Oracle Cloud Infrastructure Provider

The Oracle Cloud Infrastructure provider is used to interact with the many resources supported by the Oracle Cloud Infrastructure (https://cloud.oracle.com/cloud-infrastructure). The provider needs to be configured with credentials for the Oracle Cloud Infrastructure account.

Use the navigation to the left to read about the available resources.

Example Usage

```
# Configure the Oracle Cloud Infrastructure provider with an API Key
provider "oci" {
  tenancy_ocid = "${var.tenancy_ocid}"
  user_ocid = "${var.user_ocid}"
  fingerprint = "${var.fingerprint}"
  private_key_path = "${var.private_key_path}"
  region = "${var.region}"
}

# Get a list of Availability Domains
data "oci_identity_availability_domains" "ads" {
  compartment_id = "${var.tenancy_ocid}"
}

# Output the result
output "show-ads" {
  value = "${data.oci_identity_availability_domains.ads.availability_domains}"
}
```

Authentication

The OCI provider supports API Key based authentication and Instance Principal based authentication.

API Key based authentication

Calls to OCI using API Key authentication requires that you provide the following credentials:

- `tenancy_ocid` - The global identifier for your account, always shown on the bottom of the web console.

- `user_ocid` - The identifier of the user account you will be using for Terraform. For information on setting the correct policies for your user see Managing Users (https://docs.cloud.oracle.com/iaas/Content/Identity/Tasks/managingusers.htm).

- `private_key_path` - The path to the private key stored on your computer. The public key portion must be added to the user account above in the *API Keys* section of the web console. For details on how to create and configure keys see Required Keys and OCIDs (https://docs.us-phoenix-1.oraclecloud.com/Content/API/Concepts/apisigningkey.htm).

- `fingerprint` - The fingerprint of the public key added in the above user's *API Keys* section of the web console.

- `region` - The region to target with this provider configuration.

Environment variables

It is common to export the above values as environment variables, or source them in different bash profiles when executing Terraform commands. Below are OS specific examples for configuring these environment values.

If you primarily work in a single compartment, consider exporting the compartment OCID as well. The tenancy OCID is also the OCID of the root compartment, and can be used where any compartment id is required.

 *nix

If your Terraform configurations are limited to a single compartment or user, then using this `bash_profile` option be sufficient. For more complex environments you may want to maintain multiple sets of environment variables. See the compute single instance example (https://github.com/oracle/terraform-provider-oci/tree/master/docs/examples/compute/instance) for more info.

In your ~/.bash_profile set these variables: export TF_VAR_tenancy_ocid=<value> export TF_VAR_compartment_ocid=<value> export TF_VAR_user_ocid=<value> export TF_VAR_fingerprint=<value> export TF_VAR_private_key_path=<value>

Once you've set these values open a new terminal or source your profile changes: $ source ~/.bash_profile

 Windows

Configuring for Windows usage is largely the same, with one notable exception: you can use PuttyGen to create the public and private key as shown above, however, you will need to convert them from PPK format to PEM format.

```
setx TF_VAR_tenancy_ocid <value>
setx TF_VAR_compartment_ocid <value>
setx TF_VAR_user_ocid <value>
setx TF_VAR_fingerprint <value>
setx TF_VAR_private_key_path <value>
```

The variables won't be set for the current session, exit the terminal and reopen.

Instance Principal Authentication

Instance Principal authentication allows you to run Terraform from an OCI Instance within your Tenancy. To enable Instance Principal authentication, set the `auth` attribute to "InstancePrincipal" in the provider definition as below:

```
# Configure the Oracle Cloud Infrastructure provider to use Instance Principal based authentication
provider "oci" {
  auth = "InstancePrincipal"
  region = "${var.region}"
}
```

Note: this configuration will only work when run from an OCI instance. For more information on using Instance Principals, see this document (https://docs.cloud.oracle.com/iaas/Content/Identity/Tasks/callingservicesfrominstances.htm).

Testing

Credentials must be provided via the environment variables as shown above in order to run acceptance tests.

Data Source: oci_audit_events

This data source provides the list of Audit Events in Oracle Cloud Infrastructure Audit service.

Returns all audit events for the specified compartment that were processed within the specified time range.

Example Usage

```
data "oci_audit_events" "test_audit_events" {
    #Required
    compartment_id = "${var.compartment_id}"
    end_time = "${var.audit_event_end_time}"
    start_time = "${var.audit_event_start_time}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `end_time` - (Required) Returns events that were processed before this end date and time, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. For example, a start value of `2017-01-01T00:00:00Z` and an end value of `2017-01-02T00:00:00Z` will retrieve a list of all events processed on January 1, 2017. Similarly, a start value of `2017-01-01T00:00:00Z` and an end value of `2017-02-01T00:00:00Z` will result in a list of all events processed between January 1, 2017 and January 31, 2017. You can specify a value with granularity to the minute. Seconds (and milliseconds, if included) must be set to `0`.

- `start_time` - (Required) Returns events that were processed at or after this start date and time, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. For example, a start value of `2017-01-15T11:30:00Z` will retrieve a list of all events processed since 30 minutes after the 11th hour of January 15, 2017, in Coordinated Universal Time (UTC). You can specify a value with granularity to the minute. Seconds (and milliseconds, if included) must be set to `0`.

- `limit` - (Optional) The number of pages of events to request from the service. Default to 1. Large `start_time` and `end_time` ranges or very active tenancies may result in very large data sets that could cause performance issues running Terraform commands. This default value mitigates that risk by requiring intentionally setting a higher tolerance for slow running Terarform commands with potentially large statefiles.

Attributes Reference

The following attributes are exported:

- `audit_events` - The list of audit_events.

AuditEvent Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment.

- `credential_id` - The credential ID of the user. This value is extracted from the HTTP 'Authorization' request header. It consists of the tenantId, userId, and user fingerprint, all delimited by a slash (/).

- `event_id` - The GUID of the event.

- `event_name` - The name of the event. Example: `LaunchInstance`

- `event_source` - The source of the event.

- `event_time` - The time the event occurred, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format.

- `event_type` - The type of the event.

- `principal_id` - The OCID of the user whose action triggered the event.

- `request_action` - The HTTP method of the request.

- `request_agent` - The user agent of the client that made the request.

- `request_headers` - The HTTP header fields and values in the request.

- `request_id` - The opc-request-id of the request.

- `request_origin` - The IP address of the source of the request.

- `request_parameters` - The query parameter fields and values for the request.

- `request_resource` - The resource targeted by the request.

- `response_headers` - The headers of the response.

- `response_payload` - Metadata of interest from the response payload. For example, the OCID of a resource.

- `response_status` - The status code of the response.

- `response_time` - The time of the response to the audited request, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format.

- `tenant_id` - The OCID of the tenant.

Data Source: oci_audit_configuration

This data source provides details about a specific Configuration resource in Oracle Cloud Infrastructure Audit service.

Get the configuration

Example Usage

```
data "oci_audit_configuration" "test_configuration" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) ID of the root compartment (tenancy)

Attributes Reference

The following attributes are exported:

- `retention_period_days` - The retention period days

Data Source: oci_containerengine_cluster_kube_config

This data source provides details about a specific Cluster Kube Config resource in Oracle Cloud Infrastructure Container Engine service.

Example Usage

```
data "oci_containerengine_cluster_kube_config" "test_cluster_kube_config" {
    #Required
    cluster_id = "${oci_containerengine_cluster.test_cluster.id}"

    #Optional
    expiration = "${var.cluster_kube_config_expiration}"
    token_version = "${var.cluster_kube_config_token_version}"
}
```

Argument Reference

The following arguments are supported:

- `cluster_id` - (Required) The OCID of the cluster.

- `expiration` - (Optional) The desired expiration, in seconds, to use for the kubeconfig token.

- `token_version` - (Optional) The version of the kubeconfig token.

Attributes Reference

The following attributes are exported:

- `content` - content of the Kubeconfig YAML for the cluster.

Data Source: oci_containerengine_cluster_option

This data source provides details about a specific Cluster Option resource in Oracle Cloud Infrastructure Container Engine service.

Get options available for clusters.

Example Usage

```
data "oci_containerengine_cluster_option" "test_cluster_option" {
    #Required
    cluster_option_id = "${oci_containerengine_cluster_option.test_cluster_option.id}"
}
```

Argument Reference

The following arguments are supported:

- `cluster_option_id` - (Required) The id of the option set to retrieve. Only "all" is supported.

Attributes Reference

The following attributes are exported:

- `kubernetes_versions` - Available Kubernetes versions.

Data Source: oci_containerengine_clusters

This data source provides the list of Clusters in Oracle Cloud Infrastructure Container Engine service.

List all the cluster objects in a compartment.

Example Usage

```
data "oci_containerengine_clusters" "test_clusters" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    name = "${var.cluster_name}"
    state = "${var.cluster_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `name` - (Optional) The name to filter on.

- `state` - (Optional) A cluster lifecycle state to filter on. Can have multiple parameters of this name.

Attributes Reference

The following attributes are exported:

- `clusters` - The list of clusters.

Cluster Reference

The following attributes are exported:

- `available_kubernetes_upgrades` - Available Kubernetes versions to which the clusters masters may be upgraded.

- `compartment_id` - The OCID of the compartment in which the cluster exists.

- `endpoints` - Endpoints served up by the cluster masters.
    - `kubernetes` - The Kubernetes API server endpoint.

- `id` - The OCID of the cluster.

- `kubernetes_version` - The version of Kubernetes running on the cluster masters.

- `lifecycle_details` - Details about the state of the cluster masters.

- `metadata` - Metadata about the cluster.
  - `created_by_user_id` - The user who created the cluster.

  - `created_by_work_request_id` - The OCID of the work request which created the cluster.

  - `deleted_by_user_id` - The user who deleted the cluster.

  - `deleted_by_work_request_id` - The OCID of the work request which deleted the cluster.

  - `time_created` - The time the cluster was created.

  - `time_deleted` - The time the cluster was deleted.

  - `time_updated` - The time the cluster was updated.

  - `updated_by_user_id` - The user who updated the cluster.

  - `updated_by_work_request_id` - The OCID of the work request which updated the cluster.
- `name` - The name of the cluster.

- `options` - Optional attributes for the cluster.
  - `add_ons` - Configurable cluster add-ons
    - `is_kubernetes_dashboard_enabled` - Whether or not to enable the Kubernetes Dashboard add-on.

    - `is_tiller_enabled` - Whether or not to enable the Tiller add-on.

  - `kubernetes_network_config` - Network configuration for Kubernetes.
    - `pods_cidr` - The CIDR block for Kubernetes pods.

    - `services_cidr` - The CIDR block for Kubernetes services.

  - `service_lb_subnet_ids` - The OCIDs of the subnets used for Kubernetes services load balancers.
- `state` - The state of the cluster masters.

- `vcn_id` - The OCID of the virtual cloud network (VCN) in which the cluster exists.

Data Source: oci_containerengine_node_pool

This data source provides details about a specific Node Pool resource in Oracle Cloud Infrastructure Container Engine service.

Get the details of a node pool.

Example Usage

```
data "oci_containerengine_node_pool" "test_node_pool" {
    #Required
    node_pool_id = "${oci_containerengine_node_pool.test_node_pool.id}"
}
```

Argument Reference

The following arguments are supported:

* `node_pool_id` - (Required) The OCID of the node pool.

Attributes Reference

The following attributes are exported:

* `cluster_id` - The OCID of the cluster to which this node pool is attached.

* `compartment_id` - The OCID of the compartment in which the node pool exists.

* `id` - The OCID of the node pool.

* `initial_node_labels` - A list of key/value pairs to add to nodes after they join the Kubernetes cluster.
    * `key` - The key of the pair.

    * `value` - The value of the pair.

* `kubernetes_version` - The version of Kubernetes running on the nodes in the node pool.

* `name` - The name of the node pool.

* `node_image_id` - The OCID of the image running on the nodes in the node pool.

* `node_image_name` - The name of the image running on the nodes in the node pool.

* `node_shape` - The name of the node shape of the nodes in the node pool.

* `nodes` - The nodes in the node pool.
    * `availability_domain` - The name of the availability domain in which this node is placed.

    * `error` - An error that may be associated with the node.
        * `code` - A short error code that defines the error, meant for programmatic parsing. See API Errors

(https://docs.cloud.oracle.com/iaas/Content/API/References/apierrors.htm).

- - - `message` - A human-readable error string.

  - `id` - The OCID of the compute instance backing this node.

  - `lifecycle_details` - Details about the state of the node.

  - `name` - The name of the node.

  - `node_pool_id` - The OCID of the node pool to which this node belongs.

  - `public_ip` - The public IP address of this node.

  - `state` - The state of the node.

  - `subnet_id` - The OCID of the subnet in which this node is placed.

- `quantity_per_subnet` - The number of nodes in each subnet.

- `ssh_public_key` - The SSH public key on each node in the node pool.

- `subnet_ids` - The OCIDs of the subnets in which to place nodes for this node pool.

Data Source: oci_containerengine_node_pool_option

This data source provides details about a specific Node Pool Option resource in Oracle Cloud Infrastructure Container Engine service.

Get options available for node pools.

Example Usage

```
data "oci_containerengine_node_pool_option" "test_node_pool_option" {
    #Required
    node_pool_option_id = "${oci_containerengine_node_pool_option.test_node_pool_option.id}"
}
```

Argument Reference

The following arguments are supported:

- `node_pool_option_id` - (Required) The id of the option set to retrieve. Only "all" is supported.

Attributes Reference

The following attributes are exported:

- `images` - Available Kubernetes versions.

- `kubernetes_versions` - Available Kubernetes versions.

- `shapes` - Available shapes for nodes.

Data Source: oci_containerengine_node_pools

This data source provides the list of Node Pools in Oracle Cloud Infrastructure Container Engine service.

List all the node pools in a compartment, and optionally filter by cluster.

Example Usage

```
data "oci_containerengine_node_pools" "test_node_pools" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    cluster_id = "${oci_containerengine_cluster.test_cluster.id}"
    name = "${var.node_pool_name}"
}
```

Argument Reference

The following arguments are supported:

- `cluster_id` - (Optional) The OCID of the cluster.

- `compartment_id` - (Required) The OCID of the compartment.

- `name` - (Optional) The name to filter on.

Attributes Reference

The following attributes are exported:

- `node_pools` - The list of node_pools.

NodePool Reference

The following attributes are exported:

- `cluster_id` - The OCID of the cluster to which this node pool is attached.

- `compartment_id` - The OCID of the compartment in which the node pool exists.

- `id` - The OCID of the node pool.

- `initial_node_labels` - A list of key/value pairs to add to nodes after they join the Kubernetes cluster.
    - `key` - The key of the pair.

    - `value` - The value of the pair.

- `kubernetes_version` - The version of Kubernetes running on the nodes in the node pool.

- `name` - The name of the node pool.

- `node_image_id` - The OCID of the image running on the nodes in the node pool.

- `node_image_name` - The name of the image running on the nodes in the node pool.

- `node_shape` - The name of the node shape of the nodes in the node pool.

- `nodes` - The nodes in the node pool.
  - `availability_domain` - The name of the availability domain in which this node is placed.

  - `error` - An error that may be associated with the node.
    - `code` - A short error code that defines the error, meant for programmatic parsing. See API Errors (https://docs.cloud.oracle.com/iaas/Content/API/References/apierrors.htm).

    - `message` - A human-readable error string.

  - `id` - The OCID of the compute instance backing this node.

  - `lifecycle_details` - Details about the state of the node.

  - `name` - The name of the node.

  - `node_pool_id` - The OCID of the node pool to which this node belongs.

  - `public_ip` - The public IP address of this node.

  - `state` - The state of the node.

  - `subnet_id` - The OCID of the subnet in which this node is placed.

- `quantity_per_subnet` - The number of nodes in each subnet.

- `ssh_public_key` - The SSH public key on each node in the node pool.

- `subnet_ids` - The OCIDs of the subnets in which to place nodes for this node pool.

Data Source: oci_containerengine_work_request_errors

This data source provides the list of Work Request Errors in Oracle Cloud Infrastructure Container Engine service.

Get the errors of a work request.

Example Usage

```
data "oci_containerengine_work_request_errors" "test_work_request_errors" {
    #Required
    compartment_id = "${var.compartment_id}"
    work_request_id = "${oci_containerengine_work_request.test_work_request.id}"
}
```

Argument Reference

The following arguments are supported:

* `compartment_id` - (Required) The OCID of the compartment.

* `work_request_id` - (Required) The OCID of the work request.

Attributes Reference

The following attributes are exported:

* `work_request_errors` - The list of work_request_errors.

WorkRequestError Reference

The following attributes are exported:

* `code` - A short error code that defines the error, meant for programmatic parsing. See API Errors (https://docs.cloud.oracle.com/iaas/Content/API/References/apierrors.htm).

* `message` - A human-readable error string.

* `timestamp` - The date and time the error occurred.

Data Source: oci_containerengine_work_request_log_entries

This data source provides the list of Work Request Log Entries in Oracle Cloud Infrastructure Container Engine service.

Get the logs of a work request.

Example Usage

```
data "oci_containerengine_work_request_log_entries" "test_work_request_log_entries" {
    #Required
    compartment_id = "${var.compartment_id}"
    work_request_id = "${oci_containerengine_work_request.test_work_request.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `work_request_id` - (Required) The OCID of the work request.

Attributes Reference

The following attributes are exported:

- `work_request_log_entries` - The list of work_request_log_entries.

WorkRequestLogEntry Reference

The following attributes are exported:

- `message` - The description of an action that occurred.

- `timestamp` - The date and time the log entry occurred.

Data Source: oci_containerengine_work_requests

This data source provides the list of Work Requests in Oracle Cloud Infrastructure Container Engine service.

List all work requests in a compartment.

Example Usage

```
data "oci_containerengine_work_requests" "test_work_requests" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    cluster_id = "${oci_containerengine_cluster.test_cluster.id}"
    resource_id = "${oci_containerengine_resource.test_resource.id}"
    resource_type = "${var.work_request_resource_type}"
    status = "${var.work_request_status}"
}
```

Argument Reference

The following arguments are supported:

- `cluster_id` - (Optional) The OCID of the cluster.

- `compartment_id` - (Required) The OCID of the compartment.

- `resource_id` - (Optional) The OCID of the resource associated with a work request

- `resource_type` - (Optional) Type of the resource associated with a work request

- `status` - (Optional) A work request status to filter on. Can have multiple parameters of this name.

Attributes Reference

The following attributes are exported:

- `work_requests` - The list of work_requests.

WorkRequest Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment in which the work request exists.

- `id` - The OCID of the work request.

- `operation_type` - The type of work the work request is doing.

- `resources` - The resources this work request affects.

- action_type - The way in which this resource was affected by the work tracked by the work request.

- entity_type - The resource type the work request affects.

- entity_uri - The URI path on which the user can issue a GET request to access the resource metadata.

- identifier - The OCID of the resource the work request affects.

- status - The current status of the work request.

- time_accepted - The time the work request was accepted.

- time_finished - The time the work request was finished.

- time_started - The time the work request was started.

Data Source: oci_core_app_catalog_listing

This data source provides details about a specific App Catalog Listing resource in Oracle Cloud Infrastructure Core service.

Gets the specified listing.

Example Usage

```
data "oci_core_app_catalog_listing" "test_app_catalog_listing" {
    #Required
    listing_id = "${oci_core_listing.test_listing.id}"
}
```

Argument Reference

The following arguments are supported:

- `listing_id` - (Required) The OCID of the listing.

Attributes Reference

The following attributes are exported:

- `contact_url` - Listing's contact URL.

- `description` - Description of the listing.

- `display_name` - The display name of the listing.

- `listing_id` - the region free ocid of the listing resource.

- `publisher_logo_url` - Publisher's logo URL.

- `publisher_name` - The name of the publisher who published this listing.

- `summary` - The short summary for the listing.

- `time_published` - Date and time the listing was published, in RFC3339 format. Example: `2018-03-20T12:32:53.532Z`

Data Source: oci_core_app_catalog_listing_resource_version

This data source provides details about a specific App Catalog Listing Resource Version resource in Oracle Cloud Infrastructure Core service.

Gets the specified listing resource version.

Example Usage

```
data "oci_core_app_catalog_listing_resource_version" "test_app_catalog_listing_resource_version" {
    #Required
    listing_id = "${oci_core_listing.test_listing.id}"
    resource_version = "${var.app_catalog_listing_resource_version_resource_version}"
}
```

Argument Reference

The following arguments are supported:

- `listing_id` - (Required) The OCID of the listing.

- `resource_version` - (Required) Listing Resource Version.

Attributes Reference

The following attributes are exported:

- `accessible_ports` - List of accessible ports for instances launched with this listing resource version.

- `allowed_actions` - Allowed actions for the listing resource.

- `available_regions` - List of regions that this listing resource version is available.

  For information about Regions, see Regions (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/regions.htm).

  Example: ["us-ashburn-1", "us-phoenix-1"]

- `compatible_shapes` - Array of shapes compatible with this resource.

  You may enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

  Example: ["VM.Standard1.1", "VM.Standard1.2"]

- `listing_id` - The OCID of the listing this resource version belongs to.

- `listing_resource_id` - OCID of the listing resource.

- `listing_resource_version` - Resource Version.

- `time_published` - Date and time the listing resource version was published, in RFC3339 format. Example: `2018-03-20T12:32:53.532Z`

Data Source: oci_core_app_catalog_listing_resource_versions

This data source provides the list of App Catalog Listing Resource Versions in Oracle Cloud Infrastructure Core service.

Gets all resource versions for a particular listing.

Example Usage

```
data "oci_core_app_catalog_listing_resource_versions" "test_app_catalog_listing_resource_versions" {
    #Required
    listing_id = "${oci_core_listing.test_listing.id}"
}
```

Argument Reference

The following arguments are supported:

- `listing_id` - (Required) The OCID of the listing.

Attributes Reference

The following attributes are exported:

- `app_catalog_listing_resource_versions` - The list of app_catalog_listing_resource_versions.

AppCatalogListingResourceVersion Reference

The following attributes are exported:

- `accessible_ports` - List of accessible ports for instances launched with this listing resource version.

- `allowed_actions` - Allowed actions for the listing resource.

- `available_regions` - List of regions that this listing resource version is available.

  For information about Regions, see Regions (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/regions.htm).

  Example: ["us-ashburn-1", "us-phoenix-1"]

- `compatible_shapes` - Array of shapes compatible with this resource.

  You may enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

  Example: ["VM.Standard1.1", "VM.Standard1.2"]

- `listing_id` - The OCID of the listing this resource version belongs to.

- `listing_resource_id` - OCID of the listing resource.

- `listing_resource_version` - Resource Version.

- `time_published` - Date and time the listing resource version was published, in RFC3339 format. Example: `2018-03-20T12:32:53.532Z`

Data Source: oci_core_app_catalog_listings

This data source provides the list of App Catalog Listings in Oracle Cloud Infrastructure Core service.

Lists the published listings.

Example Usage

```
data "oci_core_app_catalog_listings" "test_app_catalog_listings" {

    #Optional
    display_name = "${var.app_catalog_listing_display_name}"
    publisher_name = "${var.app_catalog_listing_publisher_name}"
    publisher_type = "${var.app_catalog_listing_publisher_type}"
}
```

Argument Reference

The following arguments are supported:

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `publisher_name` - (Optional) A filter to return only the publisher that matches the given publisher name exactly.

- `publisher_type` - (Optional) A filter to return only publishers that match the given publisher type exactly. Valid types are OCI, ORACLE, TRUSTED, STANDARD.

Attributes Reference

The following attributes are exported:

- `app_catalog_listings` - The list of app_catalog_listings.

AppCatalogListing Reference

The following attributes are exported:

- `contact_url` - Listing's contact URL.

- `description` - Description of the listing.

- `display_name` - The display name of the listing.

- `listing_id` - the region free ocid of the listing resource.

- `publisher_logo_url` - Publisher's logo URL.

- `publisher_name` - The name of the publisher who published this listing.

- `summary` - The short summary for the listing.

- `time_published` - Date and time the listing was published, in RFC3339 format. Example: `2018-03-20T12:32:53.532Z`

Data Source: oci_core_app_catalog_subscriptions

This data source provides the list of App Catalog Subscriptions in Oracle Cloud Infrastructure Core service.

Lists subscriptions for a compartment.

Example Usage

```
data "oci_core_app_catalog_subscriptions" "test_app_catalog_subscriptions" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    listing_id = "${oci_core_listing.test_listing.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `listing_id` - (Optional) A filter to return only the listings that matches the given listing id.

Attributes Reference

The following attributes are exported:

- `app_catalog_subscriptions` - The list of app_catalog_subscriptions.

AppCatalogSubscription Reference

The following attributes are exported:

- `compartment_id` - The compartmentID of the subscription.

- `display_name` - The display name of the listing.

- `listing_id` - The ocid of the listing resource.

- `listing_resource_id` - Listing resource id.

- `listing_resource_version` - Listing resource version.

- `publisher_name` - Name of the publisher who published this listing.

- `summary` - The short summary to the listing.

- `time_created` - Date and time at which the subscription was created, in RFC3339 format. Example: `2018-03-`

20T12:32:53.532Z

Data Source: oci_core_boot_volume

This data source provides details about a specific Boot Volume resource in Oracle Cloud Infrastructure Core service.

Gets information for the specified boot volume.

Example Usage

```
data "oci_core_boot_volume" "test_boot_volume" {
    #Required
    boot_volume_id = "${oci_core_boot_volume.test_boot_volume.id}"
}
```

Argument Reference

The following arguments are supported:

- `boot_volume_id` - (Required) The OCID of the boot volume.

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain of the boot volume. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the boot volume.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The boot volume's Oracle ID (OCID).

- `image_id` - The image OCID used to create the boot volume.

- `is_hydrated` - Specifies whether the boot volume's data has finished copying from the source boot volume or boot volume backup.

- `kms_key_id` - The OCID of the KMS key which is the master encryption key for the boot volume.

- `size_in_gbs` - The size of the boot volume in GBs.

- `size_in_mbs` - The size of the volume in MBs. The value must be a multiple of 1024. This field is deprecated. Please use `size_in_gbs`.

- `source_details` - The boot volume source, either an existing boot volume in the same availability domain or a boot volume backup. If null, this means that the boot volume was created from an image.
    - `id` - The OCID of the boot volume or boot volume backup.

    - `type` - The type can be one of these values: `bootVolume`, `bootVolumeBackup`

- `state` - The current state of a boot volume.

- `time_created` - The date and time the boot volume was created. Format defined by RFC3339.

- `volume_group_id` - The OCID of the source volume group.

Data Source: oci_core_boot_volume_attachments

This data source provides the list of Boot Volume Attachments in Oracle Cloud Infrastructure Core service.

Lists the boot volume attachments in the specified compartment. You can filter the list by specifying an instance OCID, boot volume OCID, or both.

Example Usage

```
data "oci_core_boot_volume_attachments" "test_boot_volume_attachments" {
    #Required
    availability_domain = "${var.boot_volume_attachment_availability_domain}"
    compartment_id = "${var.compartment_id}"

    #Optional
    boot_volume_id = "${oci_core_boot_volume.test_boot_volume.id}"
    instance_id = "${oci_core_instance.test_instance.id}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `boot_volume_id` - (Optional) The OCID of the boot volume.

- `compartment_id` - (Required) The OCID of the compartment.

- `instance_id` - (Optional) The OCID of the instance.

Attributes Reference

The following attributes are exported:

- `boot_volume_attachments` - The list of boot_volume_attachments.

BootVolumeAttachment Reference

The following attributes are exported:

- `availability_domain` - The availability domain of an instance. Example: `Uocm:PHX-AD-1`

- `boot_volume_id` - The OCID of the boot volume.

- `compartment_id` - The OCID of the compartment.

- `display_name` - A user-friendly name. Does not have to be unique, and it cannot be changed. Avoid entering confidential information. Example: `My boot volume`

- `id` - The OCID of the boot volume attachment.

- `instance_id` - The OCID of the instance the boot volume is attached to.

- `is_pv_encryption_in_transit_enabled` - Whether the enable encryption in transit for the PV volume attachment is on or not.

- `state` - The current state of the boot volume attachment.

- `time_created` - The date and time the boot volume was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_boot_volume_backup

This data source provides details about a specific Boot Volume Backup resource in Oracle Cloud Infrastructure Core service.

Gets information for the specified boot volume backup.

Example Usage

```
data "oci_core_boot_volume_backup" "test_boot_volume_backup" {
    #Required
    boot_volume_backup_id = "${oci_core_boot_volume_backup.test_boot_volume_backup.id}"
}
```

Argument Reference

The following arguments are supported:

* `boot_volume_backup_id` - (Required) The OCID of the boot volume backup.

Attributes Reference

The following attributes are exported:

* `boot_volume_id` - The OCID of the boot volume.

* `compartment_id` - The OCID of the compartment that contains the boot volume backup.

* `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Operations.CostCenter": "42"`}

* `display_name` - A user-friendly name for the boot volume backup. Does not have to be unique and it's changeable. Avoid entering confidential information.

* `expiration_time` - The date and time the volume backup will expire and be automatically deleted. Format defined by RFC3339. This parameter will always be present for backups that were created automatically by a scheduled-backup policy. For manually created backups, it will be absent, signifying that there is no expiration time and the backup will last forever until manually deleted.

* `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Department": "Finance"`}

* `id` - The OCID of the boot volume backup.

* `image_id` - The image OCID used to create the boot volume the backup is taken from.

* `size_in_gbs` - The size of the boot volume, in GBs.

- `source_type` - Specifies whether the backup was created manually, or via scheduled backup policy.

- `state` - The current state of a boot volume backup.

- `time_created` - The date and time the boot volume backup was created. This is the time the actual point-in-time image of the volume data was taken. Format defined by RFC3339.

- `time_request_received` - The date and time the request to create the boot volume backup was received. Format defined by RFC3339.

- `type` - The type of a volume backup. Supported values are 'FULL' or 'INCREMENTAL'.

- `unique_size_in_gbs` - The size used by the backup, in GBs. It is typically smaller than `size_in_gbs`, depending on the space consumed on the boot volume and whether the backup is full or incremental.

Data Source: oci_core_boot_volume_backups

This data source provides the list of Boot Volume Backups in Oracle Cloud Infrastructure Core service.

Lists the boot volume backups in the specified compartment. You can filter the results by boot volume.

Example Usage

```
data "oci_core_boot_volume_backups" "test_boot_volume_backups" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    boot_volume_id = "${oci_core_boot_volume.test_boot_volume.id}"
    display_name = "${var.boot_volume_backup_display_name}"
    state = "${var.boot_volume_backup_state}"
}
```

Argument Reference

The following arguments are supported:

- `boot_volume_id` - (Optional) The OCID of the boot volume.

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

Attributes Reference

The following attributes are exported:

- `boot_volume_backups` - The list of boot_volume_backups.

BootVolumeBackup Reference

The following attributes are exported:

- `boot_volume_id` - The OCID of the boot volume.

- `compartment_id` - The OCID of the compartment that contains the boot volume backup.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name for the boot volume backup. Does not have to be unique and it's changeable. Avoid entering confidential information.

- `expiration_time` - The date and time the volume backup will expire and be automatically deleted. Format defined by RFC3339. This parameter will always be present for backups that were created automatically by a scheduled-backup policy. For manually created backups, it will be absent, signifying that there is no expiration time and the backup will last forever until manually deleted.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the boot volume backup.

- `image_id` - The image OCID used to create the boot volume the backup is taken from.

- `size_in_gbs` - The size of the boot volume, in GBs.

- `source_type` - Specifies whether the backup was created manually, or via scheduled backup policy.

- `state` - The current state of a boot volume backup.

- `time_created` - The date and time the boot volume backup was created. This is the time the actual point-in-time image of the volume data was taken. Format defined by RFC3339.

- `time_request_received` - The date and time the request to create the boot volume backup was received. Format defined by RFC3339.

- `type` - The type of a volume backup. Supported values are 'FULL' or 'INCREMENTAL'.

- `unique_size_in_gbs` - The size used by the backup, in GBs. It is typically smaller than `size_in_gbs`, depending on the space consumed on the boot volume and whether the backup is full or incremental.

Data Source: oci_core_boot_volumes

This data source provides the list of Boot Volumes in Oracle Cloud Infrastructure Core service.

Lists the boot volumes in the specified compartment and availability domain.

Example Usage

```
data "oci_core_boot_volumes" "test_boot_volumes" {
    #Required
    availability_domain = "${var.boot_volume_availability_domain}"
    compartment_id = "${var.compartment_id}"

    #Optional
    volume_group_id = "${oci_core_volume_group.test_volume_group.id}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `volume_group_id` - (Optional) The OCID of the volume group.

Attributes Reference

The following attributes are exported:

- `boot_volumes` - The list of boot_volumes.

BootVolume Reference

The following attributes are exported:

- `availability_domain` - The availability domain of the boot volume. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the boot volume.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type,

or namespace. For more information, see Resource Tags
(https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Department"`:
`"Finance"`}

- `id` - The boot volume's Oracle ID (OCID).

- `image_id` - The image OCID used to create the boot volume.

- `is_hydrated` - Specifies whether the boot volume's data has finished copying from the source boot volume or boot volume backup.

- `kms_key_id` - The OCID of the KMS key which is the master encryption key for the boot volume.

- `size_in_gbs` - The size of the boot volume in GBs.

- `size_in_mbs` - The size of the volume in MBs. The value must be a multiple of 1024. This field is deprecated. Please use `size_in_gbs`.

- `source_details` - The boot volume source, either an existing boot volume in the same availability domain or a boot volume backup. If null, this means that the boot volume was created from an image.
    - `id` - The OCID of the boot volume or boot volume backup.

    - `type` - The type can be one of these values: `bootVolume`, `bootVolumeBackup`

- `state` - The current state of a boot volume.

- `time_created` - The date and time the boot volume was created. Format defined by RFC3339.

- `volume_group_id` - The OCID of the source volume group.

Data Source: oci_core_console_histories

This data source provides the list of Console Histories in Oracle Cloud Infrastructure Core service.

Lists the console history metadata for the specified compartment or instance.

Example Usage

```
data "oci_core_console_histories" "test_console_histories" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    availability_domain = "${var.console_history_availability_domain}"
    instance_id = "${oci_core_instance.test_instance.id}"
    state = "${var.console_history_state}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Optional) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `instance_id` - (Optional) The OCID of the instance.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

Attributes Reference

The following attributes are exported:

- `console_histories` - The list of console_histories.

ConsoleHistory Reference

The following attributes are exported:

- `availability_domain` - The availability domain of an instance. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information. Example: `My console history metadata`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the console history metadata object.

- `instance_id` - The OCID of the instance this console history was fetched from.

- `state` - The current state of the console history.

- `time_created` - The date and time the history was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_console_history_data

This data source provides details about a specific Console History Content resource in Oracle Cloud Infrastructure Core service.

Gets the actual console history data (not the metadata). See CaptureConsoleHistory (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/ConsoleHistory/CaptureConsoleHistory) for details about using the console history operations.

Example Usage

```
data "oci_core_console_history_data" "test_console_history_data" {
    #Required
    console_history_id = "${oci_core_console_history.test_console_history.id}"

    #Optional
    length = 10240
    offset = 0
}
```

Argument Reference

The following arguments are supported:

- `console_history_id` - (Required) The OCID of the console history.

- `length` - (Optional) Length of the snapshot data to retrieve. Cannot be less than 10240.

- `offset` - (Optional) Offset of the snapshot data to retrieve.

Attributes Reference

The following attributes are exported:

- `data` - The console history data.

Data Source: oci_core_cpes

This data source provides the list of Cpes in Oracle Cloud Infrastructure Core service.

Lists the customer-premises equipment objects (CPEs) in the specified compartment.

Example Usage

```
data "oci_core_cpes" "test_cpes" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

* `compartment_id` - (Required) The OCID of the compartment.

Attributes Reference

The following attributes are exported:

* `cpes` - The list of cpes.

Cpe Reference

The following attributes are exported:

* `compartment_id` - The OCID of the compartment containing the CPE.

* `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

* `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

* `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

* `id` - The CPE's Oracle ID (OCID).

* `ip_address` - The public IP address of the on-premises router.

* `time_created` - The date and time the CPE was created, in the format defined by RFC3339. Example: 2016-08-

25T21:10:29.600Z

Data Source: oci_core_cross_connect

This data source provides details about a specific Cross Connect resource in Oracle Cloud Infrastructure Core service.

Gets the specified cross-connect's information.

Example Usage

```
data "oci_core_cross_connect" "test_cross_connect" {
    #Required
    cross_connect_id = "${oci_core_cross_connect.test_cross_connect.id}"
}
```

Argument Reference

The following arguments are supported:

- `cross_connect_id` - (Required) The OCID of the cross-connect.

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the cross-connect group.

- `cross_connect_group_id` - The OCID of the cross-connect group this cross-connect belongs to (if any).

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `id` - The cross-connect's Oracle ID (OCID).

- `location_name` - The name of the FastConnect location where this cross-connect is installed.

- `port_name` - A string identifying the meet-me room port for this cross-connect.

- `port_speed_shape_name` - The port speed for this cross-connect. Example: `10 Gbps`

- `state` - The cross-connect's current state.

- `time_created` - The date and time the cross-connect was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_cross_connect_group

This data source provides details about a specific Cross Connect Group resource in Oracle Cloud Infrastructure Core service.

Gets the specified cross-connect group's information.

Example Usage

```
data "oci_core_cross_connect_group" "test_cross_connect_group" {
    #Required
    cross_connect_group_id = "${oci_core_cross_connect_group.test_cross_connect_group.id}"
}
```

Argument Reference

The following arguments are supported:

- `cross_connect_group_id` - (Required) The OCID of the cross-connect group.

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the cross-connect group.

- `display_name` - The display name of A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `id` - The cross-connect group's Oracle ID (OCID).

- `state` - The cross-connect group's current state.

- `time_created` - The date and time the cross-connect group was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_cross_connect_groups

This data source provides the list of Cross Connect Groups in Oracle Cloud Infrastructure Core service.

Lists the cross-connect groups in the specified compartment.

Example Usage

```
data "oci_core_cross_connect_groups" "test_cross_connect_groups" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.cross_connect_group_display_name}"
    state = "${var.cross_connect_group_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to return only resources that match the specified lifecycle state. The value is case insensitive.

Attributes Reference

The following attributes are exported:

- `cross_connect_groups` - The list of cross_connect_groups.

CrossConnectGroup Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the cross-connect group.

- `display_name` - The display name of A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `id` - The cross-connect group's Oracle ID (OCID).

- `state` - The cross-connect group's current state.

- `time_created` - The date and time the cross-connect group was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_cross_connect_locations

This data source provides the list of Cross Connect Locations in Oracle Cloud Infrastructure Core service.

Lists the available FastConnect locations for cross-connect installation. You need this information so you can specify your desired location when you create a cross-connect.

Example Usage

```
data "oci_core_cross_connect_locations" "test_cross_connect_locations" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

Attributes Reference

The following attributes are exported:

- `cross_connect_locations` - The list of cross_connect_locations.

CrossConnectLocation Reference

The following attributes are exported:

- `description` - A description of the location.

- `name` - The name of the location. Example: `CyrusOne, Chandler, AZ`

Data Source: oci_core_cross_connect_port_speed_shapes

This data source provides the list of Cross Connect Port Speed Shapes in Oracle Cloud Infrastructure Core service.

Lists the available port speeds for cross-connects. You need this information so you can specify your desired port speed (that is, shape) when you create a cross-connect.

Example Usage

```
data "oci_core_cross_connect_port_speed_shapes" "test_cross_connect_port_speed_shapes" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

* `compartment_id` - (Required) The OCID of the compartment.

Attributes Reference

The following attributes are exported:

* `cross_connect_port_speed_shapes` - The list of cross_connect_port_speed_shapes.

CrossConnectPortSpeedShape Reference

The following attributes are exported:

* `name` - The name of the port speed shape. Example: `10 Gbps`

* `port_speed_in_gbps` - The port speed in Gbps. Example: `10`

Data Source: oci_core_cross_connect_status

This data source provides details about a specific Cross Connect Status resource in Oracle Cloud Infrastructure Core service.

Gets the status of the specified cross-connect.

Example Usage

```
data "oci_core_cross_connect_status" "test_cross_connect_status" {
    #Required
    cross_connect_id = "${oci_core_cross_connect.test_cross_connect.id}"
}
```

Argument Reference

The following arguments are supported:

- `cross_connect_id` - (Required) The OCID of the cross-connect.

Attributes Reference

The following attributes are exported:

- `cross_connect_id` - The OCID of the cross-connect.

- `interface_state` - Whether Oracle's side of the interface is up or down.

- `light_level_ind_bm` - The light level of the cross-connect (in dBm). Example: `14.0`

- `light_level_indicator` - Status indicator corresponding to the light level.
    - **NO_LIGHT:** No measurable light

    - **LOW_WARN:** There's measurable light but it's too low

    - **HIGH_WARN:** Light level is too high

    - **BAD:** There's measurable light but the signal-to-noise ratio is bad

    - **GOOD:** Good light level

Data Source: oci_core_cross_connects

This data source provides the list of Cross Connects in Oracle Cloud Infrastructure Core service.

Lists the cross-connects in the specified compartment. You can filter the list by specifying the OCID of a cross-connect group.

Example Usage

```
data "oci_core_cross_connects" "test_cross_connects" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    cross_connect_group_id = "${oci_core_cross_connect_group.test_cross_connect_group.id}"
    display_name = "${var.cross_connect_display_name}"
    state = "${var.cross_connect_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `cross_connect_group_id` - (Optional) The OCID of the cross-connect group.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to return only resources that match the specified lifecycle state. The value is case insensitive.

Attributes Reference

The following attributes are exported:

- `cross_connects` - The list of cross_connects.

CrossConnect Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the cross-connect group.

- `cross_connect_group_id` - The OCID of the cross-connect group this cross-connect belongs to (if any).

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `id` - The cross-connect's Oracle ID (OCID).

- `location_name` - The name of the FastConnect location where this cross-connect is installed.

- `port_name` - A string identifying the meet-me room port for this cross-connect.

- `port_speed_shape_name` - The port speed for this cross-connect. Example: `10 Gbps`

- `state` - The cross-connect's current state.

- `time_created` - The date and time the cross-connect was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_dhcp_options

This data source provides the list of Dhcp Options in Oracle Cloud Infrastructure Core service.

Lists the sets of DHCP options in the specified VCN and specified compartment. The response includes the default set of options that automatically comes with each VCN, plus any other sets you've created.

Example Usage

```
data "oci_core_dhcp_options" "test_dhcp_options" {
    #Required
    compartment_id = "${var.compartment_id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    display_name = "${var.dhcp_options_display_name}"
    state = "${var.dhcp_options_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

- `vcn_id` - (Required) The OCID of the VCN.

Attributes Reference

The following attributes are exported:

- `options` - The list of options.

DhcpOptions Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the set of DHCP options.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - Oracle ID (OCID) for the set of DHCP options.

- `options` - The collection of individual DHCP options.

  - `custom_dns_servers` - If you set `serverType` to `CustomDnsServer`, specify the IP address of at least one DNS server of your choice (three maximum).

  - `search_domain_names` - A single search domain name according to RFC 952 (https://tools.ietf.org/html/rfc952) and RFC 1123 (https://tools.ietf.org/html/rfc1123). During a DNS query, the OS will append this search domain name to the value being queried.

    If you set DhcpDnsOption (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/DhcpDnsOption/) to `VcnLocalPlusInternet`, and you assign a DNS label to the VCN during creation, the search domain name in the VCN's default set of DHCP options is automatically set to the VCN domain (for example, `vcn1.oraclevcn.com`).

    If you don't want to use a search domain name, omit this option from the set of DHCP options. Do not include this option with an empty list of search domain names, or with an empty string as the value for any search domain name.

  - `server_type` -

    - **VcnLocal:** Reserved for future use.

    - **VcnLocalPlusInternet:** Also referred to as "Internet and VCN Resolver". Instances can resolve internet hostnames (no internet gateway is required), and can resolve hostnames of instances in the VCN. This is the default value in the default set of DHCP options in the VCN. For the Internet and VCN Resolver to work across the VCN, there must also be a DNS label set for the VCN, a DNS label set for each subnet, and a hostname for each instance. The Internet and VCN Resolver also enables reverse DNS lookup, which lets you determine the hostname corresponding to the private IP address. For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

    - **CustomDnsServer:** Instances use a DNS server of your choice (three maximum).

  - `type` - The specific DHCP option. Either `DomainNameServer` (for DhcpDnsOption (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/DhcpDnsOption/)) or `SearchDomain` (for DhcpSearchDomainOption (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/DhcpSearchDomainOption/)).

- `state` - The current state of the set of DHCP options.

- `time_created` - Date and time the set of DHCP options was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the set of DHCP options belongs to.

Data Source: oci_core_drg_attachments

This data source provides the list of Drg Attachments in Oracle Cloud Infrastructure Core service.

Lists the `DrgAttachment` objects for the specified compartment. You can filter the results by VCN or DRG.

Example Usage

```
data "oci_core_drg_attachments" "test_drg_attachments" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    drg_id = "${oci_core_drg.test_drg.id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `drg_id` - (Optional) The OCID of the DRG.

- `vcn_id` - (Optional) The OCID of the VCN.

Attributes Reference

The following attributes are exported:

- `drg_attachments` - The list of drg_attachments.

DrgAttachment Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the DRG attachment.

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `drg_id` - The OCID of the DRG.

- `id` - The DRG attachment's Oracle ID (OCID).

- `route_table_id` - The OCID of the route table the DRG attachment is using. For information about why you would associate a route table with a DRG attachment, see Advanced Scenario: Transit Routing (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/transitrouting.htm).

- `state` - The DRG attachment's current state.

- `time_created` - The date and time the DRG attachment was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN.

Data Source: oci_core_drgs

This data source provides the list of Drgs in Oracle Cloud Infrastructure Core service.

Lists the DRGs in the specified compartment.

Example Usage

```
data "oci_core_drgs" "test_drgs" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

Attributes Reference

The following attributes are exported:

- `drgs` - The list of drgs.

Drg Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the DRG.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The DRG's Oracle ID (OCID).

- `state` - The DRG's current state.

- `time_created` - The date and time the DRG was created, in the format defined by RFC3339. Example: 2016-08-

25T21:10:29.600Z

Data Source: oci_core_fast_connect_provider_service

This data source provides details about a specific Fast Connect Provider Service resource in Oracle Cloud Infrastructure Core service.

Gets the specified provider service. For more information, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

Example Usage

```
data "oci_core_fast_connect_provider_service" "test_fast_connect_provider_service" {
    #Required
    provider_service_id = "${data.oci_core_fast_connect_provider_services.test_fast_connect_provider_serv
ices.fast_connect_provider_services.0.id}"
}
```

Argument Reference

The following arguments are supported:

- `provider_service_id` - (Required) The OCID of the provider service.

Attributes Reference

The following attributes are exported:

- `description` - A description of the service offered by the provider.

- `id` - The OCID of the service offered by the provider.

- `private_peering_bgp_management` - Who is responsible for managing the private peering BGP information.

- `provider_name` - The name of the provider.

- `provider_service_name` - The name of the service offered by the provider.

- `public_peering_bgp_management` - Who is responsible for managing the public peering BGP information.

- `supported_virtual_circuit_types` - An array of virtual circuit types supported by this service.

- `type` - Provider service type.

Data Source: oci_core_fast_connect_provider_services

This data source provides the list of Fast Connect Provider Services in Oracle Cloud Infrastructure Core service.

Lists the service offerings from supported providers. You need this information so you can specify your desired provider and service offering when you create a virtual circuit.

For the compartment ID, provide the OCID of your tenancy (the root compartment).

For more information, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

Example Usage

```
data "oci_core_fast_connect_provider_services" "test_fast_connect_provider_services" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

Attributes Reference

The following attributes are exported:

- `fast_connect_provider_services` - The list of fast_connect_provider_services.

FastConnectProviderService Reference

The following attributes are exported:

- `description` - A description of the service offered by the provider.

- `id` - The OCID of the service offered by the provider.

- `private_peering_bgp_management` - Who is responsible for managing the private peering BGP information.

- `provider_name` - The name of the provider.

- `provider_service_name` - The name of the service offered by the provider.

- `public_peering_bgp_management` - Who is responsible for managing the public peering BGP information.

- `supported_virtual_circuit_types` - An array of virtual circuit types supported by this service.

- `type` - Provider service type.

Data Source: oci_core_images

This data source provides the list of Images in Oracle Cloud Infrastructure Core service.

Lists the available images in the specified compartment, including both Oracle-provided images (https://docs.cloud.oracle.com/iaas/Content/Compute/References/images.htm) and custom images (https://docs.cloud.oracle.com/iaas/Content/Compute/Tasks/managingcustomimages.htm) that have been created. The list of images returned is ordered to first show all Oracle-provided images, then all custom images.

The order of images returned may change when new images are released.

Example Usage

```
data "oci_core_images" "test_images" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.image_display_name}"
    operating_system = "${var.image_operating_system}"
    operating_system_version = "${var.image_operating_system_version}"
    shape = "${var.image_shape}"
    state = "${var.image_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `operating_system` - (Optional) The image's operating system. Example: `Oracle Linux`

- `operating_system_version` - (Optional) The image's operating system version. Example: `7.2`

- `shape` - (Optional) Shape name.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

Attributes Reference

The following attributes are exported:

- `images` - The list of images.

Image Reference

The following attributes are exported:

- `base_image_id` - The OCID of the image originally used to launch the instance.

- `compartment_id` - The OCID of the compartment containing the instance you want to use as the basis for the image.

- `create_image_allowed` - Whether instances launched with this image can be used to create new images. For example, you cannot create an image of an Oracle Database instance. Example: `true`

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name for the image. It does not have to be unique, and it's changeable. Avoid entering confidential information. You cannot use an Oracle-provided image name as a custom image name. Example: `My custom Oracle Linux image`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the image.

- `launch_mode` - Specifies the configuration mode for launching virtual machine (VM) instances. The configuration modes are:
    - `NATIVE` - VM instances launch with iSCSI boot and VFIO devices. The default value for Oracle-provided images.

    - `EMULATED` - VM instances launch with emulated devices, such as the E1000 network driver and emulated SCSI disk controller.

    - `PARAVIRTUALIZED` - VM instances launch with paravirtualized devices using virtio drivers.

    - `CUSTOM` - VM instances launch with custom configuration settings specified in the `LaunchOptions` parameter.

- `launch_options` -
    - `boot_volume_type` - Emulation type for volume.
        - `ISCSI` - ISCSI attached block storage device. This is the default for Boot Volumes and Remote Block Storage volumes on Oracle provided images.

        - `SCSI` - Emulated SCSI disk.

        - `IDE` - Emulated IDE disk.

        - `VFIO` - Direct attached Virtual Function storage. This is the default option for Local data volumes on Oracle provided images.

        - `PARAVIRTUALIZED` - Paravirtualized disk.

    - `firmware` - Firmware used to boot VM. Select the option that matches your operating system.
        - `BIOS` - Boot VM using BIOS style firmware. This is compatible with both 32 bit and 64 bit operating systems that boot using MBR style bootloaders.

        - `UEFI_64` - Boot VM using UEFI style firmware compatible with 64 bit operating systems. This is the default

for Oracle provided images.

- `is_pv_encryption_in_transit_enabled` - Whether to enable encryption in transit for the PV boot volume attachment. Defaults to false.

- `network_type` - Emulation type for NIC.
  - `E1000` - Emulated Gigabit ethernet controller. Compatible with Linux e1000 network driver.

  - `VFIO` - Direct attached Virtual Function network controller. Default for Oracle provided images.

  - `PARAVIRTUALIZED` - VM instances launch with paravirtualized devices using virtio drivers.

- `remote_data_volume_type` - Emulation type for volume.
  - `ISCSI` - ISCSI attached block storage device. This is the default for Boot Volumes and Remote Block Storage volumes on Oracle provided images.

  - `SCSI` - Emulated SCSI disk.

  - `IDE` - Emulated IDE disk.

  - `VFIO` - Direct attached Virtual Function storage. This is the default option for Local data volumes on Oracle provided images.

  - `PARAVIRTUALIZED` - Paravirtualized disk.

- `operating_system` - The image's operating system. Example: `Oracle Linux`

- `operating_system_version` - The image's operating system version. Example: `7.2`

- `size_in_mbs` - Image size (1 MB = 1048576 bytes) Example: `47694`

- `state` -

- `time_created` - The date and time the image was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_instance

This data source provides details about a specific Instance resource in Oracle Cloud Infrastructure Core service.

Gets information about the specified instance.

Example Usage

```
data "oci_core_instance" "test_instance" {
    #Required
    instance_id = "${oci_core_instance.test_instance.id}"
}
```

Argument Reference

The following arguments are supported:

- `instance_id` - (Required) The OCID of the instance.

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain the instance is running in. Example: `Uocm:PHX-AD-1`

- `boot_volume_id` - The OCID of the attached boot volume. If the `source_type` is `bootVolume`, this will be the same OCID as the `source_id`.

- `compartment_id` - The OCID of the compartment that contains the instance.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information. Example: `My bare metal instance`

- `extended_metadata` - Additional metadata key/value pairs that you provide. They serve the same purpose and functionality as fields in the 'metadata' object.

  They are distinguished from 'metadata' fields in that these can be nested JSON objects (whereas 'metadata' fields are string/string maps only).

  If you don't need nested metadata values, it is strongly advised to avoid using this object and use the Metadata object instead.

  Input in terraform is the same as metadata but allows nested metadata if you pass a valid JSON string as a value. See the example below.

- `fault_domain` - The name of the fault domain the instance is running in.

  A fault domain is a grouping of hardware and infrastructure within an availability domain. Each availability domain contains three fault domains. Fault domains let you distribute your instances so that they are not on the same physical hardware within a single availability domain. A hardware failure or Compute hardware maintenance that affects one fault domain does not affect instances in other fault domains.

  If you do not specify the fault domain, the system selects one for you. To change the fault domain for an instance, terminate it and launch a new instance in the preferred fault domain.

  Example: `FAULT-DOMAIN-1`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `hostname_label` - The hostname for the instance VNIC's primary private IP.

- `id` - The OCID of the instance.

- `image` - Deprecated. Use `sourceDetails` instead.

- `ipxe_script` - When a bare metal or virtual machine instance boots, the iPXE firmware that runs on the instance is configured to run an iPXE script to continue the boot process.

  If you want more control over the boot process, you can provide your own custom iPXE script that will run when the instance boots; however, you should be aware that the same iPXE script will run every time an instance boots; not only after the initial LaunchInstance call.

  The default iPXE script connects to the instance's local boot volume over iSCSI and performs a network boot. If you use a custom iPXE script and want to network-boot from the instance's local boot volume over iSCSI the same way as the default iPXE script, you should use the following iSCSI IP address: 169.254.0.2, and boot volume IQN: iqn.2015-02.oracle.boot.

  For more information about the Bring Your Own Image feature of Oracle Cloud Infrastructure, see Bring Your Own Image (https://docs.cloud.oracle.com/iaas/Content/Compute/References/bringyourownimage.htm).

  For more information about iPXE, see http://ipxe.org (http://ipxe.org).

- `launch_mode` - Specifies the configuration mode for launching virtual machine (VM) instances. The configuration modes are:

  - `NATIVE` - VM instances launch with iSCSI boot and VFIO devices. The default value for Oracle-provided images.

  - `EMULATED` - VM instances launch with emulated devices, such as the E1000 network driver and emulated SCSI disk controller.

  - `PARAVIRTUALIZED` - VM instances launch with paravirtualized devices using virtio drivers.

  - `CUSTOM` - VM instances launch with custom configuration settings specified in the `LaunchOptions` parameter.

- `launch_options` -

  - `boot_volume_type` - Emulation type for volume.
    - `ISCSI` - ISCSI attached block storage device. This is the default for Boot Volumes and Remote Block Storage volumes on Oracle provided images.

- **SCSI** - Emulated SCSI disk.

- **IDE** - Emulated IDE disk.

- **VFIO** - Direct attached Virtual Function storage. This is the default option for Local data volumes on Oracle provided images.

- **PARAVIRTUALIZED** - Paravirtualized disk.

- **firmware** - Firmware used to boot VM. Select the option that matches your operating system.
  - **BIOS** - Boot VM using BIOS style firmware. This is compatible with both 32 bit and 64 bit operating systems that boot using MBR style bootloaders.

  - **UEFI_64** - Boot VM using UEFI style firmware compatible with 64 bit operating systems. This is the default for Oracle provided images.

- **is_pv_encryption_in_transit_enabled** - Whether to enable encryption in transit for the PV boot volume attachment. Defaults to false.

- **network_type** - Emulation type for NIC.
  - **E1000** - Emulated Gigabit ethernet controller. Compatible with Linux e1000 network driver.

  - **VFIO** - Direct attached Virtual Function network controller. Default for Oracle provided images.

  - **PARAVIRTUALIZED** - VM instances launch with paravirtualized devices using virtio drivers.

- **remote_data_volume_type** - Emulation type for volume.
  - **ISCSI** - ISCSI attached block storage device. This is the default for Boot Volumes and Remote Block Storage volumes on Oracle provided images.

  - **SCSI** - Emulated SCSI disk.

  - **IDE** - Emulated IDE disk.

  - **VFIO** - Direct attached Virtual Function storage. This is the default option for Local data volumes on Oracle provided images.

  - **PARAVIRTUALIZED** - Paravirtualized disk.

- **metadata** - Custom metadata that you provide.

- **private_ip** - The private IP address of instance VNIC. To set the private IP address, use the `private_ip` argument in create_vnic_details.

- **public_ip** - The public IP address of instance VNIC (if enabled).

- **region** - The region that contains the availability domain the instance is running in. Example: phx

- **shape** - The shape of the instance. The shape determines the number of CPUs and the amount of memory allocated to the instance. You can enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

- **source_details** - Details for creating an instance

  - **boot_volume_size_in_gbs** - The size of the boot volume in GBs. Minimum value is 50 GB and maximum value is 16384 GB (16TB). This should only be specified when `source_type` is `image`.

- - `kms_key_id` - The OCID of the KMS key to be used as the master encryption key for the boot volume.

  - `source_id` - The OCID of an image or a boot volume to use, depending on the value of `source_type`.

  - `source_type` - The source type for the instance. Use `image` when specifying the image OCID. Use `bootVolume` when specifying the boot volume OCID.

- `state` - The current state of the instance.

- `time_created` - The date and time the instance was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `time_maintenance_reboot_due` - The date and time the instance is expected to be stopped / started, in the format defined by RFC3339. After that time if instance hasn't been rebooted, Oracle will reboot the instance within 24 hours of the due time. Regardless of how the instance was stopped, the flag will be reset to empty as soon as instance reaches Stopped state. Example: `2018-05-25T21:10:29.600Z`

Data Source: oci_core_instance_configuration

This data source provides details about a specific Instance Configuration resource in Oracle Cloud Infrastructure Core service.

Gets the specified instance configuration

Example Usage

```
data "oci_core_instance_configuration" "test_instance_configuration" {
    #Required
    instance_configuration_id = "${oci_core_instance_configuration.test_instance_configuration.id}"
}
```

Argument Reference

The following arguments are supported:

* `instance_configuration_id` - (Required) The OCID of the instance configuration.

Attributes Reference

The following attributes are exported:

* `compartment_id` - The OCID of the compartment containing the instance configuration.

* `deferred_fields` -

* `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

* `display_name` - A user-friendly name for the instance configuration

* `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

* `id` - The OCID of the instance configuration

* `instance_details` -
    * `block_volumes` -
        * `attach_details` -
            * `display_name` - A user-friendly name. Does not have to be unique, and it cannot be changed. Avoid entering confidential information.

            * `is_read_only` - Whether the attachment should be created in read-only mode.

            * `type` - The type of volume. The only supported values are "iscsi" and "paravirtualized".

            * `use_chap` - Whether to use CHAP authentication for the volume attachment. Defaults to false.

        * `create_details` -
            * `availability_domain` - The availability domain of the volume. Example: `Uocm:PHX-AD-1`

            * `backup_policy_id` - If provided, specifies the ID of the volume backup policy to assign to the newly created volume. If omitted, no policy will be assigned.

            * `compartment_id` - The OCID of the compartment that contains the volume.

            * `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

            * `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

            * `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

            * `size_in_gbs` - The size of the volume in GBs.

            * `source_details` - Specifies the volume source details for a new Block volume. The volume source is either another Block volume in the same availability domain or a Block volume backup. This is an optional field. If not specified or set to null, the new Block volume will be empty. When specified, the new Block volume will contain data from the source volume or backup.
                * `id` - The OCID of the volume backup.

                * `type` - The type can be one of these values: `volume`, `volumeBackup`

        * `volume_id` - The OCID of the volume.
    * `instance_type` - The type of instance details. Supported instanceType is compute

    * `launch_details` -
        * `availability_domain` - The availability domain of the instance. Example: `Uocm:PHX-AD-1`

        * `compartment_id` - The OCID of the compartment.

        * `create_vnic_details` - Details for the primary VNIC, which is automatically created and attached when the instance is launched.
            * `assign_public_ip` -

- - `display_name` - A user-friendly name for the VNIC. Does not have to be unique. Avoid entering confidential information.

    - `hostname_label` -

    - `private_ip` -

    - `skip_source_dest_check` -

    - `subnet_id` -

  - `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

  - `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information. Example: `My bare metal instance`

  - `extended_metadata` - Additional metadata key/value pairs that you provide. They serve the same purpose and functionality as fields in the 'metadata' object.

    They are distinguished from 'metadata' fields in that these can be nested JSON objects (whereas 'metadata' fields are string/string maps only).

  - `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

  - `ipxe_script` - This is an advanced option.

    When a bare metal or virtual machine instance boots, the iPXE firmware that runs on the instance is configured to run an iPXE script to continue the boot process.

    If you want more control over the boot process, you can provide your own custom iPXE script that will run when the instance boots; however, you should be aware that the same iPXE script will run every time an instance boots; not only after the initial LaunchInstance call.

    The default iPXE script connects to the instance's local boot volume over iSCSI and performs a network boot. If you use a custom iPXE script and want to network-boot from the instance's local boot volume over iSCSI the same way as the default iPXE script, you should use the following iSCSI IP address: 169.254.0.2, and boot volume IQN: iqn.2015-02.oracle.boot.

    For more information about the Bring Your Own Image feature of Oracle Cloud Infrastructure, see Bring Your Own Image (https://docs.cloud.oracle.com/iaas/Content/Compute/References/bringyourownimage.htm).

    For more information about iPXE, see http://ipxe.org (http://ipxe.org).

  - `metadata` - Custom metadata key/value pairs that you provide, such as the SSH public key required to connect to the instance.

    A metadata service runs on every launched instance. The service is an HTTP endpoint listening on 169.254.169.254. You can use the service to:

    - Provide information to Cloud-Init (https://cloudinit.readthedocs.org/en/latest/) to be used for various system initialization tasks.

    - Get information about the instance, including the custom metadata that you provide when you launch the instance.

    Providing Cloud-Init Metadata

    You can use the following metadata key names to provide information to Cloud-Init:

    "ssh_authorized_keys" - Provide one or more public SSH keys to be included in the `~/.ssh/authorized_keys` file for the default user on the instance. Use a newline character to separate multiple keys. The SSH keys must be in the format necessary for the `authorized_keys` file, as shown in the example below.

    "user_data" - Provide your own base64-encoded data to be used by Cloud-Init to run custom scripts or provide custom Cloud-Init configuration. For information about how to take advantage of user data, see the Cloud-Init Documentation (http://cloudinit.readthedocs.org/en/latest/topics/format.html).

    Note: Cloud-Init does not pull this data from the `http://169.254.169.254/opc/v1/instance/metadata/` path. When the instance launches and either of these keys are provided, the key values are formatted as OpenStack metadata and copied to the following locations, which are recognized by Cloud-Init:

    `http://169.254.169.254/openstack/latest/meta_data.json` - This JSON blob contains, among other things, the SSH keys that you provided for **"ssh_authorized_keys"**.

    `http://169.254.169.254/openstack/latest/user_data` - Contains the base64-decoded data that you provided for **"user_data"**.

    Metadata Example

    "metadata" : { "quake_bot_level" : "Severe", "ssh_authorized_keys" : "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAACAQCZ06fccNTQfq+xubFIJ5ZR3kt+uzspdH9tXL+lAejSM1NXM+CFZev7MIxfEjas06y80ZBZ7DUTQO0GxJPeD8NCOb1VorF8M4xuLwrmzRtkoZzU16umt4y1W ryan.smith@company.com (mailto:ryan.smith@company.com) ssh-rsa AAAAB3NzaC1yc2EAAAABJQAAAQEAzJSAtwEPoB3Jmr58IXrDGzLuDYkWAYg8AsLYIo6JZvKpjY1xednIcfEVQJm4T2DhVmdWhRrwQ8DmayVZvBkLt+zs2LdoAJEVimKwXcJFD/7wtH8Lnk17HiglbbbN rsa-key-20160227", "user_data" : "SWYgeW91IGNhbiBzZWUgdGhpcywgdGhlbiBpdCB3b3JrZWQgbWF5YmUuCg==" } **Getting Metadata on the Instance**

    To get information about your instance, connect to the instance using SSH and issue any of the following GET requests:

    curl http://169.254.169.254/opc/v1/instance/ (http://169.254.169.254/opc/v1/instance/) curl http://169.254.169.254/opc/v1/instance/metadata/ (http://169.254.169.254/opc/v1/instance/metadata/) curl http://169.254.169.254/opc/v1/instance/metadata/ (http://169.254.169.254/opc/v1/instance/metadata/)

    You'll get back a response that includes all the instance information; only the metadata information; or the metadata information for the specified key name, respectively.

  - `shape` - The shape of an instance. The shape determines the number of CPUs, amount of memory, and other resources allocated to the instance.

    You can enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

  - `source_details` - Details for creating an instance. Use this parameter to specify whether a boot volume or an image should be used to launch a new instance.

    - `boot_volume_id` - The OCID of the boot volume used to boot the instance.

    - `image_id` - The OCID of the image used to boot the instance.

    - `source_type` - The source type for the instance. Use `image` when specifying the image OCID. Use `bootVolume` when specifying the boot volume OCID.

- `secondary_vnics` -
  - `create_vnic_details` - Details for creating a new VNIC.
    - `assign_public_ip` -

- - `display_name` - A user-friendly name for the VNIC. Does not have to be unique. Avoid entering confidential information.

  - `hostname_label` -

  - `private_ip` -

  - `skip_source_dest_check` -

  - `subnet_id` -

- `display_name` - A user-friendly name for the attachment. Does not have to be unique, and it cannot be changed.

- `nic_index` - Which physical network interface card (NIC) the VNIC will use. Defaults to 0. Certain bare metal instance shapes have two active physical NICs (0 and 1). If you add a secondary VNIC to one of these instances, you can specify which NIC the VNIC will use. For more information, see Virtual Network Interface Cards (VNICs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVNICs.htm).

- `time_created` - The date and time the instance configuration was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_instance_configurations

This data source provides the list of Instance Configurations in Oracle Cloud Infrastructure Core service.

Lists the available instanceConfigurations in the specific compartment.

Example Usage

```
data "oci_core_instance_configurations" "test_instance_configurations" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

* `compartment_id` - (Required) The OCID of the compartment.

Attributes Reference

The following attributes are exported:

* `instance_configurations` - The list of instance_configurations.

InstanceConfiguration Reference

The following attributes are exported:

* `compartment_id` - The OCID of the compartment containing the instance configuration.

* `deferred_fields` -

* `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

* `display_name` - A user-friendly name for the instance configuration

* `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

* `id` - The OCID of the instance configuration

* `instance_details` -
    * `block_volumes` -
        * `attach_details` -
            * `display_name` - A user-friendly name. Does not have to be unique, and it cannot be changed. Avoid entering confidential information.
            * `is_read_only` - Whether the attachment should be created in read-only mode.
            * `type` - The type of volume. The only supported values are "iscsi" and "paravirtualized".
            * `use_chap` - Whether to use CHAP authentication for the volume attachment. Defaults to false.
        * `create_details` -
            * `availability_domain` - The availability domain of the volume. Example: `Uocm:PHX-AD-1`
            * `backup_policy_id` - If provided, specifies the ID of the volume backup policy to assign to the newly created volume. If omitted, no policy will be assigned.
            * `compartment_id` - The OCID of the compartment that contains the volume.
            * `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`
            * `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.
            * `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`
            * `size_in_gbs` - The size of the volume in GBs.
            * `source_details` - Specifies the volume source details for a new Block volume. The volume source is either another Block volume in the same availability domain or a Block volume backup. This is an optional field. If not specified or set to null, the new Block volume will be empty. When specified, the new Block volume will contain data from the source volume or backup.
                * `id` - The OCID of the volume backup.
                * `type` - The type can be one of these values: `volume`, `volumeBackup`
        * `volume_id` - The OCID of the volume.
    * `instance_type` - The type of instance details. Supported instanceType is compute
    * `launch_details` -

- `availability_domain` - The availability domain of the instance. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment.

- `create_vnic_details` - Details for the primary VNIC, which is automatically created and attached when the instance is launched.
    - `assign_public_ip` -
    - `display_name` - A user-friendly name for the VNIC. Does not have to be unique. Avoid entering confidential information.
    - `hostname_label` -
    - `private_ip` -
    - `skip_source_dest_check` -
    - `subnet_id` -

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Operations.CostCenter": "42"`}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information. Example: `My bare metal instance`

- `extended_metadata` - Additional metadata key/value pairs that you provide. They serve the same purpose and functionality as fields in the 'metadata' object.

  They are distinguished from 'metadata' fields in that these can be nested JSON objects (whereas 'metadata' fields are string/string maps only).

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Department": "Finance"`}

- `ipxe_script` - This is an advanced option.

  When a bare metal or virtual machine instance boots, the iPXE firmware that runs on the instance is configured to run an iPXE script to continue the boot process.

  If you want more control over the boot process, you can provide your own custom iPXE script that will run when the instance boots; however, you should be aware that the same iPXE script will run every time an instance boots; not only after the initial LaunchInstance call.

  The default iPXE script connects to the instance's local boot volume over iSCSI and performs a network boot. If you use a custom iPXE script and want to network-boot from the instance's local boot volume over iSCSI the same way as the default iPXE script, you should use the following iSCSI IP address: 169.254.0.2, and boot volume IQN: iqn.2015-02.oracle.boot.

  For more information about the Bring Your Own Image feature of Oracle Cloud Infrastructure, see Bring Your Own Image (https://docs.cloud.oracle.com/iaas/Content/Compute/References/bringyourownimage.htm).

  For more information about iPXE, see http://ipxe.org (http://ipxe.org).

- `metadata` - Custom metadata key/value pairs that you provide, such as the SSH public key required to connect to the instance.

  A metadata service runs on every launched instance. The service is an HTTP endpoint listening on 169.254.169.254. You can use the service to:

    - Provide information to Cloud-Init (https://cloudinit.readthedocs.org/en/latest/) to be used for various system initialization tasks.
    - Get information about the instance, including the custom metadata that you provide when you launch the instance.

  Providing Cloud-Init Metadata

  You can use the following metadata key names to provide information to Cloud-Init:

  "ssh_authorized_keys" - Provide one or more public SSH keys to be included in the `~/.ssh/authorized_keys` file for the default user on the instance. Use a newline character to separate multiple keys. The SSH keys must be in the format necessary for the `authorized_keys` file, as shown in the example below.

  "user_data" - Provide your own base64-encoded data to be used by Cloud-Init to run custom scripts or provide custom Cloud-Init configuration. For information about how to take advantage of user data, see the Cloud-Init Documentation (http://cloudinit.readthedocs.org/en/latest/topics/format.html).

  Note: Cloud-Init does not pull this data from the `http://169.254.169.254/opc/v1/instance/metadata/` path. When the instance launches and either of these keys are provided, the key values are formatted as OpenStack metadata and copied to the following locations, which are recognized by Cloud-Init:

  `http://169.254.169.254/openstack/latest/meta_data.json` - This JSON blob contains, among other things, the SSH keys that you provided for **"ssh_authorized_keys"**.

  `http://169.254.169.254/openstack/latest/user_data` - Contains the base64-decoded data that you provided for **"user_data"**.

  Metadata Example

  "metadata" : { "quake_bot_level" : "Severe", "ssh_authorized_keys" : "ssh-rsa
  AAAAB3NzaC1yc2EAAAADAQABAAACAQCZ06fccNTQfq+xubFIJ5ZR3kt+uzspdH9tXL+lAejSM1NXM+CFZev7MIxfEjas06y80ZBZ7DUTQO0GxJPeD8NCOb1VorF8M4xuLwrmzRtkoZzU16umt4y1W
  ryan.smith@company.com (mailto:ryan.smith@company.com) ssh-rsa
  AAAAB3NzaC1yc2EAAAABJQAAAQEAzJSAtwEPoB3Jmr58IXrDGzLuDYkWAYg8AsLYIo6JZvKpjY1xednIcfEVQJm4T2DhVmdWhRrwQ8DmayVZvBkLt+zs2LdoAJEVimKwXcJFD/7wtH8Lnk17HiglbbbN
  rsa-key-20160227", "user_data" : "SWYgeW91IGNhbiBzZWUgdGhpcywgd2hlbiBpdCB3b3JrZWQgbWF5YmUuUg==" } **Getting Metadata on the Instance**

  To get information about your instance, connect to the instance using SSH and issue any of the following GET requests:

  curl http://169.254.169.254/opc/v1/instance/ (http://169.254.169.254/opc/v1/instance/) curl http://169.254.169.254/opc/v1/instance/metadata/ (http://169.254.169.254/opc/v1/instance/metadata/) curl http://169.254.169.254/opc/v1/instance/metadata/ (http://169.254.169.254/opc/v1/instance/metadata/)

  You'll get back a response that includes all the instance information; only the metadata information; or the metadata information for the specified key name, respectively.

- `shape` - The shape of an instance. The shape determines the number of CPUs, amount of memory, and other resources allocated to the instance.

  You can enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

- `source_details` - Details for creating an instance. Use this parameter to specify whether a boot volume or an image should be used to launch a new instance.
    - `boot_volume_id` - The OCID of the boot volume used to boot the instance.
    - `image_id` - The OCID of the image used to boot the instance.

- - `source_type` - The source type for the instance. Use `image` when specifying the image OCID. Use `bootVolume` when specifying the boot volume OCID.

  - `secondary_vnics` -

    - `create_vnic_details` - Details for creating a new VNIC.
      - `assign_public_ip` -

      - `display_name` - A user-friendly name for the VNIC. Does not have to be unique. Avoid entering confidential information.

      - `hostname_label` -

      - `private_ip` -

      - `skip_source_dest_check` -

      - `subnet_id` -

    - `display_name` - A user-friendly name for the attachment. Does not have to be unique, and it cannot be changed.

    - `nic_index` - Which physical network interface card (NIC) the VNIC will use. Defaults to 0. Certain bare metal instance shapes have two active physical NICs (0 and 1). If you add a secondary VNIC to one of these instances, you can specify which NIC the VNIC will use. For more information, see Virtual Network Interface Cards (VNICs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVNICs.htm).

- `time_created` - The date and time the instance configuration was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

oci_core_remote_peering_connection

This resource provides the Remote Peering Connection resource in Oracle Cloud Infrastructure Core service.

Creates a new remote peering connection (RPC) for the specified DRG.

Example Usage

```
resource "oci_core_remote_peering_connection" "test_remote_peering_connection" {
    #Required
    compartment_id = "${var.compartment_id}"
    drg_id = "${oci_core_drg.test_drg.id}"

    #Optional
    display_name = "${var.remote_peering_connection_display_name}"
    peer_id = "${oci_core_remote_peering_connection.test_remote_peering_connection2.id}"
    peer_region_name = "${var.remote_peering_connection_peer_region_name}"
}
```

Argument Reference

- Specifying a `peer_id` and a `peer_region_name` creates a connection to the specified RPC ID. Both `peer_id` and `peer_region_name` are required for the connection to succeed.

- If the specified peer_id is also a resource in the terraform config you will have do a `terraform refresh` after the `terraform apply` in order to get the latest connection information on that resource.

- To disconnect the peering connection at least one of the RPC resources in the connection will have to be destroyed, however in terraform we recommend that when one RPC is destroyed the peer should also be destroyed. If one of them is not destroyed it will have a `REVOKED` peering_status. If another RPC resource tries to connect to this RPC resource the peering_status on the requestor will be `INVALID`. To solve this you will have to run `terraform taint oci_core_remote_peering_connection.test_remote_peering_connection` on the acceptor resource or target delete it `terraform destroy -target="oci_core_remote_peering_connection.test_remote_peering_connection"`.

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment to contain the RPC.

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `drg_id` - (Required) The OCID of the DRG the RPC belongs to.

- `peer_id` - (Optional) The OCID of the RPC you want to peer with.

- `peer_region_name` - (Optional) The name of the region that contains the RPC you want to peer with. Example: `us-ashburn-1`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains the RPC.

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `drg_id` - The OCID of the DRG that this RPC belongs to.

- `id` - The OCID of the RPC.

- `is_cross_tenancy_peering` - Whether the VCN at the other end of the peering is in a different tenancy. Example: `false`

- `peer_id` - If this RPC is peered, this value is the OCID of the other RPC.

- `peer_region_name` - If this RPC is peered, this value is the region that contains the other RPC. Example: `us-ashburn-1`

- `peer_tenancy_id` - If this RPC is peered, this value is the OCID of the other RPC's tenancy.

- `peering_status` - Whether the RPC is peered with another RPC. `NEW` means the RPC has not yet been peered. `PENDING` means the peering is being established. `REVOKED` means the RPC at the other end of the peering has been deleted.

- `state` - The RPC's current lifecycle state.

- `time_created` - The date and time the RPC was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

RemotePeeringConnections can be imported using the `id`, e.g.

