» circonus account

circonus_account provides details about a specific Circonus Account.

The circonus_account data source can be used for pulling various attributes about a specific Circonus Account.

» Example Usage

The following example shows how the resource might be used to obtain the metrics usage and limit of a given Circonus Account.

```
data "circonus_account" "current" {
  current = true
}
```

» Argument Reference

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

- id (Optional) The Circonus ID of a given account.
- current (Optional) Automatically use the current Circonus Account attached to the API token making the request.

At least one of the above attributes should be provided when searching for a account.

» Attributes Reference

The following attributes are exported:

- address1 The first line of the address associated with the account.
- address2 The second line of the address associated with the account.
- cc_email An optionally specified email address used in the CC line of invoices.
- id The Circonus ID of the selected Account.
- city The city part of the address associated with the account.
- contact_groups A list of IDs for each contact group in the account.
- country The country of the user's address.
- description Description of the account.

- invites An list of users invited to use the platform. Each element in the list has both an email and role attribute.
- name The name of the account.
- owner The Circonus ID of the user who owns this account.
- state_prov The state or province of the address associated with the account.
- timezone The timezone that events will be displayed in the web interface for this account.
- ui_base_url The base URL of this account.
- usage A list of account usage limits. Each element in the list will have a limit attribute, a limit type, and a used attribute.
- users A list of users who have access to this account. Each element in the list has both an id and a role. The id is a Circonus ID referencing the user.

» circonus_collector

circonus_collector provides details about a specific Circonus Collector.

As well as validating a given Circonus ID, this resource can be used to discover the additional details about a collector configured within the provider. The results of a circonus_collector API call can return more than one collector per Circonus ID. Details of each individual collector in the group of collectors can be found via the details attribute described below.

NOTE regarding circonus_collector: The circonus_collector data source actually queries and operates on Circonus "brokers" at the broker group level. The circonus_collector is simply a renamed Circonus "broker" to make it clear what the function of the "broker" actually does: act as a fan-in agent that either pulls or has metrics pushed into it and funneled back through Circonus.

» Example Usage

The following example shows how the resource might be used to obtain the name of the Circonus Collector configured on the provider.

```
data "circonus_collector" "ashburn" {
  id = "/broker/1"
}
```

» Argument Reference

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

• id - (Optional) The Circonus ID of a given collector.

At least one of the above attributes should be provided when searching for a collector.

» Attributes Reference

The following attributes are exported:

- id The Circonus ID of the selected Collector.
- details A list of details about the individual Collector instances that
 make up the group of collectors. See below for a list of attributes within
 each collector.
- latitude The latitude of the selected Collector.
- longitude The longitude of the selected Collector.
- name The name of the selected Collector.
- tags A list of tags assigned to the selected Collector.
- type The of the selected Collector. This value is either circonus for a Circonus-managed, public Collector, or enterprise for a private collector that is private to an account.

» Collector Details

- cn The CN of an individual Collector in the Collector Group.
- external_host The external host information for an individual Collector in the Collector Group. This is useful or important when talking with a Collector through a NAT'ing firewall.
- external_port The external port number for an individual Collector in the Collector Group. This is useful or important when talking with a Collector through a NAT'ing firewall.
- ip The IP address of an individual Collector in the Collector Group. This is the IP address of the interface listening on the network.
- min_version ??
- modules A list of what modules (types of checks) this collector supports.

- port The port the collector responds to the Circonus HTTPS REST wire protocol on.
- skew The clock drift between this collector and the Circonus server.
- status The status of this particular collector. A string containing either active, unprovisioned, pending, provisioned, or retired.
- version The version of the collector software the collector is running.

» circonus_check

The circonus_check resource creates and manages a Circonus Check.

NOTE regarding circcnus_check vs a Circcnus Check Bundle: The circcnus_check resource is implemented in terms of a Circcnus Check Bundle. The circcnus_check creates a higher-level abstraction over the implementation of a Check Bundle. As such, the naming and structure does not map 1:1 with the underlying Circcnus API.

» Usage

```
variable api_token {
  default = "my-token"
}
resource "circonus_check" "usage" {
 name = "Circonus Usage Check"
 notes = <<-EOF
A check to extract a usage metric.
EOF
 collector {
    id = "/broker/1"
 metric {
    name = "${circonus_metric.used.name}"
    tags = "${circonus_metric.used.tags}"
    type = "${circonus_metric.used.type}"
    unit = "${circonus_metric.used.unit}"
 json {
```

```
url = "https://api.circonus.com/v2"
   http_headers = {
                            = "application/json"
      Accept
      X-Circonus-App-Name = "TerraformCheck"
      X-Circonus-Auth-Token = "${var.api_token}"
   }
 }
               = 60
 period
               = ["source:circonus", "author:terraform"]
 tags
  timeout
}
resource "circonus_metric" "used" {
 name = "_usage`0`_used"
  type = "numeric"
 unit = "qty"
  tags = {
   source = "circonus"
}
```

» Argument Reference

- active (Optional) Whether or not the check is enabled or not (default true).
- caql (Optional) A Circonus Analytics Query Language (CAQL) check. See below for details on how to configure a caql check.
- cloudwatch (Optional) A CloudWatch check check. See below for details on how to configure a cloudwatch check.
- collector (Required) A collector ID. The collector(s) that are responsible for running a circonus_check. The id can be the Circonus ID for a Circonus collector (a.k.a. "broker") running in the cloud or an enterprise collector running in your datacenter. One collection of metrics will be automatically created for each collector specified.
- consul (Optional) A native Consul check. See below for details on how to configure a consul check.
- http (Optional) A poll-based HTTP check. See below for details on how to configure the http check.

