# » consul\_agent\_self

Warning: The consul\_agent\_self resource has been deprecated and will be removed from a future release of the provider. Read the upgrade instructions for more information.

The consul\_agent\_self data source returns configuration and status data from the agent specified in the provider.

## » Example Usage

```
data "consul_agent_self" "read-dc1-agent" {
    query_options {
        # Optional parameter: implicitly uses the current datacenter of the agent
        datacenter = "dc1"
    }
}

# Set the description to a whitespace delimited list of the services
resource "example_resource" "app" {
    description = "Consul datacenter ${data.consul_agent_self.read-dc1-agent.datacenter}"
    # ...
}
```

#### » Attributes Reference

The following attributes are exported:

- acl\_datacenter
- acl\_default\_policy
- acl\_disabled\_ttl
- acl\_down\_policy
- acl\_enforce\_0\_8\_semantics
- acl ttl
- addresses
- advertise\_addr
- advertise\_addr\_wan
- advertise\_addrs
- atlas\_join
- bind\_addr
- bootstrap\_expect
- bootstrap\_mode
- check\_deregister\_interval\_min

- check\_reap\_interval
- check\_update\_interval
- client\_addr
- dns A map of DNS configuration attributes. See below for details on the contents of the dns attribute.
- dns\_recursors A list of all DNS recursors.
- data\_dir
- datacenter
- dev\_mode
- domain
- enable\_anonymous\_signature
- enable\_coordinates
- enable\_debug
- enable\_remote\_exec
- enable\_syslog
- enable ui
- enable\_update\_check
- id
- leave\_on\_int
- leave\_on\_term
- log\_level
- name
- performance
- pid\_file
- ports
- protocol\_version
- reconnect\_timeout\_lan
- reconnect\_timeout\_wan
- rejoin\_after\_leave
- retry\_join
- retry\_join\_ec2 A map of EC2 retry attributes. See below for details on the available information.
- retry\_join\_gce A map of GCE retry attributes. See below for details on the available information.
- retry\_join\_wan
- retry\_max\_attempts
- retry\_max\_attempts\_wan
- serf\_lan\_bind\_addr
- serf\_wan\_bind\_addr
- server\_mode
- server\_name
- session\_ttl\_min
- start\_join
- start\_join\_wan
- syslog\_facility
- tls\_ca\_file

- tls\_cert\_file
- tls\_key\_file
- tls\_min\_version
- tls\_verify\_incoming
- tls\_verify\_outgoing
- tls\_verify\_server\_hostname
- tagged\_addresses
- telemetry A map of telemetry configuration.
- translate\_wan\_addrs
- ui\_dir
- unix\_sockets
- version The version of the Consul agent.
- version\_prerelease
- version\_revision

#### » DNS Attributes

- allow\_stale
- enable\_compression
- enable\_truncate
- max\_stale
- node\_ttl
- only\_passing
- recursor\_timeout
- service\_ttl
- udp\_answer\_limit

#### » Retry Join EC2 Attributes

- region
- tag\_key
- tag\_value

#### » Retry Join GCE Attributes

- credentials\_file
- project\_name
- tag\_value
- zone\_pattern

#### » Telemetry Attributes

• circonus\_api\_app

- circonus\_api\_token
- circonus\_api\_url
- circonus\_broker\_id
- circonus\_check\_id
- circonus\_check\_tags
- circonus\_display\_name
- circonus\_force\_metric\_activation
- circonus\_instance\_id
- circonus\_search\_tag
- circonus\_select\_tag
- circonus\_submission\_interval
- circonus\_submission\_url
- dogstatsd\_addr
- dogstatsd\_tags
- enable\_hostname
- statsd addr
- statsite\_addr
- statsite\_prefix

## » consul\_agent\_config

Note: The consul\_agent\_config resource differs from consul\_agent\_self, providing less information but utilizing stable APIs. consul\_agent\_self will be deprecated in a future release.

The consul\_agent\_config data source returns configuration data from the agent specified in the provider.

#### » Example Usage

```
data "consul_agent_config" "remote_agent" {}

output "consul_version" {
   value = "${data.consul_agent_config.remote_agent.version}"
}
```

#### » Attributes Reference

The following attributes are exported:

- datacenter The datacenter the agent is running in
- node\_id The ID of the node the agent is running on
- node\_name The name of the node the agent is running on

- server Boolean if the agent is a server or not
- revision The first 9 characters of the VCS revision of the build of Consul that is running
- version The version of the build of Consul that is running

# » consul\_autopilot\_health

The consul\_autopilot\_health data source returns autopilot health information about the current Consul cluster.

