g.

```
$ terraform import tencentcloud_vpn_gateway.foo vpngw-8ccsnclt
```

» tencentcloud_vpn_connection

Provides a resource to create a VPN connection.

» Example Usage

```
resource "tencentcloud_vpn_connection" "foo" {
  name                       = "vpn_connection_test"
  vpc_id                     = "vpc-dk8zmwuf"
  vpn_gateway_id             = "vpngw-8ccsnclt"
  customer_gateway_id        = "cgw-xfqag"
  pre_share_key              = "testt"
  ike_proto_encry_algorithm  = "3DES-CBC"
  ike_proto_authen_algorithm = "SHA"
  ike_local_identity         = "ADDRESS"
  ike_exchange_mode          = "AGGRESSIVE"
  ike_local_address          = "1.1.1.1"
  ike_remote_identity        = "ADDRESS"
  ike_remote_address         = "2.2.2.2"
  ike_dh_group_name          = "GROUP2"
  ike_sa_lifetime_seconds    = 86401
  ipsec_encrypt_algorithm    = "3DES-CBC"
  ipsec_integrity_algorithm  = "SHA1"
  ipsec_sa_lifetime_seconds  = 7200
  ipsec_pfs_dh_group         = "NULL"
  ipsec_sa_lifetime_traffic  = 2570

  security_group_policy {
    local_cidr_block  = "172.16.0.0/16"
    remote_cidr_block = ["2.2.2.0/26", ]
  }
  tags = {
    test = "testt"
  }
}
```

» Argument Reference

The following arguments are supported:

- `customer_gateway_id` - (Required, ForceNew) ID of the customer gateway.
- `name` - (Required) Name of the VPN connection. The length of character is limited to 1-60.
- `pre_share_key` - (Required) Pre-shared key of the VPN connection.
- `security_group_policy` - (Required) Security group policy of the VPN connection.
- `vpc_id` - (Required, ForceNew) ID of the VPC.
- `vpn_gateway_id` - (Required, ForceNew) ID of the VPN gateway.
- `ike_dh_group_name` - (Optional) DH group name of the IKE operation specification, valid values are `GROUP1`, `GROUP2`, `GROUP5`, `GROUP14`, `GROUP24`. Default value is `GROUP1`.
- `ike_exchange_mode` - (Optional) Exchange mode of the IKE operation specification, valid values are `AGGRESSIVE`, `MAIN`. Default value is `MAIN`.
- `ike_local_address` - (Optional) Local address of IKE operation specification, valid when ike_local_identity is `ADDRESS`, generally the value is public_ip_address of the related VPN gateway.
- `ike_local_fqdn_name` - (Optional) Local FQDN name of the IKE operation specification.
- `ike_local_identity` - (Optional) Local identity way of IKE operation specification, valid values are `ADDRESS`, `FQDN`. Default value is `ADDRESS`.
- `ike_proto_authen_algorithm` - (Optional) Proto authenticate algorithm of the IKE operation specification, valid values are `MD5`, `SHA`. Default Value is `MD5`.
- `ike_proto_encry_algorithm` - (Optional) Proto encrypt algorithm of the IKE operation specification, valid values are `3DES-CBC`, `AES-CBC-128`, `AES-CBC-128`, `AES-CBC-256`, `DES-CBC`. Default value is `3DES-CBC`.
- `ike_remote_address` - (Optional) Remote address of IKE operation specification, valid when ike_remote_identity is `ADDRESS`, generally the value is public_ip_address of the related customer gateway.
- `ike_remote_fqdn_name` - (Optional) Remote FQDN name of the IKE operation specification.
- `ike_remote_identity` - (Optional) Remote identity way of IKE operation specification, valid values are `ADDRESS`, `FQDN`. Default value is `ADDRESS`.
- `ike_sa_lifetime_seconds` - (Optional) SA lifetime of the IKE operation specification, unit is `second`. The value ranges from 60 to 604800. Default value is 86400 seconds.
- `ike_version` - (Optional) Version of the IKE operation specification. Default value is `IKEV1`.
- `ipsec_encrypt_algorithm` - (Optional) Encrypt algorithm of the IPSEC operation specification, valid values are `3DES-CBC`, `AES-CBC-128`, `AES-CBC-128`, `AES-CBC-256`, `DES-CBC`. Default value is `3DES-CBC`.
- `ipsec_integrity_algorithm` - (Optional) Integrity algorithm of the IPSEC operation specification, valid values are `SHA1`, `MD5`. Default value is `MD5`.
- `ipsec_pfs_dh_group` - (Optional) PFS DH group, valid values are `GROUP1`,

GROUP2, GROUP5, GROUP14, GROUP24, NULL. Default value is NULL.
- ipsec_sa_lifetime_seconds - (Optional) SA lifetime of the IPSEC operation specification, unit is second. The value ranges from 180 to 604800. Default value is 3600 seconds.
- ipsec_sa_lifetime_traffic - (Optional) SA lifetime of the IPSEC operation specification, unit is KB. The value should not be less then 2560. Default value is 1843200.
- tags - (Optional) A list of tags used to associate different resources.

The security_group_policy object supports the following:

- local_cidr_block - (Required) Local cidr block.
- remote_cidr_block - (Required) Remote cidr block list.

» Attributes Reference

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

- create_time - Create time of the VPN connection.
- encrypt_proto - Encrypt proto of the VPN connection.
- net_status - Net status of the VPN connection, values are AVAILABLE.
- route_type - Route type of the VPN connection.
- state - State of the connection, values are PENDING, AVAILABLE, DELETING.
- vpn_proto - Vpn proto of the VPN connection.

» Import

VPN connection can be imported using the id, e.g.

```
$ terraform import tencentcloud_vpn_connection.foo vpnx-nadifg3s
```