- httptrap (Optional) An push-based HTTP check. This check method expects clients to send a specially crafted HTTP JSON payload. See below for details on how to configure the httptrap check.
- icmp_ping (Optional) An ICMP ping check. See below for details on how to configure the icmp_ping check.
- json (Optional) A JSON check. See below for details on how to configure the json check.
- metric (Required) A list of one or more metric configurations. All metrics obtained from this check instance will be available as individual metric streams. See below for a list of supported metric attributes.
- metric_limit (Optional) Setting a metric limit will tell the Circonus backend to periodically look at the check to see if there are additional metrics the collector has seen that we should collect. It will not reactivate metrics previously collected and then marked as inactive. Values are 0 to disable, -1 to enable all metrics or N+ to collect up to the value N (both -1 and N+ can not exceed other account restrictions).
- mysql (Optional) A MySQL check. See below for details on how to configure the mysql check.
- name (Optional) The name of the check that will be displayed in the web interface.
- notes (Optional) Notes about this check.
- period (Optional) The period between each time the check is made in seconds.
- postgresql (Optional) A PostgreSQL check. See below for details on how to configure the postgresql check.
- statsd (Optional) A statsd check. See below for details on how to configure the statsd check.
- tags (Optional) A list of tags assigned to this check.
- target (Required) A string containing the location of the thing being checked. This value changes based on the check type. For example, for an http check type this would be the URL you're checking. For a DNS check it would be the hostname you wanted to look up.
- tcp (Optional) A TCP check. See below for details on how to configure the tcp check (includes TLS support).
- timeout (Optional) A floating point number representing the maximum number of seconds this check should wait for a result. Defaults to 10.0.

» Supported metric Attributes

The following attributes are available within a metric.

- active (Optional) Whether or not the metric is active or not. Defaults to true.
- name (Optional) The name of the metric. A string containing freeform text.
- tags (Optional) A list of tags assigned to the metric.
- type (Required) A string containing either numeric, text, histogram, composite, or caql.
- units (Optional) The unit of measurement the metric represents (e.g., bytes, seconds, milliseconds). A string containing freeform text.

» Supported Check Types

Circonus supports a variety of different checks. Each check type has its own set of options that must be configured. Each check type conflicts with every other check type (i.e. a circonus_check configured for a json check will conflict with all other check types, therefore a postgresql check must be a different circonus check resource).

» caql Check Type Attributes

• query - (Required) The CAQL Query to run.

Available metrics depend on the payload returned in the caql check. See the caql check type for additional details.

» cloudwatch Check Type Attributes

- api_key (Required) The AWS access key. If this value is not explicitly set, this value is populated by the environment variable AWS_ACCESS_KEY_ID.
- api_secret (Required) The AWS secret key. If this value is not explicitly set, this value is populated by the environment variable AWS_SECRET_ACCESS_KEY.
- dimmensions (Required) A map of the CloudWatch dimmensions to include in the check.
- metric (Required) A list of metric names to collect in this check.
- namespace (Required) The namespace to pull parameters from.

- url (Required) The AWS URL to pull from. This should be set to the region-specific endpoint (e.g. prefer https://monitoring.us-east-1.amazonaws.com over https://monitoring.amazonaws.com).
- version (Optional) The version of the Cloudwatch API to use. Defaults to 2010-08-01.

Available metrics depend on the payload returned in the cloudwatch check. See the cloudwatch check type for additional details. The circonus_check period attribute must be set to either 60s or 300s for CloudWatch metrics.

Example CloudWatch check (partial metrics collection):

```
variable "cloudwatch_rds_tags" {
 type = "list"
 default = [
    "app:postgresql",
    "app:rds",
    "source:cloudwatch",
 ]
}
resource "circonus_check" "rds_metrics" {
  active = true
 name = "Terraform test: RDS Metrics via CloudWatch"
 notes = "Collect RDS metrics"
 period = "60s"
  collector {
   id = "/broker/1"
 }
  cloudwatch {
    dimmensions = {
      DBInstanceIdentifier = "my-db-name",
    }
   metric = [
      "CPUUtilization",
      "DatabaseConnections",
    ]
   namespace = "AWS/RDS"
   url = "https://monitoring.us-east-1.amazonaws.com"
 metric {
   name = "CPUUtilization"
```

```
tags = [ "${var.cloudwatch_rds_tags}" ]
type = "numeric"
unit = "%"
}

metric {
  name = "DatabaseConnections"
  tags = [ "${var.cloudwatch_rds_tags}" ]
  type = "numeric"
  unit = "connections"
}
```

» consul Check Type Attributes

- acl_token (Optional) An ACL Token authenticate the API request. When an ACL Token is set, this value is transmitted as an HTTP Header in order to not show up in any logs. The default value is an empty string.
- allow_stale (Optional) A boolean value that indicates whether or not this check should require the health information come from the Consul leader node. For scalability reasons, this value defaults to false. See below for details on detecting the staleness of health information.
- ca_chain (Optional) A path to a file containing all the certificate authorities that should be loaded to validate the remote certificate (required when http_addr is a TLS-enabled endpoint).
- certificate_file (Optional) A path to a file containing the client certificate that will be presented to the remote server (required when http_addr is a TLS-enabled endpoint).
- check_blacklist (Optional) A list of check names to exclude from the
 result of checks (i.e. no metrics will be generated by whose check name is
 in the check_blacklist). This blacklist is applied to the node, service,
 and state check modes.
- ciphers (Optional) A list of ciphers to be used in the TLS protocol (only used when http_addr is a TLS-enabled endpoint).
- dc (Optional) Explicitly name the Consul datacenter to use. The default value is an empty string. When an empty value is specified, the Consul datacenter of the agent at the http_addr is implicitly used.
- headers (Optional) A map of the HTTP headers to be sent when executing the check. NOTE: the headers attribute is processed last and will takes precidence over any other derived value that is transmitted as an

HTTP header to Consul (i.e. it is possible to override the acl_token by setting a headers value).