### » Example Usage

```
data "consul_autopilot_health" "read" {}

output "health" {
  value = "${data.consul_autopilot_health.read.healthy}"
}
```

#### » Argument Reference

The following arguments are supported:

• datacenter - (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.

#### » Attributes Reference

The following attributes are exported:

- healthy Whether all the servers in the cluster are currently healthy
- failure\_tolerance The number of redundant healthy servers that could fail without causing an outage
- servers A list of server health information. See below for details on the available information.

#### » Server health information

- id The Raft ID of the server
- name The node name of the server
- address The address of the server
- serf\_status The status of the SerfHealth check of the server
- version The Consul version of the server

- leader Whether the server is currently leader
- last\_contact The time elapsed since the server's last contact with the leader
- last\_term The server's last known Raft leader term
- last\_index The index of the server's last committed Raft log entry
- healthy Whether the server is healthy according to the current Autopilot configuration
- voter Whether the server is a voting member of the Raft cluster
- stable\_since The time this server has been in its current Healthy state

## » consul nodes

The consul\_nodes data source returns a list of Consul nodes that have been registered with the Consul cluster in a given datacenter. By specifying a different datacenter in the query\_options it is possible to retrieve a list of nodes from a different WAN-attached Consul datacenter.

## » Example Usage

```
data "consul_nodes" "read-dc1-nodes" {
    query_options {
        # Optional parameter: implicitly uses the current datacenter of the agent
        datacenter = "dc1"
    }
}

# Set the description to a whitespace delimited list of the node names
resource "example_resource" "app" {
    description = "${join(" ", formatlist("%s", data.consul_nodes.node_names))}"
    # ...
}
```

#### » Argument Reference

- datacenter (Optional) The Consul datacenter to query. Defaults to the same value found in query\_options parameter specified below, or if that is empty, the datacenter value found in the Consul agent that this provider is configured to talk to then the datacenter in the provider setup.
- query\_options (Optional) See below.

The query\_options block supports the following:

- allow\_stale (Optional) When true, the default, allow responses from Consul servers that are followers.
- require\_consistent (Optional) When true force the client to perform a
  read on at least quorum servers and verify the result is the same. Defaults
  to false.
- token (Optional) Specify the Consul ACL token to use when performing the request. This defaults to the same API token configured by the consul provider but may be overriden if necessary.
- wait\_index (Optional) Index number used to enable blocking quereis.
- wait\_time (Optional) Max time the client should wait for a blocking query to return.

#### » Attributes Reference

The following attributes are exported:

- datacenter The datacenter the keys are being read from to.
- node\_ids A list of the Consul node IDs.
- node names A list of the Consul node names.
- nodes A list of nodes and details about each Consul agent. The list of per-node attributes is detailed below.

The following is a list of the per-node attributes contained within the nodes map:

- id The Node ID of the Consul agent.
- meta Node meta data tag information, if any.
- name The name of the Consul node.
- address The IP address the node is advertising to the Consul cluster.
- tagged\_addresses List of explicit LAN and WAN IP addresses for the agent.

### » consul service

consul\_service provides details about a specific Consul service in a given datacenter. The results include a list of nodes advertising the specified service, the node's IP address, port number, node ID, etc. By specifying a different datacenter in the query\_options it is possible to retrieve a list of services from a different WAN-attached Consul datacenter.

This data source is different from the consul\_services (plural) data source, which provides a summary of the current Consul services.

#### » Example Usage

```
data "consul_service" "read-consul-dc1" {
    name = "consul"
    # Optional parameter: implicitly uses the current datacenter of the agent
    datacenter = "dc1"
}

# Set the description to a whitespace delimited list of the node names
resource "example_resource" "app" {
    description = "${join(" ", data.consul_service.nodes)}"

    # ...
}
```

#### » Argument Reference

The following arguments are supported:

- datacenter (Optional) The Consul datacenter to query. Defaults to the same value found in query\_options parameter specified below, or if that is empty, the datacenter value found in the Consul agent that this provider is configured to talk to.
- name (Required) The service name to select.
- query\_options (Optional) See below.
- tag (Optional) A single tag that can be used to filter the list of nodes to return based on a single matching tag..

The query\_options block supports the following:

- allow\_stale (Optional) When true, the default, allow responses from Consul servers that are followers.
- require\_consistent (Optional) When true force the client to perform a read on at least quorum servers and verify the result is the same. Defaults to false.
- token (Optional) Specify the Consul ACL token to use when performing the request. This defaults to the same API token configured by the consul provider but may be overriden if necessary.
- wait\_index (Optional) Index number used to enable blocking quereis.
- wait\_time (Optional) Max time the client should wait for a blocking query to return.