```
$ terraform import oci_core_remote_peering_connection.test_remote_peering_connection "id"
```

oci_core_route_table

This resource provides the Route Table resource in Oracle Cloud Infrastructure Core service.

Creates a new route table for the specified VCN. In the request you must also include at least one route rule for the new route table. For information on the number of rules you can have in a route table, see Service Limits (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/servicelimits.htm). For general information about route tables in your VCN and the types of targets you can use in route rules, see Route Tables (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingroutetables.htm).

For the purposes of access control, you must provide the OCID of the compartment where you want the route table to reside. Notice that the route table doesn't have to be in the same compartment as the VCN, subnets, or other Networking Service components. If you're not sure which compartment to use, put the route table in the same compartment as the VCN. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the route table, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

For more information on configuring a VCN's default route table, see Managing Default VCN Resources (/docs/providers/oci/guides/managing_default_resources.html)

Example Usage

```
resource "oci_core_route_table" "test_route_table" {
    #Required
    compartment_id = "${var.compartment_id}"
    route_rules {
        #Required
        network_entity_id = "${oci_core_internet_gateway.test_internet_gateway.id}"

        #Optional
        cidr_block = "${var.route_table_route_rules_cidr_block}"
        destination = "${var.route_table_route_rules_destination}"
        destination_type = "${var.route_table_route_rules_destination_type}"
    }
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.route_table_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment to contain the route table.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a

namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `route_rules` - (Required) (Updatable) The collection of rules used for routing destination IPs to network devices.

  - `cidr_block` - (Optional) (Updatable) Deprecated. Instead use `destination` and `destinationType`. Requests that include both `cidrBlock` and `destination` will be rejected.

    A destination IP address range in CIDR notation. Matching packets will be routed to the indicated network entity (the target).

    Example: `0.0.0.0/0`

  - `destination` - (Optional) (Updatable) Conceptually, this is the range of IP addresses used for matching when routing traffic. Required if you provide a `destinationType`.

    Allowed values:

    - IP address range in CIDR notation. For example: `192.168.1.0/24`

    - The `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/), if you're setting up a route rule for traffic destined for a particular service through a service gateway. For example: `oci-phx-objectstorage`

  - `destination_type` - (Optional) (Updatable) Type of destination for the rule. Required if you provide a `destination`.

    - `CIDR_BLOCK`: If the rule's `destination` is an IP address range in CIDR notation.

    - `SERVICE_CIDR_BLOCK`: If the rule's `destination` is the `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/) (the rule is for traffic destined for a particular service through a service gateway).

  - `network_entity_id` - (Required) (Updatable) The OCID for the route rule's target. For information about the type of targets you can specify, see Route Tables (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingroutetables.htm).

- `vcn_id` - (Required) The OCID of the VCN the route table belongs to.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the route table.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The route table's Oracle ID (OCID).

- `route_rules` - The collection of rules for routing destination IPs to network devices.

  - `cidr_block` - Deprecated. Instead use `destination` and `destinationType`. Requests that include both `cidrBlock` and `destination` will be rejected.

    A destination IP address range in CIDR notation. Matching packets will be routed to the indicated network entity (the target).

    Example: `0.0.0.0/0`

  - `destination` - Conceptually, this is the range of IP addresses used for matching when routing traffic. Required if you provide a `destinationType`.

    Allowed values:

    - IP address range in CIDR notation. For example: `192.168.1.0/24`

    - The `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/), if you're setting up a route rule for traffic destined for a particular service through a service gateway. For example: `oci-phx-objectstorage`

  - `destination_type` - Type of destination for the rule. Required if you provide a `destination`.

    - `CIDR_BLOCK`: If the rule's `destination` is an IP address range in CIDR notation.

    - `SERVICE_CIDR_BLOCK`: If the rule's `destination` is the `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/) (the rule is for traffic destined for a particular service through a service gateway).

  - `network_entity_id` - The OCID for the route rule's target. For information about the type of targets you can specify, see Route Tables (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingroutetables.htm).

- `state` - The route table's current state.

- `time_created` - The date and time the route table was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the route table list belongs to.

Import

RouteTables can be imported using the `id`, e.g.

```
$ terraform import oci_core_route_table.test_route_table "id"
```

oci_core_route_table_attachment

This resource provides the ability to associate a route table for a subnet in Oracle Cloud Infrastructure Core service.

Attaches the specified `route table` to the specified `subnet`.

Example Usage

```
resource "oci_core_route_table_attachment" "test_route_table_attachment" {
  #Required
  subnet_id = "${oci_core_subnet.test_subnet.id}"
  route_table_id ="${oci_core_route_table.test_route_table.id}"
}
```

Argument Reference

The following arguments are supported:

- `subnet_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the subnet.

- `route_table_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the route table.

Attributes Reference

The following attributes are exported:

- `subnet_id` - (Required) The OCID of the subnet.

- `route_table_id` - (Required) The OCID of the route table.

Import

Route Table Attachment can be imported using the `id`, e.g.

```
$ terraform import oci_core_route_table_attachment.test_route_table_attachment "{subnetId}/{routeTableId}"
```

oci_core_security_list

This resource provides the Security List resource in Oracle Cloud Infrastructure Core service.

Creates a new security list for the specified VCN. For more information about security lists, see Security Lists (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/securitylists.htm). For information on the number of rules you can have in a security list, see Service Limits (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/servicelimits.htm).

For the purposes of access control, you must provide the OCID of the compartment where you want the security list to reside. Notice that the security list doesn't have to be in the same compartment as the VCN, subnets, or other Networking Service components. If you're not sure which compartment to use, put the security list in the same compartment as the VCN. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the security list, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

For more information on configuring a VCN's default security list, see Managing Default VCN Resources (/docs/providers/oci/guides/managing_default_resources.html)

Example Usage

```
resource "oci_core_security_list" "test_security_list" {
    #Required
    compartment_id = "${var.compartment_id}"
    egress_security_rules {
        #Required
        destination = "${var.security_list_egress_security_rules_destination}"
        protocol = "${var.security_list_egress_security_rules_protocol}"

        #Optional
        destination_type = "${var.security_list_egress_security_rules_destination_type}"
        icmp_options {
            #Required
            type = "${var.security_list_egress_security_rules_icmp_options_type}"

            #Optional
            code = "${var.security_list_egress_security_rules_icmp_options_code}"
        }
        stateless = "${var.security_list_egress_security_rules_stateless}"
        tcp_options {

            #Optional
            max = "${var.security_list_egress_security_rules_tcp_options_destination_port_range_max}"
            min = "${var.security_list_egress_security_rules_tcp_options_destination_port_range_min}"
            source_port_range {
                #Required
                max = "${var.security_list_egress_security_rules_tcp_options_source_port_range_max}"
                min = "${var.security_list_egress_security_rules_tcp_options_source_port_range_min}"
            }
        }
        udp_options {

            #Optional
            max = "${var.security_list_egress_security_rules_udp_options_destination_port_range_max}"
```

```
            max = "${var.security_list_egress_security_rules_udp_options_destination_port_range_max}"
            min = "${var.security_list_egress_security_rules_udp_options_destination_port_range_min}"
            source_port_range {
                #Required
                max = "${var.security_list_egress_security_rules_udp_options_source_port_range_max}"
                min = "${var.security_list_egress_security_rules_udp_options_source_port_range_min}"
            }
        }
    }
    ingress_security_rules {
        #Required
        protocol = "${var.security_list_ingress_security_rules_protocol}"
        source = "${var.security_list_ingress_security_rules_source}"

        #Optional
        icmp_options {
            #Required
            type = "${var.security_list_ingress_security_rules_icmp_options_type}"

            #Optional
            code = "${var.security_list_ingress_security_rules_icmp_options_code}"
        }
        source_type = "${var.security_list_ingress_security_rules_source_type}"
        stateless = "${var.security_list_ingress_security_rules_stateless}"
        tcp_options {

            #Optional
            max = "${var.security_list_ingress_security_rules_tcp_options_destination_port_range_max}"
            min = "${var.security_list_ingress_security_rules_tcp_options_destination_port_range_min}"
            source_port_range {
                #Required
                max = "${var.security_list_ingress_security_rules_tcp_options_source_port_range_max}"
                min = "${var.security_list_ingress_security_rules_tcp_options_source_port_range_min}"
            }
        }
        udp_options {

            #Optional
            max = "${var.security_list_ingress_security_rules_udp_options_destination_port_range_max}"
            min = "${var.security_list_ingress_security_rules_udp_options_destination_port_range_min}"
            source_port_range {
                #Required
                max = "${var.security_list_ingress_security_rules_udp_options_source_port_range_max}"
                min = "${var.security_list_ingress_security_rules_udp_options_source_port_range_min}"
            }
        }
    }
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.security_list_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- compartment_id - (Required) The OCID of the compartment to contain the security list.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `egress_security_rules` - (Optional) (Updatable) Rules for allowing egress IP packets.

  - `destination` - (Required) (Updatable) Conceptually, this is the range of IP addresses that a packet originating from the instance can go to.

    Allowed values:

    - IP address range in CIDR notation. For example: `192.168.1.0/24`

    - The `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/), if you're setting up a security list rule for traffic destined for a particular service through a service gateway. For example: `oci-phx-objectstorage`

  - `destination_type` - (Optional) (Updatable) Type of destination for the rule. The default is `CIDR_BLOCK`.

    Allowed values:

    - `CIDR_BLOCK`: If the rule's `destination` is an IP address range in CIDR notation.

    - `SERVICE_CIDR_BLOCK`: If the rule's `destination` is the `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/) (the rule is for traffic destined for a particular service through a service gateway).

  - `icmp_options` - (Optional) (Updatable) Optional and valid only for ICMP. Use to specify a particular ICMP type and code as defined in ICMP Parameters (http://www.iana.org/assignments/icmp-parameters/icmp-parameters.xhtml). If you specify ICMP as the protocol but omit this object, then all ICMP types and codes are allowed. If you do provide this object, the type is required and the code is optional. To enable MTU negotiation for ingress internet traffic, make sure to allow type 3 ("Destination Unreachable") code 4 ("Fragmentation Needed and Don't Fragment was Set"). If you need to specify multiple codes for a single type, create a separate security list rule for each.

    - `code` - (Optional) (Updatable) The ICMP code (optional).

    - `type` - (Required) (Updatable) The ICMP type.

  - `protocol` - (Required) (Updatable) The transport protocol. Specify either `all` or an IPv4 protocol number as defined in Protocol Numbers (http://www.iana.org/assignments/protocol-numbers/protocol-numbers.xhtml). Options are supported only for ICMP ("1"), TCP ("6"), and UDP ("17").

  - `stateless` - (Optional) (Updatable) A stateless rule allows traffic in one direction. Remember to add a corresponding stateless rule in the other direction if you need to support bidirectional traffic. For example, if egress traffic allows TCP destination port 80, there should be an ingress rule to allow TCP source port 80. Defaults to false, which means the rule is stateful and a corresponding rule is not necessary for bidirectional traffic.

  - `tcp_options` - (Optional) (Updatable) Optional and valid only for TCP. Use to specify particular destination ports for TCP rules. If you specify TCP as the protocol but omit this object, then all destination ports are allowed.

- - - **destination_port_range** - (Optional) (Updatable) An inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
      - **max** - (Optional) (Updatable) The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.
      - **min** - (Optional) (Updatable) The minimum port number. Must not be greater than the maximum port number.
    - **source_port_range** - (Optional) (Updatable) An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
      - **max** - (Required) (Updatable) The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.
      - **min** - (Required) (Updatable) The minimum port number. Must not be greater than the maximum port number.
  - **udp_options** - (Optional) (Updatable) Optional and valid only for UDP. Use to specify particular destination ports for UDP rules. If you specify UDP as the protocol but omit this object, then all destination ports are allowed.
    - **destination_port_range** - (Optional) (Updatable) An inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
      - **max** - (Optional) (Updatable) The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.
      - **min** - (Optional) (Updatable) The minimum port number. Must not be greater than the maximum port number.
    - **source_port_range** - (Optional) (Updatable) An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
      - **max** - (Required) (Updatable) The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.
      - **min** - (Required) (Updatable) The minimum port number. Must not be greater than the maximum port number.
- **freeform_tags** - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`
- **ingress_security_rules** - (Optional) (Updatable) Rules for allowing ingress IP packets.
  - **icmp_options** - (Optional) (Updatable) Optional and valid only for ICMP. Use to specify a particular ICMP type and code as defined in ICMP Parameters (http://www.iana.org/assignments/icmp-parameters/icmp-parameters.xhtml). If you specify ICMP as the protocol but omit this object, then all ICMP types and codes are allowed. If you do provide this object, the type is required and the code is optional. To enable MTU negotiation for ingress internet traffic, make sure to allow type 3 ("Destination Unreachable") code 4 ("Fragmentation Needed and Don't Fragment was Set"). If you need to specify multiple codes for a single type, create a separate security list rule for each.
    - **code** - (Optional) (Updatable) The ICMP code (optional).
    - **type** - (Required) (Updatable) The ICMP type.
  - **protocol** - (Required) (Updatable) The transport protocol. Specify either `all` or an IPv4 protocol number as

defined in Protocol Numbers (http://www.iana.org/assignments/protocol-numbers/protocol-numbers.xhtml). Options are supported only for ICMP ("1"), TCP ("6"), and UDP ("17").

- `source` - (Required) (Updatable) Conceptually, this is the range of IP addresses that a packet coming into the instance can come from.

  Allowed values:

  - IP address range in CIDR notation. For example: `192.168.1.0/24`

  - The `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/), if you're setting up a security list rule for traffic coming from a particular service through a service gateway. For example: `oci-phx-objectstorage`

- `source_type` - (Optional) (Updatable) Type of source for the rule. The default is `CIDR_BLOCK`.

  - `CIDR_BLOCK`: If the rule's `source` is an IP address range in CIDR notation.

  - `SERVICE_CIDR_BLOCK`: If the rule's `source` is the `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/) (the rule is for traffic coming from a particular service through a service gateway).

- `stateless` - (Optional) (Updatable) A stateless rule allows traffic in one direction. Remember to add a corresponding stateless rule in the other direction if you need to support bidirectional traffic. For example, if ingress traffic allows TCP destination port 80, there should be an egress rule to allow TCP source port 80. Defaults to false, which means the rule is stateful and a corresponding rule is not necessary for bidirectional traffic.

- `tcp_options` - (Optional) (Updatable) Optional and valid only for TCP. Use to specify particular destination ports for TCP rules. If you specify TCP as the protocol but omit this object, then all destination ports are allowed.

  - `destination_port_range` - (Optional) (Updatable) An inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - (Optional) (Updatable) The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - `min` - (Optional) (Updatable) The minimum port number. Must not be greater than the maximum port number.

  - `source_port_range` - (Optional) (Updatable) An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - (Required) (Updatable) The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - `min` - (Required) (Updatable) The minimum port number. Must not be greater than the maximum port number.

- `udp_options` - (Optional) (Updatable) Optional and valid only for UDP. Use to specify particular destination ports for UDP rules. If you specify UDP as the protocol but omit this object, then all destination ports are allowed.

  - `destination_port_range` - (Optional) (Updatable) An inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - (Optional) (Updatable) The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

- **min** - (Optional) (Updatable) The minimum port number. Must not be greater than the maximum port number.

    - **source_port_range** - (Optional) (Updatable) An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
        - **max** - (Required) (Updatable) The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

        - **min** - (Required) (Updatable) The minimum port number. Must not be greater than the maximum port number.

- **vcn_id** - (Required) The OCID of the VCN the security list belongs to.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- **compartment_id** - The OCID of the compartment containing the security list.

- **defined_tags** - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- **display_name** - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- **egress_security_rules** - Rules for allowing egress IP packets.

    - **destination** - Conceptually, this is the range of IP addresses that a packet originating from the instance can go to.

    Allowed values:

        - IP address range in CIDR notation. For example: 192.168.1.0/24

        - The cidrBlock value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/), if you're setting up a security list rule for traffic destined for a particular service through a service gateway. For example: oci-phx-objectstorage

    - **destination_type** - Type of destination for the rule. The default is CIDR_BLOCK.

    Allowed values:

        - CIDR_BLOCK: If the rule's destination is an IP address range in CIDR notation.

        - SERVICE_CIDR_BLOCK: If the rule's destination is the cidrBlock value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/) (the rule is for traffic destined for a particular service through a service gateway).

    - **icmp_options** - Optional and valid only for ICMP. Use to specify a particular ICMP type and code as defined in ICMP Parameters (http://www.iana.org/assignments/icmp-parameters/icmp-parameters.xhtml). If you specify ICMP as the protocol but omit this object, then all ICMP types and codes are allowed. If you do provide this

object, the type is required and the code is optional. To enable MTU negotiation for ingress internet traffic, make sure to allow type 3 ("Destination Unreachable") code 4 ("Fragmentation Needed and Don't Fragment was Set"). If you need to specify multiple codes for a single type, create a separate security list rule for each.

- `code` - The ICMP code (optional).

- `type` - The ICMP type.

- `protocol` - The transport protocol. Specify either `all` or an IPv4 protocol number as defined in Protocol Numbers (http://www.iana.org/assignments/protocol-numbers/protocol-numbers.xhtml). Options are supported only for ICMP ("1"), TCP ("6"), and UDP ("17").

- `stateless` - A stateless rule allows traffic in one direction. Remember to add a corresponding stateless rule in the other direction if you need to support bidirectional traffic. For example, if egress traffic allows TCP destination port 80, there should be an ingress rule to allow TCP source port 80. Defaults to false, which means the rule is stateful and a corresponding rule is not necessary for bidirectional traffic.

- `tcp_options` - Optional and valid only for TCP. Use to specify particular destination ports for TCP rules. If you specify TCP as the protocol but omit this object, then all destination ports are allowed.

  - The following 2 attributes specify an inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - `min` - The minimum port number. Must not be greater than the maximum port number.

  - `source_port_range` - An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - `min` - The minimum port number. Must not be greater than the maximum port number.

- `udp_options` - Optional and valid only for UDP. Use to specify particular destination ports for UDP rules. If you specify UDP as the protocol but omit this object, then all destination ports are allowed.

  - The following 2 attributes specify an inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - `min` - The minimum port number. Must not be greater than the maximum port number.

  - `source_port_range` - An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - `min` - The minimum port number. Must not be greater than the maximum port number.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The security list's Oracle Cloud ID (OCID).

- `ingress_security_rules` - Rules for allowing ingress IP packets.

  - `icmp_options` - Optional and valid only for ICMP. Use to specify a particular ICMP type and code as defined in ICMP Parameters (http://www.iana.org/assignments/icmp-parameters/icmp-parameters.xhtml). If you specify ICMP as the protocol but omit this object, then all ICMP types and codes are allowed. If you do provide this object, the type is required and the code is optional. To enable MTU negotiation for ingress internet traffic, make sure to allow type 3 ("Destination Unreachable") code 4 ("Fragmentation Needed and Don't Fragment was Set"). If you need to specify multiple codes for a single type, create a separate security list rule for each.
    - `code` - The ICMP code (optional).

    - `type` - The ICMP type.

  - `protocol` - The transport protocol. Specify either `all` or an IPv4 protocol number as defined in Protocol Numbers (http://www.iana.org/assignments/protocol-numbers/protocol-numbers.xhtml). Options are supported only for ICMP ("1"), TCP ("6"), and UDP ("17").

  - `source` - Conceptually, this is the range of IP addresses that a packet coming into the instance can come from.

    Allowed values:

    - IP address range in CIDR notation. For example: `192.168.1.0/24`

    - The `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/), if you're setting up a security list rule for traffic coming from a particular service through a service gateway. For example: `oci-phx-objectstorage`

  - `source_type` - Type of source for the rule. The default is `CIDR_BLOCK`.

    - `CIDR_BLOCK`: If the rule's `source` is an IP address range in CIDR notation.

    - `SERVICE_CIDR_BLOCK`: If the rule's `source` is the `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/) (the rule is for traffic coming from a particular service through a service gateway).

  - `stateless` - A stateless rule allows traffic in one direction. Remember to add a corresponding stateless rule in the other direction if you need to support bidirectional traffic. For example, if ingress traffic allows TCP destination port 80, there should be an egress rule to allow TCP source port 80. Defaults to false, which means the rule is stateful and a corresponding rule is not necessary for bidirectional traffic.

  - `tcp_options` - Optional and valid only for TCP. Use to specify particular destination ports for TCP rules. If you specify TCP as the protocol but omit this object, then all destination ports are allowed.

    - The following 2 attributes specify an inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
      - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

      - `min` - The minimum port number. Must not be greater than the maximum port number.

    - `source_port_range` - An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
      - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

- **min** - The minimum port number. Must not be greater than the maximum port number.
  - **udp_options** - Optional and valid only for UDP. Use to specify particular destination ports for UDP rules. If you specify UDP as the protocol but omit this object, then all destination ports are allowed.
    - The following 2 attributes specify an inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
      - **max** - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.
      - **min** - The minimum port number. Must not be greater than the maximum port number.
    - **source_port_range** - An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
      - **max** - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.
      - **min** - The minimum port number. Must not be greater than the maximum port number.
- **state** - The security list's current state.
- **time_created** - The date and time the security list was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`
- **vcn_id** - The OCID of the VCN the security list belongs to.

Import

SecurityLists can be imported using the `id`, e.g.

```
$ terraform import oci_core_security_list.test_security_list "id"
```

oci_core_service_gateway

This resource provides the Service Gateway resource in Oracle Cloud Infrastructure Core service.

Creates a new service gateway in the specified compartment.

For the purposes of access control, you must provide the OCID of the compartment where you want the service gateway to reside. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the service gateway, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

Example Usage

```
resource "oci_core_service_gateway" "test_service_gateway" {
    #Required
    compartment_id = "${var.compartment_id}"
    services {
        #Required
        service_id = "${data.oci_core_services.test_services.services.0.id}"
    }
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.service_gateway_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment to contain the service gateway.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `services` - (Required) (Updatable) List of the service OCIDs. These are the services that will be enabled on the service gateway. This list can be empty.
  - `service_id` - (Required) (Updatable) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the service.

- `vcn_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the VCN.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `block_traffic` - Whether the service gateway blocks all traffic through it. The default is `false`. When this is `true`, traffic is not routed to any services, regardless of route rules. Example: `true`

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment that contains the service gateway.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the service gateway.

- `services` - List of the services enabled on this service gateway. The list can be empty. You can enable a particular service by using AttachServiceId (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/ServiceGateway/AttachServiceId).
  - `service_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the service.

  - `service_name` - The name of the service.

- `state` - The service gateway's current state.

- `time_created` - The date and time the service gateway was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the VCN the service gateway belongs to.

Import

ServiceGateways can be imported using the `id`, e.g.

```
$ terraform import oci_core_service_gateway.test_service_gateway "id"
```

oci_core_subnet

This resource provides the Subnet resource in Oracle Cloud Infrastructure Core service.

Creates a new subnet in the specified VCN. You can't change the size of the subnet after creation, so it's important to think about the size of subnets you need before creating them. For more information, see VCNs and Subnets (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVCNs.htm). For information on the number of subnets you can have in a VCN, see Service Limits (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/servicelimits.htm).

For the purposes of access control, you must provide the OCID of the compartment where you want the subnet to reside. Notice that the subnet doesn't have to be in the same compartment as the VCN, route tables, or other Networking Service components. If you're not sure which compartment to use, put the subnet in the same compartment as the VCN. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally associate a route table with the subnet. If you don't, the subnet will use the VCN's default route table. For more information about route tables, see Route Tables (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingroutetables.htm).

You may optionally associate a security list with the subnet. If you don't, the subnet will use the VCN's default security list. For more information about security lists, see Security Lists (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/securitylists.htm).

You may optionally associate a set of DHCP options with the subnet. If you don't, the subnet will use the VCN's default set. For more information about DHCP options, see DHCP Options (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingDHCP.htm).

You may optionally specify a *display name* for the subnet, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

You can also add a DNS label for the subnet, which is required if you want the Internet and VCN Resolver to resolve hostnames for instances in the subnet. For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

Example Usage

```
resource "oci_core_subnet" "test_subnet" {
    #Required
    availability_domain = "${var.subnet_availability_domain}"
    cidr_block = "${var.subnet_cidr_block}"
    compartment_id = "${var.compartment_id}"
    security_list_ids = "${var.subnet_security_list_ids}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    dhcp_options_id = "${oci_core_dhcp_options.test_dhcp_options.id}"
    display_name = "${var.subnet_display_name}"
    dns_label = "${var.subnet_dns_label}"
    freeform_tags = {"Department"= "Finance"}
    prohibit_public_ip_on_vnic = "${var.subnet_prohibit_public_ip_on_vnic}"
    route_table_id = "${oci_core_route_table.test_route_table.id}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The availability domain to contain the subnet. Example: `Uocm:PHX-AD-1`

- `cidr_block` - (Required) The CIDR IP address range of the subnet. Example: `172.16.1.0/24`

- `compartment_id` - (Required) The OCID of the compartment to contain the subnet.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `dhcp_options_id` - (Optional) (Updatable) The OCID of the set of DHCP options the subnet will use. If you don't provide a value, the subnet uses the VCN's default set of DHCP options.

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `dns_label` - (Optional) A DNS label for the subnet, used in conjunction with the VNIC's hostname and VCN's DNS label to form a fully qualified domain name (FQDN) for each VNIC within this subnet (for example, `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be an alphanumeric string that begins with a letter and is unique within the VCN. The value cannot be changed.

  This value must be set if you want to use the Internet and VCN Resolver to resolve the hostnames of instances in the subnet. It can only be set if the VCN itself was created with a DNS label.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `subnet123`

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":`

```
"Finance"}
```

- `prohibit_public_ip_on_vnic` - (Optional) Whether VNICs within this subnet can have public IP addresses. Defaults to false, which means VNICs created in this subnet will automatically be assigned public IP addresses unless specified otherwise during instance launch or VNIC creation (with the `assignPublicIp` flag in CreateVnicDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/CreateVnicDetails/)). If `prohibitPublicIpOnVnic` is set to true, VNICs created in this subnet cannot have public IP addresses (that is, it's a private subnet). Example: `true`

- `route_table_id` - (Optional) (Updatable) The OCID of the route table the subnet will use. If you don't provide a value, the subnet uses the VCN's default route table.

- `security_list_ids` - (Optional) (Updatable) The OCIDs of the security list or lists the subnet will use. If you don't provide a value, the subnet uses the VCN's default security list. Remember that security lists are associated *with the subnet*, but the rules are applied to the individual VNICs in the subnet.

- `vcn_id` - (Required) The OCID of the VCN to contain the subnet.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The subnet's availability domain. Example: `Uocm:PHX-AD-1`

- `cidr_block` - The subnet's CIDR block. Example: `172.16.1.0/24`

- `compartment_id` - The OCID of the compartment containing the subnet.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `dhcp_options_id` - The OCID of the set of DHCP options that the subnet uses.

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `dns_label` - A DNS label for the subnet, used in conjunction with the VNIC's hostname and VCN's DNS label to form a fully qualified domain name (FQDN) for each VNIC within this subnet (for example, `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be an alphanumeric string that begins with a letter and is unique within the VCN. The value cannot be changed.

  The absence of this parameter means the Internet and VCN Resolver will not resolve hostnames of instances in this subnet.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `subnet123`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The subnet's Oracle ID (OCID).

- `prohibit_public_ip_on_vnic` - Whether VNICs within this subnet can have public IP addresses. Defaults to false, which means VNICs created in this subnet will automatically be assigned public IP addresses unless specified otherwise during instance launch or VNIC creation (with the `assignPublicIp` flag in CreateVnicDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/CreateVnicDetails/)). If `prohibitPublicIpOnVnic` is set to true, VNICs created in this subnet cannot have public IP addresses (that is, it's a private subnet). Example: `true`

- `route_table_id` - The OCID of the route table that the subnet uses.

- `security_list_ids` - The OCIDs of the security list or lists that the subnet uses. Remember that security lists are associated *with the subnet*, but the rules are applied to the individual VNICs in the subnet.

- `state` - The subnet's current state.

- `subnet_domain_name` - The subnet's domain name, which consists of the subnet's DNS label, the VCN's DNS label, and the `oraclevcn.com` domain.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `subnet123.vcn1.oraclevcn.com`

- `time_created` - The date and time the subnet was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the subnet is in.

- `virtual_router_ip` - The IP address of the virtual router. Example: `10.0.14.1`

- `virtual_router_mac` - The MAC address of the virtual router. Example: `00:00:17:B6:4D:DD`

Import

Subnets can be imported using the `id`, e.g.

```
$ terraform import oci_core_subnet.test_subnet "id"
```

oci_core_vcn

Other supported legacy names/aliases: * `oci_core_virtual_network`

This resource provides the Vcn resource in Oracle Cloud Infrastructure Core service.

The VCN automatically comes with a default route table, default security list, and default set of DHCP options. For managing these resources, see Managing Default VCN Resources (/docs/providers/oci/guides/managing_default_resources.html)

Creates a new Virtual Cloud Network (VCN). For more information, see VCNs and Subnets (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVCNs.htm).

For the VCN you must specify a single, contiguous IPv4 CIDR block. Oracle recommends using one of the private IP address ranges specified in RFC 1918 (https://tools.ietf.org/html/rfc1918) (10.0.0.0/8, 172.16/12, and 192.168/16). Example: 172.16.0.0/16. The CIDR block can range from /16 to /30, and it must not overlap with your on-premises network. You can't change the size of the VCN after creation.

For the purposes of access control, you must provide the OCID of the compartment where you want the VCN to reside. Consult an Oracle Cloud Infrastructure administrator in your organization if you're not sure which compartment to use. Notice that the VCN doesn't have to be in the same compartment as the subnets or other Networking Service components. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the VCN, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

You can also add a DNS label for the VCN, which is required if you want the instances to use the Interent and VCN Resolver option for DNS in the VCN. For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

The VCN automatically comes with a default route table, default security list, and default set of DHCP options. The OCID for each is returned in the response. You can't delete these default objects, but you can change their contents (that is, change the route rules, security list rules, and so on).

The VCN and subnets you create are not accessible until you attach an internet gateway or set up an IPSec VPN or FastConnect. For more information, see Overview of the Networking Service (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/overview.htm).

Example Usage

```
resource "oci_core_vcn" "test_vcn" {
    #Required
    cidr_block = "${var.vcn_cidr_block}"
    compartment_id = "${var.compartment_id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.vcn_display_name}"
    dns_label = "${var.vcn_dns_label}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `cidr_block` - (Required) The CIDR IP address block of the VCN. Example: `172.16.0.0/16`

- `compartment_id` - (Required) The OCID of the compartment to contain the VCN.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `dns_label` - (Optional) A DNS label for the VCN, used in conjunction with the VNIC's hostname and subnet's DNS label to form a fully qualified domain name (FQDN) for each VNIC within this subnet (for example, `bminstance-1.subnet123.vcn1.oraclevcn.com`). Not required to be unique, but it's a best practice to set unique DNS labels for VCNs in your tenancy. Must be an alphanumeric string that begins with a letter. The value cannot be changed.

  You must set this value if you want instances to be able to use hostnames to resolve other instances in the VCN. Otherwise the Internet and VCN Resolver will not work.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `vcn1`

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `cidr_block` - The CIDR IP address block of the VCN. Example: `172.16.0.0/16`

- `compartment_id` - The OCID of the compartment containing the VCN.

- `default_dhcp_options_id` - The OCID for the VCN's default set of DHCP options.

- `default_route_table_id` - The OCID for the VCN's default route table.

- `default_security_list_id` - The OCID for the VCN's default security list.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `dns_label` - A DNS label for the VCN, used in conjunction with the VNIC's hostname and subnet's DNS label to form a fully qualified domain name (FQDN) for each VNIC within this subnet (for example, `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be an alphanumeric string that begins with a letter. The value cannot be changed.

  The absence of this parameter means the Internet and VCN Resolver will not work for this VCN.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `vcn1`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The VCN's Oracle ID (OCID).

- `state` - The VCN's current state.

- `time_created` - The date and time the VCN was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_domain_name` - The VCN's domain name, which consists of the VCN's DNS label, and the `oraclevcn.com` domain.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `vcn1.oraclevcn.com`

Import

Vcns can be imported using the `id`, e.g.

```
$ terraform import oci_core_vcn.test_vcn "id"
```

oci_core_virtual_circuit

This resource provides the Virtual Circuit resource in Oracle Cloud Infrastructure Core service.

Creates a new virtual circuit to use with Oracle Cloud Infrastructure FastConnect. For more information, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

For the purposes of access control, you must provide the OCID of the compartment where you want the virtual circuit to reside. If you're not sure which compartment to use, put the virtual circuit in the same compartment with the DRG it's using. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the virtual circuit. It does not have to be unique, and you can change it. Avoid entering confidential information.

Important: When creating a virtual circuit, you specify a DRG for the traffic to flow through. Make sure you attach the DRG to your VCN and confirm the VCN's routing sends traffic to the DRG. Otherwise traffic will not flow. For more information, see Route Tables (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingroutetables.htm).

Example Usage

```
resource "oci_core_virtual_circuit" "test_virtual_circuit" {
    #Required
    compartment_id = "${var.compartment_id}"
    type = "${var.virtual_circuit_type}"

    #Optional
    bandwidth_shape_name = "${var.virtual_circuit_bandwidth_shape_name}"
    cross_connect_mappings {

        #Optional
        bgp_md5auth_key = "${var.virtual_circuit_cross_connect_mappings_bgp_md5auth_key}"
        cross_connect_or_cross_connect_group_id = "${oci_core_cross_connect_or_cross_connect_group.test_cross_connect_or_cross_c
onnect_group.id}"
        customer_bgp_peering_ip = "${var.virtual_circuit_cross_connect_mappings_customer_bgp_peering_ip}"
        oracle_bgp_peering_ip = "${var.virtual_circuit_cross_connect_mappings_oracle_bgp_peering_ip}"
        vlan = "${var.virtual_circuit_cross_connect_mappings_vlan}"
    }
    customer_bgp_asn = "${var.virtual_circuit_customer_bgp_asn}"
    display_name = "${var.virtual_circuit_display_name}"
    gateway_id = "${oci_core_gateway.test_gateway.id}"
    provider_service_id = "${oci_core_provider_service.test_provider_service.id}"
    public_prefixes {
        #Required
        cidr_block = "${var.virtual_circuit_public_prefixes_cidr_block}"
    }
    region = "${var.virtual_circuit_region}"
}
```

Argument Reference

The following arguments are supported:

- `bandwidth_shape_name` - (Optional) (Updatable) The provisioned data rate of the connection. To get a list of the available bandwidth levels (that is, shapes), see ListFastConnectProviderServiceVirtualCircuitBandwidthShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/FastConnectProviderService/ListFastConnectProviderVirtualCircuitBandwidthShapes). Example: `10 Gbps`

- `compartment_id` - (Required) The OCID of the compartment to contain the virtual circuit.

- `cross_connect_mappings` - (Optional) (Updatable) Create a `CrossConnectMapping` for each cross-connect or cross-connect group this virtual circuit will run on.

    - `bgp_md5auth_key` - (Optional) (Updatable) The key for BGP MD5 authentication. Only applicable if your system requires MD5

authentication. If empty or not set (null), that means you don't use BGP MD5 authentication.

- `cross_connect_or_cross_connect_group_id` - (Optional) (Updatable) The OCID of the cross-connect or cross-connect group for this mapping. Specified by the owner of the cross-connect or cross-connect group (the customer if the customer is colocated with Oracle, or the provider if the customer is connecting via provider).

- `customer_bgp_peering_ip` - (Optional) (Updatable) The BGP IPv4 address for the router on the other end of the BGP session from Oracle. Specified by the owner of that router. If the session goes from Oracle to a customer, this is the BGP IPv4 address of the customer's edge router. If the session goes from Oracle to a provider, this is the BGP IPv4 address of the provider's edge router. Must use a /30 or /31 subnet mask.

  There's one exception: for a public virtual circuit, Oracle specifies the BGP IPv4 addresses.

  Example: `10.0.0.18/31`

- `oracle_bgp_peering_ip` - (Optional) (Updatable) The IPv4 address for Oracle's end of the BGP session. Must use a /30 or /31 subnet mask. If the session goes from Oracle to a customer's edge router, the customer specifies this information. If the session goes from Oracle to a provider's edge router, the provider specifies this.

  There's one exception: for a public virtual circuit, Oracle specifies the BGP IPv4 addresses.

  Example: `10.0.0.19/31`

- `vlan` - (Optional) (Updatable) The number of the specific VLAN (on the cross-connect or cross-connect group) that is assigned to this virtual circuit. Specified by the owner of the cross-connect or cross-connect group (the customer if the customer is colocated with Oracle, or the provider if the customer is connecting via provider). Example: `200`

- `customer_bgp_asn` - (Optional) (Updatable) Your BGP ASN (either public or private). Provide this value only if there's a BGP session that goes from your edge router to Oracle. Otherwise, leave this empty or null.

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `gateway_id` - (Optional) (Updatable) For private virtual circuits only. The OCID of the dynamic routing gateway (DRG) (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Drg) that this virtual circuit uses.

- `provider_service_id` - (Optional) The OCID of the service offered by the provider (if you're connecting via a provider). To get a list of the available service offerings, see ListFastConnectProviderServices (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/FastConnectProviderService/ListFastConnectProviderServices).

- `public_prefixes` - (Optional) For a public virtual circuit. The public IP prefixes (CIDRs) the customer wants to advertise across the connection.

  - `cidr_block` - (Required) An individual public IP prefix (CIDR) to add to the public virtual circuit. Must be /31 or less specific.

- `region` - (Optional) The Oracle Cloud Infrastructure region where this virtual circuit is located. Example: `phx`

- `type` - (Required) The type of IP addresses used in this virtual circuit. PRIVATE means RFC 1918 (https://tools.ietf.org/html/rfc1918) addresses (10.0.0.0/8, 172.16/12, and 192.168/16). Only PRIVATE is supported.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `bandwidth_shape_name` - The provisioned data rate of the connection. To get a list of the available bandwidth levels (that is, shapes), see ListFastConnectProviderServiceVirtualCircuitBandwidthShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/FastConnectProviderService/ListFastConnectProviderVirtualCircuitBandwidthShapes). Example: `10 Gbps`

- `bgp_management` - BGP management option.

- `bgp_session_state` - The state of the BGP session associated with the virtual circuit.

- `compartment_id` - The OCID of the compartment containing the virtual circuit.

- `cross_connect_mappings` - An array of mappings, each containing properties for a cross-connect or cross-connect group that is associated with this virtual circuit.

  - `bgp_md5auth_key` - The key for BGP MD5 authentication. Only applicable if your system requires MD5 authentication. If empty or not set (null), that means you don't use BGP MD5 authentication.

  - `cross_connect_or_cross_connect_group_id` - The OCID of the cross-connect or cross-connect group for this mapping. Specified by the owner of the cross-connect or cross-connect group (the customer if the customer is colocated with Oracle, or the provider if the customer is connecting via provider).

  - `customer_bgp_peering_ip` - The BGP IPv4 address for the router on the other end of the BGP session from Oracle. Specified by the owner of that router. If the session goes from Oracle to a customer, this is the BGP IPv4 address of the customer's edge router. If the session goes from Oracle to a provider, this is the BGP IPv4 address of the provider's edge router. Must use a /30 or /31 subnet mask.

    There's one exception: for a public virtual circuit, Oracle specifies the BGP IPv4 addresses.

    Example: `10.0.0.18/31`

  - `oracle_bgp_peering_ip` - The IPv4 address for Oracle's end of the BGP session. Must use a /30 or /31 subnet mask. If the session goes from Oracle to a customer's edge router, the customer specifies this information. If the session goes from Oracle to a provider's edge router, the provider specifies this.

    There's one exception: for a public virtual circuit, Oracle specifies the BGP IPv4 addresses.

    Example: `10.0.0.19/31`

  - `vlan` - The number of the specific VLAN (on the cross-connect or cross-connect group) that is assigned to this virtual circuit. Specified by the owner of the cross-connect or cross-connect group (the customer if the customer is colocated with Oracle, or the provider if the customer is connecting via provider). Example: `200`

- `customer_bgp_asn` - The BGP ASN of the network at the other end of the BGP session from Oracle. If the session is between the customer's edge router and Oracle, the value is the customer's ASN. If the BGP session is between the provider's edge router and Oracle, the value is the provider's ASN.

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `gateway_id` - The OCID of the customer's dynamic routing gateway (DRG) (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Drg) that this virtual circuit uses. Applicable only to private virtual circuits.

- `id` - The virtual circuit's Oracle ID (OCID).

- `oracle_bgp_asn` - The Oracle BGP ASN.

- `provider_service_id` - The OCID of the service offered by the provider (if the customer is connecting via a provider).

- `provider_state` - The provider's state in relation to this virtual circuit (if the customer is connecting via a provider). ACTIVE means the provider has provisioned the virtual circuit from their end. INACTIVE means the provider has not yet provisioned the virtual circuit, or has de-provisioned it.

- `public_prefixes` - For a public virtual circuit. The public IP prefixes (CIDRs) the customer wants to advertise across the connection. Each prefix must be /31 or less specific.

- `reference_comment` - Provider-supplied reference information about this virtual circuit (if the customer is connecting via a provider).

- `region` - The Oracle Cloud Infrastructure region where this virtual circuit is located.

- `service_type` - Provider service type.

- `state` - The virtual circuit's current state. For information about the different states, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

- `time_created` - The date and time the virtual circuit was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `type` - Whether the virtual circuit supports private or public peering. For more information, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

Import

VirtualCircuits can be imported using the `id`, e.g.

```
$ terraform import oci_core_virtual_circuit.test_virtual_circuit "id"
```

oci_core_vnic_attachment

This resource provides the Vnic Attachment resource in Oracle Cloud Infrastructure Core service.

Creates a secondary VNIC and attaches it to the specified instance. For more information about secondary VNICs, see Virtual Network Interface Cards (VNICs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVNICs.htm).

Example Usage

```
resource "oci_core_vnic_attachment" "test_vnic_attachment" {
    #Required
    create_vnic_details {
        #Required
        subnet_id = "${oci_core_subnet.test_subnet.id}"

        #Optional
        assign_public_ip = "${var.vnic_attachment_create_vnic_details_assign_public_ip}"
        defined_tags = "${var.vnic_attachment_create_vnic_details_defined_tags}"
        display_name = "${var.vnic_attachment_create_vnic_details_display_name}"
        freeform_tags = "${var.vnic_attachment_create_vnic_details_freeform_tags}"
        hostname_label = "${var.vnic_attachment_create_vnic_details_hostname_label}"
        private_ip = "${var.vnic_attachment_create_vnic_details_private_ip}"
        skip_source_dest_check = "${var.vnic_attachment_create_vnic_details_skip_source_dest_check}"
    }
    instance_id = "${oci_core_instance.test_instance.id}"

    #Optional
    display_name = "${var.vnic_attachment_display_name}"
    nic_index = "${var.vnic_attachment_nic_index}"
}
```

Argument Reference

The following arguments are supported:

- `create_vnic_details` - (Required) Details for creating a new VNIC.

  - `assign_public_ip` - (Optional) Whether the VNIC should be assigned a public IP address. Defaults to whether the subnet is public or private. If not set and the VNIC is being created in a private subnet (that is, where `prohibitPublicIpOnVnic` = true in the Subnet (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Subnet/)), then no public IP address is assigned. If not set and the subnet is public (`prohibitPublicIpOnVnic` = false), then a public IP address is assigned. If set to true and `prohibitPublicIpOnVnic` = true, an error is returned.

    Note: This public IP address is associated with the primary private IP on the VNIC. For more information, see IP Addresses (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingIPaddresses.htm).

    Note: There's a limit to the number of public IPs (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PublicIp/) a VNIC or instance can have. If you try to create a secondary VNIC with an assigned public IP for an instance that has already reached its public IP limit, an error is returned. For information about the public IP limits, see Public IP Addresses (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingpublicIPs.htm).

Example: `false`

- `defined_tags` - (Optional) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) A user-friendly name for the VNIC. Does not have to be unique. Avoid entering confidential information.

- `freeform_tags` - (Optional) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `hostname_label` - (Optional) The hostname for the VNIC's primary private IP. Used for DNS. The value is the hostname portion of the primary private IP's fully qualified domain name (FQDN) (for example, `bminstance-1` in FQDN `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be unique across all VNICs in the subnet and comply with RFC 952 (https://tools.ietf.org/html/rfc952) and RFC 1123 (https://tools.ietf.org/html/rfc1123). The value appears in the Vnic (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Vnic/) object and also the PrivateIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/) object returned by ListPrivateIps (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/ListPrivateIps) and GetPrivateIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/GetPrivateIp).

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  When launching an instance, use this `hostnameLabel` instead of the deprecated `hostnameLabel` in LaunchInstanceDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/requests/LaunchInstanceDetails). If you provide both, the values must match.

  Example: `bminstance-1`

- `private_ip` - (Optional) A private IP address of your choice to assign to the VNIC. Must be an available IP address within the subnet's CIDR. If you don't specify a value, Oracle automatically assigns a private IP address from the subnet. This is the VNIC's *primary* private IP address. The value appears in the Vnic (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Vnic/) object and also the PrivateIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/) object returned by ListPrivateIps (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/ListPrivateIps) and GetPrivateIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/GetPrivateIp). Example: `10.0.3.3`

- `skip_source_dest_check` - (Optional) Whether the source/destination check is disabled on the VNIC. Defaults to `false`, which means the check is performed. For information about why you would skip the source/destination check, see Using a Private IP as a Route Target (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingroutetables.htm#privateip). Example: `true`

- `subnet_id` - (Required) The OCID of the subnet to create the VNIC in. When launching an instance, use this `subnetId` instead of the deprecated `subnetId` in LaunchInstanceDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/requests/LaunchInstanceDetails). At least one of them is required; if you provide both, the values must match.

- `display_name` - (Optional) A user-friendly name for the attachment. Does not have to be unique, and it cannot be changed.

- `instance_id` - (Required) The OCID of the instance.

- `nic_index` - (Optional) Which physical network interface card (NIC) the VNIC will use. Defaults to 0. Certain bare metal instance shapes have two active physical NICs (0 and 1). If you add a secondary VNIC to one of these instances, you can specify which NIC the VNIC will use. For more information, see Virtual Network Interface Cards (VNICs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVNICs.htm).

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain of the instance. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment the VNIC attachment is in, which is the same compartment the instance is in.

- `display_name` - A user-friendly name. Does not have to be unique. Avoid entering confidential information.

- `id` - The OCID of the VNIC attachment.

- `instance_id` - The OCID of the instance.

- `nic_index` - Which physical network interface card (NIC) the VNIC uses. Certain bare metal instance shapes have two active physical NICs (0 and 1). If you add a secondary VNIC to one of these instances, you can specify which NIC the VNIC will use. For more information, see Virtual Network Interface Cards (VNICs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVNICs.htm).

- `state` - The current state of the VNIC attachment.

- `subnet_id` - The OCID of the VNIC's subnet.

- `time_created` - The date and time the VNIC attachment was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vlan_tag` - The Oracle-assigned VLAN tag of the attached VNIC. Available after the attachment process is complete. Example: `0`

- `vnic_id` - The OCID of the VNIC. Available after the attachment process is complete.

Import

VnicAttachments can be imported using the `id`, e.g.

```
$ terraform import oci_core_vnic_attachment.test_vnic_attachment "id"
```

oci_core_volume

This resource provides the Volume resource in Oracle Cloud Infrastructure Core service.

Creates a new volume in the specified compartment. Volumes can be created in sizes ranging from 50 GB (51200 MB) to 32 TB (33554432 MB), in 1 GB (1024 MB) increments. By default, volumes are 1 TB (1048576 MB). For general information about block volumes, see Overview of Block Volume Service (https://docs.cloud.oracle.com/iaas/Content/Block/Concepts/overview.htm).

A volume and instance can be in separate compartments but must be in the same availability domain. For information about access control and compartments, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about availability domains, see Regions and Availability Domains (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/regions.htm). To get a list of availability domains, use the `ListAvailabilityDomains` operation in the Identity and Access Management Service API.

You may optionally specify a *display name* for the volume, which is simply a friendly name or description. It does not have to be unique, and you can change it. Avoid entering confidential information.

Example Usage

```
resource "oci_core_volume" "test_volume" {
    #Required
    availability_domain = "${var.volume_availability_domain}"
    compartment_id = "${var.compartment_id}"

    #Optional
    backup_policy_id = "${oci_core_backup_policy.test_backup_policy.id}"
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.volume_display_name}"
    freeform_tags = {"Department"= "Finance"}
    kms_key_id = "${oci_core_kms_key.test_kms_key.id}"
    size_in_gbs = "${var.volume_size_in_gbs}"
    size_in_mbs = "${var.volume_size_in_mbs}"
    source_details {
        #Required
        id = "${var.volume_source_details_id}"
        type = "${var.volume_source_details_type}"
    }
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The availability domain of the volume. Example: `Uocm:PHX-AD-1`

- `backup_policy_id` - (Optional) If provided, specifies the ID of the volume backup policy to assign to the newly created volume. If omitted, no policy will be assigned.

- `compartment_id` - (Required) The OCID of the compartment that contains the volume.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `kms_key_id` - (Optional) (Updatable) The OCID of the KMS key to be used as the master encryption key for the volume.

- `size_in_gbs` - (Optional) (Updatable) The size of the volume in GBs.

- `size_in_mbs` - (Optional) The size of the volume in MBs. The value must be a multiple of 1024. This field is deprecated. Use `size_in_gbs` instead.

- `source_details` - (Optional) Specifies the volume source details for a new Block volume. The volume source is either another Block volume in the same availability domain or a Block volume backup. This is an optional field. If not specified or set to null, the new Block volume will be empty. When specified, the new Block volume will contain data from the source volume or backup.
    - `id` - (Required) The OCID of the volume or volume backup.

    - `type` - (Required) The type can be one of these values: `volume`, `volumeBackup`

- `volume_backup_id` - (Optional) The OCID of the volume backup from which the data should be restored on the newly created volume. This field is deprecated. Use the `source_details` field instead to specify the backup for the volume.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain of the volume. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the volume.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the volume.

- `is_hydrated` - Specifies whether the cloned volume's data has finished copying from the source volume or backup.

- `kms_key_id` - The OCID of the KMS key which is the master encryption key for the volume.

- `size_in_gbs` - The size of the volume in GBs.

- `size_in_mbs` - The size of the volume in MBs. This field is deprecated. Use `size_in_gbs` instead.

- `source_details` - The volume source, either an existing volume in the same availability domain or a volume backup. If null, an empty volume is created.
    - `id` - The OCID of the volume or volume backup.
    - `type` - The type can be one of these values: `volume`, `volumeBackup`

- `state` - The current state of a volume.

- `time_created` - The date and time the volume was created. Format defined by RFC3339.

- `volume_group_id` - The OCID of the source volume group.

Import

Volumes can be imported using the `id`, e.g.

```
$ terraform import oci_core_volume.test_volume "id"
```

oci_core_volume_attachment

This resource provides the Volume Attachment resource in Oracle Cloud Infrastructure Core service.

Attaches the specified storage volume to the specified instance.

Example Usage

```
resource "oci_core_volume_attachment" "test_volume_attachment" {
    #Required
    attachment_type = "${var.volume_attachment_attachment_type}"
    instance_id = "${oci_core_instance.test_instance.id}"
    volume_id = "${oci_core_volume.test_volume.id}"

    #Optional
    display_name = "${var.volume_attachment_display_name}"
    is_pv_encryption_in_transit_enabled = "${var.volume_attachment_is_pv_encryption_in_transit_enabled}"
    is_read_only = "${var.volume_attachment_is_read_only}"
    use_chap = "${var.volume_attachment_use_chap}"
}
```

Argument Reference

The following arguments are supported:

- `attachment_type` - (Required) The type of volume. The only supported value are "iscsi" and "paravirtualized".

- `display_name` - (Optional) A user-friendly name. Does not have to be unique, and it cannot be changed. Avoid entering confidential information.

- `instance_id` - (Required) The OCID of the instance.

- `is_pv_encryption_in_transit_enabled` - (Applicable when attachment_type=paravirtualized) Whether to enable encryption in transit for the PV data volume attachment. Defaults to false.

- `is_read_only` - (Optional) Whether the attachment was created in read-only mode.

- `use_chap` - (Applicable when attachment_type=iscsi) Whether to use CHAP authentication for the volume attachment. Defaults to false.

- `volume_id` - (Required) The OCID of the volume.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `attachment_type` - The type of volume attachment.

* `availability_domain` - The availability domain of an instance. Example: `Uocm:PHX-AD-1`

* `chap_secret` - The Challenge-Handshake-Authentication-Protocol (CHAP) secret valid for the associated CHAP user name. (Also called the "CHAP password".) Example: `d6866c0d-298b-48ba-95af-309b4faux45e`

* `chap_username` - The volume's system-generated Challenge-Handshake-Authentication-Protocol (CHAP) user name. Example: `ocid1.volume.oc1.phx.abyhqljrgvttnlx73nmrwfaux7kcvzfs3s66izvxf2h4lgvyndsdsnoiwr5q`

* `compartment_id` - The OCID of the compartment.

* `display_name` - A user-friendly name. Does not have to be unique, and it cannot be changed. Avoid entering confidential information. Example: `My volume attachment`

* `id` - The OCID of the volume attachment.

* `instance_id` - The OCID of the instance the volume is attached to.

* `ipv4` - The volume's iSCSI IP address. Example: `169.254.0.2`

* `iqn` - The target volume's iSCSI Qualified Name in the format defined by RFC 3720. Example: `iqn.2015-12.us.oracle.com:456b0391-17b8-4122-bbf1-f85fc0bb97d9`

* `is_pv_encryption_in_transit_enabled` - Whether the enable encryption in transit for the PV volume attachment is on or not.

* `is_read_only` - Whether the attachment was created in read-only mode.

* `port` - The volume's iSCSI port. Example: `3260`

* `state` - The current state of the volume attachment.

* `time_created` - The date and time the volume was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

* `volume_id` - The OCID of the volume.

Import

VolumeAttachments can be imported using the `id`, e.g.

```
$ terraform import oci_core_volume_attachment.test_volume_attachment "id"
```

oci_core_volume_backup

This resource provides the Volume Backup resource in Oracle Cloud Infrastructure Core service.

Creates a new backup of the specified volume. For general information about volume backups, see Overview of Block Volume Service Backups (https://docs.cloud.oracle.com/iaas/Content/Block/Concepts/blockvolumebackups.htm)

When the request is received, the backup object is in a REQUEST_RECEIVED state. When the data is imaged, it goes into a CREATING state. After the backup is fully uploaded to the cloud, it goes into an AVAILABLE state.

Example Usage

```
resource "oci_core_volume_backup" "test_volume_backup" {
    #Required
    volume_id = "${oci_core_volume.test_volume.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.volume_backup_display_name}"
    freeform_tags = {"Department"= "Finance"}
    type = "${var.volume_backup_type}"
}
```

Argument Reference

The following arguments are supported:

* `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

* `display_name` - (Optional) (Updatable) A user-friendly name for the volume backup. Does not have to be unique and it's changeable. Avoid entering confidential information.

* `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

* `type` - (Optional) The type of backup to create. If omitted, defaults to INCREMENTAL.

* `volume_id` - (Required) The OCID of the volume that needs to be backed up.

* `source_details` - (Optional) Details of the volume backup source in the cloud.
    * `region` - The region of the volume backup source.

    * `volume_backup_id` - The OCID of the source volume backup.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains the volume backup.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name for the volume backup. Does not have to be unique and it's changeable. Avoid entering confidential information.

- `expiration_time` - The date and time the volume backup will expire and be automatically deleted. Format defined by RFC3339. This parameter will always be present for backups that were created automatically by a scheduled-backup policy. For manually created backups, it will be absent, signifying that there is no expiration time and the backup will last forever until manually deleted.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the volume backup.

- `size_in_gbs` - The size of the volume, in GBs.

- `size_in_mbs` - The size of the volume in MBs. The value must be a multiple of 1024. This field is deprecated. Please use `size_in_gbs`.

- `source_type` - Specifies whether the backup was created manually, or via scheduled backup policy.

- `source_volume_backup_id` - The OCID of the source volume backup.

- `state` - The current state of a volume backup.

- `time_created` - The date and time the volume backup was created. This is the time the actual point-in-time image of the volume data was taken. Format defined by RFC3339.

- `time_request_received` - The date and time the request to create the volume backup was received. Format defined by RFC3339.

- `type` - The type of a volume backup. Supported values are 'FULL' or 'INCREMENTAL'.

- `unique_size_in_gbs` - The size used by the backup, in GBs. It is typically smaller than `size_in_gbs`, depending on the space consumed on the volume and whether the backup is full or incremental.

- `unique_size_in_mbs` - The size used by the backup, in MBs. It is typically smaller than `size_in_mbs`, depending on the space consumed on the volume and whether the backup is full or incremental. This field is deprecated. Please use `unique_size_in_gbs`.

- `volume_id` - The OCID of the volume.

Import

VolumeBackups can be imported using the `id`, e.g.

```
$ terraform import oci_core_volume_backup.test_volume_backup "id"
```

oci_core_volume_backup_policy_assignment

This resource provides the Volume Backup Policy Assignment resource in Oracle Cloud Infrastructure Core service.

Assigns a policy to the specified asset, such as a volume. Note that a given asset can only have one policy assigned to it; if this method is called for an asset that previously has a different policy assigned, the prior assignment will be silently deleted.

Example Usage

```
resource "oci_core_volume_backup_policy_assignment" "test_volume_backup_policy_assignment" {
    #Required
    asset_id = "${oci_core_asset.test_asset.id}"
    policy_id = "${oci_core_policy.test_policy.id}"
}
```

Argument Reference

The following arguments are supported:

- `asset_id` - (Required) The OCID of the asset (e.g. a volume) to which to assign the policy.

- `policy_id` - (Required) The OCID of the volume backup policy to assign to an asset.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `asset_id` - The OCID of the asset (e.g. a volume) to which the policy has been assigned.

- `id` - The OCID of the volume backup policy assignment.

- `policy_id` - The OCID of the volume backup policy that has been assigned to an asset.

- `time_created` - The date and time the volume backup policy assignment was created. Format defined by RFC3339.

Import

VolumeBackupPolicyAssignments can be imported using the `id`, e.g.

```
$ terraform import oci_core_volume_backup_policy_assignment.test_volume_backup_policy_assignment "id"
```

oci_core_volume_group

This resource provides the Volume Group resource in Oracle Cloud Infrastructure Core service.

Creates a new volume group in the specified compartment. A volume group is a collection of volumes and may be created from a list of volumes, cloning an existing volume group, or by restoring a volume group backup. A volume group can contain up to 64 volumes. You may optionally specify a *display name* for the volume group, which is simply a friendly name or description. It does not have to be unique, and you can change it. Avoid entering confidential information.

For more information, see Volume Groups (https://docs.cloud.oracle.com/iaas/Content/Block/Concepts/volumegroups.htm).

Example Usage

```
resource "oci_core_volume_group" "test_volume_group" {
    #Required
    availability_domain = "${var.volume_group_availability_domain}"
    compartment_id = "${var.compartment_id}"
    source_details {
        #Required
        type = "volumeIds"
        volume_ids = ["${var.volume_group_source_id}"]
    }

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.volume_group_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The availability domain of the volume group.

- `compartment_id` - (Required) The OCID of the compartment that contains the volume group.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name for the volume group. Does not have to be unique, and it's changeable.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `source_details` - (Required) Specifies the volume group source details for a new volume group. The volume source is

either another a list of volume ids in the same availability domain, another volume group or a volume group backup.

- `type` - (Required) The type can be one of these values: `volumeGroupBackupId`, `volumeGroupId`, `volumeIds`

- `volume_group_backup_id` - (Required when type=volumeGroupBackupId) The OCID of the volume group backup to restore from.

- `volume_group_id` - (Required when type=volumeGroupId) The OCID of the volume group to clone from.

- `volume_ids` - (Required when type=volumeIds) OCIDs for the volumes in this volume group.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain of the volume group.

- `compartment_id` - The OCID of the compartment that contains the volume group.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name for the volume group. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID for the volume group.

- `is_hydrated` - Specifies whether the newly created cloned volume group's data has finished copying from the source volume group or backup.

- `size_in_gbs` - The aggregate size of the volume group in GBs.

- `size_in_mbs` - The aggregate size of the volume group in MBs.

- `source_details` - The volume group source. The source is either another a list of volume IDs in the same availability domain, another volume group, or a volume group backup.
    - `type` - The type can be one of these values: `volumeGroupBackupId`, `volumeGroupId`, `volumeIds`

    - `volume_group_backup_id` - The OCID of the volume group backup to restore from.

    - `volume_group_id` - The OCID of the volume group to clone from.

    - `volume_ids` - OCIDs for the volumes in this volume group.

- `state` - The current state of a volume group.

- `time_created` - The date and time the volume group was created. Format defined by RFC3339.

- `volume_ids` - OCIDs for the volumes in this volume group.

Import

VolumeGroups can be imported using the `id`, e.g.

```
$ terraform import oci_core_volume_group.test_volume_group "id"
```

oci_core_volume_group_backup

This resource provides the Volume Group Backup resource in Oracle Cloud Infrastructure Core service.

Creates a new backup volume group of the specified volume group. For more information, see Volume Groups (https://docs.cloud.oracle.com/iaas/Content/Block/Concepts/volumegroups.htm).

Example Usage

```
resource "oci_core_volume_group_backup" "test_volume_group_backup" {
    #Required
    volume_group_id = "${oci_core_volume_group.test_volume_group.id}"

    #Optional
    compartment_id = "${var.compartment_id}"
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.volume_group_backup_display_name}"
    freeform_tags = {"Department"= "Finance"}
    type = "${var.volume_group_backup_type}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Optional) The OCID of the compartment that will contain the volume group backup. This parameter is optional, by default backup will be created in the same compartment and source volume group.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - (Optional) (Updatable) A user-friendly name for the volume group backup. Does not have to be unique and it's changeable.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `type` - (Optional) The type of backup to create. If omitted, defaults to incremental.
    - Allowed values are :
        - FULL
        - INCREMENTAL

- `volume_group_id` - (Required) The OCID of the volume group that needs to be backed up.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains the volume group backup.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name for the volume group backup. Does not have to be unique and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the volume group backup.

- `size_in_gbs` - The aggregate size of the volume group backup, in GBs.

- `size_in_mbs` - The aggregate size of the volume group backup, in MBs.

- `state` - The current state of a volume group backup.

- `time_created` - The date and time the volume group backup was created. This is the time the actual point-in-time image of the volume group data was taken. Format defined by RFC3339.

- `time_request_received` - The date and time the request to create the volume group backup was received. Format defined by RFC3339.

- `type` - The type of backup.

- `unique_size_in_gbs` - The aggregate size used by the volume group backup, in GBs. It is typically smaller than `size_in_gbs`, depending on the space consumed on the volume group and whether the volume backup is full or incremental.

- `unique_size_in_mbs` - The aggregate size used by the volume group backup, in MBs. It is typically smaller than `size_in_mbs`, depending on the space consumed on the volume group and whether the volume backup is full or incremental.

- `volume_backup_ids` - OCIDs for the volume backups in this volume group backup.

- `volume_group_id` - The OCID of the source volume group.

Import

VolumeGroupBackups can be imported using the `id`, e.g.

```
$ terraform import oci_core_volume_group_backup.test_volume_group_backup "id"
```

oci_database_autonomous_data_warehouse

This resource provides the Autonomous Data Warehouse resource in Oracle Cloud Infrastructure Database service.

Creates a new Autonomous Data Warehouse.

Example Usage

```
resource "oci_database_autonomous_data_warehouse" "test_autonomous_data_warehouse" {
    #Required
    admin_password = "${var.autonomous_data_warehouse_admin_password}"
    compartment_id = "${var.compartment_id}"
    cpu_core_count = "${var.autonomous_data_warehouse_cpu_core_count}"
    data_storage_size_in_tbs = "${var.autonomous_data_warehouse_data_storage_size_in_tbs}"
    db_name = "${var.autonomous_data_warehouse_db_name}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.autonomous_data_warehouse_display_name}"
    freeform_tags = {"Department"= "Finance"}
    license_model = "${var.autonomous_data_warehouse_license_model}"
}
```

Argument Reference

The following arguments are supported:

- `admin_password` - (Required) (Updatable) The password must be between 12 and 30 characters long, and must contain at least 1 uppercase, 1 lowercase, and 1 numeric character. It cannot contain the double quote symbol (") or the username "admin", regardless of casing.

- `compartment_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment of the Autonomous Data Warehouse.

- `cpu_core_count` - (Required) (Updatable) The number of CPU Cores to be made available to the database.

- `data_storage_size_in_tbs` - (Required) (Updatable) Size, in terabytes, of the data volume that will be created and attached to the database. This storage can later be scaled up if needed.

- `db_name` - (Required) The database name. The name must begin with an alphabetic character and can contain a maximum of 14 alphanumeric characters. Special characters are not permitted. The database name must be unique in the tenancy.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - (Optional) (Updatable) The user-friendly name for the Autonomous Data Warehouse. The name does not have to be unique.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no

predefined name, type, or namespace. For more information, see Resource Tags
(https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":`
`"Finance"}`

- `license_model` - (Optional) The Oracle license model that applies to the Oracle Autonomous Data Warehouse. The
  default is BRING_YOUR_OWN_LICENSE.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the
resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the
  compartment.

- `connection_strings` - The connection string used to connect to the Data Warehouse. The username for the Service
  Console is ADMIN. Use the password you entered when creating the Autonomous Data Warehouse for the password
  value.
  - `all_connection_strings` - All connection strings to use to connect to the Data Warehouse.

  - `high` - The High database service provides the highest level of resources to each SQL statement resulting in the
    highest performance, but supports the fewest number of concurrent SQL statements.

  - `low` - The Low database service provides the least level of resources to each SQL statement, but supports the
    most number of concurrent SQL statements.

  - `medium` - The Medium database service provides a lower level of resources to each SQL statement potentially
    resulting a lower level of performance, but supports more concurrent SQL statements.

- `cpu_core_count` - The number of CPU cores to be made available to the database.

- `data_storage_size_in_tbs` - The quantity of data in the database, in terabytes.

- `db_name` - The database name.

- `db_version` - A valid Oracle Database version for Autonomous Data Warehouse.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more
  information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm).
  Example: `{"Operations.CostCenter": "42"}`

- `display_name` - The user-friendly name for the Autonomous Data Warehouse. The name does not have to be unique.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type,
  or namespace. For more information, see Resource Tags
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":`
  `"Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data
  Warehouse.

- `license_model` - The Oracle license model that applies to the Oracle Autonomous Data Warehouse. The default is

BRING_YOUR_OWN_LICENSE.

- `lifecycle_details` - Information about the current lifecycle state.

- `service_console_url` - The URL of the Service Console for the Data Warehouse.

- `state` - The current state of the database.

- `time_created` - The date and time the database was created.

Import

AutonomousDataWarehouses can be imported using the `id`, e.g.

```
$ terraform import oci_database_autonomous_data_warehouse.test_autonomous_data_warehouse "id"
```

oci_database_autonomous_data_warehouse_backup

This resource provides the Autonomous Data Warehouse Backup resource in Oracle Cloud Infrastructure Database service.

Creates a new Autonomous Data Warehouse backup for the specified database based on the provided request parameters.

Example Usage

```
resource "oci_database_autonomous_data_warehouse_backup" "test_autonomous_data_warehouse_backup" {
    #Required
    autonomous_data_warehouse_id = "${oci_database_autonomous_data_warehouse.test_autonomous_data_warehou
se.id}"
    display_name = "${var.autonomous_data_warehouse_backup_display_name}"
}
```

Argument Reference

The following arguments are supported:

- `autonomous_data_warehouse_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data Warehouse backup.

- `display_name` - (Required) The user-friendly name for the backup. The name does not have to be unique.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `autonomous_data_warehouse_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data Warehouse.

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `display_name` - The user-friendly name for the backup. The name does not have to be unique.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data Warehouse backup.

- `is_automatic` - Indicates whether the backup is user-initiated or automatic.

- `lifecycle_details` - Additional information about the current lifecycle state.

- `state` - The current state of the backup.

- `time_ended` - The date and time the backup completed.

- `time_started` - The date and time the backup started.

- `type` - The type of backup.

Import

AutonomousDataWarehouseBackups can be imported using the `id`, e.g.

```
$ terraform import oci_database_autonomous_data_warehouse_backup.test_autonomous_data_warehouse_backup "id"
```

oci_database_autonomous_database

This resource provides the Autonomous Database resource in Oracle Cloud Infrastructure Database service.

Creates a new Autonomous Database.

Example Usage

```
resource "oci_database_autonomous_database" "test_autonomous_database" {
    #Required
    admin_password = "${var.autonomous_database_admin_password}"
    compartment_id = "${var.compartment_id}"
    cpu_core_count = "${var.autonomous_database_cpu_core_count}"
    data_storage_size_in_tbs = "${var.autonomous_database_data_storage_size_in_tbs}"
    db_name = "${var.autonomous_database_db_name}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.autonomous_database_display_name}"
    freeform_tags = {"Department"= "Finance"}
    license_model = "${var.autonomous_database_license_model}"
}
```

Argument Reference

The following arguments are supported:

- `admin_password` - (Required) (Updatable) The password must be between 12 and 30 characters long, and must contain at least 1 uppercase, 1 lowercase, and 1 numeric character. It cannot contain the double quote symbol (") or the username "admin", regardless of casing.

- `compartment_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment of the autonomous database.

- `cpu_core_count` - (Required) (Updatable) The number of CPU Cores to be made available to the database.

- `data_storage_size_in_tbs` - (Required) (Updatable) The size, in terabytes, of the data volume that will be created and attached to the database. This storage can later be scaled up if needed.

- `db_name` - (Required) The database name. The name must begin with an alphabetic character and can contain a maximum of 14 alphanumeric characters. Special characters are not permitted. The database name must be unique in the tenancy.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - (Optional) (Updatable) The user-friendly name for the Autonomous Database. The name does not have to be unique.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no

predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `license_model` - (Optional) The Oracle license model that applies to the Oracle Autonomous Database. The default is BRING_YOUR_OWN_LICENSE.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `connection_strings` - The connection string used to connect to the Autonomous Database. The username for the Service Console is ADMIN. Use the password you entered when creating the Autonomous Database for the password value.
  - `all_connection_strings` - All connection strings to use to connect to the Autonomous Database.
  - `high` - The High database service provides the highest level of resources to each SQL statement resulting in the highest performance, but supports the fewest number of concurrent SQL statements.
  - `low` - The Low database service provides the least level of resources to each SQL statement, but supports the most number of concurrent SQL statements.
  - `medium` - The Medium database service provides a lower level of resources to each SQL statement potentially resulting a lower level of performance, but supports more concurrent SQL statements.

- `cpu_core_count` - The number of CPU cores to be made available to the database.

- `data_storage_size_in_tbs` - The quantity of data in the database, in terabytes.

- `db_name` - The database name.

- `db_version` - A valid Oracle Database version for Autonomous Database.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - The user-friendly name for the Autonomous Database. The name does not have to be unique.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database.

- `license_model` - The Oracle license model that applies to the Oracle Autonomous Database. The default is

BRING_YOUR_OWN_LICENSE.

- `lifecycle_details` - Information about the current lifecycle state.

- `service_console_url` - The URL of the Service Console for the Autonomous Database.

- `state` - The current state of the database.

- `time_created` - The date and time the database was created.

Import

AutonomousDatabases can be imported using the `id`, e.g.

```
$ terraform import oci_database_autonomous_database.test_autonomous_database "id"
```

oci_database_autonomous_database_backup

This resource provides the Autonomous Database Backup resource in Oracle Cloud Infrastructure Database service.

Creates a new Autonomous Database backup for the specified database based on the provided request parameters.

Example Usage

```
resource "oci_database_autonomous_database_backup" "test_autonomous_database_backup" {
    #Required
    autonomous_database_id = "${oci_database_autonomous_database.test_autonomous_database.id}"
    display_name = "${var.autonomous_database_backup_display_name}"
}
```

Argument Reference

The following arguments are supported:

- `autonomous_database_id` - (Required) The OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database backup.

- `display_name` - (Required) The user-friendly name for the backup. The name does not have to be unique.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `autonomous_database_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database.

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `display_name` - The user-friendly name for the backup. The name does not have to be unique.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database backup.

- `is_automatic` - Indicates whether the backup is user-initiated or automatic.

- `lifecycle_details` - Additional information about the current lifecycle state.

- `state` - The current state of the backup.

- `time_ended` - The date and time the backup completed.

- `time_started` - The date and time the backup started.

- `type` - The type of backup.

Import

AutonomousDatabaseBackups can be imported using the `id`, e.g.

```
$ terraform import oci_database_autonomous_database_backup.test_autonomous_database_backup "id"
```

oci_database_backup

This resource provides the Backup resource in Oracle Cloud Infrastructure Database service.

Creates a new backup in the specified database based on the request parameters you provide. If you previously used RMAN or dbcli to configure backups and then you switch to using the Console or the API for backups, a new backup configuration is created and associated with your database. This means that you can no longer rely on your previously configured unmanaged backups to work.

Example Usage

```
resource "oci_database_backup" "test_backup" {
    #Required
    database_id = "${oci_database_database.test_database.id}"
    display_name = "${var.backup_display_name}"
}
```

Argument Reference

The following arguments are supported:

* `database_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database.

* `display_name` - (Required) The user-friendly name for the backup. The name does not have to be unique.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

* `availability_domain` - The name of the availability domain where the database backup is stored.

* `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

* `database_edition` - The Oracle Database edition of the DB system from which the database backup was taken.

* `database_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database.

* `db_data_size_in_mbs` (Deprecated) - Size of the database in megabytes (MB) at the time the backup was taken. Use `database_size_in_gbs` instead.

* `database_size_in_gbs` - The size of the database in gigabytes at the time the backup was taken.

* `display_name` - The user-friendly name for the backup. The name does not have to be unique.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the backup.

- `lifecycle_details` - Additional information about the current lifecycleState.

- `state` - The current state of the backup.

- `time_ended` - The date and time the backup was completed.

- `time_started` - The date and time the backup started.

- `type` - The type of backup.

Import

Backups can be imported using the `id`, e.g.