- http_addr (Optional) The Consul HTTP endpoint to to query for health information. The default value is http://consul.service.consul:8500. The scheme must change from http to https when the endpoint has been TLS-enabled.
- key_file (Optional) A path to a file containing key to be used in conjunction with the cilent certificate (required when http_addr is a TLS-enabled endpoint).
- node (Optional) Check the health of this node. The value can be either a Consul Node ID (Consul Version >= 0.7.4) or Node Name. See also the service_blacklist, node_blacklist, and check_blacklist attributes. This attribute conflicts with the service and state attributes.
- node_blacklist (Optional) A list of node IDs or node names to exclude from the results of checks (i.e. no metrics will be generated from nodes in the node_blacklist). This blacklist is applied to the node, service, and state check modes.
- service (Optional) Check the cluster-wide health of this named service. See also the service_blacklist, node_blacklist, and check_blacklist attributes. This attribute conflicts with the node and state attributes.
- service_blacklist (Optional) A list of service names to exclude from the result of checks (i.e. no metrics will be generated by services whose service name is in the service_blacklist). This blacklist is applied to the node, service, and state check modes.
- state (Optional) A Circonus check to monitor Consul checks across the entire Consul cluster. This value may be either passing, warning, or critical. This consul check mode is intended to act as the cluster check of last resort. This check type is useful when first starting and is intended to act as a check of last resort before transitioning to explicitly defined checks for individual services or nodes. The metrics returned from check will be sorted based on the CreateIndex of the entry in order to have a stable set of metrics in the array of returned values. See also the service_blacklist, node_blacklist, and check_blacklist attributes. This attribute conflicts with the node and state attributes.

Available metrics depend on the consul check being performed (node, service, or state). In addition to the data available from the endpoints, the consul check also returns a set of metrics that are a variant of: {Num,Pct}{,Passing,Warning,Critical}{Checks,Nodes,Services} (see the GLOB_BRACE section of your local glob(3) documentation).

Example Consul check (partial metrics collection):

```
resource "circonus_check" "consul_server" {
  active = true
 name = "%s"
 period = "60s"
 collector {
    # Collector ID must be an Enterprise broker able to reach the Consul agent
   # listed in `http_addr`.
   id = "/broker/2110"
 }
  consul {
    service = "consul"
   # Other consul check modes:
   # node = "consul1"
   # state = "critical"
 metric {
   name = "NumNodes"
   tags = [ "source:consul", "lifecycle:unittest" ]
    type = "numeric"
 metric {
   name = "LastContact"
   tags = [ "source:consul", "lifecycle:unittest" ]
   type = "numeric"
   unit = "seconds"
 }
 metric {
   name = "Index"
   tags = [ "source:consul", "lifecycle:unittest" ]
   type = "numeric"
   unit = "transactions"
 }
 metric {
   name = "KnownLeader"
   tags = [ "source:consul", "lifecycle:unittest" ]
   type = "text"
 tags = [ "source:consul", "lifecycle:unittest" ]
```

» http Check Type Attributes

- auth_method (Optional) HTTP Authentication method to use. When set must be one of the values Basic, Digest, or Auto.
- auth_password (Optional) The password to use during authentication.
- auth_user (Optional) The user to authenticate as.
- body_regexp (Optional) This regular expression is matched against the body of the response. If a match is not found, the check will be marked as "bad."
- ca_chain (Optional) A path to a file containing all the certificate authorities that should be loaded to validate the remote certificate (for TLS checks).
- certificate_file (Optional) A path to a file containing the client certificate that will be presented to the remote server (for TLS checks).
- ciphers (Optional) A list of ciphers to be used in the TLS protocol (for HTTPS checks).
- code (Optional) The HTTP code that is expected. If the code received does not match this regular expression, the check is marked as "bad."
- extract (Optional) This regular expression is matched against the body of the response globally. The first capturing match is the key and the second capturing match is the value. Each key/value extracted is registered as a metric for the check.
- headers (Optional) A map of the HTTP headers to be sent when executing the check.
- key_file (Optional) A path to a file containing key to be used in conjunction with the cilent certificate (for TLS checks).
- method (Optional) The HTTP Method to use. Defaults to GET.
- payload (Optional) The information transferred as the payload of an HTTP request.
- read_limit (Optional) Sets an approximate limit on the data read (0 means no limit). Default 0.
- redirects (Optional) The maximum number of HTTP Location header redirects to follow. Default 0.

- url (Required) The target for this json check. The url must include the scheme, host, port (optional), and path to use (e.g. https://appl.example.org/healthz)
- version (Optional) The HTTP version to use. Defaults to 1.1.

Available metrics include: body_match, bytes, cert_end, cert_end_in, cert_error, cert_issuer, cert_start, cert_subject, code, duration, truncated, tt_connect, and tt_firstbyte. See the http check type for additional details.

» httptrap Check Type Attributes

- async_metrics (Optional) Boolean value specifies whether or not httptrap metrics are logged immediately or held until the status message is to be emitted. Default false.
- secret (Optional) Specify the secret with which metrics may be submitted.

Available metrics depend on the payload returned in the httptrap doc. See the httptrap check type for additional details.

» json Check Type Attributes

- auth_method (Optional) HTTP Authentication method to use. When set must be one of the values Basic, Digest, or Auto.
- auth_password (Optional) The password to use during authentication.
- auth_user (Optional) The user to authenticate as.
- ca_chain (Optional) A path to a file containing all the certificate authorities that should be loaded to validate the remote certificate (for TLS checks).
- certificate_file (Optional) A path to a file containing the client certificate that will be presented to the remote server (for TLS checks).
- ciphers (Optional) A list of ciphers to be used in the TLS protocol (for HTTPS checks).
- headers (Optional) A map of the HTTP headers to be sent when executing the check.
- key_file (Optional) A path to a file containing key to be used in conjunction with the cilent certificate (for TLS checks).
- method (Optional) The HTTP Method to use. Defaults to GET.
- port (Optional) The TCP Port number to use. Defaults to 81.