The following attributes are exported:

- datacenter The datacenter the keys are being read from to.
- name The name of the service
- tag The name of the tag used to filter the list of nodes in service.
- service A list of nodes and details about each endpoint advertising a service. Each element in the list is a map of attributes that correspond to each individual node. The list of per-node attributes is detailed below.

The following is a list of the per-node service attributes:

- create\_index The index entry at which point this entry was added to the catalog.
- modify\_index The index entry at which point this entry was modified in the catalog.
- node\_address The address of the Consul node advertising the service.
- node\_id The Node ID of the Consul agent advertising the service.
- node\_meta Node meta data tag information, if any.
- node name The name of the Consul node.
- address The IP address of the service. If the ServiceAddress in the Consul catalog is empty, this value is automatically populated with the node\_address (the Address in the Consul Catalog).
- enable\_tag\_override Whether service tags can be overridden on this service.
- id A unique service instance identifier.
- name The name of the service.
- port Port number of the service.
- tagged\_addresses List of explicit LAN and WAN IP addresses for the agent.
- tags List of tags for the service.

## » consul\_service\_health

consul\_service\_health can be used to get the list of the instances that are currently healthy, according to their associated health-checks. The result includes the list of service instances, the node associated to each instance and its health-checks.

This resource is likely to change as frequently as the health-checks are being updated, you should expect different results in a frequent basis.

## » Example Usage

```
provider "consul" {}

data "consul_service_health" "vault" {
   service = "vault"
   passing = true
}

provider "vault" {
   address = "https://${data.consul_service_health.vault.results.0.service.0.address}:${data}
}
```

### » Argument Reference

The following arguments are supported:

- datacenter (Optional) The Consul datacenter to query.
- name (Required) The service name to select.
- near (Optional) Specifies a node name to sort the node list in ascending order based on the estimated round trip time from that node.
- tag (Optional) A single tag that can be used to filter the list to return based on a single matching tag.
- node\_meta (Optional) Filter the results to nodes with the specified key/value pairs.
- passing (Optional) Whether to return only nodes with all checks in the passing state. Defaults to true.

#### » Attributes Reference

The following attributes are exported:

- datacenter The datacenter the keys are being read from to.
- name The name of the service.
- near The node to which the result must be sorted to.
- tag The name of the tag used to filter the list.
- node meta The list of metadata to filter the nodes.
- passing Whether to return only nodes with all checks in the passing state.
- results A list of entries and details about each endpoint advertising a service. Each element in the list has three attributes: node, service and checks. The list of the attributes of each one is detailed below.

The following is a list of the per-entry node attributes:

- id The Node ID of the Consul node advertising the service.
- name The name of the node.
- address The address of the node.
- datacenter The datacenter in which the node is running.
- tagged\_addresses List of explicit LAN and WAN IP addresses for the agent.
- meta Node meta data tag information, if any.

The following is a list of the per-entry service attributes:

- id The ID of the service.
- name The name of the service.
- tags The list of tags associated with this instance.
- address The address of this instance.
- port The port of this instance.
- meta Service metadata tag information, if any.

checks is a list of the health-checks associated to the entry with the following attributes:

- id The ID of this health-check.
- node The name of the node associated with this health-check.
- name The name of this health-check.
- status The status of this health-check.
- notes A human readable description of the current state of the healthcheck.
- output The output of the health-check.
- service\_id The ID of the service associated to this health-check.
- service\_name The name of the service associated with this health-check.
- service\_tags The list of tags associated with this health-check.

#### » consul services

The consul\_services data source returns a list of Consul services that have been registered with the Consul cluster in a given datacenter. By specifying a different datacenter in the query\_options it is possible to retrieve a list of services from a different WAN-attached Consul datacenter.

This data source is different from the consul\_service (singular) data source, which provides a detailed response about a specific Consul service.

### » Example Usage

```
data "consul_services" "read-dc1" {
```

```
query_options {
    # Optional parameter: implicitly uses the current datacenter of the agent
    datacenter = "dc1"
}

# Set the description to a whitespace delimited list of the services
resource "example_resource" "app" {
    description = "${join(" ", data.consul_services.names)}"

    # ...
}
```

### » Argument Reference

The following arguments are supported:

- datacenter (Optional) The Consul datacenter to query. Defaults to the same value found in query\_options parameter specified below, or if that is empty, the datacenter value found in the Consul agent that this provider is configured to talk to.
- query\_options (Optional) See below.

The query\_options block supports the following:

- allow\_stale (Optional) When true, the default, allow responses from Consul servers that are followers.
- require\_consistent (Optional) When true force the client to perform a read on at least quorum servers and verify the result is the same. Defaults to false.
- token (Optional) Specify the Consul ACL token to use when performing the request. This defaults to the same API token configured by the consul provider but may be overriden if necessary.
- wait\_index (Optional) Index number used to enable blocking quereis.
- wait\_time (Optional) Max time the client should wait for a blocking query to return.