```
$ terraform import oci_database_backup.test_backup "id"
```

oci_database_db_system

This resource provides the Db System resource in Oracle Cloud Infrastructure Database service.

Launches a new DB system in the specified compartment and availability domain. The Oracle Database edition that you specify applies to all the databases on that DB system. The selected edition cannot be changed.

An initial database is created on the DB system based on the request parameters you provide and some default options. For more information, see Default Options for the Initial Database (https://docs.cloud.oracle.com/iaas/Content/Database/Tasks/launchingDB.htm#DefaultOptionsfortheInitialDatabase).

The DB System will include a command line interface (CLI) that you can use to create additional databases and manage existing databases. For more information, see the Oracle Database CLI Reference (https://docs.cloud.oracle.com/iaas/Content/Database/References/dbacli.htm).

Example Usage

```
resource "oci_database_db_system" "test_db_system" {
    #Required
    availability_domain = "${var.db_system_availability_domain}"
    compartment_id = "${var.compartment_id}"
    database_edition = "${var.db_system_database_edition}"
    db_home {
        #Required
        database {
            #Required
            admin_password = "${var.db_system_db_home_database_admin_password}"

            #Optional
            backup_id = "${oci_database_backup.test_backup.id}"
            backup_tde_password = "${var.db_system_db_home_database_backup_tde_password}"
            character_set = "${var.db_system_db_home_database_character_set}"
            db_backup_config {

                #Optional
                auto_backup_enabled = "${var.db_system_db_home_database_db_backup_config_auto_backup_enab
led}"
            }
            db_name = "${var.db_system_db_home_database_db_name}"
            db_workload = "${var.db_system_db_home_database_db_workload}"
            defined_tags = "${var.db_system_db_home_database_defined_tags}"
            freeform_tags = "${var.db_system_db_home_database_freeform_tags}"
            ncharacter_set = "${var.db_system_db_home_database_ncharacter_set}"
            pdb_name = "${var.db_system_db_home_database_pdb_name}"
        }

        #Optional
        db_version = "${var.db_system_db_home_db_version}"
        display_name = "${var.db_system_db_home_display_name}"
    }
    hostname = "${var.db_system_hostname}"
    shape = "${var.db_system_shape}"
    ssh_public_keys = "${var.db_system_ssh_public_keys}"
    subnet_id = "${oci_database_subnet.test_subnet.id}"

    #Optional
    backup_subnet_id = "${oci_database_backup_subnet.test_backup_subnet.id}"
    cluster_name = "${var.db_system_cluster_name}"
    cpu_core_count = "${var.db_system_cpu_core_count}"
    data_storage_percentage = "${var.db_system_data_storage_percentage}"
    data_storage_size_in_gb = "${var.db_system_data_storage_size_in_gb}"
    defined_tags = {"Operations.CostCenter"= "42"}
    disk_redundancy = "${var.db_system_disk_redundancy}"
    display_name = "${var.db_system_display_name}"
    domain = "${var.db_system_domain}"
    freeform_tags = {"Department"= "Finance"}
    license_model = "${var.db_system_license_model}"
    node_count = "${var.db_system_node_count}"
    source = "${var.db_system_source}"
    sparse_diskgroup = "${var.db_system_sparse_diskgroup}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The availability domain where the DB system is located.

- `backup_subnet_id` - (Optional) The OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the backup network subnet the DB
  system is associated with. Applicable only to Exadata DB systems.

  Subnet Restrictions: See the subnet restrictions information for **subnetId**.

- `cluster_name` - (Optional) The cluster name for Exadata and 2-node RAC virtual machine DB systems. The cluster
  name must begin with an an alphabetic character, and may contain hyphens (-). Underscores (_) are not permitted.
  The cluster name can be no longer than 11 characters and is not case sensitive.

- `compartment_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm)
  of the compartment the DB system belongs in.

- `cpu_core_count` - (Required) (Updatable) The number of CPU cores to enable for a bare metal or Exadata DB system.
  The valid values depend on the specified shape:

  - BM.DenseIO1.36 - Specify a multiple of 2, from 2 to 36.

  - BM.DenseIO2.52 - Specify a multiple of 2, from 2 to 52.

  - Exadata.Quarter1.84 - Specify a multiple of 2, from 22 to 84.

  - Exadata.Half1.168 - Specify a multiple of 4, from 44 to 168.

  - Exadata.Full1.336 - Specify a multiple of 8, from 88 to 336.

  - Exadata.Quarter2.92 - Specify a multiple of 2, from 0 to 92.

  - Exadata.Half2.184 - Specify a multiple of 4, from 0 to 184.

  - Exadata.Full2.368 - Specify a multiple of 8, from 0 to 368.

  This parameter is not used for virtual machine DB systems because virtual machine DB systems have a set number of
  cores for each shape. For information about the number of cores for a virtual machine DB system shape, see Virtual
  Machine DB Systems (https://docs.cloud.oracle.com/iaas/Content/Database/Concepts/overview.htm#virtualmachine)

- `data_storage_percentage` - (Optional) The percentage assigned to DATA storage (user data and database files). The
  remaining percentage is assigned to RECO storage (database redo logs, archive logs, and recovery manager backups).
  Specify 80 or 40. The default is 80 percent assigned to DATA storage. Not applicable for virtual machine DB systems.

- `data_storage_size_in_gb` - (Optional) (Updatable) Size (in GB) of the initial data volume that will be created and
  attached to a virtual machine DB system. You can scale up storage after provisioning, as needed. Note that the total
  storage size attached will be more than the amount you specify to allow for REDO/RECO space and software volume.

- `database_edition` - (Required) The Oracle Database Edition that applies to all the databases on the DB system.
  Exadata DB systems and 2-node RAC DB systems require ENTERPRISE_EDITION_EXTREME_PERFORMANCE.

- `db_home` - (Required)

  - `database` - (Required)

    - `admin_password` - (Required) A strong password for SYS, SYSTEM, PDB Admin and TDE Wallet. The
      password must be at least nine characters and contain at least two uppercase, two lowercase, two
      numbers, and two special characters. The special characters must be _, #, or -.

    - `backup_id` - (Required when source=DB_BACKUP) The backup OCID
      (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `backup_tde_password` - (Required when source=DB_BACKUP) The password to open the TDE wallet.

- `character_set` - (Applicable when source=NONE) The character set for the database. The default is AL32UTF8. Allowed values are:

  AL32UTF8, AR8ADOS710, AR8ADOS720, AR8APTEC715, AR8ARABICMACS, AR8ASMO8X, AR8ISO8859P6, AR8MSWIN1256, AR8MUSSAD768, AR8NAFITHA711, AR8NAFITHA721, AR8SAKHR706, AR8SAKHR707, AZ8ISO8859P9E, BG8MSWIN, BG8PC437S, BLT8CP921, BLT8ISO8859P13, BLT8MSWIN1257, BLT8PC775, BN8BSCII, CDN8PC863, CEL8ISO8859P14, CL8ISO8859P5, CL8ISOIR111, CL8KOI8R, CL8KOI8U, CL8MACCYRILLICS, CL8MSWIN1251, EE8ISO8859P2, EE8MACCES, EE8MACCROATIANS, EE8MSWIN1250, EE8PC852, EL8DEC, EL8ISO8859P7, EL8MACGREEKS, EL8MSWIN1253, EL8PC437S, EL8PC851, EL8PC869, ET8MSWIN923, HU8ABMOD, HU8CWI2, IN8ISCII, IS8PC861, IW8ISO8859P8, IW8MACHEBREWS, IW8MSWIN1255, IW8PC1507, JA16EUC, JA16EUCTILDE, JA16SJIS, JA16SJISTILDE, JA16VMS, KO16KSC5601, KO16KSCCS, KO16MSWIN949, LA8ISO6937, LA8PASSPORT, LT8MSWIN921, LT8PC772, LT8PC774, LV8PC1117, LV8PC8LR, LV8RST104090, N8PC865, NE8ISO8859P10, NEE8ISO8859P4, RU8BESTA, RU8PC855, RU8PC866, SE8ISO8859P3, TH8MACTHAIS, TH8TISASCII, TR8DEC, TR8MACTURKISHS, TR8MSWIN1254, TR8PC857, US7ASCII, US8PC437, UTF8, VN8MSWIN1258, VN8VN3, WE8DEC, WE8DG, WE8ISO8859P1, WE8ISO8859P15, WE8ISO8859P9, WE8MACROMAN8S, WE8MSWIN1252, WE8NCR4970, WE8NEXTSTEP, WE8PC850, WE8PC858, WE8PC860, WE8ROMAN8, ZHS16CGB231280, ZHS16GBK, ZHT16BIG5, ZHT16CCDC, ZHT16DBT, ZHT16HKSCS, ZHT16MSWIN950, ZHT32EUC, ZHT32SOPS, ZHT32TRIS

- `db_backup_config` - (Applicable when source=NONE)

  - `auto_backup_enabled` - (Applicable when source=NONE) If set to true, configures automatic backups. If you previously used RMAN or dbcli to configure backups and then you switch to using the Console or the API for backups, a new backup configuration is created and associated with your database. This means that you can no longer rely on your previously configured unmanaged backups to work.

- `db_name` - (Required when source=NONE) The database name. The name must begin with an alphabetic character and can contain a maximum of eight alphanumeric characters. Special characters are not permitted.

- `db_workload` - (Applicable when source=NONE) The database workload type.

- `defined_tags` - (Applicable when source=NONE) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `freeform_tags` - (Applicable when source=NONE) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `ncharacter_set` - (Applicable when source=NONE) The national character set for the database. The default is AL16UTF16. Allowed values are: AL16UTF16 or UTF8.

- `pdb_name` - (Applicable when source=NONE) The name of the pluggable database. The name must begin with an alphabetic character and can contain a maximum of eight alphanumeric characters. Special characters are not permitted. Pluggable database should not be same as database name.

- - `db_version` - (Required when source=NONE) A valid Oracle Database version. To get a list of supported versions, use the ListDbVersions (https://docs.cloud.oracle.com/iaas/api/#/en/database/20160918/DbVersion/ListDbVersions) operation.

  - `display_name` - (Optional) The user-provided name of the database home.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `disk_redundancy` - (Optional) The type of redundancy configured for the DB system. Normal is 2-way redundancy, recommended for test and development systems. High is 3-way redundancy, recommended for production systems.

- `display_name` - (Optional) The user-friendly name for the DB system. The name does not have to be unique.

- `domain` - (Optional) A domain name used for the DB system. If the Oracle-provided Internet and VCN Resolver is enabled for the specified subnet, the domain name for the subnet is used (do not provide one). Otherwise, provide a valid DNS domain name. Hyphens (-) are not permitted.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `hostname` - (Required) The hostname for the DB system. The hostname must begin with an alphabetic character and can contain a maximum of 30 alphanumeric characters, including hyphens (-).

  The maximum length of the combined hostname and domain is 63 characters.

  Note: The hostname must be unique within the subnet. If it is not unique, the DB system will fail to provision.

- `license_model` - (Optional) The Oracle license model that applies to all the databases on the DB system. The default is LICENSE_INCLUDED. Allowed values are: LICENSE_INCLUDED, BRING_YOUR_OWN_LICENSE.

- `node_count` - (Optional) The number of nodes to launch for a 2-node RAC virtual machine DB system.

- `shape` - (Required) The shape of the DB system. The shape determines resources allocated to the DB system.

  - For virtual machine shapes, the number of CPU cores and memory

  - For bare metal and Exadata shapes, the number of CPU cores, memory, and storage

  To get a list of shapes, use the ListDbSystemShapes (https://docs.cloud.oracle.com/iaas/api/#/en/database/20160918/DbSystemShapeSummary/ListDbSystemShapes) operation.

- `source` - (Optional) The source of the database: NONE for creating a new database. DB_BACKUP for creating a new database by restoring from a backup. The default is NONE.

- `sparse_diskgroup` - (Optional) If true, Sparse Diskgroup is configured for Exadata dbsystem. If False, Sparse diskgroup is not configured.

- `ssh_public_keys` - (Required) (Updatable) The public key portion of the key pair to use for SSH access to the DB system. Multiple public keys can be provided. The length of the combined keys cannot exceed 10,000 characters.

- `subnet_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of

the subnet the DB system is associated with.

Subnet Restrictions:

- For bare metal DB systems and for single node virtual machine DB systems, do not use a subnet that overlaps with 192.168.16.16/28.

- For Exadata and virtual machine 2-node RAC DB systems, do not use a subnet that overlaps with 192.168.128.0/20.

These subnets are used by the Oracle Clusterware private interconnect on the database instance. Specifying an overlapping subnet will cause the private interconnect to malfunction. This restriction applies to both the client subnet and the backup subnet.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The name of the availability domain that the DB system is located in.

- `backup_subnet_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the backup network subnet the DB system is associated with. Applicable only to Exadata DB systems.

  Subnet Restriction: See the subnet restrictions information for **subnetId**.

- `cluster_name` - The cluster name for Exadata and 2-node RAC virtual machine DB systems. The cluster name must begin with an an alphabetic character, and may contain hyphens (-). Underscores (_) are not permitted. The cluster name can be no longer than 11 characters and is not case sensitive.

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `cpu_core_count` - The number of CPU cores enabled on the DB system.

- `data_storage_percentage` - The percentage assigned to DATA storage (user data and database files). The remaining percentage is assigned to RECO storage (database redo logs, archive logs, and recovery manager backups). Accepted values are 40 and 80. The default is 80 percent assigned to DATA storage. Not applicable for virtual machine DB systems.

- `data_storage_size_in_gb` - The data storage size, in gigabytes, that is currently available to the DB system. Applies only for virtual machine DB systems.

- `database_edition` - The Oracle Database edition that applies to all the databases on the DB system.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `disk_redundancy` - The type of redundancy configured for the DB system. NORMAL is 2-way redundancy. HIGH is 3-way redundancy.

- `display_name` - The user-friendly name for the DB system. The name does not have to be unique.

- `domain` - The domain name for the DB system.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Department"`: `"Finance"`}

- `hostname` - The hostname for the DB system.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the DB system.

- `last_patch_history_entry_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the last patch history. This value is updated as soon as a patch operation starts.

- `license_model` - The Oracle license model that applies to all the databases on the DB system. The default is LICENSE_INCLUDED.

- `lifecycle_details` - Additional information about the current lifecycleState.

- `listener_port` - The port number configured for the listener on the DB system.

- `node_count` - The number of nodes in the DB system. For RAC DB systems, the value is greater than 1.

- `reco_storage_size_in_gb` - The RECO/REDO storage size, in gigabytes, that is currently allocated to the DB system. Applies only for virtual machine DB systems.

- `scan_dns_record_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the DNS record for the SCAN IP addresses that are associated with the DB system.

- `scan_ip_ids` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Single Client Access Name (SCAN) IP addresses associated with the DB system. SCAN IP addresses are typically used for load balancing and are not assigned to any interface. Oracle Clusterware directs the requests to the appropriate nodes in the cluster.

  Note: For a single-node DB system, this list is empty.

- `shape` - The shape of the DB system. The shape determines resources to allocate to the DB system.

    - For virtual machine shapes, the number of CPU cores and memory

    - For bare metal and Exadata shapes, the number of CPU cores, storage, and memory

- `sparse_diskgroup` - True, if Sparse Diskgroup is configured for Exadata dbsystem, False, if Sparse diskgroup was not configured.

- `ssh_public_keys` - The public key portion of one or more key pairs used for SSH access to the DB system.

- `state` - The current state of the DB system.

- `subnet_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the subnet the DB system is associated with.

    Subnet Restrictions:

    - For bare metal DB systems and for single node virtual machine DB systems, do not use a subnet that overlaps

with 192.168.16.16/28.

- For Exadata and virtual machine 2-node RAC DB systems, do not use a subnet that overlaps with 192.168.128.0/20.

These subnets are used by the Oracle Clusterware private interconnect on the database instance. Specifying an overlapping subnet will cause the private interconnect to malfunction. This restriction applies to both the client subnet and backup subnet.

- `time_created` - The date and time the DB system was created.

- `version` - The Oracle Database version of the DB system.

- `vip_ids` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the virtual IP (VIP) addresses associated with the DB system. The Cluster Ready Services (CRS) creates and maintains one VIP address for each node in the DB system to enable failover. If one node fails, the VIP is reassigned to another active node in the cluster.

  Note: For a single-node DB system, this list is empty.

Import

DbSystems can be imported using the `id`, e.g.

```
$ terraform import oci_database_db_system.test_db_system "id"
```

oci_dns_record

This resource provides the Record resource in Oracle Cloud Infrastructure Dns service.

Replaces records in the specified zone with the records specified in the request body. If a specified record does not exist, it will be created. If the record exists, then it will be updated to represent the record in the body of the request. If a record in the zone does not exist in the request body, the record will be removed from the zone.

Example Usage

```
resource "oci_dns_record" "test_record" {
    #Required
    zone_name_or_id = "${oci_dns_zone_name_or.test_zone_name_or.id}"

    #Optional
    compartment_id = "${var.compartment_id}"
    domain = "${var.record_items_domain}"
    rdata = "${var.record_items_rdata}"
    rtype = "${var.record_items_rtype}"
    ttl = "${var.record_items_ttl}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Optional) (Updatable) The OCID of the compartment the resource belongs to. If supplied, it must match the Zone's compartment ocid.

- `domain` - (Optional) (Updatable) The fully qualified domain name where the record can be located.

- `rdata` - (Optional) (Updatable) The record's data, as whitespace-delimited tokens in type-specific presentation format. All RDATA is normalized and the returned presentation of your RDATA may differ from its initial input. For more information about RDATA, see Supported DNS Resource Record Types (https://docs.cloud.oracle.com/iaas/Content/DNS/Reference/supporteddnsresource.htm)

- `rtype` - (Optional) (Updatable) The canonical name for the record's type, such as A or CNAME. For more information, see Resource Record (RR) TYPEs (https://www.iana.org/assignments/dns-parameters/dns-parameters.xhtml#dns-parameters-4).

- `ttl` - (Optional) (Updatable) The Time To Live for the record, in seconds.

- `zone_name_or_id` - (Required) The name or OCID of the target zone.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment the resource belongs to.

- `domain` - The fully qualified domain name where the record can be located.

- `is_protected` - A Boolean flag indicating whether or not parts of the record are unable to be explicitly managed.

- `rdata` - The record's data, as whitespace-delimited tokens in type-specific presentation format. All RDATA is normalized and the returned presentation of your RDATA may differ from its initial input. For more information about RDATA, see Supported DNS Resource Record Types (https://docs.cloud.oracle.com/iaas/Content/DNS/Reference/supporteddnsresource.htm)

- `record_hash` - A unique identifier for the record within its zone.

- `rrset_version` - The latest version of the record's zone in which its RRSet differs from the preceding version.

- `rtype` - The canonical name for the record's type, such as A or CNAME. For more information, see Resource Record (RR) TYPEs (https://www.iana.org/assignments/dns-parameters/dns-parameters.xhtml#dns-parameters-4).

- `ttl` - The Time To Live for the record, in seconds.

- `zone_name_or_id` - The name or OCID of the target zone.

oci_dns_zone

This resource provides the Zone resource in Oracle Cloud Infrastructure Dns service.

Creates a new zone in the specified compartment.

Example Usage

```
resource "oci_dns_zone" "test_zone" {
    #Required
    compartment_id = "${var.compartment_id}"
    name = "${var.zone_name}"
    zone_type = "${var.zone_zone_type}"

    #Optional
    defined_tags = {"foo-namespace.bar-key"= "value"}
    external_masters {
        #Required
        address = "${var.zone_external_masters_address}"

        #Optional
        port = "${var.zone_external_masters_port}"
        tsig {
            #Required
            algorithm = "${var.zone_external_masters_tsig_algorithm}"
            name = "${var.zone_external_masters_tsig_name}"
            secret = "${var.zone_external_masters_tsig_secret}"
        }
    }
    freeform_tags = {"bar-key"= "value"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) (Updatable) The OCID of the compartment the resource belongs to.

- `defined_tags` - (Optional) (Updatable) Usage of predefined tag keys. These predefined keys are scoped to a namespace. Example: `{"foo-namespace.bar-key": "value"}`

- `external_masters` - (Optional) (Updatable) External master servers for the zone. `externalMasters` becomes a required parameter when the `zoneType` value is SECONDARY.
  - `address` - (Required) (Updatable) The server's IP address (IPv4 or IPv6).

  - `port` - (Optional) (Updatable) The server's port. Port value must be a value of 53, otherwise omit the port value.

  - `tsig` - (Optional) (Updatable)
    - `algorithm` - (Required) (Updatable) TSIG Algorithms are encoded as domain names, but most consist of only one non-empty label, which is not required to be explicitly absolute. Applicable algorithms include: hmac-sha1, hmac-sha224, hmac-sha256, hmac-sha512. For more information on these algorithms, see RFC 4635 (https://tools.ietf.org/html/rfc4635#section-2).

- - `name` - (Required) (Updatable) A domain name identifying the key for a given pair of hosts.

  - `secret` - (Required) (Updatable) A base64 string encoding the binary shared secret.

- `freeform_tags` - (Optional) (Updatable) Simple key-value pair that is applied without any predefined name, type, or scope. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"bar-key": "value"}`

- `name` - (Required) The name of the zone.

- `zone_type` - (Required) The type of the zone. Must be either `PRIMARY` or `SECONDARY`.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the zone.

- `defined_tags` - Usage of predefined tag keys. These predefined keys are scoped to a namespace. Example: `{"foo-namespace.bar-key": "value"}`

- `external_masters` - External master servers for the zone. `externalMasters` becomes a required parameter when the `zoneType` value is SECONDARY.
  - `address` - The server's IP address (IPv4 or IPv6).

  - `port` - The server's port. Port value must be a value of 53, otherwise omit the port value.

  - `tsig` - A TSIG key
    - `algorithm` - TSIG Algorithms are encoded as domain names, but most consist of only one non-empty label, which is not required to be explicitly absolute. Applicable algorithms include: hmac-sha1, hmac-sha224, hmac-sha256, hmac-sha512. For more information on these algorithms, see RFC 4635 (https://tools.ietf.org/html/rfc4635#section-2).

    - `name` - A domain name identifying the key for a given pair of hosts.

    - `secret` - A base64 string encoding the binary shared secret.

- `freeform_tags` - Simple key-value pair that is applied without any predefined name, type, or scope. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"bar-key": "value"}`

- `id` - The OCID of the zone.

- `name` - The name of the zone.

- `nameservers` - The authoritative nameservers for the zone.
  - `hostname` - The hostname of the nameserver.

- `self` - The canonical absolute URL of the resource.

- `serial` - The current serial of the zone. As seen in the zone's SOA record.

- `state` - The current state of the zone resource.

- `time_created` - The date and time the resource was created in "YYYY-MM-ddThh:mmZ" format with a Z offset, as defined by RFC 3339.

  Example: `2016-07-22T17:23:59:60Z`

- `version` - Version is the never-repeating, totally-orderable, version of the zone, from which the serial field of the zone's SOA record is derived.

- `zone_type` - The type of the zone. Must be either `PRIMARY` or `SECONDARY`.

Import

Zones can be imported using the `id`, e.g.

```
$ terraform import oci_dns_zone.test_zone "id"
```

oci_email_sender

This resource provides the Sender resource in Oracle Cloud Infrastructure Email service.

Creates a sender for a tenancy in a given compartment.

Example Usage

```
resource "oci_email_sender" "test_sender" {
    #Required
    compartment_id = "${var.compartment_id}"
    email_address = "${var.sender_email_address}"
}
```

Argument Reference

The following arguments are supported:

* `compartment_id` - (Required) The OCID of the compartment that contains the sender.

* `email_address` - (Required) The email address of the sender.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

* `email_address` - The email address of the sender.

* `id` - The unique OCID of the sender.

* `is_spf` - Value of the SPF field. For more information about SPF, please see SPF Authentication (https://docs.cloud.oracle.com/iaas/Content/Email/Concepts/emaildeliveryoverview.htm#spf).

* `state` - The current status of the approved sender.

* `time_created` - The date and time the approved sender was added in "YYYY-MM-ddThh:mmZ" format with a Z offset, as defined by RFC 3339.

Import

Senders can be imported using the `id`, e.g.

```
$ terraform import oci_email_sender.test_sender "id"
```

oci_email_suppression

This resource provides the Suppression resource in Oracle Cloud Infrastructure Email service.

Adds recipient email addresses to the suppression list for a tenancy.

Example Usage

```
resource "oci_email_suppression" "test_suppression" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
    email_address = "${var.suppression_email_address}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment to contain the suppression. Since suppressions are at the customer level, this must be the tenancy OCID.

- `email_address` - (Required) The recipient email address of the suppression.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `email_address` - The email address of the suppression.

- `id` - The unique OCID of the suppression.

- `reason` - The reason that the email address was suppressed. For more information on the types of bounces, see Suppresion List (https://docs.cloud.oracle.com/iaas/Content/Email/Concepts/emaildeliveryoverview.htm#suppressionlist).

- `time_created` - The date and time a recipient's email address was added to the suppression list, in "YYYY-MM-ddThh:mmZ" format with a Z offset, as defined by RFC 3339.

Import

Suppressions can be imported using the `id`, e.g.

```
$ terraform import oci_email_suppression.test_suppression "id"
```

oci_file_storage_export

This resource provides the Export resource in Oracle Cloud Infrastructure File Storage service.

Creates a new export in the specified export set, path, and file system.

Example Usage

```
resource "oci_file_storage_export" "test_export" {
    #Required
    export_set_id = "${oci_file_storage_mount_target.test_mount_target.export_set_id}"
    file_system_id = "${oci_file_storage_file_system.test_file_system.id}"
    path = "${var.export_path}"

    #Optional
    export_options {
        #Required
        source = "${var.export_export_options_source}"

        #Optional
        access = "${var.export_export_options_access}"
        anonymous_gid = "${var.export_export_options_anonymous_gid}"
        anonymous_uid = "${var.export_export_options_anonymous_uid}"
        identity_squash = "${var.export_export_options_identity_squash}"
        require_privileged_source_port = "${var.export_export_options_require_privileged_source_port}"
    }
}
```

Argument Reference

The following arguments are supported:

- `export_options` - (Optional) (Updatable) Export options for the new export. If left unspecified, defaults to:

  []

  Note: Mount targets do not have Internet-routable IP addresses. Therefore they will not be reachable from the Internet, even if an associated `ClientOptions` item has a source of `0.0.0.0/0`.

  If set to the empty array then the export will not be visible to any clients.

  The export's `exportOptions` can be changed after creation using the `UpdateExport` operation.

  - `access` - (Optional) (Updatable) Type of access to grant clients using the file system through this export. If unspecified defaults to `READ_ONLY`.

  - `anonymous_gid` - (Optional) (Updatable) GID value to remap to when squashing a client GID (see identitySquash for more details.) If unspecified defaults to `65534`.

  - `anonymous_uid` - (Optional) (Updatable) UID value to remap to when squashing a client UID (see identitySquash for more details.) If unspecified, defaults to `65534`.

  - `identity_squash` - (Optional) (Updatable) Used when clients accessing the file system through this export have

their UID and GID remapped to 'anonymousUid' and 'anonymousGid'. If `ALL`, all users and groups are remapped; if `ROOT`, only the root user and group (UID/GID 0) are remapped; if `NONE`, no remapping is done. If unspecified, defaults to `ROOT`.

- `require_privileged_source_port` - (Optional) (Updatable) If `true`, clients accessing the file system through this export must connect from a privileged source port. If unspecified, defaults to `true`.

- `source` - (Required) (Updatable) Clients these options should apply to. Must be a either single IPv4 address or single IPv4 CIDR block.

  Note: Access will also be limited by any applicable VCN security rules and the ability to route IP packets to the mount target. Mount targets do not have Internet-routable IP addresses.

- `export_set_id` - (Required) The OCID of this export's export set.

- `file_system_id` - (Required) The OCID of this export's file system.

- `path` - (Required) Path used to access the associated file system.

  Avoid entering confidential information.

  Example: `/mediafiles`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `export_options` - Policies that apply to NFS requests made through this export. `exportOptions` contains a sequential list of `ClientOptions`. Each `ClientOptions` item defines the export options that are applied to a specified set of clients.

  For each NFS request, the first `ClientOptions` option in the list whose `source` attribute matches the source IP address of the request is applied.

  If a client source IP address does not match the `source` property of any `ClientOptions` in the list, then the export will be invisible to that client. This export will not be returned by `MOUNTPROC_EXPORT` calls made by the client and any attempt to mount or access the file system through this export will result in an error.

  Exports without defined `ClientOptions` are invisible to all clients.

  If one export is invisible to a particular client, associated file systems may still be accessible through other exports on the same or different mount targets. To completely deny client access to a file system, be sure that the client source IP address is not included in any export for any mount target associated with the file system.

  - `access` - Type of access to grant clients using the file system through this export. If unspecified defaults to `READ_ONLY`.

  - `anonymous_gid` - GID value to remap to when squashing a client GID (see identitySquash for more details.) If unspecified defaults to `65534`.

  - `anonymous_uid` - UID value to remap to when squashing a client UID (see identitySquash for more details.) If unspecified, defaults to `65534`.

- `identity_squash` - Used when clients accessing the file system through this export have their UID and GID remapped to 'anonymousUid' and 'anonymousGid'. If `ALL`, all users and groups are remapped; if `ROOT`, only the root user and group (UID/GID 0) are remapped; if `NONE`, no remapping is done. If unspecified, defaults to `ROOT`.

  - `require_privileged_source_port` - If `true`, clients accessing the file system through this export must connect from a privileged source port. If unspecified, defaults to `true`.

  - `source` - Clients these options should apply to. Must be a either single IPv4 address or single IPv4 CIDR block.

    Note: Access will also be limited by any applicable VCN security rules and the ability to route IP packets to the mount target. Mount targets do not have Internet-routable IP addresses.

- `export_set_id` - The OCID of this export's export set.

- `file_system_id` - The OCID of this export's file system.

- `id` - The OCID of this export.

- `path` - Path used to access the associated file system.

  Avoid entering confidential information.

  Example: `/accounting`

- `state` - The current state of this export.

- `time_created` - The date and time the export was created, expressed in RFC 3339 (https://tools.ietf.org/rfc/rfc3339) timestamp format. Example: `2016-08-25T21:10:29.600Z`

Import

Exports can be imported using the `id`, e.g.

```
$ terraform import oci_file_storage_export.test_export "id"
```

oci_file_storage_export_set

This resource provides the Export Set resource in Oracle Cloud Infrastructure File Storage service.

The export set resource can neither be directly created, nor destroyed.

An export set is created by the service automatically when a mount target is created. When a mount target is deleted, the export set associated with it is also deleted automatically.

However, export sets expose a few attributes that can be updated.

Hence we provide this resource for managing the already created export set from within Terraform.

Example Usage

```
resource "oci_file_storage_export_set" "test_export_set" {
    #Required
    mount_target_id = "${oci_file_storage_mount_target.test_mount_target.id}"

    #Optional
    display_name = "${var.export_set_name}"
    max_fs_stat_bytes = 23843202333
    max_fs_stat_files = 223442
}
```

Argument Reference

The following arguments are supported:

- `mount_target_id` - (Required) (Updatable) The OCID of the mount target that the export set is associated with

- `display_name` - (Optional) (Updatable) A user-friendly name. It does not have to be unique, and it is changeable. Avoid entering confidential information. Example: `My export set`

- `max_fs_stat_bytes` - (Optional) (Updatable) Controls the maximum `tbytes`, `fbytes`, and `abytes`, values reported by `NFS FSSTAT` calls through any associated mount targets. This is an advanced feature. For most applications, use the default value. The `tbytes` value reported by `FSSTAT` will be `maxFsStatBytes`. The value of `fbytes` and `abytes` will be `maxFsStatBytes` minus the metered size of the file system. If the metered size is larger than `maxFsStatBytes`, then `fbytes` and `abytes` will both be '0'.

- `max_fs_stat_files` - (Optional) (Updatable) Controls the maximum `tfiles`, `ffiles`, and `afiles` values reported by `NFS FSSTAT` calls through any associated mount targets. This is an advanced feature. For most applications, use the default value. The `tfiles` value reported by `FSSTAT` will be `maxFsStatFiles`. The value of `ffiles` and `afiles` will be `maxFsStatFiles` minus the metered size of the file system. If the metered size is larger than `maxFsStatFiles`, then `ffiles` and `afiles` will both be '0'.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain the export set is in. May be unset as a blank or NULL value. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the export set.

- `display_name` - A user-friendly name. It does not have to be unique, and it is changeable. Avoid entering confidential information. Example: `My export set`

- `id` - The OCID of the export set.

- `max_fs_stat_bytes` - Controls the maximum `tbytes`, `fbytes`, and `abytes`, values reported by `NFS` `FSSTAT` calls through any associated mount targets. This is an advanced feature. For most applications, use the default value. The `tbytes` value reported by `FSSTAT` will be `maxFsStatBytes`. The value of `fbytes` and `abytes` will be `maxFsStatBytes` minus the metered size of the file system. If the metered size is larger than `maxFsStatBytes`, then `fbytes` and `abytes` will both be '0'.

- `max_fs_stat_files` - Controls the maximum `tfiles`, `ffiles`, and `afiles` values reported by `NFS` `FSSTAT` calls through any associated mount targets. This is an advanced feature. For most applications, use the default value. The `tfiles` value reported by `FSSTAT` will be `maxFsStatFiles`. The value of `ffiles` and `afiles` will be `maxFsStatFiles` minus the metered size of the file system. If the metered size is larger than `maxFsStatFiles`, then `ffiles` and `afiles` will both be '0'.

- `state` - The current state of the export set.

- `time_created` - The date and time the export set was created, expressed in RFC 3339 (https://tools.ietf.org/rfc/rfc3339) timestamp format. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the virtual cloud network (VCN) the export set is in.

Import

ExportSets can be imported using the `id`, e.g.

```
$ terraform import oci_file_storage_export_set.test_export_set "id"
```

oci_file_storage_file_system

This resource provides the File System resource in Oracle Cloud Infrastructure File Storage service.

Creates a new file system in the specified compartment and availability domain. Instances can mount file systems in another availability domain, but doing so might increase latency when compared to mounting instances in the same availability domain.

After you create a file system, you can associate it with a mount target. Instances can then mount the file system by connecting to the mount target's IP address. You can associate a file system with more than one mount target at a time.

For information about access control and compartments, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm).

For information about availability domains, see Regions and Availability Domains (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/regions.htm). To get a list of availability domains, use the `ListAvailabilityDomains` operation in the Identity and Access Management Service API.

All Oracle Cloud Infrastructure resources, including file systems, get an Oracle-assigned, unique ID called an Oracle Cloud Identifier (OCID). When you create a resource, you can find its OCID in the response. You can also retrieve a resource's OCID by using a List API operation on that resource type or by viewing the resource in the Console.

Example Usage

```
resource "oci_file_storage_file_system" "test_file_system" {
    #Required
    availability_domain = "${var.file_system_availability_domain}"
    compartment_id = "${var.compartment_id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.file_system_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

* `availability_domain` - (Required) The availability domain to create the file system in. Example: `Uocm:PHX-AD-1`

* `compartment_id` - (Required) The OCID of the compartment to create the file system in.

* `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

* `display_name` - (Optional) (Updatable) A user-friendly name. It does not have to be unique, and it is changeable. Avoid entering confidential information. Example: `My file system`

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain the file system is in. May be unset as a blank or NULL value. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the file system.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. It does not have to be unique, and it is changeable. Avoid entering confidential information. Example: `My file system`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the file system.

- `metered_bytes` - The number of bytes consumed by the file system, including any snapshots. This number reflects the metered size of the file system and is updated asynchronously with respect to updates to the file system.

- `state` - The current state of the file system.

- `time_created` - The date and time the file system was created, expressed in RFC 3339 (https://tools.ietf.org/rfc/rfc3339) timestamp format. Example: `2016-08-25T21:10:29.600Z`

Import

FileSystems can be imported using the `id`, e.g.

```
$ terraform import oci_file_storage_file_system.test_file_system "id"
```

oci_file_storage_mount_target

This resource provides the Mount Target resource in Oracle Cloud Infrastructure File Storage service.

Creates a new mount target in the specified compartment and subnet. You can associate a file system with a mount target only when they exist in the same availability domain. Instances can connect to mount targets in another availablity domain, but you might see higher latency than with instances in the same availability domain as the mount target.

Mount targets have one or more private IP addresses that you can provide as the host portion of remote target parameters in client mount commands. These private IP addresses are listed in the privateIpIds property of the mount target and are highly available. Mount targets also consume additional IP addresses in their subnet. Do not use /30 or smaller subnets for mount target creation because they do not have sufficient available IP addresses. Allow at least three IP addresses for each mount target.

For information about access control and compartments, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm).

For information about availability domains, see Regions and Availability Domains (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/regions.htm). To get a list of availability domains, use the `ListAvailabilityDomains` operation in the Identity and Access Management Service API.

All Oracle Cloud Infrastructure Services resources, including mount targets, get an Oracle-assigned, unique ID called an Oracle Cloud Identifier (OCID). When you create a resource, you can find its OCID in the response. You can also retrieve a resource's OCID by using a List API operation on that resource type, or by viewing the resource in the Console.

Example Usage

```
resource "oci_file_storage_mount_target" "test_mount_target" {
    #Required
    availability_domain = "${var.mount_target_availability_domain}"
    compartment_id = "${var.compartment_id}"
    subnet_id = "${oci_file_storage_subnet.test_subnet.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.mount_target_display_name}"
    freeform_tags = {"Department"= "Finance"}
    hostname_label = "${var.mount_target_hostname_label}"
    ip_address = "${var.mount_target_ip_address}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The availability domain in which to create the mount target. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment in which to create the mount target.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a

namespace. For more information, see Resource Tags
(https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example:
`{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. It does not have to be unique, and it is changeable. Avoid entering confidential information. Example: `My mount target`

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `hostname_label` - (Optional) The hostname for the mount target's IP address, used for DNS resolution. The value is the hostname portion of the private IP address's fully qualified domain name (FQDN). For example, `files-1` in the FQDN `files-1.subnet123.vcn1.oraclevcn.com`. Must be unique across all VNICs in the subnet and comply with RFC 952 (https://tools.ietf.org/html/rfc952) and RFC 1123 (https://tools.ietf.org/html/rfc1123).

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `files-1`

- `ip_address` - (Optional) A private IP address of your choice. Must be an available IP address within the subnet's CIDR. If you don't specify a value, Oracle automatically assigns a private IP address from the subnet. Example: `10.0.3.3`

- `subnet_id` - (Required) The OCID of the subnet in which to create the mount target.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain the mount target is in. May be unset as a blank or NULL value. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the mount target.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. It does not have to be unique, and it is changeable. Avoid entering confidential information. Example: `My mount target`

- `export_set_id` - The OCID of the associated export set. Controls what file systems will be exported through Network File System (NFS) protocol on this mount target.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the mount target.

- `lifecycle_details` - Additional information about the current 'lifecycleState'.

- `private_ip_ids` - The OCIDs of the private IP addresses associated with this mount target.

- `state` - The current state of the mount target.

- `subnet_id` - The OCID of the subnet the mount target is in.

- `time_created` - The date and time the mount target was created, expressed in RFC 3339 (https://tools.ietf.org/rfc/rfc3339) timestamp format. Example: `2016-08-25T21:10:29.600Z`

Import

MountTargets can be imported using the `id`, e.g.

```
$ terraform import oci_file_storage_mount_target.test_mount_target "id"
```

oci_file_storage_snapshot

This resource provides the Snapshot resource in Oracle Cloud Infrastructure File Storage service.

Creates a new snapshot of the specified file system. You can access the snapshot at `.snapshot/<name>`.

Example Usage

```
resource "oci_file_storage_snapshot" "test_snapshot" {
    #Required
    file_system_id = "${oci_file_storage_file_system.test_file_system.id}"
    name = "${var.snapshot_name}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `file_system_id` - (Required) The OCID of the file system to take a snapshot of.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `name` - (Required) Name of the snapshot. This value is immutable. It must also be unique with respect to all other non-DELETED snapshots on the associated file system.

  Avoid entering confidential information.

  Example: Sunday

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more

information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm).
Example: {"Operations.CostCenter": "42"}

- `file_system_id` - The OCID of the file system from which the snapshot was created.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The OCID of the snapshot.

- `name` - Name of the snapshot. This value is immutable.

  Avoid entering confidential information.

  Example: Sunday

- `state` - The current state of the snapshot.

- `time_created` - The date and time the snapshot was created, expressed in RFC 3339 (https://tools.ietf.org/rfc/rfc3339) timestamp format. Example: `2016-08-25T21:10:29.600Z`

Import

Snapshots can be imported using the `id`, e.g.

```
$ terraform import oci_file_storage_snapshot.test_snapshot "id"
```

oci_identity_api_key

This resource provides the Api Key resource in Oracle Cloud Infrastructure Identity service.

Uploads an API signing key for the specified user.

Every user has permission to use this operation to upload a key for *their own user ID*. An administrator in your organization does not need to write a policy to give users this ability. To compare, administrators who have permission to the tenancy can use this operation to upload a key for any user, including themselves.

Important: Even though you have permission to upload an API key, you might not yet have permission to do much else. If you try calling an operation unrelated to your own credential management (e.g., `ListUsers`, `LaunchInstance`) and receive an "unauthorized" error, check with an administrator to confirm which IAM Service group(s) you're in and what access you have. Also confirm you're working in the correct compartment.

Example Usage

```
resource "oci_identity_api_key" "test_api_key" {
    #Required
    key_value = "${var.api_key_key_value}"
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

* `key_value` - (Required) The public key. Must be an RSA key in PEM format.

* `user_id` - (Required) The OCID of the user.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

* `fingerprint` - The key's fingerprint (e.g., 12:34:56:78:90:ab:cd:ef:12:34:56:78:90:ab:cd:ef).

* `id` - An Oracle-assigned identifier for the key, in this format: TENANCY_OCID/USER_OCID/KEY_FINGERPRINT.

* `inactive_status` - The detailed status of INACTIVE lifecycleState.

* `key_value` - The key's value.

* `state` - The API key's current state.

* `time_created` - Date and time the `ApiKey` object was created, in the format defined by RFC3339. Example: 2016-08-

```
25T21:10:29.600Z
```

- `user_id` - The OCID of the user the key belongs to.

oci_identity_auth_token

This resource provides the Auth Token resource in Oracle Cloud Infrastructure Identity service.

Creates a new auth token for the specified user. For information about what auth tokens are for, see Managing User Credentials (https://docs.cloud.oracle.com/iaas/Content/Identity/Tasks/managingcredentials.htm).

You must specify a *description* for the auth token (although it can be an empty string). It does not have to be unique, and you can change it anytime with UpdateAuthToken (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/AuthToken/UpdateAuthToken).

Every user has permission to create an auth token for *their own user ID*. An administrator in your organization does not need to write a policy to give users this ability. To compare, administrators who have permission to the tenancy can use this operation to create an auth token for any user, including themselves.

Example Usage

```
resource "oci_identity_auth_token" "test_auth_token" {
    #Required
    description = "${var.auth_token_description}"
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `description` - (Required) (Updatable) The description you assign to the auth token during creation. Does not have to be unique, and it's changeable.

- `user_id` - (Required) The OCID of the user.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `description` - The description you assign to the auth token. Does not have to be unique, and it's changeable.

- `id` - The OCID of the auth token.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `state` - The token's current state.

- `time_created` - Date and time the `AuthToken` object was created, in the format defined by RFC3339. Example: 2016-08-25T21:10:29.600Z

- `time_expires` - Date and time when this auth token will expire, in the format defined by RFC3339. Null if it never expires. Example: `2016-08-25T21:10:29.600Z`

- `token` - The auth token. The value is available only in the response for `CreateAuthToken`, and not for `ListAuthTokens` or `UpdateAuthToken`.

- `user_id` - The OCID of the user the auth token belongs to.

oci_identity_compartment

This resource provides the Compartment resource in Oracle Cloud Infrastructure Identity service.

Creates a new compartment in the specified compartment.

Important: Compartments cannot be deleted.

Specify the parent compartment's OCID as the compartment ID in the request object. Remember that the tenancy is simply the root compartment. For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You must also specify a *name* for the compartment, which must be unique across all compartments in your tenancy. You can use this name or the OCID when writing policies that apply to the compartment. For more information about policies, see How Policies Work (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/policies.htm).

You must also specify a *description* for the compartment (although it can be an empty string). It does not have to be unique, and you can change it anytime with UpdateCompartment (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/Compartment/UpdateCompartment).

Example Usage

```
resource "oci_identity_compartment" "test_compartment" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
    description = "${var.compartment_description}"
    name = "${var.compartment_name}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

* `compartment_id` - (Required) The OCID of the parent compartment containing the compartment.

* `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

* `description` - (Required) (Updatable) The description you assign to the compartment during creation. Does not have to be unique, and it's changeable.

* `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `name` - (Required) (Updatable) The name you assign to the compartment during creation. The name must be unique across all compartments in the parent compartment. Avoid entering confidential information.

- `enable_delete` - (Optional) Defaults to false. If omitted or set to false the provider will implicitly import the compartment if there is a name collision, and will not actually delete the compartment on destroy or removal of the resource declaration. If set to true, the provider will throw an error on a name collision with another compartment, and will attempt to delete the compartment on destroy or removal of the resource declaration.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the parent compartment containing the compartment.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `description` - The description you assign to the compartment. Does not have to be unique, and it's changeable.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The OCID of the compartment.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `is_accessible` - Indicates whether or not the compartment is accessible for the user making the request. Returns true when the user has INSPECT permissions directly on a resource in the compartment or indirectly (permissions can be on a resource in a subcompartment).

- `name` - The name you assign to the compartment during creation. The name must be unique across all compartments in the parent. Avoid entering confidential information.

- `state` - The compartment's current state.

- `time_created` - Date and time the compartment was created, in the format defined by RFC3339. Example: 2016-08-25T21:10:29.600Z

Import

Compartments can be imported using the `id`, e.g.

```
$ terraform import oci_identity_compartment.test_compartment "id"
```

oci_identity_customer_secret_key

This resource provides the Customer Secret Key resource in Oracle Cloud Infrastructure Identity service.

Creates a new secret key for the specified user. Secret keys are used for authentication with the Object Storage Service's Amazon S3 compatible API. For information, see Managing User Credentials (https://docs.cloud.oracle.com/iaas/Content/Identity/Tasks/managingcredentials.htm).

You must specify a *description* for the secret key (although it can be an empty string). It does not have to be unique, and you can change it anytime with UpdateCustomerSecretKey (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/CustomerSecretKeySummary/UpdateCustomerSecretKey).

Every user has permission to create a secret key for *their own user ID*. An administrator in your organization does not need to write a policy to give users this ability. To compare, administrators who have permission to the tenancy can use this operation to create a secret key for any user, including themselves.

Example Usage

```
resource "oci_identity_customer_secret_key" "test_customer_secret_key" {
    #Required
    display_name = "${var.customer_secret_key_display_name}"
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `display_name` - (Required) (Updatable) The name you assign to the secret key during creation. Does not have to be unique, and it's changeable.

- `user_id` - (Required) The OCID of the user.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `display_name` - The display name you assign to the secret key. Does not have to be unique, and it's changeable.

- `id` - The OCID of the secret key.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `key` - The secret key.

- `state` - The secret key's current state.

- `time_created` - Date and time the `CustomerSecretKey` object was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `time_expires` - Date and time when this password will expire, in the format defined by RFC3339. Null if it never expires. Example: `2016-08-25T21:10:29.600Z`

- `user_id` - The OCID of the user the password belongs to.

oci_identity_dynamic_group

This resource provides the Dynamic Group resource in Oracle Cloud Infrastructure Identity service.

Creates a new dynamic group in your tenancy.

You must specify your tenancy's OCID as the compartment ID in the request object (remember that the tenancy is simply the root compartment). Notice that IAM resources (users, groups, compartments, and some policies) reside within the tenancy itself, unlike cloud resources such as compute instances, which typically reside within compartments inside the tenancy. For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You must also specify a *name* for the dynamic group, which must be unique across all dynamic groups in your tenancy, and cannot be changed. Note that this name has to be also unique accross all groups in your tenancy. You can use this name or the OCID when writing policies that apply to the dynamic group. For more information about policies, see How Policies Work (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/policies.htm).

You must also specify a *description* for the dynamic group (although it can be an empty string). It does not have to be unique, and you can change it anytime with UpdateDynamicGroup (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/DynamicGroup/UpdateDynamicGroup).

Example Usage

```
resource "oci_identity_dynamic_group" "test_dynamic_group" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
    description = "${var.dynamic_group_description}"
    matching_rule = "${var.dynamic_group_matching_rule}"
    name = "${var.dynamic_group_name}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the tenancy containing the group.

- `description` - (Required) (Updatable) The description you assign to the group during creation. Does not have to be unique, and it's changeable.

- `matching_rule` - (Required) (Updatable) The matching rule to dynamically match an instance certificate to this dynamic group. For rule syntax, see Managing Dynamic Groups (https://docs.cloud.oracle.com/iaas/Content/Identity/Tasks/managingdynamicgroups.htm).

- `name` - (Required) The name you assign to the group during creation. The name must be unique across all groups in the tenancy and cannot be changed.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the tenancy containing the group.

- `description` - The description you assign to the group. Does not have to be unique, and it's changeable.

- `id` - The OCID of the group.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `matching_rule` - A rule string that defines which instance certificates will be matched. For syntax, see Managing Dynamic Groups (https://docs.cloud.oracle.com/iaas/Content/Identity/Tasks/managingdynamicgroups.htm).

- `name` - The name you assign to the group during creation. The name must be unique across all groups in the tenancy and cannot be changed.

- `state` - The group's current state.

- `time_created` - Date and time the group was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

DynamicGroups can be imported using the `id`, e.g.

```
$ terraform import oci_identity_dynamic_group.test_dynamic_group "id"
```

oci_identity_group

This resource provides the Group resource in Oracle Cloud Infrastructure Identity service.

Creates a new group in your tenancy.

You must specify your tenancy's OCID as the compartment ID in the request object (remember that the tenancy is simply the root compartment). Notice that IAM resources (users, groups, compartments, and some policies) reside within the tenancy itself, unlike cloud resources such as compute instances, which typically reside within compartments inside the tenancy. For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You must also specify a *name* for the group, which must be unique across all groups in your tenancy and cannot be changed. You can use this name or the OCID when writing policies that apply to the group. For more information about policies, see How Policies Work (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/policies.htm).

You must also specify a *description* for the group (although it can be an empty string). It does not have to be unique, and you can change it anytime with UpdateGroup (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/Group/UpdateGroup). After creating the group, you need to put users in it and write policies for it. See AddUserToGroup (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/UserGroupMembership/AddUserToGroup) and CreatePolicy (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/Policy/CreatePolicy).

Example Usage

```
resource "oci_identity_group" "test_group" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
    description = "${var.group_description}"
    name = "${var.group_name}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the tenancy containing the group.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `description` - (Required) (Updatable) The description you assign to the group during creation. Does not have to be unique, and it's changeable.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `name` - (Required) The name you assign to the group during creation. The name must be unique across all groups in the tenancy and cannot be changed.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the tenancy containing the group.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `description` - The description you assign to the group. Does not have to be unique, and it's changeable.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `id` - The OCID of the group.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `name` - The name you assign to the group during creation. The name must be unique across all groups in the tenancy and cannot be changed.

- `state` - The group's current state.

- `time_created` - Date and time the group was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

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

```
$ terraform import oci_identity_group.test_group "id"
```

oci_identity_identity_provider

This resource provides the Identity Provider resource in Oracle Cloud Infrastructure Identity service.

Creates a new identity provider in your tenancy. For more information, see Identity Providers and Federation (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/federation.htm).

You must specify your tenancy's OCID as the compartment ID in the request object. Remember that the tenancy is simply the root compartment. For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You must also specify a *name* for the `IdentityProvider`, which must be unique across all `IdentityProvider` objects in your tenancy and cannot be changed.

You must also specify a *description* for the `IdentityProvider` (although it can be an empty string). It does not have to be unique, and you can change it anytime with UpdateIdentityProvider (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/IdentityProvider/UpdateIdentityProvider).

Example Usage

```
resource "oci_identity_identity_provider" "test_identity_provider" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
    description = "${var.identity_provider_description}"
    metadata = "${var.identity_provider_metadata}"
    metadata_url = "${var.identity_provider_metadata_url}"
    name = "${var.identity_provider_name}"
    product_type = "${var.identity_provider_product_type}"
    protocol = "${var.identity_provider_protocol}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_attributes = "${var.identity_provider_freeform_attributes}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of your tenancy.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `description` - (Required) (Updatable) The description you assign to the `IdentityProvider` during creation. Does not have to be unique, and it's changeable.

- `freeform_attributes` - (Optional) (Updatable) Extra name value pairs associated with this identity provider. Example:

```
{"clientId": "app_sf3kdjf3"}
```

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `metadata` - (Required) (Updatable) The XML that contains the information required for federating.

- `metadata_url` - (Required) (Updatable) The URL for retrieving the identity provider's metadata, which contains information required for federating.

- `name` - (Required) The name you assign to the `IdentityProvider` during creation. The name must be unique across all `IdentityProvider` objects in the tenancy and cannot be changed.

- `product_type` - (Required) The identity provider service or product. Supported identity providers are Oracle Identity Cloud Service (IDCS) and Microsoft Active Directory Federation Services (ADFS). Example: `IDCS`

- `protocol` - (Required) (Updatable) The protocol used for federation. Example: `SAML2`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the tenancy containing the `IdentityProvider`.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `description` - The description you assign to the `IdentityProvider` during creation. Does not have to be unique, and it's changeable.

- `freeform_attributes` - Extra name value pairs associated with this identity provider. Example: `{"clientId": "app_sf3kdjf3"}`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the `IdentityProvider`.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `metadata_url` - The URL for retrieving the identity provider's metadata, which contains information required for federating.

- `name` - The name you assign to the `IdentityProvider` during creation. The name must be unique across all `IdentityProvider` objects in the tenancy and cannot be changed. This is the name federated users see when choosing which identity provider to use when signing in to the Oracle Cloud Infrastructure Console.

- `product_type` - The identity provider service or product. Supported identity providers are Oracle Identity Cloud Service (IDCS) and Microsoft Active Directory Federation Services (ADFS).

  Allowed values are:

    - ADFS

    - IDCS

  Example: IDCS

- `protocol` - The protocol used for federation. Allowed value: SAML2. Example: SAML2

- `redirect_url` - The URL to redirect federated users to for authentication with the identity provider.

- `signing_certificate` - The identity provider's signing certificate used by the IAM Service to validate the SAML2 token.

- `state` - The current state.

- `time_created` - Date and time the `IdentityProvider` was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

IdentityProviders can be imported using the `id`, e.g.

```
$ terraform import oci_identity_identity_provider.test_identity_provider "id"
```

oci_identity_idp_group_mapping

This resource provides the Idp Group Mapping resource in Oracle Cloud Infrastructure Identity service.

Creates a single mapping between an IdP group and an IAM Service group (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/Group/).

Example Usage

```
resource "oci_identity_idp_group_mapping" "test_idp_group_mapping" {
    #Required
    group_id = "${oci_identity_group.test_group.id}"
    identity_provider_id = "${oci_identity_identity_provider.test_identity_provider.id}"
    idp_group_name = "${var.idp_group_mapping_idp_group_name}"
}
```

Argument Reference

The following arguments are supported:

- `group_id` - (Required) (Updatable) The OCID of the IAM Service group (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/Group/) you want to map to the IdP group.

- `identity_provider_id` - (Required) The OCID of the identity provider.

- `idp_group_name` - (Required) (Updatable) The name of the IdP group you want to map.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the tenancy containing the `IdentityProvider`.

- `group_id` - The OCID of the IAM Service group that is mapped to the IdP group.

- `id` - The OCID of the `IdpGroupMapping`.

- `identity_provider_id` - The OCID of the `IdentityProvider` this mapping belongs to.

- `idp_group_name` - The name of the IdP group that is mapped to the IAM Service group.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `state` - The mapping's current state.

- `time_created` - Date and time the mapping was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

oci_identity_policy

This resource provides the Policy resource in Oracle Cloud Infrastructure Identity service.

Creates a new policy in the specified compartment (either the tenancy or another of your compartments). If you're new to policies, see Getting Started with Policies (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/policygetstarted.htm).

You must specify a *name* for the policy, which must be unique across all policies in your tenancy and cannot be changed.

You must also specify a *description* for the policy (although it can be an empty string). It does not have to be unique, and you can change it anytime with UpdatePolicy (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/Policy/UpdatePolicy).

You must specify one or more policy statements in the statements array. For information about writing policies, see How Policies Work (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/policies.htm) and Common Policies (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/commonpolicies.htm). New policies take effect typically within 10 seconds.

Example Usage

```
resource "oci_identity_policy" "test_policy" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
    description = "${var.policy_description}"
    name = "${var.policy_name}"
    statements = "${var.policy_statements}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_tags = {"Department"= "Finance"}
    version_date = "${var.policy_version_date}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment containing the policy (either the tenancy or another compartment).

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `description` - (Required) (Updatable) The description you assign to the policy during creation. Does not have to be unique, and it's changeable.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags

(https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `name` - (Required) The name you assign to the policy during creation. The name must be unique across all policies in the tenancy and cannot be changed.

- `statements` - (Required) (Updatable) An array of policy statements written in the policy language. See How Policies Work (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/policies.htm) and Common Policies (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/commonpolicies.htm).

- `version_date` - (Optional) (Updatable) The version of the policy. If null or set to an empty string, when a request comes in for authorization, the policy will be evaluated according to the current behavior of the services at that moment. If set to a particular date (YYYY-MM-DD), the policy will be evaluated according to the behavior of the services on that date.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the policy (either the tenancy or another compartment).

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `description` - The description you assign to the policy. Does not have to be unique, and it's changeable.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `id` - The OCID of the policy.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `name` - The name you assign to the policy during creation. The name must be unique across all policies in the tenancy and cannot be changed.

- `state` - The policy's current state.

- `statements` - An array of one or more policy statements written in the policy language.

- `time_created` - Date and time the policy was created, in the format defined by RFC3339. Example: `2016-08-` `25T21:10:29.600Z`

- `version_date` - The version of the policy. If null or set to an empty string, when a request comes in for authorization, the policy will be evaluated according to the current behavior of the services at that moment. If set to a particular date (YYYY-MM-DD), the policy will be evaluated according to the behavior of the services on that date.

Import

Policies can be imported using the `id`, e.g.

```
$ terraform import oci_identity_policy.test_policy "id"
```

oci_identity_smtp_credential

This resource provides the Smtp Credential resource in Oracle Cloud Infrastructure Identity service.

Creates a new SMTP credential for the specified user. An SMTP credential has an SMTP user name and an SMTP password. You must specify a *description* for the SMTP credential (although it can be an empty string). It does not have to be unique, and you can change it anytime with UpdateSmtpCredential (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/SmtpCredentialSummary/UpdateSmtpCredential).

Example Usage

```
resource "oci_identity_smtp_credential" "test_smtp_credential" {
    #Required
    description = "${var.smtp_credential_description}"
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `description` - (Required) (Updatable) The description you assign to the SMTP credentials during creation. Does not have to be unique, and it's changeable.

- `user_id` - (Required) The OCID of the user.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `description` - The description you assign to the SMTP credential. Does not have to be unique, and it's changeable.

- `id` - The OCID of the SMTP credential.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `password` - The SMTP password.

- `state` - The credential's current state.

- `time_created` - Date and time the `SmtpCredential` object was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `time_expires` - Date and time when this credential will expire, in the format defined by RFC3339. Null if it never expires. Example: `2016-08-25T21:10:29.600Z`

- `user_id` - The OCID of the user the SMTP credential belongs to.

- `username` - The SMTP user name.

oci_identity_swift_password

This resource provides the Swift Password resource in Oracle Cloud Infrastructure Identity service.

Deprecated. Use CreateAuthToken (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/AuthToken/CreateAuthToken) instead.

Creates a new Swift password for the specified user. For information about what Swift passwords are for, see Managing User Credentials (https://docs.cloud.oracle.com/iaas/Content/Identity/Tasks/managingcredentials.htm).

You must specify a *description* for the Swift password (although it can be an empty string). It does not have to be unique, and you can change it anytime with UpdateSwiftPassword (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/SwiftPassword/UpdateSwiftPassword).

Every user has permission to create a Swift password for *their own user ID*. An administrator in your organization does not need to write a policy to give users this ability. To compare, administrators who have permission to the tenancy can use this operation to create a Swift password for any user, including themselves.

Example Usage

```
resource "oci_identity_swift_password" "test_swift_password" {
    #Required
    description = "${var.swift_password_description}"
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `description` - (Required) (Updatable) The description you assign to the Swift password during creation. Does not have to be unique, and it's changeable.

- `user_id` - (Required) The OCID of the user.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `description` - The description you assign to the Swift password. Does not have to be unique, and it's changeable.

- `expires_on` - Date and time when this password will expire, in the format defined by RFC3339. Null if it never expires. Example: `2016-08-25T21:10:29.600Z`

- `id` - The OCID of the Swift password.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `password` - The Swift password. The value is available only in the response for `CreateSwiftPassword`, and not for `ListSwiftPasswords` or `UpdateSwiftPassword`.

- `state` - The password's current state.

- `time_created` - Date and time the `SwiftPassword` object was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `user_id` - The OCID of the user the password belongs to.

oci_identity_tag

This resource provides the Tag resource in Oracle Cloud Infrastructure Identity service.

Creates a new tag in the specified tag namespace.

You must specify either the OCID or the name of the tag namespace that will contain this tag definition.

You must also specify a *name* for the tag, which must be unique across all tags in the tag namespace and cannot be changed. The name can contain any ASCII character except the space (_) or period (.) characters. Names are case insensitive. That means, for example, "myTag" and "mytag" are not allowed in the same namespace. If you specify a name that's already in use in the tag namespace, a 409 error is returned.

You must also specify a *description* for the tag. It does not have to be unique, and you can change it with UpdateTag (https://docs.cloud.oracle.com/iaas/api/#/en/tagging/20170901/Tag/UpdateTag).

Example Usage

```
resource "oci_identity_tag" "test_tag" {
    #Required
    description = "${var.tag_description}"
    name = "${var.tag_name}"
    tag_namespace_id = "${oci_identity_tag_namespace.test_tag_namespace.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_tags = {"Department"= "Finance"}
    is_cost_tracking = "${var.tag_is_cost_tracking}"
    is_retired = false
}
```

Argument Reference

The following arguments are supported:

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `description` - (Required) (Updatable) The description you assign to the tag during creation.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `is_cost_tracking` - (Optional) (Updatable) Indicates whether the tag is enabled for cost tracking.

- `name` - (Required) The name you assign to the tag during creation. The name must be unique within the tag namespace and cannot be changed.

* `tag_namespace_id` - (Required) The OCID of the tag namespace.

* `is_retired` - (Optional) (Updatable) Indicates whether the tag is retired. See Retiring Key Definitions and Namespace Definitions (https://docs.us-phoenix-1.oraclecloud.com/Content/Identity/Concepts/taggingoverview.htm#Retiring).

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

* `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

* `description` - The description you assign to the tag.

* `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

* `id` - The OCID of the tag definition.

* `is_cost_tracking` - Indicates whether the tag is enabled for cost tracking.

* `is_retired` - Indicates whether the tag is retired. See Retiring Key Definitions and Namespace Definitions (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/taggingoverview.htm#Retiring).

* `name` - The name of the tag. The name must be unique across all tags in the tag namespace and can't be changed.

* `tag_namespace_id` - The OCID of the namespace that contains the tag definition.

* `time_created` - Date and time the tag was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

Tags can be imported using the `tagNamespaceId` and `tagName`, e.g.

```
$ terraform import oci_identity_tag.test_tag "tagNamespaces/{tagNamespaceId}/tags/{tagName}"
```

oci_identity_tag_namespace

This resource provides the Tag Namespace resource in Oracle Cloud Infrastructure Identity service.

Creates a new tag namespace in the specified compartment.

You must specify the compartment ID in the request object (remember that the tenancy is simply the root compartment).

You must also specify a *name* for the namespace, which must be unique across all namespaces in your tenancy and cannot be changed. The name can contain any ASCII character except the space (_) or period (.). Names are case insensitive. That means, for example, "myNamespace" and "mynamespace" are not allowed in the same tenancy. Once you created a namespace, you cannot change the name. If you specify a name that's already in use in the tenancy, a 409 error is returned.

You must also specify a *description* for the namespace. It does not have to be unique, and you can change it with UpdateTagNamespace (https://docs.cloud.oracle.com/iaas/api/#/en/tagging/20170101/TagNamespace/UpdateTagNamespace).

Tag namespaces cannot be deleted, but they can be retired. See Retiring Key Definitions and Namespace Definitions (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/taggingoverview.htm#Retiring) for more information.

Example Usage

```
resource "oci_identity_tag_namespace" "test_tag_namespace" {
    #Required
    compartment_id = "${var.compartment_id}"
    description = "${var.tag_namespace_description}"
    name = "${var.tag_namespace_name}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_tags = {"Department"= "Finance"}
    is_retired = false
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the tenancy containing the tag namespace.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `description` - (Required) (Updatable) The description you assign to the tag namespace during creation.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `name` - (Required) The name you assign to the tag namespace during creation. It must be unique across all tag namespaces in the tenancy and cannot be changed.

- `is_retired` - (Optional) (Updatable) Whether the tag namespace is retired. For more information, see Retiring Key Definitions and Namespace Definitions (https://docs.us-phoenix-1.oraclecloud.com/Content/Identity/Concepts/taggingoverview.htm#Retiring).

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains the tag namespace.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `description` - The description you assign to the tag namespace.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the tag namespace.

- `is_retired` - Whether the tag namespace is retired. For more information, see Retiring Key Definitions and Namespace Definitions (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/taggingoverview.htm#Retiring).

- `name` - The name of the tag namespace. It must be unique across all tag namespaces in the tenancy and cannot be changed.

- `time_created` - Date and time the tagNamespace was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

TagNamespaces can be imported using the `id`, e.g.

```
$ terraform import oci_identity_tag_namespace.test_tag_namespace "id"
```

oci_identity_ui_password

This resource provides the Ui Password resource in Oracle Cloud Infrastructure Identity service.

Creates a new Console one-time password for the specified user. For more information about user credentials, see User Credentials (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/usercredentials.htm).

Use this operation after creating a new user, or if a user forgets their password. The new one-time password is returned to you in the response, and you must securely deliver it to the user. They'll be prompted to change this password the next time they sign in to the Console. If they don't change it within 7 days, the password will expire and you'll need to create a new one-time password for the user.

Note: The user's Console login is the unique name you specified when you created the user (see CreateUser (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/User/CreateUser)).

Example Usage

```
resource "oci_identity_ui_password" "test_ui_password" {
    #Required
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `user_id` - (Required) The OCID of the user.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `inactive_status` - The detailed status of INACTIVE lifecycleState.

- `password` - The user's password for the Console.

- `state` - The password's current state.

- `time_created` - Date and time the password was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `user_id` - The OCID of the user.

Import

UiPasswords can be imported using the `id`, e.g.

```
$ terraform import oci_identity_ui_password.test_ui_password "id"
```

oci_identity_user

This resource provides the User resource in Oracle Cloud Infrastructure Identity service.

Creates a new user in your tenancy. For conceptual information about users, your tenancy, and other IAM Service components, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm).

You must specify your tenancy's OCID as the compartment ID in the request object (remember that the tenancy is simply the root compartment). Notice that IAM resources (users, groups, compartments, and some policies) reside within the tenancy itself, unlike cloud resources such as compute instances, which typically reside within compartments inside the tenancy. For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You must also specify a *name* for the user, which must be unique across all users in your tenancy and cannot be changed. Allowed characters: No spaces. Only letters, numerals, hyphens, periods, underscores, +, and @. If you specify a name that's already in use, you'll get a 409 error. This name will be the user's login to the Console. You might want to pick a name that your company's own identity system (e.g., Active Directory, LDAP, etc.) already uses. If you delete a user and then create a new user with the same name, they'll be considered different users because they have different OCIDs.

You must also specify a *description* for the user (although it can be an empty string). It does not have to be unique, and you can change it anytime with UpdateUser (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/User/UpdateUser). You can use the field to provide the user's full name, a description, a nickname, or other information to generally identify the user.

A new user has no permissions until you place the user in one or more groups (see AddUserToGroup (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/UserGroupMembership/AddUserToGroup)). If the user needs to access the Console, you need to provide the user a password (see CreateOrResetUIPassword (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/UIPassword/CreateOrResetUIPassword)). If the user needs to access the Oracle Cloud Infrastructure REST API, you need to upload a public API signing key for that user (see Required Keys and OCIDs (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm) and also UploadApiKey (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/ApiKey/UploadApiKey)).

Important: Make sure to inform the new user which compartment(s) they have access to.

Example Usage

```
resource "oci_identity_user" "test_user" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
    description = "${var.user_description}"
    name = "${var.user_name}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the tenancy containing the user.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `description` - (Required) (Updatable) The description you assign to the user during creation. Does not have to be unique, and it's changeable.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `name` - (Required) The name you assign to the user during creation. This is the user's login for the Console. The name must be unique across all users in the tenancy and cannot be changed.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `capabilities` - Properties indicating how the user is allowed to authenticate.
  - `can_use_api_keys` - Indicates if the user can use API keys.

  - `can_use_auth_tokens` - Indicates if the user can use SWIFT passwords / auth tokens.

  - `can_use_console_password` - Indicates if the user can log in to the console.

  - `can_use_customer_secret_keys` - Indicates if the user can use SigV4 symmetric keys.

  - `can_use_smtp_credentials` - Indicates if the user can use SMTP passwords.

- `compartment_id` - The OCID of the tenancy containing the user.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `description` - The description you assign to the user. Does not have to be unique, and it's changeable.

- `external_identifier` - Identifier of the user in the identity provider

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the user.

- `identity_provider_id` - The OCID of the `IdentityProvider` this user belongs to.

- `inactive_state` - Returned only if the user's `lifecycleState` is INACTIVE. A 16-bit value showing the reason why the user is inactive:
    - bit 0: SUSPENDED (reserved for future use)

    - bit 1: DISABLED (reserved for future use)

    - bit 2: BLOCKED (the user has exceeded the maximum number of failed login attempts for the Console)

- `name` - The name you assign to the user during creation. This is the user's login for the Console. The name must be unique across all users in the tenancy and cannot be changed.

- `state` - The user's current state.

- `time_created` - Date and time the user was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

Users can be imported using the `id`, e.g.

```
$ terraform import oci_identity_user.test_user "id"
```

oci_identity_user

This resource provides the User Capabilities Management resource in Oracle Cloud Infrastructure Identity service.

Manages the capabilities of the specified user.

Important: Deleting the User Capabilities Management leaves the User resource in its existing state (rather than returning to its defaults)

Example Usage

```
resource "oci_identity_user_capabilities_management" "test_user_capabilities_management" {
    #Required
    user_id = "${oci_identity_user.user1.id}"

    #Optional
    can_use_api_keys            = "true"
    can_use_auth_tokens         = "true"
    can_use_console_password    = "false"
    can_use_customer_secret_keys = "true"
    can_use_smtp_credentials    = "true"
}
```

Argument Reference

The following arguments are supported:

- `user_id` - (Required) The OCID of the user.

- `can_use_api_keys` - (Optional) (Updatable) Indicates if the user can use API keys.

- `can_use_auth_tokens` - (Optional) (Updatable) Indicates if the user can use SWIFT passwords / auth tokens.

- `can_use_console_password` - (Optional) (Updatable) Indicates if the user can log in to the console.

- `can_use_customer_secret_keys` - (Optional) (Updatable) Indicates if the user can use SigV4 symmetric keys.

- `can_use_smtp_credentials` - (Optional) (Updatable) Indicates if the user can use SMTP passwords.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `user_id` - The OCID of the user.

- `can_use_api_keys` - Indicates if the user can use API keys.

- `can_use_auth_tokens` - Indicates if the user can use SWIFT passwords / auth tokens.

- `can_use_console_password` - Indicates if the user can log in to the console.

- `can_use_customer_secret_keys` - Indicates if the user can use SigV4 symmetric keys.

- `can_use_smtp_credentials` - Indicates if the user can use SMTP passwords.

Import

Users can be imported using the `id`, e.g.

```
$ terraform import oci_identity_user_capabilities_management.test_user_capabilities_management "capabilit
ies/{userId}"
```

oci_identity_user_group_membership

This resource provides the User Group Membership resource in Oracle Cloud Infrastructure Identity service.

Adds the specified user to the specified group and returns a `UserGroupMembership` object with its own OCID.

Example Usage

```
resource "oci_identity_user_group_membership" "test_user_group_membership" {
    #Required
    group_id = "${oci_identity_group.test_group.id}"
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `group_id` - (Required) The OCID of the group.

- `user_id` - (Required) The OCID of the user.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the tenancy containing the user, group, and membership object.

- `group_id` - The OCID of the group.

- `id` - The OCID of the membership.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `state` - The membership's current state.

- `time_created` - Date and time the membership was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `user_id` - The OCID of the user.

Import

UserGroupMemberships can be imported using the `id`, e.g.

```
$ terraform import oci_identity_user_group_membership.test_user_group_membership "id"
```

oci_kms_encrypted_data

The `oci_kms_encrypted_data` resource creates and manages an OCI EncryptedData

Encrypts data using the given EncryptDataDetails resource. Plaintext included in the example request is a base64-encoded value of a UTF-8 string.

Example Usage

```
resource "oci_kms_encrypted_data" "test_encrypted_data" {
    #Required
    crypto_endpoint = "${var.encrypted_data_crypto_endpoint}"
    key_id = "${oci_kms_key.test_key.id}"
    plaintext = "${var.encrypted_data_plaintext}"

    #Optional
    associated_data = "${var.encrypted_data_associated_data}"
}
```

Argument Reference

The following arguments are supported:

- `associated_data` - (Optional) Information that can be used to provide an encryption context for the encrypted data. The length of the string representation of the associatedData must be fewer than 4096 characters.

- `crypto_endpoint` - (Required) The service endpoint to perform cryptographic operations against. Cryptographic operations include 'Encrypt,' 'Decrypt,' and 'GenerateDataEncryptionKey' operations. see Vault Crypto endpoint.

- `key_id` - (Required) The OCID of the key to encrypt with.

- `plaintext` - (Required) The plaintext data to encrypt.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `ciphertext` - The encrypted data.

Import

Not Supported.

oci_kms_generated_key

The `oci_kms_generated_key` resource creates and manages an OCI GeneratedKey

Generates a key that you can use to encrypt or decrypt data.

Example Usage

```
resource "oci_kms_generated_key" "test_generated_key" {
    #Required
    crypto_endpoint = "${var.generated_key_crypto_endpoint}"
    include_plaintext_key = "${var.generated_key_include_plaintext_key}"
    key_id = "${oci_kms_key.test_key.id}"
    key_shape {
        #Required
        algorithm = "${var.generated_key_key_shape_algorithm}"
        length = "${var.generated_key_key_shape_length}"
    }

    #Optional
    associated_data = "${var.generated_key_associated_data}"
}
```

Argument Reference

The following arguments are supported:

* `associated_data` - (Optional) Information that can be used to provide an encryption context for the encrypted data. The length of the string representation of the associatedData must be fewer than 4096 characters.

* `crypto_endpoint` - (Required) The service endpoint to perform cryptographic operations against. Cryptographic operations include 'Encrypt,' 'Decrypt,' and 'GenerateDataEncryptionKey' operations. see Vault Crypto endpoint.

* `include_plaintext_key` - (Required) If true, the generated key is also returned unencrypted.

* `key_id` - (Required) The OCID of the master encryption key to encrypt the generated data encryption key with.

* `key_shape` - (Required)
    * `algorithm` - (Required) The algorithm used by a key's KeyVersions to encrypt or decrypt.

    * `length` - (Required) The length of the key, expressed as an integer. Values of 16, 24, or 32 are supported.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

* `ciphertext` - The encrypted generated data encryption key.

- `plaintext` - The plaintext generated data encryption key, a base64-encoded sequence of random bytes, which is included if the GenerateDataEncryptionKey request includes the "includePlaintextKey" parameter and sets its value to 'true'.

- `plaintext_checksum` - The checksum of the plaintext generated data encryption key, which is included if the GenerateDataEncryptionKey request includes the "includePlaintextKey parameter and sets its value to 'true'.

Import

Not Supported.

oci_kms_key

This resource provides the Key resource in Oracle Cloud Infrastructure Kms service.

Creates a new key.

Example Usage

```
resource "oci_kms_key" "test_key" {
    #Required
    compartment_id = "${var.compartment_id}"
    display_name = "${var.key_display_name}"
    key_shape {
        #Required
        algorithm = "${var.key_key_shape_algorithm}"
        length = "${var.key_key_shape_length}"
    }
    management_endpoint = "${var.key_management_endpoint}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment that contains this key.

- `desired_state` - (Optional) (Updatable) Desired state of the key. Possible values : `ENABLED` or `DISABLED`

- `display_name` - (Required) (Updatable) A user-friendly name for the key. It does not have to be unique, and it is changeable. Avoid entering confidential information.

- `key_shape` - (Required)
    - `algorithm` - (Required) The algorithm used by a key's KeyVersions to encrypt or decrypt.

    - `length` - (Required) The length of the key, expressed as an integer. Values of 16, 24, or 32 are supported.

- `management_endpoint` - (Required) The service endpoint to perform management operations against. Management operations include 'Create,' 'Update,' 'List,' 'Get,' and 'Delete' operations. See Vault Management endpoint.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains this key.

- `current_key_version` - The OCID of the KeyVersion resource used in cryptographic operations. During key rotation, service may be in transitional state where this or a newer KeyVersion are used intermittently, and currentKeyVersion

field is updated once service is guaranteed to use new KeyVersion for all consequent encrypt operations.

- `display_name` - A user-friendly name for the key. It does not have to be unique, and it is changeable. Avoid entering confidential information.

- `id` - The OCID of the key.

- `key_shape` -
    - `algorithm` - The algorithm used by a key's KeyVersions to encrypt or decrypt.

    - `length` - The length of the key, expressed as an integer. Values of 16, 24, or 32 are supported.

- `state` - The key's current state. Example: `ENABLED`

- `time_created` - The date and time the key was created, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `vault_id` - The OCID of the vault that contains this key.

Import

Keys can be imported using the `id`, e.g.