- read_limit (Optional) Sets an approximate limit on the data read (0 means no limit). Default 0.
- redirects (Optional) The maximum number of HTTP Location header redirects to follow. Default 0.
- url (Required) The target for this json check. The url must include the scheme, host, port (optional), and path to use (e.g. https://appl.example.org/healthz)
- version (Optional) The HTTP version to use. Defaults to 1.1.

Available metrics depend on the payload returned in the json doc. See the json check type for additional details.

» icmp_ping Check Type Attributes

The icmp_ping check requires the target top-level attribute to be set.

- availability (Optional) The percentage of ping packets that must be returned for this measurement to be considered successful. Defaults to 100.0.
- count (Optional) The number of ICMP ping packets to send. Defaults to 5.
- interval (Optional) Interval between packets. Defaults to 2s.

Available metrics include: available, average, count, maximum, and minimum. See the ping_icmp check type for additional details.

» mysql Check Type Attributes

The mysql check requires the target top-level attribute to be set.

- dsn (Required) The MySQL DSN/connect string to use to talk to MySQL.
- query (Required) The SQL query to execute.

» postgresql Check Type Attributes

The postgresql check requires the target top-level attribute to be set.

- dsn (Required) The PostgreSQL DSN/connect string to use to talk to PostgreSQL.
- query (Required) The SQL query to execute.

Available metric names are dependent on the output of the query being run.

» statsd Check Type Attributes

• source_ip - (Required) Any stated messages from this IP address (IPv4 or IPv6) will be associated with this check.

Available metrics depend on the metrics sent to the statsd check.

» tcp Check Type Attributes

- banner_regexp (Optional) This regular expression is matched against the response banner. If a match is not found, the check will be marked as bad.
- ca_chain (Optional) A path to a file containing all the certificate authorities that should be loaded to validate the remote certificate (for TLS checks).
- certificate_file (Optional) A path to a file containing the client certificate that will be presented to the remote server (for TLS checks).
- ciphers (Optional) A list of ciphers to be used in the TLS protocol (for HTTPS checks).
- host (Required) Hostname or IP address of the host to connect to.
- key_file (Optional) A path to a file containing key to be used in conjunction with the cilent certificate (for TLS checks).
- port (Required) Integer specifying the port on which the management interface can be reached.
- tls (Optional) When enabled establish a TLS connection.

Available metrics include: banner, banner_match, cert_end, cert_end_in, cert_error, cert_issuer, cert_start, cert_subject, duration, tt_connect, tt_firstbyte. See the tcp check type for additional details.

Sample tcp check:

```
resource "circonus_check" "tcp_check" {
  name = "TCP and TLS check"
  notes = "Obtains the connect time and TTL for the TLS cert"
  period = "60s"

collector {
   id = "/broker/1"
  }

tcp {
  host = "127.0.0.1"
```

```
port = 443
  tls = true
}

metric {
  name = "cert_end_in"
  tags = [ "${var.tcp_check_tags}" ]
  type = "numeric"
  unit = "seconds"
}

metric {
  name = "tt_connect"
  tags = [ "${var.tcp_check_tags}" ]
  type = "numeric"
  unit = "miliseconds"
}

tags = [ "${var.tcp_check_tags}" ]
}
```

» Out Parameters

- check_by_collector Maps the ID of the collector (collector_id, the map key) to the check_id (value) that is registered to a collector.
- check_id If there is only one collector specified for the check, this value will be populated with the check_id. If more than one collector is specified in the check, then this value will be an empty string. check_by_collector will always be populated.
- checks List of check_ids created by this circonus_check. There is one element in this list per collector specified in the check.
- created UNIX time at which this check was created.
- last_modified UNIX time at which this check was last modified.
- last_modified_by User ID in Circonus who modified this check last.
- reverse_connect_urls Only relevant to Circonus support.
- uuids List of Check uuids created by this circonus_check. There is one element in this list per collector specified in the check.

» Import Example

circonus_check supports importing resources. Supposing the following Terraform (and that the referenced circonus_metric has already been imported):

```
provider "circonus" {
  alias = "b8fec159-f9e5-4fe6-ad2c-dc1ec6751586"
resource "circonus_metric" "used" {
 name = "_usage`0`_used"
  type = "numeric"
resource "circonus_check" "usage" {
  collector {
    id = "/broker/1"
 }
  json {
   url = "https://api.circonus.com/account/current"
   http_headers = {
      "Accept"
                              = "application/json"
      "X-Circonus-App-Name" = "TerraformCheck"
      "X-Circonus-Auth-Token" = "${var.api token}"
 }
 metric {
   name = "${circonus_metric.used.name}"
    type = "${circonus_metric.used.type}"
 }
}
```

It is possible to import a circonus_check resource with the following command:

\$ terraform import circonus_check.usage ID

Where ID is the _cid or Circonus ID of the Check Bundle (e.g. /check_bundle/12345) and circonus_check.usage is the name of the resource whose state will be populated as a result of the command.

» circonus_contact_group

The circonus_contact_group resource creates and manages a Circonus Contact Group.