### » Attributes Reference

The following attributes are exported:

• datacenter - The datacenter the keys are being read from to.

- names A list of the Consul services found. This will always contain the list of services found.
- services.<service> For each name given, the corresponding attribute is a Terraform map of services and their tags. The value is an alphanumerically sorted, whitespace delimited set of tags associated with the service.
- tags A map of the tags found for each service. If more than one service shares the same tag, unique service names will be joined by whitespace (this is the inverse of services and can be used to lookup the services that match a single tag).

## » consul keys

The consul\_keys resource reads values from the Consul key/value store. This is a powerful way dynamically set values in templates.

### » Example Usage

```
data "consul_keys" "app" {
  datacenter = "nyc1"
  token = "abcd"

# Read the launch AMI from Consul
  key {
    name = "ami"
    path = "service/app/launch_ami"
    default = "ami-1234"
  }
}

# Start our instance with the dynamic ami value
resource "aws_instance" "app" {
  ami = "${data.consul_keys.app.var.ami}"

  # ...
}
```

# » Argument Reference

The following arguments are supported:

• datacenter - (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.

- token (Optional) The ACL token to use. This overrides the token that the agent provides by default.
- key (Required) Specifies a key in Consul to be read. Supported values documented below. Multiple blocks supported.

The key block supports the following:

- name (Required) This is the name of the key. This value of the key is exposed as var. <name>. This is not the path of the key in Consul.
- path (Required) This is the path in Consul that should be read or written to.
- default (Optional) This is the default value to set for var.<name> if the key does not exist in Consul. Defaults to an empty string.

#### » Attributes Reference

The following attributes are exported:

- datacenter The datacenter the keys are being read from.
- var.<name> For each name given, the corresponding attribute has the value of the key.

# » consul\_key\_prefix

Allows Terraform to read values from a "namespace" of Consul keys that share a common name prefix.

## » Example Usage

```
data "consul_key_prefix" "app" {
  datacenter = "nyc1"
  token = "abcd"

# Prefix to add to prepend to all of the subkey names below.
  path_prefix = "myapp/config/"

# Read the ami subkey
  subkey {
   name = "ami"
   path = "app/launch_ami"
   default = "ami-1234"
}
```

```
}
# Start our instance with the dynamic ami value
resource "aws_instance" "app" {
  ami = "${data.consul_key_prefix.app.var.ami}"
  # ...
}
data "consul_key_prefix" "web" {
  datacenter = "nyc1"
             = "efgh"
 token
 # Prefix to add to prepend to all of the subkey names below.
 path_prefix = "myapp/config/"
}
# Start our instance with the dynamic ami value
resource "aws_instance" "web" {
  ami = "${data.consul_key_prefix.web.subkeys["app/launch_ami"]}"
}
```

#### » Argument Reference

The following arguments are supported:

- datacenter (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.
- token (Optional) The ACL token to use. This overrides the token that the agent provides by default.
- path\_prefix (Required) Specifies the common prefix shared by all keys that will be read by this data source instance. In most cases, this will end with a slash to read a "folder" of subkeys.
- subkey (Optional) Specifies a subkey in Consul to be read. Supported values documented below. Multiple blocks supported.

The subkey block supports the following:

- name (Required) This is the name of the key. This value of the key is exposed as var. <name>. This is not the path of the subkey in Consul.
- path (Required) This is the subkey path in Consul (which will be appended to the given path\_prefix) to construct the full key that will be used to read the value.

• default - (Optional) This is the default value to set for var. <name> if the key does not exist in Consul. Defaults to an empty string.

#### » Attributes Reference

The following attributes are exported:

- datacenter The datacenter the keys are being read from.
- path\_prefix the common prefix shared by all keys being read.
- var.<name> For each name given, the corresponding attribute has the value of the key.
- subkeys A map of the subkeys and values is set if no subkey block is provided.

# » consul\_acl\_policy

The consul\_acl\_policy resource writes an ACL policy into Consul.

### » Example Usage

### » Argument Reference

- name (Required) The name of the policy.
- description (Optional) The description of the policy.
- rules (Required) The rules of the policy.
- datacenters (Optional) The datacenters of the policy.

The following attributes are exported:

- id The ID of the policy.
- name The name of the policy.
- description The description of the policy.
- rules The rules of the policy.
- datacenters The datacenters of the policy.

#### » Import

consul\_acl\_policy can be imported:

\$ terraform import consul\_acl\_policy.my-policy 1c90ef03-a6dd-6a8c-ac49-042ad3752896

## » consul\_acl\_token

The consul\_acl\_token resource writes an ACL token into Consul.