```
$ terraform import oci_kms_key.test_key "managementEndpoint/{managementEndpoint}/keys/{keyId}"
```

oci_kms_key_version

The `oci_kms_key_version` resource creates and manages an OCI KeyVersion

Generates new cryptographic material for a key. Key must be in an `ENABLED` state to be rotated.

Example Usage

```
resource "oci_kms_key_version" "test_key_version" {
    #Required
    key_id = "${oci_kms_key.test_key.id}"
    management_endpoint = "${var.key_version_management_endpoint}"
}
```

Argument Reference

The following arguments are supported:

- `key_id` - (Required) The OCID of the key.

- `management_endpoint` - (Required) The service endpoint to perform management operations against. Management operations include 'Create,' 'Update,' 'List,' 'Get,' and 'Delete' operations. See Vault Management endpoint.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains this key version.

- `id` - The OCID of the key version.

- `key_id` - The OCID of the key associated with this key version.

- `time_created` - The date and time this key version was created, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `vault_id` - The OCID of the vault that contains this key version.

Import

KeyVersions can be imported using the `id`, e.g.

```
$ terraform import oci_kms_key_version.test_key_version "managementEndpoint/{managementEndpoint}/keys/{keyId}/keyVersions/{keyVersionId}"
```

oci_kms_vault

The `oci_kms_vault` resource creates and manages an OCI Vault

Creates a new vault. The type of vault you create determines key placement, pricing, and available options. Options include storage isolation, a dedicated service endpoint instead of a shared service endpoint for API calls, and a dedicated HSM or a multitenant HSM.

Example Usage

```
resource "oci_kms_vault" "test_vault" {
    #Required
    compartment_id = "${var.compartment_id}"
    display_name = "${var.vault_display_name}"
    vault_type = "${var.vault_vault_type}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment where you want to create this vault.

- `display_name` - (Required) (Updatable) A user-friendly name for the vault. It does not have to be unique, and it is changeable. Avoid entering confidential information.

- `vault_type` - (Required) The type of vault to create. Each type of vault stores the key with different degrees of isolation and has different options and pricing.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains this vault.

- `crypto_endpoint` - The service endpoint to perform cryptographic operations against. Cryptographic operations include 'Encrypt,' 'Decrypt,' and 'GenerateDataEncryptionKey' operations.

- `display_name` - A user-friendly name for the vault. It does not have to be unique, and it is changeable. Avoid entering confidential information.

- `id` - The OCID of the vault.

- `management_endpoint` - The service endpoint to perform management operations against. Management operations include 'Create,' 'Update,' 'List,' 'Get,' and 'Delete' operations.

- `state` - The vault's current state. Example: `DELETED`

- `time_created` - The date and time this vault was created, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `time_of_deletion` - An optional property for the deletion time of the Vault expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `vault_type` - The type of vault. Each type of vault stores the key with different degrees of isolation and has different options and pricing.

Import

Vaults can be imported using the `id`, e.g.

```
$ terraform import oci_kms_vault.test_vault "id"
```

oci_load_balancer_backend

This resource provides the Backend resource in Oracle Cloud Infrastructure Load Balancer service.

Adds a backend server to a backend set.

Example Usage

```
resource "oci_load_balancer_backend" "test_backend" {
    #Required
    backendset_name = "${oci_load_balancer_backend_set.test_backend_set.name}"
    ip_address = "${var.backend_ip_address}"
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
    port = "${var.backend_port}"

    #Optional
    backup = "${var.backend_backup}"
    drain = "${var.backend_drain}"
    offline = "${var.backend_offline}"
    weight = "${var.backend_weight}"
}
```

Argument Reference

The following arguments are supported:

- `backendset_name` - (Required) The name of the backend set to add the backend server to. Example: `example_backend_set`

- `backup` - (Optional) (Updatable) Whether the load balancer should treat this server as a backup unit. If `true`, the load balancer forwards no ingress traffic to this backend server unless all other backend servers not marked as "backup" fail the health check policy. Example: `false`

- `drain` - (Optional) (Updatable) Whether the load balancer should drain this server. Servers marked "drain" receive no new incoming traffic. Example: `false`

- `ip_address` - (Required) The IP address of the backend server. Example: `10.0.0.3`

- `load_balancer_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer associated with the backend set and servers.

- `offline` - (Optional) (Updatable) Whether the load balancer should treat this server as offline. Offline servers receive no incoming traffic. Example: `false`

- `port` - (Required) The communication port for the backend server. Example: `8080`

- `weight` - (Optional) (Updatable) The load balancing policy weight assigned to the server. Backend servers with a higher weight receive a larger proportion of incoming traffic. For example, a server weighted '3' receives 3 times the number of new connections as a server weighted '1'. For more information on load balancing policies, see How Load Balancing Policies Work (https://docs.cloud.oracle.com/iaas/Content/Balance/Reference/lbpolicies.htm). Example: 3

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `backup` - Whether the load balancer should treat this server as a backup unit. If `true`, the load balancer forwards no ingress traffic to this backend server unless all other backend servers not marked as "backup" fail the health check policy. Example: `false`

- `drain` - Whether the load balancer should drain this server. Servers marked "drain" receive no new incoming traffic. Example: `false`

- `ip_address` - The IP address of the backend server. Example: `10.0.0.3`

- `name` - A read-only field showing the IP address and port that uniquely identify this backend server in the backend set. Example: `10.0.0.3:8080`

- `offline` - Whether the load balancer should treat this server as offline. Offline servers receive no incoming traffic. Example: `false`

- `port` - The communication port for the backend server. Example: `8080`

- `weight` - The load balancing policy weight assigned to the server. Backend servers with a higher weight receive a larger proportion of incoming traffic. For example, a server weighted '3' receives 3 times the number of new connections as a server weighted '1'. For more information on load balancing policies, see How Load Balancing Policies Work (https://docs.cloud.oracle.com/iaas/Content/Balance/Reference/lbpolicies.htm). Example: 3

Import

Backends can be imported using the `id`, e.g.

```
$ terraform import oci_load_balancer_backend.test_backend "loadBalancers/{loadBalancerId}/backendSets/{backendSetName}/backends/{backendName}"
```

oci_load_balancer_backend_set

Other supported legacy names/aliases: * `oci_load_balancer_backendset`

This resource provides the Backend Set resource in Oracle Cloud Infrastructure Load Balancer service.

Adds a backend set to a load balancer.

Example Usage

```
resource "oci_load_balancer_backend_set" "test_backend_set" {
    #Required
    health_checker {
        #Required
        protocol = "${var.backend_set_health_checker_protocol}"

        #Optional
        interval_ms = "${var.backend_set_health_checker_interval_ms}"
        port = "${var.backend_set_health_checker_port}"
        response_body_regex = "${var.backend_set_health_checker_response_body_regex}"
        retries = "${var.backend_set_health_checker_retries}"
        return_code = "${var.backend_set_health_checker_return_code}"
        timeout_in_millis = "${var.backend_set_health_checker_timeout_in_millis}"
        url_path = "${var.backend_set_health_checker_url_path}"
    }
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
    name = "${var.backend_set_name}"
    policy = "${var.backend_set_policy}"

    #Optional
    session_persistence_configuration {
        #Required
        cookie_name = "${var.backend_set_session_persistence_configuration_cookie_name}"

        #Optional
        disable_fallback = "${var.backend_set_session_persistence_configuration_disable_fallback}"
    }
    ssl_configuration {
        #Required
        certificate_name = "${oci_load_balancer_certificate.test_certificate.name}"

        #Optional
        verify_depth = "${var.backend_set_ssl_configuration_verify_depth}"
        verify_peer_certificate = "${var.backend_set_ssl_configuration_verify_peer_certificate}"
    }
}
```

Argument Reference

The following arguments are supported:

- backend - (Optional) (Updatable)
    - backup - (Optional) (Updatable) Whether the load balancer should treat this server as a backup unit. If `true`, the load balancer forwards no ingress traffic to this backend server unless all other backend servers not marked as "backup" fail the health check policy. Example: `false`

- drain - (Optional) (Updatable) Whether the load balancer should drain this server. Servers marked "drain" receive no new incoming traffic. Example: `false`

- ip_address - (Required) (Updatable) The IP address of the backend server. Example: `10.0.0.3`

- offline - (Optional) (Updatable) Whether the load balancer should treat this server as offline. Offline servers receive no incoming traffic. Example: `false`

- port - (Required) (Updatable) The communication port for the backend server. Example: `8080`

- weight - (Optional) (Updatable) The load balancing policy weight assigned to the server. Backend servers with a higher weight receive a larger proportion of incoming traffic. For example, a server weighted '3' receives 3 times the number of new connections as a server weighted '1'. For more information on load balancing policies, see How Load Balancing Policies Work (https://docs.cloud.oracle.com/iaas/Content/Balance/Reference/lbpolicies.htm). Example: `3`

- health_checker - (Required) (Updatable)
  - interval_ms - (Optional) (Updatable) The interval between health checks, in milliseconds. Example: `10000`

  - port - (Optional) (Updatable) The backend server port against which to run the health check. If the port is not specified, the load balancer uses the port information from the `Backend` object. Example: `8080`

  - protocol - (Required) (Updatable) The protocol the health check must use; either HTTP or TCP. Example: `HTTP`

  - response_body_regex - (Optional) (Updatable) A regular expression for parsing the response body from the backend server. Example: `^((?!false).|\s)*$`

  - retries - (Optional) (Updatable) The number of retries to attempt before a backend server is considered "unhealthy". Example: `3`

  - return_code - (Optional) (Updatable) The status code a healthy backend server should return. Example: `200`

  - timeout_in_millis - (Optional) (Updatable) The maximum time, in milliseconds, to wait for a reply to a health check. A health check is successful only if a reply returns within this timeout period. Example: `3000`

  - url_path - (Optional) (Updatable) The path against which to run the health check. Example: `/healthcheck`

- load_balancer_id - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer on which to add a backend set.

- name - (Required) A friendly name for the backend set. It must be unique and it cannot be changed.

  Valid backend set names include only alphanumeric characters, dashes, and underscores. Backend set names cannot contain spaces. Avoid entering confidential information.

  Example: `example_backend_set`

- policy - (Required) (Updatable) The load balancer policy for the backend set. To get a list of available policies, use the ListPolicies (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/LoadBalancerPolicy/ListPolicies) operation. Example: `LEAST_CONNECTIONS`

- session_persistence_configuration - (Optional) (Updatable)

  - cookie_name - (Required) (Updatable) The name of the cookie used to detect a session initiated by the backend server. Use '*' to specify that any cookie set by the backend causes the session to persist. Example: `example_cookie`

- - `disable_fallback` - (Optional) (Updatable) Whether the load balancer is prevented from directing traffic from a persistent session client to a different backend server if the original server is unavailable. Defaults to false. Example: `false`

- `ssl_configuration` - (Optional) (Updatable)

  - `certificate_name` - (Required) (Updatable) A friendly name for the certificate bundle. It must be unique and it cannot be changed. Valid certificate bundle names include only alphanumeric characters, dashes, and underscores. Certificate bundle names cannot contain spaces. Avoid entering confidential information. Example: `example_certificate_bundle`

  - `verify_depth` - (Optional) (Updatable) The maximum depth for peer certificate chain verification. Example: `3`

  - `verify_peer_certificate` - (Optional) (Updatable) Whether the load balancer listener should verify peer certificates. Example: `true`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `backend` -
  - `backup` - Whether the load balancer should treat this server as a backup unit. If `true`, the load balancer forwards no ingress traffic to this backend server unless all other backend servers not marked as "backup" fail the health check policy. Example: `false`

  - `drain` - Whether the load balancer should drain this server. Servers marked "drain" receive no new incoming traffic. Example: `false`

  - `ip_address` - The IP address of the backend server. Example: `10.0.0.3`

  - `name` - A read-only field showing the IP address and port that uniquely identify this backend server in the backend set. Example: `10.0.0.3:8080`

  - `offline` - Whether the load balancer should treat this server as offline. Offline servers receive no incoming traffic. Example: `false`

  - `port` - The communication port for the backend server. Example: `8080`

  - `weight` - The load balancing policy weight assigned to the server. Backend servers with a higher weight receive a larger proportion of incoming traffic. For example, a server weighted '3' receives 3 times the number of new connections as a server weighted '1'. For more information on load balancing policies, see How Load Balancing Policies Work (https://docs.cloud.oracle.com/iaas/Content/Balance/Reference/lbpolicies.htm). Example: `3`

- `health_checker` -
  - `interval_ms` - The interval between health checks, in milliseconds. The default is 30000 (30 seconds). Example: `30000`

  - `port` - The backend server port against which to run the health check. If the port is not specified, the load balancer uses the port information from the `Backend` object. Example: `8080`

- `protocol` - The protocol the health check must use; either HTTP or TCP. Example: `HTTP`

- `response_body_regex` - A regular expression for parsing the response body from the backend server. Example: `^((?!false).|\s)*$`

- `retries` - The number of retries to attempt before a backend server is considered "unhealthy". Defaults to 3. Example: `3`

- `return_code` - The status code a healthy backend server should return. If you configure the health check policy to use the HTTP protocol, you can use common HTTP status codes such as "200". Example: `200`

- `timeout_in_millis` - The maximum time, in milliseconds, to wait for a reply to a health check. A health check is successful only if a reply returns within this timeout period. Defaults to 3000 (3 seconds). Example: `3000`

- `url_path` - The path against which to run the health check. Example: `/healthcheck`

- `name` - A friendly name for the backend set. It must be unique and it cannot be changed.

  Valid backend set names include only alphanumeric characters, dashes, and underscores. Backend set names cannot contain spaces. Avoid entering confidential information.

  Example: `example_backend_set`

- `policy` - The load balancer policy for the backend set. To get a list of available policies, use the ListPolicies (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/LoadBalancerPolicy/ListPolicies) operation. Example: `LEAST_CONNECTIONS`

- `session_persistence_configuration` -

  - `cookie_name` - The name of the cookie used to detect a session initiated by the backend server. Use '*' to specify that any cookie set by the backend causes the session to persist. Example: `example_cookie`

  - `disable_fallback` - Whether the load balancer is prevented from directing traffic from a persistent session client to a different backend server if the original server is unavailable. Defaults to false. Example: `false`

- `ssl_configuration` -

  - `certificate_name` - A friendly name for the certificate bundle. It must be unique and it cannot be changed. Valid certificate bundle names include only alphanumeric characters, dashes, and underscores. Certificate bundle names cannot contain spaces. Avoid entering confidential information. Example: `example_certificate_bundle`

  - `verify_depth` - The maximum depth for peer certificate chain verification. Example: 3

  - `verify_peer_certificate` - Whether the load balancer listener should verify peer certificates. Defaults to true. Example: `true`

Import

BackendSets can be imported using the `id`, e.g.

```
$ terraform import oci_load_balancer_backend_set.test_backend_set "loadBalancers/{loadBalancerId}/backend
Sets/{backendSetName}"
```

oci_load_balancer_certificate

This resource provides the Certificate resource in Oracle Cloud Infrastructure Load Balancer service.

Creates an asynchronous request to add an SSL certificate bundle.

Set the terraform flag `lifecycle { create_before_destroy = true }` in your certificate to facilitate rotating certificates. A certificate cannot be deleted if it is attached to another resource (a listener or a backend set for example). Because certificate_name in the listener is an updatable parameter, terraform will attempt to recreate the certificate first and then update the listener but the certificate cannot be deleted while it is attached to a listener so it will fail. Setting the flag makes it so that when a certificate is recreated, the new certificate will be created first before the old one gets deleted. Whenever you change any values on a certificate that causes it to be recreated the certificate_name MUST also change. Otherwise you will get an error saying that a certificate with that name already exists.

Example Usage

```
resource "oci_load_balancer_certificate" "test_certificate" {
    #Required
    certificate_name = "${var.certificate_certificate_name}"
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"

    #Optional
    ca_certificate = "${var.certificate_ca_certificate}"
    passphrase = "${var.certificate_passphrase}"
    private_key = "${var.certificate_private_key}"
    public_certificate = "${var.certificate_public_certificate}"

    lifecycle {
        create_before_destroy = true
    }
}
```

Argument Reference

The following arguments are supported:

* `ca_certificate` - (Optional) The Certificate Authority certificate, or any interim certificate, that you received from your SSL certificate provider.

  Example:

  ```
  -----BEGIN CERTIFICATE-----
  MIIEczCCA1ugAwIBAgIBADANBgkqhkiG9w0BAQQFAD..AkGA1UEBhMCR0Ix
  EzARBgNVBAgTClNvbWUtU3RhdGUxFDASBgNVBAoTC0..0EgTHRkMTcwNQYD
  VQQLEy5DbGFzcyAxIFB1YmxpYyBQcmltYXJ5IENlcn..XRpb24gQXV0aG9y
  aXR5MRQwEgYDVQQDEwtCZXN0IENBIEx0ZDAeFw0wMD..TUwMTZaFw0wMTAy
  ...
  -----END CERTIFICATE-----
  ```

- `certificate_name` - (Required) A friendly name for the certificate bundle. It must be unique and it cannot be changed. Valid certificate bundle names include only alphanumeric characters, dashes, and underscores. Certificate bundle names cannot contain spaces. Avoid entering confidential information. Example: `example_certificate_bundle`

- `load_balancer_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer on which to add the certificate bundle.

- `passphrase` - (Optional) A passphrase for encrypted private keys. This is needed only if you created your certificate with a passphrase.

- `private_key` - (Optional) The SSL private key for your certificate, in PEM format.

  Example:

  ```
  -----BEGIN RSA PRIVATE KEY-----
  jO1O1v2ftXMsawM90tnXwc6xhOAT1gDBC9S8DKeca..JZNUgYYwNS0dP2UK
  tmyN+XqVcAKw4HqVmChXy5b5msu8eIq3uc2NqNVtR..2ksSLukP8pxXcHyb
  +sEwvM4uf8qbnHAqwnOnP9+KV9vds6BaH1eRA4CHz..n+NVZlzBsTxTlS16
  /Umr7wJzVrMqK5sDiSu4WuaaBdqMGfL5hLsTjcBFD..Da2iyQmSKuVD4lIZ
  ...
  -----END RSA PRIVATE KEY-----
  ```

- `public_certificate` - (Optional) The public certificate, in PEM format, that you received from your SSL certificate provider.

  Example:

  ```
  -----BEGIN CERTIFICATE-----
  MIIC2jCCAkMCAg38MA0GCSqGSIb3DQEBBQUAMIGbM..QswCQYDVQQGEwJKU
  A1UECBMFVG9reW8xEDAOBgNVBAcTB0NodW8ta3UxE..TAPBgNVBAoTCEZyY
  MRgwFgYDVQQLEw9XZWJDZXJ0IFN1cHBvcnQxGDAWB..gNVBAMTD0ZyYW5rN
  YiBDQTEjMCEGCSqGSIb3DQEJARYUc3VwcG9ydEBmc..mFuazRkZC5jb20wH
  ...
  -----END CERTIFICATE-----
  ```

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `ca_certificate` - The Certificate Authority certificate, or any interim certificate, that you received from your SSL certificate provider.

  Example:

```
-----BEGIN CERTIFICATE-----
MIIEczCCA1ugAwIBAgIBADANBgkqhkiG9w0BAQQFAD..AkGA1UEBhMCR0Ix
EzARBgNVBAgTClNvbWUtU3RhdGUxFDASBgNVBAoTC0..0EgTHRkMTcwNQYD
VQQLEy5DbGFzcyAxIFB1YmxpYyBQcmltYXJ5IENlcn..XRpb24gQXV0aG9y
aXR5MRQwEgYDVQQDEwtCZXN0IENBIEx0ZDAeFw0wMD..TUwMTZaFw0wMTAy
...
-----END CERTIFICATE-----
```

- `certificate_name` - A friendly name for the certificate bundle. It must be unique and it cannot be changed. Valid certificate bundle names include only alphanumeric characters, dashes, and underscores. Certificate bundle names cannot contain spaces. Avoid entering confidential information. Example: `example_certificate_bundle`

- `public_certificate` - The public certificate, in PEM format, that you received from your SSL certificate provider.

  Example:

```
-----BEGIN CERTIFICATE-----
MIIC2jCCAkMCAg38MA0GCSqGSIb3DQEBBQUAMIGbMQswCQYDVQQGEwJKUDEOMAwG
A1UECBMFVG9reW8xEDAOBgNVBAcTB0NodW8ta3UxETAPBgNVBAoTCEZyYW5rNERE
MRgwFgYDVQQLEw9XZWJDZXJ0IFN1cHBvcnQxGDAWBgNVBAMTD0ZyYW5rNEREIFdl
YiBDQTEjMCEGCSqGSIb3DQEJARYUc3VwcG9ydEBmcmFuazRkZC5jb20wHhcNMTIw
...
-----END CERTIFICATE-----
```

oci_load_balancer_hostname

This resource provides the Hostname resource in Oracle Cloud Infrastructure Load Balancer service.

Adds a hostname resource to the specified load balancer. For more information, see Managing Request Routing (https://docs.cloud.oracle.com/iaas/Content/Balance/Tasks/managingrequest.htm).

Example Usage

```
resource "oci_load_balancer_hostname" "test_hostname" {
    #Required
    hostname = "${var.hostname_hostname}"
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
    name = "${var.hostname_name}"
}
```

Argument Reference

The following arguments are supported:

* `hostname` - (Required) (Updatable) A virtual hostname. For more information about virtual hostname string construction, see Managing Request Routing (https://docs.cloud.oracle.com/iaas/Content/Balance/Tasks/managingrequest.htm#routing). Example: `app.example.com`

* `load_balancer_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer to add the hostname to.

* `name` - (Required) A friendly name for the hostname resource. It must be unique and it cannot be changed. Avoid entering confidential information. Example: `example_hostname_001`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

* `hostname` - A virtual hostname. For more information about virtual hostname string construction, see Managing Request Routing (https://docs.cloud.oracle.com/iaas/Content/Balance/Tasks/managingrequest.htm#routing). Example: `app.example.com`

* `name` - A friendly name for the hostname resource. It must be unique and it cannot be changed. Avoid entering confidential information. Example: `example_hostname_001`

Import

Hostnames can be imported using the `id`, e.g.

```
$ terraform import oci_load_balancer_hostname.test_hostname "loadBalancers/{loadBalancerId}/hostnames/{name}"
```

oci_load_balancer_listener

This resource provides the Listener resource in Oracle Cloud Infrastructure Load Balancer service.

Adds a listener to a load balancer.

Example Usage

```
resource "oci_load_balancer_listener" "test_listener" {
    #Required
    default_backend_set_name = "${var.listener_default_backend_set_name}"
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
    name = "${var.listener_name}"
    port = "${var.listener_port}"
    protocol = "${var.listener_protocol}"

    #Optional
    connection_configuration {
        #Required
        idle_timeout_in_seconds = "${var.listener_connection_configuration_idle_timeout_in_seconds}"
    }
    hostname_names = ["${oci_load_balancer_hostname.test_hostname.name}"]
    path_route_set_name = "${oci_load_balancer_path_route_set.test_path_route_set.name}"
    ssl_configuration {
        #Required
        certificate_name = "${oci_load_balancer_certificate.test_certificate.name}"

        #Optional
        verify_depth = "${var.listener_ssl_configuration_verify_depth}"
        verify_peer_certificate = "${var.listener_ssl_configuration_verify_peer_certificate}"
    }
}
```

Argument Reference

The following arguments are supported:

- `connection_configuration` - (Optional) (Updatable)

    - `idle_timeout_in_seconds` - (Required) (Updatable) The maximum idle time, in seconds, allowed between two successive receive or two successive send operations between the client and backend servers. A send operation does not reset the timer for receive operations. A receive operation does not reset the timer for send operations.

        For more information, see Connection Configuration (https://docs.cloud.oracle.com/iaas/Content/Balance/Reference/connectionreuse.htm#ConnectionConfiguration).

        Example: `1200`

- `default_backend_set_name` - (Required) (Updatable) The name of the associated backend set. Example: `example_backend_set`

- `hostname_names` - (Optional) (Updatable) An array of hostname resource names.

- `load_balancer_id` - (Required) The OCID

(https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer on which to add a listener.

- `name` - (Required) A friendly name for the listener. It must be unique and it cannot be changed. Avoid entering confidential information. Example: `example_listener`

- `path_route_set_name` - (Optional) (Updatable) The name of the set of path-based routing rules, PathRouteSet (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/PathRouteSet/), applied to this listener's traffic. Example: `example_path_route_set`

- `port` - (Required) (Updatable) The communication port for the listener. Example: `80`

- `protocol` - (Required) (Updatable) The protocol on which the listener accepts connection requests. To get a list of valid protocols, use the ListProtocols (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/LoadBalancerProtocol/ListProtocols) operation. Example: `HTTP`

- `ssl_configuration` - (Optional) (Updatable)

  - `certificate_name` - (Required) (Updatable) A friendly name for the certificate bundle. It must be unique and it cannot be changed. Valid certificate bundle names include only alphanumeric characters, dashes, and underscores. Certificate bundle names cannot contain spaces. Avoid entering confidential information. Example: `example_certificate_bundle`

  - `verify_depth` - (Optional) (Updatable) The maximum depth for peer certificate chain verification. Example: `3`

  - `verify_peer_certificate` - (Optional) (Updatable) Whether the load balancer listener should verify peer certificates. Example: `true`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `connection_configuration` -
  - `idle_timeout_in_seconds` - The maximum idle time, in seconds, allowed between two successive receive or two successive send operations between the client and backend servers. A send operation does not reset the timer for receive operations. A receive operation does not reset the timer for send operations. The default values are: * 300 seconds for TCP * 60 seconds for HTTP and WebSocket protocols. Note: The protocol is set at the listener. Modify this parameter if the client or backend server stops transmitting data for more than the default time. Some examples include: * The client sends a database query to the backend server and the database takes over 300 seconds to execute. Therefore, the backend server does not transmit any data within 300 seconds. * The client uploads data using the HTTP protocol. During the upload, the backend does not transmit any data to the client for more than 60 seconds. * The client downloads data using the HTTP protocol. After the initial request, it stops transmitting data to the backend server for more than 60 seconds. * The client starts transmitting data after establishing a WebSocket connection, but the backend server does not transmit data for more than 60 seconds. * The backend server starts transmitting data after establishing a WebSocket connection, but the client does not transmit data for more than 60 seconds. The maximum value is 7200 seconds. Contact My Oracle Support to file a service request if you want to increase this limit for your tenancy. For more information, see Service Limits (https://docs.us-phoenix-

1.oraclecloud.com/Content/General/Concepts/servicelimits.htm). Example: `1200`

- `default_backend_set_name` - The name of the associated backend set. Example: `example_backend_set`

- `hostname_names` - An array of hostname resource names.

- `load_balancer_id` - The OCID (https://docs.us-phoenix-1.oraclecloud.com/Content/General/Concepts/identifiers.htm) of the load balancer on which to add a listener.

- `name` - A friendly name for the listener. It must be unique and it cannot be changed. Avoid entering confidential information. Example: `My listener`

- `path_route_set_name` - The name of the set of path-based routing rules, PathRouteSet (https://docs.us-phoenix-1.oraclecloud.com/api/#/en/loadbalancer/20170115/PathRouteSet/), applied to this listener's traffic. Example: `path-route-set-001`

- `port` - The communication port for the listener. Example: `80`

- `protocol` - The protocol on which the listener accepts connection requests. To get a list of valid protocols, use the ListProtocols (https://docs.us-phoenix-1.oraclecloud.com/api/#/en/loadbalancer/20170115/LoadBalancerProtocol/ListProtocols) operation. Example: `HTTP`

- `ssl_configuration` -
    - `certificate_name` - A friendly name for the certificate bundle. It must be unique and it cannot be changed. Valid certificate bundle names include only alphanumeric characters, dashes, and underscores. Certificate bundle names cannot contain spaces. Avoid entering confidential information. Example: `example_certificate_bundle`

    - `verify_depth` - The maximum depth for peer certificate chain verification. Example: `3`

    - `verify_peer_certificate` - Whether the load balancer listener should verify peer certificates. Example: `true`

Import

Listeners can be imported using the `id`, e.g.

```
$ terraform import oci_load_balancer_listener.test_listener "loadBalancers/{loadBalancerId}/listeners/{listenerName}"
```

oci_load_balancer_load_balancer

Other supported legacy names/aliases: * `oci_load_balancer`

This resource provides the Load Balancer resource in Oracle Cloud Infrastructure Load Balancer service.

Creates a new load balancer in the specified compartment. For general information about load balancers, see Overview of the Load Balancing Service (https://docs.cloud.oracle.com/iaas/Content/Balance/Concepts/balanceoverview.htm).

For the purposes of access control, you must provide the OCID of the compartment where you want the load balancer to reside. Notice that the load balancer doesn't have to be in the same compartment as the VCN or backend set. If you're not sure which compartment to use, put the load balancer in the same compartment as the VCN. For information about access control and compartments, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm).

You must specify a display name for the load balancer. It does not have to be unique, and you can change it.

For information about Availability Domains, see Regions and Availability Domains (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/regions.htm). To get a list of Availability Domains, use the `ListAvailabilityDomains` operation in the Identity and Access Management Service API.

All Oracle Cloud Infrastructure resources, including load balancers, get an Oracle-assigned, unique ID called an Oracle Cloud Identifier (OCID). When you create a resource, you can find its OCID in the response. You can also retrieve a resource's OCID by using a List API operation on that resource type, or by viewing the resource in the Console. Fore more information, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

When you create a load balancer, the system assigns an IP address. To get the IP address, use the GetLoadBalancer (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/LoadBalancer/GetLoadBalancer) operation.

Example Usage

```
resource "oci_load_balancer_load_balancer" "test_load_balancer" {
    #Required
    compartment_id = "${var.compartment_id}"
    display_name = "${var.load_balancer_display_name}"
    shape = "${var.load_balancer_shape}"
    subnet_ids = "${var.load_balancer_subnet_ids}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_tags = {"Department"= "Finance"}
    is_private = "${var.load_balancer_is_private}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment in which to create the load balancer.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Required) (Updatable) A user-friendly name. It does not have to be unique, and it is changeable. Avoid entering confidential information. Example: `example_load_balancer`

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `is_private` - (Optional) Whether the load balancer has a VCN-local (private) IP address.

  If "true", the service assigns a private IP address to the load balancer. The load balancer requires only one subnet to host both the primary and secondary load balancers. The private IP address is local to the subnet. The load balancer is accessible only from within the VCN that contains the associated subnet, or as further restricted by your security list rules. The load balancer can route traffic to any backend server that is reachable from the VCN.

  For a private load balancer, both the primary and secondary load balancer hosts are within the same Availability Domain.

  If "false", the service assigns a public IP address to the load balancer. A load balancer with a public IP address requires two subnets, each in a different Availability Domain. One subnet hosts the primary load balancer and the other hosts the secondary (standby) load balancer. A public load balancer is accessible from the internet, depending on your VCN's security list rules (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/securitylists.htm).

  Example: `true`

- `shape` - (Required) A template that determines the total pre-provisioned bandwidth (ingress plus egress). To get a list of available shapes, use the ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/LoadBalancerShape/ListShapes) operation. Example: `100Mbps`

- `subnet_ids` - (Required) An array of subnet OCIDs (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment containing the load balancer.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. It does not have to be unique, and it is changeable. Example:

```
example_load_balancer
```

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer.

- `ip_address_details` - An array of IP addresses.

  - `ip_address` - An IP address. Example: `192.168.0.3`

  - `is_public` - Whether the IP address is public or private.

    If "true", the IP address is public and accessible from the internet.

    If "false", the IP address is private and accessible only from within the associated VCN.

- `ip_addresses` - An array of IP addresses. Deprecated: use ip_address_details instead

- `is_private` - Whether the load balancer has a VCN-local (private) IP address.

  If "true", the service assigns a private IP address to the load balancer. The load balancer requires only one subnet to host both the primary and secondary load balancers. The private IP address is local to the subnet. The load balancer is accessible only from within the VCN that contains the associated subnet, or as further restricted by your security list rules. The load balancer can route traffic to any backend server that is reachable from the VCN.

  For a private load balancer, both the primary and secondary load balancer hosts are within the same Availability Domain.

  If "false", the service assigns a public IP address to the load balancer. A load balancer with a public IP address requires two subnets, each in a different Availability Domain. One subnet hosts the primary load balancer and the other hosts the secondary (standby) load balancer. A public load balancer is accessible from the internet, depending on your VCN's security list rules (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/securitylists.htm).

  Example: `true`

- `shape` - A template that determines the total pre-provisioned bandwidth (ingress plus egress). To get a list of available shapes, use the ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/LoadBalancerShape/ListShapes) operation. Example: `100Mbps`

- `state` - The current state of the load balancer.

- `subnet_ids` - An array of subnet OCIDs (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `time_created` - The date and time the load balancer was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

LoadBalancers can be imported using the `id`, e.g.

```
$ terraform import oci_load_balancer_load_balancer.test_load_balancer "id"
```

oci_load_balancer_path_route_set

This resource provides the Path Route Set resource in Oracle Cloud Infrastructure Load Balancer service.

Adds a path route set to a load balancer. For more information, see Managing Request Routing (https://docs.cloud.oracle.com/iaas/Content/Balance/Tasks/managingrequest.htm).

Example Usage

```
resource "oci_load_balancer_path_route_set" "test_path_route_set" {
    #Required
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
    name = "${var.path_route_set_name}"
    path_routes {
        #Required
        backend_set_name = "${oci_load_balancer_backend_set.test_backend_set.name}"
        path = "${var.path_route_set_path_routes_path}"
        path_match_type {
            #Required
            match_type = "${var.path_route_set_path_routes_path_match_type_match_type}"
        }
    }
}
```

Argument Reference

The following arguments are supported:

- `load_balancer_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer to add the path route set to.

- `name` - (Required) The name for this set of path route rules. It must be unique and it cannot be changed. Avoid entering confidential information. Example: `example_path_route_set`

- `path_routes` - (Required) (Updatable) The set of path route rules.

  - `backend_set_name` - (Required) (Updatable) The name of the target backend set for requests where the incoming URI matches the specified path. Example: `example_backend_set`

  - `path` - (Required) (Updatable) The path string to match against the incoming URI path.

    - Path strings are case-insensitive.

    - Asterisk (*) wildcards are not supported.

    - Regular expressions are not supported.

    Example: `/example/video/123`

  - `path_match_type` - (Required) (Updatable) The type of matching to apply to incoming URIs.

- `match_type` - (Required) (Updatable) Specifies how the load balancing service compares a PathRoute (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/requests/PathRoute) object's `path` string against the incoming URI.

    - **EXACT_MATCH** - Looks for a `path` string that exactly matches the incoming URI path.

    - **FORCE_LONGEST_PREFIX_MATCH** - Looks for the `path` string with the best, longest match of the beginning portion of the incoming URI path.

    - **PREFIX_MATCH** - Looks for a `path` string that matches the beginning portion of the incoming URI path.

    - **SUFFIX_MATCH** - Looks for a `path` string that matches the ending portion of the incoming URI path.

    For a full description of how the system handles `matchType` in a path route set containing multiple rules, see Managing Request Routing (https://docs.cloud.oracle.com/iaas/Content/Balance/Tasks/managingrequest.htm).

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `name` - The unique name for this set of path route rules. Avoid entering confidential information. Example: `example_path_route_set`

- `path_routes` - The set of path route rules.

    - `backend_set_name` - The name of the target backend set for requests where the incoming URI matches the specified path. Example: `example_backend_set`

    - `path` - The path string to match against the incoming URI path.

        - Path strings are case-insensitive.

        - Asterisk (*) wildcards are not supported.

        - Regular expressions are not supported.

        Example: `/example/video/123`

    - `path_match_type` - The type of matching to apply to incoming URIs.

        - `match_type` - Specifies how the load balancing service compares a PathRoute (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/requests/PathRoute) object's `path` string against the incoming URI.

            - **EXACT_MATCH** - Looks for a `path` string that exactly matches the incoming URI path.

            - **FORCE_LONGEST_PREFIX_MATCH** - Looks for the `path` string with the best, longest match of the beginning portion of the incoming URI path.

            - **PREFIX_MATCH** - Looks for a `path` string that matches the beginning portion of the incoming URI

path.

- **SUFFIX_MATCH** - Looks for a `path` string that matches the ending portion of the incoming URI path.

For a full description of how the system handles `matchType` in a path route set containing multiple rules, see Managing Request Routing (https://docs.cloud.oracle.com/iaas/Content/Balance/Tasks/managingrequest.htm).

Import

PathRouteSets can be imported using the `id`, e.g.

```
$ terraform import oci_load_balancer_path_route_set.test_path_route_set "loadBalancers/{loadBalancerId}/pathRouteSets/{pathRouteSetName}"
```

oci_objectstorage_bucket

This resource provides the Bucket resource in Oracle Cloud Infrastructure Object Storage service.

Creates a bucket in the given namespace with a bucket name and optional user-defined metadata.

Example Usage

```
resource "oci_objectstorage_bucket" "test_bucket" {
    #Required
    compartment_id = "${var.compartment_id}"
    name = "${var.bucket_name}"
    namespace = "${var.bucket_namespace}"

    #Optional
    access_type = "${var.bucket_access_type}"
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_tags = {"Department"= "Finance"}
    kms_key_id = "${oci_objectstorage_kms_key.test_kms_key.id}"
    metadata = "${var.bucket_metadata}"
    storage_tier = "${var.bucket_storage_tier}"
}
```

Argument Reference

The following arguments are supported:

- `access_type` - (Optional) (Updatable) The type of public access enabled on this bucket. A bucket is set to `NoPublicAccess` by default, which only allows an authenticated caller to access the bucket and its contents. When `ObjectRead` is enabled on the bucket, public access is allowed for the `GetObject`, `HeadObject`, and `ListObjects` operations. When `ObjectReadWithoutList` is enabled on the bucket, public access is allowed for the `GetObject` and `HeadObject` operations.

- `compartment_id` - (Required) (Updatable) The ID of the compartment in which to create the bucket.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `kms_key_id` - (Optional) (Updatable) The OCID of a KMS key id used to call KMS to generate data key, decrypt the encrypted data key

- `metadata` - (Optional) (Updatable) Arbitrary string, up to 4KB, of keys and values for user-defined metadata.

- `name` - (Required) The name of the bucket. Valid characters are uppercase or lowercase letters, numbers, and dashes.

Bucket names must be unique within the namespace. Avoid entering confidential information. example: Example: my-new-bucket1

* `namespace` - (Required) The top-level namespace used for the request.

* `storage_tier` - (Optional) The type of storage tier of this bucket. A bucket is set to 'Standard' tier by default, which means the bucket will be put in the standard storage tier. When 'Archive' tier type is set explicitly, the bucket is put in the Archive Storage tier. The 'storageTier' property is immutable after bucket is created.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

* `access_type` - The type of public access enabled on this bucket. A bucket is set to `NoPublicAccess` by default, which only allows an authenticated caller to access the bucket and its contents. When `ObjectRead` is enabled on the bucket, public access is allowed for the `GetObject`, `HeadObject`, and `ListObjects` operations. When `ObjectReadWithoutList` is enabled on the bucket, public access is allowed for the `GetObject` and `HeadObject` operations.

* `approximate_count` - The approximate number of objects in the bucket. Count statistics are reported periodically. You will see a lag between what is displayed and the actual object count.

* `approximate_size` - The approximate total size in bytes of all objects in the bucket. Size statistics are reported periodically. You will see a lag between what is displayed and the actual size of the bucket.

* `compartment_id` - The compartment ID in which the bucket is authorized.

* `created_by` - The OCID of the user who created the bucket.

* `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

* `etag` - The entity tag for the bucket.

* `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

* `kms_key_id` - The OCID of a KMS key id used to call KMS to generate data key, decrypt the encrypted data key

* `metadata` - Arbitrary string keys and values for user-defined metadata.

* `name` - The name of the bucket. Avoid entering confidential information. Example: my-new-bucket1

* `namespace` - The namespace in which the bucket lives.

* `object_lifecycle_policy_etag` - The entity tag for the live object lifecycle policy on the bucket.

* `storage_tier` - The type of storage tier of this bucket. A bucket is set to 'Standard' tier by default, which means the bucket will be put in the standard storage tier. When 'Archive' tier type is set explicitly, the bucket is put in the archive storage tier. The 'storageTier' property is immutable after bucket is created.

- `time_created` - The date and time the bucket was created, as described in RFC 2616 (https://tools.ietf.org/rfc/rfc2616), section 14.29.

oci_objectstorage_object

This resource provides the Object resource in Oracle Cloud Infrastructure Object Storage service.

Creates a new object or overwrites an existing one.

Example Usage

```
resource "oci_objectstorage_object" "test_object" {
    #Required
    bucket = "${var.object_bucket}"
    content = "${var.object_content}"
    namespace = "${var.object_namespace}"
    object = "${var.object_object}"

    #Optional
    content_encoding = "${var.object_content_encoding}"
    content_language = "${var.object_content_language}"
    content_type = "${var.object_content_type}"
    metadata = "${var.object_metadata}"
}
```

Argument Reference

The following arguments are supported:

* `bucket` - (Required) The name of the bucket. Avoid entering confidential information. Example: `my-new-bucket1`

* `content_encoding` - (Optional) The content encoding of the object.

* `content_language` - (Optional) The content language of the object.

* `content_type` - (Optional) The content type of the object. Defaults to 'application/octet-stream' if not overridden during the PutObject call.

* `content` - (Required) The object to upload to the object store. Cannot be defined if `source` or `source_uri_details` is defined.

* `metadata` - (Optional) Optional user-defined metadata key and value. Note: All specified keys must be in lower case.

* `namespace` - (Required) The top-level namespace used for the request.

* `object` - (Required) The name of the object. Avoid entering confidential information. Example: `test/object1.log`

* `source` - (Optional) An absolute path to a file on the local system. Cannot be defined if `content` or `source_uri_details` is defined.

* `source_uri_details` - (Optional) Details of the source URI of the object in the cloud. Cannot be defined if `content` or `source` is defined. Note: To enable object copy, you must authorize the service to manage objects on your behalf.
    * `region` - (Required) The region of the source object.

    * `namespace` - (Required) The top-level namespace of the source object.

- bucket - (Required) The name of the bucket for the source object.

- object - (Required) The name of the source object.

- source_object_if_match_etag - (Optional) The entity tag to match the source object.

- destination_object_if_match_etag - (Optional) The entity tag to match the target object.

- destination_object_if_none_match_etag - (Optional) The entity tag to not match the target object.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- bucket - The name of the bucket. Avoid entering confidential information. Example: my-new-bucket1

- content - The object to upload to the object store.

- content_encoding - The content encoding of the object.

- content_language - The content language of the object.

- content_length - The content length of the body.

- content_md5 - The base-64 encoded MD5 hash of the body.

- content_type - The content type of the object. Defaults to 'application/octet-stream' if not overridden during the PutObject call.

- metadata - Optional user-defined metadata key and value. Note: Metadata keys are case-insensitive and all returned keys will be lower case.

- namespace - The top-level namespace used for the request.

- object - The name of the object. Avoid entering confidential information. Example: test/object1.log

- source - An absolute path to a file on the local system to upload to the object store.

- source_uri_details - Details of the source URI of the object in the cloud.
  - region - The region of the source object.

  - namespace - The top-level namespace of the source object.

  - bucket - The name of the bucket for the source object.

  - object - The name of the source object.

Import

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

```
$ terraform import oci_objectstorage_object.test_object "id"
```

oci_objectstorage_object_lifecycle_policy

This resource provides the Object Lifecycle Policy resource in Oracle Cloud Infrastructure Object Storage service.

Creates or replaces the object lifecycle policy for the bucket.

Example Usage

```
resource "oci_objectstorage_object_lifecycle_policy" "test_object_lifecycle_policy" {
    #Required
    bucket = "${var.object_lifecycle_policy_bucket}"
    namespace = "${var.object_lifecycle_policy_namespace}"

    #Optional
    rules {
        #Required
        action = "${var.object_lifecycle_policy_rules_action}"
        is_enabled = "${var.object_lifecycle_policy_rules_is_enabled}"
        name = "${var.object_lifecycle_policy_rules_name}"
        time_amount = "${var.object_lifecycle_policy_rules_time_amount}"
        time_unit = "${var.object_lifecycle_policy_rules_time_unit}"

        #Optional
        object_name_filter {

            #Optional
            inclusion_prefixes = "${var.object_lifecycle_policy_rules_object_name_filter_inclusion_prefix
es}"
        }
    }
}
```

Argument Reference

The following arguments are supported:

- `bucket` - (Required) The name of the bucket. Avoid entering confidential information. Example: `my-new-bucket1`

- `namespace` - (Required) The top-level namespace used for the request.

- `rules` - (Optional) (Updatable) The bucket's set of lifecycle policy rules.
    - `action` - (Required) (Updatable) The action of the object lifecycle policy rule. Rules using the action 'ARCHIVE' move objects into the Archival Storage tier (https://docs.cloud.oracle.com/iaas/Content/Archive/Concepts/archivestorageoverview.htm). Rules using the action 'DELETE' permanently delete objects from buckets. 'ARCHIVE' and 'DELETE' are the only two supported actions at this time.

    - `is_enabled` - (Required) (Updatable) A boolean that determines whether this rule is currently enabled.

    - `name` - (Required) (Updatable) The name of the lifecycle rule to be applied.

    - `object_name_filter` - (Optional) (Updatable) A filter limiting object names that the rule will apply to.
        - `inclusion_prefixes` - (Optional) (Updatable) An array of object name prefixes that the rule will apply to.

An empty array means to include all objects.

- `time_amount` - (Required) (Updatable) Specifies the age of objects to apply the rule to. The timeAmount is interpreted in units defined by the timeUnit parameter, and is calculated in relation to each object's Last-Modified time.

- `time_unit` - (Required) (Updatable) The unit that should be used to interpret timeAmount. Days are defined as starting and ending at midnight UTC. Years are defined as 365.2425 days long and likewise round up to the next midnight UTC.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `rules` - The live lifecycle policy on the bucket.

  For an example of this value, see the PutObjectLifecyclePolicy API documentation (https://docs.cloud.oracle.com/iaas/api/#/en/objectstorage/20160918/ObjectLifecyclePolicy/PutObjectLifecyclePolicy).

  - `action` - The action of the object lifecycle policy rule. Rules using the action 'ARCHIVE' move objects into the Archival Storage tier (https://docs.cloud.oracle.com/iaas/Content/Archive/Concepts/archivestorageoverview.htm). Rules using the action 'DELETE' permanently delete objects from buckets. 'ARCHIVE' and 'DELETE' are the only two supported actions at this time.

  - `is_enabled` - A boolean that determines whether this rule is currently enabled.

  - `name` - The name of the lifecycle rule to be applied.

  - `object_name_filter` - A filter limiting object names that the rule will apply to.
    - `inclusion_prefixes` - An array of object name prefixes that the rule will apply to. An empty array means to include all objects.

  - `time_amount` - Specifies the age of objects to apply the rule to. The timeAmount is interpreted in units defined by the timeUnit parameter, and is calculated in relation to each object's Last-Modified time.

  - `time_unit` - The unit that should be used to interpret timeAmount. Days are defined as starting and ending at midnight UTC. Years are defined as 365.2425 days long and likewise round up to the next midnight UTC.

- `time_created` - The date and time the object lifecycle policy was created, as described in RFC 3339 (https://tools.ietf.org/rfc/rfc3339), section 14.29.

Import

ObjectLifecyclePolicies can be imported using the `id`, e.g.

```
$ terraform import oci_objectstorage_object_lifecycle_policy.test_object_lifecycle_policy "n/{namespaceName}/b/{bucketName}/l"
```

oci_objectstorage_preauthrequest

This resource provides the Preauthenticated Request resource in Oracle Cloud Infrastructure Object Storage service.

Creates a pre-authenticated request specific to the bucket.

Example Usage

```
resource "oci_objectstorage_preauthrequest" "test_preauthenticated_request" {
    #Required
    access_type = "${var.preauthenticated_request_access_type}"
    bucket = "${var.preauthenticated_request_bucket}"
    name = "${var.preauthenticated_request_name}"
    namespace = "${var.preauthenticated_request_namespace}"
    time_expires = "${var.preauthenticated_request_time_expires}"

    #Optional
    object = "${var.preauthenticated_request_object}"
}
```

Argument Reference

The following arguments are supported:

- `access_type` - (Required) The operation that can be performed on this resource.

- `bucket` - (Required) The name of the bucket. Avoid entering confidential information. Example: `my-new-bucket1`

- `name` - (Required) A user-specified name for the pre-authenticated request. Helpful for management purposes.

- `namespace` - (Required) The top-level namespace used for the request.

- `object` - (Optional) The name of object that is being granted access to by the pre-authenticated request. This can be null and if it is, the pre-authenticated request grants access to the entire bucket.

- `time_expires` - (Required) The expiration date for the pre-authenticated request as per RFC 3339 (https://tools.ietf.org/rfc/rfc3339). After this date the pre-authenticated request will no longer be valid.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `access_type` - The operation that can be performed on this resource.

- `access_uri` - The URI to embed in the URL when using the pre-authenticated request.

- `bucket` - The name of the bucket. Example: `my-new-bucket1`

- `id` - The unique identifier to use when directly addressing the pre-authenticated request.

- `name` - The user-provided name of the pre-authenticated request.

- `namespace` - The top-level namespace used for the request.

- `object` - The name of the object that is being granted access to by the pre-authenticated request. This can be null and if so, the pre-authenticated request grants access to the entire bucket. Avoid entering confidential information. Example: test/object1.log

- `time_created` - The date when the pre-authenticated request was created as per specification RFC 3339 (https://tools.ietf.org/rfc/rfc3339).

- `time_expires` - The expiration date for the pre-authenticated request as per RFC 3339 (https://tools.ietf.org/rfc/rfc3339). After this date the pre-authenticated request will no longer be valid.

Data Source: oci_core_instance_console_connections

This data source provides the list of Instance Console Connections in Oracle Cloud Infrastructure Core service.

Lists the console connections for the specified compartment or instance.

For more information about console access, see Accessing the Console (https://docs.cloud.oracle.com/iaas/Content/Compute/References/serialconsole.htm).

Example Usage

```
data "oci_core_instance_console_connections" "test_instance_console_connections" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    instance_id = "${oci_core_instance.test_instance.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `instance_id` - (Optional) The OCID of the instance.

Attributes Reference

The following attributes are exported:

- `instance_console_connections` - The list of instance_console_connections.

InstanceConsoleConnection Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment to contain the console connection.

- `connection_string` - The SSH connection string for the console connection.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `fingerprint` - The SSH public key fingerprint for the console connection.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type,

or namespace. For more information, see Resource Tags
(https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":`
`"Finance"}`

- `id` - The OCID of the console connection.

- `instance_id` - The OCID of the instance the console connection connects to.

- `state` - The current state of the console connection.

- `vnc_connection_string` - The SSH connection string for the SSH tunnel used to connect to the console connection over VNC.

- `id` - The OCID of the console connection.

- `instance_id` - The OCID of the instance the console connection connects to.

Data Source: oci_core_instance_credentials

This data source provides details about a specific Instance Credential resource in Oracle Cloud Infrastructure Core service.

Gets the generated credentials for the instance. Only works for instances that require password to log in (E.g. Windows). For certain OS'es, users will be forced to change the initial credentials.

Example Usage

```
data "oci_core_instance_credentials" "test_instance_credential" {
    #Required
    instance_id = "${oci_core_instance.test_instance.id}"
}
```

Argument Reference

The following arguments are supported:

- `instance_id` - (Required) The OCID of the instance.

Attributes Reference

The following attributes are exported:

- `password` - The password for the username.

- `username` - The username.

Data Source: oci_core_instance_pool

This data source provides details about a specific Instance Pool resource in Oracle Cloud Infrastructure Core service.

Gets the specified instance pool

Example Usage

```
data "oci_core_instance_pool" "test_instance_pool" {
    #Required
    instance_pool_id = "${oci_core_instance_pool.test_instance_pool.id}"
}
```

Argument Reference

The following arguments are supported:

- `instance_pool_id` - (Required) The OCID of the instance pool.

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the instance pool

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - The user-friendly name. Does not have to be unique.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The OCID of the instance pool

- `instance_configuration_id` - The OCID of the instance configuration associated to the intance pool.

- `placement_configurations` - The placement configurations for the instance pool.
  - `availability_domain` - The availability domain to place instances. Example: `Uocm:PHX-AD-1`

  - `primary_subnet_id` - The OCID of the primary subnet to place instances.

  - `secondary_vnic_subnets` - The set of secondary VNIC data for instances in the pool.
    - `display_name` - The displayName of the vnic. This is also use to match against the Instance Configuration defined secondary vnic.

- `subnet_id` - The subnet OCID for the secondary vnic

- `size` - The number of instances that should be in the instance pool.

- `state` - The current state of the instance pool.

- `time_created` - The date and time the instance pool was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_instance_pool_instances

This data source provides the list of Instance Pool Instances in Oracle Cloud Infrastructure Core service.

List the instances in the specified instance pool.

Example Usage

```
data "oci_core_instance_pool_instances" "test_instance_pool_instances" {
    #Required
    compartment_id = "${var.compartment_id}"
    instance_pool_id = "${oci_core_instance_pool.test_instance_pool.id}"

    #Optional
    display_name = "${var.instance_pool_instance_display_name}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `instance_pool_id` - (Required) The OCID of the instance pool.

Attributes Reference

The following attributes are exported:

- `instances` - The list of instances.

InstancePoolInstance Reference

The following attributes are exported:

- `availability_domain` - The availability domain the instance is running in.

- `compartment_id` - The OCID of the compartment that contains the instance.

- `display_name` - The user-friendly name. Does not have to be unique.

- `fault_domain` - The name of the Fault Domain the instance is running in.

- `id` - The OCID of the instance

- `instance_configuration_id` - The OCID of the instance confgiuration used to create the instance.

- `region` - The region that contains the availability domain the instance is running in.

- `shape` - The shape of an instance. The shape determines the number of CPUs, amount of memory, and other resources allocated to the instance.

  You can enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

- `state` - The current state of the instance pool instance.

- `time_created` - The date and time the instance pool instance was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_instance_pools

This data source provides the list of Instance Pools in Oracle Cloud Infrastructure Core service.

Lists the instance pools in the specified compartment.

Example Usage

```
data "oci_core_instance_pools" "test_instance_pools" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.instance_pool_display_name}"
    state = "${var.instance_pool_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

Attributes Reference

The following attributes are exported:

- `instance_pools` - The list of instance_pools.

InstancePool Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the instance pool

- `display_name` - The user-friendly name. Does not have to be unique.

- `id` - The OCID of the instance pool

- `instance_configuration_id` - The OCID of the instance configuration associated to the intance pool.

- `size` - The number of instances that should be in the instance pool.

- `state` - The current state of the instance pool.

- `time_created` - The date and time the instance pool was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_instances

This data source provides the list of Instances in Oracle Cloud Infrastructure Core service.

Lists the instances in the specified compartment and the specified availability domain. You can filter the results by specifying an instance name (the list will include all the identically-named instances in the compartment).

Example Usage

```
data "oci_core_instances" "test_instances" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    availability_domain = "${var.instance_availability_domain}"
    display_name = "${var.instance_display_name}"
    state = "${var.instance_state}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Optional) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

Attributes Reference

The following attributes are exported:

- `instances` - The list of instances.

Instance Reference

The following attributes are exported:

- `availability_domain` - The availability domain the instance is running in. Example: `Uocm:PHX-AD-1`

- `boot_volume_id` - The OCID of the attached boot volume. If the `source_type` is `bootVolume`, this will be the same OCID as the `source_id`.

- `compartment_id` - The OCID of the compartment that contains the instance.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information. Example: `My bare metal instance`

- `extended_metadata` - Additional metadata key/value pairs that you provide. They serve the same purpose and functionality as fields in the 'metadata' object.

  They are distinguished from 'metadata' fields in that these can be nested JSON objects (whereas 'metadata' fields are string/string maps only).

  If you don't need nested metadata values, it is strongly advised to avoid using this object and use the Metadata object instead.

- `fault_domain` - The name of the fault domain the instance is running in.

  A fault domain is a grouping of hardware and infrastructure within an availability domain. Each availability domain contains three fault domains. Fault domains let you distribute your instances so that they are not on the same physical hardware within a single availability domain. A hardware failure or Compute hardware maintenance that affects one fault domain does not affect instances in other fault domains.

  If you do not specify the fault domain, the system selects one for you. To change the fault domain for an instance, terminate it and launch a new instance in the preferred fault domain.

  Example: `FAULT-DOMAIN-1`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the instance.

- `image` - Deprecated. Use `sourceDetails` instead.

- `ipxe_script` - When a bare metal or virtual machine instance boots, the iPXE firmware that runs on the instance is configured to run an iPXE script to continue the boot process.

  If you want more control over the boot process, you can provide your own custom iPXE script that will run when the instance boots; however, you should be aware that the same iPXE script will run every time an instance boots; not only after the initial LaunchInstance call.

  The default iPXE script connects to the instance's local boot volume over iSCSI and performs a network boot. If you use a custom iPXE script and want to network-boot from the instance's local boot volume over iSCSI the same way as the default iPXE script, you should use the following iSCSI IP address: 169.254.0.2, and boot volume IQN: iqn.2015-02.oracle.boot.

  For more information about the Bring Your Own Image feature of Oracle Cloud Infrastructure, see Bring Your Own Image (https://docs.cloud.oracle.com/iaas/Content/Compute/References/bringyourownimage.htm).

  For more information about iPXE, see http://ipxe.org (http://ipxe.org).

- `launch_mode` - Specifies the configuration mode for launching virtual machine (VM) instances. The configuration modes are:

- `NATIVE` - VM instances launch with iSCSI boot and VFIO devices. The default value for Oracle-provided images.

- `EMULATED` - VM instances launch with emulated devices, such as the E1000 network driver and emulated SCSI disk controller.

- `PARAVIRTUALIZED` - VM instances launch with paravirtualized devices using virtio drivers.

- `CUSTOM` - VM instances launch with custom configuration settings specified in the `LaunchOptions` parameter.

- `launch_options` -

  - `boot_volume_type` - Emulation type for volume.
    - `ISCSI` - ISCSI attached block storage device. This is the default for Boot Volumes and Remote Block Storage volumes on Oracle provided images.

    - `SCSI` - Emulated SCSI disk.

    - `IDE` - Emulated IDE disk.

    - `VFIO` - Direct attached Virtual Function storage. This is the default option for Local data volumes on Oracle provided images.

    - `PARAVIRTUALIZED` - Paravirtualized disk.

  - `firmware` - Firmware used to boot VM. Select the option that matches your operating system.
    - `BIOS` - Boot VM using BIOS style firmware. This is compatible with both 32 bit and 64 bit operating systems that boot using MBR style bootloaders.

    - `UEFI_64` - Boot VM using UEFI style firmware compatible with 64 bit operating systems. This is the default for Oracle provided images.

  - `is_pv_encryption_in_transit_enabled` - Whether to enable encryption in transit for the PV boot volume attachment. Defaults to false.

  - `network_type` - Emulation type for NIC.
    - `E1000` - Emulated Gigabit ethernet controller. Compatible with Linux e1000 network driver.

    - `VFIO` - Direct attached Virtual Function network controller. Default for Oracle provided images.

    - `PARAVIRTUALIZED` - VM instances launch with paravirtualized devices using virtio drivers.

  - `remote_data_volume_type` - Emulation type for volume.
    - `ISCSI` - ISCSI attached block storage device. This is the default for Boot Volumes and Remote Block Storage volumes on Oracle provided images.

    - `SCSI` - Emulated SCSI disk.

    - `IDE` - Emulated IDE disk.

    - `VFIO` - Direct attached Virtual Function storage. This is the default option for Local data volumes on Oracle provided images.

    - `PARAVIRTUALIZED` - Paravirtualized disk.

- `metadata` - Custom metadata that you provide.

- `region` - The region that contains the availability domain the instance is running in. Example: phx

- `shape` - The shape of the instance. The shape determines the number of CPUs and the amount of memory allocated to the instance. You can enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

- `source_details` - Details for creating an instance

  - `boot_volume_size_in_gbs` - The size of the boot volume in GBs. Minimum value is 50 GB and maximum value is 16384 GB (16TB). This should only be specified when `source_type` is `image`.

  - `kms_key_id` - The OCID of the KMS key to be used as the master encryption key for the boot volume.

  - `source_id` - The OCID of an image or a boot volume to use, depending on the value of `source_type`.

  - `source_type` - The source type for the instance. Use `image` when specifying the image OCID. Use `bootVolume` when specifying the boot volume OCID.

- `state` - The current state of the instance.

- `time_created` - The date and time the instance was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `time_maintenance_reboot_due` - The date and time the instance is expected to be stopped / started, in the format defined by RFC3339. After that time if instance hasn't been rebooted, Oracle will reboot the instance within 24 hours of the due time. Regardless of how the instance was stopped, the flag will be reset to empty as soon as instance reaches Stopped state. Example: `2018-05-25T21:10:29.600Z`

Data Source: oci_core_internet_gateways

This data source provides the list of Internet Gateways in Oracle Cloud Infrastructure Core service.

Lists the internet gateways in the specified VCN and the specified compartment.

Example Usage

```
data "oci_core_internet_gateways" "test_internet_gateways" {
    #Required
    compartment_id = "${var.compartment_id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    display_name = "${var.internet_gateway_display_name}"
    state = "${var.internet_gateway_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

- `vcn_id` - (Required) The OCID of the VCN.

Attributes Reference

The following attributes are exported:

- `gateways` - The list of internet_gateways.

InternetGateway Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the internet gateway.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential

information.

- `enabled` - Whether the gateway is enabled. When the gateway is disabled, traffic is not routed to/from the Internet, regardless of route rules.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The internet gateway's Oracle ID (OCID).

- `state` - The internet gateway's current state.

- `time_created` - The date and time the internet gateway was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the internet gateway belongs to.

Data Source: oci_core_ipsec_config

This data source provides details about a specific Ip Sec Connection Device Config resource in Oracle Cloud Infrastructure Core service.

Gets the configuration information for the specified IPSec connection. For each tunnel, the response includes the IP address of Oracle's VPN headend and the shared secret.

Example Usage

```
data "oci_core_ipsec_config" "test_ip_sec_connection_device_config" {
    #Required
    ipsec_id = "${oci_core_ipsec.test_ipsec.id}"
}
```

Argument Reference

The following arguments are supported:

- `ipsec_id` - (Required) The OCID of the IPSec connection.

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the IPSec connection.

- `id` - The IPSec connection's Oracle ID (OCID).

- `time_created` - The date and time the IPSec connection was created.

- `tunnels` - Two TunnelConfig (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/TunnelConfig/) objects.
    - `ip_address` - The IP address of Oracle's VPN headend. Example: `129.146.17.50`

    - `shared_secret` - The shared secret of the IPSec tunnel. Example: `vFG2IF6TWq4UToUiLSRDoJEUs6j1c.p8G.dVQxiMfMO0yXMLi.lZTbYIWhGu4V8o`

    - `time_created` - The date and time the IPSec connection was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_ipsec_status

This data source provides details about a specific Ip Sec Connection Device Status resource in Oracle Cloud Infrastructure Core service.

Gets the status of the specified IPSec connection (whether it's up or down).

Example Usage

```
data "oci_core_ipsec_status" "test_ip_sec_connection_device_status" {
    #Required
    ipsec_id = "${oci_core_ipsec.test_ipsec.id}"
}
```

Argument Reference

The following arguments are supported:

- `ipsec_id` - (Required) The OCID of the IPSec connection.

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the IPSec connection.

- `id` - The IPSec connection's Oracle ID (OCID).

- `time_created` - The date and time the IPSec connection was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `tunnels` - Two TunnelStatus (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/TunnelStatus/) objects.
  - `ip_address` - The IP address of Oracle's VPN headend. Example: `129.146.17.50`

  - `state` - The tunnel's current state.

  - `time_created` - The date and time the IPSec connection was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

  - `time_state_modified` - When the state of the tunnel last changed, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_ip_sec_connections

This data source provides the list of Ip Sec Connections in Oracle Cloud Infrastructure Core service.

Lists the IPSec connections for the specified compartment. You can filter the results by DRG or CPE.

Example Usage

```
data "oci_core_ipsec_connections" "test_ip_sec_connections" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    cpe_id = "${oci_core_cpe.test_cpe.id}"
    drg_id = "${oci_core_drg.test_drg.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `cpe_id` - (Optional) The OCID of the CPE.

- `drg_id` - (Optional) The OCID of the DRG.

Attributes Reference

The following attributes are exported:

- `connections` - The list of IPSec connections.

IpSecConnection Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the IPSec connection.

- `cpe_id` - The OCID of the CPE.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `drg_id` - The OCID of the DRG.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The IPSec connection's Oracle ID (OCID).

- `state` - The IPSec connection's current state.

- `static_routes` - Static routes to the CPE. At least one route must be included. The CIDR must not be a multicast address or class E address. Example: `10.0.1.0/24`

- `time_created` - The date and time the IPSec connection was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_letter_of_authority

This data source provides details about a specific Letter Of Authority resource in Oracle Cloud Infrastructure Core service.

Gets the Letter of Authority for the specified cross-connect.

Example Usage

```
data "oci_core_letter_of_authority" "test_letter_of_authority" {
    #Required
    cross_connect_id = "${oci_core_cross_connect.test_cross_connect.id}"
}
```

Argument Reference

The following arguments are supported:

- `cross_connect_id` - (Required) The OCID of the cross-connect.

Attributes Reference

The following attributes are exported:

- `authorized_entity_name` - The name of the entity authorized by this Letter of Authority.

- `circuit_type` - The type of cross-connect fiber, termination, and optical specification.

- `cross_connect_id` - The OCID of the cross-connect.

- `facility_location` - The address of the FastConnect location.

- `port_name` - The meet-me room port for this cross-connect.

- `time_expires` - The date and time when the Letter of Authority expires, in the format defined by RFC3339.

- `time_issued` - The date and time the Letter of Authority was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_local_peering_gateways

This data source provides the list of Local Peering Gateways in Oracle Cloud Infrastructure Core service.

Lists the local peering gateways (LPGs) for the specified VCN and compartment (the LPG's compartment).

Example Usage

```
data "oci_core_local_peering_gateways" "test_local_peering_gateways" {
    #Required
    compartment_id = "${var.compartment_id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `vcn_id` - (Required) The OCID of the VCN.

Attributes Reference

The following attributes are exported:

- `local_peering_gateways` - The list of local_peering_gateways.

LocalPeeringGateway Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the LPG.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The LPG's Oracle ID (OCID).

- `is_cross_tenancy_peering` - Whether the VCN at the other end of the peering is in a different tenancy. Example: `false`

- `peer_advertised_cidr` - The smallest aggregate CIDR that contains all the CIDR routes advertised by the VCN at the other end of the peering from this LPG. See `peerAdvertisedCidrDetails` for the individual CIDRs. The value is `null` if the LPG is not peered. Example: `192.168.0.0/16`, or if aggregated with `172.16.0.0/24` then `128.0.0.0/1`

- `peer_advertised_cidr_details` - The specific ranges of IP addresses available on or via the VCN at the other end of the peering from this LPG. The value is `null` if the LPG is not peered. You can use these as destination CIDRs for route rules to route a subnet's traffic to this LPG. Example: [`192.168.0.0/16`, `172.16.0.0/24`]

- `peering_status` - Whether the LPG is peered with another LPG. `NEW` means the LPG has not yet been peered. `PENDING` means the peering is being established. `REVOKED` means the LPG at the other end of the peering has been deleted.

- `peering_status_details` - Additional information regarding the peering status, if applicable.

- `route_table_id` - The OCID of the route table the LPG is using. For information about why you would associate a route table with an LPG, see Advanced Scenario: Transit Routing (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/transitrouting.htm).

- `state` - The LPG's current lifecycle state.

- `time_created` - The date and time the LPG was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the LPG belongs to.

Data Source: oci_core_nat_gateway

This data source provides details about a specific Nat Gateway resource in Oracle Cloud Infrastructure Core service.

Gets the specified NAT gateway's information.

Example Usage

```
data "oci_core_nat_gateway" "test_nat_gateway" {
    #Required
    nat_gateway_id = "${oci_core_nat_gateway.test_nat_gateway.id}"
}
```

Argument Reference

The following arguments are supported:

- `nat_gateway_id` - (Required) The NAT gateway's OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

- `block_traffic` - Whether the NAT gateway blocks traffic through it. The default is `false`. Example: `true`

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment that contains the NAT gateway.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the NAT gateway.

- `nat_ip` - The IP address associated with the NAT gateway.

- `state` - The NAT gateway's current state.

- `time_created` - The date and time the NAT gateway was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the VCN the NAT gateway belongs to.

Data Source: oci_core_nat_gateways

This data source provides the list of Nat Gateways in Oracle Cloud Infrastructure Core service.

Lists the NAT gateways in the specified compartment. You may optionally specify a VCN OCID to filter the results by VCN.

Example Usage

```
data "oci_core_nat_gateways" "test_nat_gateways" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.nat_gateway_display_name}"
    state = "${var.nat_gateway_state}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to return only resources that match the specified lifecycle state. The value is case insensitive.

- `vcn_id` - (Optional) The OCID of the VCN.

Attributes Reference

The following attributes are exported:

- `nat_gateways` - The list of nat_gateways.

NatGateway Reference

The following attributes are exported:

- `block_traffic` - Whether the NAT gateway blocks traffic through it. The default is `false`. Example: `true`

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment that contains the NAT gateway.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the NAT gateway.

- `nat_ip` - The IP address associated with the NAT gateway.

- `state` - The NAT gateway's current state.

- `time_created` - The date and time the NAT gateway was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the VCN the NAT gateway belongs to.

Data Source: oci_core_peer_region_for_remote_peerings

This data source provides the list of Peer Region For Remote Peerings in Oracle Cloud Infrastructure Core service.

Lists the regions that support remote VCN peering (which is peering across regions). For more information, see VCN Peering (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/VCNpeering.htm).

Example Usage

```
data "oci_core_peer_region_for_remote_peerings" "test_peer_region_for_remote_peerings" {
}
```

Argument Reference

The following arguments are supported:

Attributes Reference

The following attributes are exported:

* `peer_region_for_remote_peerings` - The list of peer_region_for_remote_peerings.

PeerRegionForRemotePeering Reference

The following attributes are exported:

* `name` - The region's name. Example: `us-phoenix-1`

Data Source: oci_core_private_ips

This data source provides the list of Private Ips in Oracle Cloud Infrastructure Core service.

Lists the PrivateIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/) objects based on one of these filters:

- Subnet OCID.

- VNIC OCID.

- Both private IP address and subnet OCID: This lets you get a `privateIP` object based on its private IP address (for example, 10.0.3.3) and not its OCID. For comparison, GetPrivateIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/GetPrivateIp) requires the OCID.

If you're listing all the private IPs associated with a given subnet or VNIC, the response includes both primary and secondary private IPs.

Example Usage

```
# Filter on Subnet OCID
data "oci_core_private_ips" "test_private_ips_by_subnet" {
    #Optional
    subnet_id = "${var.private_ip_subnet_id}"
}
```

```
# Filter on VNIC OCID
data "oci_core_private_ips" "test_private_ips_by_vnic" {
    #Optional
    vnic_id = "${oci_core_vnic.test_vnic.id}"
}
```

```
# Filter on private IP address and Subnet OCID
data "oci_core_private_ips" "test_private_ips_by_ip_address" {
    #Optional
    ip_address = "${var.private_ip_ip_address}"
    subnet_id = "${oci_core_subnet.test_subnet.id}"
}
```

Argument Reference

The following arguments are supported:

- `ip_address` - (Optional) An IP address. Example: `10.0.3.3`

- `subnet_id` - (Optional) The OCID of the subnet.

- `vnic_id` - (Optional) The OCID of the VNIC.

Attributes Reference

The following attributes are exported:

- `private_ips` - The list of private_ips.

PrivateIp Reference

The following attributes are exported:

- `availability_domain` - The private IP's availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment containing the private IP.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `hostname_label` - The hostname for the private IP. Used for DNS. The value is the hostname portion of the private IP's fully qualified domain name (FQDN) (for example, `bminstance-1` in FQDN `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be unique across all VNICs in the subnet and comply with RFC 952 (https://tools.ietf.org/html/rfc952) and RFC 1123 (https://tools.ietf.org/html/rfc1123).

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `bminstance-1`

- `id` - The private IP's Oracle ID (OCID).

- `ip_address` - The private IP address of the `privateIp` object. The address is within the CIDR of the VNIC's subnet. Example: `10.0.3.3`

- `is_primary` - Whether this private IP is the primary one on the VNIC. Primary private IPs are unassigned and deleted automatically when the VNIC is terminated. Example: `true`

- `subnet_id` - The OCID of the subnet the VNIC is in.

- `time_created` - The date and time the private IP was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vnic_id` - The OCID of the VNIC the private IP is assigned to. The VNIC and private IP must be in the same subnet.

Data Source: oci_core_public_ip

This data source provides details about a specific Public Ip resource in Oracle Cloud Infrastructure Core service.

Gets the specified public IP. You must specify the object's OCID.

Alternatively, you can get the object by using GetPublicIpByIpAddress (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PublicIp/GetPublicIpByIpAddress) with the public IP address (for example, 129.146.2.1).

Or you can use GetPublicIpByPrivateIpId (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PublicIp/GetPublicIpByPrivateIpId) with the OCID of the private IP that the public IP is assigned to.

Note: If you're fetching a reserved public IP that is in the process of being moved to a different private IP, the service returns the public IP object with `lifecycleState` = ASSIGNING and `assignedEntityId` = OCID of the target private IP.

Example Usage

Get a public ip by public ip id

```
data "oci_core_public_ip" "test_oci_core_public_ip_by_id" {
    id = "${var.test_public_ip_id}"
}
```

Get a public ip by private ip id

```
data "oci_core_public_ip" "test_oci_core_public_ip_by_private_ip_id" {
    private_ip_id = "${var.test_public_ip_private_ip_id}"
}
```

Get a public ip by public ip address

```
data "oci_core_public_ip" "test_oci_core_public_ip_by_ip" {
    ip_address = "${var.test_public_ip_ip_address}"
}
```

Argument Reference

The following arguments are supported:

Only one of the following values will be used. If multiple arguments are passed, the first non-empty value will be used based on the order below.

- `id` - (Optional) The OCID of the public IP.

- `private_ip_id` - (Optional) Gets the public IP assigned to the specified private IP. You must specify the OCID of the private IP. If no public IP is assigned, a 404 is returned.

- `ip_address` - (Optional) Gets the public IP based on the public IP address (for example, 129.146.2.1).

Attributes Reference

The following attributes are exported:

- `assigned_entity_id` - The OCID of the entity the public IP is assigned to, or in the process of being assigned to.

- `assigned_entity_type` - The type of entity the public IP is assigned to, or in the process of being assigned to.

- `availability_domain` - The public IP's availability domain. This property is set only for ephemeral public IPs that are assigned to a private IP (that is, when the `scope` of the public IP is set to AVAILABILITY_DOMAIN). The value is the availability domain of the assigned private IP. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment containing the public IP. For an ephemeral public IP, this is the compartment of its assigned entity (which can be a private IP or a regional entity such as a NAT gateway). For a reserved public IP that is currently assigned, its compartment can be different from the assigned private IP's.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The public IP's Oracle ID (OCID).

- `ip_address` - The public IP address of the `publicIp` object. Example: `129.146.2.1`

- `lifetime` - Defines when the public IP is deleted and released back to Oracle's public IP pool.

  - `EPHEMERAL`: The lifetime is tied to the lifetime of its assigned entity. An ephemeral public IP must always be assigned to an entity. If the assigned entity is a private IP, the ephemeral public IP is automatically deleted when the private IP is deleted, when the VNIC is terminated, or when the instance is terminated. If the assigned entity is a NatGateway (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/NatGateway/), the ephemeral public IP is automatically deleted when the NAT gateway is terminated.

  - `RESERVED`: You control the public IP's lifetime. You can delete a reserved public IP whenever you like. It does not need to be assigned to a private IP at all times.

  For more information and comparison of the two types, see Public IP Addresses (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingpublicIPs.htm).

- `private_ip_id` - Deprecated. Use `assignedEntityId` instead.

The OCID of the private IP that the public IP is currently assigned to, or in the process of being assigned to.

Note: This is `null` if the public IP is not assigned to a private IP, or is in the process of being assigned to one.

- `scope` - Whether the public IP is regional or specific to a particular availability domain.

  - `REGION`: The public IP exists within a region and is assigned to a regional entity (such as a NatGateway (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/NatGateway/)), or can be assigned to a private IP in any availability domain in the region. Reserved public IPs and ephemeral public IPs assigned to a regional entity have `scope = REGION`.

  - `AVAILABILITY_DOMAIN`: The public IP exists within the availability domain of the entity it's assigned to, which is specified by the `availabilityDomain` property of the public IP object. Ephemeral public IPs that are assigned to private IPs have `scope = AVAILABILITY_DOMAIN`.

- `state` - The public IP's current state.

- `time_created` - The date and time the public IP was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_public_ips

This data source provides the list of Public Ips in Oracle Cloud Infrastructure Core service.

Lists the PublicIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PublicIp/) objects in the specified compartment. You can filter the list by using query parameters.

To list your reserved public IPs: * Set `scope` = `REGION` (required) * Leave the `availabilityDomain` parameter empty * Set `lifetime` = `RESERVED`

To list the ephemeral public IPs assigned to a regional entity such as a NAT gateway: * Set `scope` = `REGION` (required) * Leave the `availabilityDomain` parameter empty * Set `lifetime` = `EPHEMERAL`

To list the ephemeral public IPs assigned to private IPs: * Set `scope` = `AVAILABILITY_DOMAIN` (required) * Set the `availabilityDomain` parameter to the desired availability domain (required) * Set `lifetime` = `EPHEMERAL`

Note: An ephemeral public IP assigned to a private IP is always in the same availability domain and compartment as the private IP.

Example Usage

```
data "oci_core_public_ips" "test_public_ips" {
    #Required
    compartment_id = "${var.compartment_id}"
    scope = "${var.public_ip_scope}"

    #Optional
    availability_domain = "${var.public_ip_availability_domain}"
    lifetime = "${var.public_ip_lifetime}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Optional) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `lifetime` - (Optional) A filter to return only public IPs that match given lifetime.