» Usage

```
resource "circonus_contact_group" "myteam-alerts" {
 name = "MyTeam Alerts"
 email {
   user = "/user/1234"
 email {
   user = "/user/5678"
 email {
    address = "user@example.com"
 http {
    address = "https://www.example.org/post/endpoint"
   format = "json"
   method = "POST"
 }
 irc {
   user = "/user/6331"
 slack {
   channel = "#myteam"
   team = "T038UT13D"
 }
   user = "/user/1234"
 sms {
    address = "8005551212"
```

```
victorops {
    api_key = "xxxx"
    critical = 2
    info = 5
    team = "myteam"
    warning = 3
 }
 xmpp {
   user = "/user/9876"
  aggregation_window = "5m"
  alert_option {
    severity = 1
    reminder = "5m"
    escalate_to = "/contact_group/4444"
 }
  alert_option {
    severity = 2
    reminder = "15m"
    escalate_after = "2h"
    escalate_to = "/contact_group/4444"
 }
  alert_option {
    severity = 3
    reminder = "24m"
    escalate_after = "3d"
    escalate_to = "/contact_group/4444"
}
```

» Argument Reference

- aggregation_window (Optional) The aggregation window for batching up alert notifications.
- alert_option (Optional) There is one alert_option per severity, where severity can be any number between 1 (high) and 5 (low). If configured, the alerting system will remind or escalate alerts to further contact groups if an alert sent to this contact group is not acknowledged or resolved. See

below for details.

- email (Optional) Zero or more email attributes may be present to dispatch email to Circonus users by referencing their user ID, or by specifying an email address. See below for details on supported attributes.
- http (Optional) Zero or more http attributes may be present to dispatch Webhook/HTTP requests by Circonus. See below for details on supported attributes.
- irc (Optional) Zero or more irc attributes may be present to dispatch IRC notifications to users. See below for details on supported attributes.
- long_message (Optional) The bulk of the message used in long form alert messages.
- long_subject (Optional) The subject used in long form alert messages.
- long_summary (Optional) The brief summary used in long form alert messages.
- name (Required) The name of the contact group.
- pager_duty (Optional) Zero or more pager_duty attributes may be present to dispatch to Pager Duty teams. See below for details on supported attributes.
- short_message (Optional) The subject used in short form alert messages.
- short_summary (Optional) The brief summary used in short form alert messages.
- slack (Optional) Zero or more slack attributes may be present to dispatch to Slack teams. See below for details on supported attributes.
- sms (Optional) Zero or more sms attributes may be present to dispatch SMS messages to Circonus users by referencing their user ID, or by specifying an SMS Phone Number. See below for details on supported attributes.
- tags (Optional) A list of tags attached to the Contact Group.
- victorops (Optional) Zero or more victorops attributes may be present to dispatch to VictorOps teams. See below for details on supported attributes.

» Supported Contact Group alert_option Attributes

• escalate_after - (Optional) How long to wait before escalating an alert that is received at a given severity.

- escalate_to (Optional) The Contact Group ID who will receive the escalation.
- reminder (Optional) If specified, reminders will be sent after a user configurable number of minutes for open alerts.
- severity (Required) An alert_option must be assigned to a given severity level. Valid severity levels range from 1 (highest severity) to 5 (lowest severity).

» Supported Contact Group email Attributes

Either an address or user attribute is required.

- address (Optional) A well formed email address.
- user (Optional) An email will be sent to the email address of record for the corresponding user ID (e.g. /user/1234).

A user's email address is automatically maintained and kept up to date by the recipient, whereas an address provides no automatic layer of indirection for keeping the information accurate (including LDAP and SAML-based authentication mechanisms).

» Supported Contact Group http Attributes

- address (Required) URL to send a webhook request to.
- format (Optional) The payload of the request is a JSON-encoded payload when the format is set to json (the default). The alternate payload encoding is params.
- method (Optional) The HTTP verb to use when making a request. Either GET or POST may be specified. The default verb is POST.

» Supported Contact Group irc Attributes

• user - (Required) When a user has configured IRC on their user account, they will receive an IRC notification.

» Supported Contact Group pager_duty Attributes

• contact_group_fallback - (Optional) If there is a problem contacting PagerDuty, relay the notification automatically to the specified Contact Group (e.g. /contact_group/1234).

- service_key (Required) The PagerDuty Service Key.
- webhook_url (Required) The PagerDuty webhook URL that PagerDuty uses to notify Circonus of acknowledged actions.

» Supported Contact Group slack Attributes

- contact_group_fallback (Optional) If there is a problem contacting Slack, relay the notification automatically to the specified Contact Group (e.g. /contact_group/1234).
- buttons (Optional) Slack notifications can have acknowledgement buttons built into the notification message itself when enabled. Defaults to true.
- channel (Required) Specify what Slack channel Circonus should send alerts to.
- team (Required) Specify what Slack team Circonus should look in for the aforementioned channel.
- username (Optional) Specify the username Circonus should advertise itself as in Slack. Defaults to Circonus.

» Supported Contact Group sms Attributes

Either an address or user attribute is required.

- address (Optional) SMS Phone Number to send a short notification to.
- user (Optional) An SMS page will be sent to the phone number of record for the corresponding user ID (e.g. /user/1234).

A user's phone number is automatically maintained and kept up to date by the recipient, whereas an address provides no automatic layer of indirection for keeping the information accurate (including LDAP and SAML-based authentication mechanisms).

» Supported Contact Group victorops Attributes

- contact_group_fallback (Optional) If there is a problem contacting VictorOps, relay the notification automatically to the specified Contact Group (e.g. /contact_group/1234).
- api_key (Required) The API Key for talking with VictorOps.
- critical (Required)

```
• info - (Required)
```

- team (Required)
- warning (Required)

» Supported Contact Group xmpp Attributes

Either an address or user attribute is required.

- address (Optional) XMPP address to send a short notification to.
- user (Optional) An XMPP notification will be sent to the XMPP address of record for the corresponding user ID (e.g. /user/1234).