## » Example Usage

```
resource "consul_acl_policy" "agent" {
  name = "agent"
  rules = <<-RULE
   node_prefix "" {
     policy = "read"
   }
   RULE
}

resource "consul_acl_token" "test" {
  description = "my test token"
  policies = ["${consul_acl_policy.agent.name}"]
  local = true
}</pre>
```

## » Argument Reference

- description (Optional) The description of the token.
- policies (Optional) The list of policies attached to the token.

• local - (Optional) The flag to set the token local to the current datacenter.

#### » Attributes Reference

The following attributes are exported:

- id The token accessor ID.
- description The description of the token.
- policies The list of policies attached to the token.
- local The flag to set the token local to the current datacenter.

#### » Import

consul\_acl\_token can be imported. This is especially useful to manage the anonymous and the master token with Terraform:

# » consul\_agent\_service

The consul\_agent\_service resource has been deprecated in version 2.0.0 of the provider and will be removed in a future release. Please read the upgrade guide for more information.

Provides access to the agent service data in Consul. This can be used to define a service associated with a particular agent. Currently, defining health checks for an agent service is not supported.

## » Example Usage

```
resource "consul_agent_service" "app" {
  address = "www.google.com"
  name = "google"
  port = 80
  tags = ["tag0", "tag1"]
}
```

#### » Argument Reference

- address (Optional) The address of the service. Defaults to the address of the agent.
- name (Required) The name of the service.
- port (Optional) The port of the service.
- tags (Optional) A list of values that are opaque to Consul, but can be used to distinguish between services or nodes.

The following attributes are exported:

- address The address of the service.
- id The ID of the service, defaults to the value of name.
- name The name of the service.
- port The port of the service.
- $\bullet~$  tags The tags of the service.

# » consul\_autopilot\_config

Provides access to the Autopilot Configuration of Consul to automatically manage Consul servers.

It includes to automatically cleanup dead servers, monitor the status of the Raft cluster and stable server introduction.

#### » Example Usage

```
resource "consul_autopilot_config" "config" {
   cleanup_dead_servers = false
   last_contact_threshold = "1s"
   max_trailing_logs = 500
}
```

#### » Argument Reference

- datacenter (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.
- cleanup\_dead\_servers (Optional) Whether to remove failing servers when a replacement comes online. Defaults to true.

- last\_contact\_threshold (Optional) The time after which a server is considered as unhealthy and will be removed. Defaults to "200ms".
- max\_trailing\_logs (Optional) The maximum number of Raft log entries a server can trail the leader. Defaults to 250.
- server\_stabilization\_time (Optional) The period to wait for a server to be healthy and stable before being promoted to a full, voting member. Defaults to "10s".
- redundancy\_zone\_tag (Optional) The redundancy zone tag to use. Consul will try to keep one voting server by zone to take advantage of isolated failure domains. Defaults to an empty string.
- disable\_upgrade\_migration (Optional) Whether to disable upgrade migrations. Defaults to false.
- upgrade\_version\_tag (Optional) The tag to override the version information used during a migration. Defaults to an empty string.

The following attributes are exported:

- datacenter The datacenter used.
- cleanup\_dead\_servers Whether to remove failing servers.
- last\_contact\_threshold The time after which a server is considered as unhealthy and will be removed.
- max\_trailing\_logs The maximum number of Raft log entries a server can trail the leader.
- server\_stabilization\_time The period to wait for a server to be healthy and stable before being promoted to a full, voting member.
- redundancy\_zone\_tag The redundancy zone tag used. Consul will try to keep one voting server by zone to take advantage of isolated failure domains.
- disable\_upgrade\_migration Whether to disable upgrade migrations.
- upgrade\_version\_tag The tag to override the version information used during a migration.

# » consul\_catalog\_entry

The consul\_catalog\_entry resource has been deprecated in version 2.0.0 of the provider and will be removed in a future release. Please read the upgrade guide for more information.

Registers a node or service with the Consul Catalog. Currently, defining health checks is not supported.

#### » Example Usage

```
resource "consul_catalog_entry" "app" {
  address = "192.168.10.10"
  node = "foobar"

service = {
  address = "127.0.0.1"
  id = "redis1"
  name = "redis"
  port = 8000
  tags = ["master", "v1"]
  }
}
```

## » Argument Reference

The following arguments are supported:

- address (Required) The address of the node being added to, or referenced in the catalog.
- node (Required) The name of the node being added to, or referenced in the catalog.
- service (Optional) A service to optionally associated with the node. Supported values are documented below.
- datacenter (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.
- token (Optional) ACL token.