- `scope` - (Required) Whether the public IP is regional or specific to a particular availability domain.
    - `REGION`: The public IP exists within a region and is assigned to a regional entity (such as a NatGateway (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/NatGateway/)), or can be assigned to a private IP in any availability domain in the region. Reserved public IPs have `scope` = `REGION`, as do ephemeral public IPs assigned to a regional entity.

    - `AVAILABILITY_DOMAIN`: The public IP exists within the availability domain of the entity it's assigned to, which is specified by the `availabilityDomain` property of the public IP object. Ephemeral public IPs that are assigned to private IPs have `scope` = `AVAILABILITY_DOMAIN`.

Attributes Reference

The following attributes are exported:

- `public_ips` - The list of public_ips.

PublicIp Reference

The following attributes are exported:

- `assigned_entity_id` - The OCID of the entity the public IP is assigned to, or in the process of being assigned to.

- `assigned_entity_type` - The type of entity the public IP is assigned to, or in the process of being assigned to.

- `availability_domain` - The public IP's availability domain. This property is set only for ephemeral public IPs that are assigned to a private IP (that is, when the `scope` of the public IP is set to AVAILABILITY_DOMAIN). The value is the availability domain of the assigned private IP. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment containing the public IP. For an ephemeral public IP, this is the compartment of its assigned entity (which can be a private IP or a regional entity such as a NAT gateway). For a reserved public IP that is currently assigned, its compartment can be different from the assigned private IP's.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The public IP's Oracle ID (OCID).

- `ip_address` - The public IP address of the `publicIp` object. Example: `129.146.2.1`

- `lifetime` - Defines when the public IP is deleted and released back to Oracle's public IP pool.

  - `EPHEMERAL`: The lifetime is tied to the lifetime of its assigned entity. An ephemeral public IP must always be assigned to an entity. If the assigned entity is a private IP, the ephemeral public IP is automatically deleted when the private IP is deleted, when the VNIC is terminated, or when the instance is terminated. If the assigned entity is a NatGateway (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/NatGateway/), the ephemeral public IP is automatically deleted when the NAT gateway is terminated.

  - `RESERVED`: You control the public IP's lifetime. You can delete a reserved public IP whenever you like. It does not need to be assigned to a private IP at all times.

  For more information and comparison of the two types, see Public IP Addresses (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingpublicIPs.htm).

- `private_ip_id` - Deprecated. Use `assignedEntityId` instead.

The OCID of the private IP that the public IP is currently assigned to, or in the process of being assigned to.

Note: This is `null` if the public IP is not assigned to a private IP, or is in the process of being assigned to one.

- `scope` - Whether the public IP is regional or specific to a particular availability domain.

    - `REGION`: The public IP exists within a region and is assigned to a regional entity (such as a NatGateway (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/NatGateway/)), or can be assigned to a private IP in any availability domain in the region. Reserved public IPs and ephemeral public IPs assigned to a regional entity have `scope` = `REGION`.

    - `AVAILABILITY_DOMAIN`: The public IP exists within the availability domain of the entity it's assigned to, which is specified by the `availabilityDomain` property of the public IP object. Ephemeral public IPs that are assigned to private IPs have `scope` = `AVAILABILITY_DOMAIN`.

- `state` - The public IP's current state.

- `time_created` - The date and time the public IP was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_remote_peering_connections

This data source provides the list of Remote Peering Connections in Oracle Cloud Infrastructure Core service.

Lists the remote peering connections (RPCs) for the specified DRG and compartment (the RPC's compartment).

Example Usage

```
data "oci_core_remote_peering_connections" "test_remote_peering_connections" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    drg_id = "${oci_core_drg.test_drg.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `drg_id` - (Optional) The OCID of the DRG.

Attributes Reference

The following attributes are exported:

- `remote_peering_connections` - The list of remote_peering_connections.

RemotePeeringConnection Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains the RPC.

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `drg_id` - The OCID of the DRG that this RPC belongs to.

- `id` - The OCID of the RPC.

- `is_cross_tenancy_peering` - Whether the VCN at the other end of the peering is in a different tenancy. Example: `false`

- `peer_id` - If this RPC is peered, this value is the OCID of the other RPC.

- `peer_region_name` - If this RPC is peered, this value is the region that contains the other RPC. Example: `us-ashburn-1`

- `peer_tenancy_id` - If this RPC is peered, this value is the OCID of the other RPC's tenancy.

- `peering_status` - Whether the RPC is peered with another RPC. `NEW` means the RPC has not yet been peered. `PENDING` means the peering is being established. `REVOKED` means the RPC at the other end of the peering has been deleted.

- `state` - The RPC's current lifecycle state.

- `time_created` - The date and time the RPC was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_route_tables

This data source provides the list of Route Tables in Oracle Cloud Infrastructure Core service.

Lists the route tables in the specified VCN and specified compartment. The response includes the default route table that automatically comes with each VCN, plus any route tables you've created.

Example Usage

```
data "oci_core_route_tables" "test_route_tables" {
    #Required
    compartment_id = "${var.compartment_id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    display_name = "${var.route_table_display_name}"
    state = "${var.route_table_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

- `vcn_id` - (Required) The OCID of the VCN.

Attributes Reference

The following attributes are exported:

- `route_tables` - The list of route_tables.

RouteTable Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the route table.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The route table's Oracle ID (OCID).

- `route_rules` - The collection of rules for routing destination IPs to network devices.

  - `cidr_block` - Deprecated. Instead use `destination` and `destinationType`. Requests that include both `cidrBlock` and `destination` will be rejected.

    A destination IP address range in CIDR notation. Matching packets will be routed to the indicated network entity (the target).

    Example: `0.0.0.0/0`

  - `destination` - Conceptually, this is the range of IP addresses used for matching when routing traffic. Required if you provide a `destinationType`.

    Allowed values:

    - IP address range in CIDR notation. For example: `192.168.1.0/24`

    - The `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/), if you're setting up a route rule for traffic destined for a particular service through a service gateway. For example: `oci-phx-objectstorage`

  - `destination_type` - Type of destination for the rule. Required if you provide a `destination`.

    - `CIDR_BLOCK`: If the rule's `destination` is an IP address range in CIDR notation.

    - `SERVICE_CIDR_BLOCK`: If the rule's `destination` is the `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/) (the rule is for traffic destined for a particular service through a service gateway).

  - `network_entity_id` - The OCID for the route rule's target. For information about the type of targets you can specify, see Route Tables (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingroutetables.htm).

- `state` - The route table's current state.

- `time_created` - The date and time the route table was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the route table list belongs to.

Data Source: oci_core_security_lists

This data source provides the list of Security Lists in Oracle Cloud Infrastructure Core service.

Lists the security lists in the specified VCN and compartment.

Example Usage

```
data "oci_core_security_lists" "test_security_lists" {
    #Required
    compartment_id = "${var.compartment_id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    display_name = "${var.security_list_display_name}"
    state = "${var.security_list_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

- `vcn_id` - (Required) The OCID of the VCN.

Attributes Reference

The following attributes are exported:

- `security_lists` - The list of security_lists.

SecurityList Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the security list.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential

information.

- `egress_security_rules` - Rules for allowing egress IP packets.

  - `destination` - Conceptually, this is the range of IP addresses that a packet originating from the instance can go to.

    Allowed values:

    - IP address range in CIDR notation. For example: `192.168.1.0/24`

    - The `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/), if you're setting up a security list rule for traffic destined for a particular service through a service gateway. For example: `oci-phx-objectstorage`

  - `destination_type` - Type of destination for the rule. The default is `CIDR_BLOCK`.

    Allowed values:

    - `CIDR_BLOCK`: If the rule's `destination` is an IP address range in CIDR notation.

    - `SERVICE_CIDR_BLOCK`: If the rule's `destination` is the `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/) (the rule is for traffic destined for a particular service through a service gateway).

  - `icmp_options` - Optional and valid only for ICMP. Use to specify a particular ICMP type and code as defined in ICMP Parameters (http://www.iana.org/assignments/icmp-parameters/icmp-parameters.xhtml). If you specify ICMP as the protocol but omit this object, then all ICMP types and codes are allowed. If you do provide this object, the type is required and the code is optional. To enable MTU negotiation for ingress internet traffic, make sure to allow type 3 ("Destination Unreachable") code 4 ("Fragmentation Needed and Don't Fragment was Set"). If you need to specify multiple codes for a single type, create a separate security list rule for each.

    - `code` - The ICMP code (optional).

    - `type` - The ICMP type.

  - `protocol` - The transport protocol. Specify either `all` or an IPv4 protocol number as defined in Protocol Numbers (http://www.iana.org/assignments/protocol-numbers/protocol-numbers.xhtml). Options are supported only for ICMP ("1"), TCP ("6"), and UDP ("17").

  - `stateless` - A stateless rule allows traffic in one direction. Remember to add a corresponding stateless rule in the other direction if you need to support bidirectional traffic. For example, if egress traffic allows TCP destination port 80, there should be an ingress rule to allow TCP source port 80. Defaults to false, which means the rule is stateful and a corresponding rule is not necessary for bidirectional traffic.

  - `tcp_options` - Optional and valid only for TCP. Use to specify particular destination ports for TCP rules. If you specify TCP as the protocol but omit this object, then all destination ports are allowed.

    - The following 2 attributes specify an inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
      - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

      - `min` - The minimum port number. Must not be greater than the maximum port number.

    - `source_port_range` - An inclusive range of allowed source ports. Use the same number for the min and

max to indicate a single port. Defaults to all ports if not specified.

- max - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

- min - The minimum port number. Must not be greater than the maximum port number.

- `udp_options` - Optional and valid only for UDP. Use to specify particular destination ports for UDP rules. If you specify UDP as the protocol but omit this object, then all destination ports are allowed.

  - The following 2 attributes specify an inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - max - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - min - The minimum port number. Must not be greater than the maximum port number.

  - `source_port_range` - An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - max - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - min - The minimum port number. Must not be greater than the maximum port number.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Department"`: `"Finance"`}

- `id` - The security list's Oracle Cloud ID (OCID).

- `ingress_security_rules` - Rules for allowing ingress IP packets.

  - `icmp_options` - Optional and valid only for ICMP. Use to specify a particular ICMP type and code as defined in ICMP Parameters (http://www.iana.org/assignments/icmp-parameters/icmp-parameters.xhtml). If you specify ICMP as the protocol but omit this object, then all ICMP types and codes are allowed. If you do provide this object, the type is required and the code is optional. To enable MTU negotiation for ingress internet traffic, make sure to allow type 3 ("Destination Unreachable") code 4 ("Fragmentation Needed and Don't Fragment was Set"). If you need to specify multiple codes for a single type, create a separate security list rule for each.
    - code - The ICMP code (optional).

    - type - The ICMP type.

  - `protocol` - The transport protocol. Specify either `all` or an IPv4 protocol number as defined in Protocol Numbers (http://www.iana.org/assignments/protocol-numbers/protocol-numbers.xhtml). Options are supported only for ICMP ("1"), TCP ("6"), and UDP ("17").

  - `source` - Conceptually, this is the range of IP addresses that a packet coming into the instance can come from.

    Allowed values:

    - IP address range in CIDR notation. For example: `192.168.1.0/24`

    - The `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/), if you're setting up a security list rule for traffic coming from a particular service through a service gateway. For example: `oci-phx-objectstorage`

- source_type - Type of source for the rule. The default is `CIDR_BLOCK`.

  - `CIDR_BLOCK`: If the rule's `source` is an IP address range in CIDR notation.

  - `SERVICE_CIDR_BLOCK`: If the rule's `source` is the `cidrBlock` value for a Service (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Service/) (the rule is for traffic coming from a particular service through a service gateway).

- `stateless` - A stateless rule allows traffic in one direction. Remember to add a corresponding stateless rule in the other direction if you need to support bidirectional traffic. For example, if ingress traffic allows TCP destination port 80, there should be an egress rule to allow TCP source port 80. Defaults to false, which means the rule is stateful and a corresponding rule is not necessary for bidirectional traffic.

- `tcp_options` - Optional and valid only for TCP. Use to specify particular destination ports for TCP rules. If you specify TCP as the protocol but omit this object, then all destination ports are allowed.

  - The following 2 attributes specify an inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - `min` - The minimum port number. Must not be greater than the maximum port number.

  - `source_port_range` - An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - `min` - The minimum port number. Must not be greater than the maximum port number.

- `udp_options` - Optional and valid only for UDP. Use to specify particular destination ports for UDP rules. If you specify UDP as the protocol but omit this object, then all destination ports are allowed.

  - The following 2 attributes specify an inclusive range of allowed destination ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - `min` - The minimum port number. Must not be greater than the maximum port number.

  - `source_port_range` - An inclusive range of allowed source ports. Use the same number for the min and max to indicate a single port. Defaults to all ports if not specified.
    - `max` - The maximum port number. Must not be lower than the minimum port number. To specify a single port number, set both the min and max to the same value.

    - `min` - The minimum port number. Must not be greater than the maximum port number.

- `state` - The security list's current state.

- `time_created` - The date and time the security list was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the security list belongs to.

Data Source: oci_core_service_gateways

This data source provides the list of Service Gateways in Oracle Cloud Infrastructure Core service.

Lists the service gateways in the specified compartment. You may optionally specify a VCN OCID to filter the results by VCN.

Example Usage

```
data "oci_core_service_gateways" "test_service_gateways" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    state = "${var.service_gateway_state}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `state` - (Optional) A filter to return only resources that match the given lifecycle state. The state value is case-insensitive.

- `vcn_id` - (Optional) The OCID of the VCN.

Attributes Reference

The following attributes are exported:

- `service_gateways` - The list of service_gateways.

ServiceGateway Reference

The following attributes are exported:

- `block_traffic` - Whether the service gateway blocks all traffic through it. The default is `false`. When this is `true`, traffic is not routed to any services, regardless of route rules. Example: `true`

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment that contains the service gateway.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the service gateway.

- `services` - List of the services enabled on this service gateway. The list can be empty. You can enable a particular service by using AttachServiceId (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/ServiceGateway/AttachServiceId).
    - `service_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the service.
    - `service_name` - The name of the service.

- `state` - The service gateway's current state.

- `time_created` - The date and time the service gateway was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the VCN the service gateway belongs to.

Data Source: oci_core_services

This data source provides the list of Services in Oracle Cloud Infrastructure Core service.

Lists the available services that you can access through a service gateway in this region.

Example Usage

```
data "oci_core_services" "test_services" {
}
```

Argument Reference

The following arguments are supported:

Attributes Reference

The following attributes are exported:

* `services` - The list of services.

Service Reference

The following attributes are exported:

* `cidr_block` - A string that represents the public endpoints for the service. When you set up a route rule to route traffic to the service gateway, use this value as the destination CIDR block for the rule. See Route Table (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/RouteTable/).

* `description` - Description of the service.

* `id` - The service's OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

* `name` - Name of the service. This name can change and is not guaranteed to be unique.

Data Source: oci_core_shapes

This data source provides the list of Shapes in Oracle Cloud Infrastructure Core service.

Lists the shapes that can be used to launch an instance within the specified compartment. You can filter the list by compatibility with a specific image.

Example Usage

```
data "oci_core_shapes" "test_shapes" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    availability_domain = "${var.shape_availability_domain}"
    image_id = "${oci_core_image.test_image.id}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Optional) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `image_id` - (Optional) The OCID of an image.

Attributes Reference

The following attributes are exported:

- `shapes` - The list of shapes.

Shape Reference

The following attributes are exported:

- `name` - The name of the shape. You can enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

Data Source: oci_core_subnet

This data source provides details about a specific Subnet resource in Oracle Cloud Infrastructure Core service.

Gets the specified subnet's information.

Example Usage

```
data "oci_core_subnet" "test_subnet" {
    #Required
    subnet_id = "${oci_core_subnet.test_subnet.id}"
}
```

Argument Reference

The following arguments are supported:

- `subnet_id` - (Required) The OCID of the subnet.

Attributes Reference

The following attributes are exported:

- `availability_domain` - The subnet's availability domain. Example: `Uocm:PHX-AD-1`

- `cidr_block` - The subnet's CIDR block. Example: `172.16.1.0/24`

- `compartment_id` - The OCID of the compartment containing the subnet.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `dhcp_options_id` - The OCID of the set of DHCP options that the subnet uses.

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `dns_label` - A DNS label for the subnet, used in conjunction with the VNIC's hostname and VCN's DNS label to form a fully qualified domain name (FQDN) for each VNIC within this subnet (for example, `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be an alphanumeric string that begins with a letter and is unique within the VCN. The value cannot be changed.

  The absence of this parameter means the Internet and VCN Resolver will not resolve hostnames of instances in this subnet.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

Example: `subnet123`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The subnet's Oracle ID (OCID).

- `prohibit_public_ip_on_vnic` - Whether VNICs within this subnet can have public IP addresses. Defaults to false, which means VNICs created in this subnet will automatically be assigned public IP addresses unless specified otherwise during instance launch or VNIC creation (with the `assignPublicIp` flag in CreateVnicDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/CreateVnicDetails/)). If `prohibitPublicIpOnVnic` is set to true, VNICs created in this subnet cannot have public IP addresses (that is, it's a private subnet). Example: `true`

- `route_table_id` - The OCID of the route table that the subnet uses.

- `security_list_ids` - The OCIDs of the security list or lists that the subnet uses. Remember that security lists are associated *with the subnet*, but the rules are applied to the individual VNICs in the subnet.

- `state` - The subnet's current state.

- `subnet_domain_name` - The subnet's domain name, which consists of the subnet's DNS label, the VCN's DNS label, and the `oraclevcn.com` domain.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `subnet123.vcn1.oraclevcn.com`

- `time_created` - The date and time the subnet was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the subnet is in.

- `virtual_router_ip` - The IP address of the virtual router. Example: `10.0.14.1`

- `virtual_router_mac` - The MAC address of the virtual router. Example: `00:00:17:B6:4D:DD`

Data Source: oci_core_subnets

This data source provides the list of Subnets in Oracle Cloud Infrastructure Core service.

Lists the subnets in the specified VCN and the specified compartment.

Example Usage

```
data "oci_core_subnets" "test_subnets" {
    #Required
    compartment_id = "${var.compartment_id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    display_name = "${var.subnet_display_name}"
    state = "${var.subnet_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

- `vcn_id` - (Required) The OCID of the VCN.

Attributes Reference

The following attributes are exported:

- `subnets` - The list of subnets.

Subnet Reference

The following attributes are exported:

- `availability_domain` - The subnet's availability domain. Example: `Uocm:PHX-AD-1`

- `cidr_block` - The subnet's CIDR block. Example: `172.16.1.0/24`

- `compartment_id` - The OCID of the compartment containing the subnet.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm).

Example: `{"Operations.CostCenter": "42"}`

- `dhcp_options_id` - The OCID of the set of DHCP options that the subnet uses.

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `dns_label` - A DNS label for the subnet, used in conjunction with the VNIC's hostname and VCN's DNS label to form a fully qualified domain name (FQDN) for each VNIC within this subnet (for example, `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be an alphanumeric string that begins with a letter and is unique within the VCN. The value cannot be changed.

  The absence of this parameter means the Internet and VCN Resolver will not resolve hostnames of instances in this subnet.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `subnet123`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The subnet's Oracle ID (OCID).

- `prohibit_public_ip_on_vnic` - Whether VNICs within this subnet can have public IP addresses. Defaults to false, which means VNICs created in this subnet will automatically be assigned public IP addresses unless specified otherwise during instance launch or VNIC creation (with the `assignPublicIp` flag in CreateVnicDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/CreateVnicDetails/)). If `prohibitPublicIpOnVnic` is set to true, VNICs created in this subnet cannot have public IP addresses (that is, it's a private subnet). Example: `true`

- `route_table_id` - The OCID of the route table that the subnet uses.

- `security_list_ids` - The OCIDs of the security list or lists that the subnet uses. Remember that security lists are associated *with the subnet*, but the rules are applied to the individual VNICs in the subnet.

- `state` - The subnet's current state.

- `subnet_domain_name` - The subnet's domain name, which consists of the subnet's DNS label, the VCN's DNS label, and the `oraclevcn.com` domain.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `subnet123.vcn1.oraclevcn.com`

- `time_created` - The date and time the subnet was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the subnet is in.

- `virtual_router_ip` - The IP address of the virtual router. Example: `10.0.14.1`

- `virtual_router_mac` - The MAC address of the virtual router. Example: `00:00:17:B6:4D:DD`

Data Source: oci_core_vcns

Other supported legacy names/aliases: * `oci_core_virtual_network`

This data source provides the list of Vcns in Oracle Cloud Infrastructure Core service.

Lists the virtual cloud networks (VCNs) in the specified compartment.

Example Usage

```
data "oci_core_vcns" "test_vcns" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.vcn_display_name}"
    state = "${var.vcn_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

Attributes Reference

The following attributes are exported:

- `virtual_networks` - The list of virtual_networks.

Vcn Reference

The following attributes are exported:

- `cidr_block` - The CIDR IP address block of the VCN. Example: `172.16.0.0/16`

- `compartment_id` - The OCID of the compartment containing the VCN.

- `default_dhcp_options_id` - The OCID for the VCN's default set of DHCP options.

- `default_route_table_id` - The OCID for the VCN's default route table.

- `default_security_list_id` - The OCID for the VCN's default security list.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `dns_label` - A DNS label for the VCN, used in conjunction with the VNIC's hostname and subnet's DNS label to form a fully qualified domain name (FQDN) for each VNIC within this subnet (for example, `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be an alphanumeric string that begins with a letter. The value cannot be changed.

  The absence of this parameter means the Internet and VCN Resolver will not work for this VCN.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `vcn1`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The VCN's Oracle ID (OCID).

- `state` - The VCN's current state.

- `time_created` - The date and time the VCN was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_domain_name` - The VCN's domain name, which consists of the VCN's DNS label, and the `oraclevcn.com` domain.

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `vcn1.oraclevcn.com`

Data Source: oci_core_virtual_circuit

This data source provides details about a specific Virtual Circuit resource in Oracle Cloud Infrastructure Core service.

Gets the specified virtual circuit's information.

Example Usage

```
data "oci_core_virtual_circuit" "test_virtual_circuit" {
    #Required
    virtual_circuit_id = "${oci_core_virtual_circuit.test_virtual_circuit.id}"
}
```

Argument Reference

The following arguments are supported:

- `virtual_circuit_id` - (Required) The OCID of the virtual circuit.

Attributes Reference

The following attributes are exported:

- `bandwidth_shape_name` - The provisioned data rate of the connection. To get a list of the available bandwidth levels (that is, shapes), see ListFastConnectProviderServiceVirtualCircuitBandwidthShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/FastConnectProviderService/ListFastConnectProviderVirtualCircuitBandwidthShapes). Example: `10 Gbps`

- `bgp_management` - BGP management option.

- `bgp_session_state` - The state of the BGP session associated with the virtual circuit.

- `compartment_id` - The OCID of the compartment containing the virtual circuit.

- `cross_connect_mappings` - An array of mappings, each containing properties for a cross-connect or cross-connect group that is associated with this virtual circuit.

  - `bgp_md5auth_key` - The key for BGP MD5 authentication. Only applicable if your system requires MD5 authentication. If empty or not set (null), that means you don't use BGP MD5 authentication.

  - `cross_connect_or_cross_connect_group_id` - The OCID of the cross-connect or cross-connect group for this mapping. Specified by the owner of the cross-connect or cross-connect group (the customer if the customer is colocated with Oracle, or the provider if the customer is connecting via provider).

  - `customer_bgp_peering_ip` - The BGP IPv4 address for the router on the other end of the BGP session from Oracle. Specified by the owner of that router. If the session goes from Oracle to a customer, this is the BGP IPv4 address of the customer's edge router. If the session goes from Oracle to a provider, this is the BGP IPv4 address of the provider's edge router. Must use a /30 or /31 subnet mask.

    There's one exception: for a public virtual circuit, Oracle specifies the BGP IPv4 addresses.

    Example: `10.0.0.18/31`

  - `oracle_bgp_peering_ip` - The IPv4 address for Oracle's end of the BGP session. Must use a /30 or /31 subnet mask. If the session goes from Oracle to a customer's edge router, the customer specifies this information. If the session goes from Oracle to a provider's edge router, the provider specifies this.

    There's one exception: for a public virtual circuit, Oracle specifies the BGP IPv4 addresses.

    Example: `10.0.0.19/31`

- vlan - The number of the specific VLAN (on the cross-connect or cross-connect group) that is assigned to this virtual circuit. Specified by the owner of the cross-connect or cross-connect group (the customer if the customer is colocated with Oracle, or the provider if the customer is connecting via provider). Example: `200`

- `customer_bgp_asn` - The BGP ASN of the network at the other end of the BGP session from Oracle. If the session is between the customer's edge router and Oracle, the value is the customer's ASN. If the BGP session is between the provider's edge router and Oracle, the value is the provider's ASN.

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `gateway_id` - The OCID of the customer's dynamic routing gateway (DRG) (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Drg) that this virtual circuit uses. Applicable only to private virtual circuits.

- `id` - The virtual circuit's Oracle ID (OCID).

- `oracle_bgp_asn` - The Oracle BGP ASN.

- `provider_service_id` - The OCID of the service offered by the provider (if the customer is connecting via a provider).

- `provider_state` - The provider's state in relation to this virtual circuit (if the customer is connecting via a provider). ACTIVE means the provider has provisioned the virtual circuit from their end. INACTIVE means the provider has not yet provisioned the virtual circuit, or has de-provisioned it.

- `public_prefixes` - For a public virtual circuit. The public IP prefixes (CIDRs) the customer wants to advertise across the connection. Each prefix must be /31 or less specific.

- `reference_comment` - Provider-supplied reference information about this virtual circuit (if the customer is connecting via a provider).

- `region` - The Oracle Cloud Infrastructure region where this virtual circuit is located.

- `service_type` - Provider service type.

- `state` - The virtual circuit's current state. For information about the different states, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

- `time_created` - The date and time the virtual circuit was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `type` - Whether the virtual circuit supports private or public peering. For more information, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

Data Source: oci_core_virtual_circuit_bandwidth_shapes

This data source provides the list of Virtual Circuit Bandwidth Shapes in Oracle Cloud Infrastructure Core service.

Gets the list of available virtual circuit bandwidth levels for a provider. You need this information so you can specify your desired bandwidth level (shape) when you create a virtual circuit.

For more information about virtual circuits, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

Example Usage

```
data "oci_core_virtual_circuit_bandwidth_shapes" "test_virtual_circuit_bandwidth_shapes" {
    #Required
    provider_service_id = "${oci_core_provider_service.test_provider_service.id}"
}
```

Argument Reference

The following arguments are supported:

- `provider_service_id` - (Required) The OCID of the provider service.

Attributes Reference

The following attributes are exported:

- `virtual_circuit_bandwidth_shapes` - The list of virtual_circuit_bandwidth_shapes.

VirtualCircuitBandwidthShape Reference

The following attributes are exported:

- `bandwidth_in_mbps` - The bandwidth in Mbps. Example: `10000`

- `name` - The name of the bandwidth shape. Example: `10 Gbps`

Data Source: oci_core_virtual_circuit_public_prefixes

This data source provides the list of Virtual Circuit Public Prefixes in Oracle Cloud Infrastructure Core service.

Lists the public IP prefixes and their details for the specified public virtual circuit.

Example Usage

```
data "oci_core_virtual_circuit_public_prefixes" "test_virtual_circuit_public_prefixes" {
    #Required
    virtual_circuit_id = "${oci_core_virtual_circuit.test_virtual_circuit.id}"

    #Optional
    verification_state = "${var.virtual_circuit_public_prefix_verification_state}"
}
```

Argument Reference

The following arguments are supported:

* `verification_state` - (Optional) A filter to only return resources that match the given verification state. The state value is case-insensitive.

* `virtual_circuit_id` - (Required) The OCID of the virtual circuit.

Attributes Reference

The following attributes are exported:

* `virtual_circuit_public_prefixes` - The list of virtual_circuit_public_prefixes.

VirtualCircuitPublicPrefix Reference

The following attributes are exported:

* `cidr_block` - Publix IP prefix (CIDR) that the customer specified.

* `verification_state` - Oracle must verify that the customer owns the public IP prefix before traffic for that prefix can flow across the virtual circuit. Verification can take a few business days. `IN_PROGRESS` means Oracle is verifying the prefix. `COMPLETED` means verification succeeded. `FAILED` means verification failed and traffic for this prefix will not flow across the connection.

Data Source: oci_core_virtual_circuits

This data source provides the list of Virtual Circuits in Oracle Cloud Infrastructure Core service.

Lists the virtual circuits in the specified compartment.

Example Usage

```
data "oci_core_virtual_circuits" "test_virtual_circuits" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.virtual_circuit_display_name}"
    state = "${var.virtual_circuit_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to return only resources that match the specified lifecycle state. The value is case insensitive.

Attributes Reference

The following attributes are exported:

- `virtual_circuits` - The list of virtual_circuits.

VirtualCircuit Reference

The following attributes are exported:

- `bandwidth_shape_name` - The provisioned data rate of the connection. To get a list of the available bandwidth levels (that is, shapes), see ListFastConnectProviderServiceVirtualCircuitBandwidthShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/FastConnectProviderService/ListFastConnectProviderVirtualCircuitBandwidthShapes). Example: `10 Gbps`

- `bgp_management` - BGP management option.

- `bgp_session_state` - The state of the BGP session associated with the virtual circuit.

- `compartment_id` - The OCID of the compartment containing the virtual circuit.

- `cross_connect_mappings` - An array of mappings, each containing properties for a cross-connect or cross-connect group that is associated with this virtual circuit.

    - `bgp_md5auth_key` - The key for BGP MD5 authentication. Only applicable if your system requires MD5 authentication. If empty or not set (null), that means you don't use BGP MD5 authentication.

    - `cross_connect_or_cross_connect_group_id` - The OCID of the cross-connect or cross-connect group for this mapping. Specified by the owner of the cross-connect or cross-connect group (the customer if the customer is colocated with Oracle, or the provider if the customer is connecting via provider).

- `customer_bgp_peering_ip` - The BGP IPv4 address for the router on the other end of the BGP session from Oracle. Specified by the owner of that router. If the session goes from Oracle to a customer, this is the BGP IPv4 address of the customer's edge router. If the session goes from Oracle to a provider, this is the BGP IPv4 address of the provider's edge router. Must use a /30 or /31 subnet mask.

  There's one exception: for a public virtual circuit, Oracle specifies the BGP IPv4 addresses.

  Example: `10.0.0.18/31`

- `oracle_bgp_peering_ip` - The IPv4 address for Oracle's end of the BGP session. Must use a /30 or /31 subnet mask. If the session goes from Oracle to a customer's edge router, the customer specifies this information. If the session goes from Oracle to a provider's edge router, the provider specifies this.

  There's one exception: for a public virtual circuit, Oracle specifies the BGP IPv4 addresses.

  Example: `10.0.0.19/31`

- `vlan` - The number of the specific VLAN (on the cross-connect or cross-connect group) that is assigned to this virtual circuit. Specified by the owner of the cross-connect or cross-connect group (the customer if the customer is colocated with Oracle, or the provider if the customer is connecting via provider). Example: `200`

- `customer_bgp_asn` - The BGP ASN of the network at the other end of the BGP session from Oracle. If the session is between the customer's edge router and Oracle, the value is the customer's ASN. If the BGP session is between the provider's edge router and Oracle, the value is the provider's ASN.

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `gateway_id` - The OCID of the customer's dynamic routing gateway (DRG) (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Drg) that this virtual circuit uses. Applicable only to private virtual circuits.

- `id` - The virtual circuit's Oracle ID (OCID).

- `oracle_bgp_asn` - The Oracle BGP ASN.

- `provider_service_id` - The OCID of the service offered by the provider (if the customer is connecting via a provider).

- `provider_state` - The provider's state in relation to this virtual circuit (if the customer is connecting via a provider). ACTIVE means the provider has provisioned the virtual circuit from their end. INACTIVE means the provider has not yet provisioned the virtual circuit, or has de-provisioned it.

- `public_prefixes` - For a public virtual circuit. The public IP prefixes (CIDRs) the customer wants to advertise across the connection. Each prefix must be /31 or less specific.

- `reference_comment` - Provider-supplied reference information about this virtual circuit (if the customer is connecting via a provider).

- `region` - The Oracle Cloud Infrastructure region where this virtual circuit is located.

- `service_type` - Provider service type.

- `state` - The virtual circuit's current state. For information about the different states, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

- `time_created` - The date and time the virtual circuit was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `type` - Whether the virtual circuit supports private or public peering. For more information, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

Data Source: oci_core_vnic

This data source provides details about a specific Vnic resource in Oracle Cloud Infrastructure Core service.

Gets the information for the specified virtual network interface card (VNIC). You can get the VNIC OCID from the ListVnicAttachments (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/VnicAttachment/ListVnicAttachments) operation.

Example Usage

```
data "oci_core_vnic" "test_vnic" {
    #Required
    vnic_id = "${oci_core_vnic.test_vnic.id}"
}
```

Argument Reference

The following arguments are supported:

- `vnic_id` - (Required) The OCID of the VNIC.

Attributes Reference

The following attributes are exported:

- `availability_domain` - The VNIC's availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment containing the VNIC.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `hostname_label` - The hostname for the VNIC's primary private IP. Used for DNS. The value is the hostname portion of the primary private IP's fully qualified domain name (FQDN) (for example, `bminstance-1` in FQDN `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be unique across all VNICs in the subnet and comply with RFC 952 (https://tools.ietf.org/html/rfc952) and RFC 1123 (https://tools.ietf.org/html/rfc1123).

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

Example: `bminstance-1`

- `id` - The OCID of the VNIC.

- `is_primary` - Whether the VNIC is the primary VNIC (the VNIC that is automatically created and attached during instance launch).

- `mac_address` - The MAC address of the VNIC. Example: `00:00:17:B6:4D:DD`

- `private_ip_address` - The private IP address of the primary `privateIp` object on the VNIC. The address is within the CIDR of the VNIC's subnet. Example: `10.0.3.3`

- `public_ip_address` - The public IP address of the VNIC, if one is assigned.

- `skip_source_dest_check` - Whether the source/destination check is disabled on the VNIC. Defaults to `false`, which means the check is performed. For information about why you would skip the source/destination check, see Using a Private IP as a Route Target (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingroutetables.htm#privateip). Example: `true`

- `state` - The current state of the VNIC.

- `subnet_id` - The OCID of the subnet the VNIC is in.

- `time_created` - The date and time the VNIC was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_core_vnic_attachments

This data source provides the list of Vnic Attachments in Oracle Cloud Infrastructure Core service.

Lists the VNIC attachments in the specified compartment. A VNIC attachment resides in the same compartment as the attached instance. The list can be filtered by instance, VNIC, or availability domain.

Example Usage

```
data "oci_core_vnic_attachments" "test_vnic_attachments" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    availability_domain = "${var.vnic_attachment_availability_domain}"
    instance_id = "${oci_core_instance.test_instance.id}"
    vnic_id = "${oci_core_vnic.test_vnic.id}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Optional) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `instance_id` - (Optional) The OCID of the instance.

- `vnic_id` - (Optional) The OCID of the VNIC.

Attributes Reference

The following attributes are exported:

- `vnic_attachments` - The list of vnic_attachments.

VnicAttachment Reference

The following attributes are exported:

- `availability_domain` - The availability domain of the instance. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment the VNIC attachment is in, which is the same compartment the instance is in.

- `display_name` - A user-friendly name. Does not have to be unique. Avoid entering confidential information.

- `id` - The OCID of the VNIC attachment.

- `instance_id` - The OCID of the instance.

- `nic_index` - Which physical network interface card (NIC) the VNIC uses. Certain bare metal instance shapes have two active physical NICs (0 and 1). If you add a secondary VNIC to one of these instances, you can specify which NIC the VNIC will use. For more information, see Virtual Network Interface Cards (VNICs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVNICs.htm).

- `state` - The current state of the VNIC attachment.

- `subnet_id` - The OCID of the VNIC's subnet.

- `time_created` - The date and time the VNIC attachment was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vlan_tag` - The Oracle-assigned VLAN tag of the attached VNIC. Available after the attachment process is complete. Example: `0`

- `vnic_id` - The OCID of the VNIC. Available after the attachment process is complete.

Data Source: oci_core_volume

This data source provides details about a specific Volume resource in Oracle Cloud Infrastructure Core service.

Gets information for the specified volume.

Example Usage

```
data "oci_core_volume" "test_volume" {
    #Required
    volume_id = "${oci_core_volume.test_volume.id}"
}
```

Argument Reference

The following arguments are supported:

- `volume_id` - (Required) The OCID of the volume.

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain of the volume. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the volume.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The OCID of the volume.

- `is_hydrated` - Specifies whether the cloned volume's data has finished copying from the source volume or backup.

- `kms_key_id` - The OCID of the KMS key which is the master encryption key for the volume.

- `size_in_gbs` - The size of the volume in GBs.

- `size_in_mbs` - The size of the volume in MBs. This field is deprecated. Use sizeInGBs instead.

- `source_details` - The volume source, either an existing volume in the same availability domain or a volume backup. If

null, an empty volume is created.

- `id` - The OCID of the volume or volume backup.

- `type` - The type can be one of these values: `volume`, `volumeBackup`

- `state` - The current state of a volume.

- `time_created` - The date and time the volume was created. Format defined by RFC3339.

- `volume_group_id` - The OCID of the source volume group.

Data Source: oci_core_volume_attachments

This data source provides the list of Volume Attachments in Oracle Cloud Infrastructure Core service.

Lists the volume attachments in the specified compartment. You can filter the list by specifying an instance OCID, volume OCID, or both.

Currently, the only supported volume attachment type are IScsiVolumeAttachment (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/IScsiVolumeAttachment/) and ParavirtualizedVolumeAttachment (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/ParavirtualizedVolumeAttachment/).

Example Usage

```
data "oci_core_volume_attachments" "test_volume_attachments" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    availability_domain = "${var.volume_attachment_availability_domain}"
    instance_id = "${oci_core_instance.test_instance.id}"
    volume_id = "${oci_core_volume.test_volume.id}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Optional) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `instance_id` - (Optional) The OCID of the instance.

- `volume_id` - (Optional) The OCID of the volume.

Attributes Reference

The following attributes are exported:

- `volume_attachments` - The list of volume_attachments.

VolumeAttachment Reference

The following attributes are exported:

- `attachment_type` - The type of volume attachment.

- `availability_domain` - The availability domain of an instance. Example: `Uocm:PHX-AD-1`

- `chap_secret` - The Challenge-Handshake-Authentication-Protocol (CHAP) secret valid for the associated CHAP user name. (Also called the "CHAP password".) Example: `d6866c0d-298b-48ba-95af-309b4faux45e`

- `chap_username` - The volume's system-generated Challenge-Handshake-Authentication-Protocol (CHAP) user name. Example: `ocid1.volume.oc1.phx.abyhqljrgvttnlx73nmrwfaux7kcvzfs3s66izvxf2h4lgvyndsdsnoiwr5q`

- `compartment_id` - The OCID of the compartment.

- `display_name` - A user-friendly name. Does not have to be unique, and it cannot be changed. Avoid entering confidential information. Example: `My volume attachment`

- `id` - The OCID of the volume attachment.

- `instance_id` - The OCID of the instance the volume is attached to.

- `ipv4` - The volume's iSCSI IP address. Example: `169.254.0.2`

- `iqn` - The target volume's iSCSI Qualified Name in the format defined by RFC 3720. Example: `iqn.2015-12.us.oracle.com:456b0391-17b8-4122-bbf1-f85fc0bb97d9`

- `is_pv_encryption_in_transit_enabled` - Whether the enable encryption in transit for the PV volume attachment is on or not.

- `is_read_only` - Whether the attachment was created in read-only mode.

- `port` - The volume's iSCSI port. Example: `3260`

- `state` - The current state of the volume attachment.

- `time_created` - The date and time the volume was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `volume_id` - The OCID of the volume.

Data Source: oci_core_volume_backup_policies

This data source provides the list of Volume Backup Policies in Oracle Cloud Infrastructure Core service.

Lists all volume backup policies available to the caller.

Example Usage

```
data "oci_core_volume_backup_policies" "test_volume_backup_policies" {
}
```

Attributes Reference

The following attributes are exported:

* `volume_backup_policies` - The list of volume_backup_policies.

VolumeBackupPolicy Reference

The following attributes are exported:

* `display_name` - A user-friendly name for the volume backup policy. Does not have to be unique and it's changeable. Avoid entering confidential information.

* `id` - The OCID of the volume backup policy.

* `schedules` - The collection of schedules that this policy will apply.
    * `backup_type` - The type of backup to create.

    * `offset_seconds` - The number of seconds (positive or negative) that the backup time should be shifted from the default interval boundaries specified by the period. Backup time = Frequency start time + Offset.

    * `period` - How often the backup should occur.

    * `retention_seconds` - How long, in seconds, backups created by this schedule should be kept until being automatically deleted.

* `time_created` - The date and time the volume backup policy was created. Format defined by RFC3339.

Data Source: oci_core_volume_backup_policy_assignments

This data source provides the list of Volume Backup Policy Assignments in Oracle Cloud Infrastructure Core service.

Gets the volume backup policy assignment for the specified asset. Note that the assetId query parameter is required, and that the returned list will contain at most one item (since any given asset can only have one policy assigned to it).

Example Usage

```
data "oci_core_volume_backup_policy_assignments" "test_volume_backup_policy_assignments" {
    #Required
    asset_id = "${oci_core_asset.test_asset.id}"
}
```

Argument Reference

The following arguments are supported:

- `asset_id` - (Required) The OCID of an asset (e.g. a volume).

Attributes Reference

The following attributes are exported:

- `volume_backup_policy_assignments` - The list of volume_backup_policy_assignments.

VolumeBackupPolicyAssignment Reference

The following attributes are exported:

- `asset_id` - The OCID of the asset (e.g. a volume) to which the policy has been assigned.

- `id` - The OCID of the volume backup policy assignment.

- `policy_id` - The OCID of the volume backup policy that has been assigned to an asset.

- `time_created` - The date and time the volume backup policy assignment was created. Format defined by RFC3339.

Data Source: oci_core_volume_backups

This data source provides the list of Volume Backups in Oracle Cloud Infrastructure Core service.

Lists the volume backups in the specified compartment. You can filter the results by volume.

Example Usage

```
data "oci_core_volume_backups" "test_volume_backups" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.volume_backup_display_name}"
    source_volume_backup_id = "${oci_core_source_volume_backup.test_source_volume_backup.id}"
    state = "${var.volume_backup_state}"
    volume_id = "${oci_core_volume.test_volume.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `source_volume_backup_id` - (Optional) A filter to return only resources that originated from the given source volume backup.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

- `volume_id` - (Optional) The OCID of the volume.

Attributes Reference

The following attributes are exported:

- `volume_backups` - The list of volume_backups.

VolumeBackup Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains the volume backup.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm).

Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name for the volume backup. Does not have to be unique and it's changeable. Avoid entering confidential information.

- `expiration_time` - The date and time the volume backup will expire and be automatically deleted. Format defined by RFC3339. This parameter will always be present for backups that were created automatically by a scheduled-backup policy. For manually created backups, it will be absent, signifying that there is no expiration time and the backup will last forever until manually deleted.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The OCID of the volume backup.

- `size_in_gbs` - The size of the volume, in GBs.

- `size_in_mbs` - The size of the volume in MBs. The value must be a multiple of 1024. This field is deprecated. Please use `size_in_gbs`.

- `source_type` - Specifies whether the backup was created manually, or via scheduled backup policy.

- `source_volume_backup_id` - The OCID of the source volume backup.

- `state` - The current state of a volume backup.

- `time_created` - The date and time the volume backup was created. This is the time the actual point-in-time image of the volume data was taken. Format defined by RFC3339.

- `time_request_received` - The date and time the request to create the volume backup was received. Format defined by RFC3339.

- `type` - The type of a volume backup. Supported values are 'FULL' or 'INCREMENTAL'.

- `unique_size_in_gbs` - The size used by the backup, in GBs. It is typically smaller than `size_in_gbs`, depending on the space consumed on the volume and whether the backup is full or incremental.

- `unique_size_in_mbs` - The size used by the backup, in MBs. It is typically smaller than `size_in_mbs`, depending on the space consumed on the volume and whether the backup is full or incremental. This field is deprecated. Please use `unique_size_in_gbs`.

- `volume_id` - The OCID of the volume.

Data Source: oci_core_volume_group_backups

This data source provides the list of Volume Group Backups in Oracle Cloud Infrastructure Core service.

Lists the volume group backups in the specified compartment. You can filter the results by volume group. For more information, see Volume Groups (https://docs.cloud.oracle.com/iaas/Content/Block/Concepts/volumegroups.htm).

Example Usage

```
data "oci_core_volume_group_backups" "test_volume_group_backups" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.volume_group_backup_display_name}"
    volume_group_id = "${oci_core_volume_group.test_volume_group.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `volume_group_id` - (Optional) The OCID of the volume group.

Attributes Reference

The following attributes are exported:

- `volume_group_backups` - The list of volume_group_backups.

VolumeGroupBackup Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains the volume group backup.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name for the volume group backup. Does not have to be unique and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type,

or namespace. For more information, see Resource Tags
(https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `id` - The OCID of the volume group backup.

- `size_in_gbs` - The aggregate size of the volume group backup, in GBs.

- `size_in_mbs` - The aggregate size of the volume group backup, in MBs.

- `state` - The current state of a volume group backup.

- `time_created` - The date and time the volume group backup was created. This is the time the actual point-in-time image of the volume group data was taken. Format defined by RFC3339.

- `time_request_received` - The date and time the request to create the volume group backup was received. Format defined by RFC3339.

- `type` - The type of backup.

- `unique_size_in_gbs` - The aggregate size used by the volume group backup, in GBs. It is typically smaller than `size_in_gbs`, depending on the space consumed on the volume group and whether the volume backup is full or incremental.

- `unique_size_in_mbs` - The aggregate size used by the volume group backup, in MBs. It is typically smaller than `size_in_mbs`, depending on the space consumed on the volume group and whether the volume backup is full or incremental.

- `volume_backup_ids` - OCIDs for the volume backups in this volume group backup.

- `volume_group_id` - The OCID of the source volume group.

Data Source: oci_core_volume_groups

This data source provides the list of Volume Groups in Oracle Cloud Infrastructure Core service.

Lists the volume groups in the specified compartment and availability domain. For more information, see Volume Groups (https://docs.cloud.oracle.com/iaas/Content/Block/Concepts/volumegroups.htm).

Example Usage

```
data "oci_core_volume_groups" "test_volume_groups" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    availability_domain = "${var.volume_group_availability_domain}"
    display_name = "${var.volume_group_display_name}"
    state = "${var.volume_group_state}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Optional) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

Attributes Reference

The following attributes are exported:

- `volume_groups` - The list of volume_groups.

VolumeGroup Reference

The following attributes are exported:

- `availability_domain` - The availability domain of the volume group.

- `compartment_id` - The OCID of the compartment that contains the volume group.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm).

Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name for the volume group. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The OCID for the volume group.

- `is_hydrated` - Specifies whether the newly created cloned volume group's data has finished copying from the source volume group or backup.

- `size_in_gbs` - The aggregate size of the volume group in GBs.

- `size_in_mbs` - The aggregate size of the volume group in MBs.

- `source_details` - The volume group source. The source is either another a list of volume IDs in the same availability domain, another volume group, or a volume group backup.
    - `type` - The type can be one of these values: `volumeGroupBackupId`, `volumeGroupId`, `volumeIds`

    - `volume_group_backup_id` - The OCID of the volume group backup to restore from, if the type is `volumeGroupBackup`

    - `volume_group_id` - The OCID of the volume group to clone from, if the type is `volumeGroup`

    - `volume_ids` - OCIDs for the volumes in this volume group, if the type is `volumeIds`

- `state` - The current state of a volume group.

- `time_created` - The date and time the volume group was created. Format defined by RFC3339.

- `volume_ids` - OCIDs for the volumes in this volume group.

Data Source: oci_core_volumes

This data source provides the list of Volumes in Oracle Cloud Infrastructure Core service.

Lists the volumes in the specified compartment and availability domain.

Example Usage

```
data "oci_core_volumes" "test_volumes" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    availability_domain = "${var.volume_availability_domain}"
    display_name = "${var.volume_display_name}"
    state = "${var.volume_state}"
    volume_group_id = "${oci_core_volume_group.test_volume_group.id}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Optional) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly.

- `state` - (Optional) A filter to only return resources that match the given lifecycle state. The state value is case-insensitive.

- `volume_group_id` - (Optional) The OCID of the volume group.

Attributes Reference

The following attributes are exported:

- `volumes` - The list of volumes.

Volume Reference

The following attributes are exported:

- `availability_domain` - The availability domain of the volume. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the volume.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more

information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm).
Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The OCID of the volume.

- `is_hydrated` - Specifies whether the cloned volume's data has finished copying from the source volume or backup.

- `kms_key_id` - The OCID of the KMS key which is the master encryption key for the volume.

- `size_in_gbs` - The size of the volume in GBs.

- `size_in_mbs` - The size of the volume in MBs. This field is deprecated. Use `size_in_gbs` instead.

- `source_details` - The volume source, either an existing volume in the same availability domain or a volume backup. If null, an empty volume is created.
    - `id` - The OCID of the volume or volume backup.

    - `type` - The type can be one of these values: `volume`, `volumeBackup`

- `state` - The current state of a volume.

- `time_created` - The date and time the volume was created. Format defined by RFC3339.

- `volume_group_id` - The OCID of the source volume group.

Data Source: oci_database_autonomous_data_warehouse

This data source provides details about a specific Autonomous Data Warehouse resource in Oracle Cloud Infrastructure Database service.

Gets the details of the specified Autonomous Data Warehouse.

Example Usage

```
data "oci_database_autonomous_data_warehouse" "test_autonomous_data_warehouse" {
    #Required
    autonomous_data_warehouse_id = "${oci_database_autonomous_data_warehouse.test_autonomous_data_warehouse.id}"
}
```

Argument Reference

The following arguments are supported:

- `autonomous_data_warehouse_id` - (Required) The database OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `connection_strings` - The connection string used to connect to the Data Warehouse. The username for the Service Console is ADMIN. Use the password you entered when creating the Autonomous Data Warehouse for the password value.
    - `all_connection_strings` - All connection strings to use to connect to the Data Warehouse.
    - `high` - The High database service provides the highest level of resources to each SQL statement resulting in the highest performance, but supports the fewest number of concurrent SQL statements.
    - `low` - The Low database service provides the least level of resources to each SQL statement, but supports the most number of concurrent SQL statements.
    - `medium` - The Medium database service provides a lower level of resources to each SQL statement potentially resulting a lower level of performance, but supports more concurrent SQL statements.

- `cpu_core_count` - The number of CPU cores to be made available to the database.

- `data_storage_size_in_tbs` - The quantity of data in the database, in terabytes.

- `db_name` - The database name.

- `db_version` - A valid Oracle Database version for Autonomous Data Warehouse.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - The user-friendly name for the Autonomous Data Warehouse. The name does not have to be unique.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data Warehouse.

- `license_model` - The Oracle license model that applies to the Oracle Autonomous Data Warehouse. The default is BRING_YOUR_OWN_LICENSE.

- `lifecycle_details` - Information about the current lifecycle state.

- `service_console_url` - The URL of the Service Console for the Data Warehouse.

- `state` - The current state of the database.

- `time_created` - The date and time the database was created.

Data Source: oci_database_autonomous_data_warehouse_backup

This data source provides details about a specific Autonomous Data Warehouse Backup resource in Oracle Cloud Infrastructure Database service.

Gets information about the specified Autonomous Data Warehouse backup.

Example Usage

```
data "oci_database_autonomous_data_warehouse_backup" "test_autonomous_data_warehouse_backup" {
    #Required
    autonomous_data_warehouse_backup_id = "${oci_database_autonomous_data_warehouse_backup.test_autonomous_data_warehouse_backup.id}"
}
```

Argument Reference

The following arguments are supported:

* `autonomous_data_warehouse_backup_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data Warehouse backup.

Attributes Reference

The following attributes are exported:

* `autonomous_data_warehouse_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data Warehouse.

* `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

* `display_name` - The user-friendly name for the backup. The name does not have to be unique.

* `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data Warehouse backup.

* `is_automatic` - Indicates whether the backup is user-initiated or automatic.

* `lifecycle_details` - Additional information about the current lifecycle state.

* `state` - The current state of the backup.

* `time_ended` - The date and time the backup completed.

* `time_started` - The date and time the backup started.

- `type` - The type of backup.

Data Source: oci_database_autonomous_data_warehouse_backups

This data source provides the list of Autonomous Data Warehouse Backups in Oracle Cloud Infrastructure Database service.

Gets a list of Autonomous Data Warehouse backups based on either the `autonomousDataWarehouseId` or `compartmentId` specified as a query parameter.

Example Usage

```
data "oci_database_autonomous_data_warehouse_backups" "test_autonomous_data_warehouse_backups" {

    #Optional
    autonomous_data_warehouse_id = "${oci_database_autonomous_data_warehouse.test_autonomous_data_warehouse.id}"
    compartment_id = "${var.compartment_id}"
    display_name = "${var.autonomous_data_warehouse_backup_display_name}"
    state = "${var.autonomous_data_warehouse_backup_state}"
}
```

Argument Reference

The following arguments are supported:

- `autonomous_data_warehouse_id` - (Optional) The database OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `compartment_id` - (Optional) The compartment OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `display_name` - (Optional) A filter to return only resources that match the entire display name given. The match is not case sensitive.

- `state` - (Optional) A filter to return only resources that match the given lifecycle state exactly.

Attributes Reference

The following attributes are exported:

- `autonomous_data_warehouse_backups` - The list of autonomous_data_warehouse_backups.

AutonomousDataWarehouseBackup Reference

The following attributes are exported:

- `autonomous_data_warehouse_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data Warehouse.

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `display_name` - The user-friendly name for the backup. The name does not have to be unique.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data Warehouse backup.

- `is_automatic` - Indicates whether the backup is user-initiated or automatic.

- `lifecycle_details` - Additional information about the current lifecycle state.

- `state` - The current state of the backup.

- `time_ended` - The date and time the backup completed.

- `time_started` - The date and time the backup started.

- `type` - The type of backup.

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

Data Source: oci_database_autonomous_data_warehouse_wallet

This data source provides details about a specific Autonomous Data Warehouse Wallet resource in Oracle Cloud Infrastructure Database service.

Example Usage

```
data "oci_database_autonomous_data_warehouse_wallet" "test_autonomous_data_warehouse_wallet" {
    #Required
    autonomous_data_warehouse_id = "${oci_database_autonomous_data_warehouse.test_autonomous_data_warehouse.id}"
    password = "${var.autonomous_data_warehouse_wallet_password}"
}
```

Argument Reference

The following arguments are supported:

- `autonomous_data_warehouse_id` - (Required) The database OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `password` - (Required) The password to encrypt the keys inside the wallet. The password must be at least 8 characters long and must include at least 1 letter and either 1 numeric character or 1 special character.

Attributes Reference

The following attributes are exported:

- `content` - content of the downloaded zipped wallet for the Autonomous Data Warehouse

Data Source: oci_database_autonomous_data_warehouses

This data source provides the list of Autonomous Data Warehouses in Oracle Cloud Infrastructure Database service.

Gets a list of Autonomous Data Warehouses.

Example Usage

```
data "oci_database_autonomous_data_warehouses" "test_autonomous_data_warehouses" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.autonomous_data_warehouse_display_name}"
    state = "${var.autonomous_data_warehouse_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The compartment OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `display_name` - (Optional) A filter to return only resources that match the entire display name given. The match is not
  case sensitive.

- `state` - (Optional) A filter to return only resources that match the given lifecycle state exactly.

Attributes Reference

The following attributes are exported:

- `autonomous_data_warehouses` - The list of autonomous_data_warehouses.

AutonomousDataWarehouse Reference

The following attributes are exported:

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the
  compartment.

- `connection_strings` - The connection string used to connect to the Data Warehouse. The username for the Service
  Console is ADMIN. Use the password you entered when creating the Autonomous Data Warehouse for the password
  value.
  - `all_connection_strings` - All connection strings to use to connect to the Data Warehouse.

- **high** - The High database service provides the highest level of resources to each SQL statement resulting in the highest performance, but supports the fewest number of concurrent SQL statements.

- **low** - The Low database service provides the least level of resources to each SQL statement, but supports the most number of concurrent SQL statements.

- **medium** - The Medium database service provides a lower level of resources to each SQL statement potentially resulting a lower level of performance, but supports more concurrent SQL statements.

- **cpu_core_count** - The number of CPU cores to be made available to the database.

- **data_storage_size_in_tbs** - The quantity of data in the database, in terabytes.

- **db_name** - The database name.

- **db_version** - A valid Oracle Database version for Autonomous Data Warehouse.

- **defined_tags** - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- **display_name** - The user-friendly name for the Autonomous Data Warehouse. The name does not have to be unique.

- **freeform_tags** - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- **id** - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Data Warehouse.

- **license_model** - The Oracle license model that applies to the Oracle Autonomous Data Warehouse. The default is BRING_YOUR_OWN_LICENSE.

- **lifecycle_details** - Information about the current lifecycle state.

- **service_console_url** - The URL of the Service Console for the Data Warehouse.

- **state** - The current state of the database.

- **time_created** - The date and time the database was created.

Data Source: oci_database_autonomous_database

This data source provides details about a specific Autonomous Database resource in Oracle Cloud Infrastructure Database service.

Gets the details of the specified Autonomous Database.

Example Usage

```
data "oci_database_autonomous_database" "test_autonomous_database" {
    #Required
    autonomous_database_id = "${oci_database_autonomous_database.test_autonomous_database.id}"
}
```

Argument Reference

The following arguments are supported:

- `autonomous_database_id` - (Required) The database OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `connection_strings` - The connection string used to connect to the Autonomous Database. The username for the Service Console is ADMIN. Use the password you entered when creating the Autonomous Database for the password value.
    - `all_connection_strings` - All connection strings to use to connect to the Autonomous Database.

    - `high` - The High database service provides the highest level of resources to each SQL statement resulting in the highest performance, but supports the fewest number of concurrent SQL statements.

    - `low` - The Low database service provides the least level of resources to each SQL statement, but supports the most number of concurrent SQL statements.

    - `medium` - The Medium database service provides a lower level of resources to each SQL statement potentially resulting a lower level of performance, but supports more concurrent SQL statements.

- `cpu_core_count` - The number of CPU cores to be made available to the database.

- `data_storage_size_in_tbs` - The quantity of data in the database, in terabytes.

- `db_name` - The database name.

- `db_version` - A valid Oracle Database version for Autonomous Database.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - The user-friendly name for the Autonomous Database. The name does not have to be unique.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database.

- `license_model` - The Oracle license model that applies to the Oracle Autonomous Database. The default is BRING_YOUR_OWN_LICENSE.

- `lifecycle_details` - Information about the current lifecycle state.

- `service_console_url` - The URL of the Service Console for the Autonomous Database.

- `state` - The current state of the database.

- `time_created` - The date and time the database was created.

Data Source: oci_database_autonomous_database_backup

This data source provides details about a specific Autonomous Database Backup resource in Oracle Cloud Infrastructure Database service.

Gets information about the specified Autonomous Database backup.

Example Usage

```
data "oci_database_autonomous_database_backup" "test_autonomous_database_backup" {
    #Required
    autonomous_database_backup_id = "${oci_database_autonomous_database_backup.test_autonomous_database_backup.id}"
}
```

Argument Reference

The following arguments are supported:

* `autonomous_database_backup_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database backup.

Attributes Reference

The following attributes are exported:

* `autonomous_database_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database.

* `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

* `display_name` - The user-friendly name for the backup. The name does not have to be unique.

* `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database backup.

* `is_automatic` - Indicates whether the backup is user-initiated or automatic.

* `lifecycle_details` - Additional information about the current lifecycle state.

* `state` - The current state of the backup.

* `time_ended` - The date and time the backup completed.

* `time_started` - The date and time the backup started.

* `type` - The type of backup.

Data Source: oci_database_autonomous_database_backups

This data source provides the list of Autonomous Database Backups in Oracle Cloud Infrastructure Database service.

Gets a list of Autonomous Database backups based on either the `autonomousDatabaseId` or `compartmentId` specified as a query parameter.

Example Usage

```
data "oci_database_autonomous_database_backups" "test_autonomous_database_backups" {

    #Optional
    autonomous_database_id = "${oci_database_autonomous_database.test_autonomous_database.id}"
    compartment_id = "${var.compartment_id}"
    display_name = "${var.autonomous_database_backup_display_name}"
    state = "${var.autonomous_database_backup_state}"
}
```

Argument Reference

The following arguments are supported:

- `autonomous_database_id` - (Optional) The database OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `compartment_id` - (Optional) The compartment OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `display_name` - (Optional) A filter to return only resources that match the entire display name given. The match is not case sensitive.

- `state` - (Optional) A filter to return only resources that match the given lifecycle state exactly.

Attributes Reference

The following attributes are exported:

- `autonomous_database_backups` - The list of autonomous_database_backups.

AutonomousDatabaseBackup Reference

The following attributes are exported:

- `autonomous_database_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database.

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `display_name` - The user-friendly name for the backup. The name does not have to be unique.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database backup.

- `is_automatic` - Indicates whether the backup is user-initiated or automatic.

- `lifecycle_details` - Additional information about the current lifecycle state.

- `state` - The current state of the backup.

- `time_ended` - The date and time the backup completed.

- `time_started` - The date and time the backup started.

- `type` - The type of backup.

Data Source: oci_database_autonomous_database_wallet

This data source provides details about a specific Autonomous Database Wallet resource in Oracle Cloud Infrastructure Database service.

Example Usage

```
data "oci_database_autonomous_database_wallet" "test_autonomous_database_wallet" {
    #Required
    autonomous_database_id = "${oci_database_autonomous_database.test_autonomous_database.id}"
    password = "${var.autonomous_database_wallet_password}"
}
```

Argument Reference

The following arguments are supported:

- `autonomous_database_id` - (Required) The database OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `password` - (Required) The password to encrypt the keys inside the wallet. The password must be at least 8 characters long and must include at least 1 letter and either 1 numeric character or 1 special character.

Attributes Reference

The following attributes are exported:

- `content` - content of the downloaded zipped wallet for the Autonomous Database

Data Source: oci_database_autonomous_databases

This data source provides the list of Autonomous Databases in Oracle Cloud Infrastructure Database service.

Gets a list of Autonomous Databases.

Example Usage

```
data "oci_database_autonomous_databases" "test_autonomous_databases" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.autonomous_database_display_name}"
    state = "${var.autonomous_database_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The compartment OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `display_name` - (Optional) A filter to return only resources that match the entire display name given. The match is not case sensitive.

- `state` - (Optional) A filter to return only resources that match the given lifecycle state exactly.

Attributes Reference

The following attributes are exported:

- `autonomous_databases` - The list of autonomous_databases.

AutonomousDatabase Reference

The following attributes are exported:

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `connection_strings` - The connection string used to connect to the Autonomous Database. The username for the Service Console is ADMIN. Use the password you entered when creating the Autonomous Database for the password value.
  - `all_connection_strings` - All connection strings to use to connect to the Autonomous Database.
  - `high` - The High database service provides the highest level of resources to each SQL statement resulting in the

highest performance, but supports the fewest number of concurrent SQL statements.

- `low` - The Low database service provides the least level of resources to each SQL statement, but supports the most number of concurrent SQL statements.

- `medium` - The Medium database service provides a lower level of resources to each SQL statement potentially resulting a lower level of performance, but supports more concurrent SQL statements.

- `cpu_core_count` - The number of CPU cores to be made available to the database.

- `data_storage_size_in_tbs` - The quantity of data in the database, in terabytes.

- `db_name` - The database name.

- `db_version` - A valid Oracle Database version for Autonomous Database.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Operations.CostCenter": "42"`}

- `display_name` - The user-friendly name for the Autonomous Database. The name does not have to be unique.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Department": "Finance"`}

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Autonomous Database.

- `license_model` - The Oracle license model that applies to the Oracle Autonomous Database. The default is BRING_YOUR_OWN_LICENSE.

- `lifecycle_details` - Information about the current lifecycle state.

- `service_console_url` - The URL of the Service Console for the Autonomous Database.

- `state` - The current state of the database.

- `time_created` - The date and time the database was created.

Data Source: oci_database_backups

This data source provides the list of Backups in Oracle Cloud Infrastructure Database service.

Gets a list of backups based on the databaseId or compartmentId specified. Either one of the query parameters must be provided.

Example Usage

```
data "oci_database_backups" "test_backups" {

    #Optional
    compartment_id = "${var.compartment_id}"
    database_id = "${oci_database_database.test_database.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Optional) The compartment OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `database_id` - (Optional) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database.

Attributes Reference

The following attributes are exported:

- `backups` - The list of backups.

Backup Reference

The following attributes are exported:

- `availability_domain` - The name of the availability domain where the database backup is stored.

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `database_edition` - The Oracle Database edition of the DB system from which the database backup was taken.

- `database_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database.

- `database_size_in_gbs` - The size of the database in gigabytes at the time the backup was taken.

- `display_name` - The user-friendly name for the backup. The name does not have to be unique.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the backup.

- `lifecycle_details` - Additional information about the current lifecycleState.

- `state` - The current state of the backup.

- `time_ended` - The date and time the backup was completed.

- `time_started` - The date and time the backup started.

- `type` - The type of backup.

- `display_name` - The user-friendly name for the backup. The name does not have to be unique.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the backup.

- `lifecycle_details` - Additional information about the current lifecycleState.

Data Source: oci_database_database

This data source provides details about a specific Database resource in Oracle Cloud Infrastructure Database service.

Gets information about a specific database.

Example Usage

```
data "oci_database_database" "test_database" {
    #Required
    database_id = "${var.database_id}"
}
```

Argument Reference

The following arguments are supported:

- `database_id` - (Required) The database OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

- `character_set` - The character set for the database.

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `db_backup_config` -
  - `auto_backup_enabled` - If set to true, configures automatic backups. If you previously used RMAN or dbcli to configure backups and then you switch to using the Console or the API for backups, a new backup configuration is created and associated with your database. This means that you can no longer rely on your previously configured unmanaged backups to work.

- `db_home_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database home.

- `db_name` - The database name.

- `db_unique_name` - A system-generated name for the database to ensure uniqueness within an Oracle Data Guard group (a primary database and its standby databases). The unique name cannot be changed.

- `db_workload` - The database workload type.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database.

- `lifecycle_details` - Additional information about the current lifecycleState.

- `ncharacter_set` - The national character set for the database.

- `pdb_name` - The name of the pluggable database. The name must begin with an alphabetic character and can contain a maximum of eight alphanumeric characters. Special characters are not permitted. Pluggable database should not be same as database name.

- `state` - The current state of the database.

- `time_created` - The date and time the database was created.

Data Source: oci_database_databases

This data source provides the list of Databases in Oracle Cloud Infrastructure Database service.

Gets a list of the databases in the specified database home.

Example Usage

```
data "oci_database_databases" "test_databases" {
    #Required
    compartment_id = "${var.compartment_id}"
    db_home_id = "${oci_database_db_home.test_db_home.id}"

    #Optional
    db_name = "${var.database_db_name}"
    state = "${var.database_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The compartment OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `db_home_id` - (Required) A database home OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `db_name` - (Optional) A filter to return only resources that match the entire database name given. The match is not case
  sensitive.

- `state` - (Optional) A filter to return only resources that match the given lifecycle state exactly.

Attributes Reference

The following attributes are exported:

- `databases` - The list of databases.

Database Reference

The following attributes are exported:

- `character_set` - The character set for the database.

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the
  compartment.

- `db_backup_config` -
    - `auto_backup_enabled` - If set to true, configures automatic backups. If you previously used RMAN or dbcli to configure backups and then you switch to using the Console or the API for backups, a new backup configuration is created and associated with your database. This means that you can no longer rely on your previously configured unmanaged backups to work.

- `db_home_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database home.

- `db_name` - The database name.

- `db_unique_name` - A system-generated name for the database to ensure uniqueness within an Oracle Data Guard group (a primary database and its standby databases). The unique name cannot be changed.

- `db_workload` - The database workload type.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database.

- `lifecycle_details` - Additional information about the current lifecycleState.

- `ncharacter_set` - The national character set for the database.

- `pdb_name` - The name of the pluggable database. The name must begin with an alphabetic character and can contain a maximum of eight alphanumeric characters. Special characters are not permitted. Pluggable database should not be same as database name.

- `state` - The current state of the database.

- `time_created` - The date and time the database was created.

Data Source: oci_database_db_home

This data source provides details about a specific Db Home resource in Oracle Cloud Infrastructure Database service.

Gets information about the specified database home.

Example Usage

```
data "oci_database_db_home" "test_db_home" {
    #Required
    db_home_id = "${var.db_home_id}"
}
```

Argument Reference

The following arguments are supported:

- `db_home_id` - (Required) The database home OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `db_system_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the DB system.

- `db_version` - The Oracle Database version.

- `display_name` - The user-provided name for the database home. The name does not need to be unique.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database home.

- `last_patch_history_entry_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the last patch history. This value is updated as soon as a patch operation is started.

- `state` - The current state of the database home.

- `time_created` - The date and time the database home was created.

Data Source: oci_database_db_home_patch_history_entries

This data source provides the list of Db Home Patch History Entries in Oracle Cloud Infrastructure Database service.

Gets history of the actions taken for patches for the specified database home.

Example Usage

```
data "oci_database_db_home_patch_history_entries" "test_db_home_patch_history_entries" {
    #Required
    db_home_id = "${oci_database_db_home.test_db_home.id}"
}
```

Argument Reference

The following arguments are supported:

- `db_home_id` - (Required) The database home OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

- `patch_history_entries` - The list of patch_history_entries.

DbHomePatchHistoryEntry Reference

The following attributes are exported:

- `action` - The action being performed or was completed.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the patch history entry.

- `lifecycle_details` - A descriptive text associated with the lifecycleState. Typically contains additional displayable text.

- `patch_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the patch.

- `state` - The current state of the action.

- `time_ended` - The date and time when the patch action completed.

- `time_started` - The date and time when the patch action started.

Data Source: oci_database_db_home_patches

This data source provides the list of Db Home Patches in Oracle Cloud Infrastructure Database service.

Lists patches applicable to the requested database home.

Example Usage

```
data "oci_database_db_home_patches" "test_db_home_patches" {
    #Required
    db_home_id = "${oci_database_db_home.test_db_home.id}"
}
```

Argument Reference

The following arguments are supported:

- db_home_id - (Required) The database home OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

- patches - The list of patches.

DbHomePatch Reference

The following attributes are exported:

- available_actions - Actions that can possibly be performed using this patch.

- description - The text describing this patch package.

- id - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the patch.

- last_action - Action that is currently being performed or was completed last.

- lifecycle_details - A descriptive text associated with the lifecycleState. Typically can contain additional displayable text.

- state - The current state of the patch as a result of lastAction.

- time_released - The date and time that the patch was released.

- version - The version of this patch package.

Data Source: oci_database_db_homes

This data source provides the list of Db Homes in Oracle Cloud Infrastructure Database service.

Gets a list of database homes in the specified DB system and compartment. A database home is a directory where Oracle database software is installed.

Example Usage

```
data "oci_database_db_homes" "test_db_homes" {
    #Required
    compartment_id = "${var.compartment_id}"
    db_system_id = "${oci_database_db_system.test_db_system.id}"

    #Optional
    display_name = "${var.db_home_display_name}"
    state = "${var.db_home_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The compartment OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `db_system_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the DB system.

- `display_name` - (Optional) A filter to return only resources that match the entire display name given. The match is not case sensitive.

- `state` - (Optional) A filter to return only resources that match the given lifecycle state exactly.

Attributes Reference

The following attributes are exported:

- `db_homes` - The list of db_homes.

DbHome Reference

The following attributes are exported:

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `db_system_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the DB

system.

- `db_version` - The Oracle Database version.

- `display_name` - The user-provided name for the database home. The name does not need to be unique.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database home.

- `last_patch_history_entry_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the last patch history. This value is updated as soon as a patch operation is started.

- `state` - The current state of the database home.

- `time_created` - The date and time the database home was created.

Data Source: oci_database_db_node

This data source provides details about a specific Db Node resource in Oracle Cloud Infrastructure Database service.

Gets information about the specified database node.

Example Usage

```
data "oci_database_db_node" "test_db_node" {
    #Required
    db_node_id = "${var.db_node_id}"
}
```

Argument Reference

The following arguments are supported:

- `db_node_id` - (Required) The database node OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

- `backup_vnic_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the backup VNIC.

- `db_system_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the DB system.

- `hostname` - The host name for the database node.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database node.

- `software_storage_size_in_gb` - The size (in GB) of the block storage volume allocation for the DB system. This attribute applies only for virtual machine DB systems.

- `state` - The current state of the database node.

- `time_created` - The date and time that the database node was created.

- `vnic_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the VNIC.

Data Source: oci_database_db_nodes

This data source provides the list of Db Nodes in Oracle Cloud Infrastructure Database service.

Gets a list of database nodes in the specified DB system and compartment. A database node is a server running database software.

Example Usage

```
data "oci_database_db_nodes" "test_db_nodes" {
    #Required
    compartment_id = "${var.compartment_id}"
    db_system_id = "${oci_database_db_system.test_db_system.id}"

    #Optional
    state = "${var.db_node_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The compartment OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `db_system_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm)
  of the DB system.

- `state` - (Optional) A filter to return only resources that match the given lifecycle state exactly.

Attributes Reference

The following attributes are exported:

- `db_nodes` - The list of db_nodes.

DbNode Reference

The following attributes are exported:

- `backup_vnic_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the
  backup VNIC.

- `db_system_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the DB
  system.

- `hostname` - The host name for the database node.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the database node.

- `software_storage_size_in_gb` - The size (in GB) of the block storage volume allocation for the DB system. This attribute applies only for virtual machine DB systems.

- `state` - The current state of the database node.

- `time_created` - The date and time that the database node was created.

- `vnic_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the VNIC.

Data Source: oci_database_db_system_patch_history_entries

This data source provides the list of Db System Patch History Entries in Oracle Cloud Infrastructure Database service.

Gets the history of the patch actions performed on the specified DB system.

Example Usage

```
data "oci_database_db_system_patch_history_entries" "test_db_system_patch_history_entries" {
    #Required
    db_system_id = "${oci_database_db_system.test_db_system.id}"
}
```

Argument Reference

The following arguments are supported:

* `db_system_id` - (Required) The DB system OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

* `patch_history_entries` - The list of patch_history_entries.

DbSystemPatchHistoryEntry Reference

The following attributes are exported:

* `action` - The action being performed or was completed.

* `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the patch history entry.

* `lifecycle_details` - A descriptive text associated with the lifecycleState. Typically contains additional displayable text.

* `patch_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the patch.

* `state` - The current state of the action.

* `time_ended` - The date and time when the patch action completed.

* `time_started` - The date and time when the patch action started.

Data Source: oci_database_db_system_patches

This data source provides the list of Db System Patches in Oracle Cloud Infrastructure Database service.

Lists the patches applicable to the requested DB system.