» Import Example

circonus_contact_group supports importing resources. Supposing the following Terraform:

```
provider "circonus" {
   alias = "b8fec159-f9e5-4fe6-ad2c-dc1ec6751586"
}

resource "circonus_contact_group" "myteam" {
   name = "My Team's Contact Group"

   email {
      address = "myteam@example.com"
   }

   slack {
      channel = "#myteam"
      team = "T024UT03C"
   }
}
```

It is possible to import a circonus_contact_group resource with the following command:

```
$ terraform import circonus_contact_group.myteam ID
```

Where ID is the _cid or Circonus ID of the Contact Group (e.g. /contact_group/12345) and circonus_contact_group.myteam is the name of the resource whose state will be populated as a result of the command.

» circonus_graph

The circonus_graph resource creates and manages a Circonus Graph. https://login.circonus.com/resources/api/calls/graph).

» Usage

```
variable "myapp-tags" {
 type = "list"
 default = [ "app:myapp", "owner:myteam" ]
resource "circonus_graph" "latency-graph" {
 name = "Latency Graph"
 description = "A sample graph showing off two data points"
         = "Misc notes about this graph"
 graph_style = "line"
 line_style = "stepped"
 metric {
               = "${circonus_check.api_latency.checks[0]}"
   check
   metric_name = "maximum"
   metric_type = "numeric"
           = "Maximum Latency"
   name
   axis
              = "left"
             = "#657aa6"
   color
 metric {
               = "${circonus_check.api_latency.checks[0]}"
   metric_name = "minimum"
   metric_type = "numeric"
   name = "Minimum Latency"
   axis
             = "right"
             = "#0000ff"
   color
 tags = [ "${var.myapp-tags}" ]
```

» Argument Reference

• description - (Optional) Description of what the graph is for.

- graph_style (Optional) How the graph should be rendered. Valid options are area or line (default).
- left (Optional) A map of graph left axis options. Valid values in left include: logarithmic can be set to 0 (default) or 1; min is the min Y axis value on the left; and max is the Y axis max value on the left.
- line_style (Optional) How the line should change between points. Can be either stepped (default) or interpolated.
- name (Required) The title of the graph.
- notes (Optional) A place for storing notes about this graph.
- right (Optional) A map of graph right axis options. Valid values in right include: logarithmic can be set to 0 (default) or 1; min is the min Y axis value on the right; and max is the Y axis max value on the right.
- metric (Optional) A list of metric streams to graph. See below for options.
- metric_cluster (Optional) A metric cluster to graph. See below for options.
- tags (Optional) A list of tags assigned to this graph.

» metric Configuration

An individual metric stream is the underlying source of data points used for visualization in a graph. Either a caql attribute is required or a check and metric must be set. The metric attribute can have the following options set.

- active (Optional) A boolean if the metric stream is enabled or not.
- alpha (Optional) A floating point number between 0 and 1.
- axis (Optional) The axis that the metric stream will use. Valid options are left (default) or right.
- caql (Optional) A CAQL formula. Conflicts with the check and metric attributes.
- check (Optional) The check that this metric stream belongs to.
- color (Optional) A hex-encoded color of the line / area on the graph.
- formula (Optional) Formula that should be aplied to both the values in the graph and the legend.
- legend_formula (Optional) Formula that should be applied to values in the legend.

- function (Optional) What derivative value, if any, should be used. Valid values are: gauge (default), derive, and counter (_stddev)
- metric_type (Required) The type of the metric. Valid values are: numeric, text, histogram, composite, or caql.
- name (Optional) A name which will appear in the graph legend.
- metric_name (Optional) The name of the metric stream within the check to graph.
- stack (Optional) If this metric is to be stacked, which stack set does it belong to (starting at 0).

» metric_cluster Configuration

A metric cluster selects multiple metric streams together dynamically using a query language and returns the set of matching metric streams as a single result set to the graph rendering engine.

- active (Optional) A boolean if the metric cluster is enabled or not.
- aggregate (Optional) The aggregate function to apply across this metric cluster to create a single value. Valid values are: none (default), min, max, sum, mean, or geometric_mean.
- axis (Optional) The axis that the metric cluster will use. Valid options are left (default) or right.
- color (Optional) A hex-encoded color of the line / area on the graph. This is a required attribute when aggregate is specified.
- group (Optional) The metric_cluster that will provide datapoints for this graph.
- name (Optional) A name which will appear in the graph legend for this metric cluster.

» Import Example

circonus_graph supports importing resources. Supposing the following Terraform (and that the referenced circonus_metric and circonus_check have already been imported):

It is possible to import a circonus_graph resource with the following command:

```
$ terraform import circonus_graph.icmp-graph ID
```

Where ID is the _cid or Circonus ID of the graph (e.g. /graph/bd72aabc-90b9-4039-cc30-c9ab838c18f5) and circonus_graph.icmp-graph is the name of the resource whose state will be populated as a result of the command.

» circonus_metric

The circonus_metric resource creates and manages a single metric resource that will be instantiated only once a referencing circonus_check has been created.

» Usage

```
resource "circonus_metric" "used" {
  name = "_usage`0`_used"
  type = "numeric"
  units = "qty"

  tags = {
    author = "terraform"
    source = "circonus"
  }
}
```

» Argument Reference

- active (Optional) A boolean indicating if the metric is being filtered out at the circonus_check's collector(s) or not.
- name (Required) The name of the metric. A name must be unique within a circonus_check and its meaning is circonus_check.type specific.
- tags (Optional) A list of tags assigned to the metric.

- type (Required) The type of metric. This value must be present and can be one of the following values: numeric, text, histogram, composite, or cagl.
- unit (Optional) The unit of measurement for this circonus_metric.

» Import Example

circonus_metric supports importing resources. Supposing the following Terraform:

```
provider "circonus" {
   alias = "b8fec159-f9e5-4fe6-ad2c-dc1ec6751586"
}

resource "circonus_metric" "usage" {
   name = "_usage`0`_used"
   type = "numeric"
   unit = "qty"
   tags = { source = "circonus" }
}
```

It is possible to import a circonus_metric resource with the following command:

\$ terraform import circonus_metric.usage ID

Where ID is a random, never before used UUID and circonus_metric.usage is the name of the resource whose state will be populated as a result of the command.