The service block supports the following:

- address (Optional) The address of the service. Defaults to the node address.
- id (Optional) The ID of the service. Defaults to the name.
- name (Required) The name of the service
- port (Optional) The port of the service.
- tags (Optional) A list of values that are opaque to Consul, but can be used to distinguish between services or nodes.

The following attributes are exported:

- address The address of the service.
- node The ID of the service, defaults to the value of name.

## » consul intention

Intentions are used to define rules for which services may connect to one another when using Consul Connect.

It is appropriate to either reference existing services or specify non-existent services that will be created in the future when creating intentions. This resource can be used in conjunction with the <code>consul\_service</code> datasource when referencing services registered on nodes that have a running Consul agent.

#### » Example Usage

Create a simplest intention with static service names:

```
resource "consul_intention" "database" {
  source_name
                   = "api"
 destination_name = "db"
                  = "allow"
}
Referencing a known service via a datasource:
resource "consul_intention" "database" {
  source_name
                  = "api"
 destination_name = "${consul_service.pg.name}"
                   = "allow"
}
data "consul_service" "pg" {
 name = "postgresql"
}
```

#### » Argument Reference

The following arguments are supported:

• source\_name - (Required, string) The name of the source service for the intention. This service does not have to exist.

- destination\_name (Required, string) The name of the destination service for the intention. This service does not have to exist.
- action (Required, string) The intention action. Must be one of allow or deny.
- meta (Optional, map) Key/value pairs that are opaque to Consul and are associated with the intention.
- description (Optional, string) Optional description that can be used by Consul tooling, but is not used internally.
- datacenter (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.

The following attributes are exported:

- id The ID of the intention.
- source\_name The source for the intention.
- destination\_name The destination for the intention.
- description A description of the intention.
- meta Key/value pairs associated with the intention.

## » consul keys

The consul\_keys resource writes sets of individual values into Consul. This is a powerful way to expose infrastructure details to clients.

This resource manages individual keys, and thus it can create, update and delete the keys explicitly given. However, it is not able to detect and remove additional keys that have been added by non-Terraform means. To manage *all* keys sharing a common prefix, and thus have Terraform remove errant keys not present in the configuration, consider using the <code>consul\_key\_prefix</code> resource instead.

#### » Example Usage

```
resource "consul_keys" "app" {
  datacenter = "nyc1"
  token = "abcd"

# Set the CNAME of our load balancer as a key
  key {
    path = "service/app/elb_address"
```

```
value = "${aws_elb.app.dns_name}"
}
```

## » Argument Reference

The following arguments are supported:

- datacenter (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.
- token (Optional) The ACL token to use. This overrides the token that the agent provides by default.
- key (Required) Specifies a key in Consul to be written. Supported values documented below.

The key block supports the following:

- path (Required) This is the path in Consul that should be written to.
- value (Required) The value to write to the given path.
- flags (Optional) An unsigned integer value to attach to the key (defaults to 0).
- delete (Optional) If true, then the key will be deleted when either its configuration block is removed from the configuration or the entire resource is destroyed. Otherwise, it will be left in Consul. Defaults to false.

#### » Deprecated key arguments

Prior to Terraform 0.7, this resource was used both to read and write the Consul key/value store. The read functionality has moved to the consul\_keys data source, whose documentation can be found via the navigation.

The pre-0.7 interface for reading keys is still supported for backward compatibility, but will be removed in a future version of Terraform.

#### » Attributes Reference

The following attributes are exported:

• datacenter - The datacenter the keys are being written to.

## » consul\_key\_prefix

Allows Terraform to manage a "namespace" of Consul keys that share a common name prefix.

Like consul\_keys, this resource can write values into the Consul key/value store, but *unlike* consul\_keys this resource can detect and remove extra keys that have been added some other way, thus ensuring that rogue data added outside of Terraform will be removed on the next run.

This resource is thus useful in the case where Terraform is exclusively managing a set of related keys.

To avoid accidentally clobbering matching data that existed in Consul before a consul\_key\_prefix resource was created, creation of a key prefix instance will fail if any matching keys are already present in the key/value store. If any conflicting data is present, you must first delete it manually or explicitly import the prefix.

Warning After this resource is instantiated, Terraform takes control over *all* keys with the given path prefix, and will remove any matching keys that are not present in the configuration. It will also delete *all* keys under the given prefix when a <code>consul\_key\_prefix</code> resource is destroyed, even if those keys were created outside of Terraform.