Example Usage

```
data "oci_database_db_system_patches" "test_db_system_patches" {
    #Required
    db_system_id = "${oci_database_db_system.test_db_system.id}"
}
```

Argument Reference

The following arguments are supported:

- `db_system_id` - (Required) The DB system OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

- `patches` - The list of patches.

DbSystemPatch Reference

The following attributes are exported:

- `available_actions` - Actions that can possibly be performed using this patch.

- `description` - The text describing this patch package.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the patch.

- `last_action` - Action that is currently being performed or was completed last.

- `lifecycle_details` - A descriptive text associated with the lifecycleState. Typically can contain additional displayable text.

- `state` - The current state of the patch as a result of lastAction.

- `time_released` - The date and time that the patch was released.

- `version` - The version of this patch package.

Data Source: oci_database_db_system_shapes

This data source provides the list of Db System Shapes in Oracle Cloud Infrastructure Database service.

Gets a list of the shapes that can be used to launch a new DB system. The shape determines resources to allocate to the DB system - CPU cores and memory for VM shapes; CPU cores, memory and storage for non-VM (or bare metal) shapes.

Example Usage

```
data "oci_database_db_system_shapes" "test_db_system_shapes" {
    #Required
    availability_domain = "${var.db_system_shape_availability_domain}"
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The name of the Availability Domain.

- `compartment_id` - (Required) The compartment OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

Attributes Reference

The following attributes are exported:

- `db_system_shapes` - The list of db_system_shapes.

DbSystemShape Reference

The following attributes are exported:

- `available_core_count` - The maximum number of CPU cores that can be enabled on the DB system for this shape.

- `core_count_increment` - The discrete number by which the CPU core count for this shape can be increased or decreased.

- `maximum_node_count` - The maximum number of database nodes available for this shape.

- `minimum_core_count` - The minimum number of CPU cores that can be enabled on the DB system for this shape.

- `minimum_node_count` - The minimum number of database nodes available for this shape.

- `name` - The name of the shape used for the DB system.

- `shape` - Deprecated. Use `name` instead of `shape`.

Data Source: oci_database_db_systems

This data source provides the list of Db Systems in Oracle Cloud Infrastructure Database service.

Gets a list of the DB systems in the specified compartment. You can specify a backupId to list only the DB systems that support creating a database using this backup in this compartment.

Example Usage

```
data "oci_database_db_systems" "test_db_systems" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    availability_domain = "${var.db_system_availability_domain}"
    backup_id = "${oci_database_backup.test_backup.id}"
    display_name = "${var.db_system_display_name}"
    state = "${var.db_system_state}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Optional) A filter to return only resources that match the given availability domain exactly.

- `backup_id` - (Optional) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the backup. Specify a backupId to list only the DB systems that support creating a database using this backup in this compartment.

- `compartment_id` - (Required) The compartment OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `display_name` - (Optional) A filter to return only resources that match the entire display name given. The match is not case sensitive.

- `state` - (Optional) A filter to return only resources that match the given lifecycle state exactly.

Attributes Reference

The following attributes are exported:

- `db_systems` - The list of db_systems.

DbSystem Reference

The following attributes are exported:

- `availability_domain` - The name of the availability domain that the DB system is located in.

- `backup_subnet_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the backup network subnet the DB system is associated with. Applicable only to Exadata DB systems.

  Subnet Restriction: See the subnet restrictions information for **subnetId**.

- `cluster_name` - The cluster name for Exadata and 2-node RAC virtual machine DB systems. The cluster name must begin with an an alphabetic character, and may contain hyphens (-). Underscores (_) are not permitted. The cluster name can be no longer than 11 characters and is not case sensitive.

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment.

- `cpu_core_count` - The number of CPU cores enabled on the DB system.

- `data_storage_percentage` - The percentage assigned to DATA storage (user data and database files). The remaining percentage is assigned to RECO storage (database redo logs, archive logs, and recovery manager backups). Accepted values are 40 and 80. The default is 80 percent assigned to DATA storage. Not applicable for virtual machine DB systems.

- `data_storage_size_in_gb` - The data storage size, in gigabytes, that is currently available to the DB system. Applies only for virtual machine DB systems.

- `database_edition` - The Oracle Database edition that applies to all the databases on the DB system.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `disk_redundancy` - The type of redundancy configured for the DB system. NORMAL is 2-way redundancy. HIGH is 3-way redundancy.

- `display_name` - The user-friendly name for the DB system. The name does not have to be unique.

- `domain` - The domain name for the DB system.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `hostname` - The hostname for the DB system.

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the DB system.

- `last_patch_history_entry_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the last patch history. This value is updated as soon as a patch operation starts.

- `license_model` - The Oracle license model that applies to all the databases on the DB system. The default is LICENSE_INCLUDED.

- `lifecycle_details` - Additional information about the current lifecycleState.

- `listener_port` - The port number configured for the listener on the DB system.

- `node_count` - The number of nodes in the DB system. For RAC DB systems, the value is greater than 1.

- `reco_storage_size_in_gb` - The RECO/REDO storage size, in gigabytes, that is currently allocated to the DB system. Applies only for virtual machine DB systems.

- `scan_dns_record_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the DNS record for the SCAN IP addresses that are associated with the DB system.

- `scan_ip_ids` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the Single Client Access Name (SCAN) IP addresses associated with the DB system. SCAN IP addresses are typically used for load balancing and are not assigned to any interface. Oracle Clusterware directs the requests to the appropriate nodes in the cluster.

  Note: For a single-node DB system, this list is empty.

- `shape` - The shape of the DB system. The shape determines resources to allocate to the DB system.

    - For virtual machine shapes, the number of CPU cores and memory

    - For bare metal and Exadata shapes, the number of CPU cores, storage, and memory

- `sparse_diskgroup` - True, if Sparse Diskgroup is configured for Exadata dbsystem, False, if Sparse diskgroup was not configured.

- `ssh_public_keys` - The public key portion of one or more key pairs used for SSH access to the DB system.

- `state` - The current state of the DB system.

- `subnet_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the subnet the DB system is associated with.

  Subnet Restrictions:

    - For bare metal DB systems and for single node virtual machine DB systems, do not use a subnet that overlaps with 192.168.16.16/28.

    - For Exadata and virtual machine 2-node RAC DB systems, do not use a subnet that overlaps with 192.168.128.0/20.

  These subnets are used by the Oracle Clusterware private interconnect on the database instance. Specifying an overlapping subnet will cause the private interconnect to malfunction. This restriction applies to both the client subnet and backup subnet.

- `time_created` - The date and time the DB system was created.

- `version` - The Oracle Database version of the DB system.

- `vip_ids` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the virtual IP (VIP) addresses associated with the DB system. The Cluster Ready Services (CRS) creates and maintains one VIP address for each node in the DB system to enable failover. If one node fails, the VIP is reassigned to another active node in the cluster.

  Note: For a single-node DB system, this list is empty.

Data Source: oci_database_db_versions

This data source provides the list of Db Versions in Oracle Cloud Infrastructure Database service.

Gets a list of supported Oracle database versions.

Example Usage

```
data "oci_database_db_versions" "test_db_versions" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    db_system_id = "${oci_database_db_system.test_db_system.id}"
    db_system_shape = "${var.db_version_db_system_shape}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The compartment OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `db_system_id` - (Optional) The DB system OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm). If provided, filters the results to the
  set of database versions which are supported for the DB system.

- `db_system_shape` - (Optional) If provided, filters the results to the set of database versions which are supported for
  the given shape.

Attributes Reference

The following attributes are exported:

- `db_versions` - The list of db_versions.

DbVersion Reference

The following attributes are exported:

- `is_latest_for_major_version` - True if this version of the Oracle Database software is the latest version for a
  release.

- `supports_pdb` - True if this version of the Oracle Database software supports pluggable databases.

- `version` - A valid Oracle Database version.

Data Source: oci_dns_records

This data source provides the list of Records in Oracle Cloud Infrastructure Dns service.

Gets all records in the specified zone. The results are sorted by `domain` in alphabetical order by default. For more information about records, see Resource Record (RR) TYPEs (https://www.iana.org/assignments/dns-parameters/dns-parameters.xhtml#dns-parameters-4).

Example Usage

```
data "oci_dns_records" "test_records" {
    #Required
    zone_name_or_id = "${oci_dns_zone_name_or.test_zone_name_or.id}"

    #Optional
    compartment_id = "${var.compartment_id}"
    domain = "${var.record_domain}"
    domain_contains = "${var.record_domain_contains}"
    rtype = "${var.record_rtype}"
    zone_version = "${var.record_zone_version}"
}
```

Argument Reference

The following arguments are supported:

* `compartment_id` - (Optional) The OCID of the compartment the resource belongs to.

* `domain` - (Optional) Search by domain. Will match any record whose domain (case-insensitive) equals the provided value.

* `domain_contains` - (Optional) Search by domain. Will match any record whose domain (case-insensitive) contains the provided value.

* `rtype` - (Optional) Search by record type. Will match any record whose type (https://www.iana.org/assignments/dns-parameters/dns-parameters.xhtml#dns-parameters-4) (case-insensitive) equals the provided value.

* `sort_by` - (Optional) The field by which to sort records. Allowed values are: domain|rtype|ttl

* `sort_order` - The order to sort the resources. Allowed values are: ASC|DESC

* `zone_name_or_id` - (Required) The name or OCID of the target zone.

* `zone_version` - (Optional) The version of the zone for which data is requested.

Attributes Reference

The following attributes are exported:

* `records` - A collection of DNS resource records.

DnsRecord Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment the resource belongs to.

- `domain` - The fully qualified domain name where the record can be located.

- `is_protected` - A Boolean flag indicating whether or not parts of the record are unable to be explicitly managed.

- `rdata` - The record's data, as whitespace-delimited tokens in type-specific presentation format. All RDATA is normalized and the returned presentation of your RDATA may differ from its initial input. For more information about RDATA, see Supported DNS Resource Record Types (https://docs.cloud.oracle.com/iaas/Content/DNS/Reference/supporteddnsresource.htm)

- `record_hash` - A unique identifier for the record within its zone.

- `rrset_version` - The latest version of the record's zone in which its RRSet differs from the preceding version.

- `rtype` - The canonical name for the record's type, such as A or CNAME. For more information, see Resource Record (RR) TYPEs (https://www.iana.org/assignments/dns-parameters/dns-parameters.xhtml#dns-parameters-4).

- `ttl` - The Time To Live for the record, in seconds.

- `zone_name_or_id` - The name or OCID of the target zone.

Data Source: oci_dns_zones

This data source provides the list of Zones in Oracle Cloud Infrastructure Dns service.

Gets a list of all zones in the specified compartment. The collection can be filtered by name, time created, and zone type.

Example Usage

```
data "oci_dns_zones" "test_zones" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    name = "${var.zone_name}"
    name_contains = "${var.zone_name_contains}"
    state = "${var.zone_state}"
    time_created_greater_than_or_equal_to = "${var.zone_time_created_greater_than_or_equal_to}"
    time_created_less_than = "${var.zone_time_created_less_than}"
    zone_type = "${var.zone_zone_type}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment the resource belongs to.

- `name` - (Optional) A case-sensitive filter for zone names. Will match any zone with a name that equals the provided value.

- `name_contains` - (Optional) Search by zone name. Will match any zone whose name (case-insensitive) contains the provided value.

- `sort_by` - (Optional) The field by which to sort zones. Allowed values are: name|zoneType|timeCreated

- `sort_order` - The order to sort the resources. Allowed values are: ASC|DESC

- `state` - (Optional) The state of a resource.

- `time_created_greater_than_or_equal_to` - (Optional) An RFC 3339 (https://www.ietf.org/rfc/rfc3339.txt) timestamp that states all returned resources were created on or after the indicated time.

- `time_created_less_than` - (Optional) An RFC 3339 (https://www.ietf.org/rfc/rfc3339.txt) timestamp that states all returned resources were created before the indicated time.

- `zone_type` - (Optional) Search by zone type, `PRIMARY` or `SECONDARY`. Will match any zone whose type equals the provided value.

Attributes Reference

The following attributes are exported:

- `zones` - A list of DNS zones.

DnsZone Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the zone.

- `defined_tags` - Usage of predefined tag keys. These predefined keys are scoped to a namespace. Example: `{"foo-namespace.bar-key": "value"}`

- `external_masters` - External master servers for the zone. `externalMasters` becomes a required parameter when the `zoneType` value is SECONDARY.
    - `address` - The server's IP address (IPv4 or IPv6).

    - `port` - The server's port. Port value must be a value of 53, otherwise omit the port value.

    - `tsig` - A TSIG key
        - `algorithm` - TSIG Algorithms are encoded as domain names, but most consist of only one non-empty label, which is not required to be explicitly absolute. Applicable algorithms include: hmac-sha1, hmac-sha224, hmac-sha256, hmac-sha512. For more information on these algorithms, see RFC 4635 (https://tools.ietf.org/html/rfc4635#section-2).

        - `name` - A domain name identifying the key for a given pair of hosts.

        - `secret` - A base64 string encoding the binary shared secret.
- `freeform_tags` - Simple key-value pair that is applied without any predefined name, type, or scope. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"bar-key": "value"}`

- `id` - The OCID of the zone.

- `name` - The name of the zone.

- `nameservers` - The authoritative nameservers for the zone.
    - `hostname` - The hostname of the nameserver.

- `self` - The canonical absolute URL of the resource.

- `serial` - The current serial of the zone. As seen in the zone's SOA record.

- `state` - The current state of the zone resource.

- `time_created` - The date and time the resource was created in "YYYY-MM-ddThh:mmZ" format with a Z offset, as defined by RFC 3339.

    Example: `2016-07-22T17:23:59:60Z`

- `version` - Version is the never-repeating, totally-orderable, version of the zone, from which the serial field of the zone's SOA record is derived.

- `zone_type` - The type of the zone. Must be either `PRIMARY` or `SECONDARY`.

Data Source: oci_email_sender

This data source provides details about a specific Sender resource in Oracle Cloud Infrastructure Email service.

Gets an approved sender for a given `senderId`.

Example Usage

```
data "oci_email_sender" "test_sender" {
    #Required
    sender_id = "${oci_email_sender.test_sender.id}"
}
```

Argument Reference

The following arguments are supported:

- `sender_id` - (Required) The unique OCID of the sender.

Attributes Reference

The following attributes are exported:

- `email_address` - The email address of the sender.

- `id` - The unique OCID of the sender.

- `is_spf` - Value of the SPF field. For more information about SPF, please see SPF Authentication (https://docs.cloud.oracle.com/iaas/Content/Email/Concepts/emaildeliveryoverview.htm#spf).

- `state` - The current status of the approved sender.

- `time_created` - The date and time the approved sender was added in "YYYY-MM-ddThh:mmZ" format with a Z offset, as defined by RFC 3339.

Data Source: oci_email_senders

This data source provides the list of Senders in Oracle Cloud Infrastructure Email service.

Gets a collection of approved sender email addresses and sender IDs.

Example Usage

```
data "oci_email_senders" "test_senders" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    email_address = "${var.sender_email_address}"
    state = "${var.sender_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID for the compartment.

- `email_address` - (Optional) The email address of the approved sender.

- `state` - (Optional) The current state of a sender.

Attributes Reference

The following attributes are exported:

- `senders` - The list of senders.

Sender Reference

The following attributes are exported:

- `email_address` - The email address of the sender.

- `id` - The unique OCID of the sender.

- `is_spf` - Value of the SPF field. For more information about SPF, please see SPF Authentication (https://docs.cloud.oracle.com/iaas/Content/Email/Concepts/emaildeliveryoverview.htm#spf).

- `state` - The current status of the approved sender.

- `time_created` - The date and time the approved sender was added in "YYYY-MM-ddThh:mmZ" format with a Z offset, as defined by RFC 3339.

Data Source: oci_email_suppression

This data source provides details about a specific Suppression resource in Oracle Cloud Infrastructure Email service.

Gets the details of a suppressed recipient email address for a given `suppressionId`. Each suppression is given a unique OCID.

Example Usage

```
data "oci_email_suppression" "test_suppression" {
    #Required
    suppression_id = "${oci_email_suppression.test_suppression.id}"
}
```

Argument Reference

The following arguments are supported:

- `suppression_id` - (Required) The unique OCID of the suppression.

Attributes Reference

The following attributes are exported:

- `email_address` - The email address of the suppression.

- `id` - The unique OCID of the suppression.

- `reason` - The reason that the email address was suppressed. For more information on the types of bounces, see Suppresion List (https://docs.cloud.oracle.com/iaas/Content/Email/Concepts/emaildeliveryoverview.htm#suppressionlist).

- `time_created` - The date and time a recipient's email address was added to the suppression list, in "YYYY-MM-ddThh:mmZ" format with a Z offset, as defined by RFC 3339.

Data Source: oci_email_suppressions

This data source provides the list of Suppressions in Oracle Cloud Infrastructure Email service.

Gets a list of suppressed recipient email addresses for a user. The `compartmentId` for suppressions must be a tenancy OCID. The returned list is sorted by creation time in descending order.

Example Usage

```
data "oci_email_suppressions" "test_suppressions" {
    #Required
    compartment_id = "${var.tenancy_ocid}"

    #Optional
    email_address = "${var.suppression_email_address}"
    time_created_greater_than_or_equal_to = "${var.suppression_time_created_greater_than_or_equal_to}"
    time_created_less_than = "${var.suppression_time_created_less_than}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID for the compartment.

- `email_address` - (Optional) The email address of the suppression.

- `time_created_greater_than_or_equal_to` - (Optional) Search for suppressions that were created within a specific date range, using this parameter to specify the earliest creation date for the returned list (inclusive). Specifying this parameter without the corresponding `timeCreatedLessThan` parameter will retrieve suppressions created from the given `timeCreatedGreaterThanOrEqualTo` to the current time, in "YYYY-MM-ddThh:mmZ" format with a Z offset, as defined by RFC 3339.

  Example: 2016-12-19T16:39:57.600Z

- `time_created_less_than` - (Optional) Search for suppressions that were created within a specific date range, using this parameter to specify the latest creation date for the returned list (exclusive). Specifying this parameter without the corresponding `timeCreatedGreaterThanOrEqualTo` parameter will retrieve all suppressions created before the specified end date, in "YYYY-MM-ddThh:mmZ" format with a Z offset, as defined by RFC 3339.

  Example: 2016-12-19T16:39:57.600Z

Attributes Reference

The following attributes are exported:

- `suppressions` - The list of suppressions.

Suppression Reference

The following attributes are exported:

- `email_address` - The email address of the suppression.

- `id` - The unique OCID of the suppression.

- `reason` - The reason that the email address was suppressed. For more information on the types of bounces, see Suppresion List (https://docs.cloud.oracle.com/iaas/Content/Email/Concepts/emaildeliveryoverview.htm#suppressionlist).

- `time_created` - The date and time a recipient's email address was added to the suppression list, in "YYYY-MM-ddThh:mmZ" format with a Z offset, as defined by RFC 3339.

Data Source: oci_file_storage_export_sets

This data source provides the list of Export Sets in Oracle Cloud Infrastructure File Storage service.

Lists the export set resources in the specified compartment.

Example Usage

```
data "oci_file_storage_export_sets" "test_export_sets" {
    #Required
    availability_domain = "${var.export_set_availability_domain}"
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.export_set_display_name}"
    id = "${var.export_set_id}"
    state = "${var.export_set_state}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A user-friendly name. It does not have to be unique, and it is changeable. Example: `My resource`

- `id` - (Optional) Filter results by OCID. Must be an OCID of the correct type for the resouce type.

- `state` - (Optional) Filter results by the specified lifecycle state. Must be a valid state for the resource type.

Attributes Reference

The following attributes are exported:

- `export_sets` - The list of export_sets.

ExportSet Reference

The following attributes are exported:

- `availability_domain` - The availability domain the export set is in. May be unset as a blank or NULL value. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the export set.

- `display_name` - A user-friendly name. It does not have to be unique, and it is changeable. Avoid entering confidential information. Example: `My export set`

- `id` - The OCID of the export set.

- `max_fs_stat_bytes` - Controls the maximum `tbytes`, `fbytes`, and `abytes`, values reported by `NFS FSSTAT` calls through any associated mount targets. This is an advanced feature. For most applications, use the default value. The `tbytes` value reported by FSSTAT will be `maxFsStatBytes`. The value of `fbytes` and `abytes` will be `maxFsStatBytes` minus the metered size of the file system. If the metered size is larger than `maxFsStatBytes`, then `fbytes` and `abytes` will both be '0'.

- `max_fs_stat_files` - Controls the maximum `tfiles`, `ffiles`, and `afiles` values reported by `NFS FSSTAT` calls through any associated mount targets. This is an advanced feature. For most applications, use the default value. The `tfiles` value reported by FSSTAT will be `maxFsStatFiles`. The value of `ffiles` and `afiles` will be `maxFsStatFiles` minus the metered size of the file system. If the metered size is larger than `maxFsStatFiles`, then `ffiles` and `afiles` will both be '0'.

- `state` - The current state of the export set.

- `time_created` - The date and time the export set was created, expressed in RFC 3339 (https://tools.ietf.org/rfc/rfc3339) timestamp format. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the virtual cloud network (VCN) the export set is in.

Data Source: oci_file_storage_exports

This data source provides the list of Exports in Oracle Cloud Infrastructure File Storage service.

Lists export resources by compartment, file system, or export set. You must specify an export set ID, a file system ID, and / or a compartment ID.

Example Usage

```
data "oci_file_storage_exports" "test_exports" {

    #Optional
    compartment_id = "${var.compartment_id}"
    export_set_id = "${oci_file_storage_export_set.test_export_set.id}"
    file_system_id = "${oci_file_storage_file_system.test_file_system.id}"
    id = "${var.export_id}"
    state = "${var.export_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Optional) The OCID of the compartment.

- `export_set_id` - (Optional) The OCID of the export set.

- `file_system_id` - (Optional) The OCID of the file system.

- `id` - (Optional) Filter results by OCID. Must be an OCID of the correct type for the resouce type.

- `state` - (Optional) Filter results by the specified lifecycle state. Must be a valid state for the resource type.

Attributes Reference

The following attributes are exported:

- `exports` - The list of exports.

Export Reference

The following attributes are exported:

- `export_options` - Policies that apply to NFS requests made through this export. `exportOptions` contains a sequential list of `ClientOptions`. Each `ClientOptions` item defines the export options that are applied to a specified set of clients.

For each NFS request, the first `ClientOptions` option in the list whose `source` attribute matches the source IP address of the request is applied.

If a client source IP address does not match the `source` property of any `ClientOptions` in the list, then the export will be invisible to that client. This export will not be returned by `MOUNTPROC_EXPORT` calls made by the client and any attempt to mount or access the file system through this export will result in an error.

Exports without defined `ClientOptions` are invisible to all clients.

If one export is invisible to a particular client, associated file systems may still be accessible through other exports on the same or different mount targets. To completely deny client access to a file system, be sure that the client source IP address is not included in any export for any mount target associated with the file system.

- `access` - Type of access to grant clients using the file system through this export. If unspecified defaults to `READ_ONLY`.

- `anonymous_gid` - GID value to remap to when squashing a client GID (see identitySquash for more details.) If unspecified defaults to `65534`.

- `anonymous_uid` - UID value to remap to when squashing a client UID (see identitySquash for more details.) If unspecified, defaults to `65534`.

- `identity_squash` - Used when clients accessing the file system through this export have their UID and GID remapped to 'anonymousUid' and 'anonymousGid'. If `ALL`, all users and groups are remapped; if `ROOT`, only the root user and group (UID/GID 0) are remapped; if `NONE`, no remapping is done. If unspecified, defaults to `ROOT`.

- `require_privileged_source_port` - If `true`, clients accessing the file system through this export must connect from a privileged source port. If unspecified, defaults to `true`.

- `source` - Clients these options should apply to. Must be a either single IPv4 address or single IPv4 CIDR block.

  Note: Access will also be limited by any applicable VCN security rules and the ability to route IP packets to the mount target. Mount targets do not have Internet-routable IP addresses.

- `export_set_id` - The OCID of this export's export set.

- `file_system_id` - The OCID of this export's file system.

- `id` - The OCID of this export.

- `path` - Path used to access the associated file system.

  Avoid entering confidential information.

  Example: `/accounting`

- `state` - The current state of this export.

- `time_created` - The date and time the export was created, expressed in RFC 3339 (https://tools.ietf.org/rfc/rfc3339) timestamp format. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_file_storage_file_systems

This data source provides the list of File Systems in Oracle Cloud Infrastructure File Storage service.

Lists the file system resources in the specified compartment.

Example Usage

```
data "oci_file_storage_file_systems" "test_file_systems" {
    #Required
    availability_domain = "${var.file_system_availability_domain}"
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.file_system_display_name}"
    id = "${var.file_system_id}"
    state = "${var.file_system_state}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A user-friendly name. It does not have to be unique, and it is changeable. Example: `My resource`

- `id` - (Optional) Filter results by OCID. Must be an OCID of the correct type for the resouce type.

- `state` - (Optional) Filter results by the specified lifecycle state. Must be a valid state for the resource type.

Attributes Reference

The following attributes are exported:

- `file_systems` - The list of file_systems.

FileSystem Reference

The following attributes are exported:

- `availability_domain` - The availability domain the file system is in. May be unset as a blank or NULL value. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the file system.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. It does not have to be unique, and it is changeable. Avoid entering confidential information. Example: `My file system`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the file system.

- `metered_bytes` - The number of bytes consumed by the file system, including any snapshots. This number reflects the metered size of the file system and is updated asynchronously with respect to updates to the file system.

- `state` - The current state of the file system.

- `time_created` - The date and time the file system was created, expressed in RFC 3339 (https://tools.ietf.org/rfc/rfc3339) timestamp format. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_file_storage_mount_targets

This data source provides the list of Mount Targets in Oracle Cloud Infrastructure File Storage service.

Lists the mount target resources in the specified compartment.

Example Usage

```
data "oci_file_storage_mount_targets" "test_mount_targets" {
    #Required
    availability_domain = "${var.mount_target_availability_domain}"
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.mount_target_display_name}"
    export_set_id = "${oci_file_storage_export_set.test_export_set.id}"
    id = "${var.mount_target_id}"
    state = "${var.mount_target_state}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The name of the availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `display_name` - (Optional) A user-friendly name. It does not have to be unique, and it is changeable. Example: `My resource`

- `export_set_id` - (Optional) The OCID of the export set.

- `id` - (Optional) Filter results by OCID. Must be an OCID of the correct type for the resouce type.

- `state` - (Optional) Filter results by the specified lifecycle state. Must be a valid state for the resource type.

Attributes Reference

The following attributes are exported:

- `mount_targets` - The list of mount_targets.

MountTarget Reference

The following attributes are exported:

- `availability_domain` - The availability domain the mount target is in. May be unset as a blank or NULL value.
  Example: `Uocm:PHX-AD-1`

* `compartment_id` - The OCID of the compartment that contains the mount target.

* `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

* `display_name` - A user-friendly name. It does not have to be unique, and it is changeable. Avoid entering confidential information. Example: `My mount target`

* `export_set_id` - The OCID of the associated export set. Controls what file systems will be exported through Network File System (NFS) protocol on this mount target.

* `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

* `id` - The OCID of the mount target.

* `lifecycle_details` - Additional information about the current 'lifecycleState'.

* `private_ip_ids` - The OCIDs of the private IP addresses associated with this mount target.

* `state` - The current state of the mount target.

* `subnet_id` - The OCID of the subnet the mount target is in.

* `time_created` - The date and time the mount target was created, expressed in RFC 3339 (https://tools.ietf.org/rfc/rfc3339) timestamp format. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_file_storage_snapshots

This data source provides the list of Snapshots in Oracle Cloud Infrastructure File Storage service.

Lists snapshots of the specified file system.

Example Usage

```
data "oci_file_storage_snapshots" "test_snapshots" {
    #Required
    file_system_id = "${oci_file_storage_file_system.test_file_system.id}"

    #Optional
    id = "${var.snapshot_id}"
    state = "${var.snapshot_state}"
}
```

Argument Reference

The following arguments are supported:

- `file_system_id` - (Required) The OCID of the file system.

- `id` - (Optional) Filter results by OCID. Must be an OCID of the correct type for the resouce type.

- `state` - (Optional) Filter results by the specified lifecycle state. Must be a valid state for the resource type.

Attributes Reference

The following attributes are exported:

- `snapshots` - The list of snapshots.

Snapshot Reference

The following attributes are exported:

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `file_system_id` - The OCID of the file system from which the snapshot was created.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The OCID of the snapshot.

- `name` - Name of the snapshot. This value is immutable.

  Avoid entering confidential information.

  Example: `Sunday`

- `state` - The current state of the snapshot.

- `time_created` - The date and time the snapshot was created, expressed in RFC 3339 (https://tools.ietf.org/rfc/rfc3339) timestamp format. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_identity_api_keys

This data source provides the list of Api Keys in Oracle Cloud Infrastructure Identity service.

Lists the API signing keys for the specified user. A user can have a maximum of three keys.

Every user has permission to use this API call for *their own user ID*. An administrator in your organization does not need to write a policy to give users this ability.

Example Usage

```
data "oci_identity_api_keys" "test_api_keys" {
    #Required
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `user_id` - (Required) The OCID of the user.

Attributes Reference

The following attributes are exported:

- `api_keys` - The list of api_keys.

ApiKey Reference

The following attributes are exported:

- `fingerprint` - The key's fingerprint (e.g., 12:34:56:78:90:ab:cd:ef:12:34:56:78:90:ab:cd:ef).

- `id` - An Oracle-assigned identifier for the key, in this format: TENANCY_OCID/USER_OCID/KEY_FINGERPRINT.

- `inactive_status` - The detailed status of INACTIVE lifecycleState.

- `key_value` - The key's value.

- `state` - The API key's current state.

- `time_created` - Date and time the `ApiKey` object was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `user_id` - The OCID of the user the key belongs to.

Data Source: oci_identity_auth_tokens

This data source provides the list of Auth Tokens in Oracle Cloud Infrastructure Identity service.

Lists the auth tokens for the specified user. The returned object contains the token's OCID, but not the token itself. The actual token is returned only upon creation.

Example Usage

```
data "oci_identity_auth_tokens" "test_auth_tokens" {
    #Required
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `user_id` - (Required) The OCID of the user.

Attributes Reference

The following attributes are exported:

- `tokens` - The list of tokens.

AuthToken Reference

The following attributes are exported:

- `description` - The description you assign to the auth token. Does not have to be unique, and it's changeable.

- `id` - The OCID of the auth token.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `state` - The token's current state.

- `time_created` - Date and time the `AuthToken` object was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `time_expires` - Date and time when this auth token will expire, in the format defined by RFC3339. Null if it never expires. Example: `2016-08-25T21:10:29.600Z`

- `token` - The auth token. The value is available only in the response for `CreateAuthToken`, and not for `ListAuthTokens` or `UpdateAuthToken`.

- `user_id` - The OCID of the user the auth token belongs to.

Data Source: oci_identity_availability_domains

This data source provides the list of Availability Domains in Oracle Cloud Infrastructure Identity service.

Lists the availability domains in your tenancy. Specify the OCID of either the tenancy or another of your compartments as the value for the compartment ID (remember that the tenancy is simply the root compartment). See Where to Get the Tenancy's OCID and User's OCID (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm#five). Note that the order of the results returned can change if availability domains are added or removed; therefore, do not create a dependency on the list order.

Example Usage

```
data "oci_identity_availability_domains" "test_availability_domains" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the parent compartment (remember that the tenancy is simply the root compartment).

Attributes Reference

The following attributes are exported:

- `availability_domains` - The list of availability_domains.

AvailabilityDomain Reference

The following attributes are exported:

- `compartment_id` - The OCID of the tenancy.

- `id` - The OCID of the Availability Domain.

- `name` - The name of the Availability Domain.

Data Source: oci_identity_compartment

This data source provides details about a specific Compartment resource in Oracle Cloud Infrastructure Identity service.

Gets the specified compartment's information.

This operation does not return a list of all the resources inside the compartment. There is no single API operation that does that. Compartments can contain multiple types of resources (instances, block storage volumes, etc.). To find out what's in a compartment, you must call the "List" operation for each resource type and specify the compartment's OCID as a query parameter in the request. For example, call the ListInstances (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Instance/ListInstances) operation in the Cloud Compute Service or the ListVolumes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Volume/ListVolumes) operation in Cloud Block Storage.

Example Usage

```
data "oci_identity_compartment" "test_compartment" {
    #Required
    id = "${var.compartment_ocid}"
}
```

Argument Reference

The following arguments are supported:

- `id` - (Required) The OCID of the compartment.

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the parent compartment containing the compartment.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `description` - The description you assign to the compartment. Does not have to be unique, and it's changeable.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the compartment.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `is_accessible` - Indicates whether or not the compartment is accessible for the user making the request. Returns true when the user has INSPECT permissions directly on a resource in the compartment or indirectly (permissions can be on a resource in a subcompartment).

- `name` - The name you assign to the compartment during creation. The name must be unique across all compartments in the parent. Avoid entering confidential information.

- `state` - The compartment's current state.

- `time_created` - Date and time the compartment was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_identity_compartments

This data source provides the list of Compartments in Oracle Cloud Infrastructure Identity service.

Lists the compartments in a specified compartment. The members of the list returned depends on the values set for several parameters.

With the exception of the tenancy (root compartment), the ListCompartments operation returns only the first-level child compartments in the parent compartment specified in `compartmentId`. The list does not include any subcompartments of the child compartments (grandchildren).

The parameter `accessLevel` specifies whether to return only those compartments for which the requestor has INSPECT permissions on at least one resource directly or indirectly (the resource can be in a subcompartment).

The parameter `compartmentIdInSubtree` applies only when you perform ListCompartments on the tenancy (root compartment). When set to true, the entire hierarchy of compartments can be returned. To get a full list of all compartments and subcompartments in the tenancy (root compartment), set the parameter `compartmentIdInSubtree` to true and `accessLevel` to ANY.

See Where to Get the Tenancy's OCID and User's OCID (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm#five).

Example Usage

```
data "oci_identity_compartments" "test_compartments" {
    #Required
    compartment_id = "${var.tenancy_ocid}"

    #Optional
    access_level = "${var.compartment_access_level}"
    compartment_id_in_subtree = "${var.compartment_compartment_id_in_subtree}"
}
```

Argument Reference

The following arguments are supported:

* `access_level` - (Optional) Valid values are `ANY` and `ACCESSIBLE`. Default is `ANY`. Setting this to `ACCESSIBLE` returns only those compartments for which the user has INSPECT permissions directly or indirectly (permissions can be on a resource in a subcompartment). For the compartments on which the user indirectly has INSPECT permissions, a restricted set of fields is returned.

    When set to `ANY` permissions are not checked.

* `compartment_id` - (Required) The OCID of the parent compartment (remember that the tenancy is simply the root compartment).

* `compartment_id_in_subtree` - (Optional) Default is false. Can only be set to true when performing ListCompartments on the tenancy (root compartment). When set to true, the hierarchy of compartments is traversed and all compartments and subcompartments in the tenancy are returned depending on the the setting of `accessLevel`.

Attributes Reference

The following attributes are exported:

- `compartments` - The list of compartments.

Compartment Reference

The following attributes are exported:

- `compartment_id` - The OCID of the parent compartment containing the compartment.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `description` - The description you assign to the compartment. Does not have to be unique, and it's changeable.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The OCID of the compartment.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `is_accessible` - Indicates whether or not the compartment is accessible for the user making the request. Returns true when the user has INSPECT permissions directly on a resource in the compartment or indirectly (permissions can be on a resource in a subcompartment).

- `name` - The name you assign to the compartment during creation. The name must be unique across all compartments in the parent. Avoid entering confidential information.

- `state` - The compartment's current state.

- `time_created` - Date and time the compartment was created, in the format defined by RFC3339. Example: 2016-08-25T21:10:29.600Z

Data Source: oci_identity_customer_secret_keys

This data source provides the list of Customer Secret Keys in Oracle Cloud Infrastructure Identity service.

Lists the secret keys for the specified user. The returned object contains the secret key's OCID, but not the secret key itself. The actual secret key is returned only upon creation.

Example Usage

```
data "oci_identity_customer_secret_keys" "test_customer_secret_keys" {
    #Required
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `user_id` - (Required) The OCID of the user.

Attributes Reference

The following attributes are exported:

- `customer_secret_keys` - The list of customer_secret_keys.

CustomerSecretKey Reference

The following attributes are exported:

- `display_name` - The display name you assign to the secret key. Does not have to be unique, and it's changeable.

- `id` - The OCID of the secret key.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `state` - The secret key's current state.

- `time_created` - Date and time the `CustomerSecretKey` object was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `time_expires` - Date and time when this password will expire, in the format defined by RFC3339. Null if it never expires. Example: `2016-08-25T21:10:29.600Z`

- `user_id` - The OCID of the user the password belongs to.

Data Source: oci_identity_dynamic_groups

This data source provides the list of Dynamic Groups in Oracle Cloud Infrastructure Identity service.

Lists the dynamic groups in your tenancy. You must specify your tenancy's OCID as the value for the compartment ID (remember that the tenancy is simply the root compartment). See Where to Get the Tenancy's OCID and User's OCID (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm#five).

Example Usage

```
data "oci_identity_dynamic_groups" "test_dynamic_groups" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the parent compartment (remember that the tenancy is simply the root compartment).

Attributes Reference

The following attributes are exported:

- `dynamic_groups` - The list of dynamic_groups.

DynamicGroup Reference

The following attributes are exported:

- `compartment_id` - The OCID of the tenancy containing the group.

- `description` - The description you assign to the group. Does not have to be unique, and it's changeable.

- `id` - The OCID of the group.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `matching_rule` - A rule string that defines which instance certificates will be matched. For syntax, see Managing Dynamic Groups (https://docs.cloud.oracle.com/iaas/Content/Identity/Tasks/managingdynamicgroups.htm).

- `name` - The name you assign to the group during creation. The name must be unique across all groups in the tenancy and cannot be changed.

- `state` - The group's current state.

- `time_created` - Date and time the group was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_identity_fault_domains

This data source provides the list of Fault Domains in Oracle Cloud Infrastructure Identity service.

Lists the Fault Domains in your tenancy. Specify the OCID of either the tenancy or another of your compartments as the value for the compartment ID (remember that the tenancy is simply the root compartment). See Where to Get the Tenancy's OCID and User's OCID (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm#five).

Example Usage

```
data "oci_identity_fault_domains" "test_fault_domains" {
    #Required
    availability_domain = "${var.fault_domain_availability_domain}"
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The name of the availibilityDomain.

- `compartment_id` - (Required) The OCID of the parent compartment (remember that the tenancy is simply the root compartment).

Attributes Reference

The following attributes are exported:

- `fault_domains` - The list of fault_domains.

FaultDomain Reference

The following attributes are exported:

- `availability_domain` - The name of the availabilityDomain where the Fault Domain belongs.

- `compartment_id` - The OCID of the compartment. Currently only tenancy (root) compartment can be provided.

- `id` - The OCID of the Fault Domain.

- `name` - The name of the Fault Domain.

Data Source: oci_identity_groups

This data source provides the list of Groups in Oracle Cloud Infrastructure Identity service.

Lists the groups in your tenancy. You must specify your tenancy's OCID as the value for the compartment ID (remember that the tenancy is simply the root compartment). See Where to Get the Tenancy's OCID and User's OCID (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm#five).

Example Usage

```
data "oci_identity_groups" "test_groups" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
}
```

Argument Reference

The following arguments are supported:

*   `compartment_id` - (Required) The OCID of the parent compartment (remember that the tenancy is simply the root compartment).

Attributes Reference

The following attributes are exported:

*   `groups` - The list of groups.

Group Reference

The following attributes are exported:

*   `compartment_id` - The OCID of the tenancy containing the group.

*   `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

*   `description` - The description you assign to the group. Does not have to be unique, and it's changeable.

*   `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

*   `id` - The OCID of the group.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `name` - The name you assign to the group during creation. The name must be unique across all groups in the tenancy and cannot be changed.

- `state` - The group's current state.

- `time_created` - Date and time the group was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_identity_identity_provider_groups

This data source provides the list of Identity Provider Groups in Oracle Cloud Infrastructure Identity service.

Lists the identity provider groups.

Example Usage

```
data "oci_identity_identity_provider_groups" "test_identity_provider_groups" {
    #Required
    identity_provider_id = "${oci_identity_identity_provider.test_identity_provider.id}"
}
```

Argument Reference

The following arguments are supported:

* `identity_provider_id` - (Required) The OCID of the identity provider.

Attributes Reference

The following attributes are exported:

* `identity_provider_groups` - The list of identity_provider_groups.

IdentityProviderGroup Reference

The following attributes are exported:

* `display_name` - Display name of the group

* `external_identifier` - Identifier of the group in the identity provider

* `id` - The OCID of the `IdentityProviderGroup`.

* `identity_provider_id` - The OCID of the `IdentityProvider` this group belongs to.

* `time_created` - Date and time the `IdentityProviderGroup` was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

* `time_modified` - Date and time the `IdentityProviderGroup` was last modified, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_identity_identity_providers

This data source provides the list of Identity Providers in Oracle Cloud Infrastructure Identity service.

Lists all the identity providers in your tenancy. You must specify the identity provider type (e.g., `SAML2` for identity providers using the SAML2.0 protocol). You must specify your tenancy's OCID as the value for the compartment ID (remember that the tenancy is simply the root compartment). See Where to Get the Tenancy's OCID and User's OCID (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm#five).

Example Usage

```
data "oci_identity_identity_providers" "test_identity_providers" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
    protocol = "${var.identity_provider_protocol}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the parent compartment (remember that the tenancy is simply the root compartment).

- `protocol` - (Required) The protocol used for federation.

Attributes Reference

The following attributes are exported:

- `identity_providers` - The list of identity_providers.

IdentityProvider Reference

The following attributes are exported:

- `compartment_id` - The OCID of the tenancy containing the `IdentityProvider`.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `description` - The description you assign to the `IdentityProvider` during creation. Does not have to be unique, and it's changeable.

- `freeform_attributes` - Extra name value pairs associated with this identity provider. Example: {"clientId": "app_sf3kdjf3"}

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the `IdentityProvider`.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `metadata_url` - The URL for retrieving the identity provider's metadata, which contains information required for federating.

- `name` - The name you assign to the `IdentityProvider` during creation. The name must be unique across all `IdentityProvider` objects in the tenancy and cannot be changed. This is the name federated users see when choosing which identity provider to use when signing in to the Oracle Cloud Infrastructure Console.

- `product_type` - The identity provider service or product. Supported identity providers are Oracle Identity Cloud Service (IDCS) and Microsoft Active Directory Federation Services (ADFS).

  Allowed values are:

    - `ADFS`

    - `IDCS`

  Example: `IDCS`

- `protocol` - The protocol used for federation. Allowed value: `SAML2`. Example: `SAML2`

- `redirect_url` - The URL to redirect federated users to for authentication with the identity provider.

- `signing_certificate` - The identity provider's signing certificate used by the IAM Service to validate the SAML2 token.

- `state` - The current state.

- `time_created` - Date and time the `IdentityProvider` was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_identity_idp_group_mappings

This data source provides the list of Idp Group Mappings in Oracle Cloud Infrastructure Identity service.

Lists the group mappings for the specified identity provider.

Example Usage

```
data "oci_identity_idp_group_mappings" "test_idp_group_mappings" {
    #Required
    identity_provider_id = "${oci_identity_identity_provider.test_identity_provider.id}"
}
```

Argument Reference

The following arguments are supported:

- `identity_provider_id` - (Required) The OCID of the identity provider.

Attributes Reference

The following attributes are exported:

- `idp_group_mappings` - The list of idp_group_mappings.

IdpGroupMapping Reference

The following attributes are exported:

- `compartment_id` - The OCID of the tenancy containing the `IdentityProvider`.

- `group_id` - The OCID of the IAM Service group that is mapped to the IdP group.

- `id` - The OCID of the `IdpGroupMapping`.

- `identity_provider_id` - The OCID of the `IdentityProvider` this mapping belongs to.

- `idp_group_name` - The name of the IdP group that is mapped to the IAM Service group.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `state` - The mapping's current state.

- `time_created` - Date and time the mapping was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_identity_policies

This data source provides the list of Policies in Oracle Cloud Infrastructure Identity service.

Lists the policies in the specified compartment (either the tenancy or another of your compartments). See Where to Get the Tenancy's OCID and User's OCID (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm#five).

To determine which policies apply to a particular group or compartment, you must view the individual statements inside all your policies. There isn't a way to automatically obtain that information via the API.

Example Usage

```
data "oci_identity_policies" "test_policies" {
    #Required
    compartment_id = "${var.tenancy_ocid}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the parent compartment (remember that the tenancy is simply the root compartment).

Attributes Reference

The following attributes are exported:

- `policies` - The list of policies.

Policy Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the policy (either the tenancy or another compartment).

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `description` - The description you assign to the policy. Does not have to be unique, and it's changeable.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The OCID of the policy.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `name` - The name you assign to the policy during creation. The name must be unique across all policies in the tenancy and cannot be changed.

- `state` - The policy's current state.

- `statements` - An array of one or more policy statements written in the policy language.

- `time_created` - Date and time the policy was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `version_date` - The version of the policy. If null or set to an empty string, when a request comes in for authorization, the policy will be evaluated according to the current behavior of the services at that moment. If set to a particular date (YYYY-MM-DD), the policy will be evaluated according to the behavior of the services on that date.

Data Source: oci_identity_region_subscriptions

This data source provides the list of Region Subscriptions in Oracle Cloud Infrastructure Identity service.

Lists the region subscriptions for the specified tenancy.

Example Usage

```
data "oci_identity_region_subscriptions" "test_region_subscriptions" {
    #Required
    tenancy_id = "${oci_identity_tenancy.test_tenancy.id}"
}
```

Argument Reference

The following arguments are supported:

- `tenancy_id` - (Required) The OCID of the tenancy.

Attributes Reference

The following attributes are exported:

- `region_subscriptions` - The list of region_subscriptions.

RegionSubscription Reference

The following attributes are exported:

- `is_home_region` - Indicates if the region is the home region or not.

- `region_key` - The region's key.

    Allowed values are:

    - PHX

    - IAD

    - FRA

    - LHR

- `region_name` - The region's name.

    Allowed values are:

    - us-phoenix-1

- us-ashburn-1

- eu-frankurt-1

- uk-london-1

- `state` - The region subscription state.

Data Source: oci_identity_regions

This data source provides the list of Regions in Oracle Cloud Infrastructure Identity service.

Lists all the regions offered by Oracle Cloud Infrastructure.

Example Usage

```
data "oci_identity_regions" "test_regions" {
}
```

Attributes Reference

The following attributes are exported:

- `regions` - The list of regions.

Region Reference

The following attributes are exported:

- `key` - The key of the region.

  Allowed values are:

    - PHX

    - IAD

    - FRA

    - LHR

- `name` - The name of the region.

  Allowed values are:

    - us-phoenix-1

    - us-ashburn-1

    - eu-frankfurt-1

    - uk-london-1

Data Source: oci_identity_smtp_credentials

This data source provides the list of Smtp Credentials in Oracle Cloud Infrastructure Identity service.

Lists the SMTP credentials for the specified user. The returned object contains the credential's OCID, the SMTP user name but not the SMTP password. The SMTP password is returned only upon creation.

Example Usage

```
data "oci_identity_smtp_credentials" "test_smtp_credentials" {
    #Required
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `user_id` - (Required) The OCID of the user.

Attributes Reference

The following attributes are exported:

- `smtp_credentials` - The list of smtp_credentials.

SmtpCredential Reference

The following attributes are exported:

- `description` - The description you assign to the SMTP credential. Does not have to be unique, and it's changeable.

- `id` - The OCID of the SMTP credential.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `state` - The credential's current state.

- `time_created` - Date and time the `SmtpCredential` object was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `time_expires` - Date and time when this credential will expire, in the format defined by RFC3339. Null if it never expires. Example: `2016-08-25T21:10:29.600Z`

- `user_id` - The OCID of the user the SMTP credential belongs to.

- `username` - The SMTP user name.

Data Source: oci_identity_swift_passwords

This data source provides the list of Swift Passwords in Oracle Cloud Infrastructure Identity service.

Deprecated. Use ListAuthTokens (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/AuthToken/ListAuthTokens) instead.

Lists the Swift passwords for the specified user. The returned object contains the password's OCID, but not the password itself. The actual password is returned only upon creation.

Example Usage

```
data "oci_identity_swift_passwords" "test_swift_passwords" {
    #Required
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `user_id` - (Required) The OCID of the user.

Attributes Reference

The following attributes are exported:

- `passwords` - The list of passwords.

SwiftPassword Reference

The following attributes are exported:

- `description` - The description you assign to the Swift password. Does not have to be unique, and it's changeable.

- `expires_on` - Date and time when this password will expire, in the format defined by RFC3339. Null if it never expires. Example: `2016-08-25T21:10:29.600Z`

- `id` - The OCID of the Swift password.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `password` - The Swift password. The value is available only in the response for `CreateSwiftPassword`, and not for `ListSwiftPasswords` or `UpdateSwiftPassword`.

- `state` - The password's current state.

- `time_created` - Date and time the `SwiftPassword` object was created, in the format defined by RFC3339. Example:

```
2016-08-25T21:10:29.600Z
```

- `user_id` - The OCID of the user the password belongs to.

Data Source: oci_identity_tag_namespaces

This data source provides the list of Tag Namespaces in Oracle Cloud Infrastructure Identity service.

Lists the tag namespaces in the specified compartment.

Example Usage

```
data "oci_identity_tag_namespaces" "test_tag_namespaces" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    include_subcompartments = "${var.tag_namespace_include_subcompartments}"
}
```

Argument Reference

The following arguments are supported:

* `compartment_id` - (Required) The OCID of the parent compartment (remember that the tenancy is simply the root compartment).

* `include_subcompartments` - (Optional) An optional boolean parameter indicating whether to retrieve all tag namespaces in subcompartments. If this parameter is not specified, only the tag namespaces defined in the specified compartment are retrieved.

Attributes Reference

The following attributes are exported:

* `tag_namespaces` - The list of tag_namespaces.

TagNamespace Reference

The following attributes are exported:

* `compartment_id` - The OCID of the compartment that contains the tag namespace.

* `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

* `description` - The description you assign to the tag namespace.

* `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":`

```
"Finance"}
```

- `id` - The OCID of the tag namespace.

- `is_retired` - Whether the tag namespace is retired. For more information, see Retiring Key Definitions and Namespace Definitions (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/taggingoverview.htm#Retiring).

- `name` - The name of the tag namespace. It must be unique across all tag namespaces in the tenancy and cannot be changed.

- `time_created` - Date and time the tagNamespace was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_identity_tags

This data source provides the list of Tags in Oracle Cloud Infrastructure Identity service.

Lists the tag definitions in the specified tag namespace.

Example Usage

```
data "oci_identity_tags" "test_tags" {
    #Required
    tag_namespace_id = "${oci_identity_tag_namespace.test_tag_namespace.id}"
}
```

Argument Reference

The following arguments are supported:

* `tag_namespace_id` - (Required) The OCID of the tag namespace.

Attributes Reference

The following attributes are exported:

* `tags` - The list of tags.

Tag Reference

The following attributes are exported:

* `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}`

* `description` - The description you assign to the tag.

* `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

* `id` - The OCID of the tag definition.

* `is_cost_tracking` - Indicates whether the tag is enabled for cost tracking.

* `is_retired` - Indicates whether the tag is retired. See Retiring Key Definitions and Namespace Definitions (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/taggingoverview.htm#Retiring).

* `name` - The name of the tag. The name must be unique across all tags in the tag namespace and can't be changed.

- `tag_namespace_id` - The OCID of the namespace that contains the tag definition.

- `time_created` - Date and time the tag was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_identity_tenancy

This data source provides details about a specific Tenancy resource in Oracle Cloud Infrastructure Identity service.

Get the specified tenancy's information.

Example Usage

```
data "oci_identity_tenancy" "test_tenancy" {
    #Required
    tenancy_id = "${var.tenancy_ocid}"
}
```

Argument Reference

The following arguments are supported:

- `tenancy_id` - (Required) The OCID of the tenancy.

Attributes Reference

The following attributes are exported:

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `description` - The description of the tenancy.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `home_region_key` - The region key for the tenancy's home region. For more information about regions, see Regions and Availability Domains (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/regions.htm).

  Allowed values are:

    - IAD

    - PHX

    - FRA

    - LHR

- `id` - The OCID of the tenancy.

- `name` - The name of the tenancy.

Data Source: oci_identity_user_group_memberships

This data source provides the list of User Group Memberships in Oracle Cloud Infrastructure Identity service.

Lists the `UserGroupMembership` objects in your tenancy. You must specify your tenancy's OCID as the value for the compartment ID (see Where to Get the Tenancy's OCID and User's OCID (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm#five)). You must also then filter the list in one of these ways:

- You can limit the results to just the memberships for a given user by specifying a `userId`.

- Similarly, you can limit the results to just the memberships for a given group by specifying a `groupId`.

- You can set both the `userId` and `groupId` to determine if the specified user is in the specified group. If the answer is no, the response is an empty list.

- Although `userId` and `groupId` are not indvidually required, you must set one of them.

Example Usage

```
data "oci_identity_user_group_memberships" "test_user_group_memberships" {
    #Required
    compartment_id = "${var.tenancy_ocid}"

    #Optional
    group_id = "${oci_identity_group.test_group.id}"
    user_id = "${oci_identity_user.test_user.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the parent compartment (remember that the tenancy is simply the root compartment).

- `group_id` - (Optional) The OCID of the group.

- `user_id` - (Optional) The OCID of the user.

Attributes Reference

The following attributes are exported:

- `memberships` - The list of memberships.

UserGroupMembership Reference

The following attributes are exported:

- `compartment_id` - The OCID of the tenancy containing the user, group, and membership object.

- `group_id` - The OCID of the group.

- `id` - The OCID of the membership.

- `inactive_state` - The detailed status of INACTIVE lifecycleState.

- `state` - The membership's current state.

- `time_created` - Date and time the membership was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `user_id` - The OCID of the user.

Data Source: oci_identity_users

This data source provides the list of Users in Oracle Cloud Infrastructure Identity service.

Lists the users in your tenancy. You must specify your tenancy's OCID as the value for the compartment ID (remember that the tenancy is simply the root compartment). See Where to Get the Tenancy's OCID and User's OCID (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm#five).

Example Usage

```
data "oci_identity_users" "test_users" {
    #Required
    compartment_id = "${var.tenancy_ocid}"

    #Optional
    external_identifier = "${var.user_external_identifier}"
    identity_provider_id = "${oci_identity_identity_provider.test_identity_provider.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the parent compartment (remember that the tenancy is simply the root compartment).

- `external_identifier` - (Optional) The id of a user in the identity provider.

- `identity_provider_id` - (Optional) The id of the identity provider.

Attributes Reference

The following attributes are exported:

- `users` - The list of users.

User Reference

The following attributes are exported:

- `capabilities` - Properties indicating how the user is allowed to authenticate.
    - `can_use_api_keys` - Indicates if the user can use API keys.

    - `can_use_auth_tokens` - Indicates if the user can use SWIFT passwords / auth tokens.

    - `can_use_console_password` - Indicates if the user can log in to the console.

    - `can_use_customer_secret_keys` - Indicates if the user can use SigV4 symmetric keys.

- - `can_use_smtp_credentials` - Indicates if the user can use SMTP passwords.

- `compartment_id` - The OCID of the tenancy containing the user.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Operations.CostCenter": "42"`}

- `description` - The description you assign to the user. Does not have to be unique, and it's changeable.

- `external_identifier` - Identifier of the user in the identity provider

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {`"Department": "Finance"`}

- `id` - The OCID of the user.

- `identity_provider_id` - The OCID of the `IdentityProvider` this user belongs to.

- `inactive_state` - Returned only if the user's `lifecycleState` is INACTIVE. A 16-bit value showing the reason why the user is inactive:
  - bit 0: SUSPENDED (reserved for future use)

  - bit 1: DISABLED (reserved for future use)

  - bit 2: BLOCKED (the user has exceeded the maximum number of failed login attempts for the Console)

- `name` - The name you assign to the user during creation. This is the user's login for the Console. The name must be unique across all users in the tenancy and cannot be changed.

- `state` - The user's current state.

- `time_created` - Date and time the user was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Data Source: oci_kms_decrypted_data

The `oci_kms_decrypted_data` data source provides details about a specific DecryptedData

Decrypts data using the given DecryptDataDetails resource.

Example Usage

```
data "oci_kms_decrypted_data" "test_decrypted_data" {
    #Required
    ciphertext = "${var.decrypted_data_ciphertext}"
    crypto_endpoint = "${var.decrypted_data_crypto_endpoint}"
    key_id = "${oci_kms_key.test_key.id}"

    #Optional
    associated_data = "${var.decrypted_data_associated_data}"
}
```

Argument Reference

The following arguments are supported:

- `associated_data` - (Optional) Information that can be used to provide an encryption context for the encrypted data. The length of the string representation of the associatedData must be fewer than 4096 characters.

- `ciphertext` - (Required) The encrypted data to decrypt.

- `crypto_endpoint` - (Required) The service endpoint to perform cryptographic operations against. Cryptographic operations include 'Encrypt,' 'Decrypt,' and 'GenerateDataEncryptionKey' operations. see Vault Crypto endpoint.

- `key_id` - (Required) The OCID of the key used to encrypt the ciphertext.

Attributes Reference

The following attributes are exported:

- `plaintext` - The decrypted data, in the form of a base64-encoded value.

- `plaintext_checksum` - Checksum of the decrypted data.

Data Source: oci_kms_encrypted_data

The `oci_kms_encrypted_data` data source provides details about a specific EncryptedData

Encrypts data using the given EncryptDataDetails resource. Plaintext included in the example request is a base64-encoded value of a UTF-8 string.

Example Usage

```
data "oci_kms_encrypted_data" "test_encrypted_data" {
    #Required
    crypto_endpoint = "${var.encrypted_data_crypto_endpoint}"
    key_id = "${oci_kms_key.test_key.id}"
    plaintext = "${var.encrypted_data_plaintext}"

    #Optional
    associated_data = "${var.encrypted_data_associated_data}"
}
```

Argument Reference

The following arguments are supported:

- `associated_data` - (Optional) Information that can be used to provide an encryption context for the encrypted data. The length of the string representation of the associatedData must be fewer than 4096 characters.

- `crypto_endpoint` - (Required) The service endpoint to perform cryptographic operations against. Cryptographic operations include 'Encrypt,' 'Decrypt,' and 'GenerateDataEncryptionKey' operations. see Vault Crypto endpoint.

- `key_id` - (Required) The OCID of the key to encrypt with.

- `plaintext` - (Required) The plaintext data to encrypt.

Attributes Reference

The following attributes are exported:

- `ciphertext` - The encrypted data.

Data Source: oci_kms_key

The `oci_kms_key` data source provides details about a specific Key

Gets information about the specified key.

Example Usage

```
data "oci_kms_key" "test_key" {
    #Required
    key_id = "${oci_kms_key.test_key.id}"
    management_endpoint = "${var.key_management_endpoint}"
}
```

Argument Reference

The following arguments are supported:

- `key_id` - (Required) The OCID of the key.

- `management_endpoint` - (Required) The service endpoint to perform management operations against. Management operations include 'Create,' 'Update,' 'List,' 'Get,' and 'Delete' operations. See Vault Management endpoint.

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains this key.

- `current_key_version` - The OCID of the KeyVersion resource used in cryptographic operations. During key rotation, service may be in transitional state where this or a newer KeyVersion are used intermittently, and currentKeyVersion field is updated once service is guaranteed to use new KeyVersion for all consequent encrypt operations.

- `display_name` - A user-friendly name for the key. It does not have to be unique, and it is changeable. Avoid entering confidential information.

- `id` - The OCID of the key.

- `key_shape` -
    - `algorithm` - The algorithm used by a key's KeyVersions to encrypt or decrypt.

    - `length` - The length of the key, expressed as an integer. Values of 16, 24, or 32 are supported.

- `state` - The key's current state. Example: `ENABLED`

- `time_created` - The date and time the key was created, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `vault_id` - The OCID of the vault that contains this key.

Data Source: oci_kms_key_version

The `oci_kms_key_version` data source provides details about a specific KeyVersion

Gets information about the specified key version.

Example Usage

```
data "oci_kms_key_version" "test_key_version" {
    #Required
    key_id = "${oci_kms_key.test_key.id}"
    key_version_id = "${oci_kms_key_version.test_key_version.id}"
    management_endpoint = "${var.key_version_management_endpoint}"
}
```

Argument Reference

The following arguments are supported:

- `key_id` - (Required) The OCID of the key.

- `key_version_id` - (Required) The OCID of the key version.

- `management_endpoint` - (Required) The service endpoint to perform management operations against. Management operations include 'Create,' 'Update,' 'List,' 'Get,' and 'Delete' operations. See Vault Management endpoint.

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains this key version.

- `key_version_id` - The OCID of the key version.

- `key_id` - The OCID of the key associated with this key version.

- `time_created` - The date and time this key version was created, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `vault_id` - The OCID of the vault that contains this key version.

Data Source: oci_kms_key_versions

The `oci_kms_key_versions` data source allows access to the list of OCI key_versions

Lists all key versions for the specified key.

Example Usage

```
data "oci_kms_key_versions" "test_key_versions" {
    #Required
    key_id = "${oci_kms_key.test_key.id}"
    management_endpoint = "${var.key_version_management_endpoint}"
}
```

Argument Reference

The following arguments are supported:

- `key_id` - (Required) The OCID of the key.

- `management_endpoint` - (Required) The service endpoint to perform management operations against. Management operations include 'Create,' 'Update,' 'List,' 'Get,' and 'Delete' operations. See Vault Management endpoint.

Attributes Reference

The following attributes are exported:

- `key_versions` - The list of key_versions.

KeyVersion Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains this key version.

- `key_version_id` - The OCID of the key version.

- `key_id` - The OCID of the key associated with this key version.

- `time_created` - The date and time this key version was created, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `vault_id` - The OCID of the vault that contains this key version.

Data Source: oci_kms_keys

This data source provides the list of Keys in Oracle Cloud Infrastructure Kms service.

Lists the keys in the specified vault and compartment.

Example Usage

```
data "oci_kms_keys" "test_keys" {
    #Required
    compartment_id = "${var.compartment_id}"
    management_endpoint = "${var.key_management_endpoint}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

- `management_endpoint` - (Required) The service endpoint to perform management operations against. Management operations include 'Create,' 'Update,' 'List,' 'Get,' and 'Delete' operations. See Vault Management endpoint.

Attributes Reference

The following attributes are exported:

- `keys` - The list of keys.

Key Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains this key.

- `current_key_version` - The OCID of the KeyVersion resource used in cryptographic operations. During key rotation, service may be in transitional state where this or a newer KeyVersion are used intermittently, and currentKeyVersion field is updated once service is guaranteed to use new KeyVersion for all consequent encrypt operations.

- `display_name` - A user-friendly name for the key. It does not have to be unique, and it is changeable. Avoid entering confidential information.

- `id` - The OCID of the key.

- `key_shape` -
    - `algorithm` - The algorithm used by a key's KeyVersions to encrypt or decrypt.

    - `length` - The length of the key, expressed as an integer. Values of 16, 24, or 32 are supported.

- `state` - The key's current state. Example: `ENABLED`

- `time_created` - The date and time the key was created, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `vault_id` - The OCID of the vault that contains this key.

Data Source: oci_kms_vault

The `oci_kms_vault` data source provides details about a specific Vault

Gets the specified vault's configuration information.

Example Usage

```
data "oci_kms_vault" "test_vault" {
    #Required
    vault_id = "${oci_kms_vault.test_vault.id}"
}
```

Argument Reference

The following arguments are supported:

- `vault_id` - (Required) The OCID of the vault.

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains this vault.

- `crypto_endpoint` - The service endpoint to perform cryptographic operations against. Cryptographic operations include 'Encrypt,' 'Decrypt,' and 'GenerateDataEncryptionKey' operations.

- `display_name` - A user-friendly name for the vault. It does not have to be unique, and it is changeable. Avoid entering confidential information.

- `id` - The OCID of the vault.

- `management_endpoint` - The service endpoint to perform management operations against. Management operations include 'Create,' 'Update,' 'List,' 'Get,' and 'Delete' operations.

- `state` - The vault's current state. Example: `DELETED`

- `time_created` - The date and time this vault was created, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `time_of_deletion` - An optional property for the deletion time of the Vault expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `vault_type` - The type of vault. Each type of vault stores the key with different degrees of isolation and has different options and pricing.

Data Source: oci_kms_vaults

The `oci_kms_vaults` data source allows access to the list of OCI vaults

Lists vaults in the specified compartment.

Example Usage

```
data "oci_kms_vaults" "test_vaults" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment.

Attributes Reference

The following attributes are exported:

- `vaults` - The list of vaults.

Vault Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment that contains this vault.

- `crypto_endpoint` - The service endpoint to perform cryptographic operations against. Cryptographic operations include 'Encrypt,' 'Decrypt,' and 'GenerateDataEncryptionKey' operations.

- `display_name` - A user-friendly name for the vault. It does not have to be unique, and it is changeable. Avoid entering confidential information.

- `id` - The OCID of the vault.

- `management_endpoint` - The service endpoint to perform management operations against. Management operations include 'Create,' 'Update,' 'List,' 'Get,' and 'Delete' operations.

- `state` - The vault's current state. Example: `DELETED`

- `time_created` - The date and time this vault was created, expressed in RFC 3339 (https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `time_of_deletion` - An optional property for the deletion time of the Vault expressed in RFC 3339

(https://tools.ietf.org/html/rfc3339) timestamp format. Example: `2018-04-03T21:10:29.600Z`

- `vault_type` - The type of vault. Each type of vault stores the key with different degrees of isolation and has different options and pricing.

Data Source: oci_load_balancer_backend_health

This data source provides details about a specific Backend Health resource in Oracle Cloud Infrastructure Load Balancer service.

Gets the current health status of the specified backend server.

Example Usage

```
data "oci_load_balancer_backend_health" "test_backend_health" {
    #Required
    backend_name = "${oci_load_balancer_backend.test_backend.name}"
    backend_set_name = "${oci_load_balancer_backend_set.test_backend_set.name}"
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
}
```

Argument Reference

The following arguments are supported:

* `backend_name` - (Required) The IP address and port of the backend server to retrieve the health status for. Example: `10.0.0.3:8080`

* `backend_set_name` - (Required) The name of the backend set associated with the backend server to retrieve the health status for. Example: `example_backend_set`

* `load_balancer_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer associated with the backend server health status to be retrieved.

Attributes Reference

The following attributes are exported:

* `health_check_results` - A list of the most recent health check results returned for the specified backend server.
    * `health_check_status` - The result of the most recent health check.

    * `source_ip_address` - The IP address of the health check status report provider. This identifier helps you differentiate same-subnet (private) load balancers that report health check status. Example: `10.0.0.7`

    * `subnet_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the subnet hosting the load balancer that reported this health check status.

    * `timestamp` - The date and time the data was retrieved, in the format defined by RFC3339. Example: `2017-06-02T18:28:11+00:00`

* `status` - The general health status of the specified backend server as reported by the primary and standby load balancers.

- **OK:** Both health checks returned `OK`.

- **WARNING:** One health check returned `OK` and one did not.

- **CRITICAL:** Neither health check returned `OK`.

- **UNKNOWN:** One or both health checks returned `UNKNOWN`, or the system was unable to retrieve metrics at this time.

- **OK:** Both health checks returned `OK`.

- **WARNING:** One health check returned `OK` and one did not.

- **CRITICAL:** Neither health check returned `OK`.

- **UNKNOWN:** One or both health checks returned `UNKNOWN`, or the system was unable to retrieve metrics at this time.

Data Source: oci_load_balancer_backend_set_health

This data source provides details about a specific Backend Set Health resource in Oracle Cloud Infrastructure Load Balancer service.

Gets the health status for the specified backend set.

Example Usage

```
data "oci_load_balancer_backend_set_health" "test_backend_set_health" {
    #Required
    backend_set_name = "${oci_load_balancer_backend_set.test_backend_set.name}"
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
}
```

Argument Reference

The following arguments are supported:

- `backend_set_name` - (Required) The name of the backend set to retrieve the health status for. Example: `example_backend_set`

- `load_balancer_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer associated with the backend set health status to be retrieved.

Attributes Reference

The following attributes are exported:

- `critical_state_backend_names` - A list of backend servers that are currently in the `CRITICAL` health state. The list identifies each backend server by IP address and port. Example: `10.0.0.4:8080`

- `status` - Overall health status of the backend set.
    - **OK:** All backend servers in the backend set return a status of `OK`.

    - **WARNING:** Half or more of the backend set's backend servers return a status of `OK` and at least one backend server returns a status of `WARNING`, `CRITICAL`, or `UNKNOWN`.

    - **CRITICAL:** Fewer than half of the backend set's backend servers return a status of `OK`.

    - **UNKNOWN:** More than half of the backend set's backend servers return a status of `UNKNOWN`, the system was unable to retrieve metrics, or the backend set does not have a listener attached.

- `total_backend_count` - The total number of backend servers in this backend set. Example: `7`

- `unknown_state_backend_names` - A list of backend servers that are currently in the `UNKNOWN` health state. The list identifies each backend server by IP address and port. Example: `10.0.0.5:8080`

- `warning_state_backend_names` - A list of backend servers that are currently in the `WARNING` health state. The list identifies each backend server by IP address and port. Example: `10.0.0.3:8080`

Data Source: oci_load_balancer_backend_sets

Other supported legacy names/aliases: * `oci_load_balancer_backendset`

This data source provides the list of Backend Sets in Oracle Cloud Infrastructure Load Balancer service.

Lists all backend sets associated with a given load balancer.

Example Usage

```
data "oci_load_balancer_backend_sets" "test_backend_sets" {
    #Required
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
}
```

Argument Reference

The following arguments are supported:

- `load_balancer_id` - (Required) The OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer associated with
  the backend sets to retrieve.

Attributes Reference

The following attributes are exported:

- `backendsets` - The list of backendsets.

BackendSet Reference

The following attributes are exported:

- `backend` -
  - `backup` - Whether the load balancer should treat this server as a backup unit. If `true`, the load balancer forwards
    no ingress traffic to this backend server unless all other backend servers not marked as "backup" fail the health
    check policy. Example: `false`

  - `drain` - Whether the load balancer should drain this server. Servers marked "drain" receive no new incoming
    traffic. Example: `false`

  - `ip_address` - The IP address of the backend server. Example: `10.0.0.3`

  - `name` - A read-only field showing the IP address and port that uniquely identify this backend server in the
    backend set. Example: `10.0.0.3:8080`

  - `offline` - Whether the load balancer should treat this server as offline. Offline servers receive no incoming

traffic. Example: `false`

- - `port` - The communication port for the backend server. Example: `8080`

  - `weight` - The load balancing policy weight assigned to the server. Backend servers with a higher weight receive a larger proportion of incoming traffic. For example, a server weighted '3' receives 3 times the number of new connections as a server weighted '1'. For more information on load balancing policies, see How Load Balancing Policies Work (https://docs.cloud.oracle.com/iaas/Content/Balance/Reference/lbpolicies.htm). Example: 3

- `health_checker` -
  - `interval_ms` - The interval between health checks, in milliseconds. The default is 30000 (30 seconds). Example: `30000`

  - `port` - The backend server port against which to run the health check. If the port is not specified, the load balancer uses the port information from the `Backend` object. Example: `8080`

  - `protocol` - The protocol the health check must use; either HTTP or TCP. Example: `HTTP`

  - `response_body_regex` - A regular expression for parsing the response body from the backend server. Example: `^((?!false).|\s)*$`

  - `retries` - The number of retries to attempt before a backend server is considered "unhealthy". Defaults to 3. Example: 3

  - `return_code` - The status code a healthy backend server should return. If you configure the health check policy to use the HTTP protocol, you can use common HTTP status codes such as "200". Example: `200`

  - `timeout_in_millis` - The maximum time, in milliseconds, to wait for a reply to a health check. A health check is successful only if a reply returns within this timeout period. Defaults to 3000 (3 seconds). Example: `3000`

  - `url_path` - The path against which to run the health check. Example: `/healthcheck`

- `name` - A friendly name for the backend set. It must be unique and it cannot be changed.

  Valid backend set names include only alphanumeric characters, dashes, and underscores. Backend set names cannot contain spaces. Avoid entering confidential information.

  Example: `example_backend_set`

- `policy` - The load balancer policy for the backend set. To get a list of available policies, use the ListPolicies (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/LoadBalancerPolicy/ListPolicies) operation. Example: `LEAST_CONNECTIONS`

- `session_persistence_configuration` -
  - `cookie_name` - The name of the cookie used to detect a session initiated by the backend server. Use '*' to specify that any cookie set by the backend causes the session to persist. Example: `example_cookie`

  - `disable_fallback` - Whether the load balancer is prevented from directing traffic from a persistent session client to a different backend server if the original server is unavailable. Defaults to false. Example: `false`

- `ssl_configuration` -
  - `certificate_name` - A friendly name for the certificate bundle. It must be unique and it cannot be changed. Valid certificate bundle names include only alphanumeric characters, dashes, and underscores. Certificate bundle names cannot contain spaces. Avoid entering confidential information. Example: `example_certificate_bundle`

- `verify_depth` - The maximum depth for peer certificate chain verification. Example: 3

- `verify_peer_certificate` - Whether the load balancer listener should verify peer certificates. Defaults to true.
  Example: `true`

Data Source: oci_load_balancer_backends

This data source provides the list of Backends in Oracle Cloud Infrastructure Load Balancer service.

Lists the backend servers for a given load balancer and backend set.

Example Usage

```
data "oci_load_balancer_backends" "test_backends" {
    #Required
    backendset_name = "${oci_load_balancer_backend_set.test_backend_set.name}"
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
}
```

Argument Reference

The following arguments are supported:

- `backendset_name` - (Required) The name of the backend set associated with the backend servers. Example: `example_backend_set`

- `load_balancer_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer associated with the backend set and servers.

Attributes Reference

The following attributes are exported:

- `backends` - The list of backends.

Backend Reference

The following attributes are exported:

- `backup` - Whether the load balancer should treat this server as a backup unit. If `true`, the load balancer forwards no ingress traffic to this backend server unless all other backend servers not marked as "backup" fail the health check policy. Example: `false`

- `drain` - Whether the load balancer should drain this server. Servers marked "drain" receive no new incoming traffic. Example: `false`

- `ip_address` - The IP address of the backend server. Example: `10.0.0.3`

- `name` - A read-only field showing the IP address and port that uniquely identify this backend server in the backend set. Example: `10.0.0.3:8080`

- `offline` - Whether the load balancer should treat this server as offline. Offline servers receive no incoming traffic. Example: `false`

- `port` - The communication port for the backend server. Example: `8080`

- `weight` - The load balancing policy weight assigned to the server. Backend servers with a higher weight receive a larger proportion of incoming traffic. For example, a server weighted '3' receives 3 times the number of new connections as a server weighted '1'. For more information on load balancing policies, see How Load Balancing Policies Work (https://docs.cloud.oracle.com/iaas/Content/Balance/Reference/lbpolicies.htm). Example: 3

Data Source: oci_load_balancer_certificates

This data source provides the list of Certificates in Oracle Cloud Infrastructure Load Balancer service.

Lists all SSL certificates bundles associated with a given load balancer.

Example Usage

```
data "oci_load_balancer_certificates" "test_certificates" {
    #Required
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
}
```

Argument Reference

The following arguments are supported:

- `load_balancer_id` - (Required) The OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer associated with
  the certificate bundles to be listed.

Attributes Reference

The following attributes are exported:

- `certificates` - The list of certificates.

Certificate Reference

The following attributes are exported:

- `ca_certificate` - The Certificate Authority certificate, or any interim certificate, that you received from your SSL
  certificate provider.

  Example:

  ```
  -----BEGIN CERTIFICATE-----
  MIIEczCCA1ugAwIBAgIBADANBgkqhkiG9w0BAQQFAD..AkGA1UEBhMCR0Ix
  EzARBgNVBAgTClNvbWUtU3RhdGUxFDASBgNVBAoTC0..0EgTHRkMTcwNQYD
  VQQLEy5DbGFzcyAxIFB1YmxpYyBQcmltYXJ5IENlcn..XRpb24gQXV0aG9y
  aXR5MRQwEgYDVQQDEwtCZXN0IENBIEx0ZDAeFw0wMD..TUwMTZaFw0wMTAy
  ...
  -----END CERTIFICATE-----
  ```

- `certificate_name` - A friendly name for the certificate bundle. It must be unique and it cannot be changed. Valid
  certificate bundle names include only alphanumeric characters, dashes, and underscores. Certificate bundle names
  cannot contain spaces. Avoid entering confidential information. Example: `example_certificate_bundle`

- `public_certificate` - The public certificate, in PEM format, that you received from your SSL certificate provider.