» circonus_metric_cluster

The circonus_metric_cluster resource creates and manages a Circonus Metric Cluster.

» Usage

```
resource "circonus_metric_cluster" "nomad-job-memory-rss" {
  name = "My Job's Resident Memory"
  description = <<-EOF
An aggregation of all resident memory metric streams across allocations in a Nomad job.
EOF
  query {</pre>
```

```
definition = "*`nomad-jobname`memory`rss"
  type = "average"
}
tags = ["source:nomad","resource:memory"]
}
```

» Argument Reference

- description (Optional) A long-form description of the metric cluster.
- name (Required) The name of the metric cluster. This name must be unique across all metric clusters in a given Circonus Account.
- query (Required) One or more query attributes must be present. Each query must contain both a definition and a type. See below for details on supported attributes.
- tags (Optional) A list of tags attached to the metric cluster.

» Supported Metric Cluster query Attributes

- definition (Required) The definition of a metric cluster query.
- type (Required) The query type to execute per metric cluster. Valid query types are: average, count, counter, counter2, counter2_stddev, counter_stddev, derive, derive2, derive2_stddev, derive_stddev, histogram, stddev, text.

» Out parameters

• id - ID of the Metric Cluster.

» Import Example

circonus_metric_cluster supports importing resources. Supposing the following Terraform:

```
provider "circonus" {
   alias = "b8fec159-f9e5-4fe6-ad2c-dc1ec6751586"
}

resource "circonus_metric_cluster" "mymetriccluster" {
   name = "Metric Cluster for a particular metric in a job"
   query {
```

```
definition = "*`nomad-jobname`memory`rss"
    type = "average"
}
```

It is possible to import a circonus_metric_cluster resource with the following command:

\$ terraform import circonus_metric_cluster.mymetriccluster ID

Where ID is the _cid or Circonus ID of the Metric Cluster (e.g. /metric_cluster/12345) and circonus_metric_cluster.mymetriccluster is the name of the resource whose state will be populated as a result of the command.

» circonus rule set

The circonus_rule_set resource creates and manages a Circonus Rule Set.

» Usage

```
variable "myapp-tags" {
         = "list"
  type
  default = [ "app:myapp", "owner:myteam" ]
resource "circonus_rule_set" "myapp-cert-ttl-alert" {
             = "${circonus_check.myapp-https.checks[0]}"
 metric_name = "cert_end_in"
             = "https://wiki.example.org/playbook/how-to-renew-cert"
 link
  if {
   value {
     min value = \$\{2 * 24 * 3600\}"
    then {
     notify = [ "${circonus_contact_group.myapp-owners.id}" ]
      severity = 1
    }
 }
 if {
   value {
     min_value = "${7 * 24 * 3600}"
```

```
then {
     notify = [ "${circonus_contact_group.myapp-owners.id}" ]
      severity = 2
   }
 }
 if {
   value {
     min_value = "${21 * 24 * 3600}"
     notify = [ "${circonus_contact_group.myapp-owners.id}" ]
     severity = 3
 }
 if {
   value {
     absent = "24h"
   }
   then {
     notify = [ "${circonus_contact_group.myapp-owners.id}" ]
     severity = 1
   }
 }
 tags = [ "${var.myapp-tags}" ]
}
resource "circonus_rule_set" "myapp-healthy-alert" {
  check = "${circonus_check.myapp-https.checks[0]}"
 metric_name = "duration"
 link = "https://wiki.example.org/playbook/debug-down-app"
 if {
      # SEV1 if it takes more than 9.5s for us to complete an HTTP request
     max_value = "${9.5 * 1000}"
   }
   then {
     notify = [ "${circonus_contact_group.myapp-owners.id}" ]
      severity = 1
```

```
}
if {
  value {
    # SEV2 if it takes more than 5s for us to complete an HTTP request
   max_value = "${5 * 1000}"
  }
  then {
   notify = [ "${circonus_contact_group.myapp-owners.id}" ]
    severity = 2
  }
}
if {
  value {
    # SEV3 if the average response time is more than 500ms using a moving
    # average over the last 10min. Any transient problems should have
    # resolved themselves by now. Something's wrong, need to page someone.
    over {
      last = "10m"
      using = "average"
   max_value = "500"
  then {
   notify = [ "${circonus_contact_group.myapp-owners.id}" ]
    severity = 3
  }
}
if {
  value {
    # SEV4 if it takes more than 500ms for us to complete an HTTP request. We
    # want to record that things were slow, but not wake anyone up if it
    # momentarily pops above 500ms.
   min_value = "500"
  }
  then {
   notify = [ "${circonus_contact_group.myapp-owners.id}" ]
    severity = 3
 }
}
```

```
if {
   value {
      # If for whatever reason we're not recording any values for the last
      # 24hrs, fire off a SEV1.
      absent = "24h"
   }
   then {
     notify = [ "${circonus_contact_group.myapp-owners.id}" ]
      severity = 1
   }
 }
 tags = [ "${var.myapp-tags}" ]
resource "circonus_contact_group" "myapp-owners" {
 name = "My App Owners"
  tags = [ "${var.myapp-tags}" ]
}
resource "circonus_check" "myapp-https" {
 name = "My App's HTTPS Check"
 notes = <<-EOF
A check to create metric streams for Time to First Byte, HTTP transaction
duration, and the TTL of a TLS cert.
EOF
  collector {
    id = "/broker/1"
 http {
    code = "^200$"
   headers = {
     X-Request-Type = "health-check",
   url = "https://www.example.com/myapp/healthz"
 metric {
   name = "${circonus_metric.myapp-cert-ttl.name}"
   tags = "${circonus_metric.myapp-cert-ttl.tags}"
    type = "${circonus_metric.myapp-cert-ttl.type}"
```

```
unit = "${circonus_metric.myapp-cert-ttl.unit}"
 metric {
    name = "${circonus_metric.myapp-duration.name}"
    tags = "${circonus_metric.myapp-duration.tags}"
    type = "${circonus_metric.myapp-duration.type}"
    unit = "${circonus_metric.myapp-duration.unit}"
 period
               = ["source:circonus", "author:terraform"]
  tags
  timeout
               = 10
}
resource "circonus_metric" "myapp-cert-ttl" {
 name = "cert_end_in"
  type = "numeric"
 unit = "seconds"
  tags = [ "${var.myapp-tags}", "resource:tls" ]
}
resource "circonus_metric" "myapp-duration" {
 name = "duration"
 type = "numeric"
 unit = "miliseconds"
  tags = [ "${var.myapp-tags}" ]
```