#### » Example Usage

```
resource "consul_key_prefix" "myapp_config" {
  datacenter = "nvc1"
             = "abcd"
  token
 # Prefix to add to prepend to all of the subkey names below.
 path_prefix = "myapp/config/"
  subkeys = {
                        = "${aws elb.app.dns name}"
    "elb cname"
    "s3 bucket name"
                        = "${aws s3 bucket.app.bucket}"
    "database/hostname" = "${aws db instance.app.address}"
    "database/port"
                        = "${aws_db_instance.app.port}"
    "database/username" = "${aws_db_instance.app.username}"
    "database/name"
                        = "${aws_db_instance.app.name}"
  }
  subkey {
   path = "database/password"
    value = "${aws_db_instance.app.password}"
```

```
flags = 2 }
```

### » Argument Reference

The following arguments are supported:

- datacenter (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.
- token (Optional) The ACL token to use. This overrides the token that the agent provides by default.
- path\_prefix (Required) Specifies the common prefix shared by all keys that will be managed by this resource instance. In most cases this will end with a slash, to manage a "folder" of keys.
- subkeys (Optional) A mapping from subkey name (which will be appended to the given path\_prefix) to the value that should be stored at that key. Use slashes, as shown in the above example, to create "subfolders" under the given path prefix.
- subkey (Optional) A subkey to add. Supported values documented below. Multiple blocks supported.

The subkey block supports the following:

- path (Required) This is the path (which will be appended to the given path prefix) in Consul that should be written to.
- value (Required) The value to write to the given path.
- flags (Optional) An unsigned integer value to attach to the key (defaults to 0).

#### » Attributes Reference

The following attributes are exported:

• datacenter - The datacenter the keys are being read/written to.

#### » Import

consul\_key\_prefix can be imported. This is useful when the path already and you know all keys in path must be removed.

\$ terraform import consul\_key\_prefix.myapp\_config myapp/config/

## » consul node

Provides access to Node data in Consul. This can be used to define a node. Currently, defining health checks is not supported.

## » Example Usage

```
resource "consul_node" "foobar" {
  address = "192.168.10.10"
  name = "foobar"
}
```

### » Argument Reference

The following arguments are supported:

- address (Required) The address of the node being added to, or referenced in the catalog.
- name (Required) The name of the node being added to, or referenced in the catalog.
- datacenter (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.
- meta (Optional, map) Key/value pairs that are associated with the node.

#### » Attributes Reference

The following attributes are exported:

- address The address of the service.
- name The name of the service.
- meta (Optional, map) Key/value pairs that are associated with the node.

# » consul\_prepared\_query

Allows Terraform to manage a Consul prepared query.

Managing prepared queries is done using Consul's REST API. This resource is useful to provide a consistent and declarative way of managing prepared queries in your Consul cluster using Terraform.

#### » Example Usage

```
# Creates a prepared query myquery.query.consul that finds the nearest
# healthy myapp.service.consul instance that has the active tag and not
# the standby tag.
resource "consul_prepared_query" "myapp-query" {
             = "myquery"
 datacenter = "us-central1"
              = "abcd"
 token
 stored_token = "wxyz"
 only_passing = true
 near
              = "_agent"
  service = "myapp"
         = ["active", "!standby"]
  tags
 failover {
   nearest n
    datacenters = ["us-west1", "us-east-2", "asia-east1"]
 }
 dns {
   tt1 = "30s"
 }
}
# Creates a Prepared Query Template that matches *-near-self.query.consul
# and finds the nearest service that matches the glob character (e.g.
# foo-near-self.query.consul will find the nearest healthy foo.service.consul).
resource "consul_prepared_query" "service-near-self" {
  datacenter = "nyc1"
  token
              = "abcd"
  stored_token = "wxyz"
              = ""
 name
 only_passing = true
  connect = true
 near
              = "_agent"
  template {
         = "name_prefix_match"
   regexp = "^(.*)-near-self$"
```

```
}
service = "$${match(1)}"

failover {
   nearest_n = 3
   datacenters = ["dc2", "dc3", "dc4"]
}

dns {
   ttl = "5m"
}
```

#### » Argument Reference

- datacenter (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.
- token (Optional) The ACL token to use when saving the prepared query. This overrides the token that the agent provides by default.
- stored\_token (Optional) The ACL token to store with the prepared query. This token will be used by default whenever the query is executed.
- name (Required) The name of the prepared query. Used to identify the prepared query during requests. Can be specified as an empty string to configure the query as a catch-all.
- service (Required) The name of the service to query.
- session (Optional) The name of the Consul session to tie this query's lifetime to. This is an advanced parameter that should not be used without a complete understanding of Consul sessions and the implications of their use (it is recommended to leave this blank in nearly all cases). If this parameter is omitted the query will not expire.
- tags (Optional) The list of required and/or disallowed tags. If a tag is in this list it must be present. If the tag is preceded with a "!" then it is disallowed.
- only\_passing (Optional) When true, the prepared query will only return nodes with passing health checks in the result.
- connect (Optional) When true the prepared query will return connect proxy services for a queried service. Conditions such as tags in the prepared query will be matched against the proxy service. Defaults to false.