  Example:

  ```
  -----BEGIN CERTIFICATE-----
  MIIC2jCCAkMCAg38MA0GCSqGSIb3DQEBBQUAMIGbMQswCQYDVQQGEwJKUDEOMAwG
  A1UECBMFVG9reW8xEDAOBgNVBAcTB0NodW8ta3UxETAPBgNVBAoTCEZyYW5rNERE
  MRgwFgYDVQQLEw9XZWJJDZXJ0IFN1cHBvcnQxGDAWBgNVBAMTD0ZyYW5rNEREIFdl
  YiBDQTEjMCEGCSqGSIb3DQEJARYUc3VwcG9ydEBmcmFuazRkZC5jb20wHhcNMTIw
  ...
  -----END CERTIFICATE-----
  ```

Data Source: oci_load_balancer_hostnames

This data source provides the list of Hostnames in Oracle Cloud Infrastructure Load Balancer service.

Lists all hostname resources associated with the specified load balancer.

Example Usage

```
data "oci_load_balancer_hostnames" "test_hostnames" {
    #Required
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
}
```

Argument Reference

The following arguments are supported:

* `load_balancer_id` - (Required) The OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer associated with
  the hostnames to retrieve.

Attributes Reference

The following attributes are exported:

* `hostnames` - The list of hostnames.

Hostname Reference

The following attributes are exported:

* `hostname` - A virtual hostname. For more information about virtual hostname string construction, see Managing
  Request Routing (https://docs.cloud.oracle.com/iaas/Content/Balance/Tasks/managingrequest.htm#routing).
  Example: `app.example.com`

* `name` - A friendly name for the hostname resource. It must be unique and it cannot be changed. Avoid entering
  confidential information. Example: `example_hostname_001`

Data Source: oci_load_balancer_health

This data source provides details about a specific Load Balancer Health resource in Oracle Cloud Infrastructure Load Balancer service.

Gets the health status for the specified load balancer.

Example Usage

```
data "oci_load_balancer_health" "test_load_balancer_health" {
    #Required
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
}
```

Argument Reference

The following arguments are supported:

* `load_balancer_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer to return health status for.

Attributes Reference

The following attributes are exported:

* `critical_state_backend_set_names` - A list of backend sets that are currently in the `CRITICAL` health state. The list identifies each backend set by the friendly name you assigned when you created it. Example: `example_backend_set`

* `status` - The overall health status of the load balancer.
    * **OK:** All backend sets associated with the load balancer return a status of `OK`.

    * **WARNING:** At least one of the backend sets associated with the load balancer returns a status of `WARNING`, no backend sets return a status of `CRITICAL`, and the load balancer life cycle state is `ACTIVE`.

    * **CRITICAL:** One or more of the backend sets associated with the load balancer return a status of `CRITICAL`.

    * **UNKNOWN:** If any one of the following conditions is true:

    * The load balancer life cycle state is not `ACTIVE`.

    * No backend sets are defined for the load balancer.

    * More than half of the backend sets associated with the load balancer return a status of `UNKNOWN`, none of the backend sets return a status of `WARNING` or `CRITICAL`, and the load balancer life cycle state is `ACTIVE`.

    * The system could not retrieve metrics for any reason.

* `total_backend_set_count` - The total number of backend sets associated with this load balancer. Example: 4

- `unknown_state_backend_set_names` - A list of backend sets that are currently in the `UNKNOWN` health state. The list identifies each backend set by the friendly name you assigned when you created it. Example: `example_backend_set2`

- `warning_state_backend_set_names` - A list of backend sets that are currently in the `WARNING` health state. The list identifies each backend set by the friendly name you assigned when you created it. Example: `example_backend_set3`

Data Source: oci_load_balancer_policies

This data source provides the list of Load Balancer Policies in Oracle Cloud Infrastructure Load Balancer service.

Lists the available load balancer policies.

Example Usage

```
data "oci_load_balancer_policies" "test_load_balancer_policies" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

* `compartment_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment containing the load balancer policies to list.

Attributes Reference

The following attributes are exported:

* `policies` - The list of policies.

LoadBalancerPolicy Reference

The following attributes are exported:

* `name` - The name of a load balancing policy. Example: 'LEAST_CONNECTIONS'

Data Source: oci_load_balancer_protocols

This data source provides the list of Load Balancer Protocols in Oracle Cloud Infrastructure Load Balancer service.

Lists all supported traffic protocols.

Example Usage

```
data "oci_load_balancer_protocols" "test_load_balancer_protocols" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

*   `compartment_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment containing the load balancer protocols to list.

Attributes Reference

The following attributes are exported:

*   `protocols` - The list of protocols.

LoadBalancerProtocol Reference

The following attributes are exported:

*   `name` - The name of a protocol. Example: 'HTTP'

Data Source: oci_load_balancer_shapes

This data source provides the list of Load Balancer Shapes in Oracle Cloud Infrastructure Load Balancer service.

Lists the valid load balancer shapes.

Example Usage

```
data "oci_load_balancer_shapes" "test_load_balancer_shapes" {
    #Required
    compartment_id = "${var.compartment_id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment containing the load balancer shapes to list.

Attributes Reference

The following attributes are exported:

- `shapes` - The list of shapes.

LoadBalancerShape Reference

The following attributes are exported:

- `name` - The name of the shape. Example: `100Mbps`

Data Source: oci_load_balancer_load_balancers

Other supported legacy names/aliases: * `oci_load_balancer`

This data source provides the list of Load Balancers in Oracle Cloud Infrastructure Load Balancer service.

Lists all load balancers in the specified compartment.

Example Usage

```
data "oci_load_balancer_load_balancers" "test_load_balancers" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    detail = "${var.load_balancer_detail}"
    display_name = "${var.load_balancer_display_name}"
    state = "${var.load_balancer_state}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment containing the load balancers to list.

- `detail` - (Optional) The level of detail to return for each result. Can be `full` or `simple`. Example: `full`

- `display_name` - (Optional) A filter to return only resources that match the given display name exactly. Example: `example_load_balancer`

- `state` - (Optional) A filter to return only resources that match the given lifecycle state. Example: `SUCCEEDED`

Attributes Reference

The following attributes are exported:

- `load_balancers` - The list of load_balancers.

LoadBalancer Reference

The following attributes are exported:

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment containing the load balancer.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more

information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm).
Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. It does not have to be unique, and it is changeable. Example:
  `example_load_balancer`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type,
  or namespace. For more information, see Resource Tags
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":`
  `"Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer.

- `ip_address_details` - An array of IP addresses.

  - `ip_address` - An IP address. Example: `192.168.0.3`

  - `is_public` - Whether the IP address is public or private.

    If "true", the IP address is public and accessible from the internet.

    If "false", the IP address is private and accessible only from within the associated VCN.

- `ip_addresses` - An array of IP addresses. Deprecated: use ip_address_details instead.

- `is_private` - Whether the load balancer has a VCN-local (private) IP address.

  If "true", the service assigns a private IP address to the load balancer. The load balancer requires only one subnet to
  host both the primary and secondary load balancers. The private IP address is local to the subnet. The load balancer is
  accessible only from within the VCN that contains the associated subnet, or as further restricted by your security list
  rules. The load balancer can route traffic to any backend server that is reachable from the VCN.

  For a private load balancer, both the primary and secondary load balancer hosts are within the same Availability
  Domain.

  If "false", the service assigns a public IP address to the load balancer. A load balancer with a public IP address requires
  two subnets, each in a different Availability Domain. One subnet hosts the primary load balancer and the other hosts
  the secondary (standby) load balancer. A public load balancer is accessible from the internet, depending on your VCN's
  security list rules (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/securitylists.htm).

  Example: `true`

- `shape` - A template that determines the total pre-provisioned bandwidth (ingress plus egress). To get a list of available
  shapes, use the ListShapes
  (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/LoadBalancerShape/ListShapes) operation.
  Example: 100Mbps

- `state` - The current state of the load balancer.

- `subnet_ids` - An array of subnet OCIDs
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

- `time_created` - The date and time the load balancer was created, in the format defined by RFC3339. Example: `2016-`
  `08-25T21:10:29.600Z`

Data Source: oci_load_balancer_path_route_sets

This data source provides the list of Path Route Sets in Oracle Cloud Infrastructure Load Balancer service.

Lists all path route sets associated with the specified load balancer.

Example Usage

```
data "oci_load_balancer_path_route_sets" "test_path_route_sets" {
    #Required
    load_balancer_id = "${oci_load_balancer_load_balancer.test_load_balancer.id}"
}
```

Argument Reference

The following arguments are supported:

* `load_balancer_id` - (Required) The OCID
  (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the load balancer associated with
  the path route sets to retrieve.

Attributes Reference

The following attributes are exported:

* `path_route_sets` - The list of path_route_sets.

PathRouteSet Reference

The following attributes are exported:

* `name` - The unique name for this set of path route rules. Avoid entering confidential information. Example:
  `example_path_route_set`

* `path_routes` - The set of path route rules.

  * `backend_set_name` - The name of the target backend set for requests where the incoming URI matches the
    specified path. Example: `example_backend_set`

  * `path` - The path string to match against the incoming URI path.

    * Path strings are case-insensitive.

    * Asterisk (*) wildcards are not supported.

    * Regular expressions are not supported.

    Example: `/example/video/123`

- `path_match_type` - The type of matching to apply to incoming URIs.

  - `match_type` - Specifies how the load balancing service compares a PathRoute (https://docs.cloud.oracle.com/iaas/api/#/en/loadbalancer/20170115/requests/PathRoute) object's `path` string against the incoming URI.

    - **EXACT_MATCH** - Looks for a `path` string that exactly matches the incoming URI path.

    - **FORCE_LONGEST_PREFIX_MATCH** - Looks for the `path` string with the best, longest match of the beginning portion of the incoming URI path.

    - **PREFIX_MATCH** - Looks for a `path` string that matches the beginning portion of the incoming URI path.

    - **SUFFIX_MATCH** - Looks for a `path` string that matches the ending portion of the incoming URI path.

    For a full description of how the system handles `matchType` in a path route set containing multiple rules, see Managing Request Routing (https://docs.cloud.oracle.com/iaas/Content/Balance/Tasks/managingrequest.htm).

Data Source: oci_objectstorage_bucket

This data source provides details about a specific Bucket resource in Oracle Cloud Infrastructure Object Storage service.

Gets the current representation of the given bucket in the given namespace.

Example Usage

```
data "oci_objectstorage_bucket" "test_bucket" {
    #Required
    name = "${var.bucket_name}"
    namespace = "${var.bucket_namespace}"
}
```

Argument Reference

The following arguments are supported:

- `name` - (Required) The name of the bucket. Avoid entering confidential information. Example: `my-new-bucket1`

- `namespace` - (Required) The top-level namespace used for the request.

Attributes Reference

The following attributes are exported:

- `access_type` - The type of public access enabled on this bucket. A bucket is set to `NoPublicAccess` by default, which only allows an authenticated caller to access the bucket and its contents. When `ObjectRead` is enabled on the bucket, public access is allowed for the `GetObject`, `HeadObject`, and `ListObjects` operations. When `ObjectReadWithoutList` is enabled on the bucket, public access is allowed for the `GetObject` and `HeadObject` operations.

- `approximate_count` - The approximate number of objects in the bucket. Count statistics are reported periodically. You will see a lag between what is displayed and the actual object count.

- `approximate_size` - The approximate total size in bytes of all objects in the bucket. Size statistics are reported periodically. You will see a lag between what is displayed and the actual size of the bucket.

- `compartment_id` - The compartment ID in which the bucket is authorized.

- `created_by` - The OCID of the user who created the bucket.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `etag` - The entity tag for the bucket.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags

(https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `kms_key_id` - The OCID of a KMS key id used to call KMS to generate data key, decrypt the encrypted data key

- `metadata` - Arbitrary string keys and values for user-defined metadata.

- `name` - The name of the bucket. Avoid entering confidential information. Example: my-new-bucket1

- `namespace` - The namespace in which the bucket lives.

- `object_lifecycle_policy_etag` - The entity tag for the live object lifecycle policy on the bucket.

- `storage_tier` - The type of storage tier of this bucket. A bucket is set to 'Standard' tier by default, which means the bucket will be put in the standard storage tier. When 'Archive' tier type is set explicitly, the bucket is put in the archive storage tier. The 'storageTier' property is immutable after bucket is created.

- `time_created` - The date and time the bucket was created, as described in RFC 2616 (https://tools.ietf.org/rfc/rfc2616), section 14.29.

Data Source: oci_objectstorage_bucket_summaries

This data source provides the list of Buckets in Oracle Cloud Infrastructure Object Storage service.

Gets a list of all `BucketSummary`s in a compartment. A `BucketSummary` contains only summary fields for the bucket and does not contain fields like the user-defined metadata.

To use this and other API operations, you must be authorized in an IAM policy. If you're not authorized, talk to an administrator. If you're an administrator who needs to write policies to give users access, see Getting Started with Policies (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/policygetstarted.htm).

Example Usage

```
data "oci_objectstorage_bucket_summaries" "test_buckets" {
    #Required
    compartment_id = "${var.compartment_id}"
    namespace = "${var.bucket_namespace}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The ID of the compartment in which to list buckets.

- `namespace` - (Required) The top-level namespace used for the request.

Attributes Reference

The following attributes are exported:

- `bucket_summaries` - The list of buckets.

Bucket Reference

The following attributes are exported:

- `access_type` - The type of public access enabled on this bucket. A bucket is set to `NoPublicAccess` by default, which only allows an authenticated caller to access the bucket and its contents. When `ObjectRead` is enabled on the bucket, public access is allowed for the `GetObject`, `HeadObject`, and `ListObjects` operations. When `ObjectReadWithoutList` is enabled on the bucket, public access is allowed for the `GetObject` and `HeadObject` operations.

- `compartment_id` - The compartment ID in which the bucket is authorized.

- `created_by` - The OCID of the user who created the bucket.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more

information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm).
Example: `{"Operations.CostCenter": "42"}`

- `etag` - The entity tag for the bucket.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `metadata` - Arbitrary string keys and values for user-defined metadata.

- `name` - The name of the bucket. Avoid entering confidential information. Example: my-new-bucket1

- `namespace` - The namespace in which the bucket lives.

- `object_lifecycle_policy_etag` - The entity tag for the live object lifecycle policy on the bucket.

- `storage_tier` - The type of storage tier of this bucket. A bucket is set to 'Standard' tier by default, which means the bucket will be put in the standard storage tier. When 'Archive' tier type is set explicitly, the bucket is put in the archive storage tier. The 'storageTier' property is immutable after bucket is created.

- `time_created` - The date and time the bucket was created, as described in RFC 2616 (https://tools.ietf.org/rfc/rfc2616), section 14.29.

Data Source: oci_objectstorage_namespace

This data source provides details about a specific Namespace resource in Oracle Cloud Infrastructure Object Storage service.

Gets the name of the namespace for the user making the request.

Example Usage

```
data "oci_objectstorage_namespace" "test_namespace" {
}
```

Attributes Reference

The following attributes are exported:

- `namespace` - (Computed) The name of the user's namespace.

Data Source: oci_objectstorage_object_head

The `oci_objectstorage_object_head` data source allows access to the list of OCI object metadata

Provides a datasource for fetching object metadata.

Example Usage

```
data "oci_objectstorage_object_head" "test_object_head" {
    #Required
    bucket = "${var.object_bucket}"
    namespace = "${var.object_namespace}"
    object = "${var.object_object}"
}
```

Argument Reference

The following arguments are supported:

- `bucket` - (Required) The name of the bucket. Avoid entering confidential information. Example: `my-new-bucket1`

- `namespace` - (Required) The top-level namespace used for the request.

- `object` - (Required) The name of the object. Avoid entering confidential information. Example: `test/object1.log`

Attributes Reference

The following attributes are exported:

- `metadata` - The metadata of the object

- `content_type` - The content-type of the object

- `content_length` - The content-length of the object

- `etag` - The etag of the object

Data Source: oci_objectstorage_object_lifecycle_policy

This data source provides details about a specific Object Lifecycle Policy resource in Oracle Cloud Infrastructure Object Storage service.

Gets the object lifecycle policy for the bucket.

Example Usage

```
data "oci_objectstorage_object_lifecycle_policy" "test_object_lifecycle_policy" {
    #Required
    bucket = "${var.object_lifecycle_policy_bucket}"
    namespace = "${var.object_lifecycle_policy_namespace}"
}
```

Argument Reference

The following arguments are supported:

- `bucket` - (Required) The name of the bucket. Avoid entering confidential information. Example: `my-new-bucket1`

- `namespace` - (Required) The top-level namespace used for the request.

Attributes Reference

The following attributes are exported:

- `rules` - The live lifecycle policy on the bucket.

  For an example of this value, see the PutObjectLifecyclePolicy API documentation (https://docs.cloud.oracle.com/iaas/api/#/en/objectstorage/20160918/ObjectLifecyclePolicy/PutObjectLifecyclePolicy).

  - `action` - The action of the object lifecycle policy rule. Rules using the action 'ARCHIVE' move objects into the Archival Storage tier (https://docs.cloud.oracle.com/iaas/Content/Archive/Concepts/archivestorageoverview.htm). Rules using the action 'DELETE' permanently delete objects from buckets. 'ARCHIVE' and 'DELETE' are the only two supported actions at this time.

  - `is_enabled` - A boolean that determines whether this rule is currently enabled.

  - `name` - The name of the lifecycle rule to be applied.

  - `object_name_filter` - A filter limiting object names that the rule will apply to.
    - `inclusion_prefixes` - An array of object name prefixes that the rule will apply to. An empty array means to include all objects.

  - `time_amount` - Specifies the age of objects to apply the rule to. The timeAmount is interpreted in units defined by the timeUnit parameter, and is calculated in relation to each object's Last-Modified time.

- `time_unit` - The unit that should be used to interpret timeAmount. Days are defined as starting and ending at midnight UTC. Years are defined as 365.2425 days long and likewise round up to the next midnight UTC.

- `time_created` - The date and time the object lifecycle policy was created, as described in RFC 3339 (https://tools.ietf.org/rfc/rfc3339), section 14.29.

Data Source: oci_objectstorage_objects

This data source provides the list of Objects in Oracle Cloud Infrastructure Object Storage service.

Lists the objects in a bucket.

To use this and other API operations, you must be authorized in an IAM policy. If you're not authorized, talk to an administrator. If you're an administrator who needs to write policies to give users access, see Getting Started with Policies (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/policygetstarted.htm).

Example Usage

```
data "oci_objectstorage_objects" "test_objects" {
    #Required
    bucket = "${var.object_bucket}"
    namespace = "${var.object_namespace}"

    #Optional
    delimiter = "${var.object_delimiter}"
    end = "${var.object_end}"
    prefix = "${var.object_prefix}"
    start = "${var.object_start}"
}
```

Argument Reference

The following arguments are supported:

- `bucket` - (Required) The name of the bucket. Avoid entering confidential information. Example: `my-new-bucket1`

- `delimiter` - (Optional) When this parameter is set, only objects whose names do not contain the delimiter character (after an optionally specified prefix) are returned in the objects key of the response body. Scanned objects whose names contain the delimiter have the part of their name up to the first occurrence of the delimiter (including the optional prefix) returned as a set of prefixes. Note that only '/' is a supported delimiter character at this time.

- `end` - (Optional) Object names returned by a list query must be strictly less than this parameter.

- `namespace` - (Required) The top-level namespace used for the request.

- `prefix` - (Optional) The string to use for matching against the start of object names in a list query.

- `start` - (Optional) Object names returned by a list query must be greater or equal to this parameter.

Attributes Reference

The following attributes are exported:

- `list_objects` - The list of list_objects.

Object Reference

The following attributes are exported:

- `bucket` - The name of the bucket. Avoid entering confidential information. Example: `my-new-bucket1`

- `content` - The object to upload to the object store.

- `content_encoding` - The content encoding of the object.

- `content_language` - The content language of the object.

- `content_length` - The content length of the body.

- `content_md5` - The base-64 encoded MD5 hash of the body.

- `content_type` - The content type of the object. Defaults to 'application/octet-stream' if not overridden during the PutObject call.

- `metadata` - Optional user-defined metadata key and value. Note: Metadata keys are case-insensitive and all returned keys will be lower case.

- `namespace` - The top-level namespace used for the request.

- `object` - The name of the object. Avoid entering confidential information. Example: `test/object1.log`

Data Source: oci_objectstorage_preauthrequest

This data source provides details about a specific Preauthenticated Request resource in Oracle Cloud Infrastructure Object Storage service.

Gets the pre-authenticated request for the bucket.

Example Usage

```
data "oci_objectstorage_preauthrequest" "test_preauthenticated_request" {
    #Required
    bucket = "${var.preauthenticated_request_bucket}"
    namespace = "${var.preauthenticated_request_namespace}"
    par_id = "${oci_objectstorage_preauthrequest.test_par.id}"
}
```

Argument Reference

The following arguments are supported:

- `bucket` - (Required) The name of the bucket. Avoid entering confidential information. Example: `my-new-bucket1`

- `namespace` - (Required) The top-level namespace used for the request.

- `par_id` - (Required) The unique identifier for the pre-authenticated request. This can be used to manage operations against the pre-authenticated request, such as GET or DELETE.

Attributes Reference

The following attributes are exported:

- `access_type` - The operation that can be performed on this resource.

- `access_uri` - The URI to embed in the URL when using the pre-authenticated request.

- `bucket` - The name of the bucket. Example: `my-new-bucket1`

- `id` - The unique identifier to use when directly addressing the pre-authenticated request.

- `name` - The user-provided name of the pre-authenticated request.

- `namespace` - The top-level namespace used for the request.

- `object` - The name of the object that is being granted access to by the pre-authenticated request. This can be null and if so, the pre-authenticated request grants access to the entire bucket. Avoid entering confidential information. Example: test/object1.log

- `time_created` - The date when the pre-authenticated request was created as per specification RFC 3339 (https://tools.ietf.org/rfc/rfc3339).

- `time_expires` - The expiration date for the pre-authenticated request as per RFC 3339 (https://tools.ietf.org/rfc/rfc3339). After this date the pre-authenticated request will no longer be valid.

Data Source: oci_objectstorage_preauthrequests

This data source provides the list of Preauthenticated Requests in Oracle Cloud Infrastructure Object Storage service.

Lists pre-authenticated requests for the bucket.

Example Usage

```
data "oci_objectstorage_preauthrequests" "test_preauthenticated_requests" {
    #Required
    bucket = "${var.preauthenticated_request_bucket}"
    namespace = "${var.preauthenticated_request_namespace}"

    #Optional
    object_name_prefix = "${var.preauthenticated_request_object_name_prefix}"
}
```

Argument Reference

The following arguments are supported:

- `bucket` - (Required) The name of the bucket. Avoid entering confidential information. Example: `my-new-bucket1`

- `namespace` - (Required) The top-level namespace used for the request.

- `object_name_prefix` - (Optional) User-specified object name prefixes can be used to query and return a list of pre-authenticated requests.

Attributes Reference

The following attributes are exported:

- `preauthenticated_requests` - The list of preauthenticated_requests.

PreauthenticatedRequest Reference

The following attributes are exported:

- `access_type` - The operation that can be performed on this resource.

- `access_uri` - The URI to embed in the URL when using the pre-authenticated request.

- `bucket` - The name of the bucket. Example: `my-new-bucket1`

- `id` - The unique identifier to use when directly addressing the pre-authenticated request.

- `name` - The user-provided name of the pre-authenticated request.

- `namespace` - The top-level namespace used for the request.

- `object` - The name of the object that is being granted access to by the pre-authenticated request. This can be null and if so, the pre-authenticated request grants access to the entire bucket. Avoid entering confidential information. Example: test/object1.log

- `time_created` - The date when the pre-authenticated request was created as per specification RFC 3339 (https://tools.ietf.org/rfc/rfc3339).

- `time_expires` - The expiration date for the pre-authenticated request as per RFC 3339 (https://tools.ietf.org/rfc/rfc3339). After this date the pre-authenticated request will no longer be valid.

Terraform Provider Best Practices

Following are recommended best practices for writing configurations for the Oracle Cloud Infrastructure Terraform provider.

Referencing Images

When launching Compute instances, your Terraform configuration should use the same image every time you execute a Terraform Apply command.

To ensure this, specify the image OCID directly, rather than locating it using the `oci_core_image` data source. This is because the `oci_core_image` data source calls into the ListImages API, whose return values can change over time as new images are periodically added and older ones deleted. For a list of Oracle-Provided images and their OCIDs, see Oracle-Provided Images (https://docs.cloud.oracle.com/iaas/Content/Compute/References/images.htm). For more information, see the write up in this issue: Results of oci_core_images will change over time for Oracle-provided images (https://github.com/oracle/terraform-provider-oci/issues/352).

We recommend the following pattern for specifying an image for a given region:

```
variable "image_id" {
  type = "map"
  default = {
    // See https://docs.cloud.oracle.com/iaas/images/
    // Oracle-provided image "Oracle-Linux-7.5-2018.10.16-0"
    us-phoenix-1 = "ocid1.image.oc1.phx.aaaaaaaaoqj42sokaoh42l76wsyhn3k2beuntrh5maj3gmgmzeyr55zzrwwa"
    us-ashburn-1 = "ocid1.image.oc1.iad.aaaaaaaaageeenzyuxgia726xur4ztaoxbxyjlxogdhreu3ngfj2gji3bayda"
    eu-frankfurt-1 = "ocid1.image.oc1.eu-frankfurt-1.aaaaaaaaitzn6tdyjer7jl34h2ujz74jwy5nkbukbh55ekp6oyzw
rtfa4zma"
    uk-london-1 = "ocid1.image.oc1.uk-london-1.aaaaaaaa32voyikkkzfxyo4xbdmadc2dmvorfxxgdhpnk6dw64fa3l4jh7
wa"
  }
}
```

A Compute instance can use this in the following way:

```
resource "oci_core_instance" "TFInstance" {
  image = "${var.image_id[var.region]}"
  ...
}
```

Availability Domains

With respect to Availability Domains, we caution against the common pattern of iterating over the results of the `oci_identity_availability_domains` data source, as shown here:

```
// Get all availability domains for the region
data "oci_identity_availability_domains" "ads" {
  compartment_id = "${var.tenancy_ocid}"
}

// Then either use it to get a single AD name based on the index:
resource "oci_core_instance" "nat" {
  availability_domain = "${lookup(data.oci_identity_availability_domains.ads.availability_domains[var.nat
_instance_ad],"name")}"
  ...
}

// Or iterate through all the ADs:
resource "oci_core_subnet" "nat" {
  count = "${length(data.oci_identity_availability_domains.ads.availability_domains)}"
  availability_domain = "${lookup(data.oci_identity_availability_domains.ad.availability_domains[count.in
dex], "name")}"
  ...
}
```

The recommendation is to explicitly list the Availability Domain names for the regions in your configuration. To do so, use a variable that you have defined as follows:

```
variable "ad_list" {
  type = "list"
}
```

You can then use the variable as shown here:

```
// Index:
resource "oci_core_instance" "nat" {
  availability_domain = "${var.ad_list[var.nat_instance_ad_index]}"
  ...
}

// Or iterate through all the ADs:
resource "oci_core_subnet" "nat" {
  count = "${length(var.ad_list)}"
  availability_domain = "${var.ad_list[count.index]}"
  ...
}
```

You can then set the ad_list variable directly by using the availability domain names for your tenant and region, as shown here:

```
variable "ad_list" {
  type = "list"
  default = ["kIdk:PHX-AD-1","kIdk:PHX-AD-2","kIdk:PHX-AD-3"]
}
```

The advantage of using this method is that it gives you control over your availability domain usage and prevents unexpected changes over time. However, this approach is problematic when configurations are shared between tenancies and regions, since availability domain names are tenancy and region-specific.

A convenient alternative is to instead set the ad_list value by using the oci_identity_availability_domains data source. You should do this in the configuration, then pass them into the resources or modules. This effectively centralizes the list of ADs, making it is easy to switch to an explicit list later, should that become necessary.

```
data "oci_identity_availability_domains" "ad" {
  compartment_id = "${var.tenancy_ocid}"
}

data "template_file" "ad_names" {
  count = "${length(data.oci_identity_availability_domains.ad.availability_domains)}"
  template = "${lookup(data.oci_identity_availability_domains.ad.availability_domains[count.index], "name")}"
}

module "ssm_network" {
  ad_list = "${data.template_file.ad_names.*.rendered}"
  ...
}
```

FAQ for the Oracle Cloud Infrastructure Terraform provider

Q: What is Oracle Cloud Infrastructure?

https://cloud.oracle.com/infrastructure/architecture (https://cloud.oracle.com/infrastructure/architecture)

Q: What is Terraform?

Terraform is an orchestration engine and language that enables you to safely and predictably create, change, and improve production infrastructure. It is an open source tool that codifies APIs into declarative configuration files that can be shared amongst team members, treated as code, edited, reviewed, and versioned.

Q: What is a Terraform provider?

Terraform is agnostic to the underlying cloud platform, it implements this with the provider model. Providers are pieces of software that act as an interface between the Cloud provider and the Terraform engine. There is a list of additional providers here - https://www.terraform.io/docs/providers/ (https://www.terraform.io/docs/providers/).

Q: Can I use Terraform to manage my infrastructure in multiple clouds?

Yes, Terraform supports configurations that can span multiple clouds and can allow you to manage infrastructure and resources in those clouds.

Q: What can I do with Terraform I can't do with the APIs?

Terraform allows you to define infrastructure configurations and then have those configurations implemented/created by Terraform automatically. In this respect, you could compare Terraform to similar solutions like OpenStack Heat, AWS CloudFormation, and others. http://blog.scottlowe.org/2015/11/25/intro-to-terraform/ (http://blog.scottlowe.org/2015/11/25/intro-to-terraform/)

Q: Can I use Terraform to manage both Oracle Public Cloud and Oracle Cloud Infrastructure?

Yes. The Oracle Public Cloud Terraform provider is located here - https://github.com/terraform-providers/terraform-provider-opc (https://github.com/terraform-providers/terraform-provider-opc). See - http://darylscorner.com/2016/11/using-terraform-across-multiple-cloud-providers/ (http://darylscorner.com/2016/11/using-terraform-across-multiple-cloud-providers/) for examples of Terraform multi-cloud configurations.

Q: What happens if I change infrastructure I'm managing with Terraform outside of Terraform?

The change you made outside of Terraform will be overwritten the next time you apply the configuration unless you add the `ignore_changes` parameter to the resource in the configuration file.

Q: How do I get help?

You can file an issue against the project

https://github.com/terraform-providers/terraform-provider-oci/issues (https://github.com/terraform-providers/terraform-provider-oci/issues)

or meet us in the OCI forums https://community.oracle.com/community/oracle-cloud/cloud-infrastructure/ (https://community.oracle.com/community/oracle-cloud/cloud-infrastructure/)

Data Sources Filtering

Data sources that return lists of resources support filtering semantics. To employ a filter include this block in your data source definition:

```
filter {
    name = ""
    values = [""]
}
```

The `name` value corresponds to the qualified property name to filter with and the `values` lists can contain one or more values filter with.

Nested properties and map elements can be addressed by qualifying the property name with parent property name. Example `r1` will give all the instances which have `source_type` image. Example `r2` will give all the instances which contain a defined tag with value "42" for key `CostCenter` in the namespace `Operations`

```
data "oci_core_instances" "r1" {
  ...
  filter {
    name = "source_details.source_type"
    values = ["image"]
  }
}

data "oci_core_instances" "r2" {
  ...
  filter {
    name = "defined_tags.Operations.CostCenter"
    values = ["42"]
  }
}
```

Multiple `values` work as an **OR** type filter. In the shape example below, the resulting data source would contain both VM shapes *Standard 1.1* and *Standard 1.2*:

```
data "oci_core_shape" "t" {
  ...
  filter {
    name = "name"
    values = ["VM.Standard1.1", "VM.Standard1.2"]
  }
}
```

Multiple filters blocks can be composed to form **AND** type comparisons. The example below will return a data source containing *running instances* in the *first AD* of a region:

```
data "oci_core_instances" "s" {
    ...
  filter {
    name = "availability_domain"
    values = ["\\w*-AD-1"]
    regex = true
  }

  filter {
    name = "state"
    values = ["RUNNING"]
  }
}
```

As shown above, filters can also employ regular expressions. By setting `regex = true`, each item in the `values` list will be treated as a regular expression. Note that backslashes in strings for regular expression special characters need to be escaped with another slash, shown above as the first \ before \w in "\\w*-AD-1".

Limitations

Drilling into lists of structured objects is not currently supported. If these properties are targeted no results will be returned from the datasource.

Managing Default Virtual Cloud Network Resources

When you create an `oci_core_vcn` (/docs/providers/oci/r/core_vcn.html) resource, it will also create the following associated resources by default.

- oci_core_security_list (/docs/providers/oci/r/core_security_list.html)

- oci_core_dhcp_options (/docs/providers/oci/r/core_dhcp_options.html)

- oci_core_route_table (/docs/providers/oci/r/core_route_table.html)

These default resources will be implicitly created even if they are not specified in the Terraform configuration. Their OCIDs are returned by the following attributes under the `oci_core_vcn` resource:

- `default_security_list_id`

- `default_dhcp_options_id`

- `default_route_table_id`

Default resources must be configured in Terraform using a separate resource type. Here are the mappings between the resource and the new resource type to use for configuring default resources: - `oci_core_security_list` => `oci_core_default_security_list` - `oci_core_dhcp_options` => `oci_core_default_dhcp_options` - `oci_core_route_table` => `oci_core_default_route_table`

Default resources types are configured in the same way as their non-default counterparts. The only difference is specifying the ID of the default resource using the `manage_default_resource_id` argument.

Consequently, the `compartment_id` and `vcn_id` are no longer necessary for default resources.

Example Usage

Modifying a VCN's default DHCP options

```
resource "oci_core_vcn" "vcn1" {
  cidr_block = "10.0.0.0/16"
  dns_label = "vcn1"
  compartment_id = "${var.compartment_ocid}"
  display_name = "vcn1"
}

resource "oci_core_default_dhcp_options" "default-dhcp-options" {
  manage_default_resource_id = "${oci_core_vcn.vcn1.default_dhcp_options_id}"

  // required
  options {
    type = "DomainNameServer"
    server_type = "VcnLocalPlusInternet"
  }

  // optional
  options {
    type = "SearchDomain"
    search_domain_names = [ "abc.com" ]
  }
}
```

Limitations

Default resources can only be removed when the associated `oci_core_vcn` resource is removed. When attempting a targeted removal of a default resource, the resource will be removed from the Terraform state file but the resource may still exist in OCI with empty settings.

Examples of targeted removal include:

- Removing a default resource from a Terraform configuration that was previously applied

- Running a `terraform destroy -target=<default resource>` command

- Changing the `manage_default_resource_id` for a default resource that was previously applied

Using the Object Store for Terraform State Files

You can store Terraform state files (https://www.terraform.io/docs/state/index.html) in the Oracle Cloud Infrastructure Object Storage. Doing so requires that you configure a backend using one of the Terraform backend types.

Terraform supports various backend types to allow flexibility in how state files are loaded into Terraform. (For more information, see Terraform Backend Types (https://www.terraform.io/docs/backends/types/index.html).) For our purposes, we address two of these approaches:

- Using an HTTP remote state backend

- Using an S3-compatible remote state backend

Using an HTTP Backend

Using the HTTP backend type (https://www.terraform.io/docs/backends/types/http.html) allows you to store state using a simple REST client. With the HTTP backend type, you can easily fetch, update, and purge state using the HTTP GET, POST, and DELETE methods.

To configure the HTTP backend to store your Oracle Cloud Infrastructure Terraform state files, do the following:

Create a Pre-Authenticated Request

Creating a pre-authenticated request in Oracle Object Storage enables accessing a bucket or object in the Oracle Cloud Infrastructure without needing to provide credentials. To do so, you must create a pre-authenticated request that has read/write permissions to the object store where you intend to save the Terraform state file. You can do so in any of three ways: by using the Console UI, by using the command line interface (CLI), or by using the REST APIs.

> **Note**
>
> A state file must exist in the bucket before you create the pre-authenticated request. This file can be an existing state file, or an empty file for the initial state.

For guidance, see Using Pre-Authenticated Requests (https://docs.cloud.oracle.com/iaas/Content/Object/Tasks/usingpreauthenticatedrequests.htm).

Upload Existing State

If you have an existing state file, you can upload it using Curl to make an HTTP Put request to the object store URL, as shown here:

```
curl -X PUT -H "Content-Type: text/plain" --data-binary "@path/to/local/tfstate" http://<prefix>/<my-access-uri>
```

Configure HTTP as a Terraform Backend

The HTTP backend type (https://www.terraform.io/docs/backends/types/http.html) stores state using a simple REST client and allows you to easily fetch, update, and purge state using the HTTP GET, POST, and DELETE methods.

The access URI for addressing Oracle Cloud Infrastructure Terraform configurations must be of the form:
https://objectstorage.us-phoenix-1.oraclecloud.com/my-access-uri (https://objectstorage.us-phoenix-1.oraclecloud.com/my-access-uri) (where region and access URI are specific to you).

For more example configuration and state files that reference code, and a summary of configuration variables, see Standard Backends: HTTP (https://www.terraform.io/docs/backends/types/http.html).

Following is an example Terraform configuration. The region in the URL can be something other than the Phoenix region.

```
terraform {
   backend "http" {
      address = "https://objectstorage.us-phoenix-1.oraclecloud.com/<my-access-uri>" update_method = "PUT"
  }
}
```

Reinitialize Terraform

Finally, you must reinitialize Terraform and then run the apply command, as shown following.

```
terraform init
terraform apply
```

After completing these steps, you are able to use Oracle Cloud Infrastructure as the backend for storing Terraform state files.

Using an S3-Compatible Backend

Configuring the S3-compatible backend requires that the account be enabled with S3 authentication keys, which are set on a per-user basis.

1. In the Console, open the navigation menu, then, under Governance and Administration, navigate to Identity, then Users. Under User Details, click Amazon S3 Compatibility API Keys. For more guidance, see Working with Amazon S3 Compatibility API Keys (https://docs.cloud.oracle.com/Content/Identity/Tasks/managingcredentials.htm#s3).

2. Set the location for the credentials file. The default location is `~/.aws/credentials`. You can set an alternate location by using the S3 backend `shared_credentials_file` option.

   > **Warning**
   > Never set the access_key and the secret_key attributes in the same Terraform backend configuration, since this creates a security risk.

3. Configure the `[default]` entry in the credentials file with the appropriate object storage credentials. The file can contain any number of credential profiles. If you provide a different profile name, you must also update the backend `profile` option in your Terraform configuration file.

   Following is an example of Object Storage credentials:

```
[default]
aws_access_key_id=ocid1.credential.oc1..aaaaaaaasbmhehdmefolvqwtbdjgwfsxjsgxgipdbph7odn2brgurgsyztca
aws_secret_access_key=mSTdaWhlbWj3ty4JZXlm0NUZV52xlImWjayJLJ6OH9A=
```

Where `aws_access_key_id` and `aws_secret_access_key` are user-specific values provided from the Console. The key values provided in the example are not valid and provided as examples only.

4. Set the object storage endpoint value in the following format: `https://{tenancy}.compat.objectstorage.{region}.oraclecloud.com`

Following is a full example of an Object Storage backend configuration:

```
terraform {
  backend "s3" {
    bucket   = "terraform-state"
    key      = "terraform.tfstate"
    region   = "us-phoenix-1"
    endpoint = "https://acme.compat.objectstorage.us-phoenix-1.oraclecloud.com"

    skip_region_validation      = true
    skip_credentials_validation = true
    skip_requesting_account_id  = true
    skip_get_ec2_platforms      = true
    skip_metadata_api_check     = true
    force_path_style            = true
  }
}
```

The S3 backend configuration can also be used for the terraform_remote_state data source to enable sharing state across Terraform projects.

Once you have configured the backend, you must run `terraform init` to finish the setup. If you already have an existing `terraform.tfstate` file, then Terraform prompts you to confirm that the current state file is the one to upload to the remote state.

For More Information

- Using Pre-Authenticated Requests (https://docs.cloud.oracle.com/iaas/Content/Object/Tasks/usingpreauthenticatedrequests.htm)

- State Files (https://www.terraform.io/docs/state/index.html)

- Terraform Backend Types (https://www.terraform.io/docs/backends/types/index.html)

Tagging OCI Resources

When you have many resources (for example, instances, VCNs, load balancers, and block volumes) across multiple compartments in your tenancy, it can become difficult to track resources used for specific purposes, or to aggregate them, report on them, or take bulk actions on them. Tagging allows you to define keys and values and associate them with resources. You can then use the tags to help you organize and list resources based on your business needs. See Tagging Overview (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/taggingoverview.htm#overview) to familiarize yourself with concept of tagging and features available.

Managing Tags and Tag Namespaces

- See tag_namespaces (/docs/providers/oci/r/identity_tag_namespace.html) for guidance on managing lifecycle of tag namespaces.

- See tags (/docs/providers/oci/d/identity_tag_namespaces.html) for guidance on managing lifecycle of tags.

How To Manage Tags on OCI Resources

- **Freeform tags:** Freeform tags are simple key value map

- **Defined tags:** Defined tags provide a key/value map and are organized by combining the tag namespaces with tag keys using dot notation. For example, a tag namespace called `HumanResources` could have a key named `CostCenter`. You then associate the namespace and key `HumanResource.CostCenter` and then assign the desired tag, as shown in the following example.

Examples:

Example 1:

```
//Hand curated way
resource "oci_core_instance" "t" {
    .
    .
    .

  freeform_tags =  {
        Environment = "Prod"
        Department = "Ops"
  }
   defined_tags = {
       HumanResources.CostCenter = "42"
       Operations.Project = "Beta"
       HumanResources.Environment = "Production"
   }
 }
```

Example 2:

```
//Using Locals(available in terraform 0.10.3 or later) & interpolation

locals {
  //Put all common tags here
  common_tags = "${map(
                     "${oci_identity_tag_namespace.tag-namespace1.name}.${oci_identity_tag.tag1.name}"
,"value",
                     "HumanResources.Environment", "Production",
                     "Operations.Project", "Beta"
                     )}"
}

resource "oci_core_instance" t {
    .
    .
    .

    freeform_tags = "${map("key${count.index}", "value${count.index}",
        "domain", "${lookup(data.oci_identity_availability_domains.ADs.availability_domains[var.AD - 1],"
name")}"
        )}"

    defined_tags = "${merge(
                     local.common_tags,
                     map(
                        "${oci_identity_tag_namespace.tag-namespace1.name}.${oci_identity_tag.tag2.na
me}", "awesome-tag-example"
                        )
                     )}"

}
```

Not Authenticated Error when configuring Terraform

If the Terraform CLI gives an error message like:

`* oci_core_vcn.resource1: Service error:NotAuthenticated. The required information to complete authentication was not provided or was incorrect.. http status code: 401`

- Verify you have properly set `user_ocid`, `tenancy_ocid`, `fingerprint` and `private_key_path`

- Verify your `private_key_path` is pointing to your private key and not the corresponding public key

- Verify you have added the corresponding public key to the user account you have specified with `user_ocid`

- Verify the public/private key pairs you are using are of the correct format
    - see: Required Keys (https://docs.cloud.oracle.com/iaas/Content/API/Concepts/apisigningkey.htm) for details on the correct format and how to generate keys

- Verify the user account is part of a group with the appropriate permissions to perform the actions in the plan you are executing

- Verify your Tenancy has been subscribed to the Region you are targeting in your plan

Error message after upgrading OCI Terraform Provider

If the Terraform CLI gives an error message like:

```
Error asking for user input: 1 error(s) occurred:

* provider.oci: dial unix /var/folders/6r/8fk5dmbj4_z3sl0mc_y_fhjw0000gn/T/plugin811254328|netrpc: connect: no such file or directory
```

You are likely using a version of the OCI Terraform Provider that is not compatible with the Terraform binary you have installed. For OCI Provider versions v3.x.x and above, a minimum Terraform version of v.0.10.1 is required.

Dial tcp i/o timeout when connecting via proxy

If the Terraform CLI gives an error message like:

```
* provider.oci: ... dial tcp 134.70.16.0:443: i/o timeout
```

Then you may not have properly configured your proxy settings. The OCI terraform provider does support `http_proxy`, `https_proxy` and `no_proxy` variables where the inclusion or exclusion lists can be defined as follows:

```
export http_proxy=http://www.your-proxy.com:80/
export https_proxy=http://www.your-proxy.com:80/
export no_proxy=localhost,127.0.0.1
```

Terraform OCI Provider Version 2

All Oracle Bare Metal Cloud (OBMC) technologies and services have been renamed to Oracle Cloud Infrastructure (OCI).

The V2.0.0 release (https://github.com/terraform-providers/terraform-provider-oci/releases/tag/v2.0.0) will require you to make changes to your configuration files and state file.

You can still use previous versions of the provider without modifying the configuration files and state file.

Migration tool

As part of the release on September 13th, a migration tool will be supplied that will help you update your terraform plans and state files to work with the new version of the provider. The latest version can be found on the V2.0.2 release page (https://github.com/terraform-providers/terraform-provider-oci/releases/tag/2.0.2) in the oci-tool.zip file. If you would like to review the source and potentially build your own migration tool, the files can be found here (https://github.com/terraform-providers/terraform-provider-oci/tree/v2.2.0/tools/oci-tool). A readme on using the tool is also in that directory.

The changes in this release affect all our current Terraform Provider users. You will be able to run this tool against a plan directory and it will: - Transform all the "baremetal" references in .tf and .tfstate files to the new "oci" provider name. - Detect and modify provider blocks that do not specify a region to explicitly use "us-phoenix-1".

Alternatively, you can make the changes manually.

Provider Name Change

The provider name changes from "baremetal" to "oci". You need to update your Terraform configuration files.

```
Provider "oci" {
    region = "us-ashburn-1"
    tenancy_ocid = "${var.tenancy_ocid}"
    user_ocid = "${var.user_ocid}"
    fingerprint = "${var.fingerprint}"
    private_key_path = "${var.private_key_path}"
}
```

The provider binary filename also changes, from "terraform-provider-baremetal" to "terraform-provider-oci".

Installing the Updated Provider

Use the following guidance to install the updated provider on a Linux or Windows computer.

On *nix

Copy the unpacked provider into the following directory: `~/.terraform.d/plugins/`

Your ~/.terraformrc file specifies the path to the baremetal provider (only required for v.9.x). For example:

```
providers {
  baremetal = "~/.terraform.d/plugins/terraform-provider-baremetal"
}
```

Change the path in your /.terraformrc file to:

```
providers {
  oci = "~/.terraform.d/plugins/terraform-provider-oci_v2.0.0"
}
```

Alternatively you can reference both providers at the same time:

```
providers {
  baremetal = "~/.terraform.d/plugins/terraform-provider-baremetal"
  oci = "~/.terraform.d/plugins/terraform-provider-oci_v2.0.0"
}
```

On Windows

Copy the unpacked provider into the following directory:

```
%APPDATA%/terraform.d/plugins/
```

Your %APPDATA%/terraform.rc file specifies the path to the baremetal provider (only required for v.9.x). For example:

```
providers {
  baremetal = "%appdata%/terraform.d/plugins/terraform-provider-baremetal"
}
```

Change the path in your /.terraformrc file to:

```
providers {
  oci = "%appdata%/terraform.d/plugins/terraform-provider-oci"
}
```

Resource and Datasource Names

Resource and datasource names that use a "baremetal" prefix will now use "oci". For example, resource "baremetal_core_instance" changes to resource "oci_core_instance".

Code example:

```
image = "${lookup(data.baremetal_core_images.OLImageOCID.images[0], "id")}"
```

changes to

```
image = "${lookup(data.oci_core_images.OLImageOCID.images[0], "id")}".
```

Making the Changes

The changes to the provider and the resource names will need to be made to both the configuration files, the state file, and the backup state file.

Once the changes have been made, run terraform plan and verify that there will be no new changes to your infrastructure on the next apply.

Specifying a Region is Mandatory

In addition to the name change, the region parameter in the provider is a required parameter. In previous releases, the region defaulted to "us-phoenix-1" if no region was specified. This region parameter is used to determine service endpoints.

```
provider "oci" {
      region = "us-ashburn-1"
      tenancy_ocid = "${var.tenancy_ocid}"
      user_ocid = "${var.user_ocid}"
      fingerprint = "${var.fingerprint}"
      private_key_path = "${var.private_key_path}"
}
```

Building the Code from Source

If you want to build the new code from source you will have to make sure that the root directory of the project is "terraform-provider-oci" instead of "terraform-provider-baremetal"

Terraform OCI Provider Version 3

New Installation

To use the latest OCI Terraform Provider, version 3, run `terraform init` on the directory that contains the configuration referencing the configuration block, `provider "oci" {`.

> **Note**: If you have previously configured this environment to run v1 or v2 OCI Provider versions, you will need to employ the steps that follow.

Upgrading from v2

The simplest way to begin using the latest provider from the Hashicorp Provider registry is to place an explicit version requirement in your OCI Provider configuration block, as shown here:

```
provider "oci" {
  version          = ">= 3.0.0"
  region           = "${var.region}"
  tenancy_ocid     = "${var.tenancy_ocid}"
  user_ocid        = "${var.user_ocid}"
  fingerprint      = "${var.fingerprint}"
  private_key_path = "${var.private_key_path}"
}
```

For guidance using additional version configuration options, see Provider Versions (https://www.terraform.io/docs/configuration/providers.html#provider-versions).

> **Note**: This approach leaves the previous provider configuration unchanged, and is the better approach if you need the environment to remain compatible with previous versions.

To completely update a previously configured environment, remove the old provider from every location where it was added. While this is typically the `plugins` folder of the user's home directory (`~/.terraform.d/plugins`), it can also be found in the plugins folder of any Terraform configuration directory, for example,

```
…/my-plan-folder/.terraform/plugins/darwin_amd64/
```

Upgrading from v1

Upgrading OCI Provider from v1 to v3 requires the same environment reconfiguration that is shown for the v2 upgrade. However, you must also change all of the plan and statefile references from `bmc` to `oci`. For detailed instructions, see the Version 2 Upgrade Guide (https://www.terraform.io/docs/providers/oci/guides/version-2-upgrade.html)

oci_audit_configuration

This resource provides the Configuration resource in Oracle Cloud Infrastructure Audit service.

Example Usage

```
resource "oci_audit_configuration" "test_configuration" {
  #Required
  compartment_id = "${var.tenancy_ocid}"

  #Optional
  retention_period_days = "${var.configuration_retention_period_days}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) ID of the root compartment (tenancy)

- `retention_period_days` - (Optional) (Updatable) The retention period days

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `retention_period_days` - The retention period days

oci_containerengine_cluster

This resource provides the Cluster resource in Oracle Cloud Infrastructure Container Engine service.

Create a new cluster.

Example Usage

```
resource "oci_containerengine_cluster" "test_cluster" {
    #Required
    compartment_id = "${var.compartment_id}"
    kubernetes_version = "${var.cluster_kubernetes_version}"
    name = "${var.cluster_name}"
    vcn_id = "${oci_containerengine_vcn.test_vcn.id}"

    #Optional
    options {

        #Optional
        add_ons {

            #Optional
            is_kubernetes_dashboard_enabled = "${var.cluster_options_add_ons_is_kubernetes_dashboard_enab
led}"
            is_tiller_enabled = "${var.cluster_options_add_ons_is_tiller_enabled}"
        }
        kubernetes_network_config {

            #Optional
            pods_cidr = "${var.cluster_options_kubernetes_network_config_pods_cidr}"
            services_cidr = "${var.cluster_options_kubernetes_network_config_services_cidr}"
        }
        service_lb_subnet_ids = "${var.cluster_options_service_lb_subnet_ids}"
    }
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment in which to create the cluster.

- `kubernetes_version` - (Required) (Updatable) The version of Kubernetes to install into the cluster masters.

- `name` - (Required) (Updatable) The name of the cluster. Avoid entering confidential information.

- `options` - (Optional) Optional attributes for the cluster.
    - `add_ons` - (Optional) Configurable cluster add-ons
        - `is_kubernetes_dashboard_enabled` - (Optional) Whether or not to enable the Kubernetes Dashboard add-on.

        - `is_tiller_enabled` - (Optional) Whether or not to enable the Tiller add-on.

    - `kubernetes_network_config` - (Optional) Network configuration for Kubernetes.

- - **pods_cidr** - (Optional) The CIDR block for Kubernetes pods.

  - **services_cidr** - (Optional) The CIDR block for Kubernetes services.

  - **service_lb_subnet_ids** - (Optional) The OCIDs of the subnets used for Kubernetes services load balancers.

- **vcn_id** - (Required) The OCID of the virtual cloud network (VCN) in which to create the cluster.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- **available_kubernetes_upgrades** - Available Kubernetes versions to which the clusters masters may be upgraded.

- **compartment_id** - The OCID of the compartment in which the cluster exists.

- **endpoints** - Endpoints served up by the cluster masters.
  - **kubernetes** - The Kubernetes API server endpoint.

- **id** - The OCID of the cluster.

- **kubernetes_version** - The version of Kubernetes running on the cluster masters.

- **lifecycle_details** - Details about the state of the cluster masters.

- **metadata** - Metadata about the cluster.
  - **created_by_user_id** - The user who created the cluster.

  - **created_by_work_request_id** - The OCID of the work request which created the cluster.

  - **deleted_by_user_id** - The user who deleted the cluster.

  - **deleted_by_work_request_id** - The OCID of the work request which deleted the cluster.

  - **time_created** - The time the cluster was created.

  - **time_deleted** - The time the cluster was deleted.

  - **time_updated** - The time the cluster was updated.

  - **updated_by_user_id** - The user who updated the cluster.

  - **updated_by_work_request_id** - The OCID of the work request which updated the cluster.
- **name** - The name of the cluster.

- **options** - Optional attributes for the cluster.
  - **add_ons** - Configurable cluster add-ons
    - **is_kubernetes_dashboard_enabled** - Whether or not to enable the Kubernetes Dashboard add-on.

    - **is_tiller_enabled** - Whether or not to enable the Tiller add-on.

  - **kubernetes_network_config** - Network configuration for Kubernetes.
    - **pods_cidr** - The CIDR block for Kubernetes pods.

- - `services_cidr` - The CIDR block for Kubernetes services.

  - `service_lb_subnet_ids` - The OCIDs of the subnets used for Kubernetes services load balancers.

- `state` - The state of the cluster masters.

- `vcn_id` - The OCID of the virtual cloud network (VCN) in which the cluster exists.

Import

Clusters can be imported using the `id`, e.g.

```
$ terraform import oci_containerengine_cluster.test_cluster "id"
```

oci_containerengine_node_pool

This resource provides the Node Pool resource in Oracle Cloud Infrastructure Container Engine service.

Create a new node pool.

Example Usage

```
resource "oci_containerengine_node_pool" "test_node_pool" {
    #Required
    cluster_id = "${oci_containerengine_cluster.test_cluster.id}"
    compartment_id = "${var.compartment_id}"
    kubernetes_version = "${var.node_pool_kubernetes_version}"
    name = "${var.node_pool_name}"
    node_image_name = "${var.node_pool_node_image_name}"
    node_shape = "${var.node_pool_node_shape}"
    subnet_ids = "${var.node_pool_subnet_ids}"

    #Optional
    initial_node_labels {

        #Optional
        key = "${var.node_pool_initial_node_labels_key}"
        value = "${var.node_pool_initial_node_labels_value}"
    }
    quantity_per_subnet = "${var.node_pool_quantity_per_subnet}"
    ssh_public_key = "${var.node_pool_ssh_public_key}"
}
```

Argument Reference

The following arguments are supported:

- `cluster_id` - (Required) The OCID of the cluster to which this node pool is attached.

- `compartment_id` - (Required) The OCID of the compartment in which the node pool exists.

- `initial_node_labels` - (Optional) (Updatable) A list of key/value pairs to add to nodes after they join the Kubernetes cluster.
    - `key` - (Optional) (Updatable) The key of the pair.

    - `value` - (Optional) (Updatable) The value of the pair.

- `kubernetes_version` - (Required) (Updatable) The version of Kubernetes to install on the nodes in the node pool.

- `name` - (Required) (Updatable) The name of the node pool. Avoid entering confidential information.

- `node_image_name` - (Required) The name of the image running on the nodes in the node pool.

- `node_shape` - (Required) The name of the node shape of the nodes in the node pool.

- `quantity_per_subnet` - (Optional) (Updatable) The number of nodes to create in each subnet.

- `ssh_public_key` - (Optional) The SSH public key to add to each node in the node pool.

- `subnet_ids` - (Required) (Updatable) The OCIDs of the subnets in which to place nodes for this node pool.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `cluster_id` - The OCID of the cluster to which this node pool is attached.

- `compartment_id` - The OCID of the compartment in which the node pool exists.

- `id` - The OCID of the node pool.

- `initial_node_labels` - A list of key/value pairs to add to nodes after they join the Kubernetes cluster.
    - `key` - The key of the pair.

    - `value` - The value of the pair.

- `kubernetes_version` - The version of Kubernetes running on the nodes in the node pool.

- `name` - The name of the node pool.

- `node_image_id` - The OCID of the image running on the nodes in the node pool.

- `node_image_name` - The name of the image running on the nodes in the node pool.

- `node_shape` - The name of the node shape of the nodes in the node pool.

- `nodes` - The nodes in the node pool.
    - `availability_domain` - The name of the availability domain in which this node is placed.

    - `error` - An error that may be associated with the node.
        - `code` - A short error code that defines the error, meant for programmatic parsing. See API Errors (https://docs.cloud.oracle.com/iaas/Content/API/References/apierrors.htm).

        - `message` - A human-readable error string.

    - `id` - The OCID of the compute instance backing this node.

    - `lifecycle_details` - Details about the state of the node.

    - `name` - The name of the node.

    - `node_pool_id` - The OCID of the node pool to which this node belongs.

    - `public_ip` - The public IP address of this node.

    - `state` - The state of the node.

    - `subnet_id` - The OCID of the subnet in which this node is placed.

- `quantity_per_subnet` - The number of nodes in each subnet.

- `ssh_public_key` - The SSH public key on each node in the node pool.

- `subnet_ids` - The OCIDs of the subnets in which to place nodes for this node pool.

Import

NodePools can be imported using the `id`, e.g.

```
$ terraform import oci_containerengine_node_pool.test_node_pool "id"
```

oci_core_app_catalog_listing_resource_version_agreement

The `oci_core_app_catalog_listing_resource_version_agreement` resource creates AppCatalogListingResourceVersionAgreement for a particular resource version of a listing.

Example Usage

```
resource "oci_core_app_catalog_listing_resource_version_agreement" "test_app_catalog_listing_resource_ver
sion_agreement" {
    #Required
    listing_id = "${oci_core_listing.test_listing.id}"
    listing_resource_version = "${var.app_catalog_listing_resource_version_agreement_listing_resource_ver
sion}"
}
```

Argument Reference

The following arguments are supported:

- `listing_id` - (Required) The OCID of the listing.

- `listing_resource_version` - (Required) Listing Resource Version.

Attributes Reference

The following attributes are exported:

- `eula_link` - EULA link

- `listing_id` - The OCID of the listing associated with these agreements.

- `listing_resource_version` - Listing resource version associated with these agreements.

- `oracle_terms_of_use_link` - Oracle TOU link

- `signature` - A generated signature for this agreement retrieval operation which should be used in the create subscription call.

- `time_retrieved` - Date and time the agreements were retrieved, in RFC3339 format. Example: `2018-03-20T12:32:53.532Z`

oci_core_app_catalog_subscription

This resource provides the App Catalog Subscription resource in Oracle Cloud Infrastructure Core service.

Create a subscription for listing resource version for a compartment. It will take some time to propagate to all regions.

Example Usage

```
resource "oci_core_app_catalog_subscription" "test_app_catalog_subscription" {

    #Optional
    compartment_id = "${var.compartment_id}"
    eula_link = "${var.app_catalog_subscription_eula_link}"
    listing_id = "${oci_core_listing.test_listing.id}"
    listing_resource_version = "${var.app_catalog_subscription_listing_resource_version}"
    oracle_terms_of_use_link = "${var.app_catalog_subscription_oracle_terms_of_use_link}"
    signature = "${var.app_catalog_subscription_signature}"
    time_retrieved = "${var.app_catalog_subscription_time_retrieved}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Optional) The compartmentID for the subscription.

- `eula_link` - (Optional) EULA link

- `listing_id` - (Optional) The OCID of the listing.

- `listing_resource_version` - (Optional) Listing resource version.

- `oracle_terms_of_use_link` - (Optional) Oracle TOU link

- `signature` - (Optional) A generated signature for this listing resource version retrieved the agreements API.

- `time_retrieved` - (Optional) Date and time the agreements were retrieved, in RFC3339 format. Example: `2018-03-20T12:32:53.532Z`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The compartmentID of the subscription.

- `display_name` - The display name of the listing.

- `listing_id` - The ocid of the listing resource.

- `listing_resource_id` - Listing resource id.

- `listing_resource_version` - Listing resource version.

- `publisher_name` - Name of the publisher who published this listing.

- `summary` - The short summary to the listing.

- `time_created` - Date and time at which the subscription was created, in RFC3339 format. Example: `2018-03-20T12:32:53.532Z`

Import

AppCatalogSubscriptions can be imported using the `id`, e.g.

```
$ terraform import oci_core_app_catalog_subscription.test_app_catalog_subscription "compartmentId/{compartmentId}/listingId/{listingId}/listingResourceVersion/{listingResourceVersion}"
```

oci_core_boot_volume

This resource provides the Boot Volume resource in Oracle Cloud Infrastructure Core service.

Creates a new boot volume in the specified compartment from an existing boot volume or a boot volume backup. For general information about boot volumes, see Boot Volumes (https://docs.cloud.oracle.com/iaas/Content/Block/Concepts/bootvolumes.htm). You may optionally specify a *display name* for the volume, which is simply a friendly name or description. It does not have to be unique, and you can change it. Avoid entering confidential information.

Example Usage

```
resource "oci_core_boot_volume" "test_boot_volume" {
    #Required
    availability_domain = "${var.boot_volume_availability_domain}"
    compartment_id = "${var.compartment_id}"
    source_details {
        #Required
        id = "${var.boot_volume_source_details_id}"
        type = "${var.boot_volume_source_details_type}"
    }

    #Optional
    backup_policy_id = "${oci_core_backup_policy.test_backup_policy.id}"
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.boot_volume_display_name}"
    freeform_tags = {"Department"= "Finance"}
    kms_key_id = "${oci_core_kms_key.test_kms_key.id}"
    size_in_gbs = "${var.boot_volume_size_in_gbs}"
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The availability domain of the boot volume. Example: `Uocm:PHX-AD-1`

- `backup_policy_id` - (Optional) If provided, specifies the ID of the boot volume backup policy to assign to the newly created boot volume. If omitted, no policy will be assigned.

- `compartment_id` - (Required) The OCID of the compartment that contains the boot volume.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags

(https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `kms_key_id` - (Optional) (Updatable) The OCID of the KMS key to be used as the master encryption key for the boot volume.

- `size_in_gbs` - (Optional) (Updatable) The size of the volume in GBs.

- `source_details` - (Required) Specifies the boot volume source details for a new boot volume. The volume source is either another boot volume in the same availability domain or a boot volume backup. This is a mandatory field for a boot volume.
    - `id` - (Required) The OCID of the boot volume or boot volume backup.

    - `type` - (Required) The type can be one of these values: `bootVolume`, `bootVolumeBackup`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain of the boot volume. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment that contains the boot volume.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `id` - The boot volume's Oracle ID (OCID).

- `image_id` - The image OCID used to create the boot volume.

- `is_hydrated` - Specifies whether the boot volume's data has finished copying from the source boot volume or boot volume backup.

- `kms_key_id` - The OCID of the KMS key which is the master encryption key for the boot volume.

- `size_in_gbs` - The size of the boot volume in GBs.

- `size_in_mbs` - The size of the volume in MBs. The value must be a multiple of 1024. This field is deprecated. Please use `size_in_gbs`.

- `source_details` - The boot volume source, either an existing boot volume in the same availability domain or a boot volume backup. If null, this means that the boot volume was created from an image.
    - `id` - The OCID of the boot volume or boot volume backup.

- type - The type can be one of these values: `bootVolume`, `bootVolumeBackup`

- `state` - The current state of a boot volume.

- `time_created` - The date and time the boot volume was created. Format defined by RFC3339.

- `volume_group_id` - The OCID of the source volume group.

Import

BootVolumes can be imported using the `id`, e.g.

```
$ terraform import oci_core_boot_volume.test_boot_volume "id"
```

oci_core_boot_volume_backup

This resource provides the Boot Volume Backup resource in Oracle Cloud Infrastructure Core service.

Creates a new boot volume backup of the specified boot volume. For general information about boot volume backups, see Overview of Boot Volume Backups (https://docs.cloud.oracle.com/iaas/Content/Block/Concepts/bootvolumebackups.htm)

When the request is received, the backup object is in a REQUEST_RECEIVED state. When the data is imaged, it goes into a CREATING state. After the backup is fully uploaded to the cloud, it goes into an AVAILABLE state.

Example Usage

```
resource "oci_core_boot_volume_backup" "test_boot_volume_backup" {
    #Required
    boot_volume_id = "${oci_core_boot_volume.test_boot_volume.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.boot_volume_backup_display_name}"
    freeform_tags = {"Department"= "Finance"}
    type = "${var.boot_volume_backup_type}"
}
```

Argument Reference

The following arguments are supported:

* `boot_volume_id` - (Required) The OCID of the boot volume that needs to be backed up.

* `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

* `display_name` - (Optional) (Updatable) A user-friendly name for the boot volume backup. Does not have to be unique and it's changeable. Avoid entering confidential information.

* `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

* `type` - (Optional) The type of backup to create. If omitted, defaults to incremental.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `boot_volume_id` - The OCID of the boot volume.

- `compartment_id` - The OCID of the compartment that contains the boot volume backup.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name for the boot volume backup. Does not have to be unique and it's changeable. Avoid entering confidential information.

- `expiration_time` - The date and time the volume backup will expire and be automatically deleted. Format defined by RFC3339. This parameter will always be present for backups that were created automatically by a scheduled-backup policy. For manually created backups, it will be absent, signifying that there is no expiration time and the backup will last forever until manually deleted.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the boot volume backup.

- `image_id` - The image OCID used to create the boot volume the backup is taken from.

- `size_in_gbs` - The size of the boot volume, in GBs.

- `source_type` - Specifies whether the backup was created manually, or via scheduled backup policy.

- `state` - The current state of a boot volume backup.

- `time_created` - The date and time the boot volume backup was created. This is the time the actual point-in-time image of the volume data was taken. Format defined by RFC3339.

- `time_request_received` - The date and time the request to create the boot volume backup was received. Format defined by RFC3339.

- `type` - The type of a volume backup. Supported values are 'FULL' or 'INCREMENTAL'.

- `unique_size_in_gbs` - The size used by the backup, in GBs. It is typically smaller than `size_in_gbs`, depending on the space consumed on the boot volume and whether the backup is full or incremental.

Import

BootVolumeBackups can be imported using the `id`, e.g.

```
$ terraform import oci_core_boot_volume_backup.test_boot_volume_backup "id"
```

oci_core_console_history

This resource provides the Console History resource in Oracle Cloud Infrastructure Core service.

Captures the most recent serial console data (up to a megabyte) for the specified instance.

The `CaptureConsoleHistory` operation works with the other console history operations as described below.

1. Use `CaptureConsoleHistory` to request the capture of up to a megabyte of the most recent console history. This call returns a `ConsoleHistory` object. The object will have a state of REQUESTED.

2. Wait for the capture operation to succeed by polling `GetConsoleHistory` with the identifier of the console history metadata. The state of the `ConsoleHistory` object will go from REQUESTED to GETTING-HISTORY and then SUCCEEDED (or FAILED).

3. Use `GetConsoleHistoryContent` to get the actual console history data (not the metadata).

4. Optionally, use `DeleteConsoleHistory` to delete the console history metadata and the console history data.

Example Usage

```
resource "oci_core_console_history" "test_console_history" {
    #Required
    instance_id = "${oci_core_instance.test_instance.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.console_history_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

* `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

* `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable.

* `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

* `instance_id` - (Required) The OCID of the instance to get the console history from.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain of an instance. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information. Example: `My console history metadata`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the console history metadata object.

- `instance_id` - The OCID of the instance this console history was fetched from.

- `state` - The current state of the console history.

- `time_created` - The date and time the history was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

ConsoleHistories can be imported using the `id`, e.g.

```
$ terraform import oci_core_console_history.test_console_history "id"
```

oci_core_cpe

This resource provides the Cpe resource in Oracle Cloud Infrastructure Core service.

Creates a new virtual customer-premises equipment (CPE) object in the specified compartment. For more information, see IPSec VPNs (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingIPsec.htm).

For the purposes of access control, you must provide the OCID of the compartment where you want the CPE to reside. Notice that the CPE doesn't have to be in the same compartment as the IPSec connection or other Networking Service components. If you're not sure which compartment to use, put the CPE in the same compartment as the DRG. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You must provide the public IP address of your on-premises router. See Configuring Your On-Premises Router for an IPSec VPN (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/configuringCPE.htm).

You may optionally specify a *display name* for the CPE, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

Example Usage

```
resource "oci_core_cpe" "test_cpe" {
    #Required
    compartment_id = "${var.compartment_id}"
    ip_address = "${var.cpe_ip_address}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.cpe_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment to contain the CPE.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department":

"Finance"}

- `ip_address` - (Required) The public IP address of the on-premises router. Example: `143.19.23.16`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the CPE.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The CPE's Oracle ID (OCID).

- `ip_address` - The public IP address of the on-premises router.

- `time_created` - The date and time the CPE was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

Cpes can be imported using the `id`, e.g.

```
$ terraform import oci_core_cpe.test_cpe "id"
```

oci_core_cross_connect

This resource provides the Cross Connect resource in Oracle Cloud Infrastructure Core service.

Creates a new cross-connect. Oracle recommends you create each cross-connect in a CrossConnectGroup (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/CrossConnectGroup) so you can use link aggregation with the connection.

After creating the `CrossConnect` object, you need to go the FastConnect location and request to have the physical cable installed. For more information, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

For the purposes of access control, you must provide the OCID of the compartment where you want the cross-connect to reside. If you're not sure which compartment to use, put the cross-connect in the same compartment with your VCN. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the cross-connect. It does not have to be unique, and you can change it. Avoid entering confidential information.

Example Usage

```
resource "oci_core_cross_connect" "test_cross_connect" {
    #Required
    compartment_id = "${var.compartment_id}"
    location_name = "${var.cross_connect_location_name}"
    port_speed_shape_name = "${var.cross_connect_port_speed_shape_name}"

    #Optional
    cross_connect_group_id = "${oci_core_cross_connect_group.test_cross_connect_group.id}"
    display_name = "${var.cross_connect_display_name}"
    far_cross_connect_or_cross_connect_group_id = "${oci_core_far_cross_connect_or_cross_connect_group.test_far_
cross_connect_or_cross_connect_group.id}"
    near_cross_connect_or_cross_connect_group_id = "${oci_core_near_cross_connect_or_cross_connect_group.test_n
ear_cross_connect_or_cross_connect_group.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment to contain the cross-connect.

- `cross_connect_group_id` - (Optional) The OCID of the cross-connect group to put this cross-connect in.

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `far_cross_connect_or_cross_connect_group_id` - (Optional) If you already have an existing cross-connect or cross-connect group at this FastConnect location, and you want this new cross-connect to be on a different router (for the purposes of redundancy), provide the OCID of that existing cross-connect or cross-connect group.

- `is_active` - (Optional) (Updatable) Set to true to activate the cross-connect. You activate it after the physical cabling is complete, and you've confirmed the cross-connect's light levels are good and your side of the interface is up. Activation

indicates to Oracle that the physical connection is ready.

- `location_name` - (Required) The name of the FastConnect location where this cross-connect will be installed. To get a list of the available locations, see ListCrossConnectLocations (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/CrossConnectLocation/ListCrossConnectLocations). Example: `CyrusOne, Chandler, AZ`

- `near_cross_connect_or_cross_connect_group_id` - (Optional) If you already have an existing cross-connect or cross-connect group at this FastConnect location, and you want this new cross-connect to be on the same router, provide the OCID of that existing cross-connect or cross-connect group.

- `port_speed_shape_name` - (Required) The port speed for this cross-connect. To get a list of the available port speeds, see ListCrossConnectPortSpeedShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/CrossConnectPortSpeedShape/ListCrossconnectPortSpeedShapes). Example: `10 Gbps`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the cross-connect group.

- `cross_connect_group_id` - The OCID of the cross-connect group this cross-connect belongs to (if any).

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `id` - The cross-connect's Oracle ID (OCID).

- `location_name` - The name of the FastConnect location where this cross-connect is installed.

- `port_name` - A string identifying the meet-me room port for this cross-connect.

- `port_speed_shape_name` - The port speed for this cross-connect. Example: `10 Gbps`

- `state` - The cross-connect's current state.

- `time_created` - The date and time the cross-connect was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

CrossConnects can be imported using the `id`, e.g.

```
$ terraform import oci_core_cross_connect.test_cross_connect "id"
```

oci_core_cross_connect_group

This resource provides the Cross Connect Group resource in Oracle Cloud Infrastructure Core service.

Creates a new cross-connect group to use with Oracle Cloud Infrastructure FastConnect. For more information, see FastConnect Overview (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm).

For the purposes of access control, you must provide the OCID of the compartment where you want the cross-connect group to reside. If you're not sure which compartment to use, put the cross-connect group in the same compartment with your VCN. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the cross-connect group. It does not have to be unique, and you can change it. Avoid entering confidential information.

Example Usage

```
resource "oci_core_cross_connect_group" "test_cross_connect_group" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.cross_connect_group_display_name}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment to contain the cross-connect group.

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the cross-connect group.

- `display_name` - The display name of A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `id` - The cross-connect group's Oracle ID (OCID).

- `state` - The cross-connect group's current state.

- `time_created` - The date and time the cross-connect group was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

CrossConnectGroups can be imported using the `id`, e.g.

```
$ terraform import oci_core_cross_connect_group.test_cross_connect_group "id"
```

oci_core_dhcp_options

This resource provides the Dhcp Options resource in Oracle Cloud Infrastructure Core service.

Creates a new set of DHCP options for the specified VCN. For more information, see DhcpOptions (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/DhcpOptions/).

For the purposes of access control, you must provide the OCID of the compartment where you want the set of DHCP options to reside. Notice that the set of options doesn't have to be in the same compartment as the VCN, subnets, or other Networking Service components. If you're not sure which compartment to use, put the set of DHCP options in the same compartment as the VCN. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the set of DHCP options, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

For more information on configuring a VCN's default DHCP options, see Managing Default VCN Resources (/docs/providers/oci/guides/managing_default_resources.html)

Example Usage

VCN Local with Internet

```
resource "oci_core_dhcp_options" "test_dhcp_options" {
    #Required
    compartment_id = "${var.compartment_id}"
    options {
        type = "DomainNameServer"
        server_type = "VcnLocalPlusInternet"
    }

    options {
        type = "SearchDomain"
        search_domain_names = [ "test.com" ]
    }

    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    display_name = "${var.dhcp_options_display_name}"
}
```

Custom DNS Server

```
resource "oci_core_dhcp_options" "test_dhcp_options" {
    #Required
    compartment_id = "${var.compartment_id}"
    options {
        type = "DomainNameServer"
        server_type = "CustomDnsServer"
        custom_dns_servers = [ "192.168.0.2", "192.168.0.11", "192.168.0.19" ]
    }

    options {
        type = "SearchDomain"
        search_domain_names = [ "test.com" ]
    }

    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.dhcp_options_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment to contain the set of DHCP options.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `options` - (Required) (Updatable) A set of DHCP options.

  - `custom_dns_servers` - (Applicable when type=DomainNameServer) (Updatable) If you set `serverType` to `CustomDnsServer`, specify the IP address of at least one DNS server of your choice (three maximum).

  - `search_domain_names` - (Required when type=SearchDomain) (Updatable) A single search domain name according to RFC 952 (https://tools.ietf.org/html/rfc952) and RFC 1123 (https://tools.ietf.org/html/rfc1123). During a DNS query, the OS will append this search domain name to the value being queried.

    If you set DhcpDnsOption (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/DhcpDnsOption/) to `VcnLocalPlusInternet`, and you assign a DNS label to the VCN during creation, the search domain name in the VCN's default set of DHCP options is automatically set to the VCN domain (for example, `vcn1.oraclevcn.com`).