» Argument Reference

- check (Required) The Circonus ID that this Rule Set will use to search for a metric stream to alert on.
- if (Required) One or more ordered predicate clauses that describe when Circonus should generate a notification. See below for details on the structure of an if configuration clause.
- link (Optional) A link to external documentation (or anything else you feel is important) when a notification is sent. This value will show up in email alerts and the Circonus UI.
- metric_type (Optional) The type of metric this rule set will operate on. Valid values are numeric (the default) and text.
- notes (Optional) Notes about this rule set.

- parent (Optional) A Circonus Metric ID that, if specified and active with a severity 1 alert, will silence this rule set until all of the severity 1 alerts on the parent clear. This value must match the format \${check_id}_\${metric_name}.
- metric_name (Required) The name of the metric stream within a given check that this rule set is active on.
- tags (Optional) A list of tags assigned to this rule set.

» if Configuration

The if configuration block is an ordered list of rules that are evaluated in order, first to last. The first if condition to evaluate true shortcircuits all other if blocks in this rule set. An if block is also referred to as a "rule." It is advised that all high-severity rules are ordered before low-severity rules otherwise low-severity rules will mask notifications that should be delivered with a high-severity.

if blocks are made up of two configuration blocks: value and then. The value configuration block specifies the criteria underwhich the metric streams are evaluated. The then configuration block, optional, specifies what action to take.

» value Configuration

A value block can have only one of several "predicate" attributes specified because they conflict with each other. The list of mutually exclusive predicates is dependent on the metric_type. To evaluate multiple predicates, create multiple if configuration blocks in the proper order.

» numeric Predicates

Metric types of type numeric support the following predicates. Only one of the following predicates may be specified at a time.

- absent (Optional) If a metric has not been observed in this duration the rule will fire. When present, this duration is evaluated in terms of seconds.
- changed (Optional) A boolean indicating this rule should fire when the value changes (e.g. n != n₁).
- min_value (Optional) When the value is less than this value, this rule will fire (e.g. n < \${min_value}).
- max_value (Optional) When the value is greater than this value, this rule will fire (e.g. n > \${max_value}).

Additionally, a numeric check can also evaluate data based on a windowing function versus the last measured value in the metric stream. In order to have a rule evaluate on derived value from a window, include a nested over attribute inside of the value configuration block. An over attribute needs two attributes:

- last (Optional) A duration for the sliding window. Default 300s.
- using (Optional) The window function to use over the last interval. Valid window functions include: average (the default), stddev, derive, derive_stddev, counter, counter_stddev, derive_2, derive_2_stddev, counter_2, and counter_2_stddev.

» text Predicates

Metric types of type text support the following predicates:

- absent (Optional) If a metric has not been observed in this duration the rule will fire. When present, this duration is evaluated in terms of seconds.
- changed (Optional) A boolean indicating this rule should fire when the
 last value in the metric stream changed from it's previous value (e.g. n
 != n-1).
- contains (Optional) When the last value in the metric stream the value is less than this value, this rule will fire (e.g. strstr(n, \${contains}) != NULL).
- match (Optional) When the last value in the metric stream value exactly matches this configured value, this rule will fire (e.g. strcmp(n, \${match}) == 0).
- not_contain (Optional) When the last value in the metric stream does not match this configured value, this rule will fire (e.g. strstr(n, \${contains}) == NULL).
- not_match (Optional) When the last value in the metric stream does not match this configured value, this rule will fire (e.g. strstr(n, \${not_match}) == NULL).

» then Configuration

A then block can have the following attributes:

- after (Optional) Only execute this notification after waiting for this number of minutes. Defaults to immediately, or Om.
- notify (Optional) A list of contact group IDs to notify when this rule is sends off a notification.

• severity - (Optional) The severity level of the notification. This can be set to any value between 1 and 5. Defaults to 1.

» Import Example

circonus_rule_set supports importing resources. Supposing the following Terraform (and that the referenced circonus_metric and circonus_check have already been imported):

```
resource "circonus_rule_set" "icmp-latency-alert" {
 check = "${circonus check.api latency.checks[0]}"
 metric_name = "maximum"
  if {
    value {
      absent = "600s"
     notify = [ "${circonus_contact_group.test-trigger.id}" ]
      severity = 1
    }
 }
 if {
   value {
      over {
        last = "120s"
       using = "average"
      }
     max_value = 0.5 # units are in miliseconds
      notify = [ "${circonus_contact_group.test-trigger.id}" ]
      severity = 2
    }
 }
```

It is possible to import a circonus_rule_set resource with the following command:

\$ terraform import circonus_rule_set.icmp-latency-alert ID
Where ID is the _cid or Circonus ID of the Rule Set (e.g. /rule_set/201285_maximum)

and $circonus_rule_set.icmp-latency-alert$ is the name of the resource whose state will be populated as a result of the command.