- near (Optional) Allows specifying the name of a node to sort results
  near using Consul's distance sorting and network coordinates. The magic
  \_agent value can be used to always sort nearest the node servicing the
  request.
- failover (Optional) Options for controlling behavior when no healthy nodes are available in the local DC.
  - nearest\_n (Optional) Return results from this many datacenters, sorted in ascending order of estimated RTT.
  - datacenters (Optional) Remote datacenters to return results from.
- dns (Optional) Settings for controlling the DNS response details.
  - ttl (Optional) The TTL to send when returning DNS results.
- template (Optional) Query templating options. This is used to make a single prepared query respond to many different requests.
  - type (Required) The type of template matching to perform. Currently only name\_prefix\_match is supported.
  - regexp (Required) The regular expression to match with. When using name\_prefix\_match, this regex is applied against the query name.

The following attributes are exported:

• id - The ID of the prepared query, generated by Consul.

#### » Import

consul\_prepared\_query can be imported with the query's ID in the Consul HTTP API.

\$ terraform import consul\_prepared\_query.my\_service 71ecfb82-717a-4258-b4b6-2fb75144d856

#### » consul service

A high-level resource for creating a Service in Consul in the Consul catalog. This is appropriate for registering external services and can be used to create services addressable by Consul that cannot be registered with a local agent.

If the Consul agent is running on the node where this service is registered, it is not recommended to use this resource.

### » Example Usage

```
Creating a new node with the service:
resource "consul_service" "google" {
 name
          = "google"
          = "${consul_node.compute.name}"
 node
         = 80
 port
  tags
          = ["tag0"]
}
resource "consul_node" "compute" {
          = "compute-google"
  address = "www.google.com"
Utilizing an existing known node:
resource "consul_service" "google" {
          = "google"
 name
          = "google"
 node
 port
          = 443
}
Register an health-check:
resource "consul_service" "redis" {
 name = "redis"
 node = "redis"
 port = 6379
  check {
                                       = "service:redis1"
    check_id
                                       = "Redis health check"
    name
    status
                                       = "passing"
    http
                                       = "https://www.hashicorptest.com"
    tls_skip_verify
                                       = "PUT"
    method
                                       = "5s"
    interval
    timeout
    deregister_critical_service_after = "30s"
    header {
      name = "foo"
      value = ["test"]
    }
    header {
```

```
name = "bar"
    value = ["test"]
}
}
```

#### » Argument Reference

The following arguments are supported:

- name (Required, string) The name of the service.
- node (Required, string) The name of the node the to register the service on.
- address (Optional, string) The address of the service. Defaults to the address of the node.
- service\_id (Optional, string) If the service ID is not provided, it will be defaulted to the value of the name attribute.
- port (Optional, int) The port of the service.
- checks (Optional, list of checks) Health-checks to register to monitor the service. The list of attributes for each health-check is detailled below.
- tags (Optional, set of strings) A list of values that are opaque to Consul, but can be used to distinguish between services or nodes.
- datacenter (Optional) The datacenter to use. This overrides the agent's default datacenter and the datacenter in the provider setup.

The following attributes are available for each health-check:

- check\_id (Optional, string) An ID, unique per agent. Will default to name if not set.
- name (Required) The name of the health-check.
- notes (Optional, string) An opaque field meant to hold human readable text.
- status (Optional, string) The initial health-check status. Defaults to critical.
- tcp (Optional, string) The TCP address and port to connect to for a TCP check.
- http (Optional, string) The HTTP endpoint to call for an HTTP check.
- header (Optional, set of headers) The headers to send for an HTTP check. The attributes of each header is given below.
- tls\_skip\_verify (Optional, boolean) Whether to deactivate certificate verification for HTTP health-checks. Defaults to false.
- method (Optional, string) The method to use for HTTP health-checks.
   Defaults to GET.

- interval (Required, string) The interval to wait between each health-check invocation.
- timeout (Required, string) The timeout value for HTTP checks.
- deregister\_critical\_service\_after (Required, string) The time after which the service is automatically deregistered when in the critical state.

Each header must have the following attributes: \* name - (Required, string) The name of the header. \* value - (Required, list of strings) The header's list of values.

#### » Attributes Reference

The following attributes are exported:

- service\_id The ID of the service.
- address The address of the service.
- node The node the service is registered on.
- name The name of the service.
- port The port of the service.
- tags The tags of the service.
- checks The list of health-checks associated with the service.
- datacenter The datacenter of the service.