If you don't want to use a search domain name, omit this option from the set of DHCP options. Do not include this option with an empty list of search domain names, or with an empty string as the value for any search domain name.

- `server_type` - (Required when type=DomainNameServer) (Updatable)

  - **VcnLocal:** Reserved for future use.

  - **VcnLocalPlusInternet:** Also referred to as "Internet and VCN Resolver". Instances can resolve internet hostnames (no internet gateway is required), and can resolve hostnames of instances in the VCN. This is the default value in the default set of DHCP options in the VCN. For the Internet and VCN Resolver to work across the VCN, there must also be a DNS label set for the VCN, a DNS label set for each subnet, and a hostname for each instance. The Internet and VCN Resolver also enables reverse DNS lookup, which lets you determine the hostname corresponding to the private IP address. For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  - **CustomDnsServer:** Instances use a DNS server of your choice (three maximum).

- `type` - (Required) (Updatable) The specific DHCP option. Either `DomainNameServer` (for DhcpDnsOption (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/DhcpDnsOption/)) or `SearchDomain` (for DhcpSearchDomainOption (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/DhcpSearchDomainOption/)).

- `vcn_id` - (Required) The OCID of the VCN the set of DHCP options belongs to.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the set of DHCP options.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - Oracle ID (OCID) for the set of DHCP options.

- `options` - The collection of individual DHCP options.

  - `custom_dns_servers` - If you set `serverType` to `CustomDnsServer`, specify the IP address of at least one DNS server of your choice (three maximum).

  - `search_domain_names` - A single search domain name according to RFC 952 (https://tools.ietf.org/html/rfc952)

and RFC 1123 (https://tools.ietf.org/html/rfc1123). During a DNS query, the OS will append this search domain name to the value being queried.

If you set DhcpDnsOption (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/DhcpDnsOption/) to `VcnLocalPlusInternet`, and you assign a DNS label to the VCN during creation, the search domain name in the VCN's default set of DHCP options is automatically set to the VCN domain (for example, `vcn1.oraclevcn.com`).

If you don't want to use a search domain name, omit this option from the set of DHCP options. Do not include this option with an empty list of search domain names, or with an empty string as the value for any search domain name.

- `server_type` -

    - **VcnLocal:** Reserved for future use.

    - **VcnLocalPlusInternet:** Also referred to as "Internet and VCN Resolver". Instances can resolve internet hostnames (no internet gateway is required), and can resolve hostnames of instances in the VCN. This is the default value in the default set of DHCP options in the VCN. For the Internet and VCN Resolver to work across the VCN, there must also be a DNS label set for the VCN, a DNS label set for each subnet, and a hostname for each instance. The Internet and VCN Resolver also enables reverse DNS lookup, which lets you determine the hostname corresponding to the private IP address. For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

    - **CustomDnsServer:** Instances use a DNS server of your choice (three maximum).

- `type` - The specific DHCP option. Either `DomainNameServer` (for DhcpDnsOption (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/DhcpDnsOption/)) or `SearchDomain` (for DhcpSearchDomainOption (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/DhcpSearchDomainOption/)).

- `state` - The current state of the set of DHCP options.

- `time_created` - Date and time the set of DHCP options was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the set of DHCP options belongs to.

Import

DhcpOptions can be imported using the `id`, e.g.

```
$ terraform import oci_core_dhcp_options.test_dhcp_options "id"
```

oci_core_drg

This resource provides the Drg resource in Oracle Cloud Infrastructure Core service.

Creates a new dynamic routing gateway (DRG) in the specified compartment. For more information, see Dynamic Routing Gateways (DRGs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingDRGs.htm).

For the purposes of access control, you must provide the OCID of the compartment where you want the DRG to reside. Notice that the DRG doesn't have to be in the same compartment as the VCN, the DRG attachment, or other Networking Service components. If you're not sure which compartment to use, put the DRG in the same compartment as the VCN. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the DRG, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

Example Usage

```
resource "oci_core_drg" "test_drg" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.drg_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

* `compartment_id` - (Required) The OCID of the compartment to contain the DRG.

* `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

* `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

* `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the DRG.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The DRG's Oracle ID (OCID).

- `state` - The DRG's current state.

- `time_created` - The date and time the DRG was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

Drgs can be imported using the `id`, e.g.

```
$ terraform import oci_core_drg.test_drg "id"
```

oci_core_drg_attachment

This resource provides the Drg Attachment resource in Oracle Cloud Infrastructure Core service.

Attaches the specified DRG to the specified VCN. A VCN can be attached to only one DRG at a time, and vice versa. The response includes a `DrgAttachment` object with its own OCID. For more information about DRGs, see Dynamic Routing Gateways (DRGs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingDRGs.htm).

You may optionally specify a *display name* for the attachment, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

For the purposes of access control, the DRG attachment is automatically placed into the same compartment as the VCN. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm).

Example Usage

```
resource "oci_core_drg_attachment" "test_drg_attachment" {
    #Required
    drg_id = "${oci_core_drg.test_drg.id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    display_name = "${var.drg_attachment_display_name}"
    route_table_id = "${oci_core_route_table.test_route_table.id}"
}
```

Argument Reference

The following arguments are supported:

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique. Avoid entering confidential information.

- `drg_id` - (Required) The OCID of the DRG.

- `route_table_id` - (Optional) (Updatable) The OCID of the route table the DRG attachment will use.

  If you don't specify a route table here, the DRG attachment is created without an associated route table. The Networking service does NOT automatically associate the attached VCN's default route table with the DRG attachment.

  For information about why you would associate a route table with a DRG attachment, see Advanced Scenario: Transit Routing (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/transitrouting.htm).

- `vcn_id` - (Required) The OCID of the VCN.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the DRG attachment.

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `drg_id` - The OCID of the DRG.

- `id` - The DRG attachment's Oracle ID (OCID).

- `route_table_id` - The OCID of the route table the DRG attachment is using. For information about why you would associate a route table with a DRG attachment, see Advanced Scenario: Transit Routing (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/transitrouting.htm).

- `state` - The DRG attachment's current state.

- `time_created` - The date and time the DRG attachment was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN.

Import

DrgAttachments can be imported using the `id`, e.g.

```
$ terraform import oci_core_drg_attachment.test_drg_attachment "id"
```

oci_core_image

This resource provides the Image resource in Oracle Cloud Infrastructure Core service.

Creates a boot disk image for the specified instance or imports an exported image from the Oracle Cloud Infrastructure Object Storage service.

When creating a new image, you must provide the OCID of the instance you want to use as the basis for the image, and the OCID of the compartment containing that instance. For more information about images, see Managing Custom Images (https://docs.cloud.oracle.com/iaas/Content/Compute/Tasks/managingcustomimages.htm).

When importing an exported image from Object Storage, you specify the source information in ImageSourceDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/latest/requests/ImageSourceDetails).

When importing an image based on the namespace, bucket name, and object name, use ImageSourceViaObjectStorageTupleDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/latest/requests/ImageSourceViaObjectStorageTupleDetails).

When importing an image based on the Object Storage URL, use ImageSourceViaObjectStorageUriDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/latest/requests/ImageSourceViaObjectStorageUriDetails). See Object Storage URLs (https://docs.cloud.oracle.com/iaas/Content/Compute/Tasks/imageimportexport.htm#URLs) and pre-authenticated requests (https://docs.cloud.oracle.com/iaas/Content/Object/Tasks/managingaccess.htm#pre-auth) for constructing URLs for image import/export.

For more information about importing exported images, see Image Import/Export (https://docs.cloud.oracle.com/iaas/Content/Compute/Tasks/imageimportexport.htm).

You may optionally specify a *display name* for the image, which is simply a friendly name or description. It does not have to be unique, and you can change it. See UpdateImage (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Image/UpdateImage). Avoid entering confidential information.

Example Usage

Create image from instance in tenancy

```
resource "oci_core_image" "test_image" {
    #Required
    compartment_id = "${var.compartment_id}"
    instance_id = "${oci_core_instance.test_instance.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.image_display_name}"
    launch_mode = "${var.image_launch_mode}"
    freeform_tags = {"Department"= "Finance"}
}
```

Create image from exported image via direct access to object store

```
resource "oci_core_image" "test_image" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.image_display_name}"
    launch_mode = "${var.image_launch_mode}"

    image_source_details {
        source_type = "objectStorageTuple"
        bucket_name = "${var.bucket_name}"
        namespace_name = "${var.namespace}"
        object_name = "${var.object_name}" # exported image name

        #Optional
        source_image_type = "${var.source_image_type}"
    }
}
```

Create image from exported image at publicly accessible uri

```
resource "oci_core_image" "test_image" {
    #Required
    compartment_id = "${var.compartment_id}"

    #Optional
    display_name = "${var.image_display_name}"
    launch_mode = "${var.image_launch_mode}"

    image_source_details {
        source_type = "objectStorageUri"
        source_uri = "${var.source_uri}"

        #Optional
        source_image_type = "${var.source_image_type}"
    }
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment containing the instance you want to use as the basis for the image.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name for the image. It does not have to be unique, and it's changeable. Avoid entering confidential information.

  You cannot use an Oracle-provided image name as a custom image name.

Example: `My Oracle Linux image`

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `image_source_details` - (Optional) Details for creating an image through import

  - `bucket_name` - (Required when source_type=objectStorageTuple) The Object Storage bucket for the image.

  - `namespace_name` - (Required when source_type=objectStorageTuple) The Object Storage namespace for the image.

  - `object_name` - (Required when source_type=objectStorageTuple) The Object Storage name for the image.

  - `source_image_type` - (Optional) The format of the image to be imported. Exported Oracle images are QCOW2. Only monolithic images are supported. Allowed values are:
    - `QCOW2`

    - `VMDK`

  - `source_type` - (Required) The source type for the image. Use `objectStorageTuple` when specifying the namespace, bucket name, and object name. Use `objectStorageUri` when specifying the Object Storage URL.

  - `source_uri` - (Required when source_type=objectStorageUri) The Object Storage URL for the image.

- `instance_id` - (Optional -- required when not specifying `image_source_details`) The OCID of the instance you want to use as the basis for the image.

- `launch_mode` - (Optional) Specifies the configuration mode for launching virtual machine (VM) instances. The configuration modes are:

  - `NATIVE` - VM instances launch with iSCSI boot and VFIO devices. The default value for Oracle-provided images.

  - `EMULATED` - VM instances launch with emulated devices, such as the E1000 network driver and emulated SCSI disk controller.

  - `PARAVIRTUALIZED` - VM instances launch with paravirtualized devices using virtio drivers.

  - `CUSTOM` - VM instances launch with custom configuration settings specified in the `LaunchOptions` parameter.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `base_image_id` - The OCID of the image originally used to launch the instance.

- `compartment_id` - The OCID of the compartment containing the instance you want to use as the basis for the image.

- `create_image_allowed` - Whether instances launched with this image can be used to create new images. For example, you cannot create an image of an Oracle Database instance. Example: `true`

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name for the image. It does not have to be unique, and it's changeable. Avoid entering confidential information. You cannot use an Oracle-provided image name as a custom image name. Example: `My custom Oracle Linux image`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the image.

- `launch_mode` - Specifies the configuration mode for launching virtual machine (VM) instances. The configuration modes are:
    - `NATIVE` - VM instances launch with iSCSI boot and VFIO devices. The default value for Oracle-provided images.

    - `EMULATED` - VM instances launch with emulated devices, such as the E1000 network driver and emulated SCSI disk controller.

    - `PARAVIRTUALIZED` - VM instances launch with paravirtualized devices using virtio drivers.

    - `CUSTOM` - VM instances launch with custom configuration settings specified in the `LaunchOptions` parameter.

- `launch_options` -
    - `boot_volume_type` - Emulation type for volume.
        - `ISCSI` - ISCSI attached block storage device. This is the default for Boot Volumes and Remote Block Storage volumes on Oracle provided images.

        - `SCSI` - Emulated SCSI disk.

        - `IDE` - Emulated IDE disk.

        - `VFIO` - Direct attached Virtual Function storage. This is the default option for Local data volumes on Oracle provided images.

        - `PARAVIRTUALIZED` - Paravirtualized disk.

    - `firmware` - Firmware used to boot VM. Select the option that matches your operating system.
        - `BIOS` - Boot VM using BIOS style firmware. This is compatible with both 32 bit and 64 bit operating systems that boot using MBR style bootloaders.

        - `UEFI_64` - Boot VM using UEFI style firmware compatible with 64 bit operating systems. This is the default for Oracle provided images.

    - `is_pv_encryption_in_transit_enabled` - Whether to enable encryption in transit for the PV boot volume attachment. Defaults to false.

    - `network_type` - Emulation type for NIC.
        - `E1000` - Emulated Gigabit ethernet controller. Compatible with Linux e1000 network driver.

        - `VFIO` - Direct attached Virtual Function network controller. Default for Oracle provided images.

        - `PARAVIRTUALIZED` - VM instances launch with paravirtualized devices using virtio drivers.

- - remote_data_volume_type - Emulation type for volume.
    - ISCSI - ISCSI attached block storage device. This is the default for Boot Volumes and Remote Block Storage volumes on Oracle provided images.

    - SCSI - Emulated SCSI disk.

    - IDE - Emulated IDE disk.

    - VFIO - Direct attached Virtual Function storage. This is the default option for Local data volumes on Oracle provided images.

    - PARAVIRTUALIZED - Paravirtualized disk.

- operating_system - The image's operating system. Example: Oracle Linux

- operating_system_version - The image's operating system version. Example: 7.2

- size_in_mbs - Image size (1 MB = 1048576 bytes) Example: 47694

- state - The current state of the image.

- time_created - The date and time the image was created, in the format defined by RFC3339. Example: 2016-08-25T21:10:29.600Z

Import

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

```
$ terraform import oci_core_image.test_image "id"
```

oci_core_instance

This resource provides the Instance resource in Oracle Cloud Infrastructure Core service.

Creates a new instance in the specified compartment and the specified availability domain. For general information about instances, see Overview of the Compute Service (https://docs.cloud.oracle.com/iaas/Content/Compute/Concepts/computeoverview.htm).

For information about access control and compartments, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm).

For information about availability domains, see Regions and Availability Domains (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/regions.htm). To get a list of availability domains, use the `ListAvailabilityDomains` operation in the Identity and Access Management Service API.

All Oracle Cloud Infrastructure resources, including instances, get an Oracle-assigned, unique ID called an Oracle Cloud Identifier (OCID). When you create a resource, you can find its OCID in the response. You can also retrieve a resource's OCID by using a List API operation on that resource type, or by viewing the resource in the Console.

To launch an instance using an image or a boot volume use the `sourceDetails` parameter in LaunchInstanceDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/LaunchInstanceDetails).

When you launch an instance, it is automatically attached to a virtual network interface card (VNIC), called the *primary VNIC*. The VNIC has a private IP address from the subnet's CIDR. You can either assign a private IP address of your choice or let Oracle automatically assign one. You can choose whether the instance has a public IP address. To retrieve the addresses, use the ListVnicAttachments (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/VnicAttachment/ListVnicAttachments) operation to get the VNIC ID for the instance, and then call GetVnic (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Vnic/GetVnic) with the VNIC ID.

You can later add secondary VNICs to an instance. For more information, see Virtual Network Interface Cards (VNICs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVNICs.htm).

Example Usage

```
resource "oci_core_instance" "test_instance" {
    #Required
    availability_domain = "${var.instance_availability_domain}"
    compartment_id = "${var.compartment_id}"
    shape = "${var.instance_shape}"

    #Optional
    create_vnic_details {
        #Required
        subnet_id = "${oci_core_subnet.test_subnet.id}"

        #Optional
        assign_public_ip = "${var.instance_create_vnic_details_assign_public_ip}"
        defined_tags = {"Operations.CostCenter"= "42"}
        display_name = "${var.instance_create_vnic_details_display_name}"
        freeform_tags = {"Department"= "Finance"}
        hostname_label = "${var.instance_create_vnic_details_hostname_label}"
        private_ip = "${var.instance_create_vnic_details_private_ip}"
        skip_source_dest_check = "${var.instance_create_vnic_details_skip_source_dest_check}"
    }
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.instance_display_name}"
    extended_metadata {
        some_string = "stringA"
        nested_object = "{\"some_string\": \"stringB\", \"object\": {\"some_string\": \"stringC\"}}"
    }
    fault_domain = "${var.instance_fault_domain}"
    freeform_tags = {"Department"= "Finance"}
    hostname_label = "${var.instance_hostname_label}"
    ipxe_script = "${var.instance_ipxe_script}"
    is_pv_encryption_in_transit_enabled = "${var.instance_is_pv_encryption_in_transit_enabled}"
    metadata {
        ssh_authorized_keys = "${var.ssh_public_key}"
        user_data = "${base64encode(file(var.custom_bootstrap_file_name))}"
    }
    source_details {
        #Required
        source_id = "${oci_core_image.test_image.id}"
        source_type = "image"

        #Optional
        boot_volume_size_in_gbs = "60"
        kms_key_id = "${oci_core_kms_key.test_kms_key.id}"
    }
    preserve_boot_volume = false
}
```

Argument Reference

The following arguments are supported:

- `availability_domain` - (Required) The availability domain of the instance. Example: `Uocm:PHX-AD-1`

- `compartment_id` - (Required) The OCID of the compartment.

- `create_vnic_details` - (Optional) Details for the primary VNIC, which is automatically created and attached when the instance is launched.

    - `assign_public_ip` - (Optional) Whether the VNIC should be assigned a public IP address. Defaults to whether the subnet is public or private. If not set and the VNIC is being created in a private subnet (that is, where `prohibitPublicIpOnVnic` = true in the Subnet (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Subnet/)), then no public IP address is assigned. If not set and the subnet is public (`prohibitPublicIpOnVnic` = false), then a public IP address is assigned. If set to true and `prohibitPublicIpOnVnic` = true, an error is returned.

    Note: This public IP address is associated with the primary private IP on the VNIC. For more information, see IP Addresses (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingIPaddresses.htm).

    Note: There's a limit to the number of public IPs (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PublicIp/) a VNIC or instance can have. If you try to create a secondary VNIC with

an assigned public IP for an instance that has already reached its public IP limit, an error is returned. For information about the public IP limits, see Public IP Addresses (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingpublicIPs.htm).

Example: `false`

- `defined_tags` - (Optional) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) A user-friendly name for the VNIC. Does not have to be unique. Avoid entering confidential information.

- `freeform_tags` - (Optional) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `hostname_label` - (Optional) The hostname for the VNIC's primary private IP. Used for DNS. The value is the hostname portion of the primary private IP's fully qualified domain name (FQDN) (for example, `bminstance-1` in FQDN `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be unique across all VNICs in the subnet and comply with RFC 952 (https://tools.ietf.org/html/rfc952) and RFC 1123 (https://tools.ietf.org/html/rfc1123). The value appears in the Vnic (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Vnic/) object and also the PrivateIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/) object returned by ListPrivateIps (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/ListPrivateIps) and GetPrivateIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/GetPrivateIp).

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  When launching an instance, use this `hostnameLabel` instead of the deprecated `hostnameLabel` in LaunchInstanceDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/requests/LaunchInstanceDetails). If you provide both, the values must match.

  Example: `bminstance-1`

- `private_ip` - (Optional) A private IP address of your choice to assign to the VNIC. Must be an available IP address within the subnet's CIDR. If you don't specify a value, Oracle automatically assigns a private IP address from the subnet. This is the VNIC's *primary* private IP address. The value appears in the Vnic (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Vnic/) object and also the PrivateIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/) object returned by ListPrivateIps (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/ListPrivateIps) and GetPrivateIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PrivateIp/GetPrivateIp). Example: `10.0.3.3`

- `skip_source_dest_check` - (Optional) Whether the source/destination check is disabled on the VNIC. Defaults to `false`, which means the check is performed. For information about why you would skip the source/destination check, see Using a Private IP as a Route Target (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingroutetables.htm#privateip). Example: `true`

- `subnet_id` - (Required) The OCID of the subnet to create the VNIC in. When launching an instance, use this `subnetId` instead of the deprecated `subnetId` in LaunchInstanceDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/requests/LaunchInstanceDetails). At least one of them is required; if you provide both, the values must match.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information. Example: `My bare metal instance`

- `extended_metadata` - (Optional) (Updatable) Additional metadata key/value pairs that you provide. They serve the same purpose and functionality as fields in the 'metadata' object.

  They are distinguished from 'metadata' fields in that these can be nested JSON objects (whereas 'metadata' fields are string/string maps only).

  If you don't need nested metadata values, it is strongly advised to avoid using this object and use the Metadata object instead.

  Input in terraform is the same as metadata but allows nested metadata if you pass a valid JSON string as a value. See the example above.

- `fault_domain` - (Optional) A fault domain is a grouping of hardware and infrastructure within an availability domain. Each availability domain contains three fault domains. Fault domains let you distribute your instances so that they are not on the same physical hardware within a single availability domain. A hardware failure or Compute hardware maintenance that affects one fault domain does not affect instances in other fault domains.

  If you do not specify the fault domain, the system selects one for you. To change the fault domain for an instance, terminate it and launch a new instance in the preferred fault domain.

  To get a list of fault domains, use the ListFaultDomains (https://docs.cloud.oracle.com/iaas/api/#/en/identity/20160918/FaultDomain/ListFaultDomains) operation in the Identity and Access Management Service API.

  Example: `FAULT-DOMAIN-1`

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `hostname_label` - (Optional) Deprecated. Instead use `hostnameLabel` in CreateVnicDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/CreateVnicDetails/). If you provide both, the values must match.

- `image` - (Optional) Deprecated. Use `sourceDetails` with InstanceSourceViaImageDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/latest/requests/InstanceSourceViaImageDetails) source type instead. If you specify values for both, the values must match.

- `ipxe_script` - (Optional) This is an advanced option.

  When a bare metal or virtual machine instance boots, the iPXE firmware that runs on the instance is configured to run an iPXE script to continue the boot process.

  If you want more control over the boot process, you can provide your own custom iPXE script that will run when the instance boots; however, you should be aware that the same iPXE script will run every time an instance boots; not only after the initial LaunchInstance call.

  The default iPXE script connects to the instance's local boot volume over iSCSI and performs a network boot. If you use a custom iPXE script and want to network-boot from the instance's local boot volume over iSCSI the same way as the default iPXE script, you should use the following iSCSI IP address: 169.254.0.2, and boot volume IQN: iqn.2015-02.oracle.boot.

  For more information about the Bring Your Own Image feature of Oracle Cloud Infrastructure, see Bring Your Own Image (https://docs.cloud.oracle.com/iaas/Content/Compute/References/bringyourownimage.htm).

  For more information about iPXE, see http://ipxe.org (http://ipxe.org).

- `is_pv_encryption_in_transit_enabled` - (Optional) Whether to enable encryption in transit for the PV boot volume attachment. Defaults to false.

- `metadata` - (Optional) (Updatable) Custom metadata key/value pairs that you provide, such as the SSH public key required to connect to the instance.

  A metadata service runs on every launched instance. The service is an HTTP endpoint listening on 169.254.169.254. You can use the service to:

- Provide information to Cloud-Init (https://cloudinit.readthedocs.org/en/latest/) to be used for various system initialization tasks.

- Get information about the instance, including the custom metadata that you provide when you launch the instance.

Providing Cloud-Init Metadata

You can use the following metadata key names to provide information to Cloud-Init:

"ssh_authorized_keys" - Provide one or more public SSH keys to be included in the `~/.ssh/authorized_keys` file for the default user on the instance. Use a newline character to separate multiple keys. The SSH keys must be in the format necessary for the `authorized_keys` file, as shown in the example below.

"user_data" - Provide your own base64-encoded data to be used by Cloud-Init to run custom scripts or provide custom Cloud-Init configuration. For information about how to take advantage of user data, see the Cloud-Init Documentation (http://cloudinit.readthedocs.org/en/latest/topics/format.html).

Note: Cloud-Init does not pull this data from the `http://169.254.169.254/opc/v1/instance/metadata/` path. When the instance launches and either of these keys are provided, the key values are formatted as OpenStack metadata and copied to the following locations, which are recognized by Cloud-Init:

`http://169.254.169.254/openstack/latest/meta_data.json` - This JSON blob contains, among other things, the SSH keys that you provided for **"ssh_authorized_keys"**.

`http://169.254.169.254/openstack/latest/user_data` - Contains the base64-decoded data that you provided for **"user_data"**.

Metadata Example

"metadata" : { "quake_bot_level" : "Severe", "ssh_authorized_keys" : "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAACAQCZ06fccNTQfq+xubFlJ5ZR3kt+uzspdH9tXL+lAejSM1NXM+CFZev7MIxfEjas06y80ZBZ7DUTQO0GxJPeD8NCOb1VorF8M4xuLwrmzRtkoZzU16umt4y1W0Q4ifdp3Iii ryan.smith@company.com (mailto:ryan.smith@company.com) ssh-rsa AAAAB3NzaC1yc2EAAAABJQAAAQEAzJSAtwEPoB3Jmr58IXrDGzLuDYkWAYg8AsLYlo6JZvKpjY1xednIcfEVQJm4T2DhVmdWhRrwQ8DmayVZvBkLt+zs2LdoAJEVimKwXcJFD/7wtH8Lnk17HiglbbbNXsemjDY0h rsa-key-20160227", "user_data" : "SWYgeW91IGNhbiBzZWUgdGhpcywgdGhlbiBpdCB3b3JrZWQgbWF5YmUuCg==" } **Getting Metadata on the Instance**

To get information about your instance, connect to the instance using SSH and issue any of the following GET requests:

curl http://169.254.169.254/opc/v1/instance/ (http://169.254.169.254/opc/v1/instance/) curl http://169.254.169.254/opc/v1/instance/metadata/ (http://169.254.169.254/opc/v1/instance/metadata/) curl http://169.254.169.254/opc/v1/instance/metadata/ (http://169.254.169.254/opc/v1/instance/metadata/)

You'll get back a response that includes all the instance information; only the metadata information; or the metadata information for the specified key name, respectively.

Note: Both the 'user_data' and 'ssh_authorized_keys' fields cannot be changed after an instance has launched. Any request which updates, removes, or adds either of these fields will be rejected. You must provide the same values for 'user_data' and 'ssh_authorized_keys' that already exist on the instance.

- `preserve_boot_volume` - (Optional) Specifies whether to delete or preserve the boot volume when terminating an instance. The default value is false. Note: This value only applies to destroy operations initiated by Terraform.

- `shape` - (Required) The shape of an instance. The shape determines the number of CPUs, amount of memory, and other resources allocated to the instance.

  You can enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

- `source_details` - (Optional) Details for creating an instance. Use this parameter to specify whether a boot volume or an image should be used to launch a new instance.

  - `boot_volume_size_in_gbs` - (Applicable when source_type=image) The size of the boot volume in GBs. Minimum value is 50 GB and maximum value is 16384 GB (16TB).

  - `kms_key_id` - (Applicable when source_type=image) The OCID of the KMS key to be used as the master encryption key for the boot volume.

  - `source_id` - (Required) The OCID of an image or a boot volume to use, depending on the value of `source_type`.

  - `source_type` - (Required) The source type for the instance. Use `image` when specifying the image OCID. Use `bootVolume` when specifying the boot volume OCID.

- `subnet_id` - (Optional) Deprecated. Instead use `subnetId` in CreateVnicDetails (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/CreateVnicDetails/). At least one of them is required; if you provide both, the values must match.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The availability domain the instance is running in. Example: `Uocm:PHX-AD-1`

- `boot_volume_id` - The OCID of the attached boot volume. If the `source_type` is `bootVolume`, this will be the same OCID as the `source_id`.

- `compartment_id` - The OCID of the compartment that contains the instance.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information. Example: `My bare metal instance`

- `extended_metadata` - Additional metadata key/value pairs that you provide. They serve the same purpose and functionality as fields in the 'metadata' object.

  They are distinguished from 'metadata' fields in that these can be nested JSON objects (whereas 'metadata' fields are string/string maps only).

  If you don't need nested metadata values, it is strongly advised to avoid using this object and use the Metadata object instead.

  Input in terraform is the same as metadata but allows nested metadata if you pass a valid JSON string as a value. See the example below.

- `fault_domain` - The name of the fault domain the instance is running in.

  A fault domain is a grouping of hardware and infrastructure within an availability domain. Each availability domain contains three fault domains. Fault domains let you distribute your instances so that they are not on the same physical hardware within a single availability domain. A hardware failure or Compute hardware maintenance that affects one fault domain does not affect instances in other fault domains.

  If you do not specify the fault domain, the system selects one for you. To change the fault domain for an instance, terminate it and launch a new instance in the preferred fault domain.

Example: `FAULT-DOMAIN-1`

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the instance.

- `image` - Deprecated. Use `sourceDetails` instead.

- `ipxe_script` - When a bare metal or virtual machine instance boots, the iPXE firmware that runs on the instance is configured to run an iPXE script to continue the boot process.

  If you want more control over the boot process, you can provide your own custom iPXE script that will run when the instance boots; however, you should be aware that the same iPXE script will run every time an instance boots; not only after the initial LaunchInstance call.

  The default iPXE script connects to the instance's local boot volume over iSCSI and performs a network boot. If you use a custom iPXE script and want to network-boot from the instance's local boot volume over iSCSI the same way as the default iPXE script, you should use the following iSCSI IP address: 169.254.0.2, and boot volume IQN: iqn.2015-02.oracle.boot.

  For more information about the Bring Your Own Image feature of Oracle Cloud Infrastructure, see Bring Your Own Image (https://docs.cloud.oracle.com/iaas/Content/Compute/References/bringyourownimage.htm).

  For more information about iPXE, see http://ipxe.org (http://ipxe.org).

- `launch_mode` - Specifies the configuration mode for launching virtual machine (VM) instances. The configuration modes are:

  - `NATIVE` - VM instances launch with iSCSI boot and VFIO devices. The default value for Oracle-provided images.

  - `EMULATED` - VM instances launch with emulated devices, such as the E1000 network driver and emulated SCSI disk controller.

  - `PARAVIRTUALIZED` - VM instances launch with paravirtualized devices using virtio drivers.

  - `CUSTOM` - VM instances launch with custom configuration settings specified in the `LaunchOptions` parameter.

- `launch_options` -

  - `boot_volume_type` - Emulation type for volume.
    - `ISCSI` - ISCSI attached block storage device. This is the default for Boot Volumes and Remote Block Storage volumes on Oracle provided images.

    - `SCSI` - Emulated SCSI disk.

    - `IDE` - Emulated IDE disk.

    - `VFIO` - Direct attached Virtual Function storage. This is the default option for Local data volumes on Oracle provided images.

    - `PARAVIRTUALIZED` - Paravirtualized disk.

  - `firmware` - Firmware used to boot VM. Select the option that matches your operating system.
    - `BIOS` - Boot VM using BIOS style firmware. This is compatible with both 32 bit and 64 bit operating systems that boot using MBR style bootloaders.

    - `UEFI_64` - Boot VM using UEFI style firmware compatible with 64 bit operating systems. This is the default for Oracle provided images.

  - `is_pv_encryption_in_transit_enabled` - Whether to enable encryption in transit for the PV boot volume attachment. Defaults to false.

  - `network_type` - Emulation type for NIC.
    - `E1000` - Emulated Gigabit ethernet controller. Compatible with Linux e1000 network driver.

    - `VFIO` - Direct attached Virtual Function network controller. Default for Oracle provided images.

    - `PARAVIRTUALIZED` - VM instances launch with paravirtualized devices using virtio drivers.

  - `remote_data_volume_type` - Emulation type for volume.
    - `ISCSI` - ISCSI attached block storage device. This is the default for Boot Volumes and Remote Block Storage volumes on Oracle provided images.

    - `SCSI` - Emulated SCSI disk.

    - `IDE` - Emulated IDE disk.

    - `VFIO` - Direct attached Virtual Function storage. This is the default option for Local data volumes on Oracle provided images.

    - `PARAVIRTUALIZED` - Paravirtualized disk.

- `metadata` - Custom metadata that you provide.

- `preserve_boot_volume` - Specifies whether to delete or preserve the boot volume when terminating an instance. The default value is false. Note: This value only applies to destroy operations initiated by Terraform.

- `private_ip` - The private IP address of instance VNIC. To set the private IP address, use the `private_ip` argument in create_vnic_details.

- `public_ip` - The public IP address of instance VNIC (if enabled).

- `region` - The region that contains the availability domain the instance is running in. Example: `phx`

- `shape` - The shape of the instance. The shape determines the number of CPUs and the amount of memory allocated to the instance. You can enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

- `source_details` - Details for creating an instance

  - `boot_volume_size_in_gbs` - The size of the boot volume in GBs. Minimum value is 50 GB and maximum value is 16384 GB (16TB). This should only be specified when `source_type` is image.

  - `kms_key_id` - The OCID of the KMS key to be used as the master encryption key for the boot volume.

  - `source_id` - The OCID of an image or a boot volume to use, depending on the value of `source_type`.

  - `source_type` - The source type for the instance. Use `image` when specifying the image OCID. Use `bootVolume` when specifying the boot volume OCID.

- `state` - The current state of the instance.

- `time_created` - The date and time the instance was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `time_maintenance_reboot_due` - The date and time the instance is expected to be stopped / started, in the format defined by RFC3339. After that time if instance hasn't been rebooted, Oracle will reboot the instance within 24 hours of the due time. Regardless of how the instance was stopped, the flag will be reset to empty as soon as instance reaches Stopped state. Example: `2018-05-25T21:10:29.600Z`

Import

Instances can be imported using the `id`, e.g.

```
$ terraform import oci_core_instance.test_instance "id"
```

oci_core_instance_configuration

This resource provides the Instance Configuration resource in Oracle Cloud Infrastructure Core service.

Creates an instance configuration

Example Usage

```
resource "oci_core_instance_configuration" "test_instance_configuration" {
    #Required
    compartment_id = "${var.compartment_id}"
    instance_details {
        #Required
        instance_type = "${var.instance_configuration_instance_details_instance_type}"

        #Optional
        block_volumes {

            #Optional
            attach_details {
                #Required
                type = "${var.instance_configuration_instance_details_block_volumes_attach_details_type}"

                #Optional
                display_name = "${var.instance_configuration_instance_details_block_volumes_attach_details_display_name}"
                is_read_only = "${var.instance_configuration_instance_details_block_volumes_attach_details_is_read_only}"
                use_chap = "${var.instance_configuration_instance_details_block_volumes_attach_details_use_chap}"
            }
            create_details {

                #Optional
                availability_domain = "${var.instance_configuration_instance_details_block_volumes_create_details_availability_domain}"
                backup_policy_id = "${oci_core_backup_policy.test_backup_policy.id}"
                compartment_id = "${var.compartment_id}"
                defined_tags = {"Operations.CostCenter"= "42"}
                display_name = "${var.instance_configuration_instance_details_block_volumes_create_details_display_name}"
                freeform_tags = {"Department"= "Finance"}
                size_in_gbs = "${var.instance_configuration_instance_details_block_volumes_create_details_size_in_gbs}"
                source_details {
                    #Required
                    type = "${var.instance_configuration_instance_details_block_volumes_create_details_source_details_type}"

                    #Optional
                    id = "${var.instance_configuration_instance_details_block_volumes_create_details_source_details_id}"
                }
            }
            volume_id = "${oci_core_volume.test_volume.id}"
        }
        launch_details {

            #Optional
            availability_domain = "${var.instance_configuration_instance_details_launch_details_availability_domain}"
            compartment_id = "${var.compartment_id}"
            create_vnic_details {

                #Optional
                assign_public_ip = "${var.instance_configuration_instance_details_launch_details_create_vnic_details_assign_public_ip}"
                display_name = "${var.instance_configuration_instance_details_launch_details_create_vnic_details_display_name}"
                hostname_label = "${var.instance_configuration_instance_details_launch_details_create_vnic_details_hostname_label}"
                private_ip = "${var.instance_configuration_instance_details_launch_details_create_vnic_details_private_ip}"
                skip_source_dest_check = "${var.instance_configuration_instance_details_launch_details_create_vnic_details_skip_source_dest_check}"
                subnet_id = "${oci_core_subnet.test_subnet.id}"
            }
            defined_tags = {"Operations.CostCenter"= "42"}
            display_name = "${var.instance_configuration_instance_details_launch_details_display_name}"
            extended_metadata = "${var.instance_configuration_instance_details_launch_details_extended_metadata}"
            freeform_tags = {"Department"= "Finance"}
            ipxe_script = "${var.instance_configuration_instance_details_launch_details_ipxe_script}"
            metadata = "${var.instance_configuration_instance_details_launch_details_metadata}"
            shape = "${var.instance_configuration_instance_details_launch_details_shape}"
            source_details {
                #Required
                source_type = "${var.instance_configuration_instance_details_launch_details_source_details_source_type}"

                #Optional
                boot_volume_id = "${oci_core_boot_volume.test_boot_volume.id}"
                image_id = "${oci_core_image.test_image.id}"
            }
        }
        secondary_vnics {

            #Optional
            create_vnic_details {

                #Optional
                assign_public_ip = "${var.instance_configuration_instance_details_secondary_vnics_create_vnic_details_assign_public_ip}"
                display_name = "${var.instance_configuration_instance_details_secondary_vnics_create_vnic_details_display_name}"
                hostname_label = "${var.instance_configuration_instance_details_secondary_vnics_create_vnic_details_hostname_label}"
                private_ip = "${var.instance_configuration_instance_details_secondary_vnics_create_vnic_details_private_ip}"
                skip_source_dest_check = "${var.instance_configuration_instance_details_secondary_vnics_create_vnic_details_skip_source_dest_check}"
                subnet_id = "${oci_core_subnet.test_subnet.id}"
            }
            display_name = "${var.instance_configuration_instance_details_secondary_vnics_display_name}"
            nic_index = "${var.instance_configuration_instance_details_secondary_vnics_nic_index}"
        }
    }

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.instance_configuration_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment containing the instance configuration.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name for the instance configuration

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `instance_details` - (Required)
  - `block_volumes` - (Optional)
    - `attach_details` - (Optional)
      - `display_name` - (Applicable when instance_type=compute) A user-friendly name. Does not have to be unique, and it cannot be changed. Avoid entering confidential information.
      - `is_read_only` - (Applicable when instance_type=compute) Whether the attachment should be created in read-only mode.
      - `type` - (Required) The type of volume. The only supported values are "iscsi" and "paravirtualized".
      - `use_chap` - (Applicable when type=iscsi) Whether to use CHAP authentication for the volume attachment. Defaults to false.
    - `create_details` - (Optional)
      - `availability_domain` - (Optional) The availability domain of the volume. Example: `Uocm:PHX-AD-1`
      - `backup_policy_id` - (Optional) If provided, specifies the ID of the volume backup policy to assign to the newly created volume. If omitted, no policy will be assigned.
      - `compartment_id` - (Optional) The OCID of the compartment that contains the volume.
      - `defined_tags` - (Optional) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`
      - `display_name` - (Optional) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.
      - `freeform_tags` - (Optional) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`
      - `size_in_gbs` - (Optional) The size of the volume in GBs.
      - `source_details` - (Optional) Specifies the volume source details for a new Block volume. The volume source is either another Block volume in the same availability domain or a Block volume backup. This is an optional field. If not specified or set to null, the new Block volume will be empty. When specified, the new Block volume will contain data from the source volume or backup.
        - `id` - (Optional) The OCID of the volume backup.
        - `type` - (Required) The type can be one of these values: `volume`, `volumeBackup`
    - `volume_id` - (Optional) The OCID of the volume.
  - `instance_type` - (Required) The type of instance details. Supported instanceType is compute
  - `launch_details` - (Optional)
    - `availability_domain` - (Optional) The availability domain of the instance. Example: `Uocm:PHX-AD-1`
    - `compartment_id` - (Optional) The OCID of the compartment.
    - `create_vnic_details` - (Optional) Details for the primary VNIC, which is automatically created and attached when the instance is launched.
      - `assign_public_ip` - (Optional)
      - `display_name` - (Optional) A user-friendly name for the VNIC. Does not have to be unique. Avoid entering confidential information.
      - `hostname_label` - (Optional)
      - `private_ip` - (Optional)
      - `skip_source_dest_check` - (Optional)
      - `subnet_id` - (Optional)
    - `defined_tags` - (Optional) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`
    - `display_name` - (Optional) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information. Example: `My bare metal instance`
    - `extended_metadata` - (Optional) Additional metadata key/value pairs that you provide. They serve the same purpose and functionality as fields in the 'metadata' object.

      They are distinguished from 'metadata' fields in that these can be nested JSON objects (whereas 'metadata' fields are string/string maps only).

    - `freeform_tags` - (Optional) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

    - `ipxe_script` - (Optional) This is an advanced option.

      When a bare metal or virtual machine instance boots, the iPXE firmware that runs on the instance is configured to run an iPXE script to continue the boot process.

      If you want more control over the boot process, you can provide your own custom iPXE script that will run when the instance boots; however, you should be aware that the same iPXE script will run every time an instance boots; not only after the initial LaunchInstance call.

      The default iPXE script connects to the instance's local boot volume over iSCSI and performs a network boot. If you use a custom iPXE script and want to network-boot from the instance's local boot volume over iSCSI the same way as the default iPXE script, you should use the following iSCSI IP address: 169.254.0.2, and boot volume IQN: iqn.2015-02.oracle.boot.

      For more information about the Bring Your Own Image feature of Oracle Cloud Infrastructure, see Bring Your Own Image (https://docs.cloud.oracle.com/iaas/Content/Compute/References/bringyourownimage.htm).

For more information about iPXE, see http://ipxe.org (http://ipxe.org).

- `metadata` - (Optional) Custom metadata key/value pairs that you provide, such as the SSH public key required to connect to the instance.

  A metadata service runs on every launched instance. The service is an HTTP endpoint listening on 169.254.169.254. You can use the service to:

  - Provide information to Cloud-Init (https://cloudinit.readthedocs.org/en/latest/) to be used for various system initialization tasks.

  - Get information about the instance, including the custom metadata that you provide when you launch the instance.

  Providing Cloud-Init Metadata

  You can use the following metadata key names to provide information to Cloud-Init:

  "ssh_authorized_keys" - Provide one or more public SSH keys to be included in the `~/.ssh/authorized_keys` file for the default user on the instance. Use a newline character to separate multiple keys. The SSH keys must be in the format necessary for the `authorized_keys` file, as shown in the example below.

  "user_data" - Provide your own base64-encoded data to be used by Cloud-Init to run custom scripts or provide custom Cloud-Init configuration. For information about how to take advantage of user data, see the Cloud-Init Documentation (http://cloudinit.readthedocs.org/en/latest/topics/format.html).

  Note: Cloud-Init does not pull this data from the `http://169.254.169.254/opc/v1/instance/metadata/` path. When the instance launches and either of these keys are provided, the key values are formatted as OpenStack metadata and copied to the following locations, which are recognized by Cloud-Init:

  `http://169.254.169.254/openstack/latest/meta_data.json` - This JSON blob contains, among other things, the SSH keys that you provided for **"ssh_authorized_keys"**.

  `http://169.254.169.254/openstack/latest/user_data` - Contains the base64-decoded data that you provided for **"user_data"**.

  Metadata Example

  "metadata" : { "quake_bot_level" : "Severe", "ssh_authorized_keys" : "ssh-rsa
  AAAAB3NzaC1yc2EAAAADAQABAAACAQCZ06fccNTQfq+xubFlJ5ZR3kt+uzspdH9tXL+lAejSM1NXM+CFZev7MIxfEjas06y80ZBZ7DUTQO0GxJPeD8NCOb1VorF8M4xuLwrmzRtkoZzU16umt4y1W
  ryan.smith@company.com (mailto:ryan.smith@company.com) ssh-rsa
  AAAAB3NzaC1yc2EAAAABJQAAAQEAzJSAtwEPoB3Jmr58IXrDGzLuDYkWAYg8AsLYlo6JZvKpjY1xednIcfEVQJm4T2DhVmdWhRrwQ8DmayVZvBkLt+zs2LdoAJEVimKwXcJFD/7wtH8Lnk17Higlbbb
  rsa-key-20160227", "user_data" : "SWYgeW91IGNhbiBzZWUgdGhpcywgdGhlbiBpdCB3b3JrZWQgbWF5YmUuCg==" } **Getting Metadata on the Instance**

  To get information about your instance, connect to the instance using SSH and issue any of the following GET requests:

  curl http://169.254.169.254/opc/v1/instance/ (http://169.254.169.254/opc/v1/instance/) curl http://169.254.169.254/opc/v1/instance/metadata/ (http://169.254.169.254/opc/v1/instance/metadata/) curl http://169.254.169.254/opc/v1/instance/metadata/ (http://169.254.169.254/opc/v1/instance/metadata/)

  You'll get back a response that includes all the instance information; only the metadata information; or the metadata information for the specified key name, respectively.

- `shape` - (Optional) The shape of an instance. The shape determines the number of CPUs, amount of memory, and other resources allocated to the instance.

  You can enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

- `source_details` - (Optional) Details for creating an instance. Use this parameter to specify whether a boot volume or an image should be used to launch a new instance.

  - `boot_volume_id` - (Applicable when source_type=bootVolume) The OCID of the boot volume used to boot the instance.

  - `image_id` - (Applicable when source_type=image) The OCID of the image used to boot the instance.

  - `source_type` - (Required) The source type for the instance. Use `image` when specifying the image OCID. Use `bootVolume` when specifying the boot volume OCID.

- `secondary_vnics` - (Optional)

  - `create_vnic_details` - (Optional) Details for creating a new VNIC.
    - `assign_public_ip` - (Optional)

    - `display_name` - (Optional) A user-friendly name for the VNIC. Does not have to be unique. Avoid entering confidential information.

    - `hostname_label` - (Optional)

    - `private_ip` - (Optional)

    - `skip_source_dest_check` - (Optional)

    - `subnet_id` - (Optional)

  - `display_name` - (Optional) A user-friendly name for the attachment. Does not have to be unique, and it cannot be changed.

  - `nic_index` - (Optional) Which physical network interface card (NIC) the VNIC will use. Defaults to 0. Certain bare metal instance shapes have two active physical NICs (0 and 1). If you add a secondary VNIC to one of these instances, you can specify which NIC the VNIC will use. For more information, see Virtual Network Interface Cards (VNICs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVNICs.htm).

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the instance configuration.

- `deferred_fields` -

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name for the instance configuration

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the instance configuration

- `instance_details` -
  - `block_volumes` -
    - `attach_details` -
      - `display_name` - A user-friendly name. Does not have to be unique, and it cannot be changed. Avoid entering confidential information.
      - `is_read_only` - Whether the attachment should be created in read-only mode.
      - `type` - The type of volume. The only supported values are "iscsi" and "paravirtualized".
      - `use_chap` - Whether to use CHAP authentication for the volume attachment. Defaults to false.
    - `create_details` -
      - `availability_domain` - The availability domain of the volume. Example: `Uocm:PHX-AD-1`
      - `backup_policy_id` - If provided, specifies the ID of the volume backup policy to assign to the newly created volume. If omitted, no policy will be assigned.
      - `compartment_id` - The OCID of the compartment that contains the volume.
      - `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`
      - `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.
      - `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`
      - `size_in_gbs` - The size of the volume in GBs.
      - `source_details` - Specifies the volume source details for a new Block volume. The volume source is either another Block volume in the same availability domain or a Block volume backup. This is an optional field. If not specified or set to null, the new Block volume will be empty. When specified, the new Block volume will contain data from the source volume or backup.
        - `id` - The OCID of the volume backup.
        - `type` - The type can be one of these values: `volume`, `volumeBackup`
    - `volume_id` - The OCID of the volume.
  - `instance_type` - The type of instance details. Supported instanceType is compute
  - `launch_details` -
    - `availability_domain` - The availability domain of the instance. Example: `Uocm:PHX-AD-1`
    - `compartment_id` - The OCID of the compartment.
    - `create_vnic_details` - Details for the primary VNIC, which is automatically created and attached when the instance is launched.
      - `assign_public_ip` -
      - `display_name` - A user-friendly name for the VNIC. Does not have to be unique. Avoid entering confidential information.
      - `hostname_label` -
      - `private_ip` -
      - `skip_source_dest_check` -
      - `subnet_id` -
    - `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`
    - `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information. Example: `My bare metal instance`
    - `extended_metadata` - Additional metadata key/value pairs that you provide. They serve the same purpose and functionality as fields in the 'metadata' object.

      They are distinguished from 'metadata' fields in that these can be nested JSON objects (whereas 'metadata' fields are string/string maps only).
    - `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`
    - `ipxe_script` - This is an advanced option.

      When a bare metal or virtual machine instance boots, the iPXE firmware that runs on the instance is configured to run an iPXE script to continue the boot process.

      If you want more control over the boot process, you can provide your own custom iPXE script that will run when the instance boots; however, you should be aware that the same iPXE script will run every time an instance boots; not only after the initial LaunchInstance call.

      The default iPXE script connects to the instance's local boot volume over iSCSI and performs a network boot. If you use a custom iPXE script and want to network-boot from the instance's local boot volume over iSCSI the same way as the default iPXE script, you should use the following iSCSI IP address: 169.254.0.2, and boot volume IQN: iqn.2015-02.oracle.boot.

      For more information about the Bring Your Own Image feature of Oracle Cloud Infrastructure, see Bring Your Own Image (https://docs.cloud.oracle.com/iaas/Content/Compute/References/bringyourownimage.htm).

      For more information about iPXE, see http://ipxe.org (http://ipxe.org).
    - `metadata` - Custom metadata key/value pairs that you provide, such as the SSH public key required to connect to the instance.

      A metadata service runs on every launched instance. The service is an HTTP endpoint listening on 169.254.169.254. You can use the service to:
      - Provide information to Cloud-Init (https://cloudinit.readthedocs.org/en/latest/) to be used for various system initialization tasks.

- Get information about the instance, including the custom metadata that you provide when you launch the instance.

Providing Cloud-Init Metadata

You can use the following metadata key names to provide information to Cloud-Init:

"ssh_authorized_keys" - Provide one or more public SSH keys to be included in the `~/.ssh/authorized_keys` file for the default user on the instance. Use a newline character to separate multiple keys. The SSH keys must be in the format necessary for the `authorized_keys` file, as shown in the example below.

"user_data" - Provide your own base64-encoded data to be used by Cloud-Init to run custom scripts or provide custom Cloud-Init configuration. For information about how to take advantage of user data, see the Cloud-Init Documentation (http://cloudinit.readthedocs.org/en/latest/topics/format.html).

Note: Cloud-Init does not pull this data from the `http://169.254.169.254/opc/v1/instance/metadata/` path. When the instance launches and either of these keys are provided, the key values are formatted as OpenStack metadata and copied to the following locations, which are recognized by Cloud-Init:

`http://169.254.169.254/openstack/latest/meta_data.json` - This JSON blob contains, among other things, the SSH keys that you provided for **"ssh_authorized_keys"**.

`http://169.254.169.254/openstack/latest/user_data` - Contains the base64-decoded data that you provided for **"user_data"**.

Metadata Example

"metadata" : { "quake_bot_level" : "Severe", "ssh_authorized_keys" : "ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAACAQCZ06fccNTQfq+xubFlJ5ZR3kt+uzspdH9tXL+lAejSM1NXM+CFZev7MIxfEjas06y80ZBZ7DUTQO0GxJPeD8NCOb1VorF8M4xuLwrmzRtkoZzU16umt4y1W ryan.smith@company.com (mailto:ryan.smith@company.com) ssh-rsa AAAAB3NzaC1yc2EAAAABJQAAAQEAzJSAtwEPoB3Jmr58IXrDGzLuDYkWAYg8AsLYlo6JZvKpjY1xednIcfEVQJm4T2DhVmdWhRrwQ8DmayVZvBkLt+zs2LdoAJEVimKwXcJFD/7wtH8Lnk17HiglbbbN rsa-key-20160227", "user_data" : "SWYgeW91IGNhbiBzZWUgdGhpcywgdGhlbiBpdCB3b3JrZWQgbWF5YmUuCg==" } **Getting Metadata on the Instance**

To get information about your instance, connect to the instance using SSH and issue any of the following GET requests:

curl http://169.254.169.254/opc/v1/instance/ (http://169.254.169.254/opc/v1/instance/) curl http://169.254.169.254/opc/v1/instance/metadata/ (http://169.254.169.254/opc/v1/instance/metadata/) curl http://169.254.169.254/opc/v1/instance/metadata/ (http://169.254.169.254/opc/v1/instance/metadata/)

You'll get back a response that includes all the instance information; only the metadata information; or the metadata information for the specified key name, respectively.

- `shape` - The shape of an instance. The shape determines the number of CPUs, amount of memory, and other resources allocated to the instance.

  You can enumerate all available shapes by calling ListShapes (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/Shape/ListShapes).

- `source_details` - Details for creating an instance. Use this parameter to specify whether a boot volume or an image should be used to launch a new instance.

  - `boot_volume_id` - The OCID of the boot volume used to boot the instance.

  - `image_id` - The OCID of the image used to boot the instance.

  - `source_type` - The source type for the instance. Use `image` when specifying the image OCID. Use `bootVolume` when specifying the boot volume OCID.

- `secondary_vnics` -

  - `create_vnic_details` - Details for creating a new VNIC.
    - `assign_public_ip` -

    - `display_name` - A user-friendly name for the VNIC. Does not have to be unique. Avoid entering confidential information.

    - `hostname_label` -

    - `private_ip` -

    - `skip_source_dest_check` -

    - `subnet_id` -

  - `display_name` - A user-friendly name for the attachment. Does not have to be unique, and it cannot be changed.

  - `nic_index` - Which physical network interface card (NIC) the VNIC will use. Defaults to 0. Certain bare metal instance shapes have two active physical NICs (0 and 1). If you add a secondary VNIC to one of these instances, you can specify which NIC the VNIC will use. For more information, see Virtual Network Interface Cards (VNICs) (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingVNICs.htm).

- `time_created` - The date and time the instance configuration was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

InstanceConfigurations can be imported using the `id`, e.g.

```
$ terraform import oci_core_instance_configuration.test_instance_configuration "id"
```

oci_core_instance_console_connection

This resource provides the Instance Console Connection resource in Oracle Cloud Infrastructure Core service.

Creates a new console connection to the specified instance. Once the console connection has been created and is available, you connect to the console using SSH.

For more information about console access, see Accessing the Console (https://docs.cloud.oracle.com/iaas/Content/Compute/References/serialconsole.htm).

Example Usage

```
resource "oci_core_instance_console_connection" "test_instance_console_connection" {
    #Required
    instance_id = "${oci_core_instance.test_instance.id}"
    public_key = "${var.instance_console_connection_public_key}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `defined_tags` - (Optional) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `freeform_tags` - (Optional) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `instance_id` - (Required) The OCID of the instance to create the console connection to.

- `public_key` - (Required) The SSH public key used to authenticate the console connection.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment to contain the console connection.

- `connection_string` - The SSH connection string for the console connection.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `fingerprint` - The SSH public key fingerprint for the console connection.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the console connection.

- `instance_id` - The OCID of the instance the console connection connects to.

- `state` - The current state of the console connection.

- `vnc_connection_string` - The SSH connection string for the SSH tunnel used to connect to the console connection over VNC.

Import

InstanceConsoleConnections can be imported using the `id`, e.g.

```
$ terraform import oci_core_instance_console_connection.test_instance_console_connection "id"
```

oci_core_instance_pool

This resource provides the Instance Pool resource in Oracle Cloud Infrastructure Core service.

Create an instance pool.

Example Usage

```
resource "oci_core_instance_pool" "test_instance_pool" {
    #Required
    compartment_id = "${var.compartment_id}"
    instance_configuration_id = "${oci_core_instance_configuration.test_instance_configuration.id}"
    placement_configurations {
        #Required
        availability_domain = "${var.instance_pool_placement_configurations_availability_domain}"
        primary_subnet_id = "${oci_core_primary_subnet.test_primary_subnet.id}"

        #Optional
        secondary_vnic_subnets {
            #Required
            subnet_id = "${oci_core_subnet.test_subnet.id}"

            #Optional
            display_name = "${var.instance_pool_placement_configurations_secondary_vnic_subnets_display_n
ame}"
        }
    }
    size = "${var.instance_pool_size}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.instance_pool_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment containing the instance pool

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - (Optional) (Updatable) The user-friendly name. Does not have to be unique.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `instance_configuration_id` - (Required) (Updatable) The OCID of the instance configuration associated to the instance pool.

- `placement_configurations` - (Required) (Updatable) The placement configurations for the instance pool. There should be 1 placement configuration for each desired AD.
  - `availability_domain` - (Required) (Updatable) The availability domain to place instances. Example: `Uocm:PHX-AD-1`
  - `primary_subnet_id` - (Required) (Updatable) The OCID of the primary subnet to place instances.
  - `secondary_vnic_subnets` - (Optional) (Updatable) The set of secondary VNIC data for instances in the pool.
    - `display_name` - (Optional) (Updatable) The displayName of the vnic. This is also use to match against the Instance Configuration defined secondary vnic.
    - `subnet_id` - (Required) (Updatable) The subnet OCID for the secondary vnic

- `size` - (Required) (Updatable) The number of instances that should be in the instance pool.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the instance pool

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - The user-friendly name. Does not have to be unique.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID of the instance pool

- `instance_configuration_id` - The OCID of the instance configuration associated to the intance pool.

- `placement_configurations` - The placement configurations for the instance pool.
  - `availability_domain` - The availability domain to place instances. Example: `Uocm:PHX-AD-1`
  - `primary_subnet_id` - The OCID of the primary subnet to place instances.
  - `secondary_vnic_subnets` - The set of secondary VNIC data for instances in the pool.
    - `display_name` - The displayName of the vnic. This is also use to match against the Instance Configuration defined secondary vnic.
    - `subnet_id` - The subnet OCID for the secondary vnic

- `size` - The number of instances that should be in the instance pool.

- `state` - The current state of the instance pool.

- `time_created` - The date and time the instance pool was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

InstancePools can be imported using the `id`, e.g.

```
$ terraform import oci_core_instance_pool.test_instance_pool "id"
```

oci_core_internet_gateway

This resource provides the Internet Gateway resource in Oracle Cloud Infrastructure Core service.

Creates a new internet gateway for the specified VCN. For more information, see Access to the Internet (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingIGs.htm).

For the purposes of access control, you must provide the OCID of the compartment where you want the Internet Gateway to reside. Notice that the internet gateway doesn't have to be in the same compartment as the VCN or other Networking Service components. If you're not sure which compartment to use, put the Internet Gateway in the same compartment with the VCN. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the internet gateway, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

For traffic to flow between a subnet and an internet gateway, you must create a route rule accordingly in the subnet's route table (for example, 0.0.0.0/0 > internet gateway). See UpdateRouteTable (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/RouteTable/UpdateRouteTable).

You must specify whether the internet gateway is enabled when you create it. If it's disabled, that means no traffic will flow to/from the internet even if there's a route rule that enables that traffic. You can later use UpdateInternetGateway (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/InternetGateway/UpdateInternetGateway) to easily disable/enable the gateway without changing the route rule.

Example Usage

```
resource "oci_core_internet_gateway" "test_internet_gateway" {
    #Required
    compartment_id = "${var.compartment_id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    enabled = "${var.internet_gateway_enabled}"
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.internet_gateway_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment to contain the internet gateway.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `enabled` - (Required) (Updatable) Whether the gateway is enabled upon creation.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `vcn_id` - (Required) The OCID of the VCN the internet gateway is attached to.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the internet gateway.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `enabled` - Whether the gateway is enabled. When the gateway is disabled, traffic is not routed to/from the Internet, regardless of route rules.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department":` `"Finance"}`

- `id` - The internet gateway's Oracle ID (OCID).

- `state` - The internet gateway's current state.

- `time_created` - The date and time the internet gateway was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the internet gateway belongs to.

Import

InternetGateways can be imported using the `id`, e.g.

```
$ terraform import oci_core_internet_gateway.test_internet_gateway "id"
```

oci_core_ipsec

This resource provides the Ip Sec Connection resource in Oracle Cloud Infrastructure Core service.

Creates a new IPSec connection between the specified DRG and CPE. For more information, see IPSec VPNs (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingIPsec.htm).

In the request, you must include at least one static route to the CPE object (you're allowed a maximum of 10). For example: 10.0.8.0/16.

For the purposes of access control, you must provide the OCID of the compartment where you want the IPSec connection to reside. Notice that the IPSec connection doesn't have to be in the same compartment as the DRG, CPE, or other Networking Service components. If you're not sure which compartment to use, put the IPSec connection in the same compartment as the DRG. For more information about compartments and access control, see Overview of the IAM Service (https://docs.cloud.oracle.com/iaas/Content/Identity/Concepts/overview.htm). For information about OCIDs, see Resource Identifiers (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm).

You may optionally specify a *display name* for the IPSec connection, otherwise a default is provided. It does not have to be unique, and you can change it. Avoid entering confidential information.

After creating the IPSec connection, you need to configure your on-premises router with tunnel-specific information returned by GetIPSecConnectionDeviceConfig (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/IPSecConnectionDeviceConfig/GetIPSecConnectionDeviceConfig). For each tunnel, that operation gives you the IP address of Oracle's VPN headend and the shared secret (that is, the pre-shared key). For more information, see Configuring Your On-Premises Router for an IPSec VPN (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/configuringCPE.htm).

To get the status of the tunnels (whether they're up or down), use GetIPSecConnectionDeviceStatus (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/IPSecConnectionDeviceStatus/GetIPSecConnectionDeviceStatus).

Example Usage

```
resource "oci_core_ipsec" "test_ip_sec_connection" {
    #Required
    compartment_id = "${var.compartment_id}"
    cpe_id = "${oci_core_cpe.test_cpe.id}"
    drg_id = "${oci_core_drg.test_drg.id}"
    static_routes = "${var.ip_sec_connection_static_routes}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.ip_sec_connection_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment to contain the IPSec connection.

- `cpe_id` - (Required) The OCID of the CPE.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `drg_id` - (Required) The OCID of the DRG.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `static_routes` - (Required) Static routes to the CPE. At least one route must be included. The CIDR must not be a multicast address or class E address. Example: `10.0.1.0/24`

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the IPSec connection.

- `cpe_id` - The OCID of the CPE.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `drg_id` - The OCID of the DRG.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The IPSec connection's Oracle ID (OCID).

- `state` - The IPSec connection's current state.

- `static_routes` - Static routes to the CPE. At least one route must be included. The CIDR must not be a multicast address or class E address. Example: `10.0.1.0/24`

- `time_created` - The date and time the IPSec connection was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

IpSecConnections can be imported using the `id`, e.g.

```
$ terraform import oci_core_ipsec.test_ip_sec_connection "id"
```

oci_core_local_peering_gateway

This resource provides the Local Peering Gateway resource in Oracle Cloud Infrastructure Core service.

Creates a new local peering gateway (LPG) for the specified VCN.

Example Usage

```
resource "oci_core_local_peering_gateway" "test_local_peering_gateway" {
    #Required
    compartment_id = "${var.compartment_id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.local_peering_gateway_display_name}"
    freeform_tags = {"Department"= "Finance"}
    peer_id = "${oci_core_local_peering_gateway.test_local_peering_gateway2.id}"
    route_table_id = "${oci_core_route_table.test_route_table.id}"
}
```

Argument Reference

- Specifying a peer_id creates a connection to the specified LPG ID.

- If the specified peer_id is also a resource in the terraform config you will have do a `terraform refresh` after the `terraform apply` in order to get the latest connection information on that resource.

- To disconnect the peering connection at least one of the LPG resources in the connection will have to be destroyed, however in terraform we recommend that when one LPG is destroyed the peer should also be destroyed. If one of them is not destroyed it will have a `REVOKED` peering_status. If another LPG resource tries to connect to this LPG resource it will get a `400 Error: The Local Peering Gateway with ID X has already been connected` To solve this you will have to run `terraform taint oci_core_local_peering_gateway.test_local_peering_gateway` on that resource or target delete it `terraform destroy -target="oci_core_local_peering_gateway.test_local_peering_gateway"`.

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment containing the local peering gateway (LPG).

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department":

"Finance"}

- `peer_id` - (Optional) The OCID of the LPG you want to peer with. Specifying a peer_id connects this local peering gateway (LPG) to another one in the same region. This operation must be called by the VCN administrator who is designated as the *requestor* in the peering relationship. The *acceptor* must implement an Identity and Access Management (IAM) policy that gives the requestor permission to connect to LPGs in the acceptor's compartment. Without that permission, this operation will fail. For more information, see VCN Peering (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/VCNpeering.htm).

- `route_table_id` - (Optional) (Updatable) The OCID of the route table the LPG will use.

  If you don't specify a route table here, the LPG is created without an associated route table. The Networking service does NOT automatically associate the attached VCN's default route table with the LPG.

  For information about why you would associate a route table with an LPG, see Advanced Scenario: Transit Routing (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/transitrouting.htm).

- `vcn_id` - (Required) The OCID of the VCN the LPG belongs to.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `compartment_id` - The OCID of the compartment containing the LPG.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Department": "Finance"}

- `id` - The LPG's Oracle ID (OCID).

- `is_cross_tenancy_peering` - Whether the VCN at the other end of the peering is in a different tenancy. Example: `false`

- `peer_advertised_cidr` - The smallest aggregate CIDR that contains all the CIDR routes advertised by the VCN at the other end of the peering from this LPG. See `peerAdvertisedCidrDetails` for the individual CIDRs. The value is `null` if the LPG is not peered. Example: 192.168.0.0/16, or if aggregated with 172.16.0.0/24 then 128.0.0.0/1

- `peer_advertised_cidr_details` - The specific ranges of IP addresses available on or via the VCN at the other end of the peering from this LPG. The value is `null` if the LPG is not peered. You can use these as destination CIDRs for route rules to route a subnet's traffic to this LPG. Example: [192.168.0.0/16, 172.16.0.0/24]

- `peering_status` - Whether the LPG is peered with another LPG. `NEW` means the LPG has not yet been peered. `PENDING`

means the peering is being established. `REVOKED` means the LPG at the other end of the peering has been deleted.

- `peering_status_details` - Additional information regarding the peering status, if applicable.

- `route_table_id` - The OCID of the route table the LPG is using. For information about why you would associate a route table with an LPG, see Advanced Scenario: Transit Routing (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/transitrouting.htm).

- `state` - The LPG's current lifecycle state.

- `time_created` - The date and time the LPG was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID of the VCN the LPG belongs to.

Import

LocalPeeringGateways can be imported using the `id`, e.g.

```
$ terraform import oci_core_local_peering_gateway.test_local_peering_gateway "id"
```

oci_core_nat_gateway

This resource provides the Nat Gateway resource in Oracle Cloud Infrastructure Core service.

Creates a new NAT gateway for the specified VCN. You must also set up a route rule with the NAT gateway as the rule's target. See Route Table (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/RouteTable/).

Example Usage

```
resource "oci_core_nat_gateway" "test_nat_gateway" {
    #Required
    compartment_id = "${var.compartment_id}"
    vcn_id = "${oci_core_vcn.test_vcn.id}"

    #Optional
    block_traffic = "${var.nat_gateway_block_traffic}"
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.nat_gateway_display_name}"
    freeform_tags = {"Department"= "Finance"}
}
```

Argument Reference

The following arguments are supported:

- `block_traffic` - (Optional) (Updatable) Whether the NAT gateway blocks traffic through it. The default is `false`. Example: `true`

- `compartment_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment to contain the NAT gateway.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `vcn_id` - (Required) The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the VCN the gateway belongs to.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `block_traffic` - Whether the NAT gateway blocks traffic through it. The default is `false`. Example: `true`

- `compartment_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the compartment that contains the NAT gateway.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the NAT gateway.

- `nat_ip` - The IP address associated with the NAT gateway.

- `state` - The NAT gateway's current state.

- `time_created` - The date and time the NAT gateway was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vcn_id` - The OCID (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/identifiers.htm) of the VCN the NAT gateway belongs to.

Import

NatGateways can be imported using the `id`, e.g.

```
$ terraform import oci_core_nat_gateway.test_nat_gateway "id"
```

oci_core_private_ip

This resource provides the Private Ip resource in Oracle Cloud Infrastructure Core service.

Creates a secondary private IP for the specified VNIC. For more information about secondary private IPs, see IP Addresses (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingIPaddresses.htm).

Example Usage

```
resource "oci_core_private_ip" "test_private_ip" {
    #Required
    vnic_id = "${oci_core_vnic.test_vnic.id}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.private_ip_display_name}"
    freeform_tags = {"Department"= "Finance"}
    hostname_label = "${var.private_ip_hostname_label}"
    ip_address = "${var.private_ip_ip_address}"
}
```

Argument Reference

The following arguments are supported:

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `hostname_label` - (Optional) (Updatable) The hostname for the private IP. Used for DNS. The value is the hostname portion of the private IP's fully qualified domain name (FQDN) (for example, `bminstance-1` in FQDN `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be unique across all VNICs in the subnet and comply with RFC 952 (https://tools.ietf.org/html/rfc952) and RFC 1123 (https://tools.ietf.org/html/rfc1123).

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `bminstance-1`

- `ip_address` - (Optional) A private IP address of your choice. Must be an available IP address within the subnet's CIDR. If you don't specify a value, Oracle automatically assigns a private IP address from the subnet. Example: `10.0.3.3`

- `vnic_id` - (Required) (Updatable) The OCID of the VNIC to assign the private IP to. The VNIC and private IP must be in the same subnet.

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `availability_domain` - The private IP's availability domain. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment containing the private IP.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `hostname_label` - The hostname for the private IP. Used for DNS. The value is the hostname portion of the private IP's fully qualified domain name (FQDN) (for example, `bminstance-1` in FQDN `bminstance-1.subnet123.vcn1.oraclevcn.com`). Must be unique across all VNICs in the subnet and comply with RFC 952 (https://tools.ietf.org/html/rfc952) and RFC 1123 (https://tools.ietf.org/html/rfc1123).

  For more information, see DNS in Your Virtual Cloud Network (https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/dns.htm).

  Example: `bminstance-1`

- `id` - The private IP's Oracle ID (OCID).

- `ip_address` - The private IP address of the `privateIp` object. The address is within the CIDR of the VNIC's subnet. Example: `10.0.3.3`

- `is_primary` - Whether this private IP is the primary one on the VNIC. Primary private IPs are unassigned and deleted automatically when the VNIC is terminated. Example: `true`

- `subnet_id` - The OCID of the subnet the VNIC is in.

- `time_created` - The date and time the private IP was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

- `vnic_id` - The OCID of the VNIC the private IP is assigned to. The VNIC and private IP must be in the same subnet.

Import

PrivateIps can be imported using the `id`, e.g.

```
$ terraform import oci_core_private_ip.test_private_ip "id"
```

PrivateIps can be imported using the `id`, e.g.

```
$ terraform import oci_core_private_ip.test_private_ip "id"
```

oci_core_public_ip

This resource provides the Public Ip resource in Oracle Cloud Infrastructure Core service.

Creates a public IP. Use the `lifetime` property to specify whether it's an ephemeral or reserved public IP. For information about limits on how many you can create, see Public IP Addresses (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingpublicIPs.htm).

- **For an ephemeral public IP assigned to a private IP:** You must also specify a `privateIpId` with the OCID of the primary private IP you want to assign the public IP to. The public IP is created in the same availability domain as the private IP. An ephemeral public IP must always be assigned to a private IP, and only to the *primary* private IP on a VNIC, not a secondary private IP. Exception: If you create a NatGateway (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/NatGateway/), Oracle automatically assigns the NAT gateway a regional ephemeral public IP that you cannot remove.

- **For a reserved public IP:** You may also optionally assign the public IP to a private IP by specifying `privateIpId`. Or you can later assign the public IP with UpdatePublicIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PublicIp/UpdatePublicIp).

Note: When assigning a public IP to a private IP, the private IP must not already have a public IP with `lifecycleState` = ASSIGNING or ASSIGNED. If it does, an error is returned.

Also, for reserved public IPs, the optional assignment part of this operation is asynchronous. Poll the public IP's `lifecycleState` to determine if the assignment succeeded.

Example Usage

```
resource "oci_core_public_ip" "test_public_ip" {
    #Required
    compartment_id = "${var.compartment_id}"
    lifetime = "${var.public_ip_lifetime}"

    #Optional
    defined_tags = {"Operations.CostCenter"= "42"}
    display_name = "${var.public_ip_display_name}"
    freeform_tags = {"Department"= "Finance"}
    private_ip_id = "${oci_core_private_ip.test_private_ip.id}"
}
```

Argument Reference

The following arguments are supported:

- `compartment_id` - (Required) The OCID of the compartment to contain the public IP. For ephemeral public IPs, you must set this to the private IP's compartment OCID.

- `defined_tags` - (Optional) (Updatable) Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: {"Operations.CostCenter": "42"}

- `display_name` - (Optional) (Updatable) A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - (Optional) (Updatable) Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `lifetime` - (Required) Defines when the public IP is deleted and released back to the Oracle Cloud Infrastructure public IP pool. For more information, see Public IP Addresses (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingpublicIPs.htm).

- `private_ip_id` - (Optional) (Updatable) The OCID of the private IP to assign the public IP to.

  Required for an ephemeral public IP because it must always be assigned to a private IP (specifically a *primary* private IP).

  Optional for a reserved public IP. If you don't provide it, the public IP is created but not assigned to a private IP. You can later assign the public IP with UpdatePublicIp (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/PublicIp/UpdatePublicIp).

** IMPORTANT ** Any change to a property that does not support update will force the destruction and recreation of the resource with the new property values

Attributes Reference

The following attributes are exported:

- `assigned_entity_id` - The OCID of the entity the public IP is assigned to, or in the process of being assigned to.

- `assigned_entity_type` - The type of entity the public IP is assigned to, or in the process of being assigned to.

- `availability_domain` - The public IP's availability domain. This property is set only for ephemeral public IPs that are assigned to a private IP (that is, when the `scope` of the public IP is set to AVAILABILITY_DOMAIN). The value is the availability domain of the assigned private IP. Example: `Uocm:PHX-AD-1`

- `compartment_id` - The OCID of the compartment containing the public IP. For an ephemeral public IP, this is the compartment of its assigned entity (which can be a private IP or a regional entity such as a NAT gateway). For a reserved public IP that is currently assigned, its compartment can be different from the assigned private IP's.

- `defined_tags` - Defined tags for this resource. Each key is predefined and scoped to a namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Operations.CostCenter": "42"}`

- `display_name` - A user-friendly name. Does not have to be unique, and it's changeable. Avoid entering confidential information.

- `freeform_tags` - Free-form tags for this resource. Each tag is a simple key-value pair with no predefined name, type, or namespace. For more information, see Resource Tags (https://docs.cloud.oracle.com/iaas/Content/General/Concepts/resourcetags.htm). Example: `{"Department": "Finance"}`

- `id` - The public IP's Oracle ID (OCID).

- `ip_address` - The public IP address of the `publicIp` object. Example: `129.146.2.1`

- `lifetime` - Defines when the public IP is deleted and released back to Oracle's public IP pool.

  - `EPHEMERAL`: The lifetime is tied to the lifetime of its assigned entity. An ephemeral public IP must always be assigned to an entity. If the assigned entity is a private IP, the ephemeral public IP is automatically deleted when the private IP is deleted, when the VNIC is terminated, or when the instance is terminated. If the assigned entity is a NatGateway (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/NatGateway/), the ephemeral public IP is automatically deleted when the NAT gateway is terminated.

  - `RESERVED`: You control the public IP's lifetime. You can delete a reserved public IP whenever you like. It does not need to be assigned to a private IP at all times.

  For more information and comparison of the two types, see Public IP Addresses (https://docs.cloud.oracle.com/iaas/Content/Network/Tasks/managingpublicIPs.htm).

- `private_ip_id` - Deprecated. Use `assignedEntityId` instead.

  The OCID of the private IP that the public IP is currently assigned to, or in the process of being assigned to.

  Note: This is `null` if the public IP is not assigned to a private IP, or is in the process of being assigned to one.

- `scope` - Whether the public IP is regional or specific to a particular availability domain.

  - `REGION`: The public IP exists within a region and is assigned to a regional entity (such as a NatGateway (https://docs.cloud.oracle.com/iaas/api/#/en/iaas/20160918/NatGateway/)), or can be assigned to a private IP in any availability domain in the region. Reserved public IPs and ephemeral public IPs assigned to a regional entity have `scope` = `REGION`.

  - `AVAILABILITY_DOMAIN`: The public IP exists within the availability domain of the entity it's assigned to, which is specified by the `availabilityDomain` property of the public IP object. Ephemeral public IPs that are assigned to private IPs have `scope` = `AVAILABILITY_DOMAIN`.

- `state` - The public IP's current state.

- `time_created` - The date and time the public IP was created, in the format defined by RFC3339. Example: `2016-08-25T21:10:29.600Z`

Import

PublicIps can be imported using the `id`, e.g.

```
$ terraform import oci_core_public_ip.test_public_ip "id